

2020 Environmental Social and Governance Report

Shanghai Electric Group Company Limited



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Notes for Report Preparation



Overview

Shanghai Electric Group Company Limited ("Shanghai Electric", "Group", "Company" and "we") began to prepare and disclose the 2009 annual social responsibility report from 2010, and to disclose its Environmental, Social and Governance ("ESG") report since 2016, and issued the report on annual basis. This is the fifth ESG report of our Group, truthfully revealing the Group's performance of its responsibility to shareholders, customers, partners, employees, environment, communities and other important stakeholders. And it shows the Group's performance in environment, society and governance.



Basis of Preparation

This report is mainly prepared with reference to the *Guidelines for Preparing and Reviewing the Internal Control Report and Social Responsibility Report of Listed Companies* of Shanghai Stock Exchange and the *Environmental, Social and Governance Reporting Guide of The Stock Exchange of Hong Kong Limited*, and partially refers to the "Core" plans of GRI Standard of Global Reporting Initiative (GRI), aiming to disclose information on environmental, social and governance performance of the corporate for relevant parties and shareholders. The content of this report is determined according to a set of established procedures, including identifying and ranking important stakeholders and ESG issues, collecting relevant data of the report, and reviewing quantitative data in the report.



Scope and Boundary of the Report

The policies and data provided in this report cover the Group's headquarter, internal divisions, branches, wholly-owned subsidiaries and holding companies, and the environmental data includes the important production-oriented subsidiaries of the Group. The data disclosure is from January 1, 2020 to December 31, 2020. Unless otherwise specified, the currency mentioned in the report is RMB, and the density data is based on revenue data in 2020 annual report of Shanghai Electric.



Source of Data and Guarantee for Reliability

The data and cases in this report mainly come from the Group's statistical reports and related documents. The report has not been verified by a third party. The Board of the Group undertakes that there are no false records or misleading statements in this report, and is responsible for the authenticity, accuracy and completeness of its content.



Confirmation and Approval

This report was confirmed by the Management Committee of the ESG and the Board of the Company, and then approved by the Board on 26 March 2021.





Zheng Jianhua

Secretary of Party Committee / Chairman and CEO

Chairman's Statement

Since 2018, Shanghai Electric took Xi Jinping's Thought on Socialism with Chinese Characteristics for a New Era as the guidance, deeply implemented the spirit of the important speeches of General Secretary Xi Jinping's visit in Shanghai and the spirit of the important guidance of the development of the state-owned assets and state-owned enterprises and the Party building. Under the correct leadership of the municipal government, the support of all walks of life and the guidance of the "three steps forward" strategic goal of the Group, the Company has achieved high quality double-digit growth for three consecutive years on average.

Especially in 2020, in the face of the complicated and grim development environment, especially the severe impact of the COVID-19 pandemic, Shanghai Electric overcame numerous difficulties and challenges and successfully completed all the goals and tasks for the whole year by seizing comprehensive transformation and promoting the high-quality development with high morale and vigorous attitudes, fully demonstrating the special responsibilities, special actions and special undertakings of the state-owned enterprises in the special period.

Looking back on the year, we have achieved extraordinary fast growth. We continued the high-quality development momentum of the past two years: our revenue, net profit attributable to the owners of the parent company, new orders and brand value achieved double-digit growth, and recorded another record high.

Looking back on this year, we constantly optimized industrial structure, and changed the growth driving forces. We speeded up efforts to promote the industrial development by scientific and technological innovation, promote the

digital transformation, and the development of strategic emerging industries, which significantly enhanced the development momentum of the Group. By the end of 2020, the proportion of the scale of the strategic emerging industries increased to approximately 20% from the single digital in 2017.

Looking back on this year, our institutional reform was comprehensively deepened, and the institutional innovation was blossomed. We actively promoted the institutional mechanism reform such as mixed ownership and key employee stock ownership and contractual management, which fully stimulated the enthusiasm, initiative and creativity for entrepreneurship of its employees. We deeply promoted "delegating power, streamlining administration and optimizing services", thus the delegation of power is more precise, the supervision is more effective and the services are more superior.

Looking back on this year, our technological innovation was increasingly active, and the scientific technological results are continuously emerged. We achieved the first wind turbine "black-start" in China with a capacity of 8MW, forming a complete technological capability for smart energy solution; we successfully developed the high-capacity and high-speed electronic-driven system, breaking the international monopoly; we participated in the contracting and manufacturing of reactor internals of the first global reactor of "Hualong One (華龍一號)"- the success of the first grid connection of Unit 5 of Fuqing Nuclear Power Plant (福清核電站), breaking the monopoly of foreign nuclear power technology.

Looking back on this year, we actively participated in the fight against the COVID-19 pandemic, demonstrating the responsibilities of the state-owned enterprises. Upon the outbreak of COVID-19 pandemic, we immediately set up a pandemic prevention and control leading

group to deploy pandemic prevention and control work according to different situations; organized all Party members, cadres and employees to voluntarily donate RMB8.8 million in total; assisted a number of enterprises in Shanghai in resuming the use of old mask production lines, developed automatic mask production lines, and accumulatively delivered 621 mask production lines to all regions in China; donated nearly 100,000 masks and various anti-pandemic supplies to overseas partners, making the Company's contribution in the fight against the COVID-19 pandemic.

2021 is the 100th anniversary of the founding of the Chinese Communist Party, the opening year of the "14th Five-Year Plan", as well as an important year and a transition year to realize the second step of the "three steps forward" strategic goal of Shanghai Electric. Looking forward to the next year, we will adhere to the strategy orientation, problem orientation and result orientation, implement the "three steps forward" development philosophy of the Group, and maintain a high degree of organic unity among national, social, shareholders, group, corporate, staff and investor interests. The Company will strive for development by taking it as an important embodiment of its core values to strive for glory for the country, to build a career for the nation, to seek prosperity for the people and to create value for the society. We will exert ourselves to build Shanghai Electric into an international, market-oriented and modernised enterprise group as well as a new aircraft carrier with high-end equipment. We will celebrate the 100th anniversary of the founding of the Communist Party of China with better performance.



Secretary of Party Committee
Chairman and CEO



Huang Ou

Deputy Secretary of Party Committee / President

President's Statement

2020 is a very extraordinary year. Despite of a more complicated and grim global economic environment, Shanghai Electric insisted on high-quality development, accelerated the industrial structure transformation. It took "green, environmentally-friendly, intelligent, interconnected and comprehensive system solutions" as direction, comprehensively performed the responsibility for shareholders, customers, partners, employees, the environment and society, and fully demonstrated its responsibility as a leading enterprise in energy equipment manufacturing.

Adhering to "compliance first". We made effort to improve internal control, risk management, and compliance management systems, and improve the timeliness and transparency of information disclosure. We continued to deepen the corporate governance and the diversified construction of the management, and improve management engagement on issues of sustainable development such as environment, society and governance. We attached great importance to the integrity governance and cultural development, took every effort to build a social responsibility governance team which well arranged with clear responsibilities, and endeavored to safeguard the investors' rights and interests.

Enhancing the construction of innovation-driven, quality improvement and information safety, accelerated innovation to replace old growth drivers with new ones. We adhered to innovation-driven, fostered and strengthened the strategic emerging industries, and the layout of "smart energy, intelligent manufacturing and smart city" formed under the digital strategic transformation was highly effective. With strengthening impetus and improving construction, we continued to promote the systematization of quality management,

and steadily carried out the protection of customers' privacy and information security.

Creating a "clean, open, and mutually beneficial" supply chain system. We gradually promoted the centralized procurement, open bidding and sustainable procurement, continued to improve the construction of four platforms such as full lifecycle management, competitive pricing, e-commerce and suppliers' order coordination. Combining with our own experience, we put forward the initiative of sustainable development for suppliers, and even proposed the specific requirements in anti-bribery and corruption, employee rights and interests protection as well as environmental protection. We actively shared the technological progress, actively maintained a harmonious, mutually benefit and win-win cooperation environment, thus promoting the common development of the industry.

Adhering to the talent concept of "making good use of the existing talents, retaining key talents, attracting urgently needed talents and reserving future talents". We continued to attach importance to the core issues of the human resources such as the employees' diversity, benefits, health and safety, training and development and life balance, established a scientific management system. The campus recruitment themed "smart planet" upgraded the brand image of the employers. We set up the "Inner Voices" platform, and expanded the communication bridge between employees. We formulated the employee incentive scheme policies, and stimulated the motivation of employees. We worked tirelessly to prevent and control COVID-19 pandemic, eased the urgent needs of employees and warmed their helpless hearts through material support and solidarity actions.

Implementing the work of carbon peak and carbon neutral. We paid attention to green energy and green manufacturing, promoted

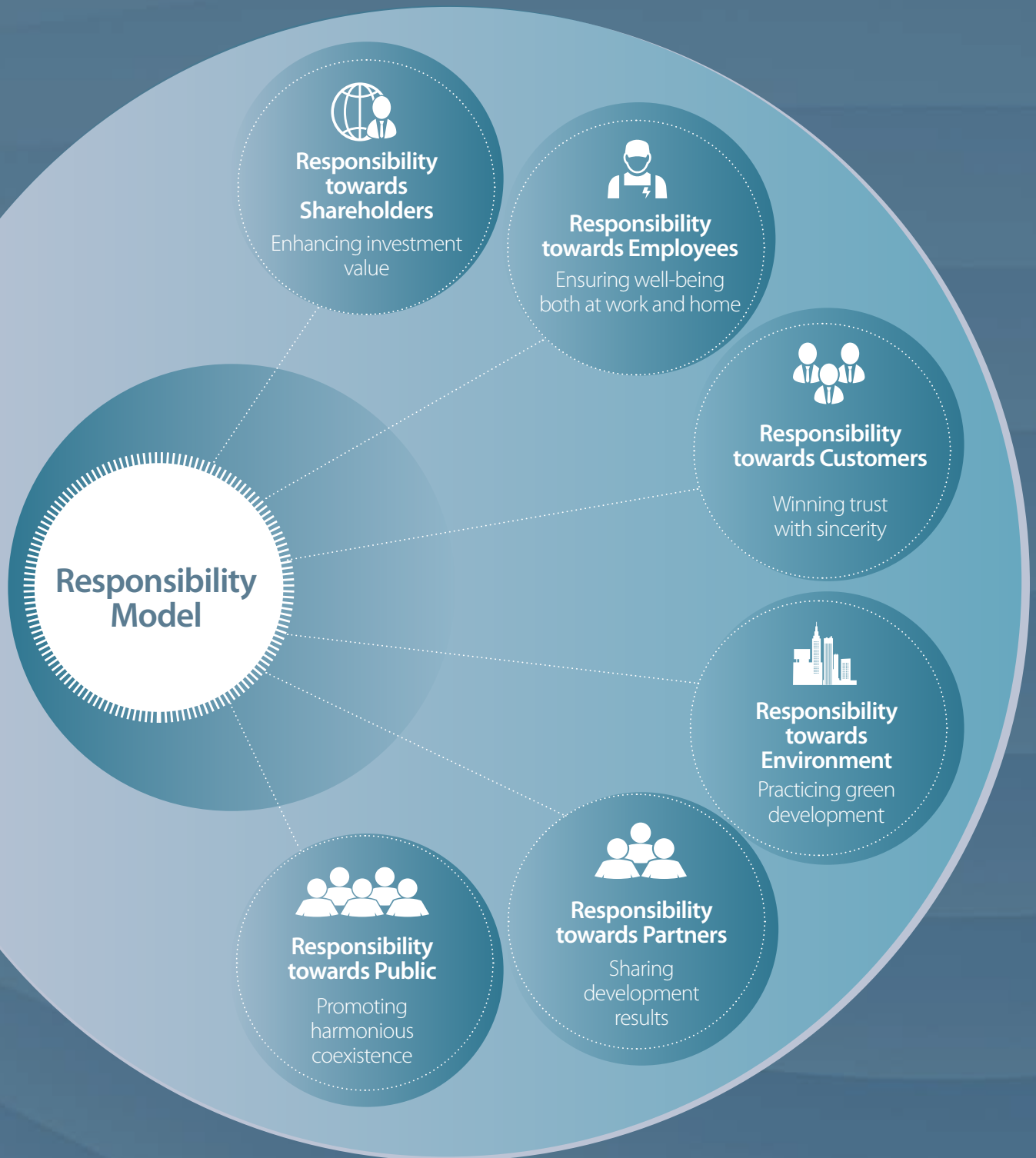
the development of harmonious ecology, and actively promoted the achievement of the national strategy. We continued to implement the energy efficiency management mechanism for production and office, improve the hierarchical management and control of environmental risks, strengthen the identification and supervision of environmental factors, and strictly control the generation of emissions and pollution. We expanded cooperation with government, leveraged our strengths to build smart cities and improve the level of the urban governance.

Looking forward, we will take the positive response to the concerns of stakeholders as the direction, the high combination of the interests of the nation, enterprises, employees, partners and investors as the goal, and took every effort to help enterprises, society and the environment achieve sustainable development.



Deputy Secretary of Party Committee
President

2020 Highlights



Key performance

Environmental data are derived from the following production enterprises

1	Shanghai Electric Power Generation Equipment Co., Ltd Turbine Works
2	Shanghai Electric Power Generation Equipment Co., Ltd Auxiliary Equipment Works
3	Shanghai Electric Power Generation Equipment Co., Ltd Turbine Generator Works
4	Shanghai Boiler Works, Ltd.
5	Shanghai Electric Machinery Co., Ltd.
6	Shanghai Electric Heavy Machinery Milling Special Equipment Co., Ltd.
7	Shanghai Electric Wind Power Equipment Dongtai Co., Ltd.
8	Shanghai Electric Wind Power Equipment Heilongjiang Co., Ltd.
9	Shanghai Electric Wind Power Equipment Gansu Co., Ltd.
10	Shanghai Electric Wind Power Equipment Yunnan Co., Ltd.
11	Shanghai Electric Wind Power Equipment Hebei Co., Ltd.
12	Shanghai Electric Appliances Ceramics Factory Co., Ltd.
13	Shanghai Electric Power-Electronics Co., Ltd.
14	Shanghai Nanqiao Transformer Co., Ltd.
15	Shanghai Najie Complete Sets Of Electric Co., Ltd.
16	Shanghai Feihang Electric Wire And Cable Co., Ltd.
17	Shanghai Dahua Electrical Equipment Co., Ltd.
18	Shanghai Nanhua-Lanling Electrical Co., Ltd.
19	Shanghai Jiejin Power New Materials Co., Ltd.
20	Wujiang Transformer Co., Ltd.

21	Shanghai Huapu Cable., Ltd.
22	Shanghai Mitsubishi Elevator Co., Ltd.
22	Goss Graphic Systems (China) Co., Ltd.
24	Shanghai Simike Welding Material Co., Ltd.
25	Shanghai Electrical Hydraulics and Pneumatics Co., Ltd.
26	Shanghai United Rolling Bearing Co., Ltd.
27	Shanghai Tian'an Bearing Co., Ltd.
28	Shanghai Zhenhua Bearing Plant Co., Ltd.
29	Wuxi Turbine Blade Co., Ltd.
30	Shanghai Tool Works Co., Ltd.
31	Shanghai High Strength Bolts Plant Co., Ltd.
32	Shanghai Centrifuge Institute Co., Ltd.
33	Shanghai Cyeco Environmental Technology Co., Ltd.
34	Shanghai Denso Fuel Injection Co., Ltd.
35	Shanghai First Machine Tool Works Co., Ltd.
36	Shanghai Electric Shanghai Heavy Machinery Forging Co., Ltd.
37	Shanghai Electric Nuclear Power Equipment Co., Ltd.
38	SEC-KSB Nuclear Pumps & Valves Co., Ltd.
39	Shanghai Electric Machine Tool Works, Ltd.
40	Zhangjiagang Jiangnan Forging Co., Ltd.
41	Wuxi Hongqi Shipyard Co., Ltd.
42	Yumen Xinneng Photothermal No.1 Power Co., Ltd.
43	ZCM (Suzhou) Heavy Equipment Co., Ltd.
44	Renmin Electrical Apparatus Works of Shanghai Electric Group Co., Ltd.

Enterprises ranked without priority

Environmental Performance Indicators

ENVIRONMENTAL PERFORMANCE INDICATORS	2018	2019	2020
Total investment in environmental protection (RMB'0000)	7,590	10,950	12,650.54
Greenhouse gas emission (tons of CO2 equivalent/ RMB '000000000 revenue)	242.7	271.53	278.50
Hazardous waste (tons/ RMB'000000000 revenue)	3.4	2.8	2.5
Water consumption (tons/ RMB'000000000 revenue)	0.6199	0.6067	0.5131

Social Performance Indicators

SOCIAL PERFORMANCE INDICATORS	2018	2019	2020
Total number of employees	30,182	33,720	39,312
Proportion with labour contract	100%	100%	100%
Proportion with social insurance coverage	100%	100%	100%
Proportion with trade union coverage	100%	100%	100%
Proportion of female management personnel	21.5%	24.3%	25.7%
Proportion with employee physical examination coverage	100%	100%	100%
Total investment in employee trainings (RMB '0000)	8,786	7,500	8,770
Proportion with employee training coverage	99.8%	99.9%	100%
Training time per capita (days)	3.5	3.5	3.6
Employee satisfaction	97.6%	97.8%	97.9%
Employee turnover rate	2.8%	2.1%	2.2%
The number of working days lost due to work-related injuries	2,208	1,814	2,730
New cases of occupational disease	0	0	0
Charitable donations (RMB '0000)	327.1	1,177	922

Social Contribution Value per Share for 2020 (RMB)

SOCIAL CONTRIBUTION	2019	2020
Earnings per share	0.23	0.25
Add: tax contribution per share	0.34	0.37
Add: emolument contribution per share	0.63	0.69
Add: debt service contribution per share	0.12	0.14
Add: social donation per share	0.0003	0.0005
Contribution value per share	1.32	1.46

Key Financial Indicators for 2020 (Unit: RMB100 million)

KEY FINANCIAL INDICATORS	2019	2020
Total assets	2,805.24	3,154.02
Revenue	1,275.09	1,372.85
Net assets attributable to owners of the Company	633.46	664.01
Net profit attributable to owners of the Company	35.01	37.58



About Shanghai Electric

Shanghai Electric, Creates a bright future with creators

About Us

Historical development

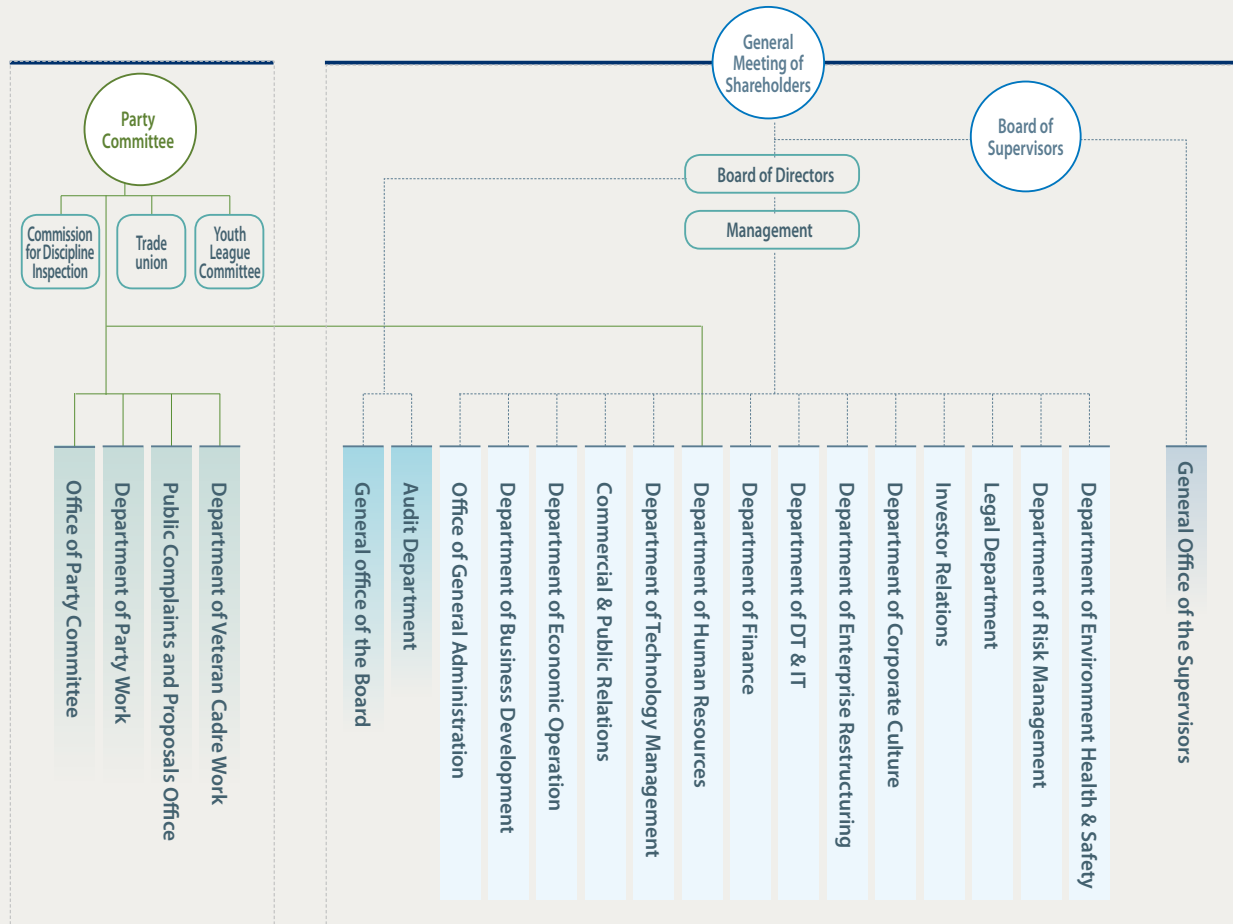
The history of Shanghai Electric can be traced back to at least 1902, and its long historical accumulation and baptism of trials and hardships have given it an extraordinary composure and richness. In March 2004, our parent company Shanghai Electric (Group) Corporation underwent a mixed-ownership reform, and thereby today Shanghai Electric's overall profile emerges at an opportune time. After that, we first listed H shares in Hong Kong in April 2005 and renamed as Shanghai Electric Group Company Limited; then in December 2008, we successfully entered the A share market and became an A+H listed company. Standing at a new starting point, Shanghai Electric is moving forward without any burdens, forging ahead and riding on the sails of a new round of development, a new era of leadership has begun.

Vision and Mission

Shanghai Electric takes "empower global industry, make life smarter" as its mission and "becoming a new world-class carrier for high-end equipment" as its vision, and is striving for both. "Empower" refers to energy and power, reflecting the main business of Shanghai Electric and its mission and responsibility of continuously "promoting global industrial progress"; "smarter" represents intelligence and innovation, reflecting the ability of Shanghai Electric and the value pursuit of "creating a better life for mankind". "Becoming a new world-class carrier for high-end equipment" reflects Shanghai Electric's great ambitions and aspirations of taking the world as the goal with the global view. Shanghai Electric always pursues the top manufacturing level, adheres to the responsibility of being a state-owned enterprise and takes promoting the development of world industry as its own duty.

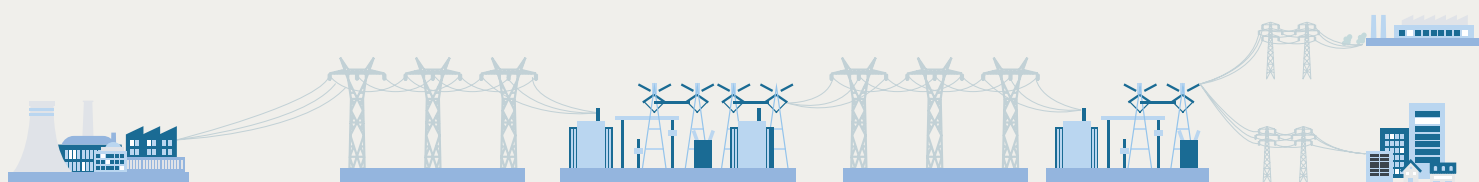
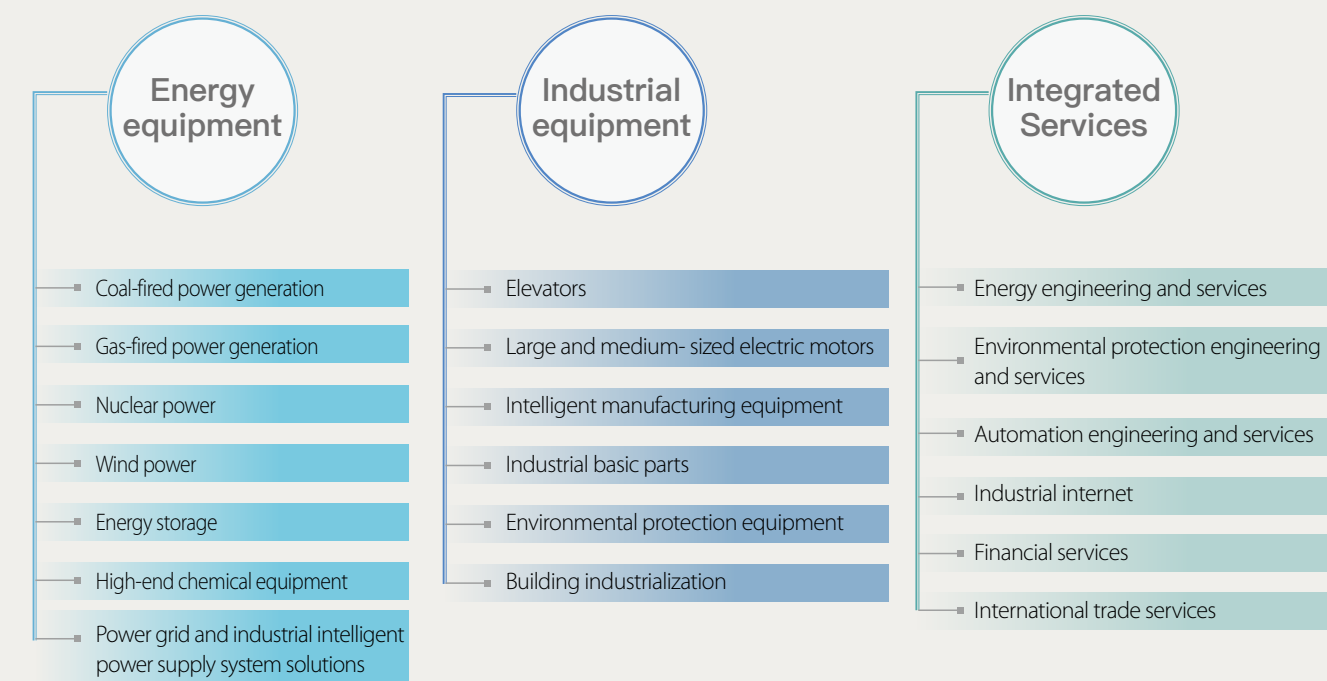
Organizational Structure

Shanghai Electric has established a functional framework with clear division of labour and full coordination and management relationships with the Group's industrial line branches and subsidiaries, and practiced the responsibility of state-owned enterprises from the aspects of operation compliance, transparency and guidance. On the basis of maintaining stability, our functional framework has been steadily optimized with the needs of industrial transformation and intelligent development of the Group.



Business highlights in 2020

Shanghai Electric is a large integrated equipment manufacturing conglomerate, and mainly operates three business segments namely energy equipment, industrial equipment and integrated services. Shanghai Electric is committed to providing customers with green, environmental-friendly, intelligent and interconnected technology integration and system solutions. The long-term system operation and collaborative development have forged the capability of Shanghai Electric in multi-segment coordinated development, manufacturing and operation. The various businesses have the advantages of strategic linkage, technological linkage, market linkage, manufacturing linkage, supply chain linkage and talent linkage. According to different application scenarios, combined with the advantages of Shanghai Electric, the Group has formed a number of customer-oriented system integration solutions to provide customers with comprehensive and integrated products and services.





For energy equipment segment, Shanghai Electric has taken the initiative to seek breakthroughs and transformation, and has formed a clear industrial layout of new energy + energy storage. Especially in the energy storage industry, Shanghai Electric adhered to the basic positioning of energy storage power plant market based on the existing foundation, increased self-research investment, and actively explored the business model and technological evolution direction through demonstration projects.

For industrial equipment, Shanghai Electric focused on intelligent manufacturing, centering on automation equipment and industrial software. The development of automation equipment industry was positioned as a provider of automation equipment and system solutions, and its main business gave priority to three industrial directions: intelligent manufacturing, smart transportation and smart city. In terms of industrial software, the Group mainly considered relevant industrial software from two dimensions of technology and market, attaching importance to intelligent hardware, industrial internet and smart supply chain. Through self-research, cooperation or merger and acquisition, the Company built core software capabilities.

For integrated services, Shanghai Electric is seeking a positive transformation, in which product servitization and service productization is one of the main ideas of the Group's transformation. Shanghai Electric combined integrated services with energy services, through the implementation of "big service" with full caliber, full industrial chain and full life cycle, and adopted technology integration, service intellectualization, sales platformization, market internationalization and operation and maintenance industrialization to boost the upgrading of energy service industry, so as to realize industrial transformation.

Shanghai Electric is actively seeking transformation in the three major fields, striving for business intellectualization and energy conservation. Through the coordinated development of multiple segments, Shanghai Electric gave full play to its long-term stable operation system and advantages as a large state-owned enterprise to fulfill its corporate mission of "empower global industry, make life smarter".

2020 Top Ten News

01

Shanghai Electric's brand value exceeded RMB100,000 million, and its industry influence continued to improve.

In August 2020, at the 17th "World Brand Summit" sponsored by the World Brand Lab, Shanghai Electric ranked the 48th most valuable brands of the year with a brand value of RMB105.637 billion, with a year-on-year increase of 30%, entered the club with a brand value of RMB100,000 million, and continued to lead China's machinery industry. In September, the ranking of "Top 500 Asian Brands" in 2020 was announced, and Shanghai Electric ranked 87th and 2nd in the machinery industry. Shanghai Electric ranked 81st on the Fortune 500 in China, and 2nd in the sub list of "mechanical equipment and equipment manufacturing". In addition, Shanghai Electric ranked 145th in the top 500 Chinese enterprises, ranked 33rd in the top 100 Yangtze River Delta enterprises, and ranked 16th in the "Top 100 Shanghai Enterprises".





02 Zheng Jianhua made a keynote speech on the forum of state-owned assets.

September 28, 2020, Zheng Jianhua, Secretary of the Party committee and Chairman of Shanghai Electric, was invited to the 23rd State-owned Assets Forum to give a keynote speech. Taking the past, present and future of Shanghai Electric as the main line, he talked about how to deepen the reform of system and mechanism and stimulate the power, vitality and pressure in the process of building high-end manufacturing brand in Shanghai and accelerating the progress towards the world-class enterprise. The speech attracted more than 100 people from the supervision departments of state-owned assets and state-owned enterprises in Shanghai and the Yangtze River Delta, as well as the middle and senior leaders of enterprises, with strong response on the spot.

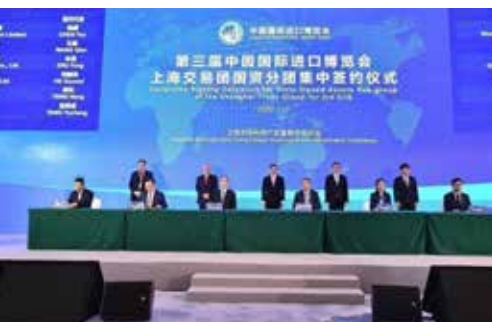
03 Solemnly commemorated the 100th anniversary of the founding of Shanghai Machinery Trade Union.

2020 is the 100th anniversary of the founding of Shanghai Machinery Trade Union which was the predecessor of Shanghai Mechanical and Electrical trade union, and the first industrial trade union under the leadership of the early organization of the Communist Party of China. Shanghai Mechanical and Electrical trade union organized a series of activities with the theme of "Inheriting the tide of Huangpu River for a hundred years and sharing the electric dream together (百年傳承浦江潮，同心共譜電氣夢)". On December 9, the 100th anniversary conference of Shanghai Machinery Trade Union was held to recall the glorious course of the unremitting efforts of Shanghai Machine workers under the leadership of the party, aiming to inherit the gene of the Communist Party of Shanghai Machinery Trade Union and promote the innovation and development of the work of the trade union. The two commemorative albums of "Backbone -- album commemorating the 100th anniversary of the founding of Shanghai Machinery Trade Union" and "Models volume-- directory of previous labour models and May 1st labour medal winners" were issued at the same time.



04 The trading volume of Shanghai Electric at the third session of the Import Expo amounted to nearly RMB2.4 billion.

As a domestic high-end manufacturing equipment enterprise, during the third China International Import Expo, Shanghai Electric entered into the photovoltaic supporting bracket procurement contract with NT of United States, the gas turbine equipment procurement contract with the customer of Italy, the wind power main bearing contract with Rothe Erde of Germany, and the superconducting magnetic resonance, CT machine and other equipment procurement contracts with Canon of Japan, and on November 7, Shanghai Electric entered into a cooperation project of smart energy empowerment center with Siemens Energy, with a total of more than 10 import procurement contracts or framework agreements signed at the centralized signing ceremony of the state-owned assets sub-group of Shanghai Trading Group of the Import Expo. The procurement volume reached RMB2.375 billion, representing an increase of approximately RMB500 million over the previous year.





05 Shanghai Electric became the official partner of China Pavilion in Dubai World Expo.

On January 17, 2020, Shanghai Electric won the license in the first China Road Show (Jiangsu station) in 2020 of Dubai World Expo held in Yangzhou, becoming the official partner of the China Pavilion of 2020 Dubai World Expo. It is not only beneficial for Shanghai Electric to further consolidate and expand the influence of the Group in the Middle East and surrounding markets with the help of the platform effect of Dubai World Expo, but also promote the development of domestic and foreign emerging energy markets, and continuously enhance the brand image of Shanghai Electric in the international market.

06 The investment in scientific research continued to increase, and Shanghai Science and Technology Awards showed the strength of Electric.

The scientific research investment of Shanghai Electric kept a steady growth trend, approaching RMB6 billion in 2020. The Company won one grand prize, three first prizes and four second prizes of Shanghai Science and Technology Award. On November 27, Shanghai Electric participated in the contracting and manufacturing of reactor internals of the first global reactor of "Hualong One (華龍一號)" - the success of the first grid connection of Unit 5 of Fuqing Nuclear Power Plant (福清核電站), marking that China has broken the monopoly of foreign nuclear power technology and officially joined the ranks of advanced countries in the field of nuclear power technology.



07 Joined in the new infrastructure, and the construction of industrial internet stepped into the fast lane.



On June 15, 2020, Shanghai Electric and Shanghai Branch of China Mobile reached a comprehensive strategic cooperation in 5G innovation port to jointly speed up the "new infrastructure" construction of 5G network and industrial internet. Shanghai Electric's "SEunicloud" industrial internet platform began to empower external enterprises, and successively entered into the cooperation agreements with Chongqing Bishan district government and Henan Xuchang municipal government to jointly build an industrial internet empowerment center and provide digital transformation services. "SEunicloud" won the 2020 industrial internet innovation (practice) achievement award, and Shanghai Electric entered into the *Yangtze River Delta Industrial Internet Talent Training Base Cluster Construction Agreement* with a number of enterprises and universities in the Yangtze River Delta. On 10 July, Shanghai Electric won the "Zhan Lu Award (湛盧獎)" Industrial Engine Award, the world's first industrial intelligence award. On 28 September, MIIT visited and reviewed the construction of internet platform for Shanghai Electric industry. On 10 October, Shanghai Industrial Internet Association settled in Hongkou District, and Shanghai Electric became the first chairman unit. On 12 December, "SEunicloud" version 2.0 was released, and was selected to appear on the recommendation list of Shanghai industrial internet platform and professional service provider by Shanghai Economic and Information Technology Commission.

08 Took the initiative to align with the national strategy of "Integrated Development of Yangtze River Delta".

Zheng Jianhua, Secretary of the Party committee and Chairman of Shanghai Electric, has successively received special interviews with "voice of the Yangtze River Delta" of Dongguang news and "focus on high quality and center on integration" of Dongfang TV to talk about the matters for aligning Shanghai Electric with national strategy and layout of the Yangtze River Delta. On June 30, 2020, the main structure of the project of Shanghai Electric Nantong Central Research Institute was successfully completed. This is the first regional headquarters established by Shanghai Electric outside Shanghai with the four major functional positioning of "corporate headquarters, R & D center, information center and service center". On September 29, Shanghai Electric GuoXuan Nantong Energy Storage Base reached target capacity, and would be built as a leading enterprise in the energy storage battery field in China. On November 16, at the Second Yangtze River Delta Enterprise Culture Construction Exchange Forum, Shanghai Electric entered into the *Yangtze River Delta Enterprise Culture Co-construction and Sharing Agreement* on behalf of Shanghai state-owned enterprises. On November 26, Shanghai Electric became the vice chairman unit of the Yangtze River Delta integrated development state-owned 100 enterprises cooperation alliance. On December 22, the "Shanghai Yangtze River Delta Intelligent Manufacturing Industry Promotion Center" established by Shanghai Electric was unveiled.



09 The first industrial app competition gained a lot of achievements with the digital transformation.

On July 11, 2020, Huang Ou, deputy secretary of the Party Committee and President of Shanghai Electric, expounded the "electric scheme" of digital transformation at the sub-forum of "2020 Global Industrial Intelligence Summit". On October 23, the publicity and implementation meeting of Shanghai state-owned assets and state-owned enterprises industrial internet innovation and development and digital transformation was held in Shanghai Electric to share the experience and achievements of digital transformation. On October 12, the senior seminar on digital transformation talents of Shanghai Electric officially started. Huang Ou proposed to accelerate the digital transformation from the transformation of the concept. The first "Shanghai Electric Cup" industrial app innovation and application competition was launched in mid-July, attracting more than 140 works at home and abroad. After fierce competition, 16 projects came to the fore, including 10 internal competition areas and 6 external competition areas of Shanghai Electric, which took half a year to conclude successfully.



10 The first commercial independent energy storage power plant in China was put into operation.

On November 5, 2020, the commissioning ceremony of Shanghai Electric Golmud Meiman Minhang 32MW / 64mwh energy storage power plant was held in Golmud City, Qinghai Province. As the first commercial operation independent energy storage power plant in China, the project successfully opened two integrated channels of "Power Sources, Grid, Load and Storage" and "Wind Power, Photovoltaic Power, Hydro Power, Thermal Power with Power Storage", which stored electricity in peak hours of photovoltaic power curtailment and wind power curtailment, and transmitted electricity to the grid in low hours of non-photovoltaic power curtailment and non-wind power curtailment, so as to effectively smooth power and improve energy quality of new energy power plant. The project innovated the new mode of "sharing" energy storage in which Shanghai Electric and the owners of new energy plant jointly invest and sharing income. The project was provided by Shanghai Electric from the general contracting of the project to the lithium-iron phosphate battery energy storage system and then to the cloud technical support, which had an important demonstration and leading role.

Achievements and Rewards

China Machinery Industry Science and Technology Awards

Number	Name of projects awarded	Name of entity awarded	Grade awarded
1	Design technology and application of non-stationary loading permanent-magnet motor near limit	Shanghai Electric Wind Power Group Co., Ltd.	Grand prize
2	Development and engineering application of new-generation large-capacity rotary condenser	Shanghai Electric Power Plant Equipment Co., Ltd. Turbine Generator Works	Grand prize
3	Development and application of 660MW-class new-generation high-efficiency supercritical steam turbine	Shanghai Electric Shanghai Heavy Machinery Co., Ltd.	Second class prize
4	New high-efficiency wet-type electrostatic dust removal ultra-low-emission packaged technology and engineering application	Shanghai Electric Power Plant Environmental Protection Engineering Co., Ltd.	Second class prize
5	Research and application of key manufacturing technology of ultra-large spliced marine crankshafts	Shanghai Electric Shanghai Heavy Machinery Forging Co., Ltd.	Second class prize
6	Development and engineering application of 350MW new-generation supercritical steam turbine with double casings and double exhausts	Shanghai Electric Power Plant Equipment Co., Ltd.	Third class prize
7	First breakthrough project of bearing for 160km express freight wagon	Shanghai United Bearing Company Limited	Third class prize

Shanghai Science and Technology Awards

Number	Name of projects awarded	Name of entity awarded	Grade awarded
1	Air-cooled and high-parameter steam turbine design key technology and application thereof	Shanghai Electric Power Plant Equipment Co., Ltd.	First class prize of science and technology progress
2	Key technology and application of high quality welding in nuclear power equipment manufacturing	Shanghai Steam Turbine Plant Co., Ltd. Shanghai First Machine Tool Works Co., Ltd.	First class prize of science and technology progress
3	Development and application of 600MW-class supercritical energy conservation and emission reduction steam turbine	Shanghai Electric Power Plant Equipment Co., Ltd.	Second class prize of science and technology progress
4	Test verification and application of 185MW E-class first pieces (sets) unit	Shanghai Electric Gas Turbine Co., Ltd.	Second class prize of science and technology progress
5	Key technology and application of flow control and performance improvement of wind turbine	Shanghai Electric Wind Power Group Co., Ltd.	First class prize of technological invention
6	Dynamic mode-locking molding technology of bimodal distribution ultra high molecular weight polyethylene injection-class resin and product thereof	Shanghai Mitsubishi Elevator Co., Ltd.	Second class prize of technological invention

Global Industrial Internet Awards

Number	Name of projects awarded	Name of entity awarded	Grade awarded
1	Industrial engine award	Shanghai Electric Group Digital Technology Co., Ltd.	Zhan Lu Award

Shanghai Excellent Organization Awards for Breakthroughs in Quality

Number	Name of projects awarded	Name of entity awarded	Grade awarded
1	Breakthroughs in quality of HE series public transportation escalator and intelligent monitoring system thereof	Shanghai Mitsubishi Elevator Co., Ltd.	First class prize
2	Breakthroughs in quality of steam generation system with tower-type photothermal power station	Shanghai Boiler Works, Ltd.	Second class prize

The 4th Shanghai Employees' Micro Film Festival of "Shanghai Electric Cup"

Number	Name of projects awarded	Name of entity awarded	Grade awarded
1	Dream Builder	Environmental Protection Group of Shanghai Electric	Gold Award
2	Father and Son	Shanghai Electric Group Digital Technology Co., Ltd.	Best Production Award
3	Mobile Factory	Shanghai Steam Turbine Plant Co., Ltd. Shanghai First Machine Tool Works Co., Ltd.	Outstanding Work Award

Anti-pandemic and Disaster Relief

Number	Name of entity awarded	Awards
1	The Central China Regional Party Branch of Shanghai Mitsubishi Elevator	Anti-pandemic characteristic work band of Shanghai State-owned Assets Supervision and Administration Commission
2	Party Committee of Shanghai Electric Automation Group	Anti-pandemic characteristic work band of Shanghai State-owned Assets Supervision and Administration Commission
3	Shanghai Electric Automation Group	Shanghai Advanced Group Against COVID-19 Pandemic

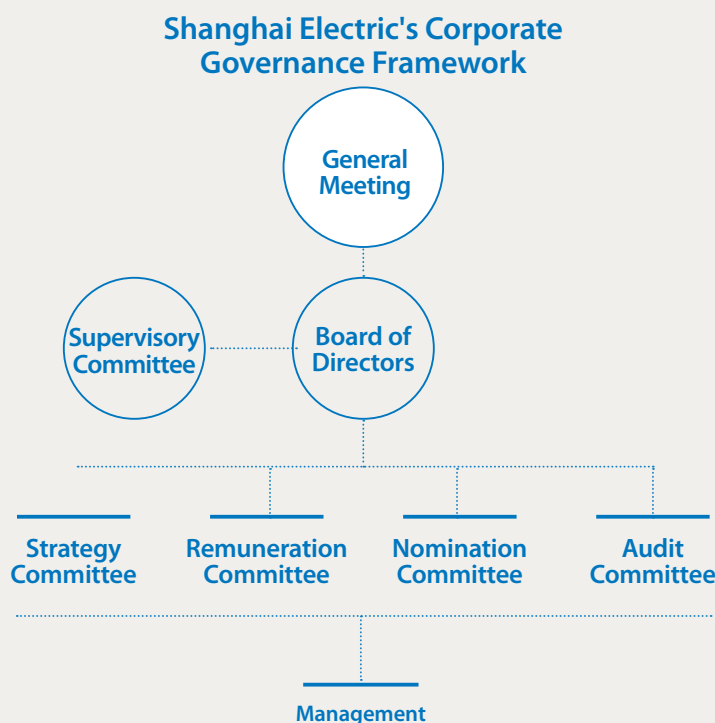
01 UNDERTOOK RESPONSIBILITY TO GIVE BACK TO SHAREHOLDERS WITH "INTELLIGENT" CONCEPT

Shanghai Electric deeply understands that good corporate governance is the cornerstone and guarantee of enterprise development. We take strengthening our internal compliance management, consolidating and further improving the level of corporate governance, and improving the integrity and diversification of corporate governance framework as the basic principles, strengthen the building of party mass culture, enhance the competitiveness of the enterprise, and give back to investors with continuously growing business performance and investment dividends.

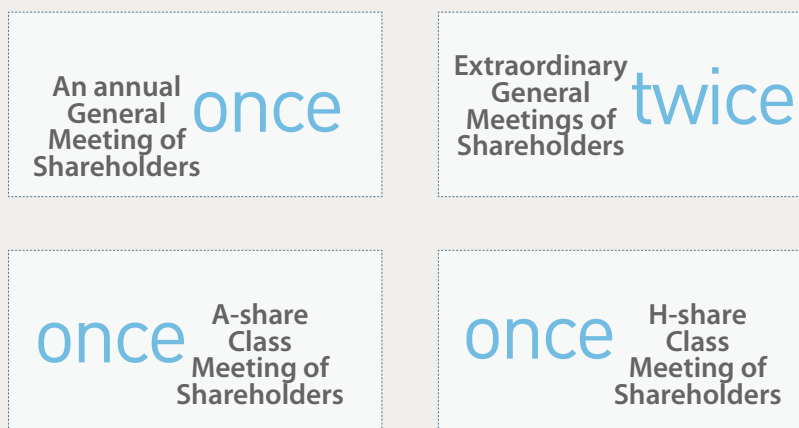
Compliance Operation

Compliance operation in accordance with the law and continuously improve the corporate governance efficiency.

Shanghai Electric strictly abided by the laws and regulations of corporate governance of listed companies, such as *the Company Law*, *Securities Law*, *Listed Company Governance Guidelines*, improved and built the corporate governance framework composed of the general meeting, the board of directors, the supervisory committee and the management, and set up the strategy committee, remuneration committee, nomination committee, audit committee and other governance bodies under the board of directors, so as to ensure the compliance and transparency of the Company's operation.



In 2020, Shanghai Electric organized and held five general meetings of shareholders, gave full play to the efficiency of its highest authority, considered over 30 resolutions, and passed all on the premise of effectively protecting shareholders' right to know, speak, question and vote. In addition, in 2020, the Group held a convertible bond holders meeting, and all the resolutions were approved.



At the level of the board of directors and special committees, in 2020, Shanghai Electric organized and held 19 board meetings, considering 122 resolutions in total; organized and held 13 audit committee meetings, 3 remuneration committee meetings, and 1 nomination committee meeting, considering more than 30 resolutions in total. In 2020, we still maintained a stable board membership framework and achieved good governance coherence and effectiveness.

Directors of Shanghai Electric

*Including 2 Female Directors



The supervisory committee, as the supervision body of the Company, is responsible for overseeing the Company's operations, financial status and the performance of directors and senior management personnel, and making recommendations. In 2020, the supervisory committee of Shanghai Electric maintained a personnel framework of five supervisors (including two employee supervisors and one female supervisor), and assumed due responsibilities through division of labour and cooperation. For more detailed information on the board of directors and supervisory committee of the Company, please refer to the 2020 annual report of Shanghai Electric.

In order to further consolidate and improve the compliance awareness of the board of directors, the supervisory committee and the senior management of Shanghai Electric, in 2020, in addition to organizing special training for relevant personnel, such as *the new Securities Law*, *Company Law*, *Listed Company Governance Guidelines* and other major regulations, we also organized the "First Voyage" training of Shanghai Stock Exchange, and watched the quarterly online briefing meeting of Shanghai Stock Exchange. In addition, we have issued compliance notices to the Company's controlling shareholders, directors, supervisors and senior management personnels, made key tips on the avoidance of short-term trading, inside information management and other matters stipulated in *the new Securities Law*, and urged the relevant subjects and personnel to strictly abide by the relevant laws and regulations, which has achieved good results. Moreover, there were 10 senior management personnels in the management team of Shanghai Electric headquarters in 2020, one more female senior management personnel than in 2019, accounting for 30% of the total.





Compliance system building

Within the year, Shanghai Electric continued to deepen the integrated management of legal affairs, expanded and deepened the span of management, promoted internal resource sharing, inter-border mutual assistance, maintained the maximization of Group rights and interests, strengthened legal research, enhanced construction of the contract management system, carried out legal training and legal publicity, and promoted the standardization of management.

Legal Research	Contract Management	Compliance Training
<ul style="list-style-type: none"> ◆ Compiled guidelines for legal affairs such as <i>the Guidelines for Handling Litigation and Arbitration Cases and the Guidelines for Legal Affairs regarding Corporate Mergers and Acquisitions</i> ◆ Carried out relevant legal research such as <i>the Legal Research on the Impact of Trade Secret Protection on Enterprises and the Legal Risks Involved in New Energy Power Generation Projects and Prevention Suggestions</i> ◆ Distributed the newly issued <i>Civil Code</i> as learning materials to external contracted employees ◆ Sorted out the new or updated laws and regulations in 2020 related to the Company's operation 	<ul style="list-style-type: none"> ◆ Updated <i>the Contract Management System</i> by the Group ◆ Established nearly 40 new conversion contract templates ◆ Promoted the improvement of the quality evaluation standards for the Group's new orders ◆ Carried out survey and supervision of industry group contracts and formed special reports ◆ Advanced the construction of the group contract manager team, defined responsibilities and implemented training and certification ◆ Completed the first phase of the construction of the contract management informatization system and launched the same as scheduled 	<ul style="list-style-type: none"> ◆ Training for temporary cadres ◆ Law popularization activities on the National Security Education Day ◆ New certification training for external contracted staff ◆ Series training on contract management for contract management staff ◆ Special series training for constructional engineering staff

In 2020, through targeted analysis, the Group conducted further legal guidance or business training for each business department, defined business requirements, and optimized the processing procedures of legal affairs.



Risk management and control

Shanghai Electric has established sound risk management and internal control systems, and formulated management processes including *the Management of Accountability for Illegal Operations and Investments, the Implementation Rules on Accountability for Illegal Operations and Investments, the Management of Technical Reform and Investment Projects and the Operational Procedures of Accountability for Illegal Operations and Investments in strict compliance with the Implementation Measures on Accountability for Illegal Operations and Investments of Municipal State-owned Enterprises in Shanghai (Trial)* to effectively ensure the controllable risks in relation to material strategic operations and investments. We also issued and implemented *the Inspection Manual of Shanghai Electric, the Negative Management and Control list of Shanghai Electric Group, the Implementation Measures for Fault Tolerance and Correction, the Risk Management System, the Risk Management Implementation and Reporting Process, the Internal Control Self-evaluation Operating Rules and the Internal Control Self-evaluation Process* as well as other internal control systems and norms. We have also compiled *the Risk Management Operating Manual and the Internal Control Manual* to continuously optimize the risk management and internal control management framework, and improve the three defense lines of risk management and internal control.

In *the Risk Management System*, we clearly require the Group and

all subsidiaries to implement the entire process of risk management and control from risk identification, risk assessment, risk response to risk monitoring and early warning, risk reporting, risk supervision and evaluation. During the risk assessment process, they shall determine the risk level based on the identified risks, reveal the attributes of performance, causes, likelihood of occurrence and impact of risks and effect of control measures, form a preliminary list of risk assessment results, and prepare a risk assessment report on material and important risks; during the risk response process, they shall distinguish material risks, important risks and general risks, and strike a balance between overall risk management and key prevention and control.

The new version of *the Internal Control Manual* in 2020 aims to formulate a standardized, scientific and normalized internal control system to motivate the Group and its subsidiaries to clarify the division of their duties and responsibilities, properly exercise their powers, strictly implement the requirements, rules and regulations on group management, and strengthen supervision and guidance on the establishment of corporate internal control. We have effectively regulated five processes at the company level and 22 processes at the sub-process level. We have sorted out and put forward requirements for multiple links including risk identification and prevention, risk management and internal control evaluation, and internal control audit.



In 2020, Shanghai Electric carried out research on the construction of a key risk early warning indicator system, and promoted the interconnection and interoperability between risk platforms and business systems to realize real-time risk monitoring and dynamic early warning and improve risk identification, monitoring, early warning and forecasting capabilities. We sorted out 49 key risk indicators based on 22 core businesses in five major areas including strategy, finance, operation and law, so as to lay the foundation for construction of the risk early warning platform in the next step and improvement of risk early warning and forecasting capabilities.

In 2020, Shanghai Electric, on the one hand, organized and carried out comprehensive risk identification and assessment on pandemic risk, overseas business risk and other key risks of concern to reveal and respond to risks in a timely manner; on the other hand, required its subsidiaries to formulate detailed risk assessment reports and response plans for their material risks, regularly follow up and implement the plans, so as to serve the implementation of the Group's "three-step" strategy and promote high-quality development of the Company.

Main risks involved during the reporting period and countermeasures

Pandemic-specific risks	Overseas business risks	MEU list risks	Financing trade risks
<ul style="list-style-type: none"> ◆ Prepared a special risk list with respect to the impact of the pandemic, covering 29 key risk points including supply chain, capital flow, project execution and legal risk ◆ Participated in the review of various investment and reform projects of the Group, and provided opinions on the review and suggestions on the risk prevention and control ◆ Took the lead in carrying out special risk assessments and prepared special assessment reports on major projects of the Group 	<ul style="list-style-type: none"> ◆ Strictly implemented the spirit of the <i>Notice on Risk Identification and Prevention in Relation to Overseas Business</i>, Circular No. 140 issued by the Shanghai State-owned Assets Supervision and Administration Commission, carried out special assessment on overseas business risk based on the Group's Key overseas engineering projects under implementation, checked and identified potential or exposed risks in key overseas projects and proposed countermeasures. 	<ul style="list-style-type: none"> ◆ Took the lead in analysing on and responding to the risk of sanctions under the US MEU list by identifying the nature of the MEU list, analyzing the possible adverse effects on the enterprises and the Group's headquarters and formulating effective measures at the enterprise and group levels to prevent and resolve the risks. 	<ul style="list-style-type: none"> ◆ Conscientiously studied and strictly implemented the Shanghai SASAC Evaluation (2020), Circular No. 188, and organized the enterprises to carry out self-inspection on financing trade risk ◆ Established a working group in conjunction with economic operation, auditing, legal affairs and other departments to study and judge the financing trade risk, conduct on-site inspections on relevant enterprises and units and strictly prevent financing trade risk

Business ethics and anti-corruption

Shanghai Electric adopts a zero-tolerance policy for any form of violations against business ethics and anti-corruption regulations. The Group consistently adheres to the principle of honesty and integrity in business operation, and strictly abides by the laws and regulations applicable to the enterprises in the places where they operates and the highest standards of business ethics.

We formulated the *Shanghai Electric Group's Implementation Opinions on Building a Mechanism That Can't Corrupt, Don't Dare Corrupt, and Don't Want to Corrupt, and Promoting the Construction of an Honest and Clean Management Team*. With respect to the matters subject to integrity risk, such as taking up part-time jobs, performance of duties and remuneration and business expenses of leading cadres, we revised and improved the *24 Tips for Shanghai Electric Group Leaders to Implement the Eight Provisions of the Central Committee, Party Discipline and Relevant Institutional Provisions* and distributed them to the leading cadres of party members, clarifying the "red line" of discipline and the "bottom line" of law that leading cadres of Party members should abide by.



According to several opinions of the General Office of the Central Commission for Discipline Inspection of the Communist Party of China on standardizing discipline inspection and supervision and letters and visits in accordance with disciplines and laws, we identified responsibilities for dereliction and neglect of duty in which, for example, investigation and treatment of cases were impeded due to leaks of letters and visits, the accuser was retaliated against, or adverse effects and serious consequences resulted from delayed treatment of important letters and visits or emergency incidents, and dealt with them seriously in accordance with Party and political discipline.

During the reporting period, there were no corruption lawsuits of the Company.

ESG Governance

Establishing a sound ESG governance system and making joint efforts with stakeholders to advance sustainable development

Shanghai Electric consistently follows the concept of sustainable development, integrates the concept of sustainable development into its strategic development goals, and implements it throughout its daily business management and innovation activities. In order to better promote the strategic layout for sustainable development, Shanghai Electric has established a special ESG governance structure, strengthened the top-level design of ESG governance, and further helped the Board of Directors and the management of the Company to coordinate and manage the Group's sustainable development. Our ESG governance structure is composed of the Board of Directors, the ESG Management Committee and the ESG Working Group from top to bottom. Among them, the ESG Management Committee governs the ESG Expert Committee. The ESG Working Group is composed of the board office and three sub-working groups which are composed of relevant functional departments and are responsible for contact and communication with relevant departments of the subsidiaries.



Established the ESG Management Committee of the Company and defined the responsibilities of the committee

The Environmental, Social and Governance Reporting Guide issued by the Hong Kong Stock Exchange is effective in fiscal years after July 1, 2020. According to the guide, the Company's Board of Directors elects members of the ESG Management Committee and authorizes the committee to perform the following functions:

- ◆ Identify, determine and evaluate the risks and importance of the Company's ESG issues;
- ◆ Evaluate and formulate the Company's sustainable development strategy and goals;
- ◆ Supervise, evaluate and review the relevant policies, management, performance and related progress of the Company's ESG matters;
- ◆ Supervise and review the Company's public disclosure on ESG-related matters;
- ◆ Other matters authorized by the Board of Directors.

Communication with stakeholders

Following the conversion of its old momentum into a new one and the acceleration of its pace in innovation and transformation, Shanghai Electric needs to strengthen communication and feedback in the capital market with respect to its development of smartness and entrance into the emerging industry. Shanghai Electric attaches great importance to communication and exchange of views with stakeholders, disseminates its social responsibility values and practices through various channels, informs itself with the demands of stakeholders, and takes measures to make reasonable response. In addition, we also hope that this ESG report will provide a more complete response to the issues that stakeholders are concerned about.

Stakeholder group	Communication channel / feedback	Key issues of concern
Investors	<ul style="list-style-type: none"> - General meeting of shareholders - Performance briefing - Roadshow activities - Investor research activities - Investor factory visit - Investor summit - Shanghai Stock Exchange(SSE) E-Interaction - Investor hotline - Company announcement - WeChat public account - Facebook homepage - Bimonthly Shanghai Electric News (《上海電氣報》) - Investor relations e-mail box of Shanghai Electric 	<ul style="list-style-type: none"> - Industry trends - Governance structure - Technology and innovation - Product safety and health - Economic impact - Legal compliance

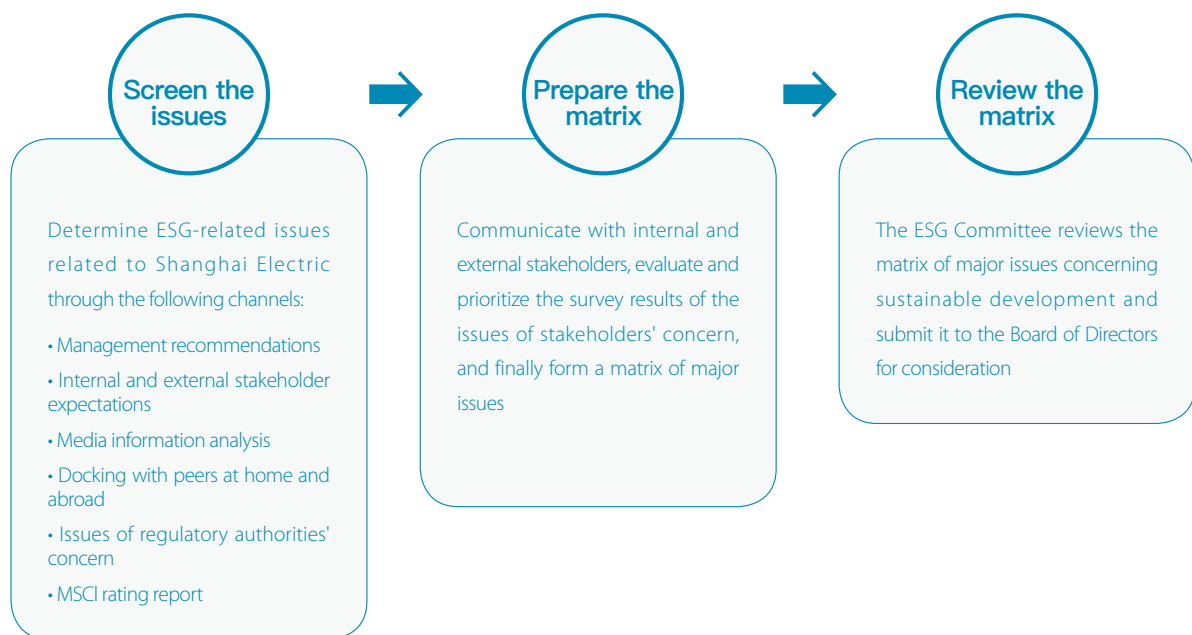


Stakeholder group	Communication channel / feedback	Key issues of concern
Employees	<ul style="list-style-type: none"> - Employee training - Employee activity - Employee satisfaction survey - Forum 	<ul style="list-style-type: none"> - Occupational health and safety - Employee benefits and compensation - Sustainable development strategy - Employee rights and interests
Partners (including suppliers and contractors)	<ul style="list-style-type: none"> - On-site review - Supplier assessment - Technical training - Online communication 	<ul style="list-style-type: none"> - Product safety and health - Energy use - Greenhouse gas emissions and climate change
Customers	<ul style="list-style-type: none"> - Customer satisfaction survey - Customer complaint handling - Brand promotion 	<ul style="list-style-type: none"> - Product quality and aftersales maintenance - Customer privacy information protection - Product safety and health
Communities	<ul style="list-style-type: none"> - Community charity activities - Regular visits 	<ul style="list-style-type: none"> - Exhaust emissions - Biodiversity in the place of operation - Charity and donations
Media	<ul style="list-style-type: none"> - Press release/information announcement - Interview - Performance conference 	<ul style="list-style-type: none"> - Sustainable development strategy - Product quality and aftersales maintenance - Governance structure
Regulatory Authorities	<ul style="list-style-type: none"> - Press release/ information announcement - Regular communication 	<ul style="list-style-type: none"> - Energy use - Industry trends - Legal compliance
NGO or non-profit organizations	<ul style="list-style-type: none"> - Regular communication - Community charity activities 	<ul style="list-style-type: none"> - Charity and donations - Community development support
Colleges and universities	<ul style="list-style-type: none"> - Scientific research exchange and cooperation - Recruitment activities 	<ul style="list-style-type: none"> - Waste water disposal - Exhaust emissions - Product quality and aftersales maintenance
End-users of products	<ul style="list-style-type: none"> - Brand Promotion - Press release/ information announcement 	<ul style="list-style-type: none"> - Product quality and aftersales maintenance - Legal compliance
Scholars	<ul style="list-style-type: none"> - Scientific research exchange and cooperation 	<ul style="list-style-type: none"> - Technology and innovation - Waste water disposal - Exhaust emissions
Grantees	<ul style="list-style-type: none"> - Community charity activities - Regular visits 	<ul style="list-style-type: none"> - Charity and donations - Community development support

Analysis of major issues

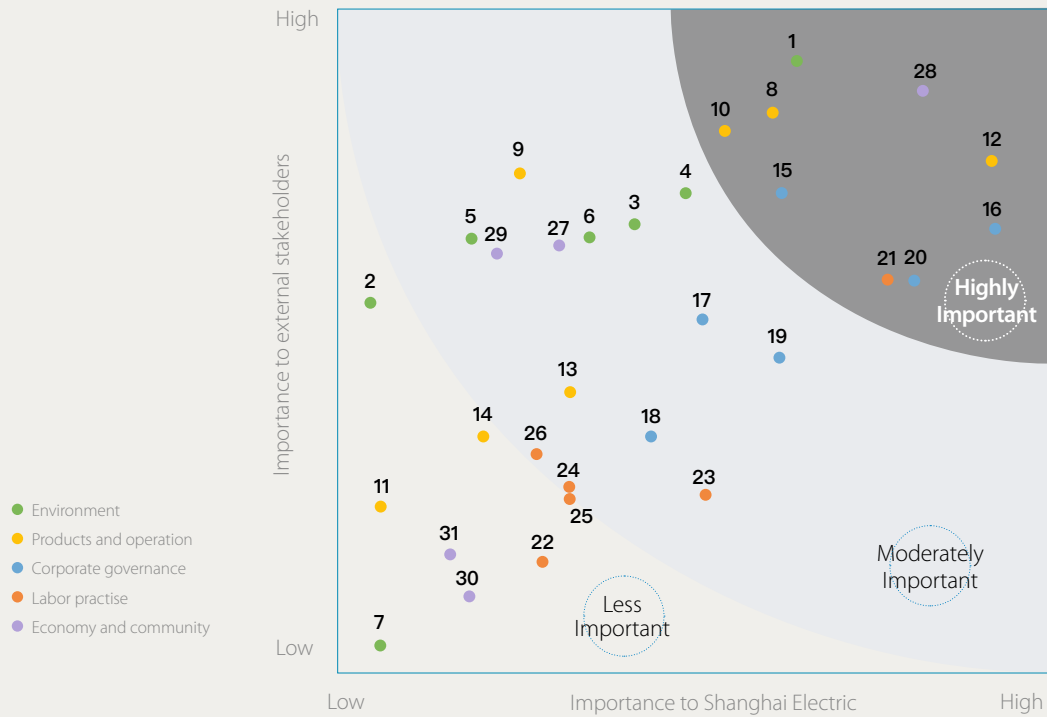
During the reporting period, we held more than 20 in-depth on-site discussions with stakeholders, and collected opinions from investors and other stakeholders on our ESG management and disclosure in a number of large-scale road shows held in China and overseas. In addition, we focused on getting in touch with the government and investment institutions and conducted in-depth communication through interviews. We combined the focus and expectations of various stakeholders on Shanghai Electric with the results of the questionnaire survey and interviews last year, and adjusted and updated the matrix of major issues.

The Identification Process of Shanghai Electric's Major Issues



Through the above identification process, we concluded 31 ESG issues, 9 of which are highly material ESG issues. For the future ESG development, the Group will continue to focus on the highly material ESG issues, which also constitute the key subjects disclosed in this report to varying extent.

Matrix of Major Issues of Shanghai Electric



Number	Issue	Number	Issue
1	The use of energy	17	Performance and remuneration for sustainable development
2	Water consumption	18	Anti-corruption
3	Wastewater discharge	19	Risk and crisis management
4	Exhaust gas emissions	20	Legal compliance
5	Solid waste treatment	21	Occupational health and safety
6	Greenhouse gas emissions and climate change	22	Employment and employee retention
7	Biodiversity in the place of operation	23	Employee benefits and remuneration
8	Product quality and aftersales maintenance	24	Education and training
9	The protection of customers' privacy information	25	Diversity and acceptance
10	Product safety and health	26	Employee rights and interests
11	Advertising and labels	27	Economic impact
12	Technology and innovation	28	The trends of the industry
13	Supply chain management	29	International trade situation
14	Raw material procurement	30	Support for community development
15	Governance Framework	31	Charity and donations
16	Strategy of sustainable development		

Information Disclosure

Transparent and efficient information disclosure, attaching great importance to the needs of every investor.

Shanghai Electric has always advocated the concept of "respecting investors and rewarding investors", and strictly implemented the "Articles of Association of Shanghai Electric Group Co., Ltd." and the "Information Disclosure Management System of Shanghai Electric Group Co., Ltd." in accordance with laws and regulations and the requirements of the listing rules of Hong Kong and Shanghai, regulated the Company's information disclosure behavior, ensuring that the information disclosure was timely, true, accurate, complete and effective. It also actively maintained communication with investors through diversified channels, effectively responding to the needs of investors and strengthening the market's understanding of the Company's performance and development strategy.



2020 Interim Results Announcement Conference of Shanghai Electric Group Company Limited



Shanghai Electric's interim results conference was held on August 31, 2020 by means of live video + conference call. Zheng Jianhua, Secretary of the Party Committee and Chairman of Shanghai Electric attended the conference.

Zheng Jianhua said, Shanghai Electric is accelerating the construction of the industrial Internet, which has been applied to wind power, thermal power, elevators, energy storage, motors, machine tools and other industrial fields, and the industrial Internet is empowering the transformation of the equipment manufacturing industry. At the same time, it has been focusing on optimizing the industrial structure, transforming the growth momentum, and striving to achieve high-quality development. And Shanghai Electric's new energy business has the advantage of scale due to its early deployment. Among other things, the wind power industry has grown substantially.

When talking about serving the national strategy of "Yangtze River Delta Integration", Zheng Jianhua pointed out that Shanghai Electric has been deploying in the Yangtze River Delta region for many years. Up to now, Shanghai Electric has built 10 advanced equipment manufacturing bases, 50% of the industrial facilities have been put in place, and has established strategic partnerships with nearly 40 prefecture-level cities. Shanghai Electric has also deployed 4 R&D centers in the Yangtze River Delta to further enhance its core competitiveness. In the future, it will continue to increase its development efforts to gain more market shares.



In 2020, Shanghai Electric

Made **193** A-share announcements, of which **4** were regular reports;

Made **276** H-share announcements

As per Shanghai Stock Exchange's "*Evaluation Methods on Information Disclosure Work of Listed Companies (revised in 2017)*", the Company has obtained an A rating in the evaluation of the information disclosure work of listed companies on the Shanghai Stock Exchange from 2019 to 2020.

Party Construction Work

Adhering to the leadership of the Communist Party of China, to provide strong political motivation and organizational guarantee for the operation and development of the Company.

Party-masses construction and management

The Party Committee of Shanghai Electric thoroughly implemented the overall requirements of the Central Committee of the Communist Party of China to comprehensively govern the party in a strict manner, focused on ideological guidance, system construction, pandemic prevention and control, resumption of work and production and other priorities, and continuously improved its organizational strength to build a robust battle fortress.



Continuing to strengthen political and ideological guidance

Shanghai Electric gave full play to the role of the theoretical study central group of its Party Committee, made overall annual study and content arrangements plan for its Party Committee, and guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, it thoroughly studied and implemented the speeches delivered at the 19th National Congress of the Communist Party of China and the second, the third, the fourth and the fifth Plenary Session of the nineteenth Central Committee of the Communist Party of China, and "*Xi Jinping's Talk about State Administration* (Volume 3)" (《习近平谈治国理政（第三卷）》) and a series of important speeches, through means of cloud video, online and offline linkage and combination of centralized tutoring and special learning exchanges, it had organized and implemented 19 Party Committee central group studies, promoted its ideological emancipation through theoretical study, and continuously improved its political consciousness and action consciousness.

Continuing to improve the Party construction system

In accordance with the new requirements for Party Committees of state-owned enterprises to play a leadership role of "steering, managing the overall situation, and ensuring implementation", the Shanghai Electric Party Committee took system construction as the starting point, carried out top-level design in four aspects, including "function positioning", "integrated governance", "implementation of responsibility" and "stimulating vitality", developing an institutional system with the features of Shanghai Electric's party construction work.

- ◆ The "1+4 system" clarifies the general requirements for promoting the integration of party leadership into corporate governance, and regulates work requirements, implementation paths and operating methods of including party construction into the Articles of Association, "pre-procedures", rules of procedure, "three major and one large (namely, decisions on major matters, appointment and removal of major officers, arrangement for major projects and the use of large-value funds)", "two-way entry, cross-appointment";
- ◆ It has established dual work responsibility systems for the implementation of "responsibility of Party Committee" and "work responsibility of Party branches", defined the responsibilities of the responsibility subjects, clarified the responsibilities, and developed a list of responsibilities;
- ◆ In accordance with the work concept of "implementing thoroughly", it focuses on the construction of work carriers from two levels, i.e., "party organization" and "party members", fully mobilizes the subjective initiative of the party committees of grassroots enterprises, and fully stimulates the vitality of grassroots party branches and party members;
- ◆ From the perspective of work effectiveness, it strengthens the assessment of grassroots party organizations, realizes closed-loop management of work, and establishes a multi-dimensional assessment and evaluation mechanism for the whole process from three dimensions: quantitative evaluation, qualitative evaluation, and communication evaluation.

On the new journey, Shanghai Electric will stay true to its founding missions of "serving the country with industrial development" and "being the pillar of the great China", give full play to the leadership role of the Party Committee, fully activate the new driving force of innovation and development, and strive to build the brand of "Shanghai Electric" into the iconic business card of "Made in China", make greater contribution to empower made-in-China with more advanced technology, smarter production, higher-end products and more recognizable brand, and take practical actions to effectively shoulder its political, social and economic responsibilities as a state-owned enterprise.

Training and promotion of Party members

Shanghai Electric always pays close attention to the protection of the rights and interests of all Party members. In 2020, it provided trainings and special trainings for Party members, and carried out support and care activities for party members in difficulties, which not only strengthened the Party construction work for the grassroots Party organizations of Shanghai Electric, contributed to Shanghai Electric's "three-step" strategy, but also provided a strong guarantee of Party construction for the management and development transformation of the brother units under the Shanghai State-owned Assets Supervision and Administration Commission.

Launched online learning platform for all party members	Held special training for secretary of the Party Committee	Actively co-organized the training of 10,000 secretaries joining the Party school	Helped the Party members in difficulties within the Party, demonstrating the care by the Party organisation
<p>In order to deeply study Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, consolidate and expand the educational achievements of the theme of "Staying true to the founding mission", vigorously promote the Group's "Four History" learning and education, and improve the ideology, style, discipline and other qualities of the party members, Shanghai Electric Party Committee launched an online learning platform for all party members, promoted online learning among all Party members of the Group, and further guided all party members to be led by the "Electric Dream", strengthen the awareness of Party members and the concept of Party spirit, and take on the important task of realizing the strategic goal of "Three Steps" of Shanghai Electric.</p>	<p>In order to further adapt to the new situation, new tasks, and new requirements of Party construction in state-owned enterprises, and to improve the ability of secretaries of the Party Committee to perform their duties, the Shanghai Electric Party Committee organized a 4-day party committee secretary training class in August 2020. The training courses covered three levels of party construction in state-owned enterprises, including macro, meso and micro aspects, as well as corporate strategy, cadres and talents, and thinking methods. At the same time, it added discussions and exchanges to the forms, emphasized on research, thinking and practice, which actually transformed the training results into tangible work results.</p>	<p>Since September 2020, the fourth round of the "Ten Thousand Secretaries Joining the Party School" training program of the Shanghai State-owned Assets Supervision and Administration Commission system was carried out by the Shanghai Electric Party School's training and teaching center. Annual training tasks of 5 advanced classes, 5 newly-appointment classes and 2 workshops were completed, and a total 405 secretaries of grassroots party organizations from 12 sessions have completed the training, covering 6 units, including Real Estate Group, Lingang Group, International Group, Huajian Group, Greenland Group and Shanghai Electric Group.</p>	<p>In accordance with the relevant guiding spirit of the superior, in order to further care for the Party members in difficulty and increase the cohesion within the Party, the Party committee of Shanghai Electric continued to implement the concentrated work of helping the members in need within the Party. Party organizations at all levels comprehensively identified the situation of Party members in need in their organizations, strictly implemented the provision of help and care in accordance with policies and standards, so that such Party members could feel the care and warmth of the organization. After identification and declaration by the grass-roots Party organizations under the Group, and review and verification by the Group Party committee, we subsidized the recipients in the form of one-off cash payment in July. In 2020, a total of 107 Party members in difficulty received assistance, which amounted to RMB321,500.</p>



Carried out theme activity to promote Party construction with Party construction brand creation

In order to further improve the quality of Party construction work, play a typical leading role, and celebrate the 100th anniversary of the founding of the Party, starting from July 2020, Shanghai Electric Party Committee organized and carried out theme activity to promote Party construction with Party construction brand creation. The Party organizations at various levels under the Group had submitted more than 100 Party construction brands for approval. The activity was divided into phases such as mutual visits, mutual evaluation, special review, online voting and awarding. Through mutual visits and learning, we built a platform for companies under the Group to learn from each other and make progress together, which further enhanced mutual understanding, mutual learning and mutual progress; in the meantime, we focused on Party construction brand creation, gave full play to subjective initiative of grassroots Party organizations, and fully stimulated the vitality and enthusiasm of the grassroots, to build it into a "booster" for the development of the Company.



Carried out "four histories" learning and education activities



The Shanghai Electric Party Committee earnestly implemented the relevant deployment requirements of the Shanghai Municipal Party Committee and the Shanghai State-owned Assets Supervision and Administration Commission, and formulated the *"Implementation Plan for Extensive and In-depth Learning and Education in Party History, History of New China, History of Reform and Opening-up, and History of Socialist Development"* (《關於廣泛深入開展黨史、新中國史、改革開放史、社會主義發展史學習教育的實施方案》), which clearly specified the guiding ideology, work objectives, organizational leadership and task arrangement, and set up a "Four Histories" learning and education leading group led by Zheng Jianhua, Secretary of the Party Committee and Chairman of the board of directors of Shanghai Electric.

On June 12, 2020, the Shanghai Electric Party Committee Central Group held enlarged learning meeting and special Party class on "Four Histories" learning and education, requiring the results of the "Four Histories" learning and education to be transformed into practical actions to promote development. Nearly 20 Party organizations in the Group invited members of the Shanghai Municipal Party Committee lecturer team to give a special counseling report, with the number of audience exceeding 4,000. The industrial groups and Party organizations of all enterprises under the Group actively explored and innovated the content and forms of learning, organized knowledge contests, essay contests and others, so as to ensure that the "Four Histories" learning and education were vivid and touching.

The Party Organization of Shanghai Electric was awarded the title of "Red Banner Party Organization" by the Municipal State-owned Assets System and recognized as a demonstration unit of Party Branch Construction

At the celebration of the 99th anniversary of the founding of the Party and the awarding ceremony for red-banner Party organization and demonstration unit of Party branch construction held by the Shanghai State-owned Assets Supervision and Administration Commission system, the Party Committee of Turbine Works of Shanghai Electric Power Generation Equipment Co., Ltd. was awarded the title of the fourth round of "Red Banner Party Organization" by the Shanghai State-owned Assets Supervision and Administration Commission system. The Party branch of Sheet Metal Workshop of Shanghai Mitsubishi Elevator Co., Ltd., the Party branch of Engineering Service Branch of Shanghai Electric Wind Power Group Co., Ltd., the Party branch of Order Management Department of Shanghai Boiler Works Co., Ltd. and the Party branch of Shanghai Electric Nantong Environment Thermoelectricity Co., Ltd. were awarded the title of the fourth round of "Demonstration Unit of Party Branch Construction" by the Shanghai State-owned Assets Supervision and Administration Commission system.

02 CONCENTRATING ON STUDYING IN THE FIELD OF "INTELLIGENTIZATION", AND SERVING CUSTOMERS WITH DILIGENCE

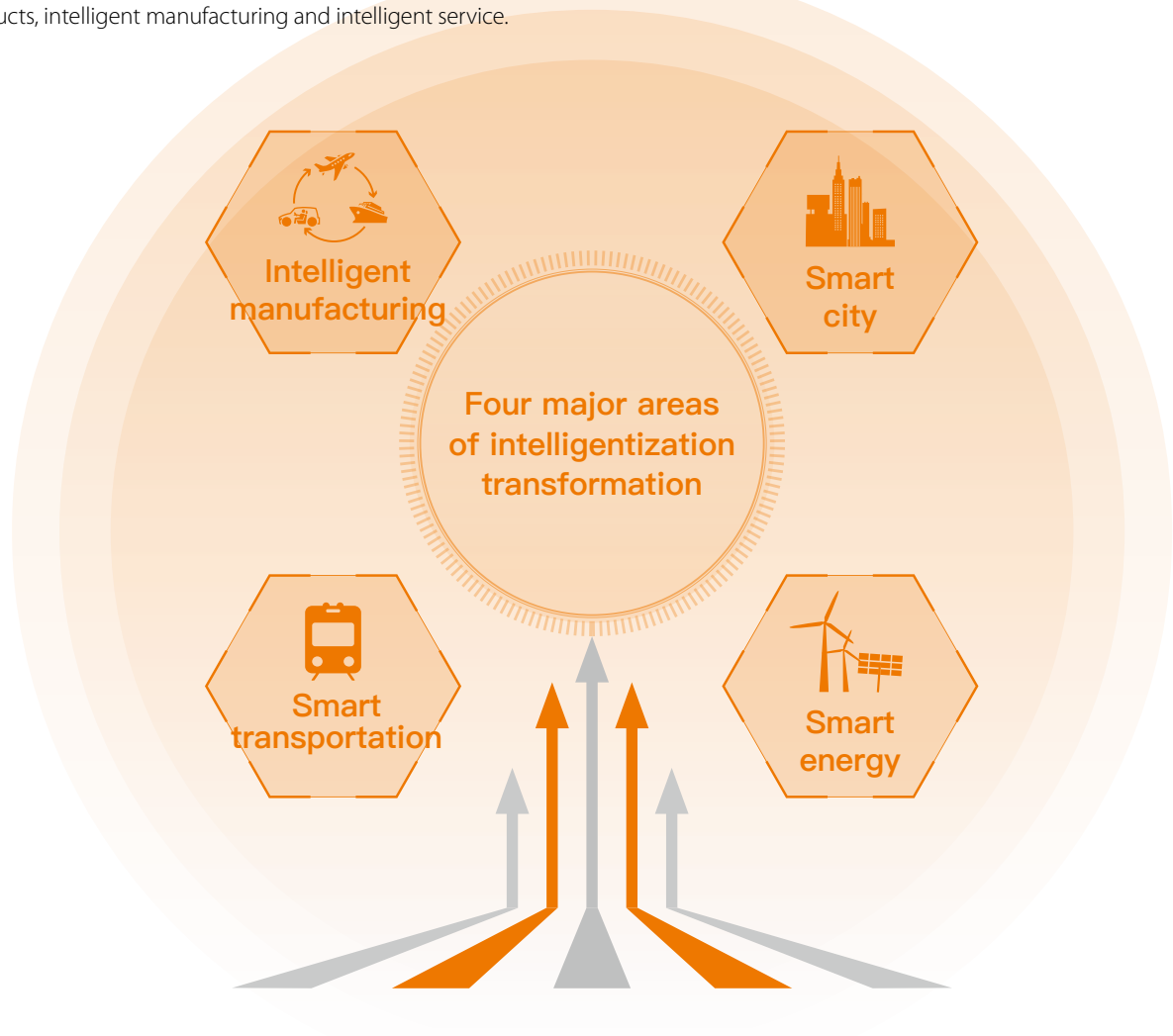
Shanghai Electric is not only a leader in energy equipment industry, but also a leader in intelligentization transformation of the manufacturing industry. We vigorously promote intelligentization transformation, focusing on "intelligent manufacturing, smart energy, smart transportation, smart city" transformation. We empower our customers with intelligent and smart solutions, while adhere to the concept of "quality first, customer first and delivering best service". We win favor of customers with innovative and intelligent manufacturing and reward customers' trust with fine quality, reward customers' expectations with fine service, and continuously create value for customers and improve customer satisfaction.

Intelligentization Innovation

Relying on the advantages of the equipment manufacturing industry, we strive to create an "industrial triangle ecology" comprising smart equipment, industrial Internet, and smart supply chains. At the same time, relying on the digitalization empowering industry, we are cultivating internal digital capabilities in terms of intelligent manufacturing, smart energy, and smart transportation, and developing empowering programs constantly to create a comprehensive and multi-dimensional comprehensive smart city.

Smart transformation

Facing the risks and challenges brought about by the COVID-19 pandemic, Shanghai Electric adhered to the mission and responsibility of serving national strategies and the development orientation of greenness, environmental protection, intelligence, interconnection, digitalization and comprehensive solutions, to cultivate and expand strategical emerging industries. During the reporting period, Shanghai Electric's digital transformation not only improved quality and efficiency internally, but also empowered industries externally, focusing on the transformation and upgrading of traditional industries on one hand, and the development and growth of strategical emerging industries on the other hand, and promoted the digitalization, networking and intelligentization of the manufacturing industry, so as to improve the stability and modernization level of the industrial chain and supply chain. Through dual-driving forces of "intelligentization transformation + energy transformation", we focus on promoting the four major areas of intelligentization transformation, continuously promote the construction of industrial ecology, and help the industry to achieve upgrade of intelligent products, intelligent manufacturing and intelligent service.





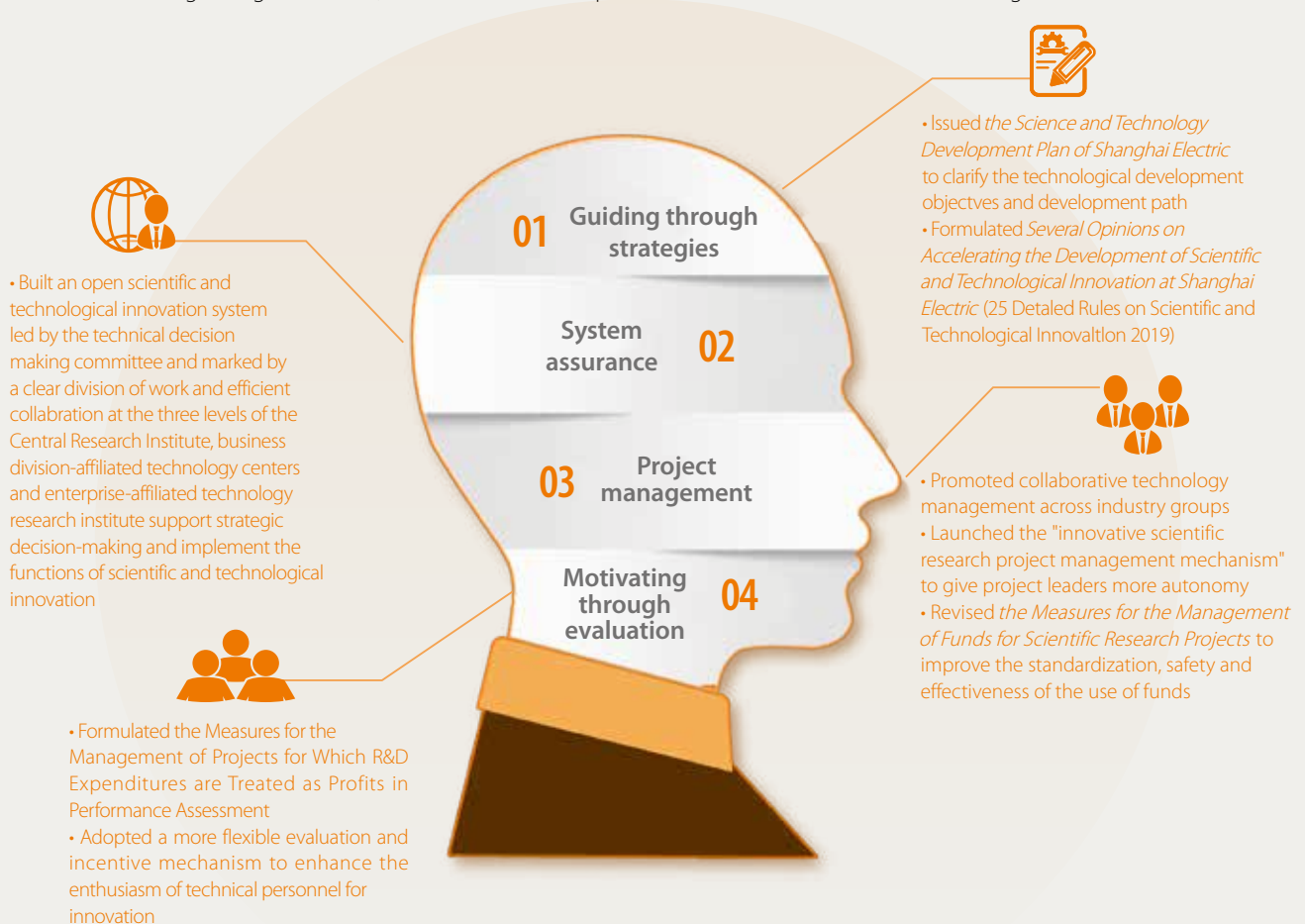
The marvelous appearance of "Smart innovation chain" of Shanghai Electric

In the 22nd China International Industry Expo with the theme of "Intelligence, Interconnection – Enabling New Development of Industries" in 2020, Shanghai Electric focused on informatization, digitalization and intelligentization, and displayed the latest progress and results of its transformation and development and acceleration of new industries of the Group. At the same time, the public can intuitively understand Shanghai Electric's "smart innovation chain" from technological innovation, product innovation, business model innovation to scenario application through the "four smart solutions" content layout of "1+4".

Shanghai Electric's smart panorama focuses on the four smart solutions of "smart city, smart energy, intelligent manufacturing, and smart transportation" and applications in 13 industrial applications including 5G, industrial Internet, smart medical and aviation industry, allowing visitors to intuitively feel in interaction how Shanghai Electric's smart solutions influence and change future life.

Scientific innovation

During the reporting period, according to the "3+3" industrial plan and *the Science and Technology Development Plan of Shanghai Electric*, the technical and research staff of Shanghai Electric, in continuous pursuit of the "three-step" strategic objective, prioritized the industrial application of high and new technologies and strategic emerging industries, focused on breakthroughs in key technologies and product development in key areas, and actively explored and studied new industries and technologies. We continued to support the building of scientific and technological innovation systems and capabilities on the four levels of guiding through strategies, assurance through systems, project management and motivating through evaluation, and accelerated the implementation and transformation of technological achievements.



As entering the 14th Five-Year Plan period, Shanghai Electric has newly revised and promulgated *the Opinions on Accelerating the Development of Scientific and Technological Innovation of Shanghai Electric Group (Version 2021)* (《關於加快推進上海電氣集團科技創新發展的若干意見（2021版）》) (Article 30 of Science and Technology Innovation (科技創新30條)), calling on the whole group to adhere to the correct direction of scientific and technological innovation and further refining the road map of technological development, to build a more vibrant organization system of scientific and technological innovation and continuously enrich the scientific and technological talent team. It paid attention to the building of innovative teams, in order to promote new momentum for development through scientific and technological innovation. During the reporting period, we successfully held a number of scientific research and innovation exchanges and competitions under the premise of safeguarding the safety from risks of the pandemic prevention and control, and won a series of scientific and technological awards, which reflected the substantial results of Shanghai Electric's promotion of a new round of development by technological development, technological leadership and leading technology.



Shanghai Electric successfully held 9 technical salon exchange activities



In 2020, under the premise of fully guaranteeing safety from the risk of pandemic, Shanghai Electric successfully held 9 technical salon exchange activities. The themes of the salons covered common issues in the fields of intelligent manufacturing, integrated energy utilization, hydrogen energy, industrial internet, and intellectual property application. The salons were carried out in the form of internal and external expert reports and guest roundtable forums, with an accumulated number of over 770 participants. The technical salons effectively promoted cross-border, cross-disciplinary and cross-professional in-depth exchanges among technicians of Shanghai Electric, and at the same time played a role in discovering technical needs and forming industrial synergy.



Successfully held the "Shanghai Electric Cup" industrial APP competition

In July 2020, under the guidance of the Shanghai Municipal of Economy and Information Commission (上海市經信委) and supported by the Municipal Industrial Internet Association, Shanghai Electric and the Shanghai Mechanical and Electrical trade union (上海市機電工會) jointly organized the 2020 "Shanghai Electric Cup" industrial APP innovation and application competition. This was the first time that Shanghai Electric held such kind of competition, aiming to create a digital innovation atmosphere, help enterprises for digital transformation, promote the application of industrial scenarios, mobilize innovation initiative, discover outstanding industrial APPs, and realize industrial empowerment.

The organizing committee of the competition organized experts to review and screen the competition items. Through comprehensive evaluation of indicators such as business value, universality, promotion mode, and technical ideas, the projects that meet the requirements and directions of the competition were selected. In the second round of competition, the competition working group reviewed and screened the completeness of content and format of the competition items. The point of view for evaluation focused more on the profound iteration of the items, the presentation of the strength of the results, and the opportunities for subsequent business cooperation and implementation of the products.

The first session of "Shanghai Electric Cup" industrial APP innovation and application competition attracted more than a total of 140 works from home and abroad. After fierce competition, 16 items stood out from the competition, including 10 items from the internal competition of Shanghai Electric and 6 from the external competition. The competition successfully concluded after half a year.



During the reporting period, Shanghai Electric invested a total of RMB **4.759** billion in research and development, accounting for **3.47%** of its annual operating revenue, representing a year-on-year increase of **8.55%**. With the steady growth in investment in research and development of Shanghai Electric, we have won **one** Grand Prize, **three** First Prizes and **four** Second Prizes of the Shanghai Science and Technology Awards (上海市科學技術獎).

Progress of major projects

In the field of smart energy

On September 28, 2020, at the Shanghai Electric Smart Energy Solution Promotion Conference themed that "For Smart Energy, the Future has Come", Shanghai Electric launched a full range of smart energy solutions covering renewable energy generation, energy storage, distributed energy and full life cycle services. During the reporting period, we understood that smart energy was an important measure to implement the new strategy for national energy safety of "Four Revolutions and One Cooperation (四個革命、一個合作)", which highlighted not only value and efficiency, but also high efficiency and intelligence, sharing and interconnection. We launched various "New Energy+" scenarios, and grasped the opportunities of new energy consumption, new infrastructure, 5G base station construction and other policies, which covered energy storage, cogeneration and "Internet+" smart energy projects, leading to a new era of energy.

Micro-grid energy storage: "Internet+" smart energy demonstration project in Sanxing Town, Chongming Island

The "Internet+" smart energy demonstration project in Sanxing Town, Chongming Island undertaken by Shanghai Electric integrates the latest products and technologies of Shanghai Electric in the field of renewable energy and intelligent micro-grid, with the internal equipment support rate exceeding 80%, including key equipment such as CIGS thin-film solar photovoltaic generation system, energy storage battery and management system, photovoltaic inverter and energy storage converter, energy management system, remote data monitoring and analysis system. Since the completion of its construction, the project has effectively promoted the process of building Sanxing Town in Chongming Island into a civilized, ecological and smart town and also become a model of Shanghai Electric's smart energy system equipment and capabilities in every aspect.



In terms of environmental protection, "photovoltaic + wind turbine" and other renewable energy generation will fully meet the need of the village committees, pastoral complexes and surrounding farmers for electricity in their living, production and farming, and achieve zero carbon emissions.



In terms of reliability, the system, which is equipped with advanced energy storage system equipment, can realize "self-generation for self-consumption, and excess electricity smoothly connecting to the grid", be friendly to the grid, and at the same time can effectively reduce the three-phase imbalance in rural power grid and improve the quality of electricity.



In terms of economy, the system adopts a smart energy management system, which provides integrated safety control and economic dispatch for rural energy grid-connected systems and the isolated grid systems, and at the same time can take advantage of the price difference of peak and valley electricity to achieve certain economic benefits.





Trial operation of Shanghai Minhang Industrial Smart Energy Demonstration Project

On May 18, 2020, the smart energy demonstration project (Phase I) in Minhang Industrial District in Shanghai was officially put into trial operation, which was the final step before put into full operation. This was the first industrial smart energy demonstration project of Shanghai Electric following the completion of the "Internet+" smart energy demonstration project in the countryside of Sanxing Town, Chongming Island.

The project consists of distributed power supply, energy storage device, wind-solar energy storage and power charging pile, and an integrated smart management platform for energy, which aims to build a large-scale smart, green, and low-carbon "wind-solar energy storage and power charging" integrated energy model project in the industrial park. Since the start of the whole set of supervision and inspection on May 14, in response to the pre-launch rectification requirements by the construction unit and engineering supervision, Shanghai Electric overcame the impact of the pandemic on its work, effectively implemented the deployment of various tasks, and finally passed the inspection and acceptance of the Start-up Committee (啟委會). After the completion of the project, it can realize renewable energy utilization, peak-load shifting, demand control, etc., which can save energy and increase efficiency for the industrial park and reduce electricity consumption in the park by 2,158 MWh per year.





In the field of intelligent manufacturing

In the field of intelligent manufacturing, Shanghai Electric insists on innovation-driven and transformation development, and empowers industrial transformation and upgrading by using digitalization, networking and intelligence. We have promoted a number of intelligent manufacturing demonstration projects within the Group, covering fields such as intelligent factories, intelligent operation and maintenance and smart supply chains, while externally made every effort to build an "industrial triangle ecology" which consists of intelligent equipment, industrial internet and smart supply chains, so as to empower industrial transformation.

During the reporting period, under the policy environment that the country has made great efforts to promote 5G network and industrial Internet, we have increased investment in technology by leveraging our technological advantages and experience in high-end equipment manufacturing, and actively explored new business models in the industrial Internet era with the "online new economy" as our focus. The "SEunicloud" industrial Internet platform independently built by Shanghai Electric was officially launched to the public at the 2019 China International Industry Fair. In 2020, we continued to upgrade the construction of the platform. At present, nearly 100,000 sets of equipment such as various power generation equipment, elevators and machine tools, etc. have been connected to "SEunicloud".

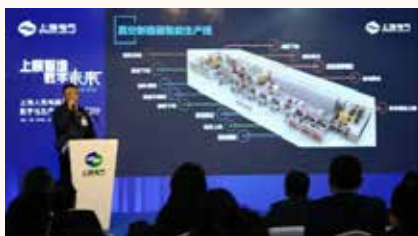
Shanghai Electric's "SEunicloud" industrial Internet platform version 2.0 was released to the public

In December 2020, Shanghai Electric's "SEunicloud" industrial Internet platform version 2.0 was officially released to the public, which marked another substantial step in the construction of Shanghai Electric's industrial Internet. The aspects of Artificial Intelligence (AI), Business Intelligence (BI) and Development Intelligence (CI) have been significantly upgraded in the newly upgraded "SEunicloud". The platform's new AI big data module "SEuni-cloud (星·雲·智)" can provide data value display and business value analysis for various work scenarios such as fault prediction and diagnosis, operation and maintenance strategy, product quality monitoring, energy consumption management, production process optimization, etc. It has lowered the threshold of industrial intelligence modeling and effectively improved the closed-loop efficiency of industrial data value, and continuously empowered the construction of enterprise's industrial intelligent system.



Creating a digital upgrade model for the "century-old shop"

On December 28, 2020, the first phase of intelligent manufacturing project - digital production line of Shanghai Renmin Electrical Apparatus Works, a subsidiary of Shanghai Electric, was officially put into production. The digital production line project of Shanghai Renmin Electrical Apparatus Works was an important part of the digital transformation of Shanghai Electric, and was selected as one of the first batch of intelligent manufacturing demonstration projects of Shanghai Electric. The successful commissioning of the project not only accumulated experience in digital transformation for Shanghai Electric, but also provided an application scenario for cultivating the capability of Shanghai Electric's digital industry, and better promoted the servitization of products and productization of services.



The acceptance content for project to be formally put into production included the vacuum circuit breaker intelligent production line, frame circuit breaker intelligent production line, small circuit breaker intelligent production line, and MES system, CRM system, WMS system and TC platform, design of cloud platform and other construction. Shanghai Renmin Electrical Apparatus Works will continue to deepen the

construction and application of intelligent manufacturing, focus on building highly automated logistics, warehousing and flexible processing and manufacturing lines, highly integrated information-based Internet of Things management platform, highly collaborative research, production, supply, sales and storage of the entire ecological chain digital intelligent factory, and promote the integration of enterprise products with the industrial Internet and Internet of Things.

In the field of smart transportation

In the field of smart transportation, relying on the traditional advantages of hardware production and manufacturing and software system development of metro lines and trams, we have been iteratively upgrading the intelligence level of new generation rail transportation products such as driverless, IERT (Intelligent Electronic Rail Transit System), urban railroad and intercity transportation. The Group has not only provided industry-leading weak power (signaling, integrated monitoring, etc.) system integration solutions for urban metro, but also provided trams and intelligent electronic rail transit system solutions for urban transportation capacity and needs, and provided integrated service solutions for safeguarding operational safety and equipment maintenance as led by localized and independent intelligent maintenance technologies.

Handover of the Integrated Operation and Maintenance Project of Shanghai Rail Transit Line No. 5

On the morning of December 26, 2020, the handover ceremony of the integrated operation and maintenance project of Shanghai Rail Transit Line No. 5 and the opening ceremony of the integrated maintenance, production and dispatch command center was held at the base of Jianchuan Road of Line No. 5. The project was a demonstration project of integrated intelligent maintenance innovation jointly built by Shanghai Electric and Shanghai Shentong Metro Group* (上海申通地鐵集團), which marked a substantial progress of strategic cooperation between the two sides in the field of rail transportation.

The integrated intelligent maintenance project of Shanghai Rail Transit Line No. 5 would provide the comprehensive intelligent maintenance services throughout the life cycle for the three professional facilities and equipment of vehicle, power supply, communication signals based on the urban rail transit intelligent maintenance and health management platform, to realize transformation of metro maintenance services from "information" to "intelligence", and the transformation of maintenance of facilities and equipment from "planned maintenance" to "state maintenance".

In this project, Shanghai Electric has made much investment in the research and development of the "i-PH Mart Urban Rail Transit Intelligent Maintenance and Health Management Platform", strengthened the exploration of the "multi-professional integration and multi-source data sharing" model, and actively promoted the asset management, operation and maintenance management, health management and emergency management of rail transit facilities and equipment, which further enhanced the reliability and safety of rail transit facilities and equipment operation.

Fully automatic driverless technology demonstration on Shanghai Line No. 14

On May 15, 2020, the trial line outside the Nanjing Puzhen Vehicle Factory welcomed the fully automatic driverless running demonstration of Shanghai Rail Transit Line No. 14 as scheduled. As a demonstration project of the new round of rail transit construction in Shanghai, this running demonstration marked another step towards "deep intelligence" of driverless technology of rail transit.

The project is a key project of the rail signal system of Shanghai Electric Thales Transport Automation Control System Co., Ltd. and is a technical transcendence achieved by Electric Thales with closely following the actual operation of domestic rail transit, providing a more intelligent and safer solution for the development of driverless technology of domestic rail transit.



In the field of environmental protection engineering and services

In the field of environmental protection engineering and services, Shanghai Electric maintained rapid development momentum, continued to adhere to a complete industrial chain covering engineering+design, technology+products, operation+services, integrated advanced foreign technologies, accumulated performance which could be taken as a benchmark in the industry and formed its own core technologies, which could in turn "feed" the subsequent overseas market and domestic environmental protection market. During the reporting period, we achieved technological and market breakthroughs in various fields such as environmental protection, solid waste treatment and water treatment at power stations.

Environmental protection independent research and development of horizontal screw centrifuge passed the evaluation

In August 2020, China Dredging Association organized and held a product evaluation meeting on the Large Horizontal Screw Centrifuge for River and Lake Dredging Project of Shanghai Electric Environmental Protection Group (上海電氣環保集團“河湖清淤工程專用大型臥螺離心機”). The evaluation team, consisting of 18 experts from China Communications Construction, CCCC Guangzhou Dredging Co., Ltd. and CCCC Shanghai Dredging Co., Ltd., unanimously concluded that such large horizontal screw centrifuge had reached the international advanced level and approved it to pass the evaluation accordingly.

The main innovation of the product is the large capacity of the single machine, continuous operation ability and environmental protection and high efficiency. Our R&D team has developed a system with modular layout of process units, which has a small footprint, short plant construction time, and simple operation and maintenance, and uses green and environmental protection flocculants and a closed dehydration system to avoid secondary pollution.

The product can fill the gap in the development of large horizontal screw centrifuge products in China, and has effectively promoted the upgrade of technology in the industry, promoted the development of China's river and lake dredging industry, and contributed to the solution for comprehensive environmental governance of domestic rivers and lakes, and had good promotion and application value.

Shanghai Electric entered the field of medical waste disposal for the first time

Shanghai Electric has been investigating technologies and equipment related to the disposal of medical waste since 2015, and in recent years has formed mature technical solutions for high-temperature steaming of medical waste, mixed combustion of medical waste and hazardous waste, and individual pyrolysis and gasification incineration of medical waste.

In May 2020, Shanghai Electric Environmental Protection Group won the bid for the Foshan City Medical Waste Disposal General Contracting Project (Phase I), which was also the only medical waste disposal facility in Foshan City. The project adopts a unique pyrolysis and gasification incineration process, and the production effluent in the whole plant will be reused after treatment to achieve zero effluent discharge. A new medical incineration line with a capacity of 25 tons per day and a main supporting plant building with a capacity of 35 tons per day, as well as supporting public and auxiliary facilities such as flue gas purification system and wastewater treatment station, etc. will be built at the first phase of the project. The scope of the tender included all engineering design, process design, equipment procurement, installation, commissioning, acceptance and other related services.

The COVID-19 pandemic prevention and control situation was still serious, policies were issued by the national and local governments to speed up the construction of medical waste disposal projects. The project indicated that Shanghai Electric entered the field of medical waste disposal for the first time. Winning the tender was of great significance to Shanghai Electric's subsequent project development, performance accumulation, and the reserve of relevant technologies.

Shanghai Electric Environmental Protection Group Invested in Rural Sewage Treatment PPP Project in Huaiyuan County

At present, the domestic rural sanitary sewage is characterized by problems of rapid growth, wide sources, low treatment rate and large volume. With the development of rural economy, the amount of sanitary sewage is also gradually rising. If the rural sanitary sewage treatment capacity keeps low, the consequences will be worrying. The untreated sewage flows through surface water bodies such as mountains, rivers, ponds and lakes, which will greatly pollute various water sources; moreover, domestic sewage is also a channel for the spread of diseases, which can easily cause the prevalence and spread of regional pollution diseases, zoonotic diseases and endemic diseases.

In early 2020, Shanghai Electric Environmental Protection Group invested in "Rural Sewage Treatment PPP Project in Huaiyuan County". The project is located in Huaiyuan County, which belongs to Bengbu City, Anhui Province, and is an important livelihood project of Huaiyuan County. It is part of the government's 2020 work plan, involving the comprehensive sewage treatment of 16 townships and 2 provincial-level beautiful villages, with a total scale of 14,040 m³ per day and a total length of sewage network of 374.68 km.

Showing China's Environmental Protection Strength to the World: Nantong Thermal Power Waste-to-Energy Incineration Technology Upgrading and Expansion Project Appeared at Times Square in New York, the USA

Nantong Thermal Power Waste-to-Energy Incineration Technology Upgrading and Expansion Project is the first large-scale waste incineration project of the Environmental Group, with a treatment capacity of waste of 2,250 tons per day. The project is capable of handling the domestic waste generated by 4.5 million people in Rugao City, Tongzhou District, Chongchuan District, Gangzha District, Nantong City and the surrounding areas, and supplying 85.92 GWh of electricity to the grid annually. It also supplies 800,000 tons of steam per year to 27 enterprises in the Fine Chemical Park where the project is located.

After the upgrading and expansion, the waste treatment capacity will increase by 208,100 tons/year, representing an increase of 33.9%, and the pollutant emission index of the project meets the EU 2010 (EU2010/75/EU) standard, thus truly realizing waste volume reduction, harmlessness and resource recovery.

In December 2020, as the first prize winner of the 2020 Bentley Brightness Awards (Bentley光輝大獎賽), the project was presented at the NASDAQ Building in Times Square, New York, the USA. As the only waste-to-energy project selected as a finalist, the project's comprehensiveness, integration and digital twin design concept were the focuses. In addition, the Nantong Thermal Power Waste-to-Energy Incineration Project, as a livelihood project, must be implemented under the premise of ensuring the stable operation of the original plant, thus to avoid a series of livelihood problems such as "garbage covering the city" and "disconnection of heat supply" caused by the shutdown of the original plant.



Intellectual property rights

While promoting internal scientific and technological innovation, Shanghai Electric effectively manages and protects its own technological innovation achievements. In accordance with the Patent Law of the People's Republic of China, the Copyright Law of the People's Republic of China, the Anti-Unfair Competition Law of the people's Republic of China, the Intellectual Property Management Practices for Enterprises, the Guide to Intellectual Property Management in Industrial Enterprises, the Working Measures for Outbound Transfer of Intellectual Property Rights (for Trial Implementation) and other relevant laws and regulations, we formulated and implemented the Intellectual Property Management Measures of Shanghai Electric, the Guide to Intellectual Property Management of Shanghai Electric and other system documents, and urged business divisions to develop detailed rules and regulations. During the reporting period, we conducted intellectual property rights certification training activities, intellectual property rights-related policies and hands-on technology salon activities to promote employees' understanding of the protection scope and technical content of patent, as well as patent legal information such as patent owners, patent statute of limitations and patent protection regions, so as to protect our own intellectual property rights from infringement while avoiding infringement of others' intellectual property rights.

Intellectual Property Right Induction Certification Training

In July 2020, in order to enhance the awareness of intellectual property right protection and improve the level of intellectual property right talent team of enterprises, Shanghai Electric, together with Shanghai Intellectual Property Services Association, launched intellectual property right induction certification training for the first round of 51 employees at posts related to intellectual property rights of the Group.

The training activities focused on intellectual property rights strategy, intellectual property rights protection, intellectual property rights value assessment and intellectual property rights management, etc. The training was conducted for four days for employees at posts related to intellectual property rights of the subordinate business divisions and key enterprises. At last, all the trained staff passed the examination and received the Shanghai Intellectual Property Worker Certificate (上海市知識產權工作者證) and the Intellectual Property Post Certification of the Group.



2020 Technology Salon – Special Session for Intellectual Property Rights

In August 2020, Shanghai Electric held the Special Session for Intellectual Property Rights of 2020 Technology Salon. The event invited the Intellectual Property Development Promotion Department of Shanghai Intellectual Property Administration, relevant law firms and other units as well as internal intellectual property experts of Shanghai Electric to share and exchange ideas on intellectual property policies, theories, practices and professional services with focus on intellectual property empowering equipment manufacturing enterprises for innovative development, so as to enhance employees' knowledge of cutting-edge intellectual property policies and theories, and discuss and solve problems in the process of practice.

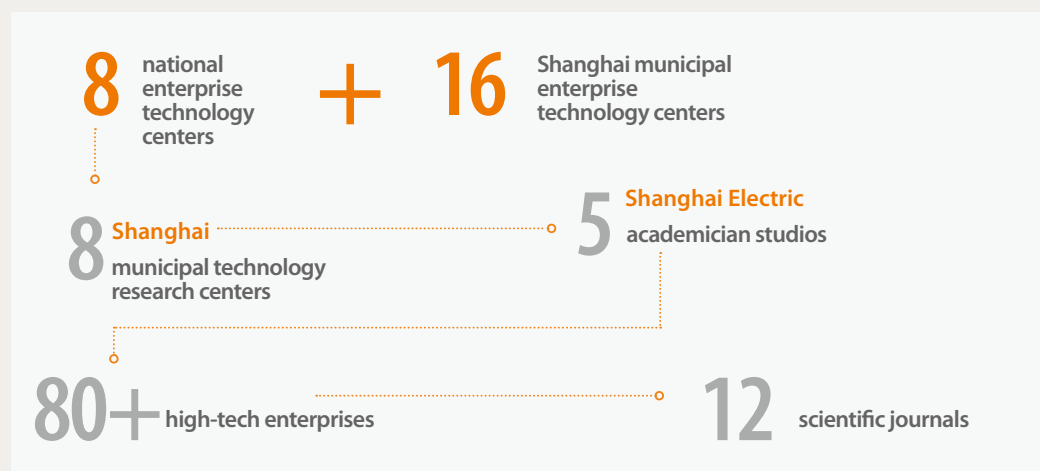




In 2020, Shanghai Electric applied 1,786 patent, and 972 were authorized. As of December 31, 2020, it owns 5,819 valid patents and 5 software copyrights.



While promoting independent research and development and intelligent transformation, Shanghai Electric focuses on the integrated utilization of research and development resources, and actively establishes industry-university-research-application consortia and technology research and development platforms with domestic and foreign universities, research institutes and industrial chain enterprises. We own:





Establishing Zhejiang University–Shanghai Electric Wind Power R&D Center

Relying on the strong scientific research strength of Zhejiang University in the field of electric machinery, in 2017, Shanghai Electric Wind Power Group and Zhejiang University jointly set up a wind power research and development center to carry out in-depth university-enterprise cooperation, and break through the "bottleneck" technology problems in the industry.

In 2020, after making efforts for nearly 3 years, we successfully developed the 3 MW direct-drive generators for the onshore wind power market and put it into prototype operation. At the same time, we have jointly won the key project from the Ministry of Science and Technology and completed the development of the independent large megawatt offshore direct-drive generator and large capacity converter. Recently, the both parties have completed the signing of the second phase of the cooperation project, and the cooperation fields and projects have been pushed forward into a more difficult phase. Based on the integrated and innovative product research and development, we will prepare well for the arrival of the wind power parity era.



European Science and Technological Innovation Center of Shanghai Electric–Completion of Multi-objective Optimization Research Project

In order to strengthen the interaction and connection with overseas advanced technology and industrial resources, further enhance the wind power technology capability and consolidate the leading position of Shanghai Electric in offshore wind power, the European Science and Technological Innovation Center of Shanghai Electric Wind Power Group completed a cooperative research project with the Technical University of Denmark in the direction of multi-objective optimization of wind farms in 2020.

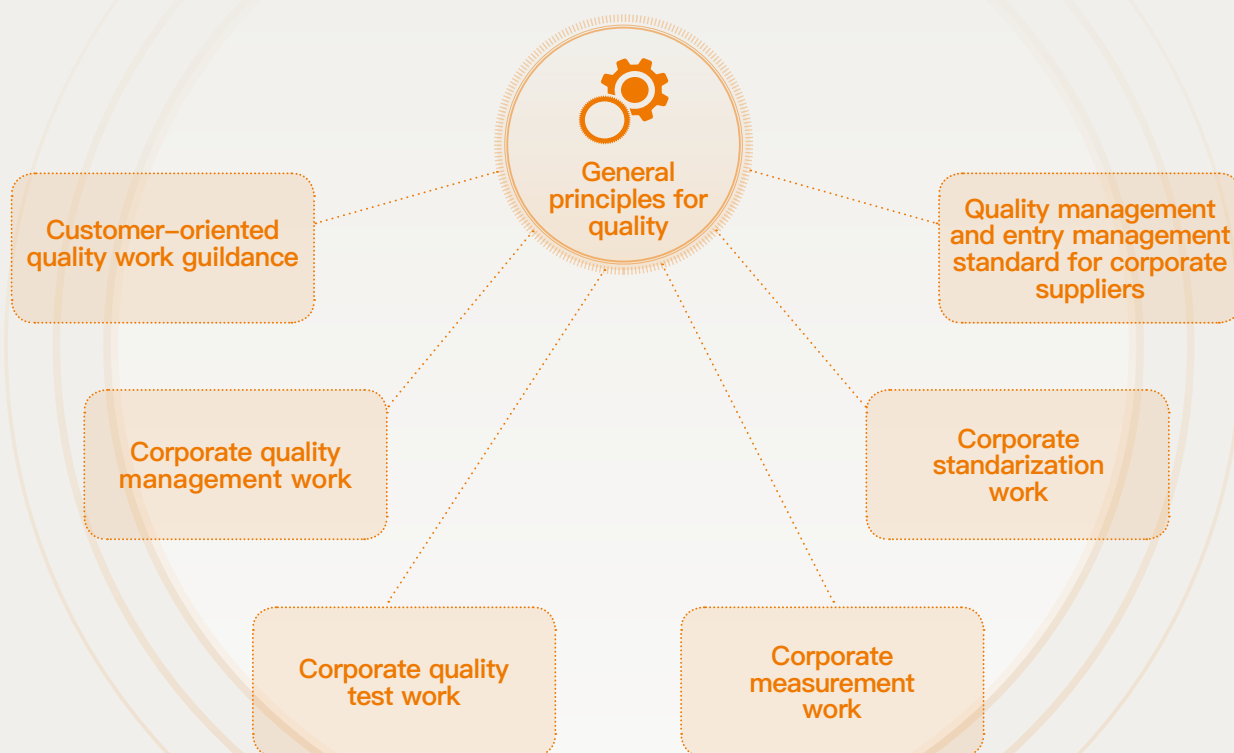
By taking into account various constraints such as unit loading, impact of tail flow, road construction, electrical circuits, multiple models and hub height mixing design methods, etc., the project can obtain the best solution for generating capacity and cost of electricity from the perspective of system optimization, and thus can help the owner to maximize the economic benefits of the project. The project has also filled a gap in the Company's wind farm optimization design capability and enhanced the Company's system design capability of wind turbines, which was conducive to developing products with lower cost and better performance, and laid a foundation for the Company to improve its market competitiveness in the era of price parity.



Quality Assurance

Quality: starting from awareness, relying on technology, based on management and existing with originality

Shanghai Electric has been adhering to taking quality first as its value orientation, strictly abided by the laws and regulations of the *Product Quality Law of the People's Republic of China*, the *Law of Product Quality and Safety of the People's Republic of China* and the *Regulations on the Administration of Industrial Product Production Licenses*, and all manufacturing enterprises of the group have completed the ISO 9001: 2015 quality management system certification. We have formulated a complete set of quality work standards in years of quality practice, including general principles for quality management, customer-centered quality work guidance, work in relation to corporate quality, management standards in relation to supplier quality and a series of system documents. Meanwhile, we strictly focus on product quality evaluation, assess on and set targets for product grade rate, quality loss rate, material quality issue and key quality problems tackling project, etc., so as to ensure the realization of the promise of quality to customers with all effort while devoting ourselves to researching and developing products.



Shanghai Electric Environmental Protection Group: internal investigation on three systems for promoting management improvement

In September 2020, the internal investigation on the implementation of three systems of Shanghai Electric Environmental Protection Group was formally launched. According to the management system requirements on the quality, environment and occupational health and safety, the Environmental Protection Group conducted a full investigation on the implementation of work including engineering design and technical services, engineering general contracting, project management and project construction supervision and construction drawing design, to ensure the internal quality work to be implemented according to standards. This internal investigation not only covered the production and functional departments of Environmental Protection Group, but was applied for the engineering projects and design projects, for the purpose of further strengthening the corporate management improvement, enhancing the quality management and control level and optimizing the management of system procedures.

Shanghai Electric Wind Power Group: close focus on quality for guaranteeing the delivery

Any quality issues and safety hidden dangers shall not be ignored. In September 2020, Shanghai Electric Wind Power Hebei Base held an oath-taking rally of "risk control, delivery guarantee, and overcoming the difficulties within 60 days" and strived to complete the delivery task with high quality under the circumstance of aggressive "rush of installation tide". Focusing on the annual production objective, Hebei Base adopted a series of measures of interactive mechanism of all departments. The Base's management divided the work on a weekly and daily basis, cleared the goal and individual responsibility, paid close attention to the quality and output volume. Double shift working system was carried out for all front-line and second-line employees and most third-line employees to ensure sufficient rest for them and avoid fatigued operation. The technical and quality teams refined their tasks, inverted the plans, established the teams for overcoming the difficulties, and provided guarantee for the front-line production with the spirit of perseverance and attitude of "immediately handling work".

During the reporting period, Shanghai Electric adhered to cultural guidance, strengthened the quality management awareness and capability cultivation of employees through multiple ways, successfully held the quality month activity under the theme of "focusing on production quality improvement and promoting project quality improvement", and won the 2020 excellent organization award for quality problem tackling in Shanghai. In 2020, there were no issue relating to recall due to the safety and health reasons among the products sold or shipped.



Highlights in "quality month" activities of all enterprises

In September 2020, the opening ceremony of "quality month" and exchange meeting of "quality labour competition" of Shanghai Electric was successfully held. During the period of activity, centering on the theme of "focusing production quality improvement and promoting project quality improvement", all business divisions and enterprises contributed to building an idea of quality first to promote quality improvement, further intensified the integration of technology and quality management, and drove the improvement of competitiveness by quality improvement, so as to demonstrate the charm of the brand of Shanghai Electric.

In particular, Shanghai Electric Power Generation Group held a quality knowledge contest with 1,000 participants. With the topic of "focus on quality brand, promotion of quality integrity and improvement of quality efficiency", the contest attracted over 1,000 employees from the headquarters of Power Generation Group, Engineering Company, Power Station Service Company (電站服務公司), Gas Turbine Company (燃機公司) and other enterprises to participate in the online Q&A, and give their advice and suggestions to the high quality development of the enterprises. In the quality knowledge contest, certain employees expressed that the cost reduction and efficiency improvement of enterprises should be started from every employees. Only the improvement of work efficiency could lead to the increase in corporate management efficiency, and thus the quality management awareness and determination of employees could be greatly improved. Subsequently, Shanghai Electric Power Generation Group further conducted summary and analysis on those suggestions received from this activity, and regarded them as important references for quality and management improvement in the next year.



Shanghai Electric won the excellent organization award for quality problem tackling

◆ On 25 August 2020, the *Notice on Announcement and Commendation of Projects and Individuals Contributing to 2020 Quality Problem Tackling Achievement of Key Products in Shanghai* (《關於通報表揚2020年上海市重點產品品質攻關成果項目和個人的通知》) was jointly issued by Shanghai Municipal Administration for Market Regulation and Economy and Information Commission of Shanghai. Shanghai Mitsubishi Elevator and Shanghai Boiler Works, Ltd., the subsidiaries of Shanghai Electric, were awarded the first and second prizes of 2020 Quality Problem Tackling Achievement of Key Products in Shanghai, respectively, and Shanghai Electric Group Company Limited won the excellent organization award.

◆ The awarded projects of Shanghai Mitsubishi Elevator and Shanghai Boiler Works, Ltd. were the "Quality Problem Tackling for HE Series of Public Transport Escalator and its Intelligent Monitoring System" and the "Quality Problem Tackling for Tower CSP Steam Generation System", respectively.

Projects of Turbine Works and Boiler Works were listed in the first batch of "Shanghai Standards"

◆ On 24 December 2020, in order to establish the "Shanghai Standards" and enhance the city level, Shanghai Municipal Government focused on exploring and creating "new" standards that meet the domestic and international advanced requirements. A total of ten enterprises and teams were awarded such great honor in the first batch, including one local standard + three team standards + 6 enterprise standards. Among them, two enterprises of Shanghai Electric were awarded, namely Shanghai Electric Power Generation Equipment Co., Ltd Turbine Works and Shanghai Boiler Works, Ltd.

Maintenance crew for Hongqiao Airport Terminal T2 of Shanghai Mitsubishi won the great honor of "quality assurance crew"

There are 139 elevators and escalators in total in Shanghai Hongqiao Airport Terminal 2, all of which are supplied by Shanghai Mitsubishi Elevator Co., Ltd., including 86 escalators and 53 elevators. The onsite maintenance crew of Shanghai Mitsubishi Elevator Co., Ltd. in Hongqiao Airport comprises 16 workers, with one senior technician, one technician and two project managers.

The maintenance crew of Shanghai Mitsubishi closely follows the idea of building an international competitive airport, focuses on the improvement of onsite service quality and the sustainable development of service innovation, and effectively advances the activities of establishing star service by leveraging on the construction of standardized maintenance units, thereby establishing the leading position of Shanghai Mitsubishi in terms of the maintenance service quality and competitiveness for public transport escalator and elevator projects within the same industry. In March 2021, the maintenance crew of Hongqiao Airport Terminal 2 of Shanghai Mitsubishi won the title of 2020 crew of mass quality improvement and industrial quality assurance in Shanghai.

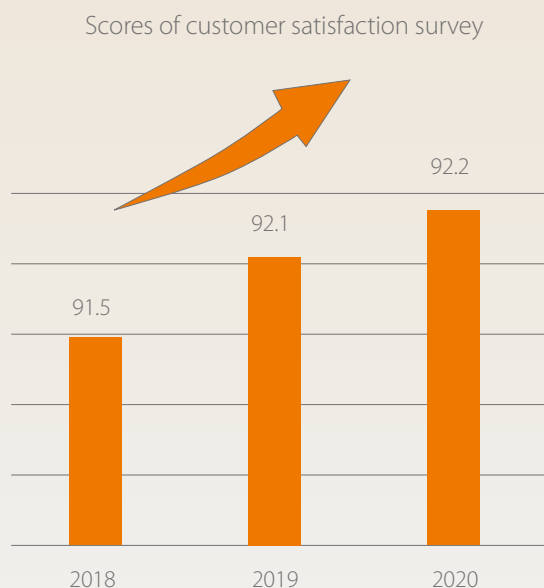


Customer First

We are dedicated to one-stop service, strictly protect customers' privacy through sound customer channel and handling mechanism and satisfy customers' needs by providing maximum values to customers.

Customer satisfaction survey

Shanghai Electric is dedicated to constantly optimizing its service quality of products, carries out a customer satisfaction survey through a third-party evaluation center every year, covering enterprise in the manufacturing category, the engineering category and the new industry segment under the Group, and maintains a sound two-way communication with customers. We can obtain customer feedback objectively and effectively, gain a comprehensive understanding of customer satisfaction with our products and services, and obtain the product quality improvement information.



Handling of customer complaints

In order to actively respond to customer complaint and handle the quality objection in timely manner, while establishing customer files, we continuously improve the customer feedback mechanism, complaint handling mechanism and rapid response mechanism. Meanwhile, the Group requests each department of the subsidiaries has a specially-assigned person to take charge of the record of complaints, organize investigation, analysis and handling of complaints, and properly resolve and give satisfactory responses to complainants within a limited time frame. For example, the Power Generation Group and the technical quality department have set up a 400 quality complaint hotline, which is communicated to customers through contracts and the customer satisfaction questionnaires. In 2020, the Group's major business divisions did not receive customer complaints.





Shanghai Electric Machinery Co., Ltd.: visiting customers for understanding quality satisfaction

During the period of "Quality Month" in 2020, Shanghai Electric carried out quality visit for market end aiming at "constantly increasing customers' satisfaction". Eight teams with over 20 visit lists were proposed under the lead by the management of plant, and accompanied by employees at posts relating to design, technology, manufacturing, quality guarantee, order management and others. The visit objects involved the industries of power, metallurgy, mining, construction materials, light machine, and petroleum, etc., the property owners, general contractors, main strategy machine plant, system integrators and other partners, in order to hear the realest voice from the market and know the most urgent demand of users from multiple dimensions.

In addition, Shanghai Electric Machinery Co., Ltd. has showed the users its latest achievements of institutional adjustment, mechanism changes, product research and development and other aspects, allowing them to fully understand the faster technical response, more efficient contract performance, better after-sales services, and more systematic solutions of Shanghai Electric Machinery Co., Ltd. at present, so as to further strengthen the brand image and improve the users' credibility and stickiness.

Information security and protection

Shanghai Electric is well aware that the credibility of solutions and network security is an important consideration for customers. We have established a comprehensive protection system and mechanism for information security in strict accordance with laws and regulations such as *the Cybersecurity Law of the People's Republic of China* and *the Administrative Measures for the Classified Protection of Information Security*, including *Information Security Management and Control*, *Password Management*, *System Security Protection*, etc., in order to standardize the operation of the internal information security protection in a comprehensive manner. Shanghai Electric Digital Technology Co., Ltd. ("SEC Digital Technology"), a subsidiary of Shanghai Electric, obtained the authentication certificates for ISO 27001 information security management system and ISO 20000 information technology service management system in 2019. In addition, during the reporting period, SEC Digital Technology obtained the "Level III Certificate of Information System Security Integration Services", and continued to give play to its corporate advantages, offering customers the professional information security services with high standards.

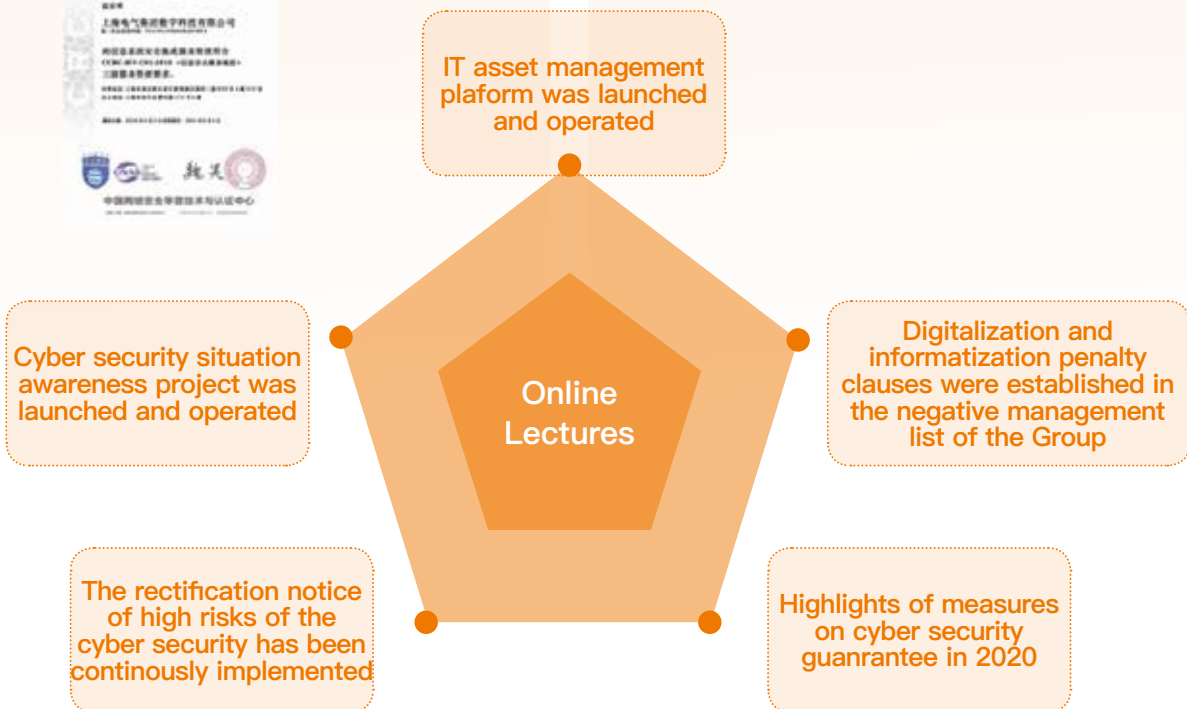
SEC Digital Technology obtained the qualification of information security integration services

In early September 2020, SEC Digital Technology successfully passed the review by China Cybersecurity Review Technology and Certification Center, and obtained the "Level III Certificate of Information System Security Integration Services". The receipt of such qualification demonstrates the recognition of SEC Digital Technology in the aspects of basic qualification, service management capability, service technology capability and service process capability, which is of great significance for the Company to expand and promote all business in the field of information security services. In the future, SEC Digital Technology will continue to give play to its corporate advantages to offer customers the professional information security services with high standards.



Online Lecture on Network Security held by Shanghai Electric

In April 2020, the online lecture on Network Security Practice of How the Enterprises Pass the Classified Protection of Information Security of Shanghai Electric was held, and a training with a topic that how all the de facto controlled enterprises of Shanghai Electric pass the classified protection of information security from multiple perspectives was carried out. At the same time, during the reporting period, the department of data and information of Shanghai Electric took the lead to launch a series of more serious and comprehensive information security review and standardization work, which aimed at advancing the construction of the information security management system of the Group and providing a secure guarantee for the stable implementation of the "three-steps" strategy of the Group.



In addition, in order to safeguard the interest of Shanghai Electric and protect the privacy of customers, we require all employees to highly value the security over the information on the privacy of customers. We have formulated a special confidential system for customers' information to regulate the handling methods and confidential measures for information of customers. Meanwhile, we have launched the IT maintenance review system to record and review the operations by internal special accounts such as the system administrator's account and by supporting accounts such as the external consultant's account, so as to avoid the leak of the information of customers.

03 CREATE VALUE FOR PARTNERS THROUGH WIN- WIN "INTELLIGENT" STRATEGY

In the face of a fiercely competitive market environment, Shanghai Electric adhered to carrying out a proactive cooperation with its partners, suppliers and other stakeholders, and established a communication platform for achieving win-win cooperation. Meanwhile, Shanghai Electric also put forward strict quality requirements for its suppliers, conducted serious anti-corruption education for the internal departments for several times and strived to establish an uncorrupted, harmonious and win-win market environment.

Responsible Procurement

We strengthened the management over purchased from suppliers, helped them improve their professional capability and constantly advanced the overall efficiency and sustainable development of the value chain in the upstream and downstream industries.

Purchase management

In 2020, Shanghai Electric put forward a series of requirements on the quality and pricing to the suppliers, proactively carried out trainings for suppliers, and strived to further improve the supplier system and helped the suppliers to improve their learning ability and compliance practice capability, so as to build a "clean, open and win-win" system for purchase supply chain.

Improvement of purchase system

Shanghai Electric strictly abided by the national laws and regulations including *Contract Law of the People's Republic of China*, *Law of the People's Republic of China on Tenders and Bids*, *Law of the People's Republic of China on Product Quality*, *Pricing Law of the People's Republic of China*, *Guarantee Law of the People's Republic of China*, *Audit Law of the People's Republic of China* and *Anti-unfair Competition Law of the People's Republic of China*, and continued to implement the existing management system and regulation including *Shanghai Electric's Purchase Management*, *Shanghai Electric's Centralized Purchase Management* and *the International Procurement and Supplier Management Plan*. Meanwhile, Shanghai Electric introduced the *Purchase Pricing Method Management* in 2020, which further improved the purchase systems, advanced a more standardized and orderly purchase business and controlled the risk of purchase. Furthermore, the first draft of *the System of Purchase Management*, as a general system at the highest level, has been prepared, and such system will form the general guidance principles and requirements on the basis of the integration and summary of the relevant systems in the future.

Improvement of supplier system

Following the introduction of a series of systems including *the Exclusive Supplier Management* and *the Designated Supplier Management* in 2019, Shanghai Electric uniformly complied and introduced the measures on *E-commerce Procurement Operation Management*, and formed a complete set of e-mall operation rules. At the same time, Shanghai Electric also updated the *Supplier Management System* at the group level, strengthening the approval evaluation, dynamic management, evaluation and application and other full lifetime management.

Material supplier performance evaluation carried out by Wind Power Group

Wind Power Group strictly complied with the relevant system requirements of Shanghai Electric, carried out the annual performance evaluation on large suppliers, strategic and bottleneck suppliers, large exclusive suppliers and suppliers requiring annual quota allocation, and scored them from five dimensions, namely, costs, quality, delivery, technology and services. Every supplier shall have a corresponding purchase manager to coordinate and maintain its performance evaluation work. Under the manager, we have the scorers for purchase, quality, technology and logistics to conduct the comprehensive evaluation on suppliers.



Supplier approval

- ◆ The suppliers are required to pass system certification and product certification, and connect with risk radar and third party risk systems, allowing the Group to obtain the risk information in the first time and respond in advance;
- ◆ The approval standards on supplies shall be unified, allowing the Group to unify and coordinate all information of suppliers, strengthen the management and supervision on all suppliers, so as to achieve the precognition, high efficiency and consistency of the risk management ;
- ◆ Enterprises with negative records, such as breach of trust, legal disputes and environmental penalties, are excluded from cooperation.



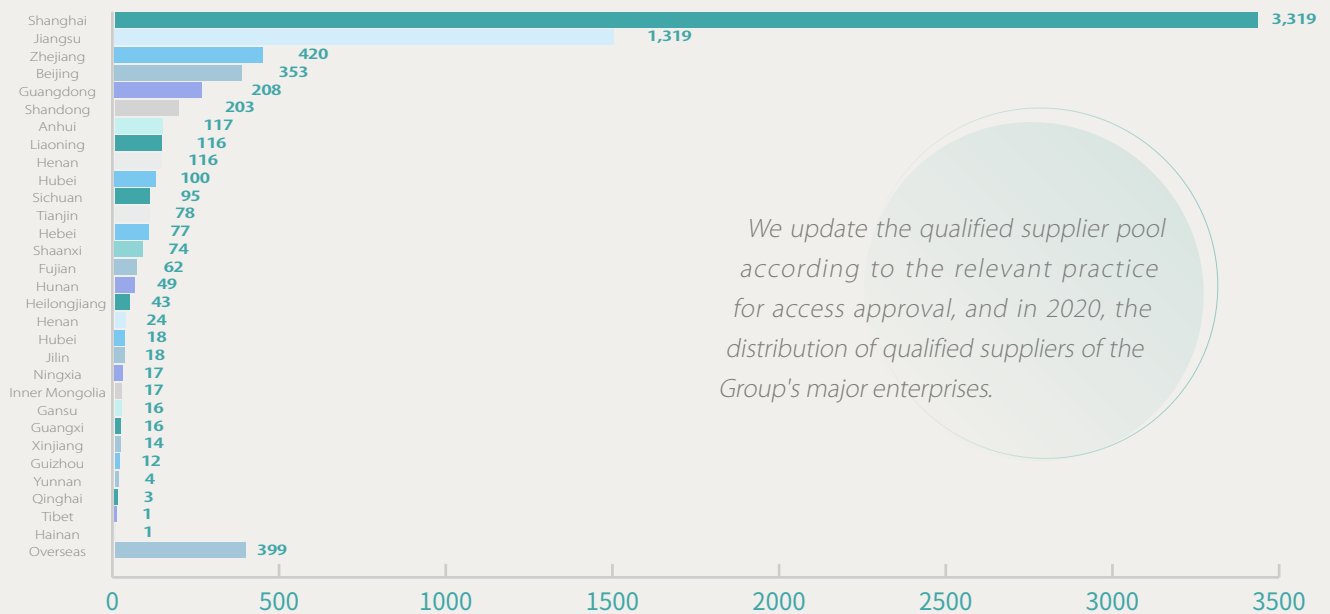
Supplier evaluation system

- ◆ Performance evaluation: a process performance feedback mechanism is adopted whereby unqualified suppliers will trigger a notification, a warning, or a suspension or cancellation of cooperation; meanwhile, an annual performance appraisal is conducted, and the unqualified suppliers will be eliminated. The evaluation will focus on the time of delivery.
- ◆ On-site review: enterprises conduct the unannounced inspections and review on the quality on supplies, projects and service of suppliers, evaluate the resupply qualifications of qualified suppliers; the Group will select some suppliers for joint review with factories.



Supplier management system

Distribution of major enterprise suppliers of Shanghai Electric



Intelligent supply chain platform

The year of 2020 was the first year for Shanghai Electric to vigorously promote the intelligent supply chain. The construction and optimization of four platforms, namely full life cycle management platform, competitive pricing platform, e-commerce platform and supplier order collaborative platform, were basically completed on the supplier management informatization (SRM, Supplier Relationship Management) platform, and the application of the intelligent supply chain platform was strongly promoted in all business divisions and enterprises.

The application of the intelligent supply chain platform can fully accommodate the dynamic, real-time and informationization demands for supply chain management in collaboration with various departments. Based on the existing internal cloud platform, the platform extends outward to connect the upstream and downstream portions of the supply chain. The new platform has significantly increased the management efficiency of supply chain and achieved a series of results:

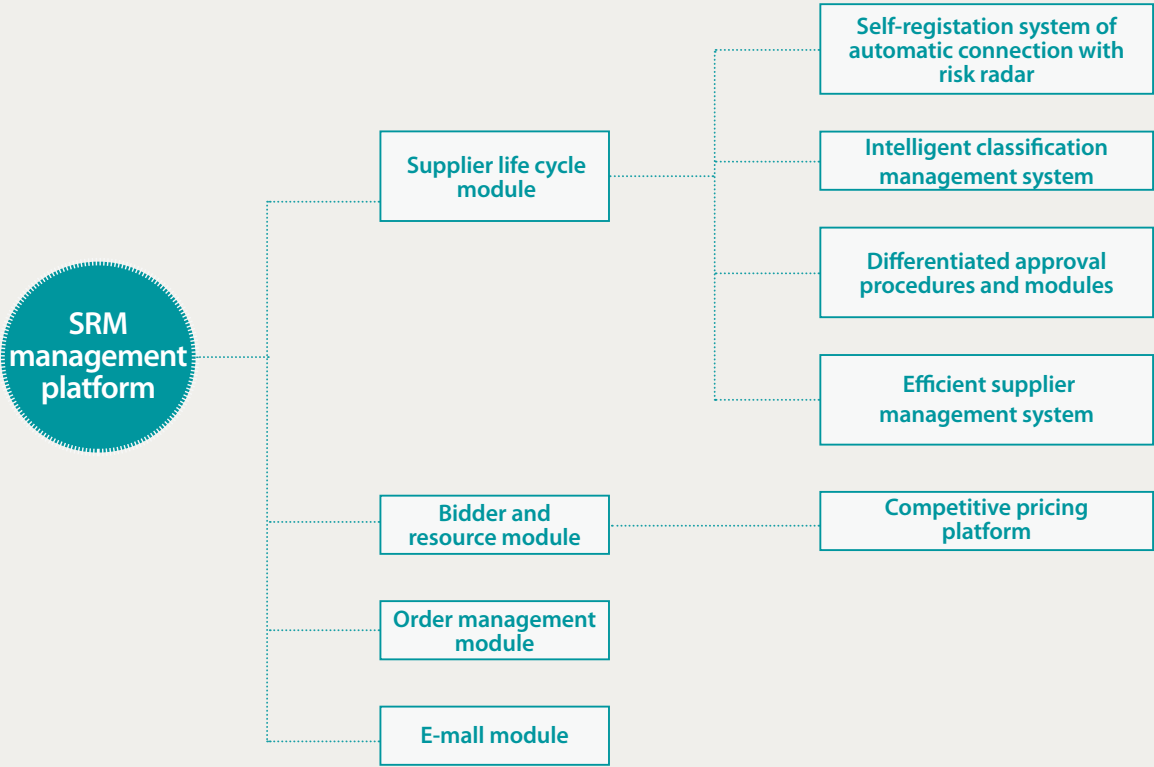
Smart supply chain platform achievements

Competitive pricing platform:

It was fully promoted and implemented within the scope of Shanghai Electric. As at 31 December 2020, the purchase projects were established with a final bidding amount of RMB6.2 billion.

E-commerce platform:

Many categories (office supplies, labour protection supplies, work clothes, industrial gas, general tools, general measuring tools, flaw detection materials, packing wood and drinking water) of supplies have been done online, with a launch of more than 20,000 products and the subsequent launch scope being increasingly expanded.



Supplier relationship maintenance

Shanghai Electric always promotes supply chain construction as the key to the sustainable development of enterprises. In view of the fact that the ability to learn and the willingness varied from supplier to supplier, various groups carried out a variety of communication activities aimed at improving the supplier operation system, so as to create a harmonious, shared and win-win cooperation environment.

Measures for the maintenance of supplier relationships

Organize a supplier conference	↔	At the supplier conference, talk to suppliers face to face about the strengths and weaknesses in their performance, and at the same time publicize the technical development plan and procurement management requirements
Hold seminars on common issues	↔	Hold supplier seminars on common issues, such as developing emerging markets, expanding service markets, etc
Coaching and training	↔	Help suppliers improve their quality management capabilities through special quality coaching and training
Carry out exchanges on centralized procurement	↔	Carry out exchanges on centralized procurement in an area where suppliers are concentrated
Customer feedback	↔	Make regular quality visits to customers, and communicate customers' requirements for products to suppliers to help suppliers improve product quality and refine the direction

"Integration for symbiosis, harmony for win-win and competition for future" supplier conference of Shanghai Electric was held

On 25 July, Shanghai Electric Wind Power Group held the wind power supplier conference. The theme of the conference is "integration for symbiosis, harmony for win-win and competition for future". The wind power industry in China is encountering a key crossroad of subsidies removal and grid parity acceleration. The symbiosis and win-win cooperation is the crucial concept for Shanghai Electric to build a supply chain strategy system and a sound cooperative ecology in the decisive era of grid parity. At the conference, Shanghai Electric expected the supplier partners to continue to fully support



the development of Wind Power Group and contribute more power and wisdom during the key development period of Wind Power Group. And Shanghai Electric will continue to deepen its cooperation with the supplier partners with a more open-minded and mutual benefit concept, so as to jointly establish a constructive development ecology of the wind power industry in China, and cooperate to win in the era of grid parity and make concerted efforts to create a bright future.

Sustainable supply chain

Shanghai Electric constantly advanced the development of sustainable supply chain, and jointly built a corporate image with social responsibility awareness with its partners. We put forward requirements in all aspects of enterprise ESG performance in *Supplier Code of Conduct*, and encouraged all suppliers to enter into the *Agreement on Workplace Safety and Environmental Protection* to realize overall sustainable development in cooperation with us.



Shanghai Electric conducted a comprehensive safety and environmental review of its suppliers. By taking the special activity of Safe Production Month as an opportunity, we conducted comprehensive review and certification of suppliers' qualifications, safety and environmental performance in the past three years, the degree of workplace safety standardization (suppliers involved in production, construction and hazardous chemicals were required to provide a certificate of workplace safety standardization at level 2 or above), safety and environmental laws and rules violations and accidents, and other related matters involving regulations on workplace safety.

At the same time, Shanghai Electric attached great importance to corruption and bribery issues, and firmly opposed commercial corruption so as to create a clean and honest corporate environment. It insisted on implementing anti-corruption work, and actively promoted its clean and honest culture to its partners.

In order to strengthen efforts to improve Party conduct and uphold integrity in the field of procurement, and prevent all kinds of violations of discipline and the law involving the seeking of improper benefits in procurement activities, Shanghai Electric continued to insist on implementing the Procurement Contract-Integrity Agreement "double contract" signing mechanism, requiring that all suppliers who provide products or services to us must sign the Integrity Agreement when they sign a contract with us. Suppliers from whom we purchase multiple times in a year are required to sign the Integrity Agreement at least once a year. At the same time, Shanghai Electric further implemented the "blacklist" system and dealt with suppliers on the "blacklist" sternly.

Legal knowledge training program for personnel who sign contracts with external parties



Since 2015, in order to raise awareness of legal risks among personnel of Shanghai Electric's affiliated enterprises who sign contracts with external parties, enable them to master certain legal risk resolution skills, mitigate the adverse legal consequences brought to enterprises by irregularities, and keep enterprises' property and transactions safe, Shanghai Electric have launched and implemented a legal knowledge training program for personnel involved in marketing, procurement, engineering, project management and other lines of business at subordinate enterprises who sign contracts with external parties.

In 2020, we made full use of our online training experience. In addition to adhering to the basic model of "development of online resources for self-study + centralized face-to-face training + examination", we encouraged more distance learning. We have invited well-known lawyers in the fields of contract law, guarantee law, civil law and procedural law and professionals at the Group's legal department to serve as our lecturers. Trainees can not only improve their legal awareness, but also acquaint themselves with the basic requirements for professional certification. As of December 31, 2020, we engaged a total of 344 new training staff who sign contracts with external parties, of which 270 passed the examination and received the certificate.

Strategic Cooperation

We actively sought a technology-mediated and diversified cooperation model to create a sustainable driving force for development.

In 2020, Shanghai Electric further strengthened the connection with external enterprises, achieved development of regionalization and globalization, and strived to combine resources, talent, capital, information, technology and other innovative elements of both parties in the cooperation to achieve mutual benefit and win-win results, and jointly promote the development of the industry.

Shanghai Electric signed strategic cooperation on wind power projects with Qiqihar Municipal Government and China First Heavy Industries

On April 25, Shanghai Electric, Qiqihar Municipal Government and China First Heavy Industries held a signing ceremony for a strategic cooperation agreement on wind power project investment and development in Qiqihar. The two sides would carry out in-depth cooperation in wind power project bidding, wind power equipment manufacturing, development of international markets, personnel training in the field of wind power, etc. The three parties from both government and enterprises would play their individual advantages, and integrate advantageous resources to achieve win-win cooperation.

Shanghai Electric signed a strategic cooperation agreement with Xiamen Guodian Investment (廈門國電投)

On August 6, Shanghai Electric New Energy Company (上海電氣新能源公司) and Xiamen Guodian Investment Minguang Intelligent Energy Company (廈門國電投閩光智慧能源公司) signed a strategic cooperation agreement. According to the agreement, both parties would establish a comprehensive strategic cooperation relationship in wind power, photovoltaic power, smart energy, power distribution and sales, energy storage, biomass thermal power cogeneration, waste-to-energy and other fields, and exploit the advantages of both parties in project development and financing to jointly develop the new energy market.

Shanghai Electric signed strategic cooperation on projects with Shanghai Aviation Industrial (上航工業) and CGN (中廣核)

On June 9, Shanghai Electric and Shanghai Aviation Industry (Group) Co., Ltd. (上海航天工業 (集團) 有限公司) signed a comprehensive strategic cooperation agreement. According to the agreement, both parties would improve their competitiveness and influence in the industry by utilizing their own advantages and jointly promote the rapid development in the field of new energy. In the future, the two parties would complement each other in project development, market, industry chain, manufacturing, construction and other fields, and launch a comprehensive strategic cooperation with multiple channels, in multiple fields and at multiple levels. In addition, Shanghai Electric Wind Power Group (上海電氣風電集團) and CGN signed a new energy strategic cooperation agreement. In the future, the two sides would carry out all-round cooperation in the new energy field with wind turbine equipment business as the main business, set up several cooperation platforms as soon as possible, and jointly study and determine major cooperation projects.

Shanghai Electric signed a letter of intent for strategic cooperation with Shentong Metro Group (申通地鐵集團)

On September 3, Shanghai Electric and Shentong Metro (申通地鐵) signed a letter of intent for strategic cooperation and a multi-disciplinary integrated operation and maintenance project contract for Shanghai Rail Transit Line 5. According to the letter of intent for strategic cooperation, both parties would form a joint venture and jointly promote comprehensive cooperation. Both parties would take this project as a pilot and demonstration to study and apply the core technology of i-PH Mart intelligent maintenance and health management platform sharing with multi-professional integration and multi-source data, and jointly explore and form a new model of replicable and extendable maintenance and whole-life management of rail transportation facilities and equipment. This project was a milestone in the transformation of Shanghai Electric's rail transportation industry from "single manufacturing" to "manufacturing + service", and was of great significance to the development of Shanghai Electric's rail transportation industry.

04 BEING RESOURCEFUL TO TRAIN AND MOTIVATE EMPLOYEES

Shanghai Electric adheres to the employment idea of "making good use of existing personnel, retaining key personnel, attracting essential personnel and reserving future personnel", so as to build the Group into a repository of high-quality personnel. We are committed to fully protecting the legitimate rights and interests of employees, providing a platform for growth and development of excellent staff, establishing a diverse training mechanism, and creating a healthy and safe working environment, and a warm and welcoming working atmosphere, so that all staff can grow and develop together with Shanghai Electric.

Employees' Rights and Interests

Insist on protecting the legitimate rights and interests of employees and promoting harmonious labour relations.

Employment management

Thanks to the support of generations of Electric Entrepreneurs, Shanghai Electric achieved prosperous development. We believe that corporate competition is a competition for talent, so we continue to attract employees from all over the world, from different fields and of different types, to bring advanced knowledge and technology to Shanghai Electric, and to drive Shanghai Electric forward in the industry.

In order to standardize the recruitment process, Shanghai Electric has set up the *Recruitment Management Rules* and *Recruitment Implementation Rules* to realize the brand integration and process integration of all kinds of recruitment work.



During the reporting period, Shanghai Electric upgraded its employer brand image for campus recruitment, focusing on the accelerated transformation of Shanghai Electric's industries from traditional energy equipment to smart manufacturing, smart energy, smart transportation and smart city. With the theme of "Smart Planet", it shaped the employer brand image. At the same time, eight VLOG videos with youth as the theme were filmed to show the work, students and life of young people in Shanghai Electric in all aspects.



In 2020, Shanghai Electric adopted the solution of "contactless recruitment" for campus recruitment and adopted the video interview system and cloud-based presentation platform to solve the problem that recruitment interviews could not be conducted under the pandemic. Eight online presentations were conducted in 2020, and the presentation information was sent to Chinese students from overseas universities by targeted invitation. It participated in 20 online job fairs to communicate with graduates from key target universities. All candidates who submitted their resumes online were arranged to take MAP career personality assessment to improve the match between personnel and positions.



Shanghai Electric held a seminar on employment in key universities in Shanghai to discuss campus recruitment with university teachers. By overcoming difficulties, it also conducted offline presentations for 2020 campus recruitment, holding a total of 32 offline presentations and participating in 16 offline two-way selection job fairs, covering 30 key target universities in China.



On the afternoon of December 4, the 2020 Shanghai Electric High-End Talent Recruitment Forum and Demand Conference was held in Shanghai, and the first batch of job demands for high-end talents of the Group were released simultaneously. Yang Hong, Vice President of Shanghai Electric, attended and delivered a speech. She said that during the important period of development opportunity of 5G network and industrial internet promoted by the country, we should make good use of the platform resources of the high-end talent recruitment forum and give full play to the strength of all walks of life to fill the gap of high-end professional talents as soon as possible and accelerate the transformation and upgrading of each industrial segment of Shanghai Electric.

"Seagull Project" — Building a Career Stage for Women

The "Seagull Project" targets female university students and provides comprehensive and systematic career support from three aspects of recruitment and employment, career counseling and career planning. In order to better help female university students find jobs and attract more outstanding talents, the "Seagull Project" enterprise visit event was held at Shanghai Electric on October 30, 2020, which was organized by Shanghai Women's Federation and Shanghai Municipal Education Commission and hosted by Shanghai Electric. Fourteen guests from the Shanghai Women's Federation, the Women's Work Committee of Shanghai Education System, Shanghai Women Entrepreneurs Association, and Shanghai Electric attended the event. Nearly 30 female fresh graduates from eight universities in Shanghai, including Fudan University and Donghua University, participated in the activity.

Through the discussion of issues and sharing of topics, the fresh graduates and the sharers of Shanghai Electric had a collision of ideas, which burst out the sparks of young minds. The event successfully concluded and established the corporate image of Shanghai Electric as a company that always cares about women, has built a platform for women and explores female talents, and provided nearly 30 potential candidates for the 2021 campus recruitment.



In **2020** Shanghai Electric recruited a total of **1,567** new employees
 bringing its workforce to **39,312**. The labour contract signing rate was **100%**
 and the social insurance coverage rate was **100%**.



Year	Total number of people	Male	Female
2018	30,182	24,063	6,119
2019	33,720	25,290	8,430
2020	39,312	30,939	8,373

Year	<20 years old	20-29 years old	30-39 years old	40-49 years old	50 years old and above
2018	3	7,893	8,734	6,987	6,565
2019	10	9,398	9,776	7,570	6,966
2020	12	10,396	11,376	10,429	7,099

Year	Management	Production	Sales	Technical research	Financial audit	Administrative logistics
2018	2,083	13,895	2,782	9,056	903	1,463
2019	2,709	15,202	3,072	10,206	991	1,540
2020	3,638	17,111	2,861	12,478	1,245	1,979

Year	Doctor's degree	Master's degree	Regular college	College degree	Below College degree
2018	125	2,765	11,356	6,534	9,402
2019	142	3,115	13,133	7,348	9,982
2020	189	3,658	14,924	8,124	12,417

Year	Senior managers	Middle managers and engineers	General technical and management staff
2018	202	8,286	7,799
2019	207	9,519	8,792
2020	210	9,802	10,060

Employee turnover (as a percentage of the total workforce)

Year	Gender		Age				Region	
	Male	Female	Below 30	30-39	40-49	50 and above	Shanghai	Non-Shanghai
2019	1.8%	0.3%	1.1%	0.7%	0.3%	0	2.1%	0
2020	1.9%	0.3%	0.9%	1.0%	0.2%	0	2.2%	0



Labour rights

Protecting the legitimate rights and interests of employees has been being the commitment of Shanghai Electric. We strictly abide by international and domestic laws and regulations such as *the Labour Law of the People's Republic of China, the Labour Contract Law of the People's Republic of China, the Employment Promotion Law of the People's Republic of China, the Special Regulations on Labour Protection for Female Employees, the Trade Union Law of the People's Republic of China, the Law on the Protection of Minors of the People's Republic of China, and the Regulations on the Prohibition of Child Labor*, and protect rights and interests of employees from all aspects. Strict rules and regulations on working hours, compensation, benefits, performance and other aspects were set out in the *Shanghai Electric Employee Handbook* formulated by us, which reflected Shanghai Electric's respect for the legitimate rights and interests of its employees and its fair and equitable human resources management idea. Shanghai Electric has been committed to the fairness of employees' compensation, and we are constantly optimizing the compensation and benefit structure of our employees to ensure that employees are paid for the results of their work.

Recruitment	Employment	Holiday
<p>Fair and open principle</p> <p>In the recruitment process, we follow the concept of "openness, fairness, impartiality, competition and picking out the best"</p>	<p>Anti-forced labor</p> <p>Shall not restrict the physical and mental freedom of employees for any reason or force them to work against their will</p>	<p>Working hours</p> <p>Observe the working hours stipulated in the labour laws of various countries and regions</p>
<p>Prohibition of discrimination</p> <p>The Company offers equal opportunities to employees regardless of their color, ethnicity, race, national origin, social background, disability, religion, gender or age</p>	<p>Prohibition of child labor</p> <p>Prohibit the employment of minors under 16 years of age. If child labour is found after employment, measures shall be taken immediately in accordance with the prescribed procedures</p>	<p>holidays</p> <p>Employees enjoy all statutory holidays in accordance with the law, and the Company provides additional paid leave, wedding leave, maternity leave, personal leave, etc.</p>

Democratic management

Shanghai Electric believes that all employees can understand, participate and monitor our management, and help us to make continuous improvements and progress. In response to management suggestions from our employees, Shanghai Electric has established a proposal review committee under the staff and workers' representative congress to encourage employees to provide feedback on the relevant management processes of Shanghai Electric in the form of proposals, such as technological progress, development strategies, production and operation management, reform and adjustment measures, cultural and ethical progress, human resources development, labour relations handling, safety production, wages and benefits, etc. We have established a strict proposal processing process. Shanghai Electric will accept and handle each proposal that meets the requirements, and send written feedback from the relevant departments to the proposer.

Held the fifth session of the second staff and workers' representative congress

Due to the impact of the pandemic, Shanghai Electric convened the fifth session of the second staff and workers' representative congress of the Group online, at which the *Special Collective Contract of Shanghai Electric Group for Wages 2020* was considered and approved.

We have conducted a written survey on the construction of the system of grass-roots enterprise staff and workers' representative congress, set up red, yellow, green and blue alerts for enterprise staff and workers' representative congress, and urged them to make election at expiration of office terms and run normally. At the same time, the *Operational Guidelines of the Grassroots Enterprise Staff and Workers' (Representative) Congress* was issued at the staff and workers' representative congress.

We have set up trade unions. We will explain the rights and obligations to join the unions for new employees after they join in the company, and respect their wishes to join or not. The trade unions act as representatives to sign collective contracts with the enterprise, which cover all employees in the unions. As of December 31, 2020, all employees of Shanghai Electric were labour union members.

Collective Wage Bargaining Meeting

At the 2020 collective wage bargaining meeting of Shanghai Electric, the employee side and the administrative side reached a consensus on the formulation of the *Special Collective Contract of Shanghai Electric Group for Wages 2020 (Draft)*. During the special period of the pandemic, in accordance with the *Tips on Collective Bargaining Work for Enterprises during the Pandemic Prevention and Control Period* issued by the Municipal Federation of Trade Unions, the Municipal Federation of Enterprises and the Municipal Federation of Industry and Commerce, and under the concept of positive bargaining and getting through difficulties together, the employee side and the administrative side reached an agreement on the adjustment of the wages of employees in 2020, and issued the *Guidance Opinions on Wage Adjustment in Response to the Pandemic in 2020 of Shanghai Electric Group* (《上海電氣集團2020年應對疫情工資調整指導意見》), so that enterprises and employees can discuss with each other and overcoming difficulties together. The Mechanical and Electrical trade union and the Human Resources Department of the Group have inspected the collective bargaining and the implementation of *Guidance Opinions* carried out by the enterprises.



Employee communication

In order to better understand employees' demands, strengthen democratic communication, and solve problems encountered by employees in their life and work, Shanghai Electric has built a complete employee communication system. In order to give employees the opportunity to communicate with executives in depth, we have held a series of "Face to Face with Executives" activities; we have set up a column of "Listen to the Voice of Youth" to give young employees the opportunity to communicate and understand the ideas of staff at different levels and in different departments, so as to enhance employees' comfort and satisfaction in working at Shanghai Electric.

Seminar of Youth Officials — Constructing the "Electric Dream" with the power of youth

On the morning of March 19, Zheng Jianhua, Secretary of the Party Committee and Chairman of the board of directors of Shanghai Electric Group, held a discussion with 14 young officials from various enterprises to listen to their new ideas, suggestions and thoughts on the development of the Group, and to put forward their expectations and requirements. Those young officials communicated and gave speeches one by one on aspects of their own work conditions, work experience and prospect, and put forward their suggestions and ideas on promoting the quality development of the Group by taking into account their own work positions.



Shanghai Electric "Heart Voice Platform"

In 2020, Shanghai Electric launched the "Heart Voice Platform" project, aiming to become a direct channel for the senior management of Shanghai Electric to listen to the voices from front-line employees, motivate the employees to actively participate in corporate management, give full play to the "owners" spirit, and break through the vertical and horizontal barriers of the Group's internal management system by means of dialogue. The platform has set up three sections, namely, "Happy Questions", "Family Matters" and "Voting", to open up the communication channels for employees in all aspects and strengthen their communication from the senior employees to the grass-roots employees.



Happy Questions:

To focus on business, promote the discussion of some technological innovation and management improvement topics, so that more employees can understand the development direction and strategy of the Group. To set up topic tags on management improvement, corporate governance, culture construction, etc., initiate online topic discussions and responses, and widely collect employees' rationalization proposals and innovation and efficiency proposals.

Family Matters:

A board for employees' spontaneous and autonomous daily communication, which aggregates topics of interest, and cultivates a rich, diversified and energetic discussion atmosphere, mainly for enhancing the attractiveness and stickiness of the platform.

Voting:

An auxiliary tool to forum speaking, helping employees who want to express themselves but can't get the words right to convey their thoughts, feelings and emotions in a lighter way of thinking.

We hope to build a one-stop corporate community platform exclusively for Shanghai Electric by building a "Heart Voice Platform" and constructing an equal, inclusive and open space for information interaction, driving management improvement through dialogue and promoting cultural consensus through communication.



At the same time, we actively collected proposals from employees, and evaluated and selected the Group's excellent rationalization proposals. During the reporting period, Shanghai Electric collected a total of 4,269 rationalized proposals, of which 124 were submitted for the Group's evaluation on excellent rationalization proposals, and a total of 2 first prizes, 4 second prizes, 4 third prizes, 10 outstanding prizes, and 34 finalists were awarded, reflecting Shanghai Electric's positive attitude towards the adoption of employees' rationalization proposals.

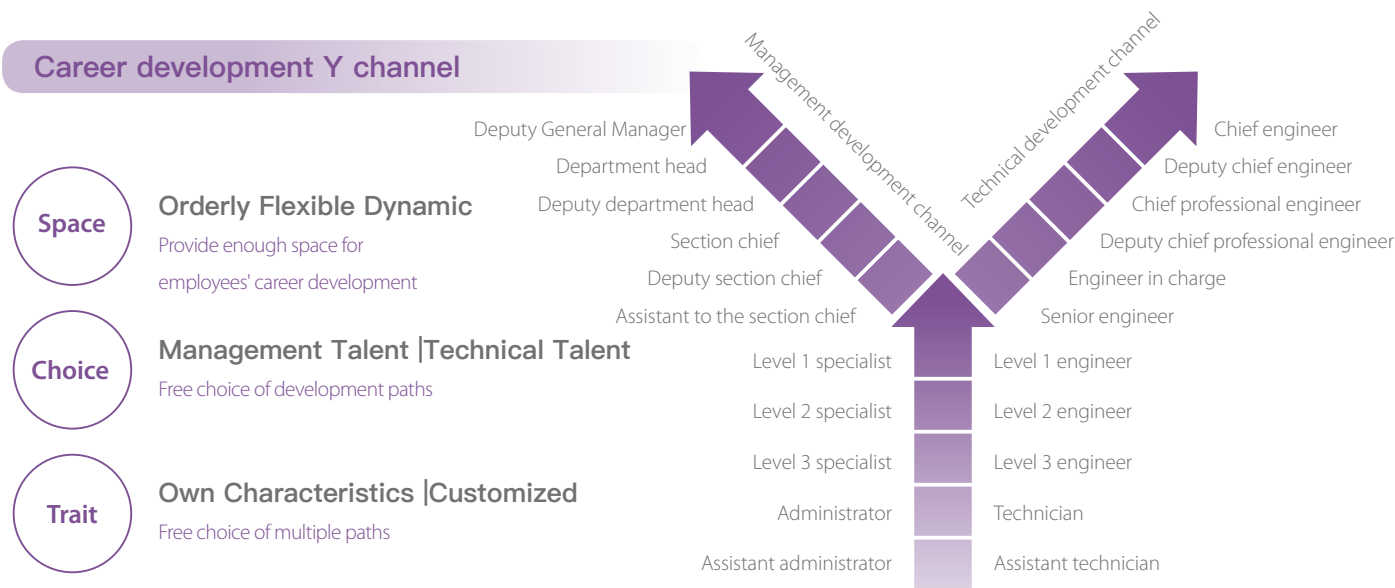
During the reporting period, most of the labour litigation and arbitration cases of the Group were concluded. The disputes in these cases mainly focused on the termination of labour relations, the calculation of the difference between various remuneration packages and some historical issues, which were properly resolved through the Group's active response to the litigation. With regard to the problems reflected by the cases, through targeted analysis, legal guidance or business training have been provided to the relevant business departments to clarify the business requirements and optimize the handling processes.

Development and incentives

Adhering to the concept of common development of the Company and its employees, being committed to cultivating and motivating employees to grow and develop continuously.

Development and incentives

Talent-led development is the foundation of a strong enterprise that Shanghai Electric always adheres to. We uphold the open employment concept oriented by ability and performance, and have built a systematic training and selection mechanism to distinguish the real talents. Shanghai Electric has set up the best growth stage for employees. We have carefully laid out a multi-channel career development path, and established a "Y-shaped" two-way career development path for technical positions and management positions, providing various career development opportunities for different types of talents.






We respect talents, and promise that every value created by our employees for the Group will be actually rewarded. We adhere to the performance management principles of "strategic guidance, performance orientation, index diversity, interest relevance, fairness, justice and openness" and have established a performance appraisal system for employees based on the "Performance Management" system to develop employees' potential and ensure the sustainable development of talents.

Employee incentive

<p>Shanghai Electric is willing to share the benefits with all the employees who have created value. Shanghai Electric is committed to making a sound and long-term incentive mechanism as an important measure to improve corporate governance, mobilize the enthusiasm of core and key employees, and promote returns on shareholder value, the medium and long-term development of the Group and the interest binding of our core team.</p>	<p>During the reporting period, we implemented the restricted A-share incentive scheme for the first time for our middle-level and above employees. Relying on the pilot policy for professional managers of state-owned enterprises in Shanghai and the share incentive policy for listed companies, 2,194 core employees, including the management members of the Group, were granted a total of 134 million restricted shares, ranking fourth among 153 listed companies in terms of the number of employees incentivized. The core employees are confident in the Group's development and are united in their determination to share the development and achievements with the Group.</p>	<p>We have compiled the <i>PES (Power, Energy, Stress) Incentive Scheme Policy Database Case Collection</i>, adopting 12 kinds of incentive policies to stimulate the momentum of leapfrog and innovative development of enterprises, focusing on encouraging enterprises to explore mechanism innovation in parallel with industrial and product development, using the mechanism to lead development, stimulate innovation and activate employees, so as to provide more effective policy protection and capacity support for the Group's strategic development and practical innovation.</p>
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Training system

Shanghai Electric is committed to cultivating more high-quality talents and building a more efficient and excellent team. We have designed a variety of training programs for employees at different positions and levels to establish a complete employee training system. From the "1+3+5" training model for young university graduates to leadership development training for management talents, we carry out talent training in different dimensions, such as corporate culture, professional skills and management skills.

Training program	Participants	Program Introduction	
Shanghai Electric Young Talent Pool	The Group's reserve cadres, talents in various professional fields	The project of Shanghai Electric Young Talent Pool is dedicated to building a "reservoir" for senior talents in various fields within the Group. The project covers three stages: the team establishment period, the navigation period and the launch period. According to the characteristics and abilities of the trainees, the training is divided into seven directions: enterprise management, project management, market management, intelligent manufacturing, R&D innovation, investment management and craftsmanship. Through various forms of classroom training, workshops, action learning, post practice and mentorship, the program integrates talent assessment and helps the young people in the pool find their development position and orientation.	
Shanghai Electric Hundred Talents Plan	Enterprise reserve cadres and business backbones	Through cross-enterprise exchange and training, the Hundred Talents Plan provides opportunities for reserve cadres and young cadres of enterprises at all levels to learn advanced management concepts and models. Based on the "70/20/10 Talent Cultivation Model Law", the program arranges relevant management courses for trainees, sets up performance achievement, case extraction, training and learning, and work innovation tasks, and assigns mentors to trainees for teaching, while incorporating evaluation tools such as questionnaire assessment and personal presentation to help trainees grow quickly.	
Shanghai Electric Spark Plan Outside Shanghai	Enterprise reserve cadres and business backbones	According to Spark Plan Outside Shanghai, the Company organized the employees of its subordinate business divisions and enterprises to rotate on the posts outside Shanghai for practice, adopting a three-dimensional management method of "short training and long practice" to carry out three stages of personnel training, arranging courses related to corporate culture and management knowledge in the training contents, setting up performance achievement, case extraction, training learning and work innovation tasks during the holding a temporary position, and improving the trainees' business management capabilities through phased and centralized training and integration with talent assessment.	

In 2020, we expanded new training courses based on the original training system to pass our missions of digitalization, internationalization, and "enabling global industries, intelligently creating better lives" on to every employee's work.

Promoting Digitalization—Advanced Seminar for Digital Transformation Talents

The Advanced Seminar for Digital Transformation Talents focuses on cultivating leaders to support the digital transformation strategy of Shanghai Electric, starting from two major aspects of conceptual transformation and capability transformation, setting up rich training courses and diversified training methods to enhance the cognition of trainees on themselves, organizations and industrial ecology from the perspective of enterprise digital transformation, carrying out interdisciplinary learning and benchmarking learning, internalizing what they have seen and learned, and deepening their thinking on digital transformation. The courses are arranged in a combination of internal and external methods, and some internal electric digital experts and external industry experts are invited to provide training from the perspectives of enterprise digitalization transformation practices, cutting-edge digitalization technologies, intelligent manufacturing, industrial internet, digital leadership, digital innovation, etc.



The training participants include senior management of business divisions and third-level enterprises; leaders in charge of technical line, manufacturing line, sales service line and digital work line, and key department heads.

International Development – Shanghai Electric Internationalization Talents Training Program



The Shanghai Electric Internationalization Talents Training Program is dedicated to cultivating internationalized talents who understand overseas markets and can adapt to global operations. The program cultivates trainees through centralized offline training, online learning, and overseas on-the-job training. And at the same time, it arranges courses on cross-cultural communication, project management, problem analysis and solution, and conducts talent assessment through questionnaire evaluation and personal presentation. The training participants are overseas project management personnel.

During the reporting period, our network learning platform "E Academy" was officially launched. Based on the requirements of positions and work tasks, we have established a course system with multi-dimensional hierarchy in terms of literacy, knowledge and skills, which is closely integrated with the business practices of Shanghai Electric in the aspects of strategy, legal affairs and risk control to improve the effectiveness of learning. The content of the platform covers Party building, scientific research, finance, legal affairs and other important areas to effectively meet the learning needs of the employees. In 2020, E Academy has 15,000 online users, covering 207 enterprises.

	Female			Male		
	High level	Middle level	General employees	High level	Middle level	General employees
Coverage rate	100%	100%	100%	100%	100%	100%
Average time (days)	8	6	3.6	8	6	3.6



Health and Safety

Continuously enhancing the safety awareness of the employees and strengthening the management of safety in production to protect the physical and mental health of the employees.

Occupational health and safety management system

Shanghai Electric has always put the health and safety of its employees as its top priority. We understand that the productivity of an enterprise is closely linked to the health and safety of its employees and are therefore committed to providing the safest and healthiest working environment for our employees. We strictly abide by national laws and regulations such as the *Law of the People's Republic of China on Workplace Safety*, the *Law of the People's Republic of China on the Prevention and Control of Occupational Diseases*, the *Measures for the Administration of Emergency Plans for Workplace Accidents*, prevent and reduce all kinds of accidents in connection with workplace safety, establish our own occupational safety and health management system and propose standardized management measures for the occupational safety and health of all employees guided by the requirements of the ISO 45001:2018 Occupational Health and Safety Management Systems — Requirements of the GB/T 33000-2016 *Basic Norms for the Workplace Safety Standardization of Enterprises*. During the reporting period, we completed the evaluation and revision of the *Emergency Plans for Workplace Accidents of Shanghai Electric* and the *Statistics Management on the Reporting and Handling of Workplace Accidents and Environmental Pollution Incidents*, and specifically formulated the *Implementation Plan for the Three-Year Action on Special Rectification of Workplace Safety of Shanghai Electric* and *Implementation Plan for the Three-Year Action on Occupational Health Work of Shanghai Electric* to comprehensively improve the workplace safety management system of the Group. In addition, in order to safeguard the "three-step" development strategy of Shanghai Electric, our workplace safety and environmental protection committee has continued to promote the improvement and optimization of the Group's projects in terms of environmental risk classification and control, effectively preventing and curbing the occurrence of various workplace accidents in the projects, and continuously improving our own risk management capability and risk control level. The Group's workplace safety and environmental protection committee holds regular meetings to discuss and consider the Group's workplace safety work plans and key projects, as well as to study and make decisions on workplace safety issues and major matters. In 2020, the Group held a total of more than 20 meetings including workplace safety meetings, semi-annual workplace safety promotion meetings, workplace safety and environmental protection committee meetings, regular safety meetings of business divisions and key units and special working meetings, which helped promote the operation of the "vertical to the end and horizontal to the edge" safety management network.



01 Management system building

- Developed the Group's EHS development strategy and plan, and provided guidance to subordinate enterprise on developing sub-plans
- Optimized and updated the EHS management system and operating procedures, guided and reviewed the revision of subordinate enterprises' systems

02 Risk control and emergency management

- Identified sources of danger, occupational hazards and environmental factors in the Group, carried out risk assessment, and established and implemented major risk control measures
- Established and optimized the Group's emergency plan system, and organized emergency drills in the Group on a regular basis

03 Technical management

- Urged production units to implement new technologies, new processes, new materials, new equipment, and the "three simultaneous" stipulation for new construction, alteration and expansion projects
- Organized feasibility studies, safety and environmental reviews and final acceptance of construction for the Group's major productive construction projects

04 Supervision and management

- Implemented EHS vertical management and supervision, and developed inspection and supervision plans
- Organized the Group's EHS performance assessment, evaluated management and implementation by various business divisions and production units

05 Culture building and training

- Promoted the publicity of safety culture and the application of safety technologies
- Identified the environmental and safety training needs of the Group, business divisions and various units, and assisted and guided the implementation of training



During the reporting period, we organized the formulation of the *Project Safety and Environmental Management Standard of Shanghai Electric*, and the *Implementation Manual for Project Safety and Environmental Risk Control of Shanghai Electric*, providing guidance and support for the smooth progress of the Group's overseas construction projects. In addition, in order to better manage the Group's accidents in connection with workplace safety and their handling, and to collect, compile and analyse the incidents that occurred, we organized the revision of the system of the *Statistics Management on the Reporting and Handling of Workplace Accidents and Environmental Pollution Incidents*, set up a complete accident account and file, and supervised the implementation of the requirements of the "four non-tolerances".

In 2020, the Group held the safety bottom line, and did not deviate from any workplace safety targets. Throughout the year, there were 0 fatal accident, 1 accident that resulted in serious injuries, and 43 accidents that resulted in minor injuries, resulting in the loss of a total of 2,730 working days. There were no workplace and fire accidents that had a serious negative impact on society. Meanwhile, all business divisions and subordinate enterprises basically met the occupational health and safety objectives and targets set in the *Letter of Responsibility of Shanghai Electric for Workplace Safety and Environmental Protection* to which they were signatories.

During the reporting period, some of the awards of Shanghai Electric in the area of health and safety are as follows:

Awards in area of Health and Safety

- 1 Shanghai Electric Wind Power Group Co., Ltd. was awarded the title of National Safety Culture Building Demonstration Enterprise
- 2 Shanghai Electric Machinery Co., Ltd. (上海電機廠有限公司), Shanghai No.1 Machine Tool Works Co., Ltd. (上海第一機床廠有限公司) and Shanghai Mitsubishi Elevator Co., Ltd. (上海三菱電梯有限公司) were awarded the title of Shanghai Safety Culture Building Demonstration Enterprise





Safety and health training and publicity and implementation

The implementation of safety concepts into the daily work life of our employees is a top priority of Shanghai Electric's safety work. We have continuously strengthened the construction of the safety capability of the employees and developed a health and safety training programme for our employees, and we proposed demands and plans for the training, publicity and drills of the employees, so that the health and safety system can be implemented in a progressive manner.



In 2020, we launched two online safety and environmental training courses on the official website of "E Academy", namely the *Interpretation of the Reform and Development Opinions and the Party and Government's Joint Responsibility* and the *Safety Culture Building of Shanghai Electric*, and organized and completed eight safety and environmental training courses, including the Operation and Management Requirements of Enterprise EHS System, the Interpretation of Construction Project Safety and Environmental Risk Management Standards and the Standardisation of Safety Production, with a total of over 3,400 participants.

In order to better develop and implement workplace safety-related systems and measures, during the reporting period, the Group, business divisions and subordinate enterprises organized and carried out a "Safe Production Month" activity centered around the theme "preventing risks, removing hidden dangers, and curbing accidents", popularized safety knowledge and enhanced safety awareness through different dimensions and forms, reduced the probability of accidents in connection with workplace safety and improved the overall workplace safety level of the enterprise.



Safe Production Month Activities of Shanghai Electric

Publicity implementation and education

- ◆ Combined the methods of the leading cadres to take the lead to speak, experts and scholars to speak in depth and front-line personnel to speak in an interactive way, to give all employees a "production safety class"; carried out in-depth risk education and production safety talk activities in the front-line team with the main content of preventing risk and inspecting hidden dangers. According to the statistics, the person in charge of each enterprise made a total of 123 presentations.
- ◆ The Group organised and implemented training on topics such as "Management related to Enterprise Environmental Impact Assessment" and "Safety and Environmental Risk Control Standards on Construction Projects of Shanghai Electric".
- ◆ Party and management leaders of the Group and other enterprises organised 184 sessions to learn about the important discourses on production safety and the requirements of equal responsibility of the Party and management team, with 3,241 participants.
- ◆ The enterprises opened 85 workplace safety columns, produced 125 special videos, conducted 282 warning education sessions, educated 34,354 people, posted or hung 2,257 safety slogans, banners, wall charts, etc., and broadcast 499 safety public service announcements and videos

Governance and inspection

- ◆ Re-identified safety risks, and revised risk descriptions and risk management measures based on the identification results in a timely manner
- ◆ Conducted the standardisation of workplace safety and the internal audit of EHS system
- ◆ Carried out such activities as "workplace safety peckers", "enterprise risk scanners" and "microscope for hidden dangers" for comprehensive and in-depth investigation and remediation of safety risks and hazards at key locations and key links to prevent workplace accidents at source. A total of 414 activities were carried out in various enterprises, with 2,084 non-compliant issues identified.
- ◆ The property companies carried out such activities as "identifying hidden dangers around us" and "special rectification picketers", actively reporting risks and hidden dangers and investigating safety violations to nip them in the bud. A total of 24 activities were carried out and 50 non-compliant issues were identified.

Publicity and promotion

- ◆ Organised the cadres, staff and employees to watch and learn at the "Safety Production Talk" cloud classroom run by the State Council Safety Commission Office and the Ministry of Emergency Management, with a total of 7,771 visits; used new media platforms such as websites, Weibo and Wechat to organise 263 online live or promotional activities such as "open classes", "micro classes" and "public lectures", with a total of 10,235 participants.
- ◆ In accordance with the relevant requirements of the Office of the Organising Committee of the National Safety Production Month Activities, we actively organised the cadres, staff and employees to participate in the online activity of "National Safety Promotion and Consultation Day", organised 3,396 participants in the online "Public Open Day" and 2,050 participants in the 360 panoramic demonstration of the safety experience venue.
- ◆ Organised some activities for the 2020 National Ankang Cup jointly with the labour union, organised the staff to study the Workers' Safety and Health Awareness and Emergency Skills for the National Health and Safety Cup, and actively participated in the knowledge competition by answering questions.

Prevention and drills

- ◆ Combined with actual situation, the enterprises studied and simulated drills on the plans, including electric shock, lifting injury, explosive dust, fire, hazardous chemicals, limited space, pandemic prevention and emergency response, flood and typhoon prevention and fire fighting, etc. A total of 366 drills were held, involving 9,391 participants.

Care and Support

Continuing to refine and improve the care for our employees, and continuously enhancing their sense of achievement, gain and belonging in their careers.

As Shanghai Electric hopes that every employee can work with peace of mind and grow with us in the big Electric family, we carried out plenty of group cultural activities, tried our best to meet the needs of our employees and provided them with adequate livelihood protection, hoping that all employees can feel the warmth of the Electric family. With this goal in mind, Shanghai Electric has been awarded the honorary title of Enterprise with Harmonious Labour Relations in Shanghai many times, reflecting our people-first culture concept and advocating a perfect work-life balance of our employees.

Group cultural activities

We hope our staff to work hard while maintaining their physical and mental health. Therefore, we actively carried out various cultural and sports activities to allow our staff to showcase their versatility.



Caring for the lives of our staff

Shanghai Electric understands that the miracle we have created is attributed to the hard work of generations of Electric staff, and talent is the foundation of our business. We always care about our employees' lives and hope to help them solve the difficulties in daily life, so that they can feel more relieved, happier and carefree, and increase their sense of happiness and belonging in Shanghai Electric, creating a warm Shanghai Electric family.

Improving the sense of belonging

Established "staff home" outside Shanghai and overseas to provide comprehensive assistance to employees outside Shanghai and overseas to solve their living difficulties and provide them with a platform for cultural exchange, study and entertainment.



Improving the sense of happiness

Since 2018, Shanghai Electric has gathered more than 500 lonely elders who had been diverted from enterprises and left their jobs, focusing on targeted services and exploring new ways and models to serve "lonely elders of the enterprise" together with government departments and social organizations.

We have established an account of the "lonely elders of the enterprise", a basic information database and a rolling mechanism to check the information on visitors, and have set up more than 10 regional stations based on the residence of lonely elders to provide services such as daily care and hospital visiting.

Shanghai Electric does not forget the old leaders, model workers and experts who have made outstanding contributions to the development of the enterprise, as well as those employees who suffer from serious illness or have family difficulties, and sends them warm greetings and care on a regular basis.

Improving the sense of safety

In order to allow parents to work with peace of mind, Shanghai Electric has set up a "Summer Care Class" to help employees take care of their children in a holistic manner, helping them to develop "morally, intellectually, physically and aesthetically".

Shanghai Electric makes every effort to solve housing problems for its employees. In order to help different groups solve their housing problems, we provide diversified housing solutions: talent apartments for young employees; public rental housing for married employees; housing loans and subsidies for employees who purchase their own houses, in order to solve employees' housing worries in a targeted manner.



Helping the New Shanghai Electric staff — Renovating talent apartment

For Shanghai Electric, fresh graduates are a solid foundation for our team. In order to ensure our fresh graduates to work without worry, we have renovated the Group's talent apartments during the reporting period to improve the living conditions and enable our staff to live and work in peace and happiness.

The renovated single-room apartments are designed to meet the living needs of two persons, and are equipped with common facilities such as single beds, tables and chairs, wardrobes and integrated bathrooms, as well as household appliances such as split air-conditioners and individual water heaters, and pre-installed fiber-optic network access, basically meeting the demand for "turnkey" apartments. In addition, based on the feedback from the young staff, the Mechanical and Electrical Design Institute, as the designer, has also thoughtfully provided the apartments with a non-motorised vehicles park and a communal washing and drying area, equipped with common facilities such as washing and drying machines, communal water dispensers and microwave ovens. In order to provide better services, the property company has commissioned a third-party professional organization to manage the apartments, which will create a 24-hour security environment through an intelligent monitoring and management system, as well as a number of one-to-one housekeeping services for the staff, such as in-room cleaning, sending to hospital by special vehicles, collection of large items and moving appointments.



Organizational care warms people's hearts, and overseas employees' morale is high

Shanghai Electric carried out an activity to call for papers named "A Letter from Home" and "Heroes Who Fight Against Pandemic by My Side", and received 121 papers, which encouraged all employees to fight against COVID-19.

On April 21, the overseas pandemic was at the initial stage of outbreak. To be well prepared for long-term combat, all overseas project departments need to fully understand the differences in overseas culture, habits, and cognition. Zheng Jianhua, Chairman of the Group, extended his sincere condolences to all overseas employees via video, thanked all overseas employees for ensuring that the overseas pandemic is overall controllable under such difficult circumstances, and extended sincere greetings and highest respect to all overseas employees.

We issued the *Notice on Strengthening the Care for Overseas Employees During the Pandemic Period* to better protect the relevant interests of overseas employees; spared no effort to organize the export of pandemic prevention materials and medical supplies, actively explored chartered flights to transport personnel to and from overseas projects, and worked hard to coordinate with the government to transport employees back to China via flights (solar thermal power project in Dubai, Pakistan Thar coal-electricity integration project, Servi Panchevo project were all successfully chartered flights), tried our best to connect with the city's SASAC and the Center for Disease Control, and arrange vaccinations for personnel who are leaving the country for business in a timely manner.



Chartered flight for Pakistan Thar coal–electricity integration project

Under the impact of the pandemic, many employees of Shanghai Electric's Thar coal-electricity integration project in Pakistan cannot return to the homeland. With the help and guidance of relevant departments of Shanghai Municipal Government, Shanghai Electric actively contacted airlines to arrange charter flights, eliminated obstacles and overcame difficulties, and strived to coordinate charter flights. On August 4, 2020, 224 project builders of Shanghai Electric took flight CA553 of Air China to Pakistan to replace their colleagues in foreign country and stay at the project site, in order to realize their wishes of returning home. In the execution of charter flights, Shanghai Electric formulated a thorough plan to provide the highest standards of protection and personal protection throughout the entire process, point-to-point connection, and safely escorted employees to the project site and picked up the employees based in Pakistan.



Care for female employees, warm up half of the sky

Shanghai Electric regularly organizes health checkups for female employees, such as screening for gynaecological conditions, and cares for the physical condition of female employees in all aspects.

Subsidiaries of Shanghai Electric have built "caring mommy huts" to provide a private and hygienic rest place for female employees who are pregnant and breastfeeding. Shanghai Electric continues to improve the functions of the huts in terms of hardware and software. Many companies' "caring mommy huts" are not only equipped with refrigerators, ultraviolet drying and disinfecting cabinets, sofas, chairs, screens, lounge chairs and other daily supplies, but also equipped with books on women's health, child care, early education, etc.

05 LOW-CARBON "SMART" WISDOM, PRACTICE GREEN DEVELOPMENT

In the context of climate change, energy shortage, natural ecological degradation and serious environmental pollution, Shanghai Electric regards environmental protection as an important support for sustainable development and integrates it into every link in the industrial chain. From the green management, energy saving and efficiency enhancement, and emission reduction, it demonstrates that Shanghai Electric continues to explore more environmentally friendly operating models, and is committed to reducing environmental impacts, maintaining ecological balance, and creating green value during the full service cycle.

Green management

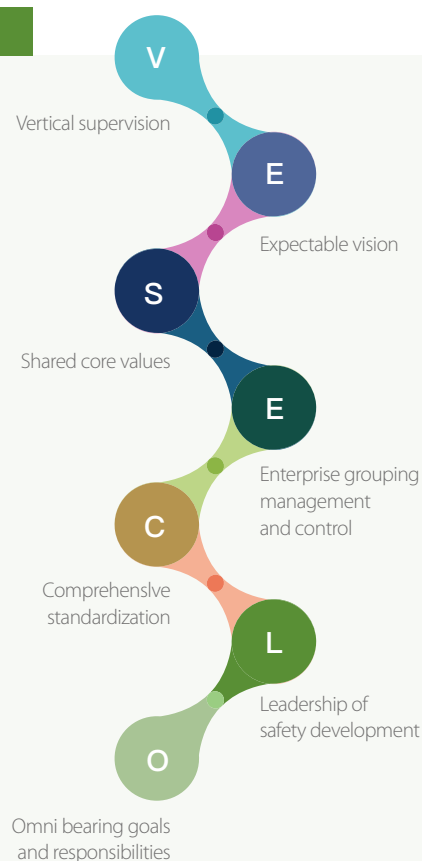
Keep improving "SEC-LOVE" system to promote risk management of industrial chain environment

As China's modernization process keeps advancing, the environmental and ecological problems have become increasingly prominent. Shanghai Electric has always regarded green management as the focus of the Company's future development and strictly abided by the environmental protection laws, regulations and standards of the industry where it operates, such as the *Environmental Protection Law of the People's Republic of China* and the *Clean Production Promotion Law of the People's Republic of China*. And we have formulated environmental protection policies such as *Safety in Production and Environmental Protection Management System of Shanghai Electric*, *Implementation Rules of Safe Production and Environmental Protection*, *Implementation Rules of the Party and Management Team Responsibility for Safety in Production and Environmental Protection of Shanghai Electric*, *Responsibility System of Safety in Production and Environmental Protection of Shanghai Electric*, and *Investigation and Treatment of Hidden Hazards in Production Safety Accidents and Environmental Pollution*, so as to strengthen the functional positioning of environmental protection, implement control over the entire production process, and comprehensively enhance the management level of the safety in production and environmental protection management system. During the year, we formulated the *Three-Year Action Plan of Environmental Protection and Governance of Shanghai Electric* to closely follow the requirements of the national "14th Five-Year Plan", further strengthen environmental protection compliance management, and comprehensively improve the corporate pollution control level and environmental risk prevention and control capabilities.

Shanghai Electric's "SEC-LOVE" System

Shanghai Electric's "SEC-LOVE" system is composed of elements such as sharing core values, control collectivization, comprehensive standardization, safety leadership improvement, all-around goals and responsibilities, vertical supervision and predictable vision, which have been integrated into the modern group management and control system. The system improves all-round goals and responsibilities, pays equal attention to both process-oriented and result-oriented goals, promotes the implementation of responsibility lists of vertical and horizontal departments, and implements the overall standardization of safety in production, occupational health and environmental protection management. Guided by the "SEC-LOVE" sharing core values, control collectivization, comprehensive standardization, safety leadership improvement, vertical supervision and predictable cascade vision, we will achieve a good integration of management needs between different levels and the integration of the group's overall management and control, and improve the pertinence, adaptability and operability of the system operation. In 2018, we compiled the *Manual of Occupational Health and Safety and Environmental Protection Management for the Group*, business divisions and production and operation departments, and completed the comprehensive construction of Shanghai Electric's safety in production and environmental protection management system.

In the "14th Five-Year Plan", Shanghai Electric will continue to improve the construction of "SEC-LOVE" system, and provide global customers with greener, environmentally friendly, intelligent, and interconnected products and technology integration and system solutions, and actively develop new green industries and seek to realize the innovation to replace old growth drivers with new ones rapidly.





Four Shanghai Electric companies entered the list of the first batch of green manufacturing system demonstration units

As one of the main tasks of the "Made in China 2025" strategy to strengthen China, *Green Manufacturing System Construction* is the main objective of the *Shanghai Green Manufacturing System Construction Implementation Plan (2018-2020)* (《上海市綠色製造體系建設實施方案（2018-2020年）》).

In 2020, the Group recommended Shanghai Electric Machinery Co., Ltd., Shanghai Mitsubishi Elevator Co., Ltd. and other companies to establish green demonstration factories. These companies have entered the list of the first batch of green manufacturing system demonstration units through special guidance, professional third-party evaluation budgets and the approval of the Ministry of Industry and Information Technology.

Environmental risk management

In order to ensure Shanghai Electric's "three steps forward" development strategy, constantly promote the improvement and optimization of hierarchical management and control over the safety and environmental risk of the Group's engineering projects, strengthen the management and supervision of the Group's environmental factor identification and risk assessment and control, and prevent environmental pollution incidents, we have compiled the *Environmental Factor Identification and Assessment Control* (《環境因素辨識及評價控制》) and the *List of Important Environmental Factors and Risks of Shanghai Electric Manufacturing Enterprises* (《上海電氣生產性企業重要環境因素及風險清單》), which required all business divisions and production and operation departments to formulate hierarchical management and control measures according to the risk level, identify environmental factors and establish risk measures for new processes, new technologies, new equipment and new materials in a timely manner, and hire external professional institutions to conduct environmental inspections, risk identification, and evaluation every six months, with special emphasis on spot checks of subordinate enterprises with emission technologies issues, environmental accidents and major inspection items in the responsibility book, to ensure orderly and controllable environmental protection. Furthermore, the Group has compiled documents to provide guidance and support for the smooth implementation of overseas engineering projects, including *Shanghai Electric Group Construction Engineering Project Safety and Environmental Management Standard* (《上海電氣集團工程項目安全環保管理標準》), *Shanghai Electric Group Engineering Project Safety and Environmental Risk Management and Control Implementation Manual* (《上海電氣集團工程項目安環風險管控實施手冊》), *Shanghai Electric Construction Engineering Project Emergency Rescue Plan* (《上海電氣建設工程項目應急救援預案》) and *Collection of Relevant Laws and Regulations on Construction Projects* (《建設工程相關法律法規彙集》).

In 2020, the Group organized a total of 150 safety and environmental protection inspections for 81 units, covering the Group's secondary industrial groups, directly affiliated units, and production units. Among which, the Group leaders led 26 inspections, 5 safety inspections at the end and beginning of the year, and 7 inspections before holidays, 6 safety and environmental protection management inspections (for enterprises outside the city), 34 pandemic prevention inspections, and 72 special inspections. A total of 707 opinions were put forward. During the inspection, 7 red rectification orders and 15 yellow rectification orders were issued for those with higher risks, and currently all rectified as required.

Environmental Management Goal Setting

We have formulated systems such as *Management of Policy Objectives and Indicators for Safe Production Environmental Protection* (《安全生產環境保護方針目標與指標管理》) and *Safety in Production and Environmental Protection Performance Evaluation and Assessment Measures of Shanghai Electric* (《上海電氣安全生產環境保護績效評價考核辦法》). We have compiled annual safety and environmental protection responsibility documents, formulated annual environmental protection objectives, organized safety and environmental performance assessment, once environmental violations occur, they will be included in the annual performance assessment, to ensure the continuous improvement of the environmental management system. During the reporting period, we set four environmental protection indicators in the environmental safety responsibility book:

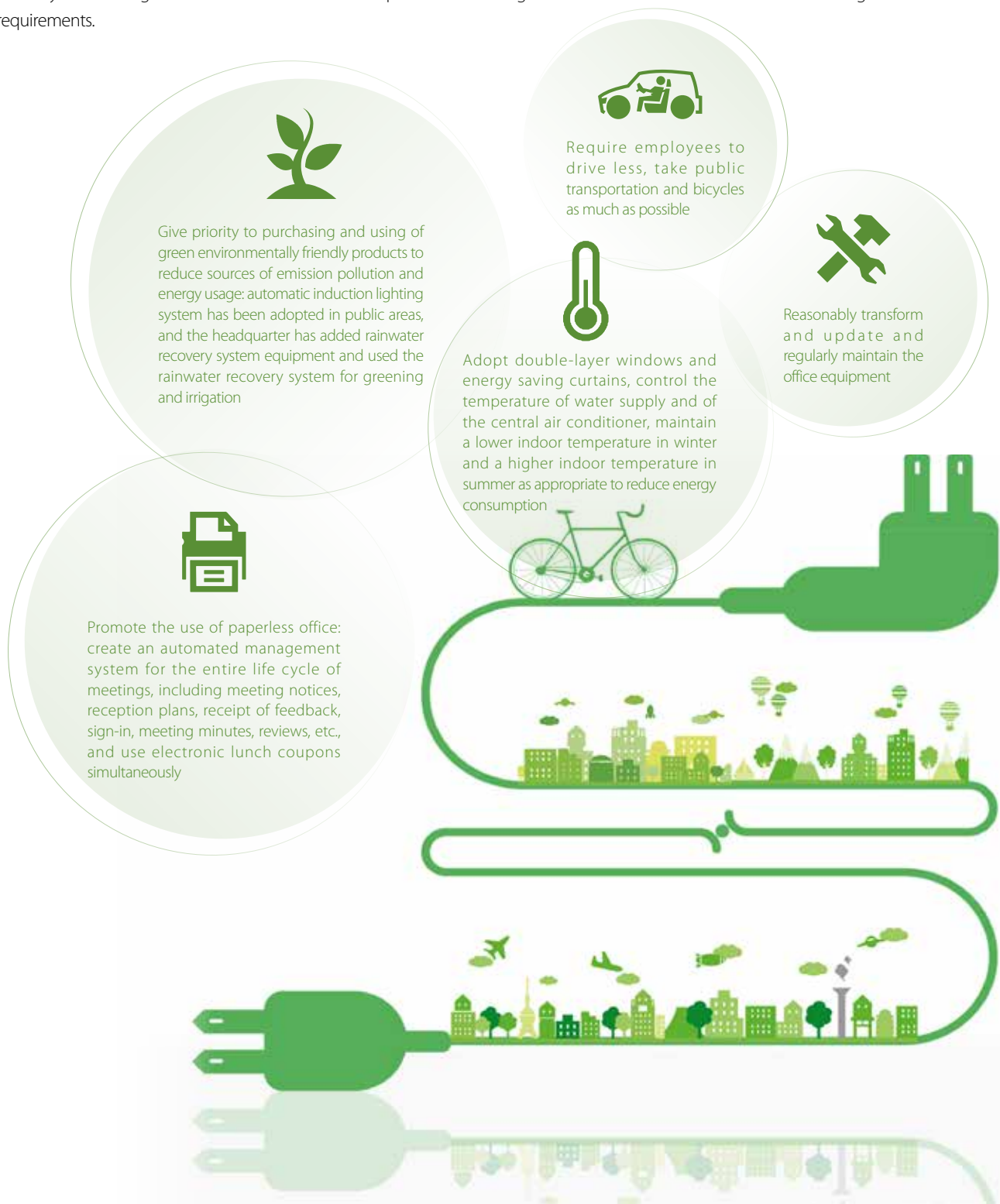


In 2020, we accepted two environmental penalties, with a penalty amount of approximately RMB20,000, decreased about 93% from last year. In the future, we will continue to optimize performance and follow up with relevant government regulations in a timely manner.



Green production and office

Shanghai Electric not only pays attention to environmental protection in the manufacturing process, but also advocates the green and low-carbon office style, guides and drives all employees to form good habits of energy saving and consumption reduction, promotes sustainable office style, builds a green office environment and an environment-friendly enterprise. In order to improve the overall environmental protection level and awareness of employees, Shanghai Electric has carried out various publicity and training activities to ensure that each step of manufacturing meets our standardized environmental management requirements.



The energy saving publicity week of Shanghai Electric

2020 is "Lucid Waters and Lush Mountains, Energy Saving and Efficiency Increase". In response to the call of the National Development and Reform Commission and Shanghai Energy Saving Publicity Week, Shanghai Electric started by enhancing employees' awareness of resources, energy saving awareness, environmental awareness and focusing on key energy consumption units, organized and implemented related activities of the Energy Saving Publicity Week with distinguished theme, plan before implementation. Various forms of energy-saving publicity work have been carried out:

- ◆ Promoted energy saving awareness through broadcasting, propaganda banners and posters;
- ◆ Raised all employees' energy-saving awareness through various forms such as internal information network, restaurant electronic screen, team learning, corporate factory office communication, on-site billboards and internal training courses, etc.;
- ◆ Carried out the suggestions for rationalization activity of "offering a suggestion to corporate energy saving" to enhance employees' sense of responsibility;
- ◆ Actively participated in the Shanghai online energy saving knowledge contest to stimulate employees' sense of participation.

Steam Turbine Factory themed by "Energy Saving on Posts", the publicity activities of "Energy Saving, Green Sharing", self-inspection and special inspection activities of energy saving by departments, and "offering a strategy for energy saving and emission reduction" activities were carried out.



Shanghai Motor Factory focused on "Green City/Green Consumption", we raised employees' awareness of energy saving, carried out clean plate campaign to promote food saving and eliminate waste.



Generator Factory taking "low-carbon office" as the theme, air conditioning of factory offices was turned off for one day, and the lights were turned off for one hour in the office from 12:00 to 13:00 to contribute to energy saving and consumption reduction.



Mitsubishi Elevator Company carried out "JJ" group energy saving and emission reduction activities to actively promote energy saving and emission reduction. 10 projects were submitted in April 2020, of which "Assembly Workshop: Improvement of 366 Item Landing Indicator YA263B296 Button Packaging Method" was selected as *Collection of Shanghai Energy Saving and Emission Reduction JJ Group Activity Cases (Volume 11)* (《上海市節能減排JJ小組活動案例集 (第11冊)》). Through a series of publicity and emission reduction activities, Mitsubishi Elevator Company was awarded as "Energy-saving Publicity Practitioner" of Shanghai in 2020 and "Advanced Unit for Energy Saving and Emission Reduction" of Shanghai in 2018-2019, and "Environmental Protection Green Star Enterprise" of Minhang Development Zone.

Shanghai Electric SHMP Casting & Forging Corporation avoided "damaged operation" of the boiler by carrying out daily maintenance and the first and second degree of maintenance during non-production period; and improved the utilization rate of the boiler and reduce carbon emissions with reasonable production arrangement during the production period.

In the activity of Shanghai Energy Saving Publicity Week, relevant work were recognized by the Shanghai Energy Saving Week Organizing Committee: Shanghai Mitsubishi Elevator was awarded as the Energy Saving Publicity Practitioner; Shanghai Electric Power Station Auxiliary Machinery Plant, Shanghai Steam Turbine Factory, and Shanghai Motor Factory were awarded as Excellent Organizer of Green Energy Saving Contest. Two individuals from Shanghai Motor Factory and Shanghai Mitsubishi Elevator, were awarded as Advanced Individual in Energy Saving and Emission Reduction in Shanghai.

Energy Saving and Efficiency Increase

In the process of production and operation, we strengthened energy efficiency management, and improved the overall utilisation efficiency of energy resources with focus on energy saving and efficiency increase projects and objectives.

Shanghai Electric is committed to promoting green operation and development. According to the 14th Five-Year Plan industrial planning, Shanghai Electric will mainly make breakthroughs in emerging industries, environmental protection and high-end equipment, pay attention to efficient transformation of energy and efficient utilization of resource, continuously improve the Company's environmental management level, and earnestly fulfill the green commitment of building a healthy ecological environment.

New energy

An integrated energy business division has been established, and the strong photovoltaic integration ability and rich engineering experience have been formed. Based on the foundation of the Group, and by taking into account the average earnings and competitive pattern of the industry, and the integrating degree of the Group's industries, the Group will actively improve its solar business layout in the future.

Energy storage

The development of new energy is inseparable from the development of energy storage industry. Energy storage is the foreseeable "blue ocean" in the future. Energy storage can coordinate and be connected with wind energy and solar energy industry. Based on the existing energy storage industry, Shanghai Electric will adhere to the basic positioning with energy storage power station market as the core, increase investment in independent research, and actively explore the direction for business model and technology evolution through demonstration projects.

Wind power generation

During the 14th Five-Year Plan period, the overall market of wind power will be stable and slightly improved. For many years, the Group's wind power industry has maintained the market position of the global third largest and the domestic first newly added offshore wind power installed capacity, and ranking among the top in terms of the comprehensive newly added installation. The Group will not change its original intention, adhere to the goal of "ranking first for offshore wind power and third for onshore wind power", focus on the core of wind power, and realize the business connection of one body and two wings (one body refers to the whole machine business, two wings refer to the wind resource development and the aftersale market). The Group's wind power business is proposed to be listed on the Science and Technology Innovation Board.



Energy and Greenhouse Gas Management

Shanghai Electric strictly abides by the industrial energy conservation laws, regulations and standards of the places where it operates, such as *Energy Conservation Law of the People's Republic of China* and *Measures for the Administration of Industrial Energy Conservation*. It has set up the Economic Operation Department as the functional department of energy management to coordinate the energy management work of the Group. Other corresponding functional departments serve as the primary energy management network and guide and carry out energy management and monitoring work. Various business division and key enterprises establish enterprise energy management centers to supervise and manage the assessment of enterprise energy consumption and energy consumption indicators.

Based on the Group's energy management structure, we formulate annual energy saving targets and conduct energy audits in accordance with the requirements of the Shanghai Economic and Information Commission, and actively implement the elimination of high-energy-consuming and obsolete electromechanical equipment and promote the procurement of high-efficiency and energy-saving products, implement key energy-saving projects and energy-saving technical transformation, organize and participate in energy-saving training and carry out various energy-saving publicity activities.

In 2020, affected by the COVID-19 pandemic, the balanced production of Shanghai Electric was greatly challenged, and the energy efficiency management was faced with unprecedented difficulties. Therefore, Shanghai Electric strengthened energy efficiency management of key energy consuming units, and effectively improved energy utilisation efficiency:

broke down energy saving assessment indicators for its main industrial segments and key energy consuming enterprises, strengthened the target assessment, and supervised and guided the production and energy consumption of key energy consuming units on a monthly basis;

gave full play to the role of the headquarters in economic operation, coordinated and implemented the balanced production of enterprises, ensured the full use of energy and improved energy utilisation efficiency.

Through hard work, Shanghai Electric has fully completed the energy efficiency management objectives for the 13th Five-Year Plan.



The energy consumption of Shanghai Electric in 2020 is shown in the following table:

Energy consumption

Type	2020	Unit
Purchased electricity	32,893	'0000 kWh
Natural gas	6,645	'0000 m ³
Diesel	456.5	tons
Gasoline	1,980,377	liters
Direct energy consumption ¹	91,162	tons of standard coal
Indirect energy consumption ²	40,425	tons of standard coal
Comprehensive energy consumption	131,587	tons of standard coal

Energy consumption density

Type	2018	2019	2020	Unit
Energy consumption per unit of production value	0.02474	0.0089	0.0096	tons of standard coal/RMB'0000 of revenue

Our greenhouse gas emissions are mainly generated by energy consumption in the process of production and operation. In the future, Shanghai Electric will respond to the call of the country, always adhere to the good habit of protecting natural resources and saving social resources, strive to improve the energy structure, actively develop new energy, promote the recycling of energy, accelerate the application of clean technology, and improve the energy utilisation rate.

During the reporting period, we actively promoted refined energy management to reduce our carbon emissions. Due to the impact of the pandemic, our revenue has not fully matched our energy consumption and greenhouse gas emissions. We will actively fight against the pandemic and at the same time strive to reduce our impact on climate change. Shanghai Electric's greenhouse gas emissions in 2020 are shown in the following table:

Total greenhouse gas emissions

Type	2020	Unit
Scope 1 Greenhouse gas emissions	149,943	tons of carbon dioxide
Scope 2 Greenhouse gas emissions	232,392	tons of carbon dioxide
Total greenhouse gas emissions	382,335	tons of carbon dioxide

Greenhouse gas emission density

Type	2018	2019	2020	Unit
Greenhouse gas emission intensity	242.7	271.54	278.50	tons of carbon dioxide/RMB'00000000 of revenue

¹ Direct energy consumption refers to the consumption of natural gas, gasoline and diesel.

² Indirect energy consumption refers to the consumption of purchased electricity.

Contribution to energy conservation and emission reduction

Relying on the strategic planning of the Group, we actively eliminated the backward mechanical and electrical equipment with high energy consumption, and promoted the operation of high-efficiency and energy-saving products, and made remarkable achievements for the terminal of the industrial chain during the reporting period.



The first independent energy storage power station under commercial operation in China

Shanghai Electric Golmud Meiman Minhong (格爾木美滿閔行) 32MW/64MWh energy storage power station project was officially connected to the grid and put into operation in Golmud City, Qinghai Province on November 5, 2020, which created a precedent of "shared energy storage" operation mode, and marked that Shanghai Electric has made significant achievements in the northwest energy market.



Through a certain share with the owners of new energy stations, a new "shared" energy storage mode was formed with investment income shared by multiple parties, and the strategic highland of "shared energy storage" mode was actively occupied by Shanghai Electric, so as to provide demonstration cases and development direction for the further development of Shanghai Electric in the energy storage industry. At the same time, the energy storage project market in Northwest China has been gradually developed, which became an innovative pilot to solve the problem of new energy consumption.

The first 1,000MW ultra-supercritical double reheat unit with six cylinders and six exhaust ports in the world passed trial operation

On November 11, 2020, the first 1,000MW ultra-supercritical double reheat unit with six cylinders and six exhaust ports in the world passed 168-hour full load trial operation at the power plant of Datang Dongying (大唐東營). The unit started smoothly with excellent data indicators. The unit only needs 258.72g coal for generating 1kWh of electricity, and can save 200,000 tons of standard coal per year as compared to other general units. It was superior to other double reheat units under operation or under construction, reaching the international advanced level. The project created a more energy-saving, environment-friendly and efficient million kilowatt double reheat coal-fired power generation unit for the first time, which provides reference and demonstration significance for the design, construction, commissioning, production, operation and maintenance of environment-friendly and clean thermal power stations with large capacity in the future, and plays an important leading role in promoting the development of international cutting-edge technology in power generation industry.



Units 5 and 6 of Phase II of Guangdong Huaxia Yangxi Power Plant (廣東華廈陽西電廠) successfully completed the trial operation

On July 17, 2020, the unit 5 of the units 5 and 6 (2×1240MW) project of Phase II of Guangdong Huaxia Yangxi Power Plant successfully completed the 168-hour full load trial operation. Yangxi project adopted 197 series units with fully independent intellectual property rights developed independently by Shanghai Electric. The unit was ultra-supercritical, single-shaft, five-cylinder, six-exhaust port, nine-stage back heating and single reheat condensing steam turbine. The unit was a single-shaft full-speed thermal power generating unit with the largest single unit capacity and the lowest coal consumption in the world. Compared with the 1000MW unit with the same parameters, the heat consumption of 1,240MW unit under rated condition reduced by 1.65%, and the heat consumption under 50% load rate reduced by 1.86%, thus achieving efficient energy conservation and emission reduction.



Water resources management

Shanghai Electric takes "low energy consumption and high efficiency, clean and low carbon, scientific management, continuous improvement" as the goal of water saving management, and pursues continuous improvement of water saving work. The Shanghai Electric Economic Operation Department is responsible for the management of the Group's water conservation and overall arrangement and deployment of the Group's water conservation. The Group's major industrial sectors and key enterprises have dedicated personnel responsible for their water conservation management. We attach importance to water-saving management, continuously strengthen water consumption statistics, analysis and assessment, and promote the application of new water-saving technologies and new processes. The major enterprises of the group all set up corresponding water-saving statistical report systems. At the same time, we actively participated in the training organized by Shanghai, and organized water-saving publicity activities on specific dates such as "Water Publicity Week" to promote water-saving common sense through multiple channels.

The water consumption of Shanghai Electric in 2020 is shown in the following table:

Water consumption

Type	2019	2020	Unit
Water use	7,735,782	7,044,773	tons

Water consumption density

Type	2018	2019	2020	Unit
Water consumption per unit of production value	0.6199	0.6067	0.5131	tons/RMB'0000 of revenue

Use of packaging materials

We continue to strengthen the management of packaging materials, and especially attach importance to the effective use of packaging materials to reduce material loss. We established close cooperative relations with packaging material suppliers, and through regular feedback and communication, we strived to adopt packaging materials that can not only ensure product quality but also reduce environmental impact. The main packaging materials consumed by Shanghai Electric in 2020 are shown in the following table, and the corresponding packaging material consumption density is 15.29 tons/RMB 100 million of revenue.

Consumption of packaging materials

Type	consumption (tons)
Timber	109,735.84
Iron support	10,200.17
Iron leather suitcase	8,529.66
card-board box	68,474.44
Plastic	12,905.85

Green Emission Reduction

Strictly abide by the laws and regulations of discharge of the wastes, attach great importance to the standardized treatment and discharge of the three wastes, and enhance the environmental protection awareness in green production and operation of all staff.

Shanghai Electric strictly abides by the laws, regulations and standards governing the discharge of industrial pollutants in the places where it operates, such as the *Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution*, the *Law of the People's Republic of China on the Prevention and Control of Water Pollution*, the *Law of the People's Republic of China on the Prevention and Control of Environmental Pollution of Solid Wastes*, and the *Regulations on the Safety Administration of Radioactive Wastes*, and formulates management systems such as *Clean Production and Clean Production Audit Implementation Rules* and *Solid Waste Management Implementation Rules*, promotes the standardized treatment and discharge of the three wastes and enhance the environmental protection awareness in operation of green emission reduction of all staff.

During the reporting period, we aimed to eliminate major environmental pollution incidents and took it as the bottom line control goal, promoted the management and certification of pollutant discharge by its affiliated polluting enterprises and urged the enterprises in the region to cooperate with government departments to implement clean production audit. At the same time, according to the risks and problems found in the environmental information research, we prepared the research report and put forward the rectification suggestions and management improvement direction, and required the industrial groups to implement the rectification scheme according to the rectification plan formulated by the enterprise, so as to ensure the stable discharge of pollutants to meet standards.



At the same time, Shanghai Electric focuses on developing its own environmental business, and is committed to improving living environment and promoting green development.

Currently, we not only have the ability to design, invest, build and operate diversified environmental protection projects such as solid waste treatment, domestic sewage treatment, desulfurization and denitrification, power plant dust removal and high concentration industrial water treatment, but also develop a series of products in the field of environmental protection, including seawater desalination, air cooling, domestic sewage treatment system, high and low temperature dust removal system, etc. In future, Shanghai Electric will continue to deepen the market segments in the field of environmental protection and strive to become a leading enterprise in the environmental protection industry with core competitiveness.

Exhaust emissions

- ◆ Exhaust gas is discharged at high altitude after being collected and treated
- ◆ Through technological transformation, some enterprises and workshops are transformed into organized emissions

Waste discharge

- ◆ Three waters (industrial wastewater, rainwater, domestic wastewater) in one, two waters (industrial wastewater, domestic wastewater) in one for unified management
- ◆ Water pollution treatment project of sewage interceptor
- ◆ Wastewater is discharged after being treated to meet discharge standards
- ◆ Online monitoring of wastewater discharge

Waste management

- ◆ Entrust qualified environmental protection companies to handle hazardous wastes. Reusable general industrial wastes shall be reused by enterprises, and the rest shall be entrusted to third-party institutions for disposal.
- ◆ Actively promote the replacement of hazardous waste products, such as the use of special cleaning liquid instead of gasoline, acetone and other cleaning machine surface, to minimize the generation of hazardous waste



Shanghai Electric's emission of pollutants in 2020 are shown in the following table:

Pollutant emissions

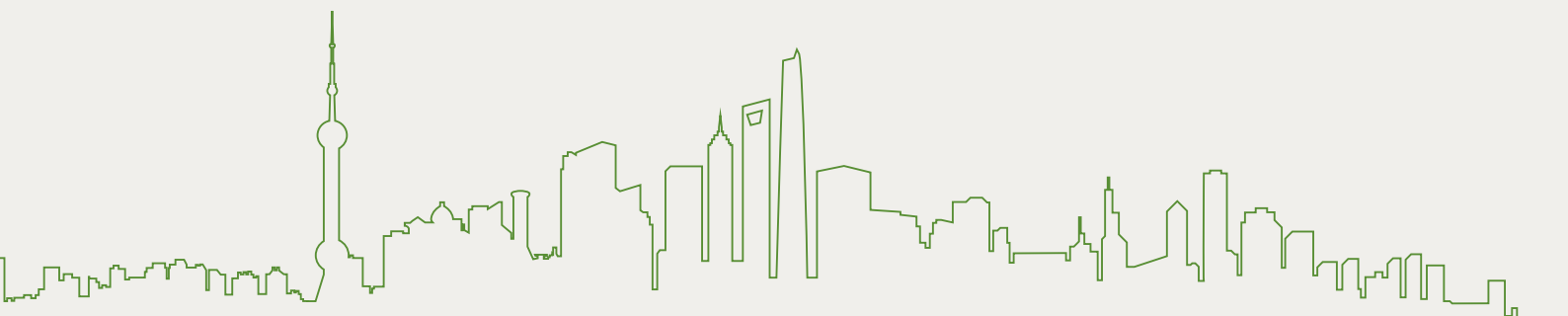
Type	2020	Unit
Wastewater discharge	2,483,531	m ³
Chemical oxygen demand	138.73	tons
Ammonia nitrogen	12.12	tons
Exhaust emissions	500,489	'0000 m ³
Nitrogen oxides ³	75.72	tons
Sulfur oxides	2.81	tons
Particulate matter	23.86	tons
VOCs	93.86	tons

Waste

Type	2020	unit
Hazardous waste	3,431	tons
Non-hazardous waste	59,802	tons

Waste intensity

Type	2019	2020	unit
Hazardous waste intensity	2.8	2.5	tons/RMB'00000000
Non-hazardous waste intensity ⁴	42.74	43.56	tons/RMB'00000000



3. The increase in emissions of sulfur oxides, nitrogen oxides and particulate matter is due to the increase in natural gas usage by Shanghai Electric Shanghai Heavy Machinery Forging Co., Ltd. during the reporting period, resulting in an increase in emissions of the above three pollutants.

4. The increase in hazardous solid waste is due to concentrated disposals of general industrial solid waste to be treated over the years from relevant enterprises during the reporting period.

Special treatment for emission reduction

On 7 June 2018, Shanghai issued a new *Emission Standard of Air Pollutants for Boiler* (《鍋爐大氣污染排放標準》), which stipulated the in-use boilers in Shanghai needed to complete low nitrogen emission improvement by October 2020. In response to the requirements of environmental protection policy in Shanghai, Shanghai Electric launched the boiler low-nitrogen improvement project and all boiler projects completed within the reporting period met the local environmental protection emission requirements.

Boiler Improvement Project of Boiler Works

The project was established by boiler works in 2019, and the low-nitrogen improvement of two industrial boilers was completed in 2020, with a total investment of RMB566,800. Among which, one boiler implemented low-nitrogen improvement with FGR technology without changing burners; the other one was improved by replacing with low nitrogen burner. Both boilers met the environmental emission requirements after the low-nitrogen improvement.



During the reporting period, Shanghai Electric started the comprehensive treatment of VOCs⁵ in an all-round way, strengthened the treatment of volatile organic compounds at source in the enterprises, conducted management assessment on the existing pollution treatment measures in key enterprises involved in coating operations, optimized the treatment measures, and improved the ability of environmental risk control.

VOCs Treatment Project of Cooper Shanghai Power Capacitor Co.,Ltd



Cooper Shanghai Power Capacitor Co., Ltd regards the continuous improvement of VOCs exhaust gas treatment as an important part of its daily work. The activated carbon adsorption method has been adopted for the tail gas treatment of the paint spraying line in the plant. In 2015, after an improvement of the activated carbon tank, the treatment capacity of the activated carbon was increased. In view of the increasingly stringent environmental protection requirements and the emission reduction requirements of VOCs, the Company has embarked on a new exhaust treatment method. In June 2020, the Company launched the improvement of the catalytic combustion project for the absorption and concentration of the tail gas of the paint spraying line, which took 4 months and cost approximately RM600,000 to complete the project improvement. The emission concentration of non-methane hydrocarbon from the paint spraying line drying room decreased by 85.5% and the emission concentration of non-methane total hydrocarbons from the paint spraying line exhaust gas decreased by 75.7%. The exhaust funnel has been uniformly raised by 3m from the original 15m to 18m. Through the improvement, we have been able to reduce the pollution of the atmosphere by VOCs exhaust gas from paint spraying and at the same time reduce the environmental risks of the plant.

5.VOCs: active volatile organic compounds that can cause environmental hazard.

06 WARM "WISDOM" TO PROMOTE HARMONIOUS COMMUNITY

As a state-owned enterprise and a leader in the industry, Shanghai Electric keeps in mind its mission and obligation of serving the society, giving back to the society, caring for the society and dedicating to the society, and actively responding to the government's call in order to promote the progress of the industry and benefit the public together with the government. In the face of the pandemic, Shanghai Electric, on a best effort basis, fought against the pandemic, which highlighted the role of state-owned enterprises. At the same time, Shanghai Electric also went deep into the grass-roots to find social difficulties and solutions. In the process of development, Shanghai Electric did not forget to serve the society and give back to the society.

Industry Development

Promoting industry transformation and development and serving the society through the joint construction and sharing.

The progress of the industry requires the joint promotion. Shanghai Electric has always seriously implemented the spirit of the Central Economic Work Conference. Under the strong leadership of the Shanghai Municipal Party Committee and the Municipal Government, it has insisted on cooperating with local governments, promoting local industrial development, and effectively promoting the quality and efficiency of state-owned capital. At the same time, we actively give play to the advantages of industry leaders, empower partners, and drive industry development.

Promoting industry development and creating a better life together

As a leader in the industry, Shanghai Electric is well aware of the necessity to drive industry development and promote the industrial transformation. It actively participates in the technological development of the industry and have reached cooperation with different enterprises. It continues to pursue technological innovation and promotes industrial transformation, and is committed to making contributions to create a better future together.

Shanghai Electric "Smart Energy" solution was brought to market

On September 28, 2020, under the theme of "the Future has come with smart energy", Shanghai Electric Smart Energy Solution Presentation launched a full range of smart energy solution covering renewable energy generation, energy storage, distributed energy and full lifecycle services. Various "New Energy+" scenarios launched this time will lead a new era of energy. It will become a new benchmark for energy conservation and consumption reduction of future industrial parks to achieve green and low-carbon transformation.

Shanghai Electric's SEunicloud helped thousands of enterprises in Chongqing transform digitally

On September 22, a strategic cooperation signing ceremony was held among Shanghai Electric Digital Technology Co., Ltd., Chongqing Bishan High-Tech Industrial Zone and Chongqing Liangshan Technology Co., Ltd., pursuant to which the three parties will cooperate to build an Industrial Internet Empowerment Centre to provide digital transformation services for more than 1,000 manufacturing enterprises in Bishan High-Tech Zone through the construction of a regional industrial internet platform. Next, the three parties will give full play to their respective advantages to jointly build Bishan Industrial Internet Empowerment Center, promote the development of digital industry in Bishan, and help Bishan Manufacturing achieves leap-forward development.

Shanghai Electric participated in the promotion and establishment of the "Shanghai Yangtze River Delta Intelligent Manufacturing Industry Promotion Centre"

On the afternoon of December 22, 2020, the 2020 Shanghai Intelligent Manufacturing Promotion Conference was held in Jiading District under the theme of "Intelligent Manufacturing Leads to High Quality Development". The Shanghai Yangtze River Delta Intelligent Manufacturing Industry Promotion Centre, which initiated the establishment of the materialization operation, is of great strategic significance in shaping the new advantages of "Made in Shanghai", promoting the compensation, consolidation and strengthening of the industrial chain, giving play to the regional driving and leading role, and creating a new highland for the application of intelligent manufacturing. The promotion center will radiate to the Yangtze River Delta region, which will help promote the coordinated innovation development of intelligent manufacturing in the Yangtze River Delta region, promote the construction of regional high-level advanced manufacturing clusters, and serve as a "booster" for coordinated innovation development of intelligent manufacturing in the Yangtze River Delta region. At the same time, we will continue to make greater efforts to foster and boost a number of local leading enterprises in intelligent manufacturing, create clusters of intelligent manufacturing industries, and promote the high-quality development of Shanghai's manufacturing industry.



Promoting industry development and giving back to society by industry cooperation

Shanghai Electric, as one of the industry leading groups, is well aware that industry progress cannot be separated from cooperation among enterprises. Therefore, Shanghai Electric insists on promoting industry cooperation, actively communicates with other enterprises, participates in industry standard setting and various industry communication activities, and is committed to promoting innovation and progress throughout the industry.



Smart City Cooperation Conference shared knowledge of digital transformation

On February 10, the 2020 Shanghai Smart City Cooperation Conference was held at the Shanghai International Convention Centre under the guidance of the Shanghai Smart City Construction Leading Group Office and the Shanghai Municipal Commission of Economy and Information. At the meeting, under the title of "Exploration and Practice of Digital Transformation of Group-based Enterprises", the Digital Technology Company introduced to the guests and scholars that Shanghai Electric actively responded to the call for the action of "Online New Economy" and "Industrial Internet Empowering Shanghai", laid out the vision of digitalization, intellectualization and informatization, and continuously formed external capability while cultivating the digitalization capability of the Group based on the advantages of equipment manufacturing industry and relied on the digital empowering industry.

Shanghai Electric became a council member

From November 26 to 27, the 2nd Yangtze River Delta Joint Conference of State-owned Enterprises was held in Ningbo, Zhejiang Province, at which the Yangtze River Delta Integrated Development Cooperation Alliance of 100 State-owned Enterprises was formally established and inaugurated, with Shanghai Electric as the vice president of the alliance. The Yangtze River Delta Integrated Development Cooperation Alliance of 100 State-owned Enterprises is a regional organisation promoted and established under the guidance of the State-owned Assets Supervision and Administration Commission of "one city and three provinces". The first batch of member units is made up of 120 representative state-owned enterprises from the Yangtze River Delta region, including Shanghai Electric. The establishment of the alliance is an important measure for state-owned enterprises in the Yangtze River Delta region to implement the spirit of the important speech delivered by Xi Jinping, General Secretary of the Communist Party of China, on promoting the integrated development of the Yangtze River Delta, and actively participate in and serve the high-quality integrated development of the Yangtze River Delta.

Community Contribution

By making warm-hearted dedication, and staying true to the original aspirations, we promote harmonious community relations and are committed to building warm-hearted communities.

While creating economic benefits and leading the development of the industry, Shanghai Electric does not forget the support provided by the community where it is located, upholds the concept of "joining the public to promote the harmonious development of society", insisting on organizing or participating in public welfare voluntary activities at home and abroad, and participating in targeted poverty alleviation, fighting against poverty. At the same time, Shanghai Electric is actively cooperating with the government to build a smart city and provide convenient services, it always maintains a harmonious relationship with the community, and helps to build a warm community.

Focusing on targeted poverty alleviation

"Double One Hundred" village enterprises for the purpose of targeted poverty alleviation work

Power Generation Group, Shanghai Mitsubishi Elevator and Wind Power Group under Shanghai Electric have been providing paired assistance to three poor villages in Fuyuan County, Qujing City, Yunnan Province, namely Tuotian Village, Fucun Town, Fatu Village, Mohong Town and Lumuk Village, and signed poverty alleviation agreements. Based on the reality, the paired parties focused on the "three mobilizations and two transformations", that is, namely, mobilizing people, goods, industries and transforming ideas and the appearance of villages, sparing no effort to solve the urgent and difficult problems that the local poor people care about. A total of RMB 450,000 of assistance funds were paid.



Shanghai Electric Power Station provided assistance to children in poor mountainous areas in Yunnan and Guangxi

At the end of April, Shanghai Electric Power Generation Equipment Co., Ltd. Turbine Generator Works jointly launched a fundraising campaign with Shanghai Suishou Charity Foundation, calling on employees to donate love gifts for children in mountainous areas. Books, stationeries, sweaters, children's clothes and shoes, though of modest value, which always contain love, bringing warmth for children from the mountainous areas throughout the season, containing Shanghai Electric's care and concern for children from mountainous areas, gathering the corporate responsibility of Shanghai Electric and full positive energy of employees.



Shanghai Electric visited poor counties to give away supplies

During the Spring Festival, Shanghai Electric Power Transmission and Distributor Group paid a visit to the poor residents of Dongfeng Village, Zhuangxing Town. According to the number of poor residents, it bought beddings as gift of sympathy, which has greatly improved the quality of life in the poor villages. During the pandemic, in order to help the residents of Cungu Village, Zhuangxing Town resist COVID-19, Shanghai Electric Environmental Protection Group donated a large number of masks to the residents when they needed it most, and helped the poor villages perform well in pandemic prevention and control. Shanghai Electric Power Generation Equipment Co., Ltd. Turbine Works donated a variety of books to the residents of Zhangtang Village, Zhuangxing Town, enriching their spiritual life and strengthening their educational base.

Shanghai Electric helped farmers sell agricultural products

In 2020, Shanghai Electric implemented the policy of promoting the paired assistance work of villages in Zhuangxing Town, Fengxian District, with a total of RMB5 million, of which RMB615,000 was directly allocated by the affiliated enterprises. The funds were used to subsidise the targeted villages in Zhuangxing Town, Fengxian District. In addition to direct financial assistance, we also provided assistance to rural people in their production and life to help them get rich:

(1) All affiliated enterprises assisted in the sale of various agricultural products in the amount of RMB1,604,400 in Fengxian.

(2) A total of RMB7,542,801.8 was spent on products for poverty alleviation through the city's Consumer Poverty Alleviation Platform, the Consumer Poverty Alleviation Life Hall in each district, special shops and counters for poverty alleviation, and the purchase through direct contact with counterparts.

Boosting smart cities

In 2020, Shanghai Electric actively cooperated with the local government, responded to the call for "new infrastructure", and fully distributed the "intelligent manufacturing, smart city, smart transportation" and "smart energy" projects to contribute more wisdom of Shanghai Electric to the regional economic development and location improvement.

Baoshan District signed a strategic cooperation framework agreement with Shanghai Electric to build a "City of Intelligent Manufacturing".

On the morning of June 17, 2020, Shanghai Electric and Baoshan District Government officially signed a strategic cooperation framework agreement. The two parties will develop a broad, multi-level and all-round strategic cooperation. Both will explore and develop cooperation channels in the fields of smart city, smart transportation, intelligent manufacturing and smart energy. At the same time, on the basis of their respective advantages, the two sides will make reasonable and effective use of existing land resources, promote the upgrading and transformation of the regional industrial structure and improve the regional ecological environment.



Shanghai Electric assists Hongkou in creating a "world meeting room"



On 9 September 2020, Shanghai Electric and the Hongkou District Government officially signed a strategic cooperation framework agreement. The two parties will further advance the construction of "Five Centers" in Shanghai in accordance with the municipal government's "Excellent Global City" plan and the "Industry Empowers Shanghai" three-year action plan and other overall goals and relevant requirements.

They will accelerate the cooperative construction of the "5G Global Innovation Port" demonstration zone, smart buildings, smart transportation, smart energy and other fields, to build Hongkou District into a comprehensive and multi-dimensional smart area, a new benchmark for urban development in the new era of the North Bund, an important carrier of core functions and a practice area for new development concepts. At the same time, they will promote the upgrading and transformation of regional industrial structure, increase economic density and improve the supporting facilities of regional ecological environment.

Shanghai Electric and Yangpu District Government signed a strategic cooperation agreement to jointly build a smart city

On the afternoon of 7 July 2020, Shanghai Electric and Yangpu District Government officially signed a strategic cooperation framework agreement. Based on Shanghai Electric's advantages in technological innovation and industrial ecological resources in artificial intelligence, cloud computing, block chain, Internet of Things and other fields, the two parties will accelerate the construction of building Yangpu into a new smart city and a "artificial intelligence + 5G" demonstration zone, to promote the high-quality development of the industrial Internet of Yangpu District at a high starting point, foster emerging artificial intelligence industries, and accelerate the transformation and upgrading of traditional industries.



Shanghai Electric assists Xuchang to build an intelligent manufacturing and livable city

On the afternoon of 16 September 2020, Shanghai Electric and Xuchang Municipal People's Government of Henan Province officially signed a strategic cooperation agreement. The two parties will vigorously implement the *Innovation-Driven Development Strategic Plan (2018-2030)* (《創新驅動發展戰略規劃》(2018~2030)) of Xuchang City, and build Xuchang City into a demonstration zone for urban-rural integration in Henan Province and even Central China, a modern composite urban functional zone, a technological innovation leading zone and a center for intelligent equipment manufacturing, to help Xuchang to develop rapidly and create a good innovative and livable environment, and promote the sustainable and healthy economic and social development.

Shanghai Electric, China Mobile and Shantou Municipal Government jointly promote new digital infrastructure

On 16 September 2020, Shanghai Electric Power Transmission and Distribution Group, Shantou Overseas Chinese Pilot Zone, and Shantou Branch of China Mobile held a new generation information technology industry project signing ceremony in Shantou Overseas Chinese Pilot Zone. The project was initiated by Shantou Mobile and constructed by the Power Transmission and Distribution Group. The two parties will work together in the field of green energy data centers to build the project into a data industry cluster that covers the entire province, the whole country and Southeast Asia.

Assistance during the Outbreak of Pandemic

Be responsible and fight the pandemic. Responsibility goes beyond the pandemic fighting.

The COVID-19 pandemic which broke out in 2020 was a huge challenge for the whole society. As a state-owned enterprise, Shanghai Electric dare not neglect it in the slightest. We actively responded to the call of our country, prepared for pandemic prevention in an all-round way, and earnestly implemented the pandemic prevention regulations promulgated by our country; the management of the Group made judgments on the situation in a timely manner, adjusted the focus of its work and established a pandemic prevention system. A number of advanced cases have emerged both inside and outside of Shanghai Electric, which made its contribution to winning the battle against the pandemic.

Companies affiliated to Shanghai Electric were awarded the title of Advanced Anti-pandemic Units

Shanghai Electric Automation Group was awarded the title of "Shanghai Advanced Group in Fighting against the COVID-19 Pandemic" at the Shanghai Commendation Meeting of Fighting the COVID-19 Pandemic on the morning of 29 September 2020. In the face of raging COVID-19 pandemic, Shanghai Electric resolutely rushed to the front line to fully assist the government in completing the pandemic prevention and control tasks, which demonstrated Shanghai Electric's determination to fight the pandemic and serve the people, and demonstrated Shanghai Electric's sense of mission as a state-owned enterprise.

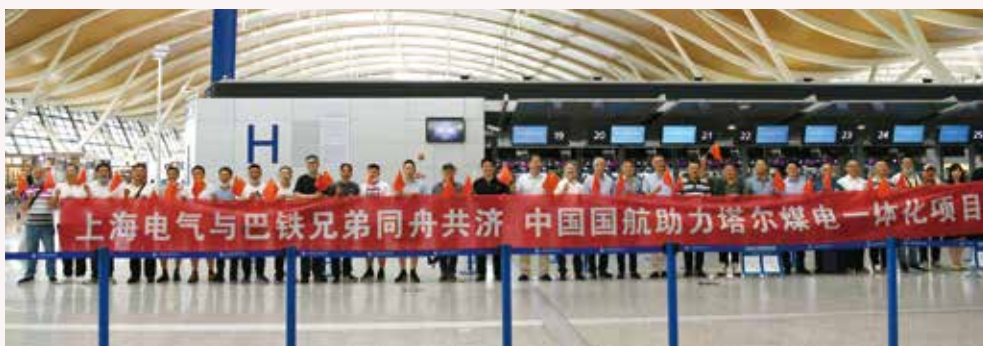
In the beginning of 2020, at a critical moment when the whole country was working together to fight the pandemic, at the urgent moment when the supply of masks across the country was tight, the Party Committee of Shanghai Electric Automation Group actively played a leading role, rose to the challenges, and led Party organizations at all levels and the Party members to complete the research and development of fully automatic production equipment for masks and emergency repair of old equipment, regardless of cost and without compromise, which contributed to winning the battle against pandemic prevention and control. On the one hand, it helped mask manufacturers in Shanghai to restore the old mask production lines that had been sealed and shut down, on the other hand, it assisted its subordinate companies in the installation, commissioning and trial operation of the fully automatic mask production lines for customers based in Shanghai against the backdrop that travelling was restricted, to provide team and technical support for mask production. In the face of severe pandemic situation, the Party members of the Automation Group's pandemic prevention supplies commando team have taken a charge posture and faced the difficulties selflessly, whether for on-site overnight debugging or an online back-office support, to fight against the pandemic bravely.





Shanghai Electric's Thar Coalfield Block One Power Generation Co., Ltd. obtained the "Annual Social Welfare Award"

The Karachi Branch of the All-Pakistan Chinese Enterprise Association awarded Thar Power Generation Company, a subsidiary of Shanghai Electric, the "Annual Social Welfare Award" to recognize Thar Power Generation Company's contribution to social welfare. In the past year, in order to combat the spreading pandemic, the Pakistani government implemented the lockdown policy in late March, causing a large number of Pakistanis to lose their jobs and sources of income. After learning the news, Thar Power Generation Company immediately contacted the government officials to explore ways to relieve the local people. On behalf of Shanghai Electric, the Power Station Department of Thar Power Generation Company donated daily supplies to the Pakistani military and donated 6 million rupees to the site of the China-Pakistan cooperation project. Meanwhile, as a priority implementation project of the "Belt and Road" and China-Pakistan Economic Corridor and Shanghai Electric's largest overseas investment project, the coal-electricity integration project of block one of the Thar Coalfield sent additional 700 personnels to Pakistan, to fight the shock of the pandemic, and help the project to overcome the pandemic, accelerate the construction of the project, promote Pakistan's energy construction, and benefit more Pakistani people, which demonstrated Shanghai Electric's determination to resolutely build a China-Pakistan "community of shared future" and promote the construction of the China-Pakistan Economic Corridor in an all-round way.



Coordinate the prevention and control of the COVID-19 pandemic

Since the outbreak of the COVID-19 pandemic, Shanghai Electric Party Committee responded quickly and made careful arrangements, Party organizations at all levels assumed their social responsibilities as state-owned enterprises through actual actions. After the outbreak of the pandemic, at Group level, Shanghai Electric quickly established a pandemic prevention and control work leading group, and successively held 19 pandemic prevention video conferences to comprehensively deploy the pandemic prevention and control work.

It organized and mobilized all Party members and cadres to donate, and their voluntary donation amounted to RMB8.8 million. In addition, it delivered more than 300 mask machines and more than 200 medical imaging equipment across the country, developed automatic mask production lines, delivered a total of 621 mask production lines nationwide, and proactively donated nearly 100,000 masks and various pandemic prevention materials to overseas partners.

In the process of pandemic prevention and control, 86 Party organizations which were serving the pandemic areas, 78 Party commandos which were in front of the charge, and 774 Party members who were fighting on the front line, stepped forward in times of crisis and fulfilled the founding mission of Party members with practical actions.



Shanghai Jiejin Power Co., Ltd., a subsidiary of Shanghai Electric, spared no effort to ensure the production of materials

Shanghai Jiejin Power Co., Ltd., a subsidiary of Shanghai Electric, received an urgent order for the health clinical center for pandemic prevention and control on February 1. After receiving the order, bearing that "fighting the pandemic is the order, prevention and control is the responsibility" in mind, it responded immediately, organizing product delivery, double checking product specifications and models, and ensuring the delivery was on time. Finally, 42 sets of wrapped cable intermediate heads and multiple sets of prefabricated indoor terminals were delivered on February 2 with quality and quantity guaranteed, ensuring the smooth implementation of pandemic prevention and control.



Shanghai Renmin Electrical Apparatus Works of Shanghai Electric completed the delivery of Chengdu pandemic prevention orders

On February 8, Shanghai Renmin Electrical Apparatus Works of Shanghai Electric, received an urgent order from Chengdu. According to the arrangement of the Chengdu Municipal Party Committee and Government, this order would be for building Chongqing's municipal centralized designated backup treatment hospital, and as a pandemic prevention material, the production and delivery for that was urgent and admitted no delay. Shanghai Renmin Electrical Apparatus Works immediately organized the management and production personnel from workshop, warehouse and quality inspection departments who are locals to resume production and assembly on February 8. From material distribution to production and assembly, to inspection and packaging, the delivery of this "special order" was successfully completed.



Working together to fight the pandemic

On 7 March 2020, after the country's first confirmed case of COVID-19 was announced in a city in northern Serbia, the Panchevo Project Department of Shanghai Electric Power Plant Engineering Company launched the contingency plan and various prevention and control measures in accordance with Shanghai Electric's latest deployment and guiding opinions on prevention of importing of cases.

Through various forms of publicity and the popularization of pandemic prevention knowledge, the project department stabilized the emotions of the Chinese and Serbian employees at the project site and improved their awareness of the pandemic situation. At the same time, masks and other pandemic prevention materials were distributed to all employees on site, and body temperature was monitored and checked at regular intervals. People at the site, other than living materials purchasers, were forbidden to enter public places. Entrance and exit in and out of the power plant were strictly controlled, and only people who wore masks were allowed to enter.



In order to carry out construction of the project effectively, the project department cancelled all physical meetings with the owners and supervisors and replaced them with online meetings. Serbian employees were notified that the working ticket would be signed once a week instead of once a day. Only the engineers needed to sign the working tickets, on each Monday, and for others, they could work online from home. Serbian logistics personnel were removed from the on-site office and living area. The supervisory office area and the Chinese office area were separated and the Serbian supervisory unit was recommended to reduce the number of on-site office staff. Through these measures, it strived to eliminate the hidden dangers of contracting to the greatest possible extent.

Appendix I. List of disclosure policies, laws and regulations

This section mainly aims to comply with the requirements of "policies" and "relevant laws and regulations that have a significant impact on the issuer" involved in the "General Disclosure" of the Stock Exchange ESG Guide. The internal policies, external laws and regulations disclosed in the report are arranged and listed in accordance with the order of ESG indicators.

Constitution of the People's Republic of China	Labour Law of the People's Republic of China
Criminal Law of the People's Republic of China	Labour Contract Law of the People's Republic of China
Company Law of the People's Republic of China	Social Insurance Law of the People's Republic of China
Securities Law of the People's Republic of China	Law of the People's Republic of China on Labour Dispute Mediation and Arbitration
Enterprise Income Tax Law of the People's Republic of China	Law of the People's Republic of China on the Protection of Women's Rights and Interests
Advertising Law of the People's Republic of China	Law of the People's Republic of China on the Promotion of Clean Production
Trademark Law of the People's Republic of China	Law of the People's Republic of China on Prevention and Control of Pollution From Environmental Noise
Patent Law of the People's Republic of China	Law of the People's Republic of China on Environmental Impact Assessment
Copyright Law of the People's Republic of China	Environmental Protection Law of the People's Republic of China
Law of the People's Republic of China for Countering Unfair Competition	Energy Conservation Law of the People's Republic of China
Guideline for Intellectual Property Management of Industrial Enterprises	Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution
Work Measures on Outward Transfer of Intellectual Property Rights (Trial)	Law of the People's Republic of China on the Prevention and Control of Soil Pollution
Product Quality Law of the People's Republic of China	Law of the People's Republic of China on Prevention and Control of Water Pollution
Law of the People's Republic of China on Product Quality and Safety	Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Wastes
Regulations on the Administration of Production Licenses for Industrial Products	Water Law of the People's Republic of China
Cyber Security Law of the People's Republic of China	Law of the People's Republic of China on Soil and Water Conservation
Measures for the Administration of Information Security Level Protection	Renewable Energy Law of the People's Republic of China
Law of the People's Republic of China on Tendering and Bidding	Law of the People's Republic of China on Prevention and Control of Radioactive Pollution
Price Law of the People's Republic of China	Law of the People's Republic of China on Occupational Disease Prevention
Guarantee Law of the People's Republic of China	Production Safety Law of the People's Republic of China
Audit Law of the People's Republic of China	Measures for the Management of Emergency Plans for Production Safety Accidents
Employment Promotion Law of the People's Republic of China	Fire Protection Law of the People's Republic of China
Special Rules on the Labour Protection for Female Employees	
Trade Union Law of the People's Republic of China	
Law of the People's Republic of China on the Protection of Minors	
Provisions on Prohibition of Child Labour	
Contract Law of the People's Republic of China	

Appendix II. Environmental, Social and Governance Reporting Guide of HKEX Guide Index

Subject Areas, Aspects, General Disclosures and KPIs

Environmental, Social and Governance Report

A. Environmental		
Aspect A1: Emissions		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	5.3 Green Emission Reduction
KPI A1.1	The types of emissions and respective emissions data.	5.3 Green Emission Reduction
KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	5.2 Energy Saving and Efficiency Increase
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	5.3 Green Emission Reduction
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	5.3 Green Emission Reduction
KPI A1.5	Description of emissions target(s) set and steps taken to achieve them.	5.3 Green Emission Reduction
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	5.3 Green Emission Reduction
Aspect A2: Use of Resources		
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	5.2 Energy Saving and Efficiency Increase
KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kwh in '000s) and intensity (e.g. per unit of production volume, per facility).	5.2 Energy Saving and Efficiency Increase
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	5.2 Energy Saving and Efficiency Increase
KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	5.2 Energy Saving and Efficiency Increase
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	5.2 Energy Saving and Efficiency Increase
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	5.2 Energy Saving and Efficiency Increase
Aspect A3: The Environment and Natural Resources		
General Disclosure	Policies on minimising the issuer's significant impact on the environment and natural resources.	5.1 Green Management
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	5.1 Green Management 5.2 Energy Saving and Efficiency Increase 5.3 Green Emission Reduction
Aspect A4: Climate Change		
General disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	5.2 Energy Saving and Efficiency Increase
KPI A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	5.2 Energy Saving and Efficiency Increase

Appendix II. Environmental, Social and Governance Reporting Guide of HKEX Guide Index

Subject Areas, Aspects, General Disclosures and KPIs

Environmental, Social and Governance Report

B. Social		
Aspect B1: Employment		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	4.1 Employees' Rights and Interests 4.4 Care and Support
KPI B1.1	Total workforce by gender, employment type, age group and geographical region.	4.1 Employees' Rights and Interests
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	4.1 Employees' Rights and Interests
Aspect B2: Health and Safety		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	4.3 Health and Safety
KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	4.3 Health and Safety
KPI B2.2	Lost days due to work injury.	4.3 Health and Safety
KPI B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	4.3 Health and Safety
Aspect B3: Development and Training		
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	4.2 Development Incentives
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	4.2 Development Incentives
KPI B3.2	The average training hours completed per employee by gender and employee category.	4.2 Development Incentives
Aspect B4: Labour Standards		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	4.1 Employees' Rights and Interests
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	4.1 Employees' Rights and Interests
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	4.1 Employees' Rights and Interests

Appendix II. Environmental, Social and Governance Reporting Guide of HKEX Guide Index

Subject Areas, Aspects, General Disclosures and KPIs

Environmental, Social and Governance Report

Aspect B5: Supply Chain Management		
General Disclosure	Policies on managing environmental and social risks of the supply chain.	3.1 Responsible Procurement
KPI B5.1	Number of suppliers by geographical region.	3.1 Responsible Procurement
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	3.1 Responsible Procurement
KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	3.1 Responsible Procurement
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	3.1 Responsible Procurement
Aspect B6: Product Responsibility		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	2.2 Quality Assurance
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	2.2 Quality Assurance
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	2.3 Customer First
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	2.2 Quality Assurance
KPI B6.4	Description of quality assurance process and recall procedures.	2.2 Quality Assurance
KPI B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	2.3 Customer First
Aspect B7: Anti-corruption		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	1.1 Compliance Operation
KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	1.1 Compliance Operation
KPI B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	1.1 Compliance Operation
KPI B7.3	Description of anti-corruption training provided to directors and staff.	1.1 Compliance Operation
Aspect B8: Community Investment		
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	6.2 Community contribution 6.3 Assistance during the Outbreak of Pandemic
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	6.2 Community contribution 6.3 Assistance during the Outbreak of Pandemic
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	6.2 Community contribution 6.3 Assistance during the Outbreak of Pandemic

