



China Datang Corporation Ltd.



2019

Social Responsibility Report



Provide clean energy to light up a better life





## Datang Saihanba Wind Farm



- Put into operation in 2017; the world's largest wind farm invested, controlled and operated by the same entity in the same region, with an installed capacity of 1.5103GW
- Transmitting over 3 TWh of clean electricity to northeast China and northern Hebei province every year





## 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 30% of the total power consumption in Beijing.
- 12 generating units realize ultra-low emission in stable operation.





## Datang Longtan Hydropower Station



- Owning several world records, including 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





## Datang Guoxin Binhai 300MW Offshore Wind Power Project



- The first offshore wind power project independently developed and constructed by CDT
- All turbines connected to the grid on December 25, 2019.





## Datang Nanjing Power Plant



- The first state-owned power plant in China with 110 years of history, the longest for CDT coal-fired units
- At present, it has two 660 MW ultra-supercritical coal-fired units. And it is the first ultra-low emission ecological renovation project of CDT and one of the first batch in Jiangsu Province.





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# Message from the Chairman



The year 2019 marked the 70th anniversary of the founding of the People's Republic of China. It was a critical year for building a moderately prosperous society in all respects, and for China Datang Corporation to embark on the journey of a world-class energy group. We closely centering on the objectives and tasks set out in the "Innovation and Progress Year", upheld the overall requirements of "act with first class standard, be the world-class energy group", and endeavored to open up a new road for high-quality development in a new era.

**We shoulder responsibility for new moves in fighting the three tough battles.** In the past year, we reinforced the management and control of major risks, to ensure that risks in key areas such as debt, finance, investment and overseas business are generally under control. Devoted to the fight against poverty, we help Chengcheng county of Shaanxi province and 40,800 people in Dahua county of Guangxi province to shake off poverty, and pulled Anlan village and Banlan village out of poverty. Besides, steady progress in pollution prevention and control as well as energy consumption reduction was achieved. The proportion of the clean energy installed capacity grew to 36.26% in 2019.

**We advance with the times to deliver new business performance.** We uphold the new vision for development and consolidate strategic guidance to fulfill development responsibilities and continuously expand our market-oriented operations. In 2019, we generated 545.4 TWh of electricity, and registered RMB 189.733 billion in revenue, RMB 12.063 billion in total profit, a year-on-year(YoY) growth of RMB 2.465 billion, and RMB 7.371 billion in net profit, a YoY growth of RMB 1.364 billion. Profits were gained in all business segments, making due contributions to China's stable economic growth.

**We deepen the reform and modernize the corporate governance system and capacity.** We have facilitated organizational, institutional and managerial innovation, including the institutional structures of the headquarters and home offices of secondary subsidiaries, the management systems on internationalization, new energy, fuel and procurement, planning & investment, performance assessment, safety & environmental protection. In addition, to transform the major function of the headquarters into the

role of strategic management & regulation, we have streamlined functional departments and set up business divisions and specialized centers. Home offices of secondary subsidiaries are restructured and pushed to the front line of work. In this way, we hope to accelerate resolving issues left over from history in an orderly manner, such as problems arising from collectively-owned factories owned by CDT and community-based retiree management.

**We safeguard the bottom line to ensure work safety and stable eco-friendly production.** We plan and advance security affairs in production, infrastructure construction, transportation, network information, and public opinion as a whole. In the past year, we invested RMB 3.254 billion in eco-friendly facilities and environment treatment. No major personal injury and equipment accident, network information security or public opinion incident, or environmental issue occurred.

**We pursue a new engine for innovation-driven and high-quality development.** To realize innovation-driven development, we aim high and work hard to be a forerunner in our industry. We perfect the innovation management system on an ongoing basis, pace up developing new systems for high-quality development, and cultivate innovative talents. Our demonstration S&T innovation projects are pushing forward and we focus more on research in new technologies and business forms such as future energy and intelligent energy, to foster new momentum for growth. In 2019, we invested RMB 3.548 billion in technological research, and delivered more than 700 innovative outcomes. New energy projects with a total installed capacity of 4.21 GW were launched, and 2.43 GW were put into operation, making a new best record.

**We create a new landscape of international development with an open and win-win approach.** We actively respond to the Belt and Road Initiative, fully mobilize resources from the domestic and international market, and pool internal and external strengths to accelerate the course of internationalization. In 2019, our coal-fired power generation project in Meulaboh, Indonesia was launched. We also expand our business in Indonesia, Cambodia, Myanmar, Laos, India, Thailand and several other countries. To help local economic and social development and improve the living

conditions of local residents, we call on overseas subsidiaries to actively take up responsibilities, help solve local problems such as lack of energy and environmental issues, and cultivate a large number of professional talents for the countries.

**We stay people-oriented and endow employees with a stronger sense of fulfillment, happiness and security.** We safeguard the legitimate rights and interests as well as democratic rights of our employees. The paid leave system is being concretely implemented to ensure employees' right to have rest days and holidays, thus protecting and stimulating their passion for work. The career planning system is improved to provide every employee with equal opportunity of development in the workplace. We care about what employees concern, help those with difficulties and problems, and provide psychological counselling to safeguard their fundamental interests, thus constantly improving their sense of fulfillment, happiness and security. We have held Open Day campaign for 13 consecutive years to bridge ourselves to the outside world.

In 2020, energy companies will encounter greater opportunities and challenges. We will aim high and forge ahead for high-quality development to contribute to a better future.

A handwritten signature in black ink, consisting of stylized Chinese characters.

Chen Feihu

Chairman, China Datang Corporation



# Message from the President



In 2019, we aligned ourselves with the overall requirements of "act with first class standard, be the world-class energy group", and coordinately ensured security, development, reform, restructuring and transformation, corporate vitality . Thus, the quality of energy supply had been improved with a new chapter of high-quality growth. We also kept building ourselves into a world-class energy group that highlights safe, green, smart, value sharing, and sustainable growth.

**We improve quality and efficiency for a new chapter of high-quality development.** We adhere to the new vision for development, and accurate grasp of the relationship between electricity & heating output and the prices of electricity, coal and heat to ensure an increasing production and revenue. Equipment governance is strengthened to improve usage and load rate, guaranteeing stable supply of electricity and heat. While expanding the market-oriented operations, we have improved the marketing system and marketing team building to develop comprehensive energy service and value-added services. In 2019, the capacity of ultra-low emission units reached 97.04%, ranking high in the industry.

**We consolidate the cornerstone of safety to lay a solid foundation for high-quality development.** Safety and life security is the paramount for us. We consolidate the foundation for work safety management, plan and advance safety work in production, infrastructure construction, transportation, network information, and public opinion as a whole. In 2019, we troubleshooted and resolved nearly 19,000 equipment problems, and eliminated over 7,000 chemicals hazards. No major personal injury and equipment accident, network information security or public opinion event occurred.

**We prioritize green development in our high-quality development.** Firmly upholding the principle of "lucid waters and lush mountains are invaluable assets", we are developing a clean, low-carbon and modern energy supply service system, with higher ratio of clean energy and optimized energy ecology. We comprehensively implement policies on energy conservation and emission reduction to improve the utilization efficiency of energy resources on an ongoing basis. To standardize corporate management of environmental

issues, we have strengthened online monitoring of environmental data and realized real-time evaluation and alerting, thus ensuring all major pollutants are emitted up to standard. In 2019, coal consumption for power supply was decreased by 3.54 g/kWh on a YoY basis.

**We foster innovation to create a new engine for high-quality development.** We keep innovating in business operation & management mechanisms, and highlight S&T innovation with focuses on frontier technologies in the global energy sector and key technological problems. In 2019, the international standard *ISO 50045: 2019 – Technical Guidelines for the Evaluation of Energy Savings of Thermal Power Plants*, with CDT as a major contributor, was officially published. Datang Guoxin Binhai 300MW Offshore Wind Power Project, the first offshore wind power project independently developed and constructed by CDT, was successfully connected to the grid. The first floating solar plant, Changhe 100MW Fishery-Solar Complementary Project in Beigang, Yiyang city, Hunan province was connected to the grid. Guangdong Leizhou 1000MW Double Reheat Coal-fired Power Plant was put into operation. And 2×600MW H-class gas turbines of Jiangsu Nanjing Power Plant Phase 2 Project and Rugao Distributed Gas Turbine Project were approved as National Demonstration Project for the Innovative Development of Gas Turbines.

**We accelerate opening up and cooperation for a new landscape of high-quality development.** We are dedicated to cooperating and communicating extensively with all walks of life for win-win development. We have deepened strategic cooperation with partners in investment & development, equipment procurement, and technology services, etc. To "go global" quickly, we have promoted key projects overseas, and strive to grow along with global partners. In 2019, our coal-fired power generation project in Meulaboh, Indonesia was launched, and 15 of our secondary subsidiaries were engaged in international business. We have 29 overseas organizations. Our projects had served 13 Belt and Road countries.

**We share fruits of development to foster new synergies for high-quality development.** We have formulated the *Three-Year Rolling Plan for Building a Happy CDT and Guiding Opinions on Employees' Cultural Development*, and improved the archives of "CDT citizens". We set up staff service centers

in over 200 primary-level enterprises and 732 service stations in workshops. Capitalizing our strengths, we pay back to society with concrete actions to promote community development and increase people's wellbeing. In 2019, we directly invested RMB 595 million to poverty-stricken areas, a YoY growth of 50.63%, and provided targeted poverty alleviation assistance to 339 impoverished villages in 27 provinces and autonomous regions across the country, overfulfilling the six tasks assigned to central SOEs for fixed-point poverty alleviation, and pulling 58 villages out of poverty.

New era and journey calls for new responsibilities and actions. In 2020, we will push ahead with quality and efficiency improvement, reform and development, technological innovation, and security and stability, to fully fulfill tasks and goals set out for the "High-quality Development Year", and make unremitting efforts for building ourselves into a world-class energy group!

  
Kou Wei  
President, China Datang Corporation



# About CDT

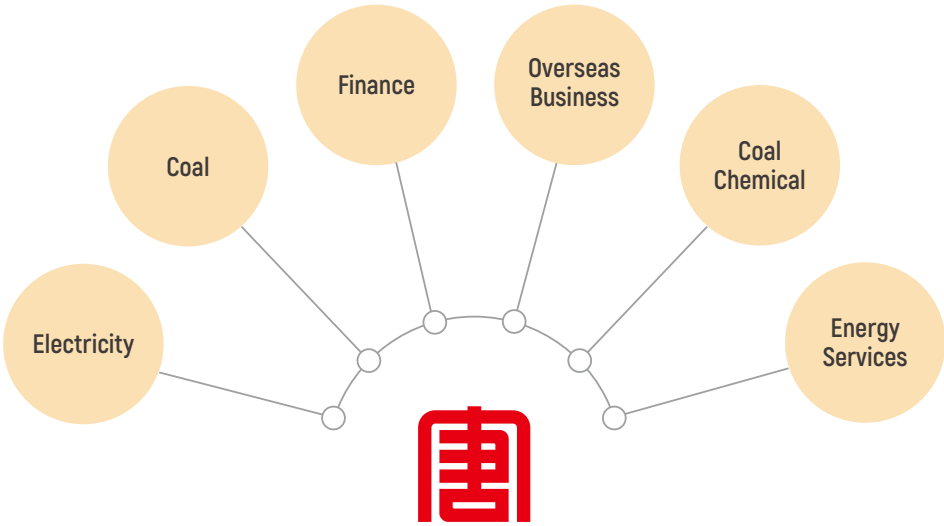
## Company Profile

Founded on December 29, 2002, China Datang Corporation Ltd. (CDT) is a super large state-owned power generation group corporation directly under the management of central government, an investment organization authorized by the State Council, and a pilot state-controlled company. The Corporation has a registered capital of RMB 37 billion.

CDT implements a group-based management system and operation model comprising three levels of responsible entities, i.e. the Corporation, branches (subsidiaries), and primary-level enterprises. By the end of 2019, CDT has five listed companies, and total assets of RMB 758.5 billion, including in-service assets and assets under construction in 31 provinces, autonomous regions and municipalities across the country as well as in foreign countries and regions such as Myanmar, Cambodia and Laos. CDT has about 100,000 employees and an installed power generation capacity of 144 GW. It possesses Inner Mongolia Tuoketuo Power Plant, the in-service largest thermal power plant in the world, Datang Saihanba Wind Farm, the world's in-service largest wind farm invested, controlled and operated by the same entity in the same region, Datang Longtan Hydropower Station, a hydropower station that has broken multiple world records, and China National Water Resources & Electric Power Materials & Equipment Group Co., Ltd., a company with a countrywide logistics network. Since 2010, CDT has been listed in Fortune Global 500 companies for ten consecutive years. Since 2012, it has been rated as Class A in the business performance assessment of the central SOEs for eight consecutive years.

## Strategic Layout

Sticking to the new vision for development and implementing new strategic requirements on energy security, CDT further clarifies its strategic positioning and main target, implements key projects, technical routes and major moves. We continuously strengthen our capacity of development and organization to serve major national strategies, such as the coordinated development of Beijing-Tianjin-Hebei Region, the integration of the Yangtze River Delta, the Guangdong-Hong Kong-Macau Greater Bay Area and the Yangtze River Economic Belt, and the ecological protection and high-quality development of the Yellow River Basin. While steadfastly focusing on key business segments, i.e. wind power, solar power, gas and services, we prioritize internationalization and keep “going global” resolutely, exploring thoroughly in markets of the Belt and Road countries.



## Structure of Power Generation Assets

Unit: MW

Region	Total Installed Capacity	Thermal Power	Hydropower	Wind Power	PV
Inside and outside of China	144,206.4	97,321.4	27,026.4	18,395.9	1,462.7
Beijing	1,385.10	1,380.00	0.00	0.00	5.10
Tianjin	1,210.00	1,200.00	0.00	0.00	10.00
Hebei	10,529.90	9,430.00	38.50	986.50	74.90
Shanxi	8,479.50	7,205.00	0.00	1,194.50	80.00
Inner Mongolia	10,296.30	6,720.00	90.00	3,386.30	100.00
Liaoning	2,204.30	950.00	0.00	1,210.30	44.00
Jilin	4,708.10	4,060.00	0.00	648.10	0.00
Heilongjiang	5,173.50	4,450.00	33.00	690.50	0.00
Shanghai	236.20	0.00	0.00	204.20	32.00
Jiangsu	7,222.70	6,821.60	0.00	351.80	49.30
Zhejiang	3,635.00	3,544.00	0.00	28.00	63.00
Anhui	6,079.50	5,770.00	184.00	125.50	0.00
Fujian	2,793.10	2,520.00	0.00	273.10	0.00
Jiangxi	2,869.50	2,440.00	0.00	429.50	0.00
Shandong	5,475.80	3,625.00	0.00	1,795.00	55.80
Henan	10,079.20	8,910.00	0.00	1,169.20	0.00
Hubei	245.10	0.00	100.00	72.50	72.60
Hunan	5,810.40	5,240.00	161.90	308.50	100.00
Guangdong	5,446.10	5,380.80	0.00	49.50	15.80
Guangxi	10,780.40	1,330.00	9,180.40	270.00	0.00
Hainan	12.00	0.00	0.00	0.00	12.00
Chongqing	3,665.40	700.00	2,844.60	120.80	0.00
Sichuan	6,954.00	0.00	6,610.00	294.00	50.00
Guizhou	3,048.80	2,400.00	310.00	290.10	48.70
Yunnan	6,863.30	600.00	5,403.60	759.80	100.00
Tibet	11.50	0.00	11.50	0.00	0.00
Shannxi	8,277.00	7,070.00	675.00	512.00	20.00
Gansu	5,435.30	3,655.00	739.00	1,040.80	0.50
Qinghai	640.00	0.00	190.00	150.00	300.00
Ningxia	941.50	0.00	0.00	842.50	99.00
Xinjiang	3,338.00	1,920.00	95.00	1,193.00	130.00
Overseas	360.00	0.00	360.00	0.00	0.00

(Information is collected by December 2019)



Corporate Culture

Corporate Mission

The implementer of national strategies, the pioneer of industrial development, the supplier of clean energy, the creator of corporate values, and the protector of public interest

Overall Goal

Building a world-class energy group

Overall Requirement

Act with first class standard, be the world-class energy group

Corporate Characteristics

Safe, green, smart, value sharing, sustainable growth

Connotations of a New CDT in a New Era



Case “CDT Open Day” Campaign Held for 13 Consecutive Years Bridges CDT to the Public

On October 16, 2019, CDT held the 13th CDT Open Day themed “Celebrating China’s 70th Birthday and Co-building a Beautiful China”. 50 companies from 27 provinces, autonomous regions and municipalities across China and overseas opened up to the public. The hydropower, wind power, thermal power, and other power companies, and some non-power companies from coal mining, e-commerce, finance and marketing industries invited the public to visit CDT and feel its charm. The main venue was in CDT Xiangtan Power Generation Company. On the same day, a Sina Weibo interactive live streaming programme themed “I Love My Country” is launched to express love and eulogize China. As the first power grid project in Cambodia, the transmission project from the Phnom Penh to Battambang opened itself to the local public under the theme of “Green Energy, Beautiful Homeland”.

By the end of 2019, 365 open day campaigns have been held. Nearly 80,000 people from all walks of life visited CDT. The campaign has become a leading and demonstrative brand among all central SOE events in terms of its history, duration, and coverage.



Group photo of participating students in Zhuanzi Park

“In the marketization reform of electricity selling, Datang Xiangdian provided us with comprehensive energy services and helped us grow. The CDT energy service system, after upgrade, has a new 400 energy service hotline, bringing greater convenience to companies looking for power.”

—Person in charge of Goldcup Electric Apparatus Co.,Ltd

1 CDT's *Story of China Amat Helping with Poverty Alleviation* wins First Prize in Central SOEs Brand Story Competition.

2 CDT is bestowed the honorary title of “Central SOE Story Creation Base” by the SASAC.

3 Sharing CDT story on the stage of the “Central SOE Stories Gala” of the SASAC

“I got to know the name of CDT because the company donated learning supplies to our school for multiple times. The green electricity supplied by CDT improves our lives. We can now use electric lamps at night, and enjoy more time to read and study. The Open Day visit helped me learn more about CDT. I will study harder and earn a chance to join CDT in the future.”

—A high school student in Loreta High School, Cambodia



Leadership Team



Chen Feihu  
Chairman



Kou Wei  
Director and President



Shi Jialin  
Director



Hu Shengmu  
Vice President and Chief Accountant



Liu Guangying  
Vice President



Wang Ying  
Leader of Discipline Inspection and Supervision Team



Qu Bo  
Vice President



Zhang Chuanjiang  
Vice President



Peng Yong  
Vice President

Corporate Governance

CDT keeps working on a well-regulated, efficient and harmonious board, and has gained steady progress in making scientific decisions. In 2019, there were seven directors on the board, including three internal directors and four external ones. The employee director is elected by the workers representative congress or staff meeting, or through other forms of democracy.

Organizational Structure

China Datang Corporation Ltd.  
(Headquarters)







# CSR Management

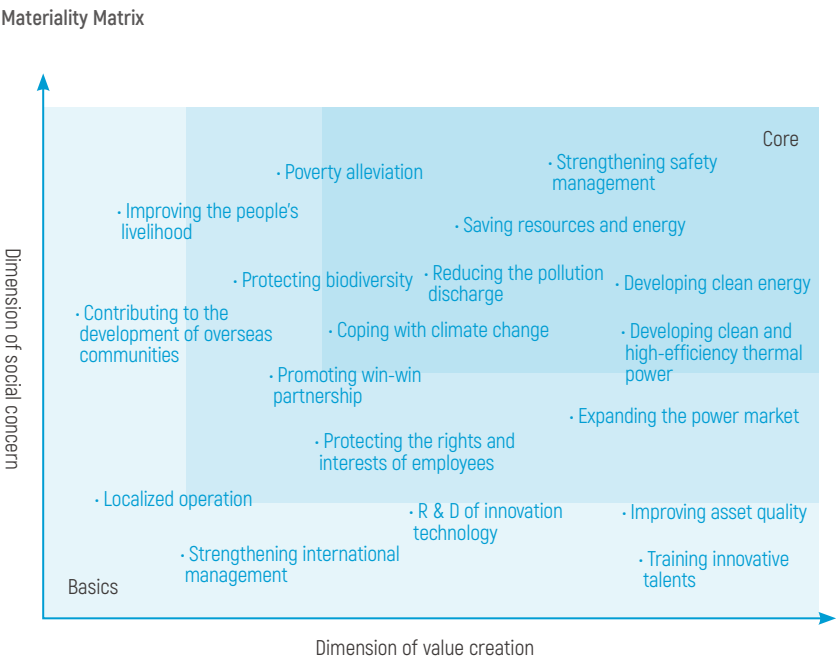
CDT attaches great importance to and constantly advances CSR management and practices. A CSR work leading group is established with the core leadership of the Corporation as the group leader. Under the guidance of the Leadership Group, it studies and deliberates over the Corporation's major CSR issues, and formulates regulations and measures on CSR practices. It also guides all CDT subsidiaries to improve their CSR systems and solidly practice social responsibilities. In addition, Business Cooperation and Public Relations Department (International Cooperation Department) is assigned as the leading department for CSR affairs, to be in charge of CSR routine of the Corporation.



▲ CDT's CSR cases are selected into *Research Report on Corporate Social Responsibility of Central Enterprises* and *Research Report on Overseas Social Responsibility of Central Enterprises*.

# Analysis of Material Topics

CDT has identified material topics on social responsibility from the following channels, such as, soliciting advice from the management, benchmarking against domestic and international CSR standards, organizing internal and external experts to conduct analysis, and obtaining information from day-to-day businesses. Then the Corporation prioritized the topics from two dimensions, i.e. "value creation" (assessing the relevance, importance and feasibility of the topic to comprehensive value creation) and "social attention" (assessing the concern of stakeholders and society for the topic) .





# Stakeholder Communication



Xinhuanet's coverage of CDT Social Responsibility Report 2018



Xinhuanet's coverage of the Social Responsibility Report (ESG Report) 2019 of Datang International Power Generation Co., Ltd.

Upholding the principle of openness and transparency, CDT attaches great importance to CSR communication and strive to build an all-round, multi-channel and routine communication system. The Corporation opens up communication platforms such as official website, WeChat and Weibo accounts, to communicate with stakeholders in a timely, effective and comprehensive manner, thus effectively enhancing its CSR capacity in all respects. The Corporation has released CSR reports for 13 consecutive years. Three subsidiaries, also listed companies, Datang International Power Generation Co., Ltd., China Datang Corporation Renewable Power Co., Ltd. and Datang Environment Industry Group Co., Ltd., published Environmental, Social, and Governance reports every year.



▲ Chinese and English versions of CDT Social Responsibility Report 2018, the 13th CSR report released since 2007



CDT Official Website (Chinese)






CDT WeChat Official Account



CDT Sina Weibo Official Account



CDT Official Website (English)

Stakeholders	Stakeholders' Concern	Communication Approaches	Performance Indicators
 <p>The Government</p>	<ul style="list-style-type: none"> <li>· National policies and energy safety</li> <li>· Electricity and heat supply</li> <li>· Complying with laws and regulations</li> <li>· Taxation</li> <li>· Optimizing energy structure</li> <li>· Expanding employment</li> <li>· Management and S&amp;T innovation</li> </ul>	<ul style="list-style-type: none"> <li>· Regulations and policies</li> <li>· Relevant meetings</li> <li>· Work reports</li> <li>· Statistics report</li> <li>· Information delivery</li> <li>· Top-level meetings</li> </ul>	<ul style="list-style-type: none"> <li>· Power generation volume</li> <li>· Total profit</li> <li>· EVA</li> <li>· Ratio of clean energy to total installed capacity</li> <li>· Providing jobs</li> <li>· Innovation achievements</li> </ul>
 <p>Shareholders</p>	<ul style="list-style-type: none"> <li>· Profitability</li> <li>· Standard operation</li> </ul>	<ul style="list-style-type: none"> <li>· Shareholders' Meeting</li> <li>· Announcements of the Corporation</li> <li>· Regular reports</li> </ul>	<ul style="list-style-type: none"> <li>· Sales revenue</li> <li>· Market share</li> <li>· Corporate profits</li> <li>· Investment income</li> </ul>
 <p>Partners</p>	<ul style="list-style-type: none"> <li>· Compliant operation</li> <li>· Long-term cooperation</li> <li>· Market equity</li> <li>· Integrity management</li> </ul>	<ul style="list-style-type: none"> <li>· Industry communication</li> <li>· Strategic cooperation</li> <li>· Contract and agreement</li> <li>· Product service</li> </ul>	<ul style="list-style-type: none"> <li>· Integrity</li> <li>· Contract performance rate</li> <li>· Period of cooperation</li> <li>· Responsible procurement</li> <li>· Profit</li> </ul>
 <p>Employees</p>	<ul style="list-style-type: none"> <li>· Democratic rights</li> <li>· Health and safety</li> <li>· Compensation and benefits</li> <li>· Personal development</li> <li>· Education and training</li> </ul>	<ul style="list-style-type: none"> <li>· Contracts and agreements</li> <li>· Workers Representative Congress</li> <li>· Letters and visits</li> <li>· Labor contracts</li> <li>· Collective contracts</li> <li>· Disclosure of corporate affairs</li> </ul>	<ul style="list-style-type: none"> <li>· Labor and operation environment</li> <li>· Accident rate</li> <li>· Trade Union membership rate</li> <li>· Labor contract coverage rate</li> <li>· Level of salary</li> <li>· Investment in staff training</li> <li>· Employee turnover</li> </ul>





#### Customers

- Safe and stable supply of electricity and heat
- Quality of coal products and other products
- Technical service quality
- Price

- Contracts and agreements
- Electricity, heat and coal products
- Related technological service

- Customer satisfaction



#### Communities

- Community development
- Public welfare cause
- Public security
- Ecological protection

- Public welfare activities
- Open day

- Investment in community development
- Investment in public welfare
- Public security complaints
- Pollution complaints



#### The Environment

- Climate change
- Energy conservation and emission reduction
- Biodiversity conservation

- Environmental impact assessment
- Open day
- Fish breeding and releasing activities

- Ratio of clean energy to total installed capacity
- Energy saving index
- Emission reduction index



#### Non-governmental Organization (NGO)

- Positive interaction
- Contributions to institutes and associations
- Impacts on sustainability

- Conferences and activities
- Suggestions

- Frequency and profoundness of activity engagement
- Membership fees



#### Media

- Transparent operation

- Press conference
- Media interview and communication

- Number of press conferences
- Number of core media reports

## CSR Performance

	Performance Indicator	Unit	2015	2016	2017	2018	2019
Economy	Installed Capacity	MW	127,170	130,900	137,780	138,910	144,210
	Power Generation Volume	TWh	478.8	470	516.9	554.1	545.4
	Total Assets	RMB billion	729.5	706.3	720.8	745.8	758.5
	Revenue	RMB billion	166.161	158.583	170.987	189.543	189.733
	Total Profits	RMB billion	17.316	10.713	6.468	9.598	12.063
	Economic Contract Performance Rate	%	100	100	100	100	100
Environment	Proportion of Clean Energy and Renewable Energy	%	27.88	29.27	33.90	35.57	36.26
	Coal Consumption for Power Supply	g standard coal/kWh	309.62	306.94	305.28	301.85	298.31
	NO <sub>x</sub> Emission Rate	g/kWh	1.18	0.74	0.26	0.22	0.19
	SO <sub>2</sub> Emission Rate	g/kWh	0.69	0.36	0.21	0.16	0.14
	Flyash Emission Rate	g/kWh	0.15	0.09	0.06	0.04	0.025
	Wastewater Discharge Rate	g/kWh	115	95	80	60	50
Society	Major Personal Accident and Above	Time	0	1	0	0	0
	Major Equipment Accident and Above	Time	0	0	0	0	0
	General Personal Accident	Time	3	2	1	2	1
	General Equipment Accident	Time	0	0	0	0	0
	Number of on-the-job Employees	Person	97,904	96,777	98,756	96,095	95,748
	Trade Union Membership Rate	%	100	100	100	100	100
	Collective Contract Coverage	%	100	100	100	100	100
	Number of Female Employees	Person	24,120	23,895	23,385	21,967	21,220
	Number of Minority Employees	Person	5,563	5,730	5,847	5,807	6,095



# [ CSR Feature I ]

## On the Move for Poverty Alleviation



We resolutely implement decisions and arrangements made by the nation on poverty alleviation. We continuously step up efforts in poverty relief, innovatively help local people shake off poverty by developing local industries, promoting educational progress, and boosting consumption. We strengthen guidance and monitoring to realize goals of fixed-point assistance, and meanwhile fulfill responsibilities as a central SOE. In 2019, we directly invested RMB 595 million to poverty-stricken areas, a YoY growth of 50.63%. We provided targeted poverty alleviation assistance to Chengcheng county of Shaanxi province, Dahua county of Guangxi province, and Xinghai county of Qinghai province. We were paired up with 339 impoverished villages in 27 provinces and autonomous regions across the country, and sent out 176 officials for poverty relief. The leadership of the Corporation all went to poverty-stricken areas with special needs for field survey. All six tasks on poverty alleviation assigned to us were overfulfilled, and 58 impoverished villages paired up with us were pulled out of poverty.

Strengthening organization and leadership. The Poverty Alleviation Leading Group Offices of all units should stick to normalized management and send out competent officials for poverty relief assistance.

Targeting at priorities. Ensuring that fixed-point poverty alleviation tasks assigned by the state will be fully completed, and further planning and implementing poverty alleviation work in areas of extreme poverty, i.e. the "three regions" (Tibet, the four prefectures of Hotan, Aksu, Kashgar, and Kizilsu in southern Xinjiang, and the ethnic Tibetan areas in Sichuan, Yunnan, Gansu, and Qinghai) and the "three prefectures" (Liangshan Yi Autonomous Prefecture in Sichuan, Nuijiang Lisu Autonomous Prefecture in Yunnan, and Linxia Hui Autonomous Prefecture in Gansu).

Strengthening inspection and monitoring, and urging sound rectification. Consolidating the auditing, patrol inspection, assessment and incentive concerning systematic poverty alleviation work.



### Poverty Alleviation Outcomes in 2019

#### Outstanding results

Our fixed-point supporting target, Chengcheng county of Shaanxi province has exited from poverty; 40,800 people in Dahua county, Guangxi province shook off poverty; Anlan village and Banlan village were pulled out of poverty ahead of schedule; Xinghai county of Qinghai province, which was paired up with us, exited from poverty; 58 impoverished villages paired up with us shook off poverty.

#### High rating in assessment

We won the highest rating "Outstanding" for two consecutive years in the fixed-point poverty alleviation performance assessment for central SOEs. Guangxi Branch, Yunnan Power Generation Co., Ltd., Sichuan Power Generation Co., Ltd., Hebei Power Generation Co., Ltd. and Hunan Branch won the "best" in provincial assessments, and 43 employees across CDT won provincial or municipal awards.

## Focusing on fixed-point poverty alleviation

After comprehensively analyzing the actual needs of poverty-stricken households, we are able to find out the key to success for fixed-point poverty alleviation and provide targeted assistance, thus fulfilling the tasks specified in the *Letter of Responsibility of Central SOEs' Fixed-point Poverty Alleviation*, ensuring that our fixed-point assistance targets shake off poverty as scheduled, and realizing fixed-point assistance objectives.



Chairman Chen Feihu is conducting a special poverty alleviation survey in Dahua county, Guangxi province.

### Case Opening up Poverty Relief Factories at the Doors of Local Households

To maintain and improve poverty alleviation outcomes with high quality, CDT developed a unique model of "order-based poverty alleviation factories". It introduced Brandway Protection Technology Co., Ltd., a work clothes manufacturer, to Chengcheng county that has exited poverty. Local residents, especially workforce in registered poverty-stricken households, are able to get employed, consolidating the county's poverty alleviation outcomes.



▲ Trial operation of CDT Order-based Garment Factory for Poverty Alleviation



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### Case CDT Supports Dahua County, Guangxi Province to Shake off Poverty through Joint Construction and Breeding

Poverty alleviation through industrial development is a fundamental way of maintaining assistance outcomes. Considering the unsatisfying conditions for building workshops in Banlan village, Dahua county, Guangxi province and that the breeding and poultry raising leaders in the village are not competent enough, CDT innovatively designed a new model combining "poverty alleviation through relocation + co-ops + poor households". By building workshops in Sulietun, Gudan village, Dahua township, a place with more favorable conditions, and giving full play to the mature breeding techniques and sufficient fodder supply of Yuanfeng Planting and Breeding Co-op in Dahua county, CDT helped Banlan village build 2,000 sq.m. of Nubia goat workshops, with Yuanfeng Co-op as a representative, and organized breeding technique training sessions for poor households to continuously train local industry leaders, thus injecting lasting momentum to local poverty alleviation undertakings and equipping local people with a sustained capacity of creating wealth.

### Case The 11th Training Program for Officials in Xinghai County, Qinghai Province Successfully Held

CDT proactively assumed the task of assisting Xinghai county, Qinghai province, and organized the 11th Training Program for government officials at all levels in Xinghai county, to help trainees learn more theoretical knowledge and hands-on skills. In 2019, CDT signed the *Three-Year Action Agreement on Comprehensive Strategic Cooperation* with Qinghai provincial government, which further specified the requirement of providing training to officials in Xinghai county. By the end of 2019, CDT had held 11 training programs in total, benefiting 284 officials at all levels.

## Promoting targeted poverty alleviation

CDT adopts effective measures to respond to poor households' ardent expectations of gaining wealth and shaking off poverty with concrete actions, such as promoting poverty alleviation through industrial growth, educational progress and consumption, and thus contributes its wisdom and strength to winning the tough battle against poverty.



▲ After visiting its poverty alleviation target – Maoping village, Xiji county of Guyuan city and conducting field surveys for multiple times, Ningxia Branch finally decided to build cowsheds and encourage villagers to breed cattle, thus equipping local people with the ability of making money by themselves. By the end of 2019, CDT has introduced RMB 1.8954 million as poverty alleviation funds from various sources, and the per capita disposable income of local registered poverty-stricken households has increased from RMB 2,670 in 2017 to RMB 5,823. The village was successfully pulled out of poverty.

### Case Hunan Branch Brings Hope to Longzhu Village

After helping Longzhu village of Xiangxi autonomous prefecture exit poverty, Hunan Branch innovatively combined targeted poverty alleviation with the strategy of rural vitalization. Through conducting extensive surveys and field visits, and organizing experts to carry out on-site investigations and household surveys, CDT decided to help Longzhu villagers go towards a fairly well-off life by developing the tea-oil tree planting industry. In 2019, with the support of Tangzhu Breeding and Planting Co-op, CDT planned in a scientific manner to build a demonstration base for Longxi Lake tea-oil tree industry of about 700 mu, which will accommodate 258 people of 87 registered poor households, and plant over 58,000 tea-oil tree seedlings in two batches.



▲ Longzhu villagers are planting tea-oil tree seedlings.



▲ CDT employees stationed in Longzhu village and local villagers are checking the growth of tea-oil tree seedlings.



▲ Since 2016, Yunnan Power Generation Co., Ltd. has successively invested RMB 750 million as a special fund for poverty alleviation, and helped 106,500 Susu people in the assistance target area shake off poverty. On April 3, 2019, the company signed a Company-College Cooperation Framework Agreement for Targeted Poverty Alleviation with Yunnan Water Resources and Hydropower Vocational College, as a new education-based poverty relief model built on both sides' strengths. Based on the principle of "three preferences", outstanding students majoring in hydropower and renewable energy will be selected into the CDT Class. In 2019, 12 fresh graduates registered poverty-stricken from the college signed labor contracts with CDT, and will become interns and official employees of CDT.



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# [ CSR Feature II ]

## Going All Out to Fight COVID-19



In the beginning of 2020, facing the unexpected COVID-19 pandemic, CDT resolutely implemented decisions and arrangements made by the CPC Central Committee on COVID-19 prevention and control, swiftly responded to the emergency and strengthened organization and leadership to plan pandemic prevention and control practices as a whole. Drastic measures were taken at the critical moment to ensure stability and security of production and operations. CDT went all out and earnestly implemented all measures to ensure energy supply, providing strong guarantee for fighting the virus and resuming production and work, and helping win the battle against COVID-19.

### Carrying out pandemic prevention and control solidly

In the face of COVID-19, we resolutely fulfill our responsibility and mission as a central SOE, plan our actions as a whole and make deployments based on times and situations, thus ensuring stable production and operation, guaranteeing electricity, heat and other energy supply. While providing support to major domestic areas hit by COVID-19, we also insist on doing well in overseas pandemic prevention.

### Ensuring stable production & operation

We always put life security and the health of our employees as well as the general public at the first place. Facing the sudden hit of COVID-19, we timely sent out an emergency alert to all units across CDT. A Leading Group on COVID-19 Prevention and Control was soon set up, and the CDT leadership was urged to instruct secondary units to establish systems and work mechanisms on pandemic prevention and control, such as double work shifts, dual reporting, daily routine reporting and "zero reporting (reporting is still required even if there are zero cases)". Special meetings of the Leading Party Group on domestic & overseas COVID-19 prevention and control were convened, and targeted measures were formulated and implemented. Once the emergency occurred, we contacted local COVID-19 joint prevention & control entities and strictly completed all tasks assigned to us. We set up a powerful and efficient leading system and work mechanism to formulate work plans and contingency proposals; set out detailed prevention and control measures for different scenarios, such as production site and residential area; provide strong support in living, production and supplies; care for employees and solve their real problems.



▲ Strictly implementing COVID-19 prevention and control measures



### Guaranteeing electricity & heat supply

We arrange the ways of maintenance and operation in a scientific manner. While a double-shift work system is implemented in power plants of regions severely hit by COVID-19, a standby and work shift system is carried out in plants of other regions. We can thus flexibly arrange personnel on duty and stand-by in case of emergency, and ensure production and organization security during the pandemic control. We have also strengthened maintenance management and lowered down potential safety issues, reinforced operation management to improve the reliability of primary and auxiliary equipment, and ensured the safety and stability of power generation and heat supply in a long period. Besides, we carefully arrange fuel supply and increase the procurement, allocation and transfer of coal for power generation in coal-fired power plants, and keep coal inventory at a relatively high level.



▲ Equipment inspection strengthened during COVID-19



▲ Production equipment maintenance during COVID-19

### Providing support to major domestic areas hit by COVID-19

We fully root for Hubei province in pandemic prevention and control. Through multiple channels and by adopting multiple measures, we aim to ensure that Hubei province, especially Wuhan city, could access adequate supplies for pandemic prevention & control, production and living. To this end, we provide safe and reliable energy supply to areas severely stricken by the virus, supporting people to fight against the pandemic, orderly resume production and return to normal life. In this course, we have donated RMB 35 million to Hubei province.

#### Case Sticking to the Front Line and Taking up Responsibility

Since the COVID-19 outbreak, CDT Hubei company, in the center of the pandemic, carried out strict requirements, guaranteed safety and stability to ensure the life security of employees, and timely organized work resumption to ensure stable and safe production. CDT Hubei was in charge of coordinating with all CDT companies in Hubei to carry out joint pandemic prevention & control, monitor the pandemic dynamically, and establish linkage and emergency response mechanisms with local government and medical institutions. A "Party Member Vanguard Team on COVID-19 Prevention and Control in Hubei" was also set up to coordinate and plan the procurement, transport and hand-out of pandemic control supplies, as well as other tasks. In 2020 Q1, CDT Hubei generated 47.5GW of electricity, contributing to Hubei province's pandemic prevention & control and local economic and social development.



▲ Employees in CDT Hubei company are maintaining equipment on a mountain during the pandemic prevention and control period.



Paying attention to overseas pandemic prevention

We grasp the changes of overseas COVID-19 prevention and control accurately, improve the relevant accountability system, strengthen the joint prevention and control mechanism, formulate scientific work plans and ensure the health and safety of nearly 800 Chinese and foreign employees and their family members in 13 countries and regions, and the safe and steady operation of overseas projects. We also actively provide humanistic assistance to countries where our projects are located, to support local pandemic prevention and control.



Cambodian Power Grid Co., Ltd. and Cambodian Hydropower Development Co., Ltd. donated 10,000 facial masks and 50 medical protective gowns to the Ministry of Mines and Energy, Cambodia, to support the Cambodian government and people to fight against COVID-19, winning high praise from the Ministry.

China Datang (Lao) Pak Beng takes up fight against COVID-19



Vientiane Times, Lao newspaper, used one whole page to report the powerful and effective measures taken by China Datang (Lao) Pak Beng against COVID-19.

While carrying out pandemic prevention and control soundly, our overseas projects are resuming production and operation orderly. The No. 4 generating unit of Taipingjiang River Hydropower Station in Myanmar has completed C-class maintenance smoothly; Cambodian Power Grid Project is carrying out spring inspection orderly; Meulaboh Project in Indonesia is pushing ahead with high efficiency; the No. 1 generating unit of Payra Operation & Maintenance Project, Bangladesh realized full load for the first time; Dinginin Project in the Philippines has renewed labor contracts with expatriates. All these moves build up strength for the high-quality development of CDT's overseas business.



Employees of the Project Department of Cilacap Power Station in Indonesia stick to their posts to ensure safe operation of all generating units.

Resuming production and work orderly

Against the backdrop of normalized pandemic prevention and control, to resume work and production orderly, CDT takes on greater responsibilities and duties to concretely ensure stability in employment, financial operations, foreign trade, foreign and domestic investments, and expectations. The Corporation adopts all measures to ensure security in job, basic living needs, operations of market entities, food and energy security, stable industrial and supply chains, as well as the normal functioning of primary-level governments, and makes systematic arrangements to support stable economic progress.



The written test of the social recruitment campaign launched by CDT Inner Mongolia Branch during the pandemic prevention and control period for ensuring employment stability.

Case Ensuring Heat Supply and Going All out to Fight COVID-19

During the heat supply season, facing challenges brought by COVID-19, Heilongjiang Power Generation Co., Ltd. acted swiftly and implemented targeted measures against bad weather conditions in Heilongjiang region, such as strong snow and sharp drop of temperature. It always worked hard to ensure heat supply and people's livelihood, regarded pandemic prevention & control and power & heat supply as top priorities, and promoted pandemic prevention & control and safe work at the same time. It actively raised the temperature of supplied heat and extended the period of heat supply, to bring warmth and coziness to people staying at home, offer assistance to local pandemic prevention and control, and spread CDT's love and care with concrete actions.

With regards to the local government's requirements on pandemic prevention and control, and local companies' capacity in maintenance, CDT planned specific schedules on work and production resumption, and strictly adopted safety and technical guarantee measures, to ensure the resumption was promoted actively and orderly. Inspections and hidden trouble detection were conducted for coal and coal chemical companies, and specific plans were made for each and every CDT company to ensure steady and smooth resumption of work and production. In early March 2020, all CDT power infrastructure projects were back to operation, and relevant maintenance and technical innovation were carried out as scheduled; all CDT coal mining enterprises resumed production and work, and coal supply was stable.

Case Responding Immediately, Helping Companies Resume Work and Production

After the COVID-19 outbreak, antiviral drugs manufactured by Shaoxing Yatai Pharmaceutical Co., Ltd. (Yatai Pharmaceutical) went in short supply. To help the company resume work and production as soon as possible, Zhejiang Datang Shaoxing Jiangbin Thermal Power Co., Ltd. (Jiangbin Thermal Power) responded at once and mobilized its strength immediately to make arrangements. After confirming the needs of heat supply for Yatai Pharmaceutical, Jiangbin Thermal Power provided great support. It overcame difficulties and raced against time to accelerate the on-site pre-supply inspection of pipelines, determined the operation mode and technical measures to supply heat solely to Yatai Pharmaceutical, and strengthened on-site monitoring and protection of managerial personnel. It implemented 24-hour rotating shifts and restored heat supply within a short time. With the support of Jiangbin Thermal Power, Yatai Pharmaceutical was able to resume work and production early in the afternoon of February 1, ensuring smooth manufacturing of medical supplies against COVID-19.



Tangyun Conference Center of China Datang Group Technology Economic Research Institute was appointed as one of the first designated isolation facilities in Beijing, and the first one in Dongcheng district for travelers arriving from abroad. The center has received 93 people and successfully fulfilled its task, winning recognition from relevant authorities in Beijing.



Scan the QR code for more information



Scan the QR code for more information



# Forging Ahead for Value Creation

Adhering to the new vision for development, CDT strengthens strategic guidance to build a modern energy supply service system and ensure power and heat supply. The Corporation expands market-oriented operations to foster new strengths for high-quality development. In 2019, the Corporation generated 545.4 TWh of electricity, and the total profit reached RMB 12.063 billion, increasing RMB 2.465 billion on a YoY basis.

**545.4** TWh

In 2019, the Corporation generated

**12.063** billion

RMB the total profit reached

**2.456** billion

RMB increasing on a YoY basis



Contributions to SDGs





## Ensuring Energy Supply

**144.21** <sup>GW</sup>

By the end of 2019, the Corporation reached a total installed capacity of

Highlighting our principal business of energy, we vigorously develop clean energy and increase advanced capacity of thermal power to secure clean, low-carbon, safe and efficient electricity and heat supply for economic and social development. In 2019, 6.53 GW of power supply projects were in full production. By the end of 2019, reaching a total installed capacity of 144.21 GW.

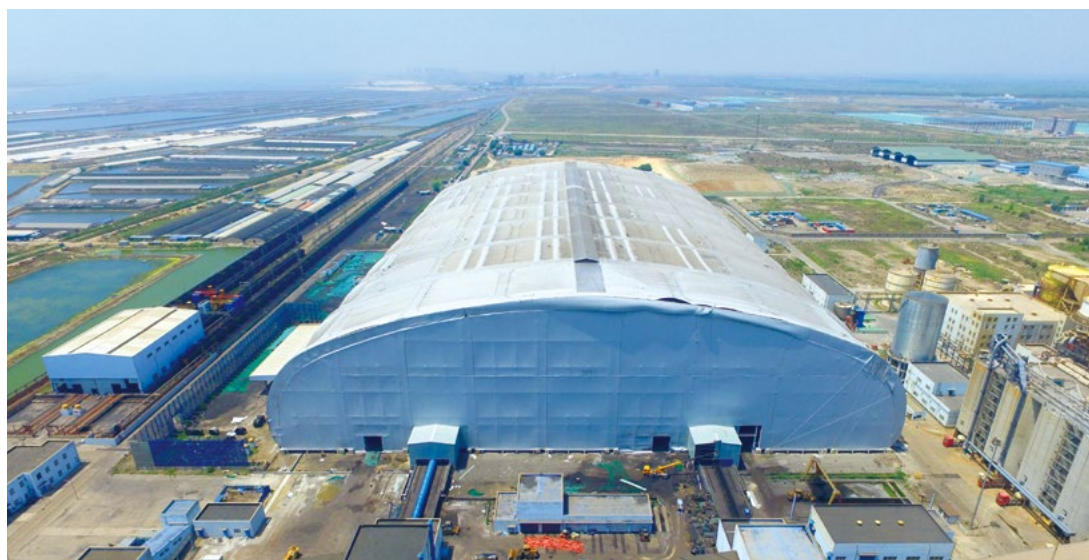
**408.659** <sup>TWh</sup>

in 2019, the volume of thermal power generation reached

## Developing clean and high-efficiency thermal power

We implement requirements of supply-side structural reform in the energy sector to keep advancing the clean and high-efficiency upgrade of thermal power units and shut down low-efficiency and backward thermal power units, facilitating high-quality development of the thermal power segment. By the end of 2019, the Corporation's thermal power installed capacity was 97.3214 GW, and the volume of thermal power generation reached 408.659 TWh throughout the year.

▶ CDT's daily power generation volume reached 1.932 TWh on July 27, 2019, exceeding 1.9 TWh for the first time and reaching a new record high in the Corporation's history.



▲ On June 28, 2019, the enclosed coal yard with a prestressed truss membrane structure for two 600MW units of Hebei Datang International Wangtan Power Generation Co., Ltd. was put into service. The coal field has the largest span in Asia. The project adopts a single-arch, single-span truss membrane structure, with no pillar in the middle, spanning over 288m from east to west, 211m from south to north, and reaches a maximum height of 59m. After being put into operation, it has completely eliminated the dust problem, bringing about huge social and environmental benefits.



◀ Datang Shandong Linqing Thermal Power Company's new project "Replacing Small Units with Large Ones" was granted 2018-2019 National Quality Engineering Award. The project is equipped with 2×350MW supercritical coal-fired CHP (combined heat and power generation) units. After being put into operation, the project has successfully replaced 14 smaller thermal power units of six companies, with a total capacity of 231MW, and 34 dispersed coal-fired furnaces in Liaocheng, delivering pretty good economic, environmental and social benefits.

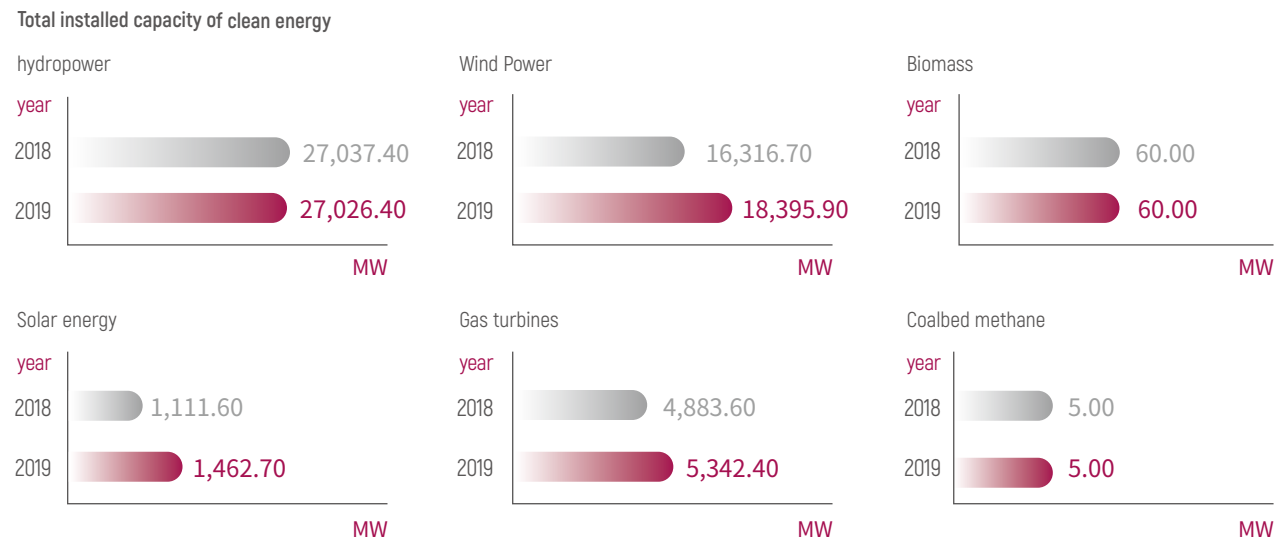


▲ On December 7, 2019, the newly installed No. 1 generating unit of Guangdong Datang International Leizhou Power Plant completed 168 hours of trial operation. After the unit is put into operation, under the rated working conditions, its coal consumption for power generation will reach 265.91 g/kWh. It can save about 74,800 tons of fire coal annually compared with single-reheat high-efficiency generating unit of the same capacity, cutting about 206,000 tons of CO<sub>2</sub> and 23.3 tons of SO<sub>2</sub> emissions. This is CDT's first double-reheat 1000MW unit, and the first one of its kind put into operation in Guangdong province.



Raise the proportion of clean energy

We step up efforts in developing wind power, PV and distributed renewable energy projects, aiming to form a sound multi-energy complementary layout, and achieve higher-quality development with better structure and greater benefits. In 2019, 4.21 GW of new energy projects were launched, and 2.43GW were put into operation, making new best records. 5.235 TWh of electricity was newly generated from gas turbines, clean energy like wind power, solar power, hydropower and renewable energy, reducing 4.2402 million tons of CO<sub>2</sub> emissions.



Case China's First Biomass Gasification Demonstration Project Completes 168 Hours of Trial Operation in Datang Changshan Thermal Power Plant

To implement the 13th National Five-Year Plan for Electric Power Development, strengthen environmental governance, realize clean, efficient and flexible operation of coal-fired thermal power plants, upon the approval of biomass demonstration project of the National Energy Administration, the Corporation and Jilin Power Generation Co., Ltd. decided to build a 20MW biomass gasification coupling coal-fired power generation demonstration project ("the Biomass Project" in short) considering the advantageous geographical features of Changshan Thermal Power Plant. After 19 months of development, construction and trial operation, on December 15, 2019, the project successfully passed 168 hours of trial operation.

The Biomass Project in Changshan Thermal Power Plant is the first biomass engineering in China that uses the technology of circulating fluidized bed and positive pressure transporting gasification, and has the largest single-unit capacity. The project has effectively prevented the explosion of combustible gas. It innovatively adopts a dual sealing system consisting a spiral self-sealing part and a three-level special stock bin, plus a sealing air system, to solve the problem of feeding corn stalks in a circulating fluidized bed and positive pressure transporting, which has been bothering the industry for a long time. Besides, the project solves the pollution caused by burning corn stalks in the field, and tackles low comprehensive energy efficiency of direct-fired power plants. Thus, it has a strong demonstration effect.



Biomass gasifier

Case The First Floating Solar Power Plant Brings People the Wealth of Sunshine

In the end of 2019, the first floating solar power plant of CDT – Changhe 100MW Fishery-Solar Complementary Project in Beigang, Yiyang city, Hunan province was successfully connected to the grid for power generation, becoming the first large-scale floating PV station in CDT and Hunan province. The project is estimated to output 125 GWh of on-grid electricity annually. Compared with a thermal power plant of the same scale, the project could save 40,000 tons of standard coal, reduce 721 tons of SO<sub>2</sub>, 1,083 tons of NO<sub>x</sub> and 100,000 tons of CO<sub>2</sub>, bringing the wealth of sunshine to local people. It also promotes the progress in fishery, power industry, tourism and taxation, making prominent contributions to the development of local economy.



Changhe 100MW PV Project in Beigang, Yiyang city, Hunan province.

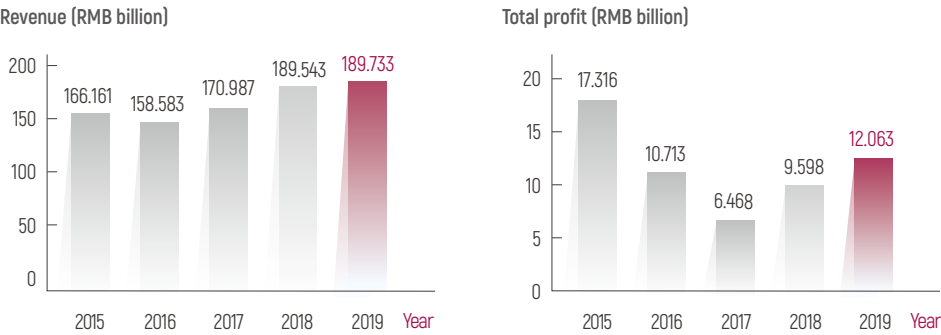


The second unit set of Datang Jintan Gas Turbine Project (2×400MW) has passed 168 hours of trial operation. Both two sets broke the record of shortest debugging time for GE combined cycle units of the same type in China. The gas consumption for power generation has reached advanced level among units of the same type in the same time period. The project has realized the goal of "running steadily, delivering profits, and reaching the designed value once being put into operation".



# Improving Asset Quality

We always put quality and benefits in the first place. Focusing on our six major business segments, i.e. electricity, coal, finance, overseas business, coal chemical and energy services, we enhance the efficiency of stock and increased assets, aim to achieve fruitful results in downsizing, and weed out backward capacity. In 2019, our net profit increased 16.76% on a YoY basis. The net profit attributable to shareholders of the parent company rose by 14.46% on a YoY basis. Profits were gained in all business segments, making due contributions to the country's stable economic growth.



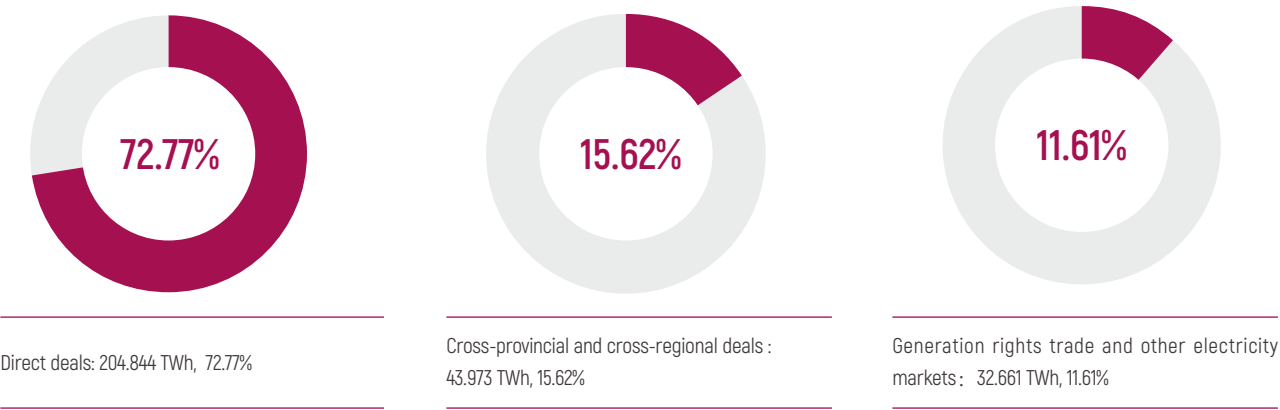
# Expanding the Power Market

We proactively adapt to the new reform of electric power system, explore and promote energy marketing business, grasp higher share in the power market, and further enhance the Corporation's profitability.

## Market-oriented reform of the power industry

We plan the management of volume, price and fees in a whole. While striving to win a higher market position and more policy support, we are dedicated to providing better ideas for the electric power market-oriented reform. In 2019, the Corporation completed 281.478 TWh of market-based transactions, which accounted for 54.67% of the total electricity sales and increased 24.14% on a year-on-year basis.

Composition of Market-based Electricity Transactions in 2019



## High-quality services

Concerning the market-oriented reform of the electric power sector, we have strengthened our marketing system and opened up convenient customer service channels and fully capitalized our professional edge to explore new value-added services. Building on the Corporation's advantage in resources, we have consolidated the relationship with Group-level strategic customers, and carried out in-depth cooperation with leaders in telecommunications, nonferrous metals, iron and steel, transportation, building materials, and the Internet industry. In aggregate, we have signed power supply contracts with over 3,000 customers.

### Prime Services and Measures

Perfecting the marketing system

We set up Sales Division (Marketing Center) at the Corporation and Marketing Business Divisions at secondary subsidiaries. Marketing Business Divisions and Energy Marketing Companies worked together to increase the strength of tertiary subsidiaries, and to grow strong the electricity sales business. Based on our power generation resources, we carry out integrated and professional marketing management.

Opening up customer service channel

We are a pioneer among central SOEs in the power generation industry in terms of opening up a national power sales service hotline 400-166-7777. Specific customer service personnel are assigned to provide customers with convenient consulting and business processing services, winning unanimous praise from customers.

Exploring more value-added services

Upholding the idea of "service first", we actively explore new value-added services for power users in Hunan, Anhui, Jiangsu and other provinces and cities. We are studying and developing an energy efficiency management platform in Hunan Branch to tailor-make energy-saving, maintenance, consulting and other considerate services for customers, thus continuously honing our power sales services.

Case

Customized Energy-Saving Service Wins Praise from Customers

During the preliminary stage of power sales, marketing staff from Datang Jiangsu Marketing Company found the power factor of a customer company only reached 80%-85%, significantly lower than 90%, the level required by power supply companies. The company was fined nearly RMB 10,000 for that every month. After a field survey of power distribution equipment of the company, Datang Jiangsu Marketing Company gained a better understanding of the power usage. After professional monitoring and testing of equipment and instruments, it found that some of the high-power equipment was used improperly, and some reactive power compensation devices damaged. Later, Datang Jiangsu Marketing Company offered both short-term maintenance scheme and long-term renovation & optimization plan to help the company effectively improve the power factor of its electric equipment, and enhance the output of such equipment. Finally, all equipment lives up to the assessment requirement, power quality and the work safety are improved while conserving energy and reducing consumption.

Scan the QR code for more information about CDT's 400 power sales service hotline





## Consolidating the Safety Foundation

Upholding the concept of safe development, CDT continuously consolidates the foundation for work safety and management, and strengthens the comprehensive governance of equipment for safe operation. Our safety education facilitates an atmosphere of safety first. We have successfully completed major tasks of political significance, such as power supply during the celebration of the 70th founding anniversary of the PRC, and the Belt and Road Summit. In 2019, we troubleshooted nearly 19,000 equipment problems, removed over 7,000 chemicals hazards, revised 5,706 contingency plans and held 2,220 emergency drills and training sessions.

**7,000** chemicals hazards  
In 2019, the Corporation removed over

**5,706**  
revised contingency plans

**2,220**  
held emergency drills and training sessions





# Reinforcing Safety Management

We hold major entities fully responsible for work safety, strictly implement relevant regulations and resolutely fight formalism and bureaucracy. While strengthening the identification and prevention of work safety risks in all links, we spare no efforts in improving the emergency response system. By revising contingency plans and carrying out emergency drills and training, we strive to increase safety in fields of production, infrastructure construction, transportation, network information, and public opinion in an all-round manner, thus effectively enhancing safety guarantee. In 2019, no major personal injury and equipment accident, network information security or public opinion incident occurred.

## Safety and Risk Management Measures

### Establishing and improving systems and regulations to facilitate implementation

Regulations like *Work safety Responsibility System of the CDT Headquarters* and *Procedures for Reporting and Investigating Work safety Accidents* were revised, and *Accountability Measures for Safety and Environmental Protection* was formulated, laying a strong institutional foundation.

### Strengthening assessment to step up work safety accountability

We will continue to maintain a high-handed posture to resolutely ensure work safety, take a zero-tolerance stance against any violation, and strictly implement the "double investigation" system to hold relevant staff accountable for safety accidents.

### Strengthening work safety inspections to hold relevant personnel accountable

The Safety and Ecological Protection Inspection Department was set up in the headquarters to constantly strengthen safety inspections. In 2019, we carried out 92 safety and ecological protection inspections, issued 11 inspection reports to subsidiaries, handed over 87 trouble checklists to primary-level companies, and listed one subsidiary and two primary-level companies with poor management performance to urge and follow up with their rectification of major issues.

### Reinforcing the capacity of risk prevention and control to build an intrinsically safe enterprise

We continue to build an intrinsic safety risk management system by further identifying post risks, and improving the risk checklist and a long-term mechanism for risk prevention & control. We have conducted in-depth internal and external assessments of safety risks control, and risk prioritization to enhance our capacity of safety management. A 100-day campaign on "Preventing Major Risks, Ensuring Safety and Stability" was carried out, which focused on "major hazard sources, critical hazardous areas, and key high-risk operations", and eliminated over 19,000 safety hazards.

### Consolidating the assurance system to enhance the safety capacity

We apply technologies to improve monitoring. In 2019, 15093 safety issues were identified, 11,928 technology service projects completed, and 95 major problems solved, effectively eliminating safety hazards.

### Troubleshooting loopholes in an in-depth manner to enhance the closed-loop rectification

We solidly implement the listing & supervision system for major safety hazards by registering major issues in a database, following up the rectification regularly, and timely removing rectified issues from the database. Every spring and autumn, we organize safety inspections to ensure safety and stability of power supply during the summer and winter peak. Learning from accidents in and out of the CDT system, we troubleshoot safety hazards from time to time, and ensure a closed-loop rectification. Rectification results will be evaluated from three aspects, i.e. whether or not well rectified, effects, and long-term mechanism, to ensure all loopholes are properly closed.

## Case Stable Power Supply During the Celebration of the 70th Founding Anniversary of the PRC

To celebrate the 70th founding anniversary of the PRC, CDT carefully arranged the work on stable power supply with high sense of responsibility and mission. We set up a leading group on safe and stable power supply to formulate and issue a general work plan as well as eight respective plans on production, infrastructure, coal chemical, environmental protection, fuel supply, and security guarantee. In the meantime, Affiliates of CDT strengthened their forecast of the fuel supply situation and assessed the fuel supply capacity in advance. They formulated specific plans on fuel supply and kept close communication with relevant coal and railway partners as well as local governments to increase the fuel procurement and supply volume and effectively keep the inventory at a proper level during the critical time period. CDT's actions showed our sense of responsibility, and we were praised by the National Energy Administration in written form.



Sparing No Efforts in Ensuring Stable Power Supply During the Celebration of the 70th Founding Anniversary of the PRC



Chairman Chen Feihu in Gaojing Thermal Power Plant for inspection and supervision over the power supply status for the 70th anniversary celebration



Affiliates of Datang International spare no efforts in securing power supply of the capital city during the celebration period.



# Increasing Equipment Safety

We increase input in work safety and strengthen equipment and overall governance on a regular basis. A series of activities on "reducing faults and unscheduled downtime, and striving to be Class A units" have been carried out, and a four-level acceptance inspection and supervision system for quality control is well implemented, to ensure all equipment are functioning well and safely. In 2019, we invested RMB 6.687 billion in improving equipment energy-saving ability and reliability. 13 of our generating units won awards in the national electric power reliability competition, and 62 won large generating unit competition, ranking high in the industry.

CDT Class A Generating Units in 2019

Company Name	Generating Unit
Inner Mongolia Tuoketuo Power Generation Co.,Ltd.	No. 11 Generating Unit
Jiangxi Datang International Fuzhou Power Generation Co., Ltd.	No. 2 Generating Unit
Zhejiang Datang Wushashan Power Generation Co., Ltd.	No. 2 Generating Unit
Hebei Datang International Zhangjiakou Power Plant	No. 1 Generating Unit
Tianjin Datang International Panshan Power Generation Co., Ltd.	No. 3 Generating Unit
Datang Yangcheng Power Generation Co., Ltd.	No. 5 Generating Unit
Datang Yangcheng Power Generation Co., Ltd.	No. 6 Generating Unit
Datang Yangcheng Power Generation Co., Ltd.	No. 7 Generating Unit
Jiangsu Xutang Power Generation Co., Ltd.	No. 6 Generating Unit
Datang Huainan Luohe Power Plant	No. 5 Generating Unit
Datang Shandong Huangdao Power Generation Co., Ltd.	No. 5 Generating Unit
Datang Xinyang Power Generation Co., Ltd.	No. 4 Generating Unit
Datang Guizhou Fa'er Power Generation Co., Ltd.	No. 4 Generating Unit

# Raising Safety Awareness

We constantly promote safety culture and improve the safety capacity of our employees by organizing the activity of "Year of Electricity Safety Culture Promotion" in an in-depth manner, naming safety culture demonstration companies, and giving safety training. In 2019, Henan Xuchang Longgang Power Generation Co., Ltd. and Shandong Huangdao Power Generation Co., Ltd. under CDT won the honorary title of National Demonstration Enterprise for Safety Culture Building. By the end of 2019, we had 1,395 certified safety engineers, including 95 newly certified in 2019.

1,395 certified safety engineers

By the end of 2019, the Corporation had

2019 CDT Safety Training

	Number of Sessions	Participations
Training for Full-time Safety Supervision Personnel	8	942
Continuing Training for Certified Safety Engineers	3	484



▲ First Aid Lecture given by Jiangxi Datang International Xinyu Power Generation Co., Ltd.



▲ Cardio-Pulmonary Resuscitation Training given by Datang Guizhou Fa'er Power Generation Co., Ltd.



▲ The Safety Training VR Classroom of Datang Huaibei Power Plant was put into use in December 2019. The classroom adopts VR, virtual simulation, panoramic VR and other advanced technologies to simulate real scenarios, combining technologies with work safety training realizing safety training of various scenarios.



# Pursuing Green Development

Upholding the development philosophy of "lucid waters and lush mountains are invaluable assets", CDT has improved the environmental protection management system, and strengthened capacity building in energy conservation and emission reduction. We save energy resources and reduce the consumption of fossil fuel and the emission of pollutants, so as to protect the ecological environment and boost green development. In 2019, we invested RMB 3.254 billion in environmental protection facilities and environmental treatment. We implemented 16 enclosed coal field renovation projects, and finished three wastewater treatment projects with a total capacity of 5.82 GW.

RMB **3.254** billion  
investment in environmental protection  
facilities and environmental treatment

**16**  
Number of enclosed coal field renovation  
projects

**5.82** GW  
three wastewater treatment projects have  
been finished with a total capacity of





# Saving Energy Resources

298.31<sub>g/kWh</sub>

The coal consumption for power generation in 2019 was

Aligning ourselves with the requirements of energy conservation and emission reduction policies, we continuously enhance the energy and resource efficiency. In 2019, we spent more than RMB 2 billion in upgrading equipment, reducing the coal consumption rate to 298.31g/kWh, which showed a YoY decrease of 3.54g/kWh, and cutting about 3.7 million tons of CO<sub>2</sub> emissions, making constant improvements.

### Actively Upgrading Coal-Fired Units

230

By the end of 2019, the number of ultra-low emission coal-fired units were

In response to three national ministries' requirements for the energy consumption limit of coal-fired generating units, we step up efforts in upgrading such units, and set goals for energy conservation and consumption reduction during the 13th Five-Year Plan period.

109 indicators were determined for the energy consumption diagnosis system; full-coverage energy conservation diagnosis and special inspections were conducted, and bottlenecks of energy consumption were rectified.

Now we have 230 ultra-low emission coal-fired units, accounting for 97.04% of the total capacity. And we have 62 winning coal-fired units of the Energy Efficiency Benchmarking Competition in China's power industry, accounting for 26% of the total number, maintaining a leading position in the industry.

# Cutting Pollution and Emissions

We actively promote standardized management of the environmental protection performance of our companies. To ensure all major pollutants are emitted up to standards, we have taken a bunch of measures, including formulating the *Evaluation Criteria for the Environmental Protection and Production Performance of Thermal Power Enterprises*, conducting in-depth inspections of the environmental management performance of thermal power enterprises, strengthening online monitoring of environmental protection data and realizing real-time status evaluation and alerting, etc.

### Pollutant Emission Rates Over the Years

	2013	2014	2015	2016	2017	2018	2019	year
SO <sub>2</sub> Emission Rate(g/kWh)	1.57	0.97	0.69	0.36	0.21	0.16	0.14	
NO <sub>x</sub> Emission Rate(g/kWh)	2.41	1.73	1.18	0.74	0.26	0.22	0.19	
Soot Emission Rate(g/kWh)	0.3	0.23	0.15	0.09	0.06	0.04	0.025	
Wastewater Discharge Rate(g/kWh)	170	155	115	95	80	60	50	

## Case No.3 Generating Unit of Datang Guiguan Heshan Electric Power Co., Ltd Ultra-Low Emission Upgrade

Datang Guiguan Heshan Electric Power Co., Ltd invested about RMB 79 million in upgrading its No. 3 generating unit. After upgrade, the unit's SO<sub>2</sub>, NO<sub>x</sub>, and soot emission concentrations dropped less than 35 mg/m<sup>3</sup>, 50mg/m<sup>3</sup> and 10 mg/m<sup>3</sup>. And the annual emissions of SO<sub>2</sub>, NO<sub>x</sub> and soot are reduced by about 1,712 tons, 989 tons and 83 tons respectively. The ecological environment, lucid waters and blue sky are effectively protected.



▲ Ultra-Low Emission Transformation Project of the No. 3 Generating Unit of Datang Guiguan Heshan Electric Power Co., Ltd.



Scan the QR code for more information about CDT's practices in energy conservation and emission reduction

## Case Remarkable Outcomes of the Comprehensive Treatment of Coal Ash

The Kulyuetu Ditch Watershed Comprehensive Governance Project of Inner Mongolia Tuoketuo Power Plant used "train (the railway stretching 8.2 km) + belt conveyor (the belt 4.3 km) + cars" to transport coal ash from power units to Kulyuetu Ditch, to fill the ditch and prepare it for further earthing and greening. The daily ash transport capacity was 12,000 tons, and 6.1 million tons of ash could be treated this way each year. While properly solving the difficulty of storing and disposing of coal ash, the project helped relieve water and soil loss, improve the local ecological environment, and improve living and production conditions for this poverty-stricken area. It is estimated that a total of 4.01 million m<sup>2</sup> of area were filled thanks to the project, which greatly improved the natural environment of Kulyuetu Ditch, laying a solid foundation for developing a national demonstration project for the comprehensive treatment of coal ash.



▲ The Kulyuetu Ditch Watershed Comprehensive Governance Project of Inner Mongolia Tuoketuo Power Plant



## Protecting Biodiversity

We attach great importance to environment protection. By formulating the *Management Measures for Environmental Protection of Construction Projects* and “*Three Simultaneous*” for Water and Soil Conservation and issuing the *Notice on Strengthening the Finishing Work of Power Infrastructure Projects to Deliver Green Projects*, we strengthen the management of environmental and water protection, and ensure that related facilities and earthwork engineering are designed, constructed and put into use at the same time, thus guaranteeing all projects meet legal requirements before being put into service. In 2019, no environmental or water protection incidents occurred in CDT power projects under construction.



Scan the QR code for more information

### Case Longtan Hydropower Plant Builds a Garden for Rare Wild Plants

Longtan Hydropower Plant is located in Tian'e county, Hechi city, northwest of Guangxi province, upstream of Hongshui River. Since the place is rich in plant resources, to protect local rare species, Longtan Hydropower Plant invested more than RMB 2 million to build a garden for protecting rare wild plants, covering an area of about 33,000 square meters. It has relocated and protected more than 300 rare wild plants and 9 ancient trees, which is of great significance for maintaining the ecological balance and species diversity in the reservoir area.



▲ Longtan Rare Wild Plant Garden

### Case Green Mines – Transition from Hills and Gullies to a Fertile Plain

Datang Inner Mongolia Baoli Coal Company adheres to the philosophy of “developing a coal mine, growing an oasis, benefiting local people, and protecting the blue sky”. It explores and continuously improves the construction, accountability and monitoring systems for green mines in a scientific manner, and sticks to the guiding principle of “reclamation & exploitation simultaneously”. The company actively builds fully-enclosed coal fields and applies the technology of exploiting ultra-thin coal seams. It has finished the greening and renovation of 270 hectares of coal mine sites and dumps, and reclaimed over 95% of area in the mine lots that could be greened and reclaimed. By using organic polymer solidifying dust suppressors, dust could be monitored online and effectively controlled. By the end of 2019, a total of RMB 45 million has been invested to turn the previously desolate gullies into a green, fertile plain. The company plays a leading demonstration role for other middle and small open-air coal mines in Inner Mongolia. On January 8, 2020, upon the assessment and approval of the Ministry of Natural Resources, Baoli Coal Co., Ltd. was listed as one of the national green mines.



▲ Landscape of the “Green Mine”

## Coping with Climate Change

We have comprehensively enhanced the ability of addressing climate change, improved the management system for pollutant discharge license, and increased the management efficiency of carbon assets. In 2019, the total amount of our CO<sub>2</sub> emission, dropped 5.81% on a YoY basis, and the overall carbon emission intensity was 3.87% lower on a YoY basis.

5.81%

The total CO<sub>2</sub> emissions in 2019 were 5.81% lower on a YoY basis.

### Case Saihanba Wind Farm – A Green Miracle in High on the Frigid Highland

The Saihanba Wind Farm managed by Datang (Chifeng) Renewable Energy Co., Ltd. is the first renewable energy project of CDT, and the largest wind farm in the world by now. A strong wind with over Level 5 or 6 of high wind speed blows more than 300 days a year in Saihanba, and the non-frost season only lasts three months. The local minimum temperature could drop to minus 42 degrees Celsius, and it's pretty common to have one's knees buried in snow. In the face of such extreme conditions, CDT employees spent 14 struggling years to finally deliver one and another green miracle here.

On August 12, 2005, the first batch of units for Phase 1 Project was successfully connected to the grid, achieving a zero breakthrough of CDT's wind power. By the end of 2017, Datang Saihanba Wind Farm had reached a total installed capacity of 1.5103 GW. With 1,136 wind power units of various types installed, 7.37 million tons of standard coal could be saved each year, and 20.43 million tons of CO<sub>2</sub> emissions reduced, making concrete contributions to the building of “Green China”.

Ratio of the Installed Capacity of Clean Energy (%)



▼ In May 2019, the first batch of 62MW units in Hejiashan Wind Farm, Sichuan province was connected to the grid.





## Exploring Ways to Unleash the Momentum for Innovation

CDT highly values scientific innovation, comprehensively strengthens the innovation system, and promotes the structural upgrade of its businesses. By fostering innovative talents in S&T research, and commercializing advanced technologies and research outcomes, we are able to lead high-quality development by technological innovation. In 2019, we invested RMB 3.548 billion in S&T development, a YoY increase of 6.4%. 1,366 patents were authorized, and 61 standards of industrial level or higher were compiled.

RMB **3.548** billion  
investment in S&T development

**1,366**  
Number of authorized patents

**61**  
Number of compiled standards of  
industrial level or higher





# Perfecting the Innovation System

The innovation system is being continuously perfected. Through setting up an independent research and development platform, establishing a renewable energy research center, and planning to launch the innovation base, we have laid a solid foundation for activating our innovation capacity. In 2019, we guided the operations of eight research centers, including the centers on computational analysis and combined heat and power generation for cities and towns. Three renewable energy research centers on wind resources assessment & development and other subjects were planned to be built, and three key labs on metal materials for power plants and other disciplines were approved to be built.

## Promoting the Construction of "National Technical Standards and Innovation Base (International Standardization of Power Generation)"



▼ Datang Delingha PV Power Plant



# Fostering Innovative Talents

We continuously strengthen the cultivation of innovative talents. By increasing rewards, improving the management model of innovation studios, and we encourage employees to engage in innovation activities via innovation studios and competitions, nurture and give birth to new engines for development. In 2019, we granted bonuses totaling RMB 4.3266 million to 165 projects and 758 employees for industrial- and Corporation-level S&T contributions. Subsidiaries at various levels organized over 1,000 competitions, attracting more than 60,000 participants. Over 700 innovative outcomes were also achieved throughout the year.

RMB **4.3266** million

In 2019, the Corporation's bonuses for industrial- and Corporation-level S&T contributions totaled

## Case Prominent Demonstration Effect of the Employee Innovation Studio of Weihe Thermal Power Plant

To continuously stimulate the vigor and momentum of front-line staff for innovation, we give full play to the role of employee innovation studios. We name such studios after outstanding employees to pool strengths for the Corporation's growth. Yang Yinjuan is an engineer specialized in steam turbine management in Weihe Thermal Power Plant. She has achieved outstanding performance in technical skill competitions, and has won honors like National Labor's Day Model Female Worker, Moral Model in Xianyang City, etc. The Yang Yinjuan Innovation Studio, focuses on key problems and difficulties in production and operation, actively carries out various innovation and technical breakthrough, and plays a positive demonstration and guiding role in stimulating employees' passion for innovation and creation. By the end of 2019, the studio has achieved over 40 innovation outcomes, and its members granted 26 national patents for utility models. The studio is also honored as the Demonstration Employee Innovation Studio in Shaanxi Province and CDT Outstanding Employee Innovation Studio.



94

In 2019, the number of awards at the industry level

8,008

By the end of 2019, the number of authorized patents was

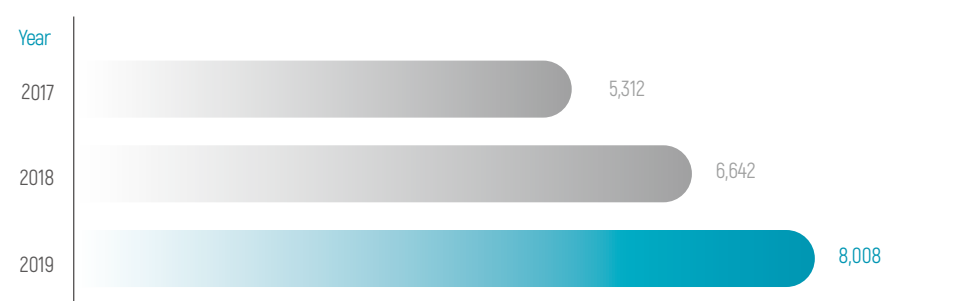
## Developing Advanced Technologies

CDT focuses on frontier technologies in the global energy sector, and strives to tackle key technical problems by improving independent innovation capacity. In 2019, we won 94 awards at the industry level including the China Electric Power Science and Technology Progress Award, China Electric Power Innovation Award, Power Construction Science and Technology Progress Award, and Energy Innovation Award of China Energy Research Society. Among them, 13 were first prizes, 6 were leading technologies in the world, 17 were internationally advanced technological achievements, 16 were leading technologies in China, and one was domestically advanced achievement, resulting in an increasingly better evaluation of our S&T outcomes.

Industrial-Level Science and Technology First Prizes Obtained by CDT in 2019

Award Name	Award Level	Project Name	Field
China Electric Power Science and Technology Progress Award	First Prize	R&D and Application of Key Technologies for Intelligent Combustion and Real-time Control of Coal-fired Generating Units	Coal Power
China Electric Power Innovation Award	First Prize	Research on Key Technologies for the Safe Maintenance of Bolts in Wind Turbines in Service	Wind Power
China Electric Power Innovation Award	First Prize	Research and Application of Key Technologies for Corrosion and Scaling Control of the Water Vapor Circulation System of High Parameter Coal-fired Power Units	Coal Power
China Electric Power Innovation Award	First Prize	The Technology of Real-time Stress Monitoring and Dynamic Damage Evaluation for Peak Load Units	Coal Power
China Electric Power Innovation Award	First Prize	Research and Application of Key Technologies for Assessing the Generating Capacity Based on the Health Status of Units	Information Technology
China Electric Power Innovation Award	First Prize	Innovation in Standards for the Distributed Control System of Thermal Power Plants	Standard Development

Total Number of Granted Patents over the Past Three Years



## Promoting the Application of Research Outcomes

We continuously strengthen the commercialization and application of innovative research achievements. Through building a platform for sharing technical innovation results, and compiling catalogues of such outcomes for promotion, we strengthen the sharing, joint use and mutual benefits of innovative fruits. In 2019, we compiled the *Catalogue of CDT Scientific and Technological Achievements (2017-2018)*, to publish the list of the Corporation's first and second batches of scientific achievements (patents) in 2019, as well as companies that have applied those achievements. This will also help primary-level enterprises access to and make better use of scientific achievements (patents) that have been promoted by the Corporation. In 2019, we commercialized over 70 scientific achievements, with a total value of more than RMB 27 million, and over 40 achievements have been promoted and put into application.



▲ Chongqing Branch's Achievement debuts at the Fourth International Innovation & Entrepreneurship Expo and wins the award of Outstanding Achievement by the Expo.



▲ On December 6, the Phase 2 Flexible Renovation Project of No. 1 and No. 2 Thermal Power Generating Units of Datang Harbin No. 1 Thermal Power Plant were successfully put into operation. As an electrode direct heating boiler coupling project, it has the largest single unit capacity and total installed capacity in China, and the thermal efficiency could reach 99.11%.



### H-Class Heavy Gas Turbine Demonstration Localization Project – Nanjing Power Plant Phase 2 Gas Turbine Project

Datang Nanjing Power Plant Phase 2 Gas Turbine Innovation Demonstration Project plans to build two sets of 9H-class steam-gas combined cycle peak shaving units. The key components of the gas turbines are manufactured domestically for the first time. The main steam parameters of the waste heat boiler under high pressure are 17 MPa and 600°C, the best among current combined cycle units. The thermal efficiency of the combined cycle is 62.92%, the comprehensive auxiliary power consumption rate is 1.4%, and the NO<sub>x</sub> emission concentration is less than 9mg/m<sup>3</sup>. With high thermal efficiency and low energy consumption rate, the project is at a leading level in China.



### The Achievement *Innovation in Standards for the Distributed Control System of Thermal Power Plants* Brings about Economic and Social Benefits

The *Innovation in Standards for the Distributed Control System of Thermal Power Plants* is one of the Corporation's innovative results and provides standards for thermal power companies in fields of maintenance and test, operation, and energy conservation and emission reduction. It can enhance the safety level of thermal units in terms of equipment reliability, standardized overhauling and operation, and the emergency handling capacity of personnel. With its support, approximately RMB 14 million of losses could be avoided each year, bringing about remarkable economic and social benefits. In 2019, the achievement won First Prize of Power Innovation Award organized by China Electricity Council. One of its standards, *IEEE P1865 Specifications for Maintenance and Test of Distributed Control Systems in Thermal Power Plants*, is the first IEEE standard on automated control systems led by China in the compilation process, filling the blankness of our country in this realm, and providing institutional foundation for domestically-developed DCS systems to go global.



## Going Global for International Cooperation

Following the principle of consultation, contribution and shared benefits, CDT always pursues development through opening up. We actively respond to the Belt and Road Initiative, build a new landscape of international development, and prioritize "going global". Giving full play to our strengths, we work with global partners for common prosperity. By the end of 2019, we had 15 secondary subsidiaries engaged in international business, and 29 overseas organizations. Our total overseas assets reached RMB 17 billion, and total overseas installed capacity reached 360 MW. Our projects had entered 13 Belt and Road partner countries.

**15**

secondary subsidiaries engaged in international business

**RMB 17 billion**

total overseas assets

**360<sup>MW</sup>**

total overseas installed capacity



Contributions to SDGs





# Jointly Contributing to the Belt and Road Initiative

We always adhere to open development and go global resolutely. Focusing on our key business segments, i.e. wind power, solar power, gas and services, we develop clean energy projects, export technologies and services, carry out power operation & maintenance projects, strengthen cooperation in the energy sector, and continuously expand international business. We dig deep into the Southeast Asian market, and solidly expand markets of the Belt and Road countries.

## Power projects

We expand overseas business on an ongoing basis, maintain safe and stable operations of our power projects, help ensure local energy security, and promote the development of local economy and society.



▲ The Stung Atay Hydropower Project in Cambodia runs safely and steadily, and delivers favorable benefits. In 2019, its power generation volume reached 186 GWh.



▲ The Phnom Penh to Battambang 230kV-substations project runs safely and steadily, making prominent contributions to the operation of local power grid and power supply.



▲ The Taipingjiang River Hydropower Plant in Myanmar runs safely and steadily, and ensures local power supply. In 2019, its power generation volume reached 920 GWh.

### Case

### The Meulaboh Project in Indonesia Becomes a “Business Card of CDT in Southeast Asia”

On December 24, 2019, the Meulaboh 2x 225MW coal-fired power generation project of CDT completed the first-cubic-meter concrete pouring, marking that CDT’s first overseas thermal power project formally moved into the construction stage. After put into operation, the project would take place a local diesel power plant, effectively relieving the shortage of electricity in Nanggroe Aceh Darussalam, northern Sumatera, Indonesia, and providing safe and reliable energy for local economic and social development.



▲ Construction site of the Meulaboh 2x 225MW coal-fired power generation project, Indonesia



▲ Renderings of the Meulaboh 2x 225MW coal-fired power generation project after completion



# Deepening International Exchange

In line with the principle of openness, inclusiveness and win-win cooperation, we take an active part in domestic and foreign diplomatic activities, and strive to improve the global image of Chinese central SOEs. With the support of the national diplomatic platform, we have built a bridge for exchange and cooperation with Belt and Road countries and regions to constantly deepen international exchange. In 2019, we participated in 2019 Annual Meeting of the New Champions of World Economic Forum, the Sixth India-China Strategic Economic Dialogue and the India- China Economic Cooperation Forum, China-CEEC Energy Cooperation Forum, the 24th World Energy Congress, the Electric Power Tech Korea, and other major international events, to promote international production capacity cooperation in the energy and power sector.

## Measures for International Exchange and Cooperation

Expanding the circle of friends and cooperation, and establishing comprehensive strategic partnerships with globally-renowned companies.

Establishing long-term liaison mechanisms with foreign embassies in China, and exploring the mode of cooperation with power companies in Southeast Asia.

Taking an active part communication, speaking out loud, building our image, and increasing our international exposure with the support of important multi-lateral and bilateral exchange platforms.



Chairman Chen Feihu meets with Bounnhang Vorachith, President of Laos, who attended the Second Belt and Road Forum for International Cooperation in Beijing, to discuss about further cooperation.



CDT attends the Second Belt and Road Forum for International Cooperation. Chairman Chen Feihu attends the Opening Ceremony of the forum, and addresses the Belt and Road CEO Conference on behalf of the Silk Road Business Council and CDT, winning warm response from Chinese and foreign entrepreneurs.



Scan the QR code for more information

# Technical standards

Giving full play to our technical strength, we export high-end technologies and provide operation & maintenance services for power projects, to secure the safe operation of equipment in power plants.



The five year operation & maintenance project of 2×660MW ultra-supercritical coal-fired units in Pajala, Bangladesh is a flagship project under the Belt and Road initiative, marking CDT's new breakthroughs in the overseas high-end technology operation & maintenance market. The project is the first large-scale ultra-supercritical power plant in Bangladesh, and has the largest installed capacity at the highest level among all thermal projects under construction.

## Case The Cilacap Power Plant in Indonesia Builds CDT's Brand in Operation and Maintenance

The Cilacap Power Plant is the only energy base in southern Java, Indonesia. Its equipment system once broke down for over 60 times a year. Since Huainan Tianjia'an Power Plant, took on the responsibility of running and maintaining the Cilacap Power Plant in 2008, it has been vigorously renovating equipment and upgrading the system, and constantly improving the conditions of generating units. The power Plant now becomes a model and benchmark that could realize long-term operations, and it is a model power plant operation & maintenance case in the region.



Xiao Qian, Chinese ambassador to Indonesia, pays a visit to the Cilacap Power Plant.



Sao Tome Power Assistance Project Phase II provides stable electricity to local people. In 2019, China Datang Overseas Electric Technology and O&M Co., Ltd. successfully completed the overhaul of generating units and trained local employees. It timely and properly responded to the failure of oil feed during Sao Tome's parliamentary elections, and received a Letter of Gratitude from Sao Tome's government.





▲ Chansy Phusikham, member to the Political Bureau of the Lao People's Democratic Republic, Secretary of the Central Secretariat and Minister of the Central Organization Department, and Khamphanh Phommahat, member to the Political Bureau, Secretary of the Central Secretariat and Director of the General Office of the Central Committee, visited CDT Headquarters for a meeting. Wang Yajun, Vice Minister of the International Department of the CPC Central Committee attended the meeting.



▲ Chairman Chen Feihu meets with U Win Khaing, Minister of Electricity and Energy of Myanmar, to discuss about project development in Myanmar.



▲ CDT hosts an Offshore Wind Power Business Seminar for Companies in the UK and China, to facilitate in-depth discussions on offshore wind power cooperation between China, UK, and third-party markets.



▲ CDT attends the Second China International Import Expo and signs cooperation agreements with Shanghai Electric Group, Ansaldo Energia (Italy), Kideco (Indonesia), Mercuria Energy Trading (Switzerland) and Sibir Energo (Switzerland).

## Driving Local Growth

We actively fulfill our responsibilities overseas. We provide abundant green energy to local people and create more jobs by investing in overseas energy and environmental protection projects. These efforts also drive local economic growth and improve people's living conditions.

### Case Taipingjiang River Hydropower Plant Helps Build an Outstanding Corporate Citizen Image in Myanmar

Taipingjiang River Hydropower Plant of China Datang Overseas Investment Co., Ltd. actively practices social responsibilities overseas. It provides safe and reliable energy resources for local economic and social progress. Besides, it trains technical professionals, creates jobs, actively participates in disaster rescue and relief, and strives to improve local people's living conditions, thus contributing to China-Myanmar power and energy cooperation and serving the Belt and Road Initiative.

- Providing clean electricity to drive local economic growth**  
 The company ensures stable and reliable electricity supply for Bhamo, Myanmar. It facilitates local residents to use household appliances, further promotes industrial and agricultural production, and contributes to local economic growth and people's livelihood, winning high praise from Myanmar people.
- Hiring local employees to promote localized operations**  
 Three recruitment campaigns were organized in Bhamo and Myitkyina, and nine outstanding Myanmar employees were hired, which promotes local employment and trains power professionals.
- Being dedicated to public welfare to boost the development of local social undertakings**  
 The company immediately responded to severe landslides during the flood season, and repaired damaged roads and bridges at once, solving travel difficulties for local residents, and was spoken highly of by local people.

### Case Datang Environment Industry Group Gives Full Play to Its Technical Strength to Create Green Power Plants

In 2019, Datang Environment Industry Group won the bid for a desulfurization project in India. The company will adopt its proprietary IP, wet limestone-gypsum desulfurization process, and use high-efficiency turbulence devices in this project, so the sulfur removal rate for SO<sub>2</sub> could reach as high as 97%. After completion, the project will effectively reduce the SO<sub>2</sub> emission level of coal-fired power plants, and greatly improve local environment.



▲ The desulfurization system for No. 1 generating unit of Datang India Cuddalore Coal-fired Power Plant successfully completes trial operation.



## Sharing Fruits of Development for a Better Life

CDT fully protects employees' legitimate rights and interests, as well as democratic rights. We unblock career development channels, and enrich the cultural and leisure life for employees. By vigorously building a modern procurement governance system, we aim to push forward the power industry. The concept of public welfare is also integrated into corporate culture, and we leverage our strengths to help local community development, giving back to society. In 2019, 32,000 training programs were provided, attracting over 2 million participants; 115 CDT subsidiaries organized the "Datang Star Class" activity, providing science education to over 10,000 primary and secondary school students.

### 32,000

training programs were provided

over **2** million  
participants

### 115

CDT subsidiaries organized the "Datang Star Class" activity



Contributions to SDGs





# Growing along with Employees

We always stay people-oriented and grow along with employees. While guaranteeing employees’ legitimate rights and interests, as well as democratic rights, we provide them with stable jobs, competitive compensation and benefits, and a sound social security system. We have also unblocked career development channels for employee growth. In addition, we provide diverse cultural and sports activities for them to boost their happiness and satisfaction.

## Rights and interests of employees

We actively promote democratic management and standardize the operation of the Workers’ Representative Congress. A sound welfare system and system for Workers’ Representative Congress has been built to provide reasonable salary and statutory “five social insurances and one fund”, and protect legitimate rights and interests of employees. In 2019, we conducted special inspections for “six most” projects of work safety and people’s livelihood (most concerning, relevant and practical issues, and most difficult, bothering and worrisome problems facing employees). Over 3,000 issues and suggestions have been found and put forward by employee representatives.

### Measures for Guaranteeing Employees’ Rights and Interests

01

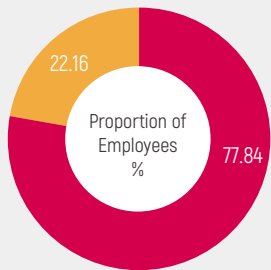
Improving the plant-workshop-team corporate affairs disclosure system to integrate the disclosure of corporate affairs into routine management and effectively protect employees’ rights to know, participate, supervise and express.

02

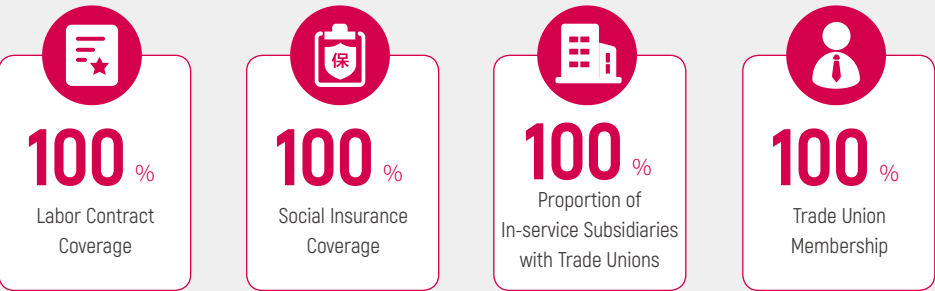
Improving and effectively implementing work safety and labor protection mechanisms for employees to practically protect employees’ safety and health.

03

Actively implementing the mechanism of consultation on an equal footing, signing and fulfilling collective labor contracts, and continuously improving the pertinence and efficacy of collective consultation and collective labor contracts.



■ Proportion of Male Employees  
■ Proportion of Female Employees



## Employee development

We help employees develop career planning, break the bottleneck of career development, and offer them equal opportunities for growth. In 2019, 32,000 training programs were provided with over 2 million participants. Three employees won the honorary title of National Outstanding Young Worker, two named National Leading Talents in the Power Industry, and 10 won Individual Second Prize and Third Prize in the Seventh Arc Cup International Welding Competition.

### Case The First New Energy High-quality Development Training Program in 2019

To help our pre-developers better master new energy policies and technologies, we held a New Energy High-quality Development Training Program in August 2019. The training focuses on industrial policies and technologies needed in the early development stage of new energy. Over 100 employees participated in the training and gained a better understanding of relevant policies, a higher mastery of technologies, clearer ideas in work, as well as better quality and professional competence.

CDT selected and sent Bai Xingming, Li Yewei and Zhao Shuxun to participate in 2019 China Vocational Skills Competition and the 15th Zhenxing Cup National Youth Vocational Skill Competition. They ranked top and won the honorary title of National Outstanding Young Workers.



### Case The 17th CDT Professional Knowledge and Skills Competition

CDT mobilizes the initiative of technical and skill talents, and vigorously promotes a culture of respecting labor, skills, and accomplishments. Through holding the 17th CDT Professional Knowledge and Skills Competition, we provide front-line talents with a stage to show themselves, and gain a chance to discover and train a batch of young talents with vigor and potential, building a strong talent pool for a world-class energy group.



▲ Finals of Power Plant Electrical Engineering Professionals, the 17th CDT Professional Knowledge and Skills Competition

## Employee care

Based on employees’ real needs, we actively carry out activities around building a happy CDT. We help employees solve key problems and difficulties, support those in need wholeheartedly, and enrich their life after work with various cultural and entertainment activities, to constantly boost their sense of fulfillment, happiness and security. In 2019, we formulated the *Three-Year Rolling Plan for Building a Happy CDT* and *Guiding Opinions on Employees’ Cultural Development*. We also set up staff service centers in over 200 primary-level subsidiaries and 732 service stations in workshops. Nearly 500 “six most projects” were launched. We also visited over 30,000 employees.



**Case** CDT Art Talents Sent the Fire in the Winter

To contribute to a happy CDT and serve front-line workers, CDT art talents prepared a series of cultural & art performances for primary-level subsidiaries to warm their heart. In November, when the first snow fell, they travelled along the ancient Silk Road to finally get to Datang 803 Power Plant of Gansu Power Generation Co., Ltd., deep in the Gobi desert, and Xigu Thermal Power Plant by the Yellow River, bringing art performances to 600 model and front-line workers.



▲ Group photo of art talents in Xigu Thermal Power Plant, Gansu Power Generation Co., Ltd.

**Case** Celebrating the Spring Festival Together with Foreign Friends

CDT organized overseas companies and project departments to host a cultural event themed "Spring Comes to All Corners of the World", to gather Chinese and foreign employees, as well as foreign partners, to celebrate the Spring Festival together. The event helps share the joy, promote Chinese culture, increase emotional ties, and build CDT's brand image. During the Spring Festival holiday in 2019, multiple overseas project departments of CDT launched the second cultural event, and added more traditional Chinese elements, like hanging lanterns, pasting spring couplets, making dumplings, watching the Spring Festival Gala, and playing football, etc., spreading happiness everywhere at project sites.



▲ The Project Department of the Balingian project in Malaysia organizes a football game for Chinese and Malaysian employees.



▲ On the eve of National Day, CDT Headquarters celebrates the 70th anniversary of the founding of the PRC.

## Developing together with partners

Upholding the philosophy of mutual respect and mutual benefits, we vigorously push forward a modern procurement governance system, constantly improve mechanisms for procurement and supplier management, and deepen partnerships to promote the development of electric power sector.

### Responsible procurement

Focusing on building a modern procurement governance system, we give full play to our dual strengths in materials management and services to better guarantee procurement quality and cost control. We have established unified supplier management system, regulations and procedures in line with the principle of "unified management, dynamic assessment, and strict in and out". This consolidates supplier management and helps attract outstanding new suppliers and knock out those with poor performance, laying a solid foundation for procuring first-class equipment and services. In 2019, we had over 90,000 registered suppliers in total. For procurement projects of materials in key categories that require open assessment, we admitted 194 suppliers for 57 categories of materials, with strong manufacturing capacity, high market share and good reputation in the industry.

#### Measures for Reforming the Material Management System



##### Improving procurement efficiency

Setting up a Procurement Department to realize the organic integration of purchasing management and service.

##### Optimizing the operation system

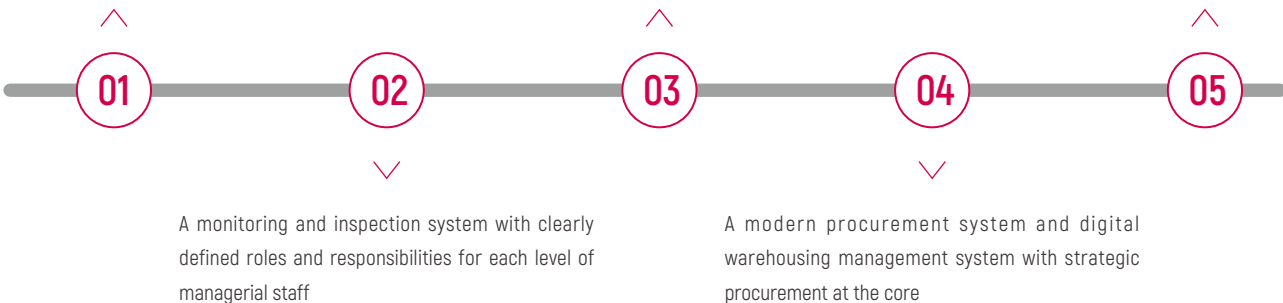
Establishing a regional procurement service platform nationwide, and setting up 22 project departments at regional offices, to let regional offices play a core role in resource allocation.

#### Supporting Systems for Procurement

A procurement management system featuring "unified management and three-level review and approval"

A procurement operation system featuring "unified platform and two-level services"

Two-level and three-level region-centered procurement organization models





Supplier Management Measures



Case CDT's Assessment and Management of Suppliers

To enhance supplier management, we have registered all archives of suppliers on the management platform. Based on day-to-day management and annual assessment, we evaluate suppliers' participation in procurement activities, share of winning bidding (or be selected), contract fulfillment performance and misconducts, and disclose suppliers with poor performance on the e-commerce website. In 2019, two batches of 66 poorly performing suppliers were removed from the supplier list.



▲ Bidding and procurement hall

Prospering with communities

We are enthusiastic about public welfare activities and take an active part in volunteering. We have rooted the concept of public welfare deeply in our corporate culture, and support communities and give back to society by leveraging our strengths, making contributions to a harmonious society. In 2019, we carried out nearly 1,800 volunteer activities with 22,000 participants. Wu Weiwei, a young employee at Datang Huaibei Power Plant, won the honorary title of Outstanding Chinese Young Volunteer in the 12th outstanding volunteer commending event. 115 CDT subsidiaries organized "Datang Star Class" activities, teaching power generation knowledge and safety tips for using electricity to over 10,000 primary and secondary school students at home and abroad.

Volunteering service and charity

We actively carry out charitable activities. Through developing "Datang Star Class" into a brand activity, we promote youth volunteering activities and encourage employees to contribute to public welfare undertakings.

Case Supporting Children to Pursue Their Dreams

In May, a beautiful month with spring breeze and blossoms, Ningxia Branch organized "Datang Star Class" activity. The tutor guided 19 primary school students and five teachers in Maoping Village Primary School, Zhenhu township, Xiji county, an impoverished mountainous area in Ningxia, to travel northwards. Through innovative and interesting interactions, the children were able to have brand new experience: for the first time, they went to the zoo and seeing various wild animals, tried equipment and instruments in the Science Museum, tasted KFC. They were also invited by Qingtongxia Solar Power Plant and Wind Farm to know more about photovoltaic panels and giant "windmills", and visited the office area of CDT to feel CDT's corporate culture. This event expanded the horizons of children and inspired children to grow better.



◀ The "Datang Star Class" organized by Ningxia Branch for children



◀ Touching PV panels at Qingtongxia Solar Power Plant

Disaster rescue and relief

We actively participate in disaster rescue and relief, and strive to ensure reliable power supply, so as to minimize and eliminate panic of employees and the public.

Case Active Response of Sichuan Power Generation Co., Ltd. to Yibin Earthquake

At 10:55 p.m., June 17, a 6.0-magnitude earthquake hit Changning county of Yibin city, Sichuan province. The epicenter, with a depth of 16 km, was monitored at 28.34 degrees north latitude and 104.90 degrees east longitude. After the earthquake, Sichuan Power Generation Co., Ltd. immediately carried out post-quake inspections, and contacted its Ya'an Branch and Ganzi Branch, urging them to deploy and start emergency plans, troubleshoot construction projects and electromechanical devices, check the status of staff, confirm damage conditions, prepare for urgent repairs, and timely report progress of disaster relief. On the next day, the company conducted further professional inspections and analyses of hydraulic structures such as dams and workshops in each power plant, as well as diversion tunnels. It also strengthened monitoring and maintenance of generating units to ensure stable power supply, and prepared emergency rescue supplies to guard against possible aftershock and secondary disasters properly.



# Outlook

In 2020, China is about to complete building a moderately prosperous society in all respects, thus realizing the first centenary goal. We, while providing clean energy to the public, will further integrate efforts like protecting the environment, caring for employees, and serving the society, into our operation and development in an all-round manner, so as to achieve harmonious development of CDT, society and nature. Upholding the concept of safety in development, we will continue to pursue the safety and stability in production. Actively promoting S&T innovation and accelerating the commercialization of innovation achievements, we will continue to unleash greater vigor and momentum for development. Sticking to a green development path, we will increase the proportion of clean energy installed capacity for higher-quality development. Promoting international exchange and cooperation, we will further improve the ability and level of international operations. Fulfilling tasks and goals set out for the “High-quality Development Year”, we will deliver satisfying results to stakeholders. Time waits for no one. We will seize every minute to work harder for a better life.

## 01 Forging Ahead for Value Creation

- Generating electricity that could yield profits, ensuring increase in both production and income, and meeting the goal of generating 550 TWh of electricity in 2020.
- Eliminating zombie enterprises and dealing with enterprises in predicament, providing specific treatment to and downsizing companies suffering losses, and tackling key difficulties in coal and coal chemical businesses.
- Strengthening the marketing system, building a strong marketing team, and exploring comprehensive energy services and value-added services.

## 02 Consolidating the Safety Foundation

- Firmly developing a macro-safety mindset, strengthening the management and control of traditional and non-traditional safety risks, and attaching great importance to the security of network information and overseas safety.
- Consolidating the monitoring and rectification of major safety hazards, and strictly carrying out comprehensive governance of major hazard sources, hazardous chemicals, and high-risk companies, operations and environment; implementing management and control measures to strictly prevent serious accidents.
- Reinforcing the emergency system, building emergency response capacity and a disaster prevention and mitigation system, and strengthening emergency drills and support.

## 03 Pursuing Green Development

- Carrying out accurate, scientific and lawful environmental treatment, and ensuring tasks like ultra-low emission renovation, enclosed coal field renovation, and wastewater treatment are completed as scheduled.
- Assigning more responsibilities to the front line, and concretely fulfilling environmental responsibility in wind power, PV and hydropower projects.
- Increasing efforts in monitoring the implementation of emergency response measures in cases of heavy air pollution, and implementing comprehensive measures for atmosphere pollution prevention & control in autumn and winter.

## 04 Exploring Ways to Unleash the Momentum for Innovation

- Improving the innovative development system, establishing and improving institutions and mechanisms on R&D input, achievement commercialization, effectiveness evaluation, and income distribution.
- Actively serving national plans on technical breakthrough, strengthening scientific cooperation, and making contributions to core “stranglehold” technologies.
- Giving full play to the role and motivation of scientific research institutes and scientific innovation centers, and carrying out in-depth cooperation with various innovation entities.
- Advocating scientific spirit and craftsmanship, and encouraging employees to tackle key technical problems.

## 05 Going Global for International Cooperation

- “Going global” resolutely, focusing on key business segments, i.e. wind power, solar power, gas and services, developing clean energy projects, exporting technologies and services, carrying out power operation & maintenance projects, strengthening cooperation in the energy sector, and continuously expanding international business; digging deep into the Southeast Asian market, and solidly expanding markets of the Belt and Road partner countries.
- Taking an active part in domestic and foreign diplomatic activities, and striving to improve the global image of Chinese central SOEs; with the support of the national diplomatic platform, building a bridge for exchange and cooperation with Belt and Road countries and regions to constantly deepen international exchange.
- Fulfilling our responsibilities overseas; through investing in overseas energy and environmental protection projects, providing abundant green energy to local people and creating more jobs, to drive local economic growth and improve people's living conditions

## 06 Sharing Fruits of Development for a Better Life

- Improving the plant-workshop-team corporate affairs disclosure system; establishing, improving and effectively implementing work safety and labor protection mechanisms for employees; setting up regional cultural and sports associations for employees and organizing inter-company cultural and sports activities in different regions.
- Vigorously promoting the building of a modern procurement governance system, constantly improving systems and mechanisms for procurement and supplier management and deepening partnerships to promote the development of electric power sector.
- Being enthusiastic about public welfare activities and taking an active part in volunteering; supporting communities and giving back to society by leveraging our strengths, and making contributions to a harmonious society.
- Stepping up efforts in supporting Dahua county of Guangxi province, and ensuring Anlan village and Banlan village exit poverty steadily and continuously; continuing to support Chengcheng county of Shaanxi province as well as other 58 fixed-point villages, helping all these villages shake off poverty, preventing those who have been exited poverty from falling back again, and preventing marginalized groups from falling into poverty.



# Expert Opinion

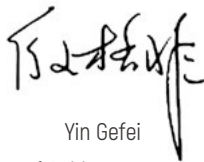
While inheriting highlights of the previous reports, the *Social Responsibility Report 2019 of China Datang Corporation Ltd.* has further improved its content in the following aspects.

**High relevance to the era.** The report proactively responds to latest hot topics. The content is enriched and more comprehensive, covering CDT's new measures and achievements in high-quality development. The features on CDT's themed Poverty alleviation efforts and the fight against COVID-19 demonstrate CDT's model role and determination as a central SOE in implementing decisions of the CPC Central Committee and State Council, supporting poverty reduction, and responding to public health emergencies.

**Remarkable materiality.** The report enhances its materiality in every way. For example, we see an analysis of material topics before the main structure of the report, which shows that CDT's CSR management is more proactive and systematic. SDGs benchmarking is highlighted at the beginning of each chapter, revealing CDT's conscious alignment with international standards on sustainable development. In the chapter "Pursuing Green Development", CDT benchmarks itself against global leaders, responds to hot issues, and discloses its actions in protecting biodiversity and coping with climate change, showing its progress on green development. In the chapter "Going Global for International Cooperation", CDT introduces its contributions to the Belt and Road Initiative in a section, highlighting its exemplary role in assuming responsibilities of central SOEs.

**Better interaction.** CDT is good at interacting with its readers. It adds in 22 QR codes as accesses to more information. For example, QR codes for information about hydropower plants are seen at the beginning of the report, and those for news coverage of CSR cases are dispersed in each chapter. In this way, the report is more informative. While enhancing the influence and exposure of CDT's CSR practices, it allows readers to access more information at will. Moreover, it denotes CDT's sincerity of information disclosure and communication with the public.

This high-standard social responsibility report perfectly shows CDT's resolution and perseverance in fulfilling social responsibilities and promoting sustainable development. I look forward to seeing greater influence of CDT in practicing social, economic and environmental responsibilities, and its greater contributions to high-quality development!



Yin Gefei  
Chief Expert of GoldenBee  
Secretary of ISO 26000 Stakeholder Global Network (SGN)

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# Feedback

Thank you for reading the *CDT Social Responsibility Report 2019*. 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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# 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, 2019 and December 31, 2019, with some dating back to previous years or referring to later years.

### Reporting Cycle

This is an annual report and also our 14th 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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environmental-friendly paper