

2016

# Social Responsibility Report

( Environmental, Social and Governance Report )

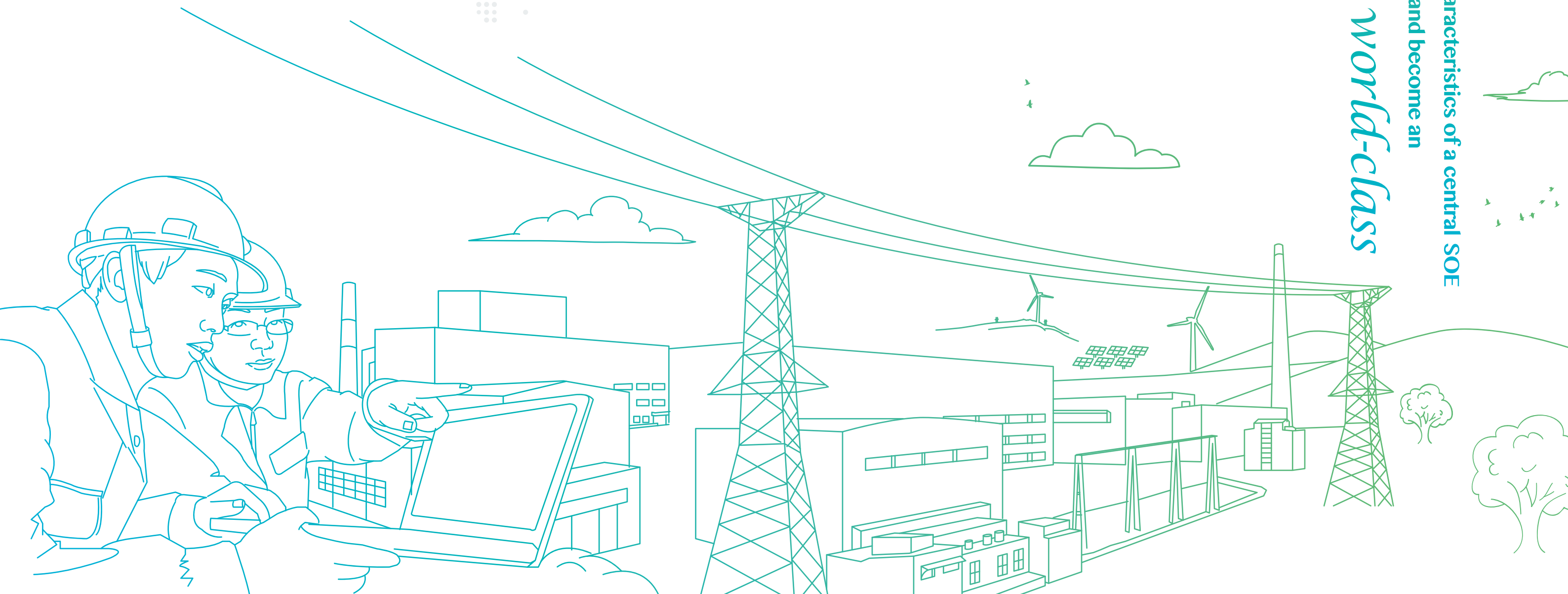




To ensure we maintain the political characteristics of a central SOE  
Datang Power must honor its mission and become an  
*industry leading world-class*  
comprehensive energy company.



The origins of our logo come from our name in ancient Chinese calligraphy. Appearing like a bell and standing as stable as a mountain, the logo embodies the pragmatic and steady approach of our company. The circle and square represent fairness, justice, unity, and harmony, while the protruding point at the top of the logo indicates our rising development and unlimited potential. The color red is typical of China and is characteristic of our strong national features and ambitious prospects.



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## Greetings



### Message from the Chairman of the Board

How time flies! We will undoubtedly look back fondly on what was a wonderfully productive year for Datang Power in 2016, but as we enter 2017 it is time to focus in on our new dreams and our plans for the new year.

The concept of "Responsibility" drove our business in the 2016. The Party Central Committee's "Four-Pronged Comprehensive Strategy" ( it refers to "comprehensively" building a moderately prosperous society, deepening reform,advancing the law-based governance of China and strengthening Party self discipline) guided us to grasp the development opportunity in the beginning year of the 13th Five-Year Plan and fully implement the development concepts of innovation, coordination, green development, openness and sharing. To follow the trend in the reform of power industry and fulfill our economic, political and social responsibility as a central state-owned enterprise, we accelerated our pace to reconstruct structure, deepen innovation reform and enhance energy conservation and emission reduction. We tackled multiple difficulties and caught up with industrial counterparts. We have made new achievements in green, low-carbon and sustainable development, manifesting our strong awareness of accountability as a central SOE. We have entered a new phase in constructing a value-added, eco-friendly, legal compliant, innovation-driven and CSR-minded Datang Power, and welcomed a good beginning of the 13th Five-Year Plan.

Looking back on 2016, we should all be proud of the way we confronted operational challenges, obstructions to our growth, various safety concerns and fierce market competition. Our team was resolute in demonstrating the Datang spirit "to be pragmatic, dedicated, innovative, and progressive". I was also greatly impressed by the support that we received from all levels of government and the trust that stakeholders and broader society showed us. Without this it would have been impossible for our company to overcome obstacles and continue its impressive growth. We are proud and extremely grateful to have such strong backing and support.

Looking to the future, I am filled with hope for 2017. A new spring season is upon us and with it come unprecedented opportunities for our development. To this end, we must grab opportunities that come from the government's implementation of major strategies aimed at constructing a clean, low-carbon, safe, efficient and modern energy system, and accelerating the pace of reforms to state-owned assets, state-owned enterprises and the electrical power system. As a listed comprehensive energy enterprise, Datang Power, with its good assets and powerful strength, is ready to accept any challenges and seek for innovation. Grasping all these precious opportunities will bring it a brilliant future.

We are also confident as what 2017 holds for us as an energy company. Ongoing reforms, increasing market competition, and mounting operational pressures remind us that we must improve our business operations, and we will do this by adopting new approaches to power generation to meet our targets and mobilize more energy. In 2017 we will keep on our values and the benefit-oriented principle to vigorously push forward reform and innovation and comprehensively improve our quality and efficiency. We will devote ourselves to scientific development, green operations and legal compliance to achieve win-win results, create wealth for our shareholders and deliver even greater benefits to society. We believe our actions in 2017 will win us wider trust and support from society and increase the value of state-owned assets.

We will implement the 13th Five-Year Plan of the company to improve quality and efficiency and contribute to the construction of a prosperous society with the responsibility of a company that understands the importance of fulfilling its mission as a central SOE. We will cooperate with our stakeholders to jointly create more values and brighten the path to be an industry leading, world-class comprehensive energy company.

Chen Jinxing, Chairman of the Board  
Datang International Power Generation Co., Ltd.

Chen Jinxing, Chairman of the Board  
Datang International Power Generation Co., Ltd.



## Commitment from the General Manager

As we begin 2017, our surroundings take on a new look. Over the past year, Datang Power has stocked to its values and benefit-oriented principle. We have risen to the unprecedented challenges and made great efforts to catch up the development trend. We hope to gather our intelligence to follow the trend and bravery to face difficulties. It is the proper sense of responsibility as a central SOE.

In 2016, we made new breakthrough as a central SOE by narrowing the gap between us and our competitors. Under our "One-Five-Eight" corporate development strategy we continued to focus on strengthening our strengths to overcome weakness. In 2016, we ranked first among the five listed power generation corporations for approved power generation capacity projects, and Inner Mongolia Power Tuoketuo Generation became the largest thermal power plant in the world by expanding its operations to Hainan province and implementing structural reforms.

We also improved ourselves in reform. We systematically overhauled all duplicate functions and departments in headquarters according to the Group's deployment, and promoted the structural reform in professional field, made institutional improvements and upgraded our internal controls. These changes will positively influence how we manage the company, improving our efficiency, delivering greater profits, and mitigating risks.

We have taken steps to refocus our energy on building an elite team over the past year. To this end, we have revised our approach to team building and management and are already seeing dividends in disciplined, tenacious and spirited way our staff approach work. We believe that acting responsibly and in accordance with our obligations as a central SOE will continue to strengthen the Group.

We have made progress on our policy of being aligned with the Party and encouraging Party membership. We regularly educate staff to study the theoretical and practical issues of party building, implement the principle of "Party committee to assume primary responsibility and Commission for Discipline Inspection to assume supervision responsibility" and enhance "Four Consciousness" so that all the policies and decisions of central government can be better implemented.

As we look forward to 2017, we will continue to focus on the Group policy and will aim our attention at making 2017 "The Year of Overall Improvement." We will continue to improve our market position and the quality of our operations by accelerating the implementation of projects during the 13th Five-Year Plan period and building an elite team that will enable us surpass our industrial counterparts.

Improving how we manage safety will play an important role in the future success of our company. As such, we will continue to meet or exceed all safety standards. We will also raise awareness about the importance of being a safe enterprise among our employees, and improve our management of production and technology activities in accordance with the Group's processes and team standards.

Our competitive advantages enable us to meet market challenges head on, and allow us to deliver electricity that is profitable.

In 2017, we will improve the quality of our assets and take the initiative upgrading the power generation industry and we will explore regional opportunities and overseas projects.

We will continue to focus on improving our corporate governance model by pushing forward reforms, upgrading capital operations and deepening law-based corporate administration.

By "striving for the best" we will improve the quality of our elite work teams and maintain the highest workplace standards to safeguard the efficiency of our management teams.

We will strengthen Party membership by promoting and disseminating the spirit of the 19th CPC National Congress and educating employees on the ideals and approach of the Party. We will adopt the Party's approach to work and its approach to clean government to create a transparent political atmosphere that strengthens our cohesion and competitiveness.

By being true to our corporate mission, we can forge ahead with our plans during the spring months and, with your support, we sincerely invite you to witness our achievements and create an industry leading, world class Datang Power together.

Wang Xin, General Manager  
Datang International Power Generation Co., Ltd.



王欣

Wang Xin, General Manager  
Datang International Power Generation Co., Ltd.

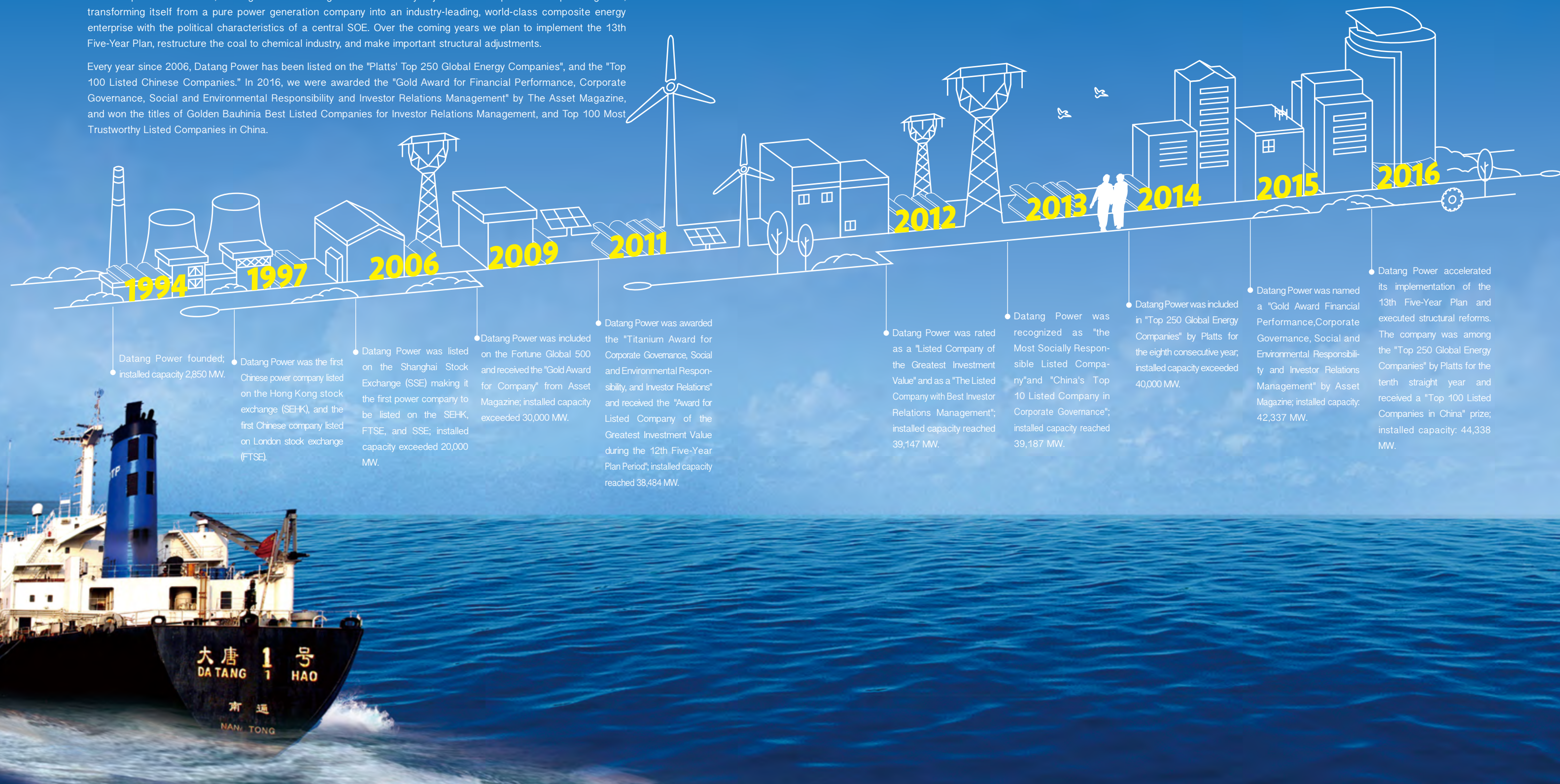


# Our History

Datang International Power Generation Co., Ltd. was founded in December 1994. The company is a power generation enterprise and its headquarters are in Beijing. In 1997 Datang Power was listed on the Hong Kong (SEHK) and London (FTSE) stock exchanges. In 2006 the company was listed on the Shanghai Stock Exchange. The principle activities of the company cover coal, transportation, recycling and electricity sale. Over the years we have transformed from a pure power generation company into a composite energy company.

Over the past two decades, Datang Power has integrated sustainability objectives into its plans for corporate growth, transforming itself from a pure power generation company into an industry-leading, world-class composite energy enterprise with the political characteristics of a central SOE. Over the coming years we plan to implement the 13th Five-Year Plan, restructure the coal to chemical industry, and make important structural adjustments.

Every year since 2006, Datang Power has been listed on the "Platts' Top 250 Global Energy Companies", and the "Top 100 Listed Chinese Companies." In 2016, we were awarded the "Gold Award for Financial Performance, Corporate Governance, Social and Environmental Responsibility and Investor Relations Management" by The Asset Magazine, and won the titles of Golden Bauhinia Best Listed Companies for Investor Relations Management, and Top 100 Most Trustworthy Listed Companies in China.



# Our Structure



Over the past 23 years, Datang Power has grown from operating four thermal power plants with an installed capacity of 2,850 MW into one of the largest diversified energy companies in China. Our headquarters are located in Northern China, we are rooted in western China, and we expanding towards the Chinese coast. We have subsidiaries and ongoing projects in 18 provinces. Our transformation from a thermal power generation company to an integrated energy enterprise with operations in different sectors and industries is extraordinary given our origins.

By constantly innovating and exploring new ways to improve our operations, we have steadily improved our corporate governance system, our institutional framework, our management and our approach to technology. To date, we have established a three-tiered management system that guides our decision-making and executive and supervisory duties, as well as the powers and procedures of the General Meeting, Board of Directors, and Board of Supervisors. The system guides our managers to ensure their work load, decision-making and accountability.

Datang Power Headquarters	Professional/ Regional Companies	Grassroots Enterprises
General Office of the President (International Cooperation Department)	Fuel Company (Hong Kong)	Beijing (1)
Development and Planning Department	Technology	Tianjin (1)
Planning and Marketing Development	Inner Mongolia Branch	Hebei (12)
Securities and Capital Department	Liaoning Branch	Liaoning (5)
Human Resources Department	Zhejiang Branch	Inner Mongolia (6)
Finance Department	Fujian Branch	Shanxi (4)
Production Department	Jiangxi Branch	Jiangsu (4)
Fuel Management Department	Guangdong Branch	Jiangxi (3)
Material Management Department	Chongqing Branch (Yuneng Group)	Sichuan (3)
Engineering Construction Department	Yunnan Power	Chongqing (7)
Party-mass Affairs Department	Qinghai Energy	Qinghai (2)
Supervision and Auditing Department	Shanxi Representative Office	Zhejiang(4)
		Fujian (3)
		Guangdong (6)
		Tibet (1)
		Yunnan (6)



# Our Development

At Datang Power we are focused balanced growth and have taken steps to ensure we meet our goals and targets during the 13th Five-Year Plan. To this end, we are guided by our corporate mission, core concepts and corporate spirit. We strive to add value by being eco-friendly, ensuring legal compliance throughout the company, and driving innovation that is aligned with our CSR mindset. We believe our approach ensures the comprehensive implementation of our "One-Five-Eight" development strategy.

## Our Mission

- To provide clean power
- To improve the quality of life

## Our Core Philosophy

Our Values  
To be benefit-oriented

## Our Spirit

- To be pragmatic, dedicated, innovative, and progressive

## "One-Five-Eight" Development Strategy of China Datang Corporation

### Development Vision

To build a well-structured world-class energy group with scientific operations, property, and enormous potential.

### Strategic Goals

Value-added, Eco-friendly, Legal Compliant, Innovation-driven and CSR-minded

### Eight Sub-strategies

Core business, Supporting businesses, International businesses, Group management, Professional operations, Talented teams, Innovation, Culture brand.

## Our Construction Goals

We will safeguard the political characteristics of a central SOE and build an industry-leading, world-class comprehensive energy corporation.

## Our focus during the 13th Five-Year Plan period

We will develop renewable energy and clean coal power in an orderly way, taking the initiative to developing large- and medium-size hydropower facilities, prioritizing the development of combustion engines, and transforming and upgrading the power generation industry. We will further incorporate the sale of heat to our operations, steadily promoting our coal operations in conjunction with our core power generation business while accelerating our internationalization. We will also explore new areas of development by entering the sale and allocation of electricity and facilitating a carbon trading market. We will continue to transform our company from a unitary power generation enterprise into a comprehensive energy service provider.





# Our Responsibility

The energy sector plays a vital role in national prosperity and safeguarding a healthy society. Datang Power balances its growth by implementing social progress initiatives and adopting environmental protection measures. To this end, we view the company as being a strong, responsible, and trustworthy energy company that "is value-added, eco-friendly, legal compliant, innovation-driven and CSR-minded."



**Responsible Communication** We publish an annual Social Responsibility Report to disclose information about our operations. We also hold an annual Open Day for media and the general public, and our official website includes a special social responsibility column for stakeholders to gain a better understanding of our company.



The official WeChat of  
Datang Power



The official Microblog of  
Datang Power

**Responsibility issues** Based on proposals from the "Report Index for Environment, Society and Governance by the Hong Kong Exchange", and the "Compilation Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises of China Social" we have identified material topics that exert a major influence on our stakeholders and the sustainability of our company. We also reviewed information from the Science Academy and social responsibility reports by international and national peers. By analyzing trends that are expected to impact our industry in the future we believe we will safeguard our growth and strengthen our overall development.




## Substantive issues





Clean Power Generation	Environmental Protection	Ultra-low Emission	Safe Production	Biodiversity	Demand-side Service
Resource Conservation	Risk Management	Legal Compliance	Democratic Management	Scientific Innovation	Organization Management
Occupational Health	Compensation and Welfare	Employee Development	Community Development	Voluntary Service	Targeted Poverty Alleviation



## Stakeholder Management

We are devoted to maintaining active interactions with internal and external stakeholders in order to know their opinions and incorporate their demands into the company's business strategies and operations, hence facilitating mutual benefits and win-win results.

Stakeholders	Concerns	Communication Methods	Performance Indicators	Some Examples
 Government	National policies and energy security Power and heat supply Legal compliance Tax Structural optimization Energy conservation and emission reduction Increasing employment Management and technical Innovation	Laws, regulations and policies Relevant meetings Report works Statistical statements Information submission High-level meetings	Scale of installed capacity Power generation capacity Total Profit and tax Jobs provided Energy conservation indicators Emissions reduction indicators Proportion of clean and renewable energies Innovation results	<ul style="list-style-type: none"> <li>Datang Power signed an Agreement of Strategic Cooperation Framework with the People's Government of Lingshui Li Autonomous County, Hainan province.</li> <li>Datang Power signed an Agreement of Investment and Cooperation Framework with the Municipal Government of Golmud City, Qinghai province.</li> </ul>
 Shareholders	Profit level Standardized operations	Setting laws and policies Company announcements Periodic reports Contracts and agreements	Shareholder dividends Shareholder rights and interests Sales income Company profit	<ul style="list-style-type: none"> <li>Attendees at The Second Temporary Shareholders' Conference discussed and passed the Proposal on Signing an Agreement with Zhongxin Science and Technology Co., Ltd to Transfer Coal Chemistry Industry and relevant Projects.</li> <li>Datang Power held the 2016 Mid Term Performance Press Conference in Shanghai and Hong Kong.</li> </ul>
 Staff	Democratic rights Health and safety Salary and wellbeing Personal development Education and training	Staff representative's meeting Reasonable suggestions Interview Collective contracts Labor contracts Openness of company affairs	Work environment Accident rate Labor union membership rate Collective contract coverage ratio Salary levels Investment in staff training Staff turnover rate	<ul style="list-style-type: none"> <li>Datang Power held the 4th Employees' Congress and 2016 Working Conference.</li> <li>The Ninth "Datang Cup" Ping-Pong Competition for employees was held in Shacheng Town, Huailai County, Zhangjiakou City.</li> </ul>

Stakeholders	Concerns	Communication Methods	Performance Indicators	Some Examples
 Community	Public interest enterprise Safety and environmental protection Public safety Public environment	Collaborative construction Public interest activities Safety and environmental protection publicity	Investments in community building Public interest investment Number of pollution complaints	<ul style="list-style-type: none"> <li>Datang Power organized a visit to the Bayi Military Sports Team of the Chinese People's Liberation Army for employees and launched a Day for the Army and Enterprise themed event.</li> <li>Beijing Gaojing Cogeneration Power Plant organized a Corporate Open Day for employees.</li> </ul>
 Client	Safe and stable supply Electricity price and heat price	Contracts and agreements Power and heat products Relevant technical services	Client satisfaction level Honesty level Contract completion rate Period of cooperation Profit	<ul style="list-style-type: none"> <li>Chongqing Branch signed its first framework agreement on the city-wide purchasing and sale of electricity for the Liangjiang Changning Power.</li> <li>More than 25% of the electricity from Inner Mongolia Tuoketuo Power Generation was contracted in the first round of bilateral trade in the 2016 Ximeng-Shandong Extra High Voltage Marketization Trade.</li> </ul>
 Partner	Honesty and legal compliance Long-term cooperation	Contracts and agreements Products and services	Honesty level Contract completion rate Period of cooperation Profit	<ul style="list-style-type: none"> <li>Datang Power signed a Strategic Cooperation Memorandum with Datong Coal Mining Co., Ltd.</li> <li>By being true to our corporate mission, we can forge ahead with our plans during the spring months and, with your support, we sincerely invite you to witness our achievements and create an industry leading, world class Datang Power together.</li> </ul>
 Social Organization	Experience sharing Providing advantageous resources	Meetings Activities	Frequency and depth of participation in activities Membership fee amount	<ul style="list-style-type: none"> <li>Beijing Gaojing Cogeneration Power Plant, the Zhejiang Shaoxing Cogeneration Company and the Zhejiang Jiangshan Cogeneration Company received an Excellent Prize at in first Gas Turbine Maintenance Thesis Competition. The competition was organized by the China Electric Power Equipment Management Association.</li> <li>Affiliated enterprises of Datang Power participated in revisions to 19 industry standards. The IEEE-P1865 Maintenance and Experiment of Distributed Control System Operation was the first international power plant automation standard complied by Chinese enterprises.</li> </ul>



## Value-added

### Improving Quality and Efficiency

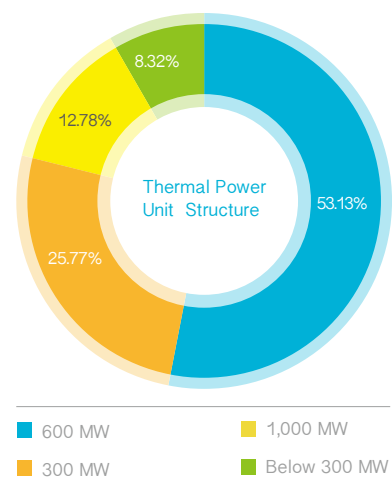
Electricity strategically supports and drives both the national economy and social development. To this end, Datang Power is accelerating its implementation of major national strategies and its development of a clean, low-carbon, safe, and a highly efficient modern energy and electric power system. We are also contributing to reforms to SOEs. As a central power generation enterprise, we will take steps to ensure our economic responsibility by scientifically upgrading initiatives that bolster the industry and improve our market competitiveness to ensure we become a world class comprehensive energy service provider.





## Low-carbon Thermal Power

The central government is a strong advocate of an economy that thrives on delivering low energy consumption, low pollution and low emissions. As a result, we are adjusting the structure of our thermal power generating units and prioritizing environmental friendly units to promote the clean and efficient coal utilization. In 2016, our installed capacity for thermal power units was 35,170.8 MW.



# 35,170.8<sub>MW</sub>

The installed capacity of thermal power units

**The world's largest thermal power plant** Inner Mongolia Tuoketuo Power Generation Company has a total installed capacity of 6,720,000 KW and is a key part of China's Western Development" and "West-East Power Transmission" Initiatives. The company's commitment to "bringing clean energy to Beijing and protecting the environment in Inner Mongolia" is a vital part of our green development strategy.

**Constructing a new integrated heating model in Liaoning** Once completed the Shendong and Huludao thermal power projects and their supporting heat supply networks will provide heat to a 15.56 million square meter and 16.47 million square meter area, respectively, in the cities of Shenfuxin and Huludao. The projects will replace 79 high-consumption and 158 low-efficiency small capacity boilers and accelerate the "Blue Sky Project" of Liaoning province, which will contribute to the rejuvenation of an old industrial base.

**Thermal power generation plant in the east end of Beijing-Tianjin-Tangshan Power Grid** The Hebei Zhangjiakou Power Generation Plant has eight 320 MW thermal power generation units. In 2016, coal consumption was reduced from its power generation activities by 4g/KWh. This significantly influenced the treatment and reduction of smog in Beijing and Tianjin.



**China Datang elite projects** Located in Jiangxi province, the Fuzhou Project, jointly invested by Datang International and EDF, is the first million dollar-worth, high-efficient and environmental-friendly plant. The key standards of its generating units, being the forefront in China, greatly contribute to the electric power restructuring and social and economic development in Jiangxi Province. The project was awarded the Elite Project of China Datang Thermal Power Prize for its breakthrough in construction process and the cost of its 1,000 MW power units. In 2016, the company's unit No.2 was officially in operation.



**China Datang's 1,000 MW-benchmark power plants** Guangdong Leizhou Power Generation Company plans to build six 1,000 MW power units with world class double reheat technology. The units will lower coal consumption to 265g/KWh and improve all coal-fired power generation indicators.



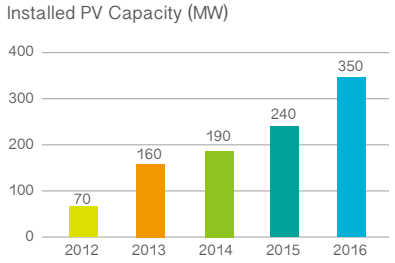
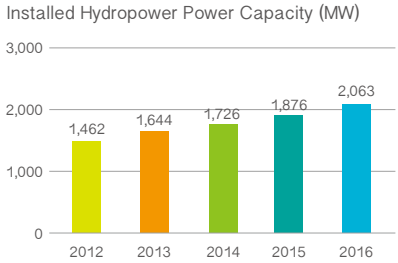
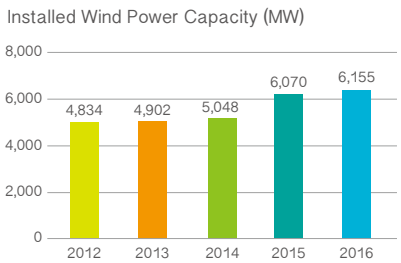
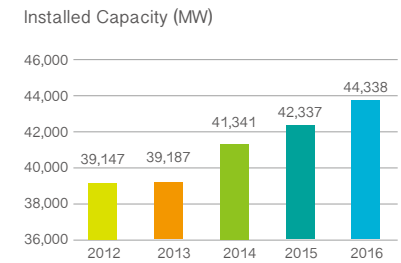
# Clean Energy

Clean energy is an important aspect in diversifying energy interests and protecting the environment. Driving upon the initiative of structural adjustments, Datang Power is focused on balancing its approach to wind and solar power while also developing its use of maritime and land energy. We are increasing our proportion of non-water renewable energy and our exploration of new forms of energy. In 2016, clean energy and renewable energy made up 25.71% of our total installed capacity.

**Constructing the Southwest Hydropower Base** The Changheba Hydropower Station used digital technology to construct its world-class 2.6 million KW high dam, the largest ongoing Datang Power hydropower project. Along side the Huangjinping Hydropower Station—which has a installed capacity of 850 thousand KW—the company is establishing a two-level power plant system on the Daduhe River. This approach is a microcosm of our broader energy structural adjustments and reforms and showcases how we will upgrade hydropower operations by using surging river water to supply power to the Tibetan region.



**Building Qinghai photovoltaic power generation brand** Qinghai New Energy Company has reached a PV capacity of 160 MW. The company has taken steps to optimize its regional power supply structure and serves as a model company in Qinghai photovoltaic industry. In 2016, the 4th phase of photovoltaic 20 MW project was successfully connected to the grid.



25.71%  
The proportion of clean energy and renewable energy to the total installed capacity in 2016



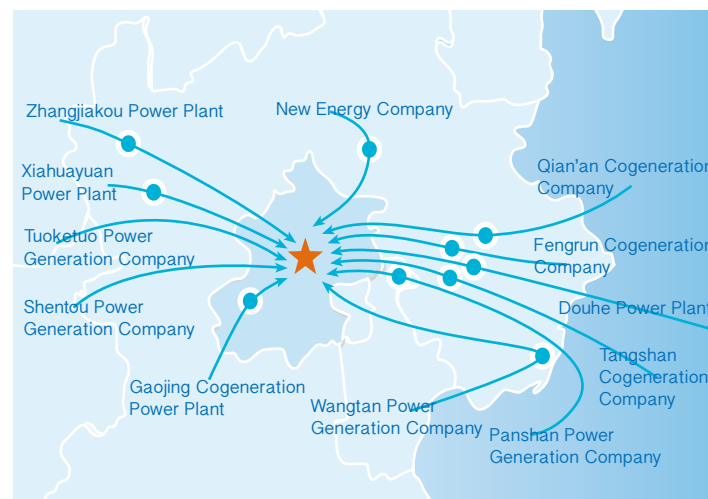
**Tapping wind energy in Jiangxi province** Jiangxi New Energy Company built an additional thirteen 2.5 MW wind power generation units on Shitou Mountain, producing an estimated 64,490,000 KWh of electricity annually. Its first wind generation units were connected to the grid in 2016 and are now viewed as a showcase for the use of local wind as a power source.



## Power Supply

Electricity is an important contributor to national economic growth and social development, and Datang Power is committed to providing safe, clean and efficient electricity power. We supervise the implementation of all forms of electric power protection measures and have successfully completed many tasks during major periods. In 2016, our total electricity consumption was 172.5 billion KWh, a year-on-year increase of 1.65%.

**Ensuring power to the capital** We have normalized the power supply for the capital and we are proud to supply power to the capital during important, energy intensive events, and have successfully performed the task during the "Two Festivals" periods, "Two Sessions" periods, the 2008 Beijing Olympic Games, the Ceremony of the 60th Anniversary of the founding of New China in 2009, the APEC Meeting in 2014, the 2015 China Victory Day Military Parade and many other important events.

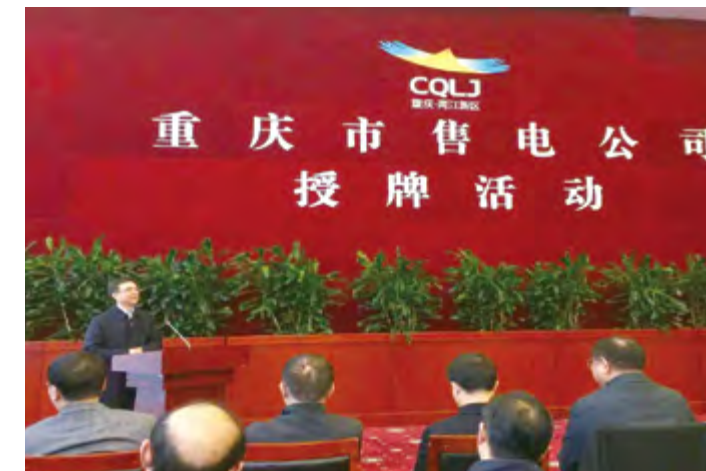


**Supplying power for the G20 Summit.** During the 2016 Hangzhou G20 Summit, Zhejiang Shaoxing Jiangbin Thermal Power Company, Jiangshan Xincheng Thermal Power Company, and Wushashan Power Generation Company formulated and implemented plans to supply power to the city, conducting tests and performing contingency measures to root out and accommodate hidden challenges. The companies strengthened all aspects of managing environment protection measures and implementing needed equipment to ensure that all emissions and pollutants met or exceeded national and international standards.

## Demand-side Services

As the government continues to reform the electricity power system, we must also continue to take the initiative adapting to market changes. To this end, we will promote our involvement in direct power purchases and sales for big consumers and our participation in pilot carbon market transactions. This will ensure our success as a comprehensive energy service provider.

**Participating in the construction of local electric power market** At the end of 2016, in addition to successively establishing three electricity-selling companies (Guangdong Datang Energy Marketing Co., Ltd., Fujian Datang Energy Marketing Co., Ltd. and Zhejiang Datang Energy Marketing Co., Ltd.), Datang Power also invested in marketing companies affiliated to the branches of China Datang Corporation in Jiangsu, Yunnan and Shanxi, and a electricity-selling company affiliated to a local energy investment company in Chongqing



**Adopting the practice of direct power purchases for big consumers** The electricity market can be a complicated environment. As such, Yunnan Lixianjiang Hydropower Company is taking steps to upgrade the quality of its service and to improve its consumer satisfaction rate for direct purchasers of electric power. The company has signed a Contract of Direct Electric Power Transactions Between Big Consumers and Power Generation Enterprises with three enterprises in Yunnan province, and is going to be the first power generation enterprise to adopt the practice of direct power for large consumer purchases in Yunnan.

### Honoring carbon emissions agreements

In 2016, eight affiliated corporations of Datang Power were included in a regional carbon emissions trading pilot program. The Beijing Gaojing Thermal Power Plant, one of the selected companies, built a regulatory system that covered the entire energy utilization and carbon emissions process. As such, the company was awarded the Energy Management System Certification of China Classification Society Quality Assurance Ltd, making it the first grassroots enterprise in Datang Power Group to adopt the CCER exchange method and complete all its annual carbon emissions work. The company also successfully achieved carbon asset appreciation. These efforts greatly contributed to Datang Power's participation in the national carbon exchange market. In addition, the first two phases of the Wind Power Project of Fengning Dam of Hebei New Energy Company were also granted a project record by CCER, following the completion of its CCER examination.



Beijing Gaojing Generation Power Plant



# Eco-friendly

## Sustainable Development

Green growth is a core concept in sustainable development and an important part of the 13th Five-Year Plan. Datang Power plans to contribute to the growth and development of an ecological civilization by placing green concepts at the heart of its operations. By developing resources and taking steps to protect the ecological environment, we will contribute to energy conservation and emissions reduction initiatives and facilitate a blue sky, clear water and green mountain environment.

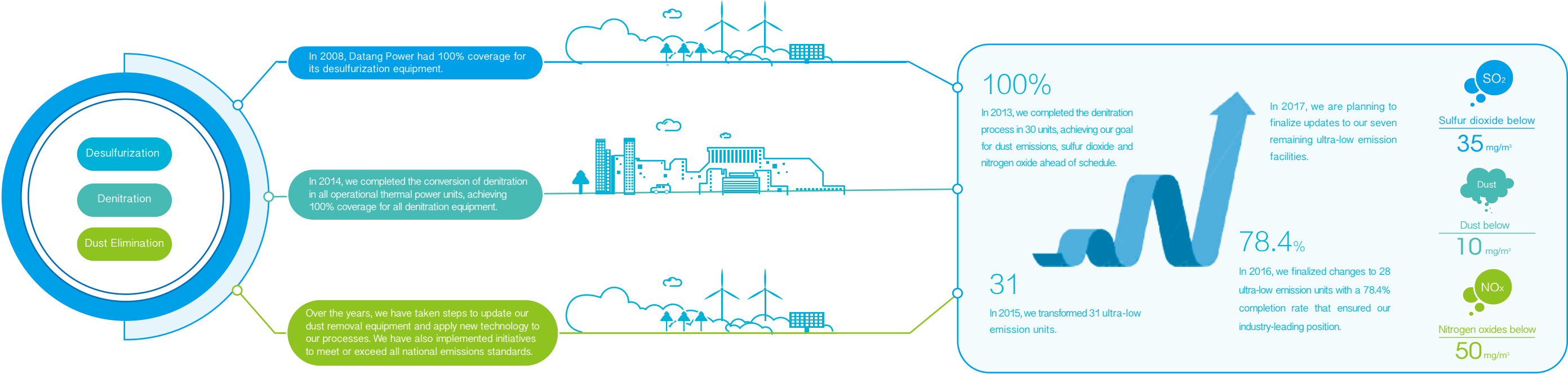




Ultra-low Emissions

In strict compliance with national pollutant emission standards to reduce pollutant emission, we conduct energy conservation and consumption reduction work and regularly look to transform and improve the ways in which we protect the environment. To date, we have introduced many ultra-low emissions initiatives, reducing pollutant emissions and playing a leading role among large-scale power generation enterprises.

In September 2014, the National Development and Reform Commission, Ministry of Environmental Protection and National Energy Administration jointly issued the *Action Plan for the Coal Power Energy Conservation and Emission Reduction Upgrade and Reform*, and in March 2015 a Government Work Report was released at the 3rd Conference of the 12th NPC. The latter specified requirements for "promoting the transformation of ultra-low emissions from coal-fired plants". In addition, on December 2, 2015, the Standing Committee of the State Council announced its decision to introduce ultra-low emissions and energy conservation in coal-fired plants and reduce coal consumption and pollutant emissions from the power generation sector.



The Beijing Gaojing Thermal Power Plant was the first facility in China to implement the denitration process in all units.



Inner Mongolia Tuoketuo Power Generation Company practiced a Special Desulfurization Management Model and was recognized as the "Best Environment Performance Power Plant in Asia".



Zhejiang Wushashan Power Generation Company met its environmental responsibilities by converting four of its ultra-low emission facilities one year ahead of the schedule. The company has one of the best emissions performance ratings in its class.



Hebei Tangshan Thermal Power Company' s average emission concentration of the three pollutants are 18.21mg/m<sup>3</sup> for Sulfur Dioxide, 28.51mg/ m<sup>3</sup> for Nitrogen Oxide and 2.10mg/ m<sup>3</sup> for dust. These figures are far below national standards for ultra-low emissions.







Yunnan Lixianjiang River Hydropower Company

Ecological Protection

We believe that "green hills and clear waters are invaluable assets" and we are committed to developing and utilizing resources safely to protect the environment. To maintain the safety, order and stability of our production and operational processes, we always examine our impact on the ecological environment to ensure that we preserve and protect social and environmental features in the communities in which we conduct activities.


Breeding and releasing fish to protect water resources



Yunnan Lixianjiang River Hydropower Company conducts catch-and-release fishing for rare aboriginal fishes such as soft-fin new light-lip fish and dark-lip fish.




Yunnan Lixianjiang River Hydropower Company transplants rare and protective seeds in around the local reservoir and transplants and breeds 12 rare rainforest seedlings such as Vietnam gurjun, Hopea hongayensis, terminalia myriocarpa, magnolia macrophylla, paramichelia baillonii, horsfieldia tetratopala, myristica yunnanensis, caryota urens, toon, tetrameles nudiflora, deutzianthus tonkienensis, and the menglun Alice subtree.

 Sichuan Ganzi Hydropower Company preserves a 11-km-long natural stretch of river between the Huangjinping hydropower station and the downstream cascade Luding hydropower station to ensure the life cycle of the surrounding landscape. The company has taken steps to prevent activities that would reduce water use and implements projects that preserve the natural habitat for indigenous fish. In 2016, the company released 300,000 two-year-old wild parent Schizothoracinae offspring to compensate for the impact of building a hydropower station on fishery reserves in the natural waters of Dadu River.



Chongqing Pengshui Hydropower Company has also designed and built the country's first comprehensive fish collection platform. The platform attracts fish for temporary farming and rescue and gives experts the opportunity to conduct experiments that have the potential to solve problems related to high- dam fish in habitats that surround hydropower stations. Their work is also reintroducing rare fish species to the river basin by way of artificial fertilization, breeding, cultivation and release. The company has been breeding and releasing aquaculture since 2010, releasing a total of 3,200,000 fish, including 420,000 mullets, lwaharas, Sinilabeos rendahlis, and 1,050,000 Spinibarbus sinensis and white turtles.

 Sichuan Ganzi Hydropower Company also transplants, cuts and collects seeds for 293 national second-class protective plants including the Cupressus chengiana which is concentrated in the Changheba Hydropower Station Reservoir area. This is done to protect indigenous trees and the gene pool of the natural Cupressus chengiana plant.

 Chongqing Pengshui Hydropower plants food for the Francois's Leaf Monkey—a first-class protected species—to help preserve their habitat. The company is cooperating with Pengshui and Wulong County Forestry Bureau to create the region's largest reserve for the endangered distylium buxifolium plant. By the end of 2016, more than 34,840 transplanted trees had been saved.

Protecting endangered plants



Chongqing Wulong Hydropower Company





"Lijiyu Ash Yard" comprehensive control project of Hebei Douhe Power Generation Plant

Creating an ecological miniature through dust consolidation and control

We focus on the waste management and synthetic utilization to actively create a harmonious ecological environment. In 2016, a total of 20.4134 million tons of fly ash, slag and coal sider was produced and its synthetic utilization rate reaches 85.5%.

Hebei Zhangjiakou Power Generation Plant has been implementing an integral Ash Yard Comprehensive Development and Utilization Initiative to actively develop ash yard tree reproduction and cultivation for the construction of ecological park.

Hebei Douhe Power Generation Plant has been implementing its comprehensive control project of Lijiyu Ash Yard since 2007 which has substantially improved the ash yard ecological restoration.

Resource Conservation

Through strengthening the conservation management throughout the whole operating process, we reduce energy consumption and improve efficiency and profitability of resource utilization. We actively promote the reform of energy conservation technologies and have steadily lowered our energy consumption. In 2016 National Large Thermal Power Unit Benchmarking Competition, our Company had 8 award-winning units for their outstanding efficiency.

We emphasize water resource conservation and supply management , exercise unified control and adopt quality grading, carry out rational recovery and adopt tiered pricing to improve water reuse rate, reduce water withdrawals and waste water discharge.

Reducing drainage system leakage

To reduce leakages in our drainage system we tighten all valves after starting-up the facilities and regularly make improvements to our supervision process during normal operations. We will continue to implement new initiatives to reduce water leakage in the drainage system and will take the necessary steps to ensure the water make-up rate is under control at all times (below 1.5%).

Using reclaimed water and floodwater

Following the Beijing Gaojing Thermal Power Plant's implementation of the "Pollution Management of Gaojing Gas Thermal Power Reverse Osmosis Membrane" the company was awarded First Prize for QC Achievement by the Beijing Electric Power Industry Association. The company's unique approach provided valuable insight to regions in northern China who wished to use reclaimed water in the reverse osmosis system water project.

Controlling the loss rate of aerated water

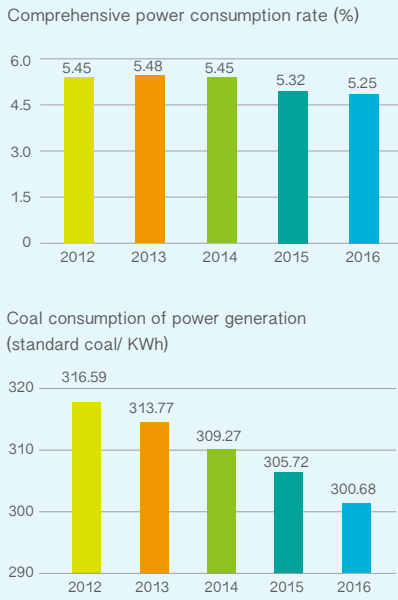
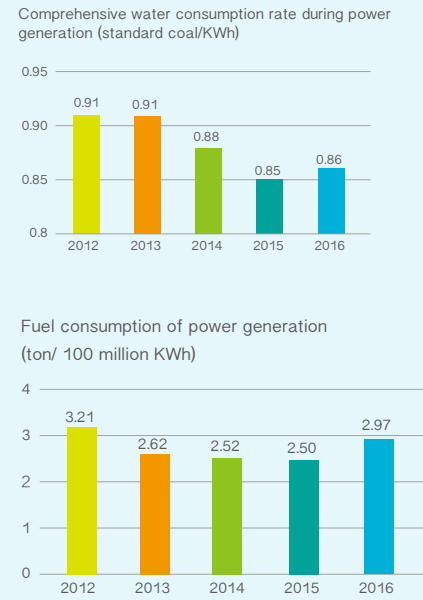
Strengthening our maintenance and management of equipment. Eradicating the phenomenon of "deflation, leakage, drainage and dripping". Keeping the gas water loss rate of units in acceptable range.

Constructing directair-cooling units in water-deficient areas

Inner Mongolia Tuoketuo Power Generation Company's Units No.5 to 10 are direct air-cooling units, the water consumption rate of which is only 20% of the traditional wet cooling units.

Replacing coal-fired units with cleaner gas-fired units with lower water consumption

The Beijing Gaojing Thermal Power Plant closed its coal-fired units and introduced gas-fired units, reducing its original water consumption by more than half.



Units at the level of 600 MW

First Prize

Unit 2, Inner Mongolia Tuoketuo Power Generation Company  
Unit 4,Tianjin Panshan Power Generation Company

Second Prize

Unit 4, Zhejiang Wushashan Power Generation Company

Third Prize

Unit 1,Hebei Wangtan Power Generation Company

Units at the level of 300 MW

First Prize

Unit 4, Shanxi Yungang Thermal Power Company

Second Prize

Unit 6, Hebei Zhangjiakou Power Plant  
Unit 1, Liaoning Jinzhou Thermal Power Company

Third Prize

Unit 1, Hebei Fengrun Thermal Power Company

Award-wining units in the National Thermal Power Units Competition.





## Law-based Corporate Governance

A legal framework is a country's superstructure and sets out a set of rules and legal steps which allow for judgments and rulings to be made in legal cases. To this end, a legal framework is essential to long-term peace and stability. Enterprises, which represent a nation and perform social responsibility, must be in accordance with laws and regulations, particularly if they are to achieve sustainable development. Datang Power, as an important constructor in this system, adheres to the principle of making substantial contributions and setting good example to and for the nation. We abide by the principles of trust and lawful operations and regularly implement initiatives and aim at strengthening our legal culture in order to guarantee the healthy development of the enterprise.





## Safe Production

*"Safe production must not involve any personal consideration. We must be strict in all aspects of our production processes, which is the best demonstration of our big love."*

Safe production is our top priority at Datang Power and a prerequisite to our successful business operations. We are committed to strengthening all aspects of our safety culture and regularly conduct safety examinations for personnel, equipment and management. In 2016, 59 power generation enterprises affiliated with Datang Power reached our internal standard for safe production, 39 achieving the Class I standard.

**Improving our safety management system.** To ensure a good control environment and contribute to achieving our company goals, we regularly make revisions and improvements to our International's Safety Regulations, our Measures for Safe Production Responsibility Management, our Safe Production Supervision Regulations, our Regulations for Rewards and Punishments of Safe Production, and our Safe Management Guidelines. We have established a "4+1" Safety Management Institutional System to guide and improve our management of safe production. We highlight, implement and regularly examine how well we perform in terms of leadership, oversight, and on-site management to improve our overall level of production management.



Management team inspected and gave guidance on safe production work.

# 847

Monitors and group leaders participated in safety management training sessions.

We use a universal approach when building a work team, and see our capacity building activities as an essential part of our safety production process. Our safety team is responsible for ensuring we meet all relevant safety standards. We adhere to our Guidance to the Standardization Construction of the Datang International Team when constructing new teams and implement our 120-point working standards. Our "security for whom" initiative publicizes and educates employees on the importance of safety security. We also run an anti-accident safety warning education program, compiling and learning from previous accidents during power production. We have codified Preventive Measures to raise awareness among our employees on the importance of safety and safety concepts, and have built an "iron enterprise" that has safe production processes. In 2016, our Team Leader Safety Management Training Courses consisted of six phases and trained 847 team leaders.



Employees in the Program Control and Maintenance Team of the Thermal Power Workshop at Inner Mongolia Renewable Energy have an average age of 30. In 2016, during the "Training Lights up Workshops", experts provided practical and theoretical skills training to the staff to improve the quality their work and guarantee the safe and stable operation of work equipment. In the 2016, the National Metallurgy Cup Thermal Technical Competition awarded two members of the team, Wang Xuemei and Zhang Peng, with a National Technical Expert and Industry Technical Expert title, respectively.



We regularly conduct comprehensive safety examinations and upgrade our safe production process to maintain a safe work environment for our employees. We perform safety inspections in facilities that have prominent safety issues, hidden on-site hangers, or weak safety records to eliminate hidden hazards that could occur during a natural disaster. We then formulate improvement measures that target the problems. In 2016, Datang Power issued 43 Notice of Safe Production Supervision certifications and supervised the rectification of 994 problems throughout the organization. In addition, we regularly implement safety control and management projects, and conduct on-site visits to strengthen our internal controls and management and to construct only first class projects.

"We conduct safety examinations not because we are obliged to, but because we are responsible for the safety of our more than 2,000 employees. We must neither fall behind our schedule due to the examinations, nor allow accidents to occur as a result of leakages."

*Liu Xiugen*

*Director of the Safety Supervision Department  
of Zhejiang Wusha Power Generation Company*



**Strengthening our emergency management plan.** Our emergency management plan covers all levels of the company and contains newly improved contingency protocols. We now have rescue materials for specific scenarios and organize drills against emergencies such as firefights, generator fires, and floods. By regularly testing the adaptability of our contingency plans and performing emergency rescue training tests we aim at strengthening our ability to respond effectively to emergencies.

**Improving the condition of our work equipment.** Our approach to managing equipment stresses the importance of maintenance to prevent defects from occurring. We examine and repair equipment on a regular basis and perform targeted technology updates to ensure that our equipment is always functioning correctly. For example, Tianjin Panshan Power Generation implements its "Examination, Rectification and Tracking" procedures to eliminate existing problems in its facilities. The company classifies problems that may negatively influence the safety of the enterprise and arranges experts to analyze potential issues and draw up corrective plans. In 2016, the company won the honorary National "Ankang Cup" Competition Excellent Unit, and the "National Safety Culture Construction Demonstrative Enterprise" for being a good example of safety and reliability.



Class A Reliable Generating Units of China (2016)

## Law-based Framework



Inner Mongolia Tuoketuo Power Generation Company visited the legal education base of Hohhot People's Procuratorate.

**Formulating rules and regulations.** At Datang Power, we adhere to law-based corporate governance and follow all applicable national rules and regulations for Hong Kong listed companies. We abide by all laws and regulations including the Law on Safe Production, the Law on Environmental Protection, and Law on Prevention of Occupational Diseases. The Datang International Power Generation Co., Ltd. Legal Compliance Implementation Plan ensures that all decisions are in accordance with the law for both our internal and external operations. In 2016, we won numerous awards including the title of Top 100 Most Trustworthy Listed Companies in China.

**Publicity and education.** Promoting law-based governance is an important step to achieving legal compliance. To this end, we have compiled our 7th Five-Year Plan on Legal Publicity and Education of Datang International Power Generation Co., Ltd (2016-2020) to promote the dissemination of laws and organize activities that promote a law-based culture and facilitate respects for the law. On 4 December 2016—National Constitution Day—we organized a number of national legal publicity activities.

## Corporate Integrity

To ensure transparency in the workplace, we strictly implement elements from Central People Government's Eight-point Regulation, and conduct in-depth studies that are guided by our "Two Studies and One Action" plan. We rectify existing problems in a timely manner and always seek to improve how we supervise and discipline staff so that we can function as honestly and transparently as the Party. In 2016, we signed 2,324 letters of intent and organized more than 600 activities for anti-corruption, attracting more than 47,000 participants.

**Standardizing our management of suppliers' and business ethics.** To prevent the exchange of gifts from occurring during festivals, Hebei Zhangjiakou Cogeneration established a "gift-giving etiquette" for its suppliers. The company asked supplier employees whether they were asked by Hebei staff for gifts or cash rewards. In reiterating ways of reporting such behavior among suppliers as well as the Party policies of establishing an honest and clean government, suppliers are warned against carrying out such improper acts. This action forms deterrent effect among suppliers and effectively reduces gift exchanges.

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Jiangsu Shipping visited the "Duty Crime Prevention" anti-corruption base in Nantong





# Innovation- Guided by Science and Technology

driven

Innovation is a powerful driving force for the development of society. By implementing an innovation-driven development strategy, China is promoting technological innovation and mass entrepreneurship. This approach is stimulating our corporate dynamism by integrating innovation into the development trajectory of our company and fostering an innovative enterprise that is contributing to economic and social development.





28

China Datang innovation labs that had been named after employees by the end of 2016

## Innovative Enterprises

Our three-tiered (headquarters+professional/regional companies+frontline companies) technology management system is firmly established and we have now launched numerous technological management regulations including the Technology and Science Reward Regulations of Datang Power, and the Technological Project Regulations of Datang Power. Drawing on our expertise in technology and innovation, we will continue to promote science and technology and independent R&D. In 2016, China Datang headquarters and affiliated companies including Inner Mongolia Tuoketuo Power Generation Company, Hebei Zhangjiakou Power Plant, Tianjin Panshan Power Generation Company and Chongqing Pengshui Hydropower Company, became the first innovative enterprises in the Group.

## Innovative Teams

Inspiring talented teams to work for our enterprise is an important part of our organizational success. By focusing on scientific research we are able to encourage employees to explore new ways to improve our efficiency. Science associations, innovation labs and quality control circles (QCCs) are just a few of the diverse innovation platforms that we use to stimulate employees' potential and cultivate increased competitiveness. At the end of 2016, 28 China Datang innovation labs had been named after employees.

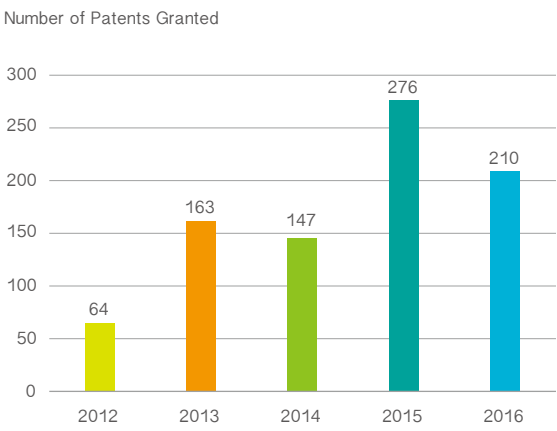
One example is the employee-led "Wanghaifeng Innovation Lab" which offers innovative training sessions on thinking, on-site technical diagnosis, technical improvements, mentorship, the promotion of advanced technology, innovation projects and other activities that eliminate problems at work. To date, the lab has delivered more than 60 million yuan of profits accumulatively. After five years, a 26-member innovation team led by model employees and leading technical staff—and supported by technical experts and front-line skilled workers—has been established and now serves as the cradle for producing innovative technical talents that drive the development of our company.

- Obtained 53 national patents
- The QCC won the "International Excellence Award"
- It received the "Trustworthy Group for Quality" award for quality management
- It also won first place in the "Industrial Innovation Award" for its management of equipment
- The "Innovation Achievement Awards for National Enterprise Management Modernization of Beijing"



## Innovative Achievements

Datang Power is committed to the application of new research and technologies, techniques, processes, materials and equipment. We will continue to implement National key scientific and technology projects to accelerate scientific achievements. In 2016, we had invested 18 million yuan in technical innovation projects, and had undertaken 2 projects under the national "863" program as well as 1 key technology R&D programs at the national, ministerial and provincial levels. We also played a key role in the revision of 19 industry standards and obtained 210 new patents.



Awarded projects led by or participated by Datang Power in 2016

Project name	Award
Research and application of key technologies of SO <sub>3</sub> removal and effective denitration of full-load coal-fired generating units	Second prize of 2016 China Electric Power Science and Technology Award
Major scientific research on China's first 9FB gas-steam combined cycle unit and its application	Third prize of 2016 China Electric Power Science and Technology Award
Research and application of simultaneous removal of multi-pollutants of coal-fired power plants	Third prize of 2016 China Electric Power Science and Technology Award

Major science and technology projects undertaken by Datang Power in 2016

Project name	Project level
Development of new thermal insulation materials for ultra-supercritical units of thermal power plants	National science and technology project
Research on usability and energy-saving effect of thermal insulation materials for thermal power plants	National science and technology project
Research on the optimization and control of peak load regulation of large-scale thermal power generating units	Key science and technology projects of China Datang





# Feature Research, development and innovation of high-aluminum fly ash



High-aluminum Coal R&D Center was honored as "Excellent Investigation Station of Scientific and Technical Practitioners" in 2016.

Xu Peng, senior researcher at the non-metallic material institute of the R&D Center, won first prize at the Science and Technology Progress Award of Ordos for his outstanding frontline research.

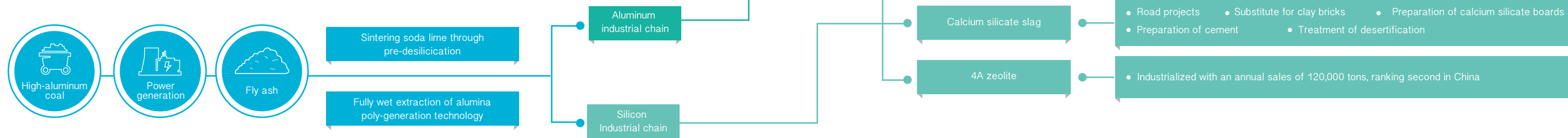
108

Innovation patents applied for national invention patents

With China's increasing emphasis on utilizing resources and implementing a circular economy, the Datang Power High-aluminum Coal R&D Center—founded by Inner Mongolia Renewable Energy—has built the world's first demonstration production line for the extraction of alumina from fly ash. The production line has an annual output of 200,000 tons. In 2016, the R&D Center implemented its research and findings in the fields of energy saving, cost reductions, by-product development and new techniques for extracting alumina from fly ash to its demonstration production line.

"Development of calcium silicate-polyfoam composite thermal insulation materials"research project

First prize at the Science and Technology Progress Award of Ordos, and second prize at the Science and Technology Progress Award by China Datang



Building a strong scientific research team.Scientific research allows us to maintain our position at the forefront of power generation and we regularly connect our scientific achievements in personnel research to production challenges so as to drive forward our development strategy. We are committed to improving our production of and performance with renewable resources and are taking the necessary steps to push by-products up the value chain to improve our operations.

Constructing key laboratories. New laboratories regularly deliver value to our company. We use laboratories to establish new standards and to experiment with our approach to process management according to CNAS laboratory certification standards. We strictly manage data to enhance our testing and analysis and improve the quality of our production data for renewable resource companies. This approach helps us maintain our goal of becoming a top-class R&D experimental platform in China.





# CSR- minded

## Harmonious Sharing

The new economy requires that as a socially responsible, forward-thinking enterprise we put people first, promote people's livelihoods, accelerate the reform and opening-up of social undertakings, and build a harmonious society that stimulates individuals and enhances social vitality. In accordance with these principles, Datang Power is committed to fulfilling its responsibility as a corporate citizen and is seeking new ways to better impact society and share its achievements with stakeholders. We ensure the legal rights and interests of our employees and provide platforms for their all-round development. To further contribute to society we have deeply rooted the fulfillment of social responsibility into our production and operational processes.





# Staff Development

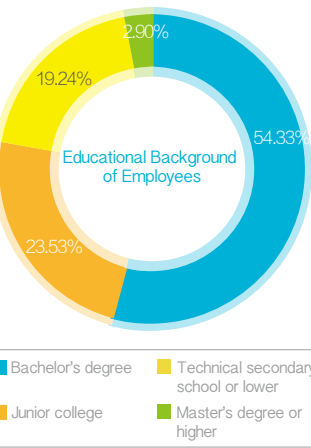
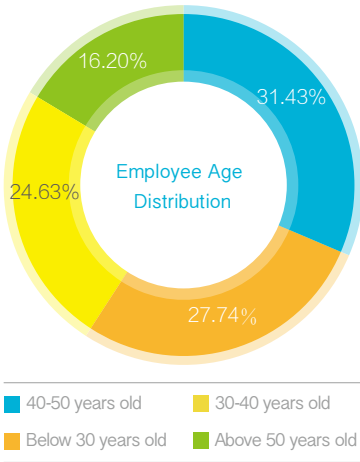
"Firm belief, strict discipline, indomitable manner, and competitiveness"

As part of Datang China's Party Group and in line with Datang China's spirits, we hold firmly to our core philosophy and follow a "120-point work standards". This ensures our team is filled with a strong belief, strict discipline, tenacious attitude, and competitiveness, and guarantees the positive impact of all business activities.

We provide diverse platforms and resources to help employees' with their career development plans as well as their physical and mental health. We safeguard their lawful rights and interests, and take the necessary steps to facilitate a harmonious working and living environment.

19,817

Total employees



# Respect and Security

To safeguard employees' rights and interests, we make sure we are in strict compliance with all laws and regulations, and ensure 100% coverage of the labor contract and the collective contract. We adhere to "equal pay for equal work", and pay premiums from the housing provident fund and social insurance. We always seek new ways to improve our labor management system and our salary and wellbeing system. We oppose all forms of discrimination and forced labor. We have taken steps to improve the democratic management system and have expanded our democratic participation channels. We have improved our workers' congress system and trade union system, raising the union membership rate to 100 %. We value the suggestions and comments that we receive from our employees and take steps to ensure their right to information, participation and supervision, which contributes to the promotion of democratic management. At the end of 2016, we had 19,817 employees, with 4,232 female employees and 1,006 ethnic minority employees.

# Training and Development

Talented employees safeguard the competitiveness of our company. To help employees develop professionally we use a specialized training system that focuses on on-the-job training. We also hold professional competitions and conduct annual training plans. In 2016, we invested 45.0979 million yuan in training programs, organizing 34 professional programs for more than 2,000 participants, and holding 62 Datang China training programs for more than 10,000 participants.

Developing professional skills. We are committed to enhancing the competence of our employees and have built development platforms that allow them to demonstrate their talents and achieve their goals. In 2016, our technical training programs fostered 73 certified technicians (increasing our total to 1,204), with 14 certified as senior technicians (increasing our total to 210).

Born in the 1980s, Lin Xianchao was a typical employee at Inner Mongolia Tuoketuo Power Generation Company. Over the past five years, however, he has improved his personal skills and developed as a technical expert through self-learning and guidance from mentors and corporate leaders. As a result, Xianchao was honored as an "excellent skilled employee of Datang Power", a "technical expert of China Datang" by Datang Power, a "technical expert from a state-owned enterprises", and a "young expert from state-owned enterprise" by SASAC.

34

Professional training programs in 2016

"Perseverance makes our life and work meaningful. Only when we do what we are doing to the best of our ability will we realize our true value to the utmost."

Lin Xianchao, Inner Mongolia Tuoketuo Power Generation Company



3 "State Council Experts for Special Allowance"



7 "national technical experts"



21 "technical experts in power industry"



4 "technical experts in nonferrous industry"



77 "technical experts from state-owned enterprises"



235 "technical experts of China Datang Corporation"



## Health and Wellbeing

100%

Coverage for regular physical examinations

Datang Power is devoted to improving both the working and living conditions of its employees. We have organized various cultural activities to enrich their lives, and have taken steps to build a healthy work-life balance. We care for retired employees, female employees, and employees in need. By offering solutions to practical challenges, we believe we are enhancing our employees' sense of belonging and happiness.

**Caring for our staff's mental health.** Chongqing Pengshui Hydropower Company organizes counseling activities and conducts customized questionnaires for employee to detect depression. The company also publishes information pamphlets about depression and related illnesses. To ease the pressures felt by young employees in the workplace, a professor of psychology from Southwest University was invited to lecture on mental phenomena and stress relief.

**Helping young employees find true love.** Due to its remote location and sparse distribution of personnel, employees at Hebei New Energy Company were having difficulty making new friends. As a result, the company took the initiative to arrange cross-company activities with other local enterprises so that single employees would have an opportunity to communicate and build new friendships—and possibly find love.



## Win-win Cooperation for Mutual Benefits

Datang Power regularly takes action to enhance its communication and cooperation with stakeholders and engages in poverty alleviation activities and makes donations to local schools to boost prosperity of economy.

## Expanding Exchanges and Cooperation

We conduct business with integrity and share resources to the greatest extent possible. This approach gives us with the opportunity to learn from each other in mutually beneficial ways that often result and win-win cooperation. To this end, we have established a comprehensive strategic partnership with our suppliers, promoted the suppliers to lower the impact of production and operation on environment to build responsible supply chain, and facilitated cooperation with governments, social organizations, partners, scientific research institutions and other stakeholders. By drawing on our advantages in capital, technology and management we can support local initiatives that protect the environment, improve people's lives, and bolster local economic development. On 29 December 2016, we signed a strategic cooperation framework agreement with Lingshui County of Hainan, and the Hainan Development Holdings Co. Ltd., to promote green energy projects in Hainan province and rectify concerns over a lack of green development initiatives in the region.



Datang Power deepened comprehensive strategic cooperation with GE.



Datang Power signed strategic cooperation framework agreement with Lingshui County, Hainan, and Hainan Development Holdings Co., Ltd.



Datang Power deepened comprehensive strategic cooperation with Xinjiang Goldwind Science & Technology Co., Ltd. and Beijing Energy Investment Holding Co., Ltd.



## Targeted Poverty Alleviation

*"In 2017, we will do our best to solve the practical difficulties for local communities. In addition to providing direct assistance to people in impoverished areas, we will enhance their ability to make life better."*

*Liu Zhiyong, Secretary of the Party Committee of Hebei Zhangjiakou Power Plant*

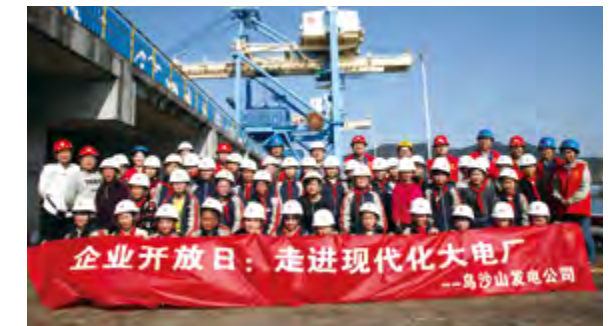
Targeting poverty alleviation is a central strategy of the central government and we regularly engage with poverty alleviation organizations to offer our technical skills and advantages in management to help in meaningful ways. To this end, we allocate targeted resources to poverty alleviation projects and provide tailored guidance in accordance with the specific needs of each situation.

The first power aid project in a Tibetan region that had no access to electricity was completed in 2016. Three generating units from the Tibet Bodui Hydropower Station, each with a capacity of 3,200 KW, were put into full operation. In addition to optimizing the power network in Bome County, the project provides a steady supply of power to the region and is easing the county's power shortage problems. We also conducted poverty alleviation work to help improve employment opportunities for young Tibetans. To date, eleven staff in the plant are local Tibetans students and local citizens are encouraged to participate in construction work with the hydropower plant.

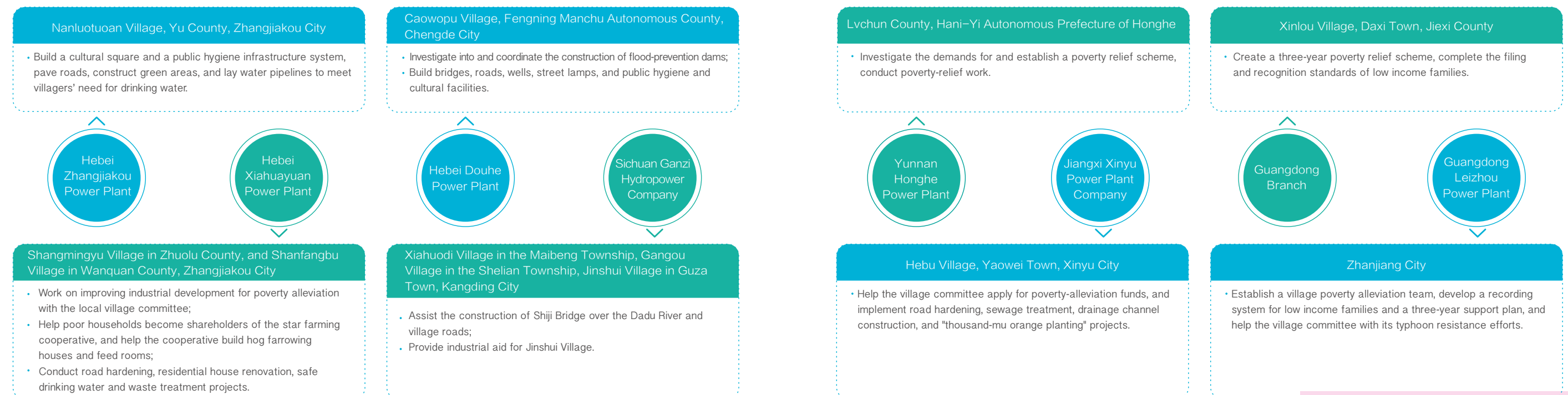
## Supporting Education

Education is an important driver of sustainable development and we support education in our public social welfare initiatives. We provide targeted donations to local education programs, support cultural activities and educational development in regions where we conduct activities to ensure our positive impact on education in impoverished regions for future generations.

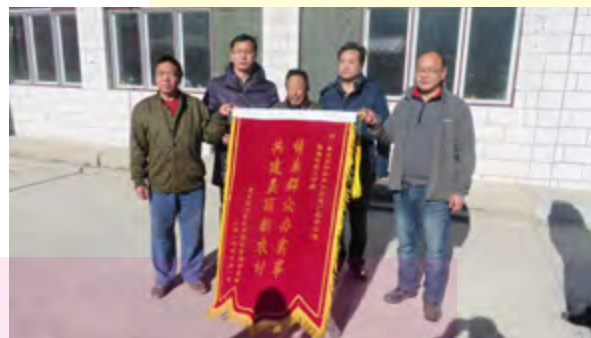
**Datang Class** Launched by Zhejiang Wushashan Power Generation Company, the "Service to Families" initiative examines left-behind children from the Datang Class. Our "service contact card", which allows individuals to contact us to seek advice, lets us provide voluntary teaching and psychological counselling to children, and send needed daily necessities like rice and milk to children regularly to make them feel loved. Ningxia New Energy Company also works with children from the Datang Class and is helping improve learning conditions in the school by creating a safer and more welcoming educational environment.



Children from Datang Class visited the power plant.



Care for Tibetan Children



A silk banner sent by villagers to the poverty relief team as a gift



Tibetan employees



Care for poor villagers



# Our 2017

In 2017, we will implement our "comprehensive improvement year" plans. Based on our corporate values and benefit-oriented goals—and guided by the "One-Five-Eight" strategy—we will seek to improve the quality of our operations and accelerate our implementation of the 13th Five-Year Plan. We will also bolster the development of our elite team so that we can surpass our industrial counterparts. We will improve our safety controls, enhance our competitive advantages and the quality of our assets, and strengthen our governance capacity. We will also improve the quality of our staff and strengthen Party membership throughout the company. We will take the necessary steps to transform Datang Power into an industry-leading, world-class comprehensive energy company.

## Value-added

- Implement a comprehensive action plan
- Improve the electric power marketing system
- 266,000 KW of electricity generation by non-water renewable resources
- 724,000 KW of electricity generation by thermal power units and gas turbines
- Bring the four generating units of Changhe Dam Hydropower Station into full operation
- Bring the Haokou and Jiaomutang Hydro Power Plants into full operation within by 2018
- Implement our first overseas project

## Eco-friendly

- Complete our ultra-low emission transformation plan
- Complete our ultra-low emission transformation plan of coal-fired generating units
- Establish model coal-efficient generating units of the same type
- Striving to create model coal-efficient generating units of China Datang
- Promote little indicator competitions
- Implement pilot project for zero wastewater discharge.

## Legal Compliant

- Ensure "Nine Eradications" in safe production
- Regulate the standardization of model teams
- Construct Class-A Reliable Generating Units in China
- Improve how we evaluate wind power plants
- Establish and improve responsibility system features such as checklist forms, accountability, and responsibility chains
- Strengthen Party membership for the 19th CPC National Congress

## Innovation-driven

- Accelerate the application and demonstration of advanced and innovative technologies
- Promote independent innovation
- Itelligentize and digitalize new energy programs
- Explore the "Internet Plus New Energy" model
- Enhance research on soft science

## CSR-minded

- Improve the quality of our employees
- Help staff with career development
- Build platforms for education, training and promotion
- Cultivate employees to be technical masters at all levels and in all fields of operation
- Deepen the construction of the "Six Most" livelihood project ("Six Most" refers to the most direct and realistic benefit matters that most concerns the staff and the mass and the most difficult, most bothering and most worrisome practical matters facing them)
- Strengthen the closed-loop management system of social responsibility





# Third-party Evaluations

In the New normal of Chinese economy, traditional energy enterprises come at a critical time to promote industrial transformation and upgrading, optimize development strategy and constantly make themselves better and stronger. The "new globalization" and Chinese government's growing concern about environmental protection and climate change also bring new challenges for enterprises' sustainable development.

To be an industry-leading, world-class comprehensive listed energy company, Datang Power, actively fulfills its social responsibility as a central SOE, and has released social responsibility reports for nine consecutive years. This year's report focuses on "value-added, eco-friendly, legal compliant, innovation-driven and CSR-minded Datang Power" and systematically and comprehensively discloses the company's social responsibility concepts, actions and performance. Datang Power implemented the development concepts of innovation, coordination, green development, openness and sharing, and integrated social responsibility into its sustainability strategy and operations management. Based on efficiency, innovation and development, the company has intensified its efforts to promote industry progress, construct ecological civilization and explore energy market reform. The concrete actions responded to the key tasks to optimize energy system, promote energy consumption, supply and reform of technology and system, and strengthen energy international cooperation in the 13th Five-Year Plan of national energy development. The company also vigorously implemented targeted poverty alleviation to contribute to a harmonious society. As a responsible central SOE, its leading role is increasingly highlighted.

Datang Power is expected to advance its social responsibility management, enhance its sustainable enterprise competitiveness and work with stakeholders to make greater contributions to the CSR development in China.

Zhai Qi, Deputy Secretary General of China Business Council for Sustainable Development

As an industrial leader and responsible central SOE, Datang Power has disclosed its social responsibility information and published social responsibility reports for nine consecutive years. The 2016 Social Responsibility Report of Datang International continues to adopt the "Five Datang" concept as its approach for systematically describing the company's social responsibility concepts, strategy, planning and management system. This approach highlights how Datang Power fulfills its social responsibilities and its performance in quality and efficiency, innovation, legal system building, green development, employee development and community construction.

Based on its communication with stakeholders and the data and diversified indicators obtained through scientific analyses of material issues, the report's content reflects the UN SDGs sufficiently. The report discloses how the company engages with low-carbon thermal power, resource conservation, technological innovation, ecological protection and targeted poverty alleviation, and highlights the role it plays supporting and promoting China's realization of responsible energy production, industrial innovation, and the protection of the water and land ecological environment, as well as poverty alleviation and other sustainable goals such global partnerships between China and the world.

This report is clear and logical, contains diversified content, distinct industrial character and shows the specific features of Datang Power. I sincerely hope that Datang Power will fully draw on the report's role as a communication tool to create more economic, social and environmental values in partnership with its stakeholder.

Han Bin, Secretary General of Global Compact Network China

# Key Performance Indicators

Category	Performance indicators	Unit	2014	2015	2016
 Economic	Installed capacity	MW	41,341	42,337	44,338
	Generation	100 million kWh	1,888	1,697	1,725
	On-grid power	100 million kWh	1,786	1,608	1,635
	Total assets	100 million Yuan	3,024	3,034	2,332
	Revenue	100 million Yuan	702	619	591
	Total profit	100 million Yuan	52.12	65.68	12.40
	Net profit	100 million Yuan	35.27	32.83	20.08
	Proportion of clean and renewable energy	%	23.93	26.12	25.71
 Environmental	Comprehensive power consumption rate	%	5.45	5.32	5.25
	NO <sub>x</sub> emission rate	g/kWh	0.36	0.24	0.16
	SO <sub>2</sub> emission rate	g/kWh	0.25	0.17	0.12
	Dust emission rate	g/kWh	0.07	0.05	0.03
	Waste water emission rate	kg/kWh	0.02	0.03	0.027
	Availability coefficient of generating equipment	%	93.70	92.87	92.98
	Power supply coal consumption	g of standard coal/kWh	309.27	305.72	300.68
 Social	Major personal death and injury incident	Times	0	0	0
	Major equipment incident	Times	0	0	0
	Common personal death and injury incident	Times	0	0	0
	Commen equipment accident	Times	0	0	0
	On-job employee	People	25,246	24,704	19,817
	Number of female employee	People	5,402	5,468	4,232
	Number of minority employee	People	1,528	1,554	1,006
	Membership rate of employee	%	100	100	100
	Coverage of collective contract	%	100	100	100



# HKEX ESG Reporting Guide Index

	"Comply or explain" Provisions	Recommended Disclosures	Disclosure	Report position (Page)	Notes (Explanation on partial disclosure and no disclosure)
A. Environmental					
Aspect A1: Emissions	General Disclosure		✓	26-27	
	A1.1		✓	26-27、55	
	A1.2		✓	27	Greenhouse gases (like methane, perfluocarbon), other than nitrous oxides, are not applicable.
	A1.3		—	—	Hazardous wastes as defined by national regulations are not applicable.
	A1.4		✓	30	
	A1.5		✓	26-27	
	A1.6		✓	30、42-43	
Aspect L A2: Use Of Resources	General Disclosure		✓	31	
	A2.1		✓	30	
	A2.2		✓	30	
	A2.3		✓	31	
	A2.4		✓	31	
	A2.5		—	—	Not Applicable
Aspect A3: The Environmental And Natural Resources	General Disclosure		✓	28-29	
	A3.1		✓	28-29	
B. Social					
Employment And Labor Standards					
Aspect B1: Employment	General Disclosure		✓	46	
		B1.1	✓	46	
		B1.2			
Aspect B2: Health And Safety	General Disclosure		✓	48	
		B2.1	✓	55	
		B2.2			

	"Comply or explain" Provisions	Recommended Disclosures	Disclosure	Report position (Page)	Notes (Explanation on partial disclosure and no disclosure)
Aspect B3: Development And Training		B2.3	✓	48	
	General Disclosure		✓	47	
		B3.1			
		B3.2			
Aspect B4: Labor Standards	General Disclosure		✓	46	
		B4.1	✓	46	
		B4.2	No Violation		
Operating Practices					
Aspect B5: Supply Chain Management	General Disclosure		✓	49	
		B5.1			
		B5.2			
Aspect B6: Product Responsibility	General Disclosure		✓	22	
		B6.1	—	—	Not Applicable
		B6.2	No related situations		
		B6.3	✓	41	
		B6.4	—	—	Not Applicable
		B6.5	—	—	Not Applicable
Aspect B7: Anti-corruption	General Disclosure		✓	37	
		B7.1			
		B7.2	✓	37	
Community					
Aspect B8: Community Investment	General Disclosure		✓	50	
		B8.1	✓	47-51	
		B8.2	✓	47	



# Feedback

Dear Readers

Thank you for taking time to read Datang Power's CSR Report 2016. To improve our performance and our next report, we hope you can give us some feedback on the following aspects:

1. What is your overall impression of the Report?

☐ Good☐ Poor☐ Fair

2. To what extent are your topics of interest addressed in the Report ?

☐ Good☐ Poor☐ Fair

3. How far has the Report revealed Datang Power's economic, environmental and social impact ?

☐ Good☐ Poor☐ Fair

4. How about the readability of the Report, especially in relation to conveniently finding your topics of interest?

☐ Good☐ Poor☐ Fair

5. How is the layout of the Report?

☐ Good☐ Poor☐ Fair

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

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

Which type of stakeholder are you?

☐ Government/regulator☐ Investor☐ Community resident☐ Customer☐ Financial institution

☐ Technical college☐ Supplier☐ Media☐ Social organization☐ Others

# About This Report

Dear readers, this is Datang Power's 9th CSR Report. The Report discloses our philosophy, strategies, actions progress and our commitment to the 13th Five-Year Plan in respect of our economic, social and environmental responsibilities. We hope that by publishing the CSR Report we could enhance communication and cooperation with you and strengthen our synergy for sustainable development.

## Basis of Compilation

This Report is complied in compliance with a) the Guidelines of SASAC on CSR Performance of Central State-owned Enterprises; b) the Environmental, Social and Governance Reporting Guide of HKEX; c) the Circular on Strengthening CSR of Listed Companies and the Guidelines on Disclosure of Environmental Information by Listed Companies of SSE; d) the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines (G4); and e) and the Guidelines of Chinese Academy of Social Sciences on CSR Reporting for Chinese Enterprises (CASS-CSR3.0).

## Reporting Period

The Report covers the period from 1 January 2016 to 31 December 2016, with some dating back to previous years.

## Reporting Cycle

This is the 9th CSR Report published by Datang Power.

## Scope of the Report

The Report covers all relevant information of the Company,please refer to P9 of this report.

## Data Sources

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

## References to Datang Power

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



**Access to the Report**

The report is available in both Chinese and English.

For a hard copy, please contact:

Tel: 010-8800 8511

Email: wangweidong@dtpower.com

The report can be downloaded at:

[www.dtpower.com](http://www.dtpower.com)

 This report is printed on environmental-friendly paper.