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中国节能环保集团有限公司  
CHINA ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION GROUP

Igniting A Bright, Sustainable Future 2019

# Compilation Description

[Period]

This report contains CECEP’s CSR performance from January 1, 2019 to December 31, 2019, with some information and data dating back earlier than the start of this period. The period for pandemic prevention and control is from January 1, 2020 to April 30, 2020.

[Appellation]

For the convenience of statement and reading, “China Energy Conservation and Environmental Protection Group” is referred to as “CECEP,” “the company,” or “we” in this report.

[Edition]

CECEP publishes a CSR report annually, and this is the company’s 9th CSR report.

[Report Boundary]

This report covers CECEP and its subsidiaries.

[Data Description]

This report uses data obtained from an analysis of relevant statistics. The business data mainly comes from the audited Financial Settlement Report and Annual Report of CECEP.

[Reference Standards]

Guiding Opinions on Better Fulfilling Social Responsibilities of State-owned Enterprises (GZFYJ [2008] No.1) issued by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC); Guidance on Social Responsibility Reporting (GB/T 36001-2015); Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-CSR 4.0) issued by the Chinese Academy of Social Sciences (CASS); Social Responsibility Evaluation Indicator System of China’s Industrial Enterprises (Trial) issued by China Federation of Industrial Economics; GRI Standards of Global Reporting Initiative (GRI); ISO 26000: 2010 Guidance on Social Responsibility, etc.

[Language Version and Access]

This report is published in both Chinese and English, and the publication is available in both print and digital versions. A PDF version can be downloaded from CECEP’s official website (www.cecep.cn). Readers who need a print version can contact us at (86) 010-62248552.

[Compilation Process]

- Issue collection

Internal collection: CECEP’s administrative departments, CECEP’s subsidiaries, CSR Office and report compilation group

External collection: regular surveys on stakeholders, irregular symposiums with stakeholders, investigation on stakeholders’ demand and specialized seminars

- Content selection

External deliberation: outside experts’ advice and stakeholders communication

Internal deliberation: an appraisal of CECEP outlook on CSR, sustainable development strategy evaluation and comparison of domestic and international report standards

Substantive evaluation: major stakeholder identification, topics database updating, potential substantive topics screening, questionnaire survey analysis, and information disclosure

- Report compilation

Report framework planning—material collection and analysis—report structure planning—internal report assessment—soliciting stakeholders’ opinions—report revision and improvement—approval by the company’s leadership—report rating

- Report release and improvement

Holding a press conference to release the report—report publication and dissemination—feedback collection—constant improvement of the report

[Statement]

CECEP CSR Report 2019 discloses its willingness to perform social responsibilities, its commitment to CSR and its CSR performance based on surveys on substantive issues. We ensure that the information and data in this report are reliable, accurate and timely. We hope the publication of the report will facilitate our communication with all stakeholders so that joint efforts will be made to promote sustainable development.

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**Song Xin**  
**Party Secretary and Chairman of CECEP**

**The rise and fall of a civilization are closely tied to its relationship with nature.** As the only central enterprise focusing on energy conservation and environmental protection in China, CECEP has always been undertaking the historical mission of promoting energy saving in China and CO<sub>2</sub> emission reductions and green development since its inception. With General Secretary Xi Jinping's entrustment that "We must protect this planet like our own eyes, and cherish nature the way we cherish life" firmly in mind, we, under the strong leadership of the CPC Central Committee with Comrade Xi Jinping at its core and the correct leadership of the SASAC of the State Council, rallied the broad masses of cadres and employees wide and led them in surmounting difficulties and achieved positive results in all respects in 2019. Relevant state ministries, local party committees and governments at all levels all provided powerful support for us. Besides, we gained support and recognition from local government leaders, all walks of life, domestic and foreign peers and partners. Driven by the motto of "The leader who takes the lead", we strove to be the main force of ecological civilization construction, raced against time and worked with added vigor to be the pillar of ecological civilization construction.

**We are the practitioners of responsibilities of the era.** Facing the COVID-19 outbreak in 2020, CECEP Party Committee implemented the spirit of important instructions of General Secretary Xi Jinping with determination by giving full play to our advantages of environmental protection, the main business of CECEP. Guided by the decisions and arrangements of the CPC Central Committee and the State Council and the work arrangements of the SASAC Party Committee, we spared no efforts. We realized fully the "double victory" of pandemic prevention and control and line operation, doing our part as a Central enterprise in winning the battle against the pandemic and accelerating the recovery of economic and social order. 2019 marked the 70th anniversary of the founding of the People's Republic of China. Looking back on the brilliant achievements over the past 70 years, we stayed true to our mission and always kept the mission of energy conservation and environmental protection in mind. Over the past year, we conducted themed education in depth internally and has achieved remarkable results. Our Party building in the year was focused and distinctive. The Party branch of CECEP (Jiaxing) Environmental Protection Technology Park Development Co., Ltd. was commended as "An advanced primary Party organization of central enterprise". Hao Jiahua, the first resident secretary of CECEP at Shichang Village, Song County, Henan Province, was commended as "Excellent Communist Party Member of Central Enterprises". Looking back on the past year, a harmonious coexistence was realized between mountains, waters, forests, soils, lakes, grass, and nature and technologies created synergy together despite collisions between them under the efforts of CECEP. In 2019, we accelerated the pace of scientific and technological innovations and got actively engaged in national programs by making an accumulated R&D investment of 960 million yuan, promoting the first batch of 18 major scientific and technological innovation projects, completing staged technical acceptance of five projects, and identifying the second batch of 12 major projects. Looking back on the year, we have always been adhering to the requirements of "Action and hard work in a solid and meticulous manner". We took solid work as a yardstick of success and spoke with actual performance. In the face of the historical opportunity of realizing the "Two Centenary Goals", we, guided by the conviction that lucid waters and lush mountains are invaluable assets, took on the responsibility of the ecological and environmental protection iron army.

**We are the pioneers of ecological civilization construction.** In the past year, CECEP implemented the instructions of General Secretary Xi Jinping with resoluteness "Putting ecology first and no over development". We integrated domestic and foreign resources positively in the Yangtze River Economic Belt and built a high-level, caring and powerful platform. We started from a high starting point, highlighted our mission, and contributed to the Yangtze River's great protection. In 2019, the Scientific and Technological Innovation Alliance for Joint Protection of the Yangtze River was successfully established and CECEP Ecological Environment Technology Co., Ltd. was established. "Two Parks and One Chain" and innovation models such as the Smart Yangtze River came into being, unveiling



## Address from the Chairman

fully great protection of the Yangtze River. Looking back on the past year, we, under the guidance of the "Two Mountains Theory", focused on developing the main business to further enhance our competitiveness, and make our energy conservation and environmental protection industry stronger, better and bigger to build a beautiful China. In 2019, we achieved green power generation of over 16.1 billion kWh, equivalent to a reduction of carbon dioxide emission by nearly 13 million tons, and a saving of standard coal of nearly five million tons; our daily water processing capacity reached nearly ten million tons, and the total chemical oxygen demand (COD) was reduced by 210,000 tons; our building energy-saving service area totaled 81 million square meters, equivalent to 11,000 strong standard football fields. We were an active pioneer and pilot in energy conservation and environmental protection in 2019. CECEP's first offshore wind power project - Yangjiang Nanpeng Island Offshore Wind Power Project was pushed forward; China National Environmental Protection Group Laishui project was successfully ended; Linyi Industrial Park Phase III project won the National Quality Project Award; The first buried reclaimed water plant with ultra-deep foundation pit in China provided water supply successfully; The first green industry debt-to-equity swap in China was landed successfully.

**We are the pioneers for a better life for people.** Looking back on the year passed, CECEP worked in with all parties concerned. Specifically, we promoted the high-quality development of "The Belt and Road" Initiative, took the lead to build up China's environmental protection brand cluster, positively undertook the work of the Secretariat of CSES Climate Investment and Finance Association, and engaged in "China Pavilion" Climate Investment and Financing Meeting at the UN Climate Change Conference 2019 and made a keynote speech. Our industrial ecological circle, friends circle and partners circle expanded day by day. In the past year, we continued strengthening staff capacity building by putting in place staff development channels, sharing development achievements with employees, and building a robust CECEP iron army. Looking back on the year passed, we studied and understood the spirit of a series of important instructions of General Secretary Xi Jinping's fight against poverty, and implemented the Central Committee of the CPC's work deployment and the SASAC on poverty with determination. With an accurate target, we were determined to fight against poverty and fulfill a central enterprise's political and social responsibilities. In 2019, we continued poverty relief in Song County, Henan and Fuchuan Yao Autonomous County, Guangxi Zhuang Autonomous Region by promoting targeted poverty relief in a practical manner. We carried out a series of projects, including village illumination, Clean Water program, Education Support Program, Industrial Poverty Relief Program, Consumption Poverty Relief. Specifically, we did our best to relieve poverty of the poverty-stricken mountainous areas through streetlamp projects and well projects, setting up a good image of "a responsible central enterprise" and acting as "a good example for other enterprises".

2020 sees the closing year for China to build a moderately prosperous society in all respects and the 13<sup>th</sup> Five-Year Plan. We look back on the glorious year of 2019 with full attachment and plan for a bright future with great hope. Looking forward to the future at such an intersection of history, we are full of hope for the forthcoming bright future, and keenly aware of the critical responsibility that we should shoulder. Following the practical spirit of "telling the truth, doing practical things and seeking practical results", we will make the best use of time and strive for the goal of a world-class CECEP.





## Seeing CECEP in Pictures

### Compose a magnificent chapter of environmental protection



Changma Town, Yumen, a deserted place without running water or power, is dusty all over when a sudden squall rises. In the face of such a harsh environment, CECEP doesn't flinch but braves unpleasant conditions instead and makes full use of the local natural environment to build ecological environmental protection projects. Since the 500,000 kW wind power project was completed, more than 1 billion kilowatt hours of green electricity are supplied to the power grid each year, equaling to a saving of about 420,000 tons of standard coal and a reduction of sulfur dioxide emissions by more than 3,500 tons. This is only a microcosm of CECEP. Behind it are nearly 40,000 CECEP workers who work across China who are not afraid of difficulties, and are dedicated and ready to do their part in China's environmental protection construction.



### Dedicated to solving difficulties through technical transformation



Wang Xiaoping is the incumbent leader of CECEP Gansu Wind Power Company. When he first joined the company, there was an extremely high failure rate of box transformers at wind farms. To solve this problem, he conducted technical research and investigation by squeezing time and getting to the transformer factory to look for technical data and repeatedly consulted with experts and technicians. Hard work pays off. Together with his colleagues, he found out the root reason and worked out a detailed technical scheme, providing a good guarantee for stable operation of power transmission and transformation equipment. There are thousands of such CECEP people who work hard, are concentrated on research, and promote the construction of an ecological civilization of by innovations. They are dedicated to a combined growth with CECEP.



### Letters of Work Safety



During the "Month of Work Safety" of CECEP, general managers of subsidiaries of CECEP wrote "Letters of Work Safety" in person to inform employee relatives of our work safety disciplines such that they will act as "Family work safety persons" to care for and remind our employees. Such "Letters of Work Safety" convey great concerns of CECEP for employees. There is no trifle for safety in CECEP. We are committed to building an environmental protection iron army that puts safety first and protects China's development.





### Dab hands and ingenuity



During the 19th National Congress, front-line workers of CECEP Environmental Protection Equipment Co., Ltd. (hereinafter referred to as "CECEP Equipment") put technologies, processing and quality under strict control, ensuring that environmental protection equipment for disposing of waste, such as solid waste, wastewater and flue gas was of high quality and operated as designed. Workers manufactured essential environmental protection equipment with deft hands and ingenuity. To meet the environmental goal (Blue Sky), CECEP craftsmen (China Red) swore to dye the most gorgeous colors with sweat and contributed to China's ecological civilization with the craftsman's dedication!



### Become an inseparable part of CECEP



Chairman Song Xin pointed out that "As a member of CECEP, honors or disgrace of CECEP is closely related to everyone." During the 19th National Congress, taking "Family" as the theme, CECEP employees drew pictures of their day-to-day work, embodying the "Family" culture of CECEP vividly. CECEP deems employees the most precious wealth and family members, and is dedicated to providing them with a better working environment and a larger platform for development, making CECEP a big family full of love and care. Loyal as family members, CECEP employees empowered the development of CECEP by their sense of responsibility and made unremitting efforts for the growth of CECEP and the construction of China's ecological civilization.



### While drinking the water from a well, one should never forget who dug it



A primary school student at Shichang Village Primary School, Jiugao Town, Song County, Henan Province is reading the text "While drinking the water from a well, one should never forget who dug it". After months of hard work since CECEP took on the poverty alleviation, the first well drilled by CECEP poverty relief cadres yielded water successfully, solving the water supply problem at one go. Like sunshine and rain, many other targeted poverty relief projects of CECEP, such as the Education Support Program, the Industrial Poverty Relief Program, and the Clean Water Program are quietly changing this village.







## About Us

### CECEP in the eyes of others

“

I was deeply impressed by the spirit of the CECEP people. They gained a sense of value and pride in their job. They yielded accordingly positive energy that appeals to others, whether it is Su Zhigang, general manager of Chengdu Xiangfu Domestic Waste Incineration Power Plant, or Wang Dong of Changxing Solar Company. Take Wang Dong as an example, Changxing Solar Company performs solidly under his leadership though he is merely 32 years old. This suggests precisely that CECEP, as a confident and care-giving central enterprise, dares to provide young people with a development space. I sincerely hope that such positive energy and good credit of such central enterprises can spread further and be conveyed to more people.

**- Wang Li, website staff of the SASAC of the State Council**

This is the first time that I have perceived CECEP people's visions on site, which are: "Achieving bluer skies, greener mountains, clearer waters and a better life". To describe my feelings on this trip, the following words concerning safety are the best fits: ease, peace of mind, safety and stability. The living state of owners of Guiyang Zhongtian Weilai Fangzhou Project is the best explanation of "ease" after heating supply is made available to their residential quarter; Chengdu Xiangfu Domestic Waste Incineration Power Plant and Huzhou Wastewater Treatment Plant make the surrounding people feel "peace of mind"; As a large water tank of Huzhou, Huzhou Laohutan Reservoir supplies 80% of the city's domestic water, providing safety guarantee for flood discharge in flood season and making citizens feel "safety"; Changxing Photovoltaic Farming Town is created to help farmers increase income and become rich and Huzhou Industrial Park provides high-quality Party building services by mobile Party members make all stakeholders feel "stability".

**- Meng Shougui, China News**

Affected by the water supply, girls at a marriageable age in the village would rather marry a man far from their hometowns, and boys at a marriageable age, afraid of spending their lives unmarried, would like to be a live-in son-in-law. After CECEP helps with poverty relief, we have a water supply, good facilities, and good fortunes. We are now the star village in Song County and 20 villagers volunteer to move back to our village. Girls even in Zhejiang are willing to marry boys in our village. Even college students are also willing to go back to the village for development. They have a quick wit, guiding villagers to open farmhouse hotels and sell mountainous specialty products. Our village is getting rich.

**- Zhang Zhanguo, secretary of the village branch, Shichang Village, Song County, Henan Province where CECEP does the targeted poverty alleviation**

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### About CECEP

China Energy Conservation and Environmental Protection Group (CECEP) is a central enterprise engaged in energy conservation and environment protection and was founded in 2010 after the merger between China Energy Conservation Investment Corporation (CECIC) and China New Era Group Corporation (CNEGC), with the approval of the State Council. The predecessor of China Energy Conservation and Environmental Protection Group (CECEP) was the Energy Conservation Bureau of the former State Planning Commission of China, which was restructured into Energy Conservation Company of China Energy Investment Corporation in 1988. After more than three decades of development, CECEP has successfully transformed from a national policy investment company into a large energy conservation and environmental protection enterprise covering multiple fields and businesses and with great overall strength in China. It has established a "4 + 1" business layout featuring energy conservation, environmental protection, clean energy and health plus relevant comprehensive services as its major businesses. As of the end of 2019, CECEP has more than five hundred subsidiaries at various levels, including twenty-five secondary subsidiaries and four listed companies. Its business has reached all provinces, municipalities and autonomous regions in China and 110 foreign countries and regions.

#### 1 minute of CECEP

In just one minute, CECEP can perform environmental scanning for 8,000-plus monitored points across the country; carry out 50 billion diagnostic analyses on environmental problems; generate 25,000 kWh of green electricity and illuminate the night of 340,000 families; treat 48.61 tons of domestic waste and bring a day's cleanliness to 50,000 people; produce 1,581.05 tons of water supply and provide clean water for 100 million people; treat 1,539.19 tons of sewage and irrigate 80 football fields, and purify 1.33 million cubic meters of flue gas and create healthy breathing conditions for 190 million people.





## Organizational Structure



## Second-level Management





## Corporate Governance

CECEP complies with laws and regulations such as the Company Law of the People's Republic of China, and has taken active actions to improve and standardize the construction of the Shareholders' Meeting, Board of Directors, Board of Supervisors and the management team, build and improve the corporate governance mechanism, improve the legal person governance structure, strengthen the disclosure of significant information to protect investors' right to know and supervise.

In 2019, CECEP further standardized systematic procedures of the board of directors and actively explored new ideas for the development of the Group. With the continued improvement of strategic decision-making and risk prevention and control capabilities, the board of directors continued to play a central role in the Group's reform and development. In 2019, CECEP revised its management systems such as the Rules of Procedure and Authorization Management System of the Board of Directors to control business risks and improve decision-making efficiency of the board of directors; printed and distributed formally Contractual Management Measures and Performance Evaluation Management Measures for managers, taking substantial steps for piloting contractual management at the managerial level. In 2019, CECEP put significant financial matters such as external donations, external guarantees and corporate liabilities under strict control, and made prudent decisions on major investment matters.

Throughout 2019, CECEP held 19 board meetings in total, on which 47 major issues were studied and considered. In addition, eight special committee meetings were held to hear and deliberate eight proposals, which were related to the financial budget, financial statements, major investment and financing projects, and important system construction of the Group; and six collective survey activities targeted mainly on external directors were organized, to learn profitability, income levels, and technical strengths of four secondary companies, 12 tertiary companies and three proposed cooperative companies from the perspectives of major investment objects, green buildings, and water treatment.

## Compliance with laws and regulations

CECEP strictly abides by various laws and regulations, requests employees to comply with relevant laws and regulations of places where they do business, and is committed to creating a devoted team of honest and dedicated employees, ensuring the Group's compliance with laws and regulations.

**Managing enterprise by law:** CECEP has formed a leading group to advance the rule of law in the group, improve the legal work system and the contract management mechanism, strengthen the training and publicity of legal compliance awareness, and push forward the construction of a long-term legal management mechanism.

**Risk management and control:** In 2019, CECEP doubled risk management and control over key operational management areas and key links to improve risk prediction and supervise risk events handling, avoiding systemic risks. In 2019, CECEP conducted a system risk assessment in an all-round way. Major risks faced by CECEP were risks with cash flow, business structure and strategic management. Solutions to these three major risks have been effectively implemented, and no major risk events occurred. In 2019, CECEP continued strengthening the management of major daily events. Specifically, CECEP checked contracts involved, corporate governance structure, risk assessment procedures and possible major risks. In total, 100-plus major business matters were discussed, including investment, quality and efficiency improvement, property right change, and evaluation report.

**Internal compliance audit:** To optimize audit over internal compliance, CECEP improved the way and method that subsidiaries work on the field in 2019, and selected 6 subsidiaries to carry out on-site self-assessment counseling and key review. Besides, CECEP advanced the on-site working time, effectively promoting the audit progress over subsidiaries and work quality improvement; A third-party body was invited to conduct an independent audit for the head office. Specifically, an objective audit was made in questionnaires, interviews, and audit tests on specific matters for internal compliance of departments at the head office over key work. Corresponding optimization suggestions were put forward for the defects found; Given the problems encountered with the 2018 internal compliance audit, 5 suggestions for further improving internal compliance audit were put forward.

**Anti-corruption:** Guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, the Party Committee of the Group implemented with determination the spirit of the 19th CPC National Congress and the Second, Third and Fourth Plenary Sessions of the 19th CPC Central Committee, and fully implemented the spirit of the 3rd Plenary Session of the 19th Central Commission for Discipline Inspection, and meeting spirits of the SASAC and Central enterprises on building a clean and honest government and anti-corruption work in 2019. CECEP led its discipline inspection committee to unite and exert strength in the same direction. They effectively fulfilled and focused on "two responsibilities" and promoted the Party building of the Group to deepen.



## CSR Management

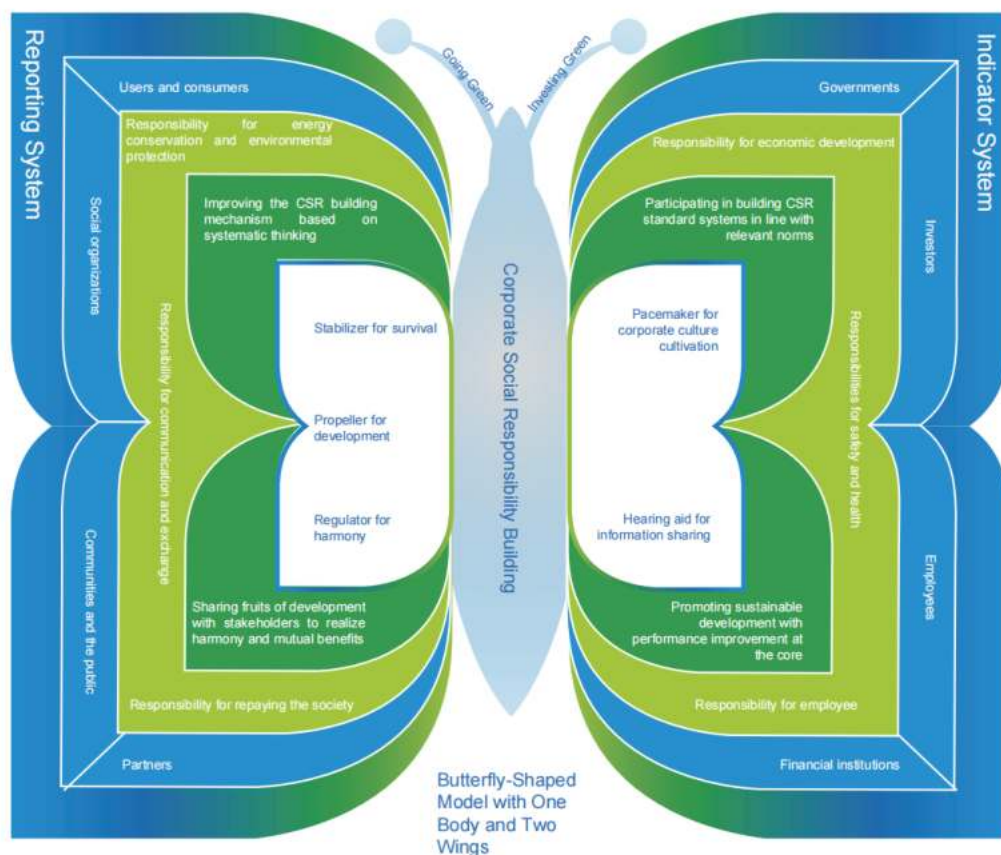
CECEP focuses on the three mainlines of economy, environment and society, and fulfills its essential responsibilities of profitability and efficiency, inborn industrial responsibilities of energy conservation and environmental protection, and consistent original responsibilities of harmonious coexistence. CECEP is committed to assuring investors, satisfying customers, sharing common benefits with stakeholders, earning a reputation in society, promoting employees' welfare, and making the earth and people's lives better, and building a world-class service group of energy conservation, environmental protection and health care.

## CSR Philosophy

Based on sustainable development, CECEP takes "Going Green, Investing Green" as its CSR philosophy, regards value creation as the core, and pursues comprehensive values of economy, society and environment, striving to realize the CSR vision of "launching green campaigns, making ecological progress, and serving employees and the public."

## CSR Model

CECEP keeps firmly in mind the mission of "achieving bluer skies, greener mountains, clearer waters and a better life," deepens the connotation of "Going Green, Investing Green," and implements six fundamental responsibilities including energy conservation and environmental protection and economic development. CECEP gives play to the five functions of social responsibility such as accelerating corporate development and promoting social harmony, and has built a model of "Butterfly with One Body and Two Wings" to guide the fulfillment of social responsibility.



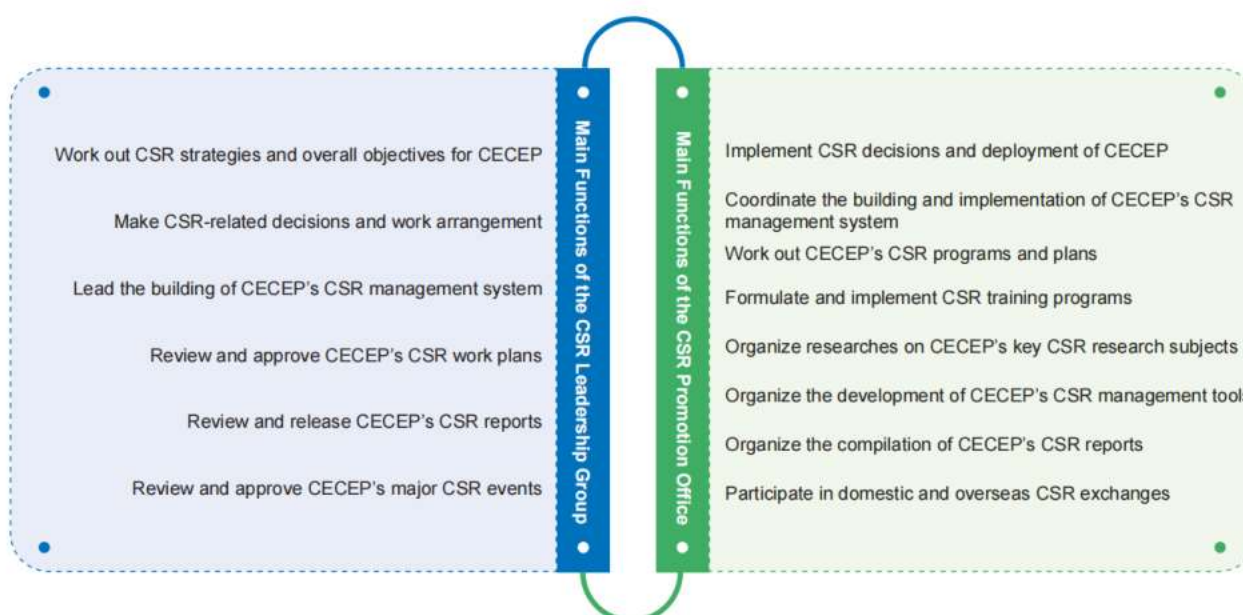


## CSR Promotion

CECEP further improves the social responsibility management system and promotes integrating the concept of social responsibility into its strategic development, corporate governance, business operation, sound social responsibility organization structure and governance mechanism. CECEP improves the social responsibility planning and the social responsibility report and index system. CECEP has maintained a leading position in CSR fulfillment ratings by social responsibility rating authorities.

## CSR Governance

CECEP has established a leadership group on social responsibility work led by major leaders of the Group. CECEP enhances the building of social responsibility organizations, identifies the boundaries between authorities and responsibilities, and realizes top-down coordination and effective communication.



## CSR Integration

CECEP integrates social responsibility into its corporate development strategy, routine operation management, supply chain management and internationalized operation to promote the transformation of social responsibility into the endogenous power of corporate development. CECEP encourages its subsidiaries to innovate social responsibility management, carry out special practices of social responsibility practices, and build a social responsibility brand to improve the group's social responsibility level.

## CSR Planning

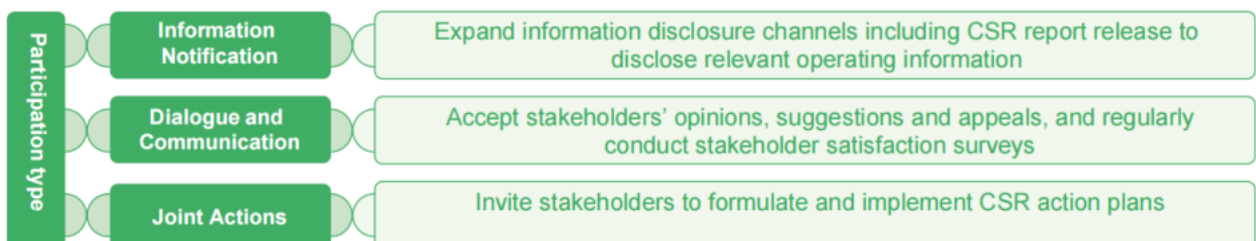
CECEP observes SASAC's requirements for promoting social responsibility management, practice and communication in centrally-administrated SOEs. Based on actual situations, CECEP timely adjusts its planning and promotes the comprehensive integration between social responsibility and other work.



Content	Implementation phase		
	2014-2015 Philosophy Introduction	2016-2017 System Improvement	2018-2020 Overall Integration
To further improve the CSR organizational system	Build the CSR Leadership Group and the CSR Promotion Office, and then identify CSR part-time/contact persons at all departments	Improve the top-down CSR organization system to cover all departments and subsidiaries of CECEP	Carry out pilot projects of CSR management and integrate CSR requirements into routine operations of all business sectors of CECEP
To further improve the CSR index system	Improve the CSR index system according to the requirements of the SASAC	Organize the guidance on the compilation of the CSR reports in accordance with the Guidance on Social Responsibility (GB/T 36000-2015), the UN 2030 Agenda for Sustainable Development and other relevant standards	Incorporate the philosophy and requirements of CSR from related standards into current institutional documents
To enhance the CSR capability building	Regularly carry out CSR training sessions to popularize CSR knowledge	Guide and organize subsidiaries to carry out CSR training and communication	Urge subsidiaries to continuously promote CSR integration into employees' post responsibilities in a comprehensive and profound way
To continuously conduct stakeholder management	Identify and sort out CECEP stakeholders in each business sector	Conduct surveys on stakeholders to understand their expectations and requirements	Conduct categorized management of stakeholders, and continuously improve communication strategies for different stakeholders

## CSR Communication

CECEP continuously enhances communication with stakeholders. By compiling and releasing high-quality social responsibility reports, and organizing CSR communication activities, CECEP timely discloses important information of CECEP, replies to public concerns, creates opportunities to engage stakeholders in corporate operation management, and improves operation transparency.

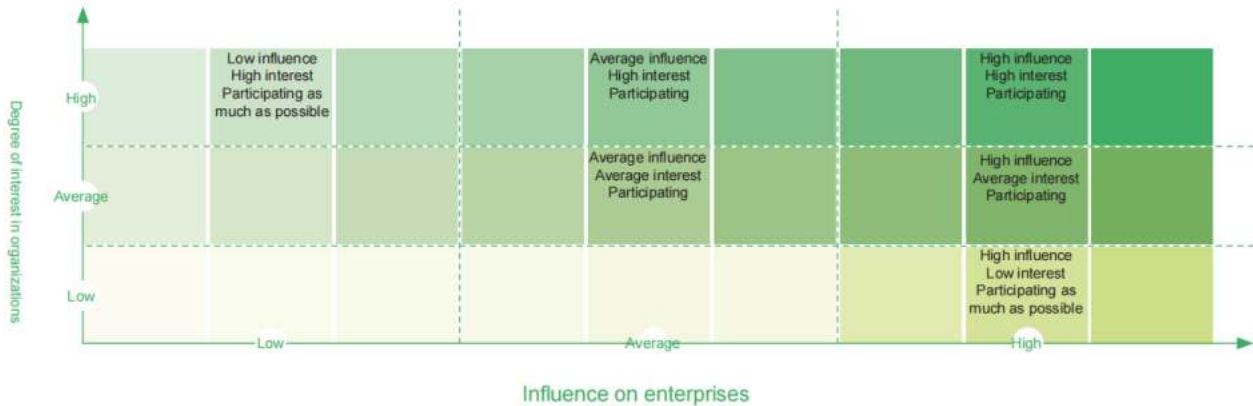




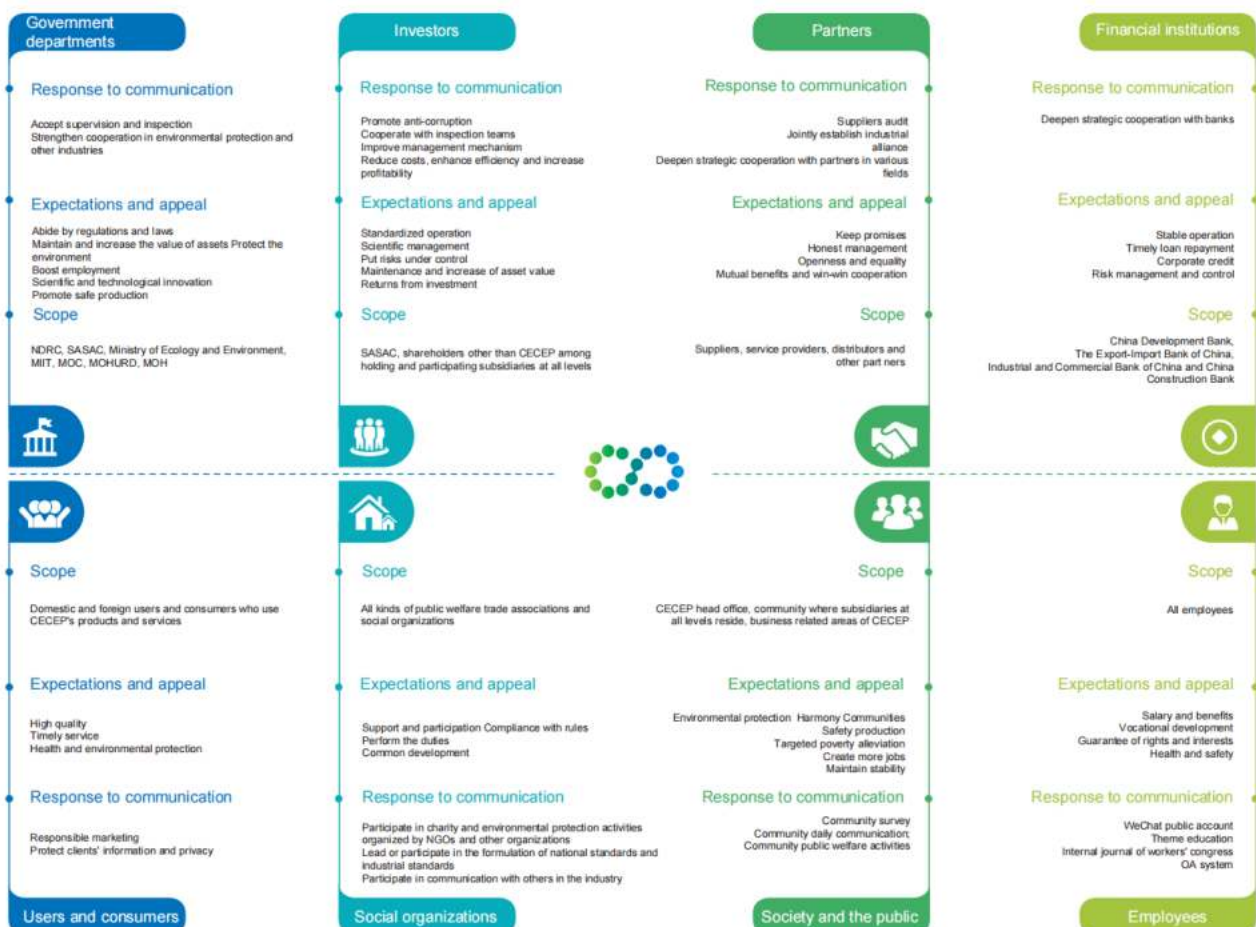
## Communication and Participation

Starting from the main business, CECEP created economic benefits, while keeping communication with all stakeholders in 2019 based on the Group's actual operation and management. Compared with previous years, the link of substantive issues survey was added with engagement survey of the board of directors, the board of supervisors and the management team in the form of questionnaires; The surveys helped explain their evaluation and expectation, and made clear their demands. In addition, CECEP also realized long-term and effective communication with stakeholders through other communication channels.

### Principles for selecting shareholders



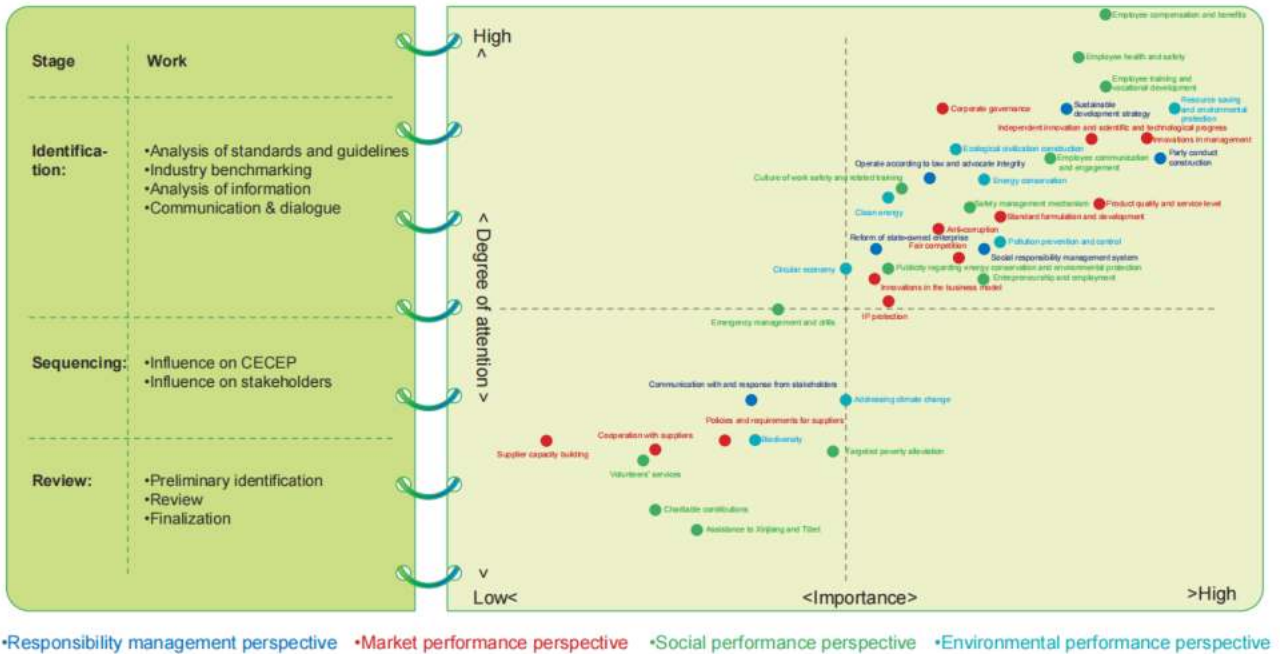
### Communication with shareholders





## Information Disclosure

In 2019, we learned the expectations and appeal of stakeholders in the form of questionnaires and expert consultation. In CSR preparation, the degree of importance attached by important stakeholders to different issues was fully reflected, improving the substance of the report. Topic identification, ranking and review in 2019 related mainly to the following:



## CSR Sharing

CECEP has been actively advancing responsible sharing and communication and promoting CSR development in the industry. In 2019, "Lecture Room for Leaders"-100 open lectures of state-owned enterprises jointly organized by SASAC and the Ministry of Education was held at Beijing Foreign Studies University. Yu Honghui, general manager and deputy secretary of Party Committee of the Group, made a themed report entitled "Achieving bluer skies, greener mountains, clearer waters and a better life." In his report, he sent a message to attending students that it is important to leave a string of green footprints, become a gorgeous sight of beautiful China and do their parts to a beautiful China and a clean, and beautiful world no matter where they go and how far they go!



## CRS Honors

- Targeted poverty alleviation cases of the Group have been included in the Yearbook of China's Poverty Alleviation and Development over the years, Research Report on Corporate Social Responsibility of Central Enterprises, Force of Central Enterprises in Relieving Poverty, and textbooks of supporting cases of SASAC corporate social responsibility;
- On December 30, 2019, the 7th Annual Meeting of New Media of Chinese Enterprises was held in Xiong'an New Area, with the theme focused on "5G All-Media Age". At the annual meeting, CECEP won the "2019 Chinese Enterprise New Media Creation Award" with its short promotional video titled 1 Minute of CECEP;
- Party branch of Lattice Lighting affiliated to Jiangxi Company was awarded by the SASAC of Jiangxi the honor of "Advanced Primary Party Organization" in 2019;
- CECEP Environmental Protection Equipment Co., Ltd. won the honorary title of "Top Ten Green Responsible Enterprises in China" on the eighth China Green Development High-Level Forum themed on "Innovation Leads Green Development";
- CECEP Finance Co., Ltd. (hereinafter referred to as "CECEP Finance") won the award of "The Most Innovative Financial Company of the Year" in the selection activity titled "2019 China Financial Institutions Gold Medal • Golden Dragon Award". This is the third time that CECEP Finance won the Golden Dragon Award following the "Golden Dragon Award" for the Most Growing Financial Company and the Best Fund Management Financial Company in 2016 and 2017.





## Forge a CECEP Iron Army with high-quality Party building

Party building of the Group was guided as always by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era and centered on strategies of the Group. Led by political construction, CECEP performed Party building for further improvement. Taking the implementation of the responsibility system for Party building as the starting point, CECEP implemented the major decision-making arrangements of the CPC Central Committee and the work requirements of SASAC Party committee.

### In this year,

The Party committee of the Group carried out in-depth education to "Remain true to original aspiration and keep our mission firmly in mind", promoted the special action of "Promotion Year of primary Party Building in Central Enterprises" in a down-to-earth manner and exercised Party self-governance fully and with rigor. The Party building of the Group was strengthened in a comprehensive way, providing a strong political guarantee for the Group's reform and development. The Party building of CECEP in this year was focused and distinctive. Party branch of CECEP (Jiaxing) Environmental Protection Technology Park Development Co., Ltd. (hereinafter referred to as "CECEP Industry") was appraised as "An advanced primary Party organization of central enterprise" and its characteristic practice of Party building was published in a full page on the Study Time. Hao Jiahua, the first resident secretary of CECEP at Shichang Village, Song County, Henan Province, was commended as "Excellent Communist Party Member of Central Enterprises".

### In this year,

The Party committee of the Group attached great importance to work style construction by implementing the work style requirements of "Do it right away and work hard" of Song Xin, Party Secretary and Chairman of the Group. Cadres took the lead in carrying forward the "Eight does" work style to firmly build up service awareness, and improve "Ten abilities" in the following aspects: comprehensive business, communication and coordination, quick response, track and supervision, briefing, typical model selection, continued optimization and improvement, reform and innovation, performance and reporting, standardized management, and pioneering efforts.

## Themed education helped improve the morale of the iron army

According to the unified arrangements of the CPC Central Committee and the requirements of the SASAC Party Committee, the Party committee of the Group carried out the themed education of "Remaining true to original aspiration and keeping our mission firmly in mind" in two batches. With a continued focus on the theme, the education activity stuck closely to the main line of studying and implementing Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era and carried out the general requirements of "Remaining true to original aspiration, taking the mission, finding the gap, and solving problems". As a result, four key measures of "Studying and education, investigation and research, problem examination, rectification and implementation" were pushed forward as an organic whole. Learning and action were combined, and so was the case with an investigation with reform, promoting the healthy and orderly development of the themed education. The 11th Central Touring Supervision Group and first SASAC Party committee Touring Supervision Group have supervised and instructed the themed education activity of the Group and its subordinate enterprises for more than 20 times and gave positive answers.

### Case

#### The Party committee of CECEP held the second batch of summary meetings for the themed education activity

The Party committee of the Group held the second batch of summary meetings for the themed education of "Remaining true to original aspiration and keep our mission firmly in mind". The spirit of studying the Central themed education activity and carrying the second batch of themed education activities for Central enterprises under SASAC was conveyed in earnest. Song Xin, Party Secretary and Chairman of the Group comprehensively summarized the second batch of themed education activities and made arrangements for consolidating and deepening the achievements of themed education to promote the high-quality development of the Group.





## Talents under the Party supervision expand the iron army

CECEP has always been adhering to the principle of placing cadres and talents under Party supervision. Based upon the "20-character" standard for leaders of state-owned enterprises, CECEP has successively formulated and revised nine systems, including the *Regulations on Management of Leaders of the Group*, in line with new policy requirements on selection, promotion and appointment of cadres of Central Party Committee and SASAC Party committee. CECEP took the lead to promote and implement joint talent training programs and signed a cooperation agreement with the Graduate School of Tianjin University, unfolding "university and enterprise cooperation" dedicated to training engineering doctors majored in environmental engineering. CECEP continued strengthening the scientific and technological talent building of the Group.

### Case

**CECEP Lattice Lighting Co., Ltd (hereinafter referred to as "Lattice Lighting") strengthened self-building to forge an excellent Party branch**

Lattice Lighting established a benchmark by strengthening position building, Party member team building, and enterprise culture building. It built up a Party membership with firm ideals, excellent business skills, and model effects. It forged a reliable, excellent and pragmatic Party branch, improving its organization and combat competency. Lattice Lighting Party branch has been awarded by the Party committee of the Group and Nanchang Municipal Party Committee in succession as an "Advanced primary Party organization" and identified by Nanchang City as the "Model Site for Party Building" of the high-tech zone.

### Case

**The Communist Youth League of China CECEP second Congress was held successfully**

On December 19, 2019, the Communist Youth League of China CECEP second Congress was held in CECEP Building. It pointed out the way forward for the CECEP iron army. It expressed the expectation that the majority of youth league members got a full sense of happiness and achievements in the big family of the Communist Youth League, and polished up their skills and improved oneself in the melting pot of the Communist Youth League, and became a new force for high-quality development of CECEP in the new era.







## The epidemic Calls for Our Action, and It Is Our Duty to Bring It under Control.

The sudden outbreak of COVID-19 in 2020 presented an unprecedented challenge to the public's lives and safety. The epidemic calls for our action, and it is our duty to bring it under control. The Party committee of the Group attached great importance to pandemic prevention and control, implemented with determination the spirit of important instructions of General Secretary Xi Jinping, decisions and arrangements of the CPC Central Committee and the State Council, and work requirements of SASAC Party committee, and gave priority to pandemic control then. The Party committee of the Group quickly set up a leaders' group to work out proposals by specialty to go all out for pandemic prevention and control.

## Set up a leaders' group for pandemic prevention and control in prime time, gaining initiative for the battle against COVID-19

Confronted with challenges posed by the sudden pandemic to environmental protection, CECEP made full rein of professional experience and strengths in medical and solid waste handling, garbage disposal, municipal water supply, domestic sewage treatment, industrial wastewater treatment and medical health. No sooner had the pandemic broke out than the Group built up a leaders' group for the battle against it, with Song Xin, Party Secretary and Chairman of the Group serving as the team leader. Besides, 138 primary Party organizations were quickly organized, and 45 Party members vanguard and commando teams were set up. 1,000-plus Party members and volunteers from nearly 100 companies, a total of 14,000 healthy persons, were mobilized to go to the front line of epidemic control.

The Group organized without any delay CECEP Ecological Environment Technology Co., Ltd. and China National Environmental Protection Group and other subsidiaries, to donate a total of 33.1757 million yuan to pandemic-hit areas such as Wuhan and Xianning, Hubei to assist with the war against COVID-19. As of February 2020, the Group donated 2,300 sets of protective clothing and 3,000 masks to the Wuhan Urban Management Commission and 3,500 sets of protective clothing and 1,000 masks to Jiayu County, Xianning City. New Era Health Industry (Group) Co., Ltd. (hereinafter referred to as "Health Industry"), a company subordinate to China New Era Group Corporation (hereinafter referred to as "New Era Group") that is affiliated to CECEP donated 100 air purifiers to Beijing Hospital. CCYL Committee of the Group donated 1,200 masks to Shichang Village, Song County and Xinshi Village, Fuchuan, two designated poverty alleviation objects.

## Play the role of a fighting bastion of the environmental protection industry and be determined to fight and win the battle against the epidemic

The Group and its subordinate subsidiaries implemented resoluteness of the spirit of the important instructions of General Secretary Xi Jinping on winning the war against the pandemic, decisions and arrangements of the CPC Central Committee and the State Council, and work requirements of SASAC. In particular, branches and subsidiaries in Hubei carefully worked in with and implemented work arrangements of local Party committees and governments. Party organizations of CECEP branches and subsidiaries in Hubei gave full play to their role as a fighting fortress. The broad masses of Communist Party members charged ahead, setting a pioneering and exemplary role. Medical and hazardous waste disposal sites, collection and vehicle scheduling, disposal and disinfection equipment, and staff attendance were all under control and allocated to meet the local government's emergency and special tasks for pandemic prevention and control.

No sooner had the COVID-19 broke out than subsidiaries of the Group were engaged in medical waste, solid waste, water affairs, clean energy, and equipment manufacturing took actions, sounded the trumpet of the battle against the pandemic, and provided full-course disposal schemes in the front line to eliminate secondary pollution of the virus. Subsidiaries like CECEP Ecological Environment Technology Co., Ltd. and China National Environmental Protection Group of the Group went all out to work with local health and pandemic prevention and control agencies to help with medical waste disposal, special solid waste treatment, block disinfection and the like. Subsidiaries and branches in Jingzhou, Xiaogan, and Jiayu all got involved in the local pandemic prevention and control. Subsidiaries and branches of the Group like General Water of China Co., Ltd. (hereinafter referred to as "General Water") developed various ways to guarantee water safety of local residents and stable and reliable operation of sewage treatment facilities.



China Geo-Engineering Corporation (hereinafter referred to as "China Geo-Engineering") and Valiant Corporation Limited (hereinafter referred to as "Valiant Corporation") purchased protective clothing, masks and other materials needed for pandemic prevention and control from overseas in line with the unified arrangement of the Group, doing a good job of material security. A powerful force that was united, and determined to win the pandemic prevention and control was built up. New Era Health Industry, CECEP Equipment, and Valiant Corporation went all out to carry out product R&D, distribution and supply in view of market demands.

## Case

### CECEP provided emergency assistance for Wuhan by sponsoring the construction of Qianzishan Medical Waste Disposal Center

In the face of the pandemic that swept through the world, CECEP, at the request of Wuhan Municipal Government, provided emergency aid to sponsor the construction of the Qianzishan Medical Waste Disposal Center. In the course of assistance, CECEP Ecological Environment Technology Co., Ltd. set up a temporary Party branch where there are business activities, where there is the Party's fighting fortress. In the process of construction, CECEP overcomes a variety of difficulties to complete the construction plan within ten hours, design drawings of four major categories of projects within three days, and main equipment hoisting and pipeline laying within eight days. In the afternoon of February 22, 2020, all three production lines were officially put into operation, completing the construction task fully, which was 31 hours ahead of schedule that was originally planned to finish the project within 15 days. The successful completion of work requirements of the Ministry of Ecology and Environment and Wuhan Municipal Government greatly eased the ongoing pressure on medical waste disposal in Wuhan and prevented the "secondary spread" of pollution.

#### In the face of the sudden COVID-19 outbreak

Employees who were fully engaged in the front line of pandemic prevention and control totaled 14,000-plus



Donations to pandemic hit areas and other areas total 33.1757 million yuan

#### Q1 2020

Solid waste treated by subsidiaries altogether 2.88 million tons



• Employees of CECEP Ecological Environment Technology Co., Ltd. joined the Party at the front line of pandemic prevention and control

During the period when the pandemic raged, subsidiaries at all levels of CECEP, in particular, enterprises engaged in medical waste disposal, garbage disposal, water supply, and sewage treatment in the severely-hit regions launched the emergency response right away and fully implemented the 24-hour duty system of leading cadres. Many employees voluntarily gave up their vacations and returned to their posts to ensure stable, reliable and efficient operation of production facilities. Altogether, subsidiaries at all levels treated solid waste of 2.88 million tons and medical wastes of 10,900 tons in Q1 2020. Medical waste treated directly connected with COVID-19 was 2,687 tons; Overall, 389 million tons of sewage was treated. CECEP did give full play to its leading role in environmental protection and won the "blocking action" of pandemic prevention and control.





## Protection of the Yangtze River with All Wisdom Is under Action

As a central enterprise focused on energy conservation and environmental protection and a platform for enterprises engaged in pollution control in the Yangtze River Economic Belt, CECEP has never forgotten its mission and thoroughly implemented decisions and arrangements of the Party Central committee with Comrade Xi Jinping at its core for the integrated development of the Yangtze River Delta and the development of the Yangtze River Economic Belt. On the journey of helping the ecological green integration development of the Yangtze River Delta, CECEP accumulated experience, achieved results, gained reputation and set up a good image. In 2019, CECEP was dedicated to building a high-level, caring and powerful platform for pollution control of the Yangtze River Economic Belt. Committed to serving the national strategy for developing the Yangtze River Economic Belt, CECEP exerted strengths of the entire Group to fight a tough battle for the ecological environment protection and restoration of the Yangtze River Economic Belt.

## Positive implementation of national strategies from a high starting point

The Party committee of CECEP thoroughly studied and implemented the spirit of General Secretary Xi Jinping's important instructions, implemented with resoluteness the decisions and arrangements of the CPC Central Committee and the State Council and the instructions of the SASAC Party committee, and kept firmly in mind the responsibility and mission of central enterprises in energy conservation and environmental protection. On January 27, 2019, Leaders' Group Office for the Promotion of the Yangtze River Economic Belt printed and distributed *Guiding Opinions on Supporting CECEP to Play the Main Platform of Pollution Control in Yangtze River Economic Belt* (hereinafter referred to as "*Guiding Opinions*"). CECEP studied and fully implemented the requirements of the *Guiding Opinions*. Taking innovative investment and financing methods and governance models as driving force and whole industrial chain treatment of solid wastes as the focus, CECEP gave full play to the advantages of the main business and went all out to restore systematical protection of the ecological environment of the Yangtze River.

### Case

#### Establish a Scientific and Technological Innovation Alliance for Joint Protection of the Yangtze River

On December 18, 2019, the inaugural meeting of the Scientific and Technological Innovation Alliance for Joint Protection of the Yangtze River (hereinafter referred to as "Alliance") was held in Beijing. The Alliance was proposed by CECEP and established by sixteen units together, including Changjiang Water Resources Commission of the Ministry of Water Resources, Tsinghua University and Chinese Academy of Environmental Planning. A total of 39 member units joined in the first batch. Guided by Xi Jinping's ecological civilization thought, the Alliance aims to practice the concept of green development, bring together enterprises, scientific research institutions, universities and other social forces, promote collaborative innovation in science and technology, serve the "Great Protection of the Yangtze River", and make positive contributions to pollution prevention and control in the Yangtze River Economic Belt.





## Story of care - CECEP is caring and exerts all strengths to ensure people's happiness

### Yangtze River Economic Belt

Implemented roughly 300 energy conservation and environmental protection projects falling into different categories 14,000-plus



Supplied green electricity of about 2.6 billion kWh



CECEP has implemented nearly 300 energy conservation and environmental protection projects falling into different categories in 11 provinces and cities in the Yangtze River Economic Belt. By the end of 2019, CECEP has implemented more than 30 solid waste treatment projects, which can treat about 6.6 million tons of solid waste such as domestic waste and about 100,000 tons of distiller's grains waste from 11 provinces and cities along the Yangtze River every year; CECEP supplied green power of about 2.6 billion kWh, realizing a saving of nearly one million tons of standard coal and a reduction of carbon dioxide emissions by more than 16 million tons; in addition, CECEP planned 25 pilot projects for model cities like Huzhou, Xianning, Hengyang, and Bijie, gaining beneficial experience that can be applied and replicated to other projects. In 2019, starting from social responsibilities of a Central enterprise, CECEP did environmental protection projects in the Yangtze River Economic Belt in earnest. CECEP used comprehensive strengths to lead the green development of the Yangtze River Economic Belt in the future, and ensure availability of green water and green mountains of local residents.



• Chairman Song Xin conducted a site survey at Jiayu, Xianning, Hubei Province

### Case

### Improved local people's livelihood through resources recycling

Invested to build Xiangfu Waste Incineration Power Plant

Created more than 90 jobs for Minqiang Village nearby



In the Linen Washing Workshop of Chengdu Xiangfu Domestic Waste Incineration Power Plant that was invested by CECEP, heat energy from waste incineration was fully utilized for linen washing. In addition, more than 90 jobs were created for Minqiang Village nearby. Local villagers accounted for 70% of the headcount and enjoyed the social security paid by the company according to law. The average income per person was nearly 4,000 yuan after social security expenses were deducted.



• A woman worker is ironing sheets with an ironing machine





## Story of intensity - Strengthen construction of the main platform

CECEP, as the only central enterprise in China that focuses on energy conservation and environmental protection, its main business is highly compatible with the pollution control of the Yangtze River. CECEP conducted a series of beneficial explorations in the fields of ecological environment supervision, comprehensive treatment of solid waste, water treatment, and soil remediation and gained successful experience for pollution control in the Yangtze River Economic Belt.

In 2019, CECEP made continued efforts and strengthened construction of main platform. It signed in succession a store of strategic cooperation agreements with national ministries and commissions, local governments and large enterprises and institutions, including China National Chemical Engineering Group Corporation Ltd., Harbin Electric Corporation, China Railway Construction Corporation Limited, Agricultural Development Bank of China, Changjiang Water Resources Commission of the Ministry of Water Resources, Human Resources Development Center of the General Administration of Sport of China, Ma'anshan City, and Songjiang District, Shanghai. CECEP deserved the reputation of being the leader in environmental pollution control in the Yangtze River Economic Belt.



- CECEP and the Changjiang Water Resources Commission of the Ministry of Water Resources signed a strategic cooperation agreement for "Ecological Yangtze River Construction for Joint Great Protection of the Yangtze River"

### Case

Treat 1,000 tons of contaminated soil every day

Donggang, founded in 1958 and located in Huangshi, Hubei, is one of the national model areas for soil pollution control along the Yangtze River, which is a typical large-scale complex industrial pollution site. Guided by the innovative idea of clean remediation, CECEP DADI Environmental Remediation Co., Ltd. (hereinafter referred to as "CECEP DADI"), completed design, processing and construction organization setup of local pollution control complexes, which effectively reduced impacts of equipment noise, smoke and dust on surrounding residents, and realized energy saving and consumption reduction and clean production, blazing a trail for clean production and efficient treatment of remediation industry. Equipment of the thermal desorption treatment workshop can treat 1,000 tons of contaminated soil every day at full load. In other words, it can treat 60 tons of contaminated soil per hour, the weight of a Boeing 737.

#### Thermal desorption workshop

1,000 tons of polluted soil can be treated every day when equipment operates under full load





CECEP Capital Holdings Co., Ltd.

set up CECEP (Hubei)  
Environmental Protec-  
tion Equity Investment  
Fund with a total fund of  
one billion yuan



Set up a fund to explore innovative investment and financing models  
for great protection of the Yangtze River


CECEP Capital Holdings Co., Ltd. (hereinafter referred to as "CECEP Capital") gave full play to industrial advantages to gather social capitals and set up CECEP (Hubei) Environmental Protection Equity Investment Fund with a total fund of one billion yuan, in alliance with Hubei Provincial Government Guidance Fund, Daiwa Corporate Investment Co., Ltd., HUBEI WINGS INVESTMENT and the like to target exactly at the national great protection strategy for the Yangtze River, providing financial support for the Group to play the role of the main platform for pollution control in the Yangtze River Economic Belt. Under the witness of relevant government leaders of China and Japan, parties concerned signed a cooperation agreement contemplated to set up the fund on the 13th China-Japan Comprehensive Forum on Energy Conservation and Environmental Protection held on December 8, 2019. Zhu Qingfeng, deputy general manager of the Group, attended the signing ceremony.



2020 marks the fifth year to fully implement the spirit of the important speech delivered by General Secretary Xi Jinping at the symposium on promoting the development of the Yangtze River Economic Belt. With General Secretary's entrustment firm in mind, CECEP fully implemented the Guiding Opinions, and innovated ideas and initiatives to do all the work of the main platform in depth and detail, doing more and greater contributions to promoting the development of the Yangtze River Economic Belt and protecting the Mother River.







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# Greenness

Root for Development

green

The development of this



Qijiagou Tailings Treatment Project of Changba Lead-zinc Mine, Gansu Province, located in Hui County, Longnan City, Gansu Province, is the first batch of national green factories, a national AAAA-level tourist scenic spot, and a green tourist mine integrated with green ecology, tourism and environmental protection, and digitalization under the new situation. With the core library with complete prospecting data and perfect functional facilities as well as the science and technology museum integrated with mining culture and popular science propaganda, it was named as the provincial popular science education base by the Science and Technology Department of Gansu Province.







## Committed to Environmental Protection

### Solid Waste Treatment

Environmental protection projects of CECEP were push forward steadily in the year. Fruitful results were achieved with projects such as solid waste treatment, water treatment, air pollution control and soil treatment. "Green seeds" of CECEP have taken root and sprouted all over the country.

In 2019, CECEP continued improving solid waste disposal business pattern to enrich upstream and downstream business chains and realize comprehensive development in fields like food waste, construction waste, kitchen waste and medical waste. Handling capacity of solid waste exceeded 12 million tons and daily handling capacity reached 92,000 tons.



CECEP (Laishui) Environmental Protection Energy Co., Ltd. helped dispose of waste in "Beijing-Tianjin-Hebei"

In northern part of Baoding and the upper reaches of Xiong'an, there was not even a single modern waste incineration plant before Laishui Waste Incineration Power Generation project was completed. Considering this, companies under China National Environmental Protection Group conducted a comprehensive analysis for areas surrounding Xiong'an, and planned garbage incineration projects for Baoding, Laishui, Lixian and Dacheng apiece. Specifically, the situation of Laishui Project was particularly urgent, for it was a big task to be finished within a short time frame. The successful completion of Laishui Project effectively solved the problem of garbage disposal in northern Baoding, and filled in the gap of domestic garbage incineration in the region. CECEP will continuously optimizing its business pattern to keep up with the national strategies and devote positively to the construction of Xiong'an New Area, creating a "Waste-free Beijing-Tianjin-Hebei region".

#### In 2019

Solid waste treated exceeded 12 million tons



Daily treatment capacity of solid waste reached 92,000 tons



• Employees of Laishui company at the infrastructure site of Laishui Waste Incineration Power Generation Project



## Water Treatment

2019

CECEP's water treatment capacity reached 1.8 billion tons



O<sub>2</sub> reduced totaled 210,000 tons in terms of Chemical oxygen demand (COD)



CECEP gives priority to water resources management, boasts key technical equipment for biological deodorization, high-efficiency biological denitrification, sludge crushing and biological fermentation required by sewage treatment plants and is committed to improving water quality and water environment by professional means. In 2019, CECEP's water treatment capacity reached 1.8 billion tons and chemical oxygen demand (COD) reduced by 210,000 tons in total. Specifically, the sewage treatment capacity increased by 9.19% year-on-year, and the water supply capacity increased by 5.31% year-on-year.



• China's first buried reclaimed water plant with ultra-deep foundation pit built by General Water of China Co., Ltd. supplied water on December 27, 2019

## Air Pollution Control

CECEP boasts stacks of technologies for flue gas desulfurization, denitrification, and integrated treatment of other acid gases. Set foot in self-development, and joint development of a number of advantageous businesses and scientific research, CECEP is dedicated to making our skies blue again with the help of technologies.

Case

Actor for the Blue Sky Protection Campaign

Remaining true to our original aspiration and keeping our mission firmly in mind, CECEP Equipment, as CECEP's high-end energy-saving and environmental protection equipment manufacturing platform as well as always upholding determination of serving the country with industrial achievements and contributed to the blue sky campaign by powering the fight to defend the blue of our skies:

In just one minute, CECEP Equipment's "Environment monitor" can monitor and scan more than 8,000 monitoring points in 27 provinces, municipalities and autonomous regions across the country;

In just one minute, CECEP Equipment's "Environment analyzer" can carry out 50 billion diagnostic analyses on national environmental problems;

In just one minute, CECEP Equipment's "Graphene energy-saving quick-heating furnace" electricity-instead-of-coal project can save 4.9 tons of standard coal (equivalent to 3,440 yuan), reduce 0.04 tons of sulfur dioxide, reduce 12.9 tons of carbon dioxide and reduce 0.04 tons of nitrogen oxides;

In just one minute, CECEP Equipment's "Desulfurization, denitrification and dust removal of flue gas" project can purify 1.33 million cubic meters of flue gas, allowing 190 million people to get clean air; it can also remove 2.58 tons of sulfur dioxide, 0.5 tons of nitrogen oxides and 0.1 tons of soot.

## Soil Treatment

CECEP is experienced in ecological restoration and has developed independently internationally leading heavy metal monitoring equipment and ecological remediation of heavy metals by biological method. CECEP occupied a leading position in China in terms of heavy metal treatment and contaminated soil remediation. In 2019, CECEP remediated soil, improved cultivated land, controlled geological disasters and remediated soil contaminated by industrial heavy metals, and the soil involved outnumbered 2,300mu.



## Practicing Resource Conservation

As a pioneer in the field of environmental protection in China, (CECEP) has been practicing the development concept of resource conservation and green energy conservation. In 2019, CECEP paid continuous efforts to such fields as industrial energy conservation, building energy conservation and resource recycling, in the hope of protecting our green hills and clear waters in a professional way.

### Industrial Energy Conservation

CECEP has actively carried out the R&D of energy conservation and environmental protection technologies and products. We have provided comprehensive solutions such as energy-saving diagnosis, evaluation, technical transformation, operation and management and financing for large-scale energy-consuming enterprises and energy-saving projects, including metallurgy, building materials, petroleum, electricity, chemicals and coal. We have actively carried out the comprehensive utilization of all kinds of industrial residual heat, pressure and gas, as well as energy management contract (EMC) projects, to promote energy conservation and emission reduction.

#### Case

**CECEP Industrial Energy Conservation Co., Ltd. builds a comprehensive low-cost energy transformation demonstration park**

CECEP Industrial Energy Conservation Co., Ltd. implements a comprehensive low-cost energy transformation project in Yinchuan Economic Development Zone. Based on incremental power distribution network, this project aims to remove barriers between cooling, heating, water and electricity industries, achieve energy transformation and improve energy utilization efficiency. The project adopts the CCHP (combined cooling, heating and power) technology and solar heat pump technology for combined heating, and industrial circulating water in the park and the heat pump technology for heating. The independently developed operation and dispatching management platform can achieve comprehensive analysis, unified dispatching and optimized management of the park. Upon completion, the project will be able to supply 200,000 tons of industrial steam to nearly ten enterprises in the park, with its annual power supply capacity reaching 130 million kWh and heating area in winter reaching 640,000 square meters, making it possible to reduce the comprehensive energy utilization cost of enterprises in the park by 10%-20%, and increase their energy utilization efficiency by above 85%.





## Building Energy Conservation and Green Building

In 2019

Total number of energy stations put into operation

37



CECEP is devoted to the promotion and large-scale application of the regional combined energy technology featuring "clean energy" and "mutual complementation". Through integrating building energy conservation resources of the whole society, CECEP provides comprehensive services of eco-friendly cities, with technology, service, brand and capital as the core. At present, CECEP has developed 49 green demonstration parks, with a built-up area of more than nine million square meters, of which nearly 430,000 square meters have obtained the Green Building Design Label certification (above three-star level). In 2019, a total of 37 energy stations were formally put into operation, increasing the building area accessing to energy by 2.143 million square meters.

## Resource recycling

CECEP actively implements the recycling of a variety of wastes, explores new development modes of the circular economy, and strives to build the whole industrial chain service mode for new energy-saving and environmentally-friendly materials, in the hope of reducing environmental pollution and achieving circular development and green development. In 2019, CECEP generated over 3.6 billion kWh of electricity from solid wastes such as garbage and biomass, and nearly 700 million kWh of electricity from residual energy (residual gas, heat, etc.).

Case

Recycle sludge by carbonization

The Sludge Carbonization Treatment Center of Ezhou CECEP Both Environment Engineering and Technology Co., Ltd. (hereinafter referred to as "CECEP Both Company") is capable of turning wet sludge into tiny carbon particles through such procedures as drying and carbonization. "The most significant advantage of sludge carbonization is that it can achieve the harmless, reductive and resourceful proposal of sludge." According to the general manager assistant of CECEP Both Company, "in response to the high moisture content (up to 80%) of sludge, most sewage treatment plants in China dispose of sludge by means of landfill and composting, which can only reduce sludge by 75% at best, with corresponding residues and bacterial dregs being likely to cause secondary pollution to the environment; however, sludge carbonization can reduce sludge by 90%, with heavy metals in corresponding carbonization products being well solidified so that they can serve as deodorant, soil conditioner, fuel or snow-melting agents, which is of quite high economic value."



- CECEP·XIXI CENTER is a benchmarking building honored as the "city badge" of Hangzhou. Designed in line with the three-star green building standard, this project integrates such energy-saving and environmentally friendly technologies as fresh air heat recovery, adjustable external shading, air source heat pump, rainwater recycling and Solatube daylight illumination, making it a landmark-level green business office model project in Hangzhou.



Key to Success



Soul of the Group



Foundation of Greatness



Wish Embedded in Blueprint

A Look into 2020

Appendix 28





## Moving towards Green And Low-carbon Development

Moving towards green and low-carbon development is an important route for an enterprise or even a country to achieve the transition to sustainable development. In 2019, CECEP invariably adhered to the concept of green development, and conducted a series of practices and innovations in terms of green and low-carbon development.

### Environmental Management

To construct a green and low-carbon recycling industry system, CECEP defined a three-year (2018-2020) development goal of energy conservation and environmental protection industry and revised the Regulations on the Administration of Environmental Protection. We have strengthened the prevention and control of environmental protection risks, pollution controls, and the supervision and control measures of environmental protection. We have improved the control of environmental hidden dangers and reclassified the environmental protection supervision and environmental protection events. We have also promoted green manufacturing, green technology and green finance. In 2019, no major pollution incident occurred in our group.

### Low-carbon Operation

CECEP positively responded to and applied for the issuance and voluntary subscription transaction of the National Renewable Energy Green Power Certificate, actively promoted voluntary emission reduction, cultivated the awareness of green development, and called on employees to buy the green power certificates. By the end of 2019, the Group had sold 5,121 green power certificates throughout the year, increasing its total sales volume of green power certificates to 13,848, accounting for 38% of the total sales volume nationwide (36,365).

In 2019, CECEP continuously intensified efforts on the development of clean energy, with its installed capacity and clean energy generating capacity respectively reaching 12.5 million kWh and 16.1 billion kWh at the end of the year. CECEP integrated environmental protection with science and technology in the two fields of wind power generation and photovoltaic power generation, in the hope of contributing to the green and efficient development of China through bringing together the strengths of its main businesses. As one of the first batch of central enterprises engaging in the wind power business, CECEP possesses quality wind resources and, at the end of 2019, its installed wind power capacity increased by 9.3% year on year. CECEP further analyzed the development trend of the energy storage industry, and granted full support to the development of domestic energy storage projects and industrial cooperation on energy storage at the user, power generation and power grid sides. It also comprehensively carried out the pilot implementation of such new photovoltaic technologies as operation and maintenance UAV, cleaning robot and SGG nanometer membrane layer. In 2019, the installed solar photovoltaic capacity of CECEP increased by 22.1% year on year.



The Yangjiang Nanpeng Island Offshore Wind Power Project of CECEP is located in the southern sea area of Nanpeng Islands in Yangjiang City, Guangdong Province. According to the Offshore Wind Power Development Plan of Guangdong Province (2007-2030) (Revision), the planned capacity of the project is 300,000 KW, for which it is supposed to install 55 wind generating sets with a single capacity of 5.5MW and build one 220KV offshore booster station and one land-based centralized control center respectively, with the dynamic investment of the project totaling roughly 5.8 billion yuan. Upon completion, the project will be able to generate over 800 million kWh of electricity annually, and compared with current coal-fired power plants, save roughly 250,000 tons of standard coal, and reduce the emission of roughly 450,000 tons of carbon dioxide and over 370 tons of sulfur dioxide. The project is of great significance to drive the development and construction of offshore wind power facilities in Guangdong Province, speed up energy structure adjustment as well as energy conservation and emission reduction, promote the implementation of the "sea-based revitalization and green development" strategy in Yangjiang City, move faster in the transformation and upgrade of regional economy and the harmonious development of society, and build a national new energy base and Guangdong wind power industry base.





The 100MW Agricultural Photovoltaic Power Station Project of CECEP in Puli Town, Guanling County was officially started On October 8, 2019 and smoothly connected to the grid on December 29, 2019. The successful introduction of photovoltaic power station makes the "rocky mountains" in the rocky desertification area in Puli Town, Guanling Autonomous County, Guizhou Province available for use. Built on the rocky mountains, the photovoltaic power station can not only strengthen local rural collective economy through land transfer and consequently bring in labor income for local residents, but also forms the development trend of "generating power above and planting below photovoltaic greenhouses" through the cooperation mode of "agriculture-PV complementation" and "forestry-PV complementation", effectively improving and managing the ecological environment of rocky desertification areas.

In addition, green power is used across the headquarters building of CECEP, and CECEP employees are encouraged to minimize the use of papers and implement paperless office. In 2019, we held a variety of environmental publicity activities, and through such activities as lectures and publicity on environmental protection, disseminated the concept of green office and green lifestyle to our employees and the public for purpose of reducing the emission of carbon dioxide. CECEP is invariably dedicated to developing itself into an enterprise under water-saving, energy-saving, low-carbon and sustainable development relying on such advantages as green industry, service and environment.

## Protect Intellectual Property Rights (IPR)

As the only central enterprise in China mainly engaging in energy conservation and emission reduction, CECEP has been actively dealing with climate changes through such practical actions as low-carbon operation, improved internal carbon management and positive response to domestic and foreign policies on climate changes. Externally, we organize affiliated enterprises to strengthen the study of carbon trading policies, carry out carbon verification, actively communicate with local governments and competent departments, and positively respond to carbon trading; internally, we consciously organize key energy consuming enterprises to carry out carbon dioxide emission verification and timely master the carbon emission level of their subsidiaries to provide accurate and reliable data support for CECEP's carbon asset management.

### Case

CECEP attended and delivered a keynote speech in "China Pavilion" Climate Investment and Financing Meeting at the UN Climate Change Conference 2019

On December 10, 2019, the "China Pavilion" Climate Investment and Finance Meeting at the UN Climate Change Conference 2019 was held in Madrid, Spain. Yu Honghui, general manager of CECEP, attended the meeting and delivered a keynote speech therein on invitation. Mr. Yu said that CECEP would, under the guidance of the Department of Climate Change, the Ministry of Ecology and Environment, P.R.C., well perform its duties as the secretariat of the Climate Investment and Finance Association, pool such resources as capital, personnel and technology to promote cooperation and innovation among financial institutions, research institutions and enterprises, and provide decision-making basis and technical support for government agencies in formulating policies on climate investment and finance.







Building an Innovation System

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Accelerating the Application of  
R&D Achievements

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Establishing a Team of  
Talents

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# Innovation

Source of Power

create

The Source of Power



Scientific researchers of Valiant Corporation Limited are developing and preparing new product formulas in the lithography area within the clean workshop.







## Building an Innovation System

Bearing in mind the concept that science and technology plays a pivotal role in our past, present and future development, CECEP had its technological innovation upgraded to a higher level in 2019. CECEP studied and formulated such innovative administration measures as Detailed Rules for Review and Approval of Major Technological Innovation Projects (for Trial Implementation), Detailed Rules for Management and Implementation of Major Technological Innovation Projects (for Trial Implementation) and Detailed Rules for Acceptance of Major Technological Innovation Projects (for Trial Implementation) in line with project measures and other relevant regulations to ensure orderly and standardized evaluation and high acceptance quality of major projects and achieve scientific, standardized and efficient process management, and formulated the Measures for Management of Innovative Technology Demonstration Projects (for Trial Implementation) to promote the industrialization and strengthen our ability and competitiveness in technological innovation, and formulated the Measures for Management of "Five Smalls" (Small Invention, Creation, Design and Proposal) Innovation and Benefit Creation Activities (for Trial Implementation) to energize "all-involvement innovation" and pool wisdom of all employees within the group system.



## Intellectual Property Rights Protection

To standardize the management, protection and utilization of IPR within the group system, improve the level of IPR management, promote technological innovation, and strengthen the core competitiveness of the company, CECEP issued the Measures for Management of Intellectual Property Rights in China Energy Conservation and Environmental Protection Group according to such laws and regulations as the Patent Law of the People's Republic of China, Trademark Law of the People's Republic of China and Copyright Law of the People's Republic of China. Ningxia CECEP New Materials Co., Ltd. obtained the IPR Management System Certification in 2019, further standardizing CECEP's IPR protection and management.

## Accelerating the Application of R&D Achievements

In 2019, we accelerated the pace of technological innovation, invested a total of 960 million yuan in R&D, made active progress with the first batch of 18 major technological innovation projects, completed technical acceptance regarding five project phases, and determined the second batch of 12 major projects. We applied for 706 new patents (including 277 invention patents) throughout the year. By the end of 2019, we had obtained a total of 2,737 authorized patents, including 632 invention patents; won 234 provincial and ministerial scientific research awards; taken the lead in undertaking 249 scientific research projects at or above the provincial and ministerial level; edited 99 national and industrial standards as chief editor or co-editor. In addition, we also actively participated state-level science and technology programs and applied for a total of 15 national key R&D programs in 2019, reaching a new record high. Key subsidiaries such as Valiant Corporation Limited, CECEP Environmental Protection Equipment Co., Ltd. and China National Environmental Protection Group acquired new achievements in technological development.



Group photo of members of CECEP Science and Technology Committee participating in the annual working conference 2019 on December 18, 2019





- Valiant Corporation Limited was incorporated into the list of Top 100 Enterprises in the Industry of Fine Chemicals in 2019 (ranking No. 10) and the list of "S&P Dow Jones Indices".



- On December 10, 2019, the scientific research project titled "key technologies for deep control of flue gas pollution and their application in non-electric industries" won the "Science Research Famous Achievement Award in Higher Institutions (Science and Technology)" (special prize) granted by the Ministry of Education, P.R.C. in 2019.



- China National Environmental Protection Group won the "Science and Technology Progress Award (Technological Innovation)" (first prize) granted by Chinese Renewable Energy Society (CRES) and the "Science Research Famous Achievement Award in Higher Institutions" (progress prize) granted by the Ministry of Education, P.R.C. in 2019.

## Case

## Actively participate in state-level science and technology programs

As organized by the Ministry of Science and Technology, P.R.C., CECEP participated in the research and preparation of the sixth national technology forecast and medium and long-term science and technology development plan as the leading unit of the environmental protection industry group, and under the guidance of the Ministry of Science and Technology, CECEP organized several leading enterprises and industry associations in the industry in a coordinated way to carry out researches on national major science and technology strategies regarding the current situation and trend of science and technology development at home and abroad, major technological needs of industrial development, selection of national key technologies, and layout of medium and long-term strategic tasks, with preliminary research achievements being already obtained at present.

## Establishing A Team of Talents

By the end of 2019

Number of the company's scientific and technological R&D personnel by the end of 2019

**3243**



CECEP has intensified efforts on the establishment and continuous optimization of its team of talents, while focusing on the cultivation of talents, protection of employees' rights and interests and creation of a harmonious corporate culture. By the end of 2019, the company had a total of 3,243 scientific and technological R&D personnel, including two national scientific and technological talents, five winners of national science and technology awards, and 73 experts enjoying the special allowance of the State Council.

Perfecting the management mechanism regarding scientific and technological talents. CECEP has established and improved the working mechanisms regarding the introduction, use and cultivation, assessment and evaluation and communication and promotion of scientific and technological talents to ensure that they can be well cultivated, introduced, retained, utilized and developed, effectively improving their sense of belonging and gain.

Setting up a number of Technological Innovation Talents Studios. We have set up a number of technological innovation talents studios named after the leading talents in CECEP's main business, and formulated the Measures for Management of Technological Innovation Talents Studios.

Respecting and pooling talents. We have combined internal training with external introduction, opened up green channels for the introduction of scientific and technological talents, and formed a multi-purpose team of talents with reasonable echelon structure, high quality and stability.

Further carrying out the "five smalls" activities to help the company improve quality and efficiency. We have encouraged labor unions at all levels to unite workers to respond to the call of the Party Committee and, following the principle of reducing cost and increasing benefits, further carry out the "five smalls" activities to ensure that the special initiatives to improve quality and efficiency can truly take effect.

## Case

The "five smalls" scientific and technological achievements of relevant subsidiaries of General Water of China Co., Ltd. in charge of the Suifenhe project were commended and rewarded in Mudanjiang City

To thoroughly implement the spirits of the 19th CPC National Congress and General Secretary Xi Jinping's important speeches to Heilongjiang Province, Suifenhe Municipal Federation of Labor Unions, centering around the city's economic construction and key project construction goals, held a series of labor (skill) contests themed by "making contributions to the new era with the sense of responsibility as masters" across the city. In response to the call of the Federation of Labor Unions, General Water of China (Suifenhe) Co., Ltd. and Suifenhe Sewage Treatment Co., Ltd. actively organized and recommended excellent "five smalls" achievements to apply for and participate in evaluation, with advanced individuals and collectives in thought emancipation and R&D innovation emerging one after another, which promoted the implementation of the "five small" innovation and benefit creation activities, and was commended and rewarded by Mudanjiang Municipal Federation of Labor Unions.



Meticulous Safety  
Management

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Improving the Emergency  
Mechanism

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Bearing in Mind the  
Concept of Safety

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# Safety

Key to success

saf e ty

Accomplish Anything on





On the site of Yangjiang Nanpeng Island Offshore Wind Power Project, employees are working hard on the shipment of offshore cables to make full preparation for subsequent laying of cables and connection between the offshore booster station and the land-based centralized control center.







## Meticulous Safety Management

In 2019

CECEP's investment in production safety totaled

182 million yuan



In 2019, CECEP, under the guidance of Xi Jinping's Thought on Socialism with Chinese Characteristics for a New Era, established a strong sense of bottom line, worked hard to prevent and defuse major safety risks, won the battle against pollution, continued to increase investment in safety and environmental protection, intensified efforts to identify and control hidden dangers, and kept raising the level of essential safety, finally ensuring orderly progress in safety and environmental protection. In 2019, no relatively serious or more serious safety accidents ever occurred in the group system, the safety situation was generally stable, and the recordable accident rate and the number of employee casualties remained at zero.

We invariably deem paramount the life safety of employees and placed first work safety. In 2019, the company further compacted production safety responsibilities at all levels, established and improved the production safety responsibility system and assessment system, strengthened process supervision and assessment, and revised and improved the assessment standards regarding safety and environmental protection process indicators. CECEP also organized the first person responsible for work safety of 26 second-level subsidiaries to sign the letter of responsibility for work safety and environmental protection with a signing rate of 100%, while conducting assessment on the annual safety and environmental protection performance of 28 second-level subsidiaries in 2018 with an assessment rate of 100%. In 2019, CECEP also further established and improved the organization system for work safety, formulated and implemented the system for production safety, made the institutional system more systematic and normative, strictly implemented the principle of "one post, double duties" for work safety, and intensify efforts to identify hidden dangers, rectify problems, and discharge pollutants in line with the standards. In 2019, CECEP's investment in production safety totaled 182 million yuan.

Case

Continuously improve the institutional system for work safety

In 2019, CECEP revised and issued the three management systems and standards of Measures for Management of Safety of Dangerous Chemicals (for Trial Implementation), Measures for Management of Fire Safety and Atlas for Standardization of Work Safety in Construction Sites, and it also revised and issued the Measures for Management of Work Safety of Manufacturers, further improving the framework of work safety management system and greatly promoting the building of the meticulous safety management system.

Case

Master the overall situation of safety risks to lay a solid foundation for meticulous management

In 2019, CECEP carried out a special investigation against key hazardous chemical and fire safety units, finally identifying 14 Level-II companies and 107 Level-III companies (including units at lower levels) producing, operating or using hazardous chemicals and 20 installations/facilities storing 100t or more hazardous chemicals, and determining 114 key fire safety units within the company. Through this special investigation, we have mastered the overall situation of the company's safety risks, laying a solid foundation for the implementation of meticulous management therein.

In 2019

The number of various emergency exercises within the group system totaled

over 1,350



## Improving the Emergency Mechanism

CECEP invariably believes that top priority should be given to institutional safety management in work safety. In practice, CECEP has established a unified and efficient working mechanism for emergency management of work safety to strengthen emergency duty and accident rescue command, promote the formulation of corporate emergency plans at all levels, strengthen rehearsals for such plans, and take the initiative in emergency management, and further improve the rescue capability and response level of employees in time of emergency. In 2019, over 1,350 emergency exercises were carried out within the group system, effectively improving our emergency disposal of accidents.



## Case

CECEP Solar Energy Co., Ltd. (hereinafter referred to as "Solar Energy Company") actively fought against Typhoon "Lekima"

During the period from August 9 to 13, 2019, Typhoon "Lekima" (the 9th super typhoon), passed through China's eastern coastal areas, with a gale force of 10-11 in Ningbo, Hangzhou and Shanghai, partially affecting the power stations built in Zhejiang, Shanghai, Jiangsu and Shandong in the charge of the East or North China Division of Solar Energy Company. Solar Energy Company attached great importance to Typhoon "Lekima". It carefully took preventive measures beforehand, closely tracked the response process during the event, and carefully supervised post-disaster recovery afterwards.

Typhoon "Lekima" affected a total of 30 power stations of Solar Energy Company, including twenty-two ones in East China and eight ones in North China. With no casualty and only slight property loss, Solar Energy Company successfully passed the test of the typhoon. After the typhoon, the power stations concerned immediately organized equipment maintenance and returned to normal production level at the fastest speed.

During the duration of Typhoon "Lekima" in China, the Administration of Work Safety of Xiaoshan District, Hangzhou City (hereinafter referred to as "Xiaoshan Administration of Work Safety") led the on-site inspection of the emergency preparedness of Xiaoshan power station, and affirmed the effective implementation of emergency preparedness therein.

- During the duration of Typhoon "Lekima" in China, Xiaoshan Administration of Work Safety inspected emergency preparedness in Xiaoshan power station



## Bearing in Mind the Concept of Safety

In 2019, CECEP paid continuous efforts to the development of work safety culture, and worked to promote the practical implementation of work safety culture through the "Month of Work Safety" activity focusing on dangerous chemicals and themed by "risk prevention, hazard elimination and accident containment" and other relevant activities such as special investigation, supervision, inspection and training, and publicity. Meanwhile, CECEP succeeded in greatly improving employees' attention to work safety through publishing brief work reports on safety and environmental protection. In addition, CECEP also successfully held an activity titled "observation of comprehensive emergency exercise regarding energy supply pipeline burst and special safety training regarding hazardous chemicals and emergency management", with over 120 employees concerned as participants, and joined hands with CECEP Wind Power Corporation in holding a training regarding the compliance of environmental protection procedures for construction projects, with more than 2,400 employees concerned as participants.

## Case

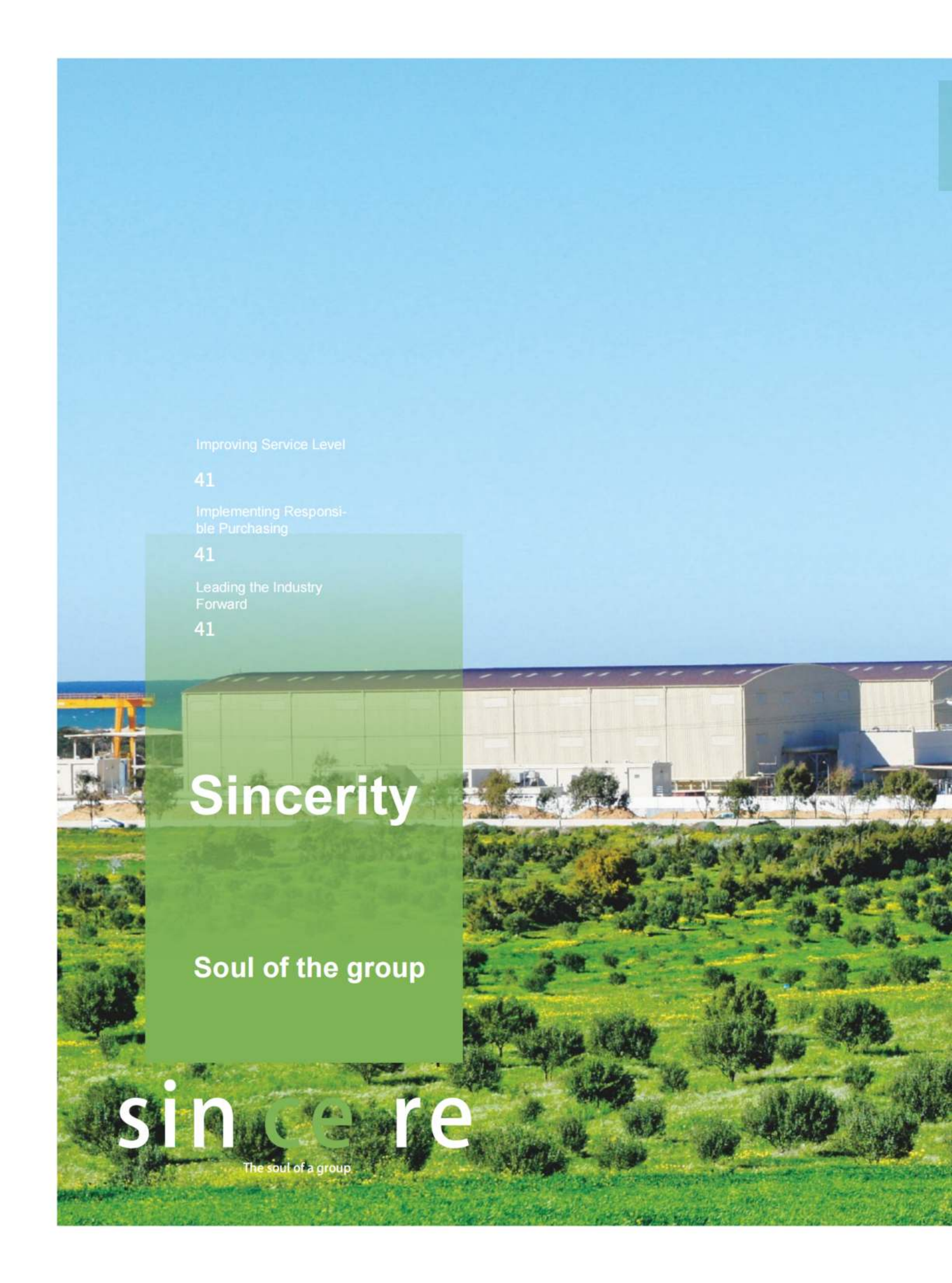
CECEP Industrial Energy Conservation Co., Ltd. carried out safety education and training from multiple levels and perspectives



- Safety and environmental protection training organized by CECEP Industrial Energy Conservation Co., Ltd. in 2019

During the period from September 17 to 20, 2019, CECEP Industrial Energy Conservation Co., Ltd. organized the 2019 safety and environmental protection training, and invited three experts respectively from Huaxin Cement Building Materials Group, Yunnan Kunming Iron & Steel Group and Yunnan University of Science and Technology being invited to systematically lecture on five special subjects, namely emergency management, power plant equipment safety management, safety culture development, dual prevention mechanism integrating risk classification and hazard detection and control as well as environmental laws and regulations and corporate environmental protection management.





Improving Service Level

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Implementing Responsible Purchasing

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Leading the Industry Forward

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**Sincerity**

**Soul of the group**

**sin ce re**

The soul of a group



500,000 tons sea water desalination project in Algeria







## Improving Service Level

CECEP upholds the service philosophy of "wholeheartedly and meticulously serving customers". In 2019, the group adhered to quality commitments, continuously strengthened quality management systems and improved service standards, and maintained committed to providing customers with better products and services, while working to protect the legitimate rights and interests of consumers through strict process quality control. The group is devoted to protecting customers' health and information safety, while prohibiting false publicity in any form, so as to ensure the legitimate rights and interests of consumers.

In 2019, the group adhered to innovation and, relying on scientific and technological upgrading and customer service optimization, continuously improved the quality of products and services, and provided customers with healthy and high-quality products and services, meeting the diversified needs of customers around the world. In 2019, Valiant Corporation Limited effectively ensured customer satisfaction with products and services through standardizing customer service management, finally achieving perfect performance in product qualification rate, customer satisfaction and customer complaint resolution rate.



## Implementing Responsible Purchasing

CECEP adheres to the concept of green and transparent procurement, and aims to promote the sustainable development of the whole industry through strengthening the management of responsibility fulfillment in such aspects as supplier environment, safety and health. In 2019, CECEP clarified specific rules and procedures regarding procurement through formulating relevant rules and regulations on procurement including the Interim Measures for Management of Centralized Procurement and issuing the Notice of Supplementary Opinions on Implementing the Interim Measures for Management of Centralized Procurement, ensuring the smooth implementation of the original procurement system; meanwhile, the company vigorously promoted the construction of e-procurement platform and qualified supplier pools, striving to create a good market environment featuring standardized operation and fair, open and transparent competition; in addition, CECEP also regularly organized forums for bidding agencies to evaluate the bidding process and make procurement process centralized, unified, transparent and open.

In 2019, CECEP New Era Group succeed in ensuring that all its suppliers passed the quality, environmental and occupational health and safety management system certification and implemented responsible purchasing; conducted assessment and investigation on suppliers' corporate social responsibility for nearly 30 times; invested 110,000 yuan in supplier review and 115,000 yuan in supplier training and exchanges.

## Leading the Industry Forward

Globally, green development cannot be achieved without cooperation. Ecology knows no borders, and mankind shares a common destiny. Xi Jinping pointed out that "in the face of ecological challenges, mankind is a community of shared future in which all rise and fall together, and no country can manage alone or stand aloof." In 2019, CECEP endeavored to expand exchanges and cooperation, actively participated in the formulation of industrial standards and the construction of the "Belt and Road", so as to pool strength for a better future.



## Expanding Exchange and Cooperation

In 2019

CECEP strengthened cooperation and attended over 30 important events

CECEP adheres to fair competition, fair trading and honest management. Relying on the technological advantages of the group's green industries, it has vigorously developed the key regional markets at home and abroad, and complied with the market rules of various countries in order to enhance international influence.. In 2019, we strengthened cooperation and expanded the circle of partners. CECEP attended over 30 important events, received more than 50 persons in charge of provincial/municipal enterprises, central enterprises or international organizations, signed a number of strategic agreements, led the establishment of China Environmental Protection Cluster Brand, and actively performed duties as CSES Climate Investment and Finance Association.



• On November 21, 2019, Chairman Song Xin met with John Thornton, executive chairman of Barrick Gold Corporation. The two sides agreed to strengthen exchange, deepen cooperation, and explore new and reproducible methods for sustainable pollution control, in the hope of making positive contributions to the building of ecological civilization.



• On December 27, 2019, CECEP led the establishment of China Environmental Protection Cluster Brand

## Formulating Industrial Standards

In 2019, CECEP continued to lead industry development through actively participating in the compilation of industrial standards, kept advocating the concept of honest management and fair competition, positively participated in industrial exchange activities, opened up communication channels among universities, research institutes, suppliers and technology enterprises, organically linked stakeholders such as governments, associations and technology intermediaries, and actively participated in the compilation of national and industrial standards to standardize and lead industry development. In 2019, the group presided over or participated in the compilation of five national, industrial or local standards.



A photograph of four people standing in front of a red wall with white Chinese calligraphy. From left to right: a man in a dark suit and bow tie, a man in a grey work uniform and red hard hat, a woman in a white shirt and black vest, and a man in a white shirt and black trousers wearing a red hard hat. All four are giving a thumbs-up gesture. The background wall has large white Chinese characters. The ceiling is red with several circular lights.

Propelling Talent Growth

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Arousing the Sense of  
Ownership

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Jointly Building the  
Home of Employees

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# Excellence

Foundation of  
Greatness

# Gr ea t

Great base

CECEP held an activity to celebrate the 70th anniversary of the founding of the People's Republic of China, during which ten speakers, with sincere feelings, vivid words, touching stories and passionate performances, demonstrated the spirit of the CECEP employees in their unremitting efforts to build a world-class group in the energy conservation and environmental protection industry.







## Propelling Talent Growth

CECEP respects talents. In 2019, we further cultivated, attracted and retained talents through protecting employees' rights and interests, implementing democratic management and paying attention to employees' health, thus laying a solid foundation for building the backbone force of CECEP in environmental protection.

In CECEP, we respect labor, knowledge, talents and creations, and deem talents the most important advantage and wealth. Adhering to the concept that "founders focus on creation, and pioneers focus on survival", CECEP is committed to sharing development achievements with employees and safeguarding the legitimate rights and interests of employees.

Strictly abiding by such laws and regulations as the Company Law of the People's Republic of China, Labor Law of the People's Republic of China and Labor Contract Law of the People's Republic of China, CECEP never discriminates against employees because of race, ethnicity, nationality, sex, age, marital status, cultural background or religion; formulates recruitment procedures according to law, signs labor contracts with employees on the basis of equality, voluntariness and consensus through consultation, handles "five social insurance and one housing fund" procedures and pays in full according to law, strengthens communications among employees, and effectively protects their basic rights and interests; implements all kinds of paid leave systems, establishes a sound salary and welfare system, and strives to diversify the employee structure; resolutely opposes forced labor, child labor, gender discrimination and abuse and harassment, ensures equal pay for equal work for both men and women, protects employees' privacy, and promotes the sustainable and healthy development of the company. In 2019, the labor contract signing rate, social insurance coverage rate and physical examination and health archive coverage rate of CECEP all reached 100%.

In 2019

The labor contract signing rate, social insurance coverage rate and physical examination and health archive coverage rate of CECEP all reached

100%



## Implementing Democratic Management

CECEP actively improves the equal and open dialogue mechanism, widens the channels for employees to participate in democratic corporate management, and protects their rights to know, participate, express and supervise. In addition, CECEP also gives play to the bridging role of labor unions and the Youth League, and collects reasonable suggestions on hot and difficult issues concerned by employees to mobilize employees' enthusiasm.

## Laying a Solid Foundation for Health

In CECEP, we give top priority to the occupational health and safety of employees. We pay attention to employees' health rights, actively collect health information of employees, and improve the occupational health management system by establishing the occupational health archives for employees. We regularly carry out mental health counseling for employees, and hold various knowledge lectures on occupational disease prevention and mental health, effectively control and mitigate occupational hazards based on the combination of prevention and treatment, and strive to create a healthy working environment for employees. In 2019, CECEP Valiant Corporation Limited was rated as a Level-II enterprise in work safety standardization by the Department of Emergency Management of Shandong Province.

CECEP attaches great importance to the physical and mental health of employees, and actively provides perfect health protection and whole-process care for employees. Regarding healthy and energetic employees as the most valuable asset of the company, we further grant employees with supplementary medical insurance on the basis of basic medical insurance, record employees' health information, and reduce the pressure on employees' medical expenses. In addition, we also handle personal accident insurance to provide personal safety protection for employee during commuting time or business trips; provide employees with high temperature allowance, and protect their health and legal rights during the high temperature period, as regulated by relevant national policies. Meanwhile, we also organize psychological counseling for employees from time to time to relieve their work pressure and emotions, so as to minimize the incidence of occupational diseases, and create a healthy, fair and harmonious working environment for employees.

## Arousing the Sense of Ownership

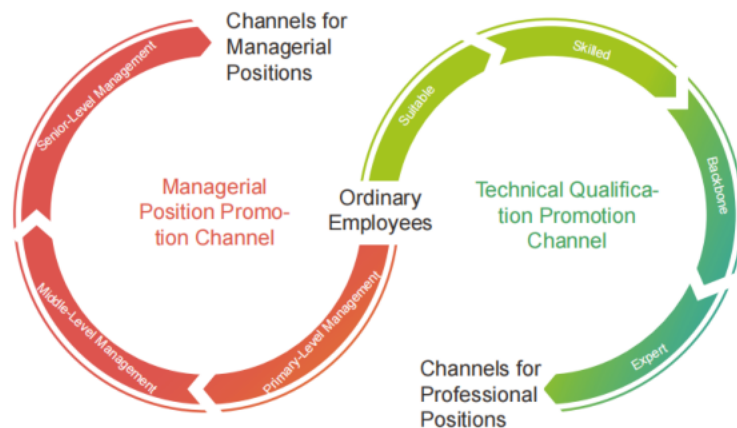
Adhering to the new concept of talent development, CECEP further broadens the platform for talent development, improves the channels for management and career development of professional talents, takes talent resources as core capital of the company, focuses on the improvement of employees' ability and quality, helps employees achieve career growth and arouses their sense of ownership, while providing talent guarantee for high-quality development of the company.

## Smoothing Career Development

Attaching great importance to the career development of employees, CECEP continuously promotes institutional innovation, while building and perfecting a management and technology (business) two-channel promotion system to provide broad platform for employees' career development and smooth the multi-post experiencing channel between the group headquarters and subsidiaries and business-related departments. And it also designs and implements various special training projects, competitive salary package and complete welfare allowance guarantees.

CECEP continuously perfects its employees management system, improves the career development channel, builds the growth platform and smoothes the development path for employees, and issues the Measures for Post and Rank Management and the Measures for Salary Management, so as to make employees clear about their career development and promotion path, enable employees to share the group's development achievements, and train and reserve excellent and high-quality cadres for the group.

CECEP Management and Technology Two-channel Promotion System



## Focusing on Cultivation and Exchange

In 2019, we continuously increased investment in talent training and established a systematic training system and vocational skills improvement plan. We implemented the quality training system and professional and technical talent training system targeting managerial and technical talents. CECEP took the "Blue Sky Talent Training Plan" as a typical leadership development and training program to train management cadres and professional managers at all levels for the group and, through "Green Sapling, Green Pine, Green Mountain and Green Cloud" Training Programs, effectively improved the expertise of employees.

In 2019

The group's training cost totaled roughly

22.711 million yuan



The headquarters implemented training programs for

over 30 shifts



Targeting grass-roots workers and new employees, we organized and implemented the 9th and 10th special training sessions for grass-roots group leaders, mainly designed to improve the political quality, professional skills, management skills and team building and management ability of grass-roots group leaders and skilled workers. For new employees, we also organized and implemented the special induction training, the publicity and implementation of corporate culture and development strategies and the training of company management system, work skills and methods as well as basic business etiquette, so that they can complete role transformation from students to professionals, quickly integrate into the management system and cultural atmosphere of CECEP, and better complete their work. In 2019, the group spent roughly 22.711 million yuan on training, and the headquarters implemented training programs for over 30 shifts.





Case

Drive the entire workforce to compete for excellence through model demonstration

In view of the fact that young Party members are typically strong in business skills but weak in political quality, the Party branch of CECEP Lattice Lighting Co., Ltd, through deeply implementing the system of "Three Meetings and One Lecture" system (To organize regular branch meetings, branch committee meetings, group meetings, and Party lectures, and the "Two Studies, One Action" education campaign (Study is the prerequisite and action is the key.), and conducting special discussions, WeChat exchanges and centralized lecturing, timely study and convey the spirit of relevant documents of the CPC Central Committee and party organizations at higher levels, and strengthen the education and management, deepen the concept of Party character and improve the political theoretical quality of Party members. Meanwhile, the company also sets up the post of Party member vanguard and selects advanced models to give full play to the vanguard and model role of Party members and drive the entire workforce to compete for excellence through model demonstration.

## Implementing Employee Stock Ownership

Through the implementation of employee stock ownership, CECEP DADI Environmental Remediation Co., Ltd. has effectively resolved its development problems, made up for its market weaknesses, and fully mobilized the enthusiasm and initiative of its employees. The company implements employee stock ownership following the principle of "post-based stock holding and dynamic adjustment" while highlighting productive backbone employees to attract outstanding talents in the industry. Among the first group of shareholding employees, business backbone accounts for 90%, and key management personnel accounts for 10%. Since the implementation of employee stock ownership, the company has also achieved initial achievements in operation and management.

Stock holding by key management personnel



Stock holding by business backbone



## Jointly Building the Home of Employees

CECEP adheres to humanized management and is committed to creating a healthy, comfortable and warm working environment and a great cultural atmosphere, in the hope of further strengthening its soft power and employees' sense of belonging and cohesion while building a "spiritual home" for employees.

Baby care rooms, reading corners and green channels have been set up to meet various demands of employees;

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To promote a healthy work-life balance and the employees' attachment to CECEP, a number of cultural and sports clubs have been founded in accordance with the employees' interests and hobbies and a variety of cultural and sports events have been organized, such as staff games, table tennis and badminton matches and lectures on children education.

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Continuous efforts have been made to improve the assistance mechanism for employees in need and provide them with practical help.

Case

No one should be left behind

For dispatched employees, CECEP typically provides them with reasonable allowance in combination with the realities of the place where they are dispatched to ensure their basic needs during the period of dispatching; in addition, CECEP also provides personal accident and injury insurance for them to well safeguard their personal safety during the period of dispatching; meanwhile, CECEP also tracks and pays attention to their mental state and family situation, and reimburse the expenses they spend on visiting relatives every year, so as to help them maintain and consolidate the family and parent-child relationship.


For employees dispatched abroad, the company typically provides them with training regarding local laws and regulations, folk customs, living habits, culture and language in advance, and ensure necessary mental health counseling for them.

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A photograph of three young children in a classroom. In the foreground, a girl with dark hair and bangs, wearing a light pink shirt, is looking towards the camera with her mouth open as if speaking or singing. Behind her, a boy in a yellow shirt is also looking forward. To the left, another child in an orange shirt is partially visible. They are sitting at a desk with papers and a green mat. The background is a teal-colored wall.

Contributing to Targeted  
Poverty Alleviation

51

Devoted to Public Charity

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# Kindness

Wish Embedded in  
Blueprint

g o o d n e s s

The blueprint of the may

CECEP cares about education for children in poverty-stricken areas through the Education Support Program







## Contributing to Targeted Poverty Alleviation

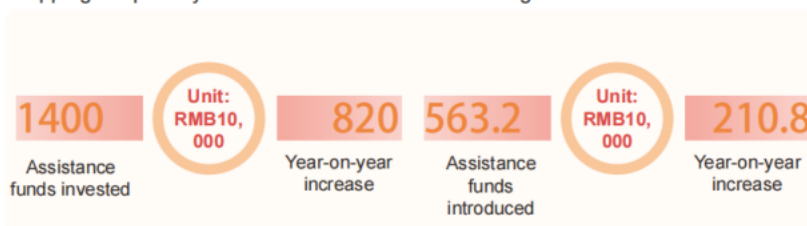
Since the commencement of its poverty alleviation program, CECEP has been silently making contributions and fulfilling missions as a central enterprise. It is a great pleasure to see that the millennia-old water shortage troubling people in mountain areas is resolved by the wells we dug, the mountain roads and the confidence of poor people to get rid of poverty and become well-off are both lightened by the energy-saving lamps we install, the income sources of poor people are diversified by the poverty alleviation industry projects we implement, laborious farmers light up with pleasure for stable sales of their agricultural products under our support, students from poor families are smoothly admitted by colleges or universities under our subsidization, and rural roads become cleaner thanks to the sanitation trucks we provide...

### Poverty Alleviation Management

In 2019, CECEP established a leading group for fixed-point poverty alleviation headed by the group's main leaders, which is affiliated with an office and under the centralized management of the Party-Mass Work Department, with specific persons responsible for poverty alleviation their respective work responsibilities being already clarified. In 2019, the Standing Committee of the group's Party Committee studied the important statements of General Secretary Xi Jinping on poverty alleviation and the major decisions and plans of the CPC Central Committee and the State Council on poverty alleviation in a total of six special sessions. The group deliberated and approved the Work Plan for Fixed-point Poverty Alleviation in 2019, determined the budget for fixed-point poverty alleviation, and comprehensively sorted out the annual poverty alleviation work list. The group improved the Measures for Management of CECEP's Fixed-point Poverty Alleviation Funds, perfected the evaluation mechanism for assistance projects, focused on areas of extreme poverty, targeted registered poor people and special poor groups, and took innovative and targeted measures in poverty alleviation through education, health care, industry and consumption, fully assisting poor areas in winning the battle against poverty.

### Poverty Alleviation Performance

In 2019, the group made solid progress in fixed-point poverty alleviation. Fourteen million yuan was invested in Song County, Henan province and Fuchuan Yao Autonomous County, Guangxi Province, increasing by 8.2 million yuan over the previous year; assistance funds amounting to 5.632 million yuan were introduced, increasing by 2.108 million yuan over the previous year; 376 grass-roots cadres were trained, increasing by 322 over the previous year; 850 technicians were trained, increasing by 814 over the previous year. As a result, in Song County, 14,335 people and 35 poor villages were out of poverty, dropping corresponding poverty headcount ratio to 1.1% and lifting the whole county out of poverty; as to Shichang Village under major support, 495 people from 117 households were out of poverty, with the remaining 12 households (20 people) being granted with subsistence allowances, dropping the poverty headcount ratio of the whole village to 1.27%. In Fuchuan Yao Autonomous County, upon its being out of poverty as a whole in April 2019, another 5,957 poor people from 1,667 household in seven poor villages therein were out of poverty, dropping the poverty headcount ratio of the whole county to 0.26%; as to Xinshi Village in Liujia Town under major support, 64 poor people from 19 households were smoothly out of poverty, dropping the poverty headcount ratio of the whole village to 0.018%.



## In 2019

The agricultural products purchased by CECEP from counties under fixed-point poverty alleviation amounted to

781,000 yuan



In 2019, according to the guiding opinions of the General Office of the State Council on deeply implementing poverty alleviation by consuming products and services from poor areas to help win the battle against poverty, CECEP took poverty alleviation by consuming products and services from poor areas as an important part of poverty alleviation, expanded the distribution and sales channels for agricultural products in poor areas, and created brands of distinctive agricultural products. It also promoted the commercialization and e-commerce operation of distinctive products in poor areas, carried out exhibitions and sales activities regarding agricultural products, and enlarged the brand influence and sales coverage of high-quality distinctive agricultural products in counties under fixed-point poverty alleviation. Throughout the year, the agricultural products from counties under fixed-point poverty alleviation purchased and sold by CECEP respectively amounted to 781,000 yuan and 410,000 yuan, and those from other poor areas respectively amounted to 71,000 yuan and 182,000 yuan, both exceeding the target set. CECEP

Agricultural products from counties under fixed-point poverty alleviation (unit: RMB10,000)

Agricultural products from other poor areas (unit: RMB10,000)



## Case

## CECEP "Village Illumination Program"

## By the end of 2019

Solar streetlamps installed by CECEP for poor villages in Song County totaled

1300



In 2018, CECEP donated 240 solar streetlamps to eight villages in Song County, Henan Province, including Shichang Village, Guanting Village, Yugou Village and Magou Village. By the end of 2019, CECEP had installed nearly 1,300 solar streetlamps in 16 poor mountain villages in Song County. The "Village Illumination Program" launched by CECEP has lightened more and more villages and also lighted up the confidence and hope of poor people therein to get rid of poverty.







## Poverty Alleviation at the Grassroots Level

A number of units under CECEP resolutely implement the important directives of General Secretary Xi Jinping on targeted poverty alleviation, and in active response to the call of local governments, carry out local targeted poverty alleviation, in the hope of contributing to winning the battle against poverty. In 2019, six subsidiaries of CECEP undertook the task of local targeted poverty alleviation, with their work being fully affirmed by local Party Committee and government and warmly welcomed by local people.

In 2019

The number of subsidiaries undertaking the task of local targeted poverty alleviation totaled

6



Shaanxi



Targeted poverty alleviation



China Qiyuan Engineering Corporation (hereinafter referred to as "China Qiyuan") assisted Shuangsheng Village in Ziyang County, Ankang City, Shaanxi Province. To be specific, it invested 60,000 yuan to help the village build a highway bridge, and facilitate the travel of villagers, and 53,000 yuan to support the development of local distinctive agricultural products, and increase the income of farmers therein.



Hebei



Targeted poverty alleviation



The Qinhuangdao and Chengde subsidiaries of China National Environmental Protection Group respectively assisted Shizhazi Village in Huangqi Town, Fengning Manchu Autonomous County, Chengde City and Bagualing Village, Dayingzi Town, Chengde County, with the assistance funds invested totaling 199,800 yuan, and those introduced and applied for totaling 2.52 million yuan.



Qinghai, Xinjiang

Targeted poverty alleviation

The Da Qaidam subsidiary of Solar Energy Company in Northwest China invested assistance funds amounting to 100,000 yuan to Naerzong Village and Yanglong Village, and over 50,000 yuan in the form of consumption to poor areas in Xinjiang, while providing jobs for two poor people therein.



Tianjin

Targeted poverty alleviation

CECEP (Tianjin) Investment Group Co., Ltd. assisted Dongtianwuzhuang Village in Haogezhuang Town, Baodi District, investing 370,000 yuan to upgrade infrastructure, transform farmlands and add facilities to the Party-mass activity center therein.



Jiangxi

Targeted poverty alleviation

The No. 4 Metallurgical Construction Company of China Limited assisted Hushi Village and Zhiguang Village in Zhiguang Town, Guixi City, Jiangxi Province, investing 99,000 yuan to establish a rural poverty alleviation supermarket, assist the development of local kiwi fruit orchard and help poor households transform windows and toilets.







## Devoted to Public Charity

Bearing in mind the concept of "Going Green, Investing Green" and giving full play to its own advantages, CECEP made due contributions as a central enterprise in such aspects as volunteer service, environmental protection publicity and overseas community co-building in 2019. Meanwhile, in face of the sudden outbreak of COVID-19 in the beginning of 2020, CECEP launched epidemic donation assistance in the first time, and led by its epidemic prevention and control leading group, paid all efforts to ensure the supply of anti-epidemic materials to avoid secondary pollution of the virus and go through the hard times together with all compatriots (see the special topic titled "The epidemic calls for our action, and it is our duty to bring it under control" for specific anti-epidemic contents).

## Actively Providing Volunteer Services

As a central enterprise ready to devote, we are keen on conveying our warmth and devote our strength to society, and we encourage employees to actively participate in volunteer activities, service the public and warm communities. In 2019, the group conducted nearly 100 volunteer activities and made anti-epidemic donation totaling over 33 million yuan.



The Party Committee of CECEP Tianjin Company conducted volunteer service activities



On November 16, 2019, the Party Committee of CECEP Tianjin Company organized Party members to provide volunteer services for Xianghe Community in Yuexiulu Street together with community workers. Led by community workers, they visited ten households to understand their heating situation and provide them with heating maintenance service cards, which conveyed the sincere passion of these grass-roots Party members and community workers that is enough to warm the cold winter. Through this volunteer service activity, the company succeeded in strengthening the cohesion and sense of serving the people of its Party members, and in practicing the original intention and missions of Communists with actual actions.

## Actively Carrying out Environmental Protection Publicity

As a central enterprise mainly engaging in energy conservation and environmental protection, we know clearly about our important role in the building of ecological civilization in China. In 2019, while strengthening the building of our own business capacity, we also strengthened environmental protection publicity by virtue of our own platform advantages.



• In 2019, CECEP built a small artificial turf football field for Xinshi Primary School in Xiatou Village, Fuchuan Yao Autonomous County, Guangxi leveraging the abandoned earth of local basketball court, providing a green space for local teenagers to enjoy themselves, while creating a park for publicizing knowledge about energy conservation and environmental protection.



## Community Engagement Overseas

Guided by the thought of building a community with a shared future for mankind, CECEP adheres to the strategy of "going global", attaches great importance to communication and co-building with overseas communities, actively participates in the building of overseas communities, and extensively carries out economic and technical exchanges and cooperation with countries all over the world, promoting the sustainable development of the world. In 2019, the group made new progress in the "Belt and Road" building. Here take China Qiyuan as an example. After years of explorations and practices, China Qiyuan further refined its international market, and gradually shifted its business focus to the four sectors of new energy, environmental protection, traditional power transmission and transformation as well as housing construction and infrastructure construction. In addition, China Qiyuan also provided engineering design, project management and supervision, relevant equipment supply, advanced labor service and technology export for countries along the "Belt and Road" in such fields as photovoltaic power generation, solar power generation, garbage power generation, wind power generation and sewage treatment; provided power transmission and transformation plant design for developing countries, driving the export of relevant process equipment and transfer of relevant technologies; provided international project contracting and import and export trade services for foreign-aid markets, transforming its engineering technology advantages into operation advantages in the international market.

### Case

The responsibility assumption case of the Middle East Branch of China Eco-Engineering Corporation was listed in the *Research Report on Overseas Social Responsibilities of Central Enterprises (2019)*

Since its entry into the Saudi market in 2019, the Middle East Branch of China Eco-Engineering Corporation has visited local disabled employees for many times and made 29 donations amounting to 3.19 million Saudi Riyals (about USD 850,700) to eight units including local welfare society, schools and charities. Besides, the company has also provided jobs for many local residents within its capacity, and been affirmed and commended by local government departments. The responsibility assumption case of the Middle East Branch of China Eco-Engineering Corporation was listed in the *Research Report on Overseas Social Responsibilities of Central Enterprises (2019)*.

### Case

CECEP went to Hong Kong to attend the "Connecting Belt and Road and Exploiting Development Opportunities Altogether High-level Roundtable Meeting 2019"

During the period from July 9 to 10, 2019, Xie Guoguang (chief accountant of the company) attended on invitation the "Connecting Belt and Road and Exploiting Development Opportunities Altogether High-level Roundtable Meeting 2019" jointly sponsored by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC) and the Hong Kong Monetary Authority (HKMA). During the meeting, Xie Guoguang pointed out that "as a window for the Chinese Mainland to connect with other countries, Hong Kong has incomparable advantages. Central enterprises can make the best of Hong Kong's rich experience in overseas investment management, financing, capital, legal affairs and risk management to conduct comprehensive cooperation with partners all over the world. Over the years, CECEP has been specializing in the energy conservation and environmental protection industry and adhering to the concept of practicing green development and leading green development through scientific and technological innovation, and in the future, CECEP will better leverage the advantages of Hong Kong to carry out the Belt and Road business".



- CECEP went to Hong Kong to attend the "Connecting Belt and Road and Exploiting Development Opportunities Altogether High-level Roundtable Meeting 2019"



- In December 2019, CECEP L & T Environmental Technology Co., Ltd. signed an EPC General Contract with two Indian companies for an overseas flue gas desulfurization system, with the total contract value of USD 310 million.



- In March 2019, the Middle East Branch of China Eco-Engineering Corporation signed a contract for the Saudi JEC F - 7002 Community Public Facility Connection Service Project







## Pursue Dreams in Lucid Waters and Lush Mountains - A Look into 2020

Time flies and stops for no one.

Look back to 2019, we have many unforgettable memories left.

Look into 2020, our original intention will remain unchanged.

In 2020, an unexpected epidemic suddenly swept across China. As a central enterprise mainly engaging in energy conservation and environmental protection, CECEP didn't retreat in face of the epidemic, instead, it bravely organized an iron army on environmental protection in the first time to protect people's lives and safety, effectively playing the role of battle fortress in the environmental protection industry.

2020 is the year to finish building a moderately prosperous society in all respects and implementing the "13th Five-Year Plan". It is also the year to achieve the first centenary goal and win the decisive battle against pollution. In face of the crisis brought about by the epidemic, CECEP invariably maintains strategic willpower and strengthens the confidence to win. Standing on the intersection of history, we are better equipped and more powerful than ever before to stand on the crest of the tide, accelerate the formation of industrial "leader" with the ability to perfect the industrial chain, systemize comprehensive environmental services and invest and finance, and strive to become a world-class Chinese group in the energy conservation and environmental protection industry.

Our responsibility is heavier than Mount Tai, and our cause still has a long way to go. In 2020, CECEP will further center around its main industry, and highlight the hard power and strengthen the soft power of the main industry, so as to truly focus on the development of the main industry, and further strengthen its competitiveness. We will resolutely fulfill our responsibility for the main business of energy conservation and environmental protection and as the principal platform for pollution control along the Yangtze River Economic Belt, continue to implement major national strategic tasks such as protecting the Yangtze River, improving the Yellow River, coordinating the development of the Beijing-Tianjin-Hebei Region, building the Xiongan New Area and the Hainan Pilot Zone for Ecological Civilization, and developing the Yangtze River Delta, strive to become the "pioneer in ecological civilization" and "explorer of beautiful life for people", and bring together the strength of the whole group to contribute to the building of a moderately prosperous society in all respects in China.

2020 has already arrived. CECEP will more closely center around CPC Central Committee with General Secretary Xi Jinping as the core, bear in mind that a sound ecological environment is the most beneficial wellbeing, and never forget the original intention of "conserving resources and protecting the environment" and the mission of "achieving bluer skies, greener mountains, clearer waters and a better life ". We will forge ahead dauntlessly and seize the day tightly, in the hope of making new and more contributions to build a world-class group in the energy conservation and environmental protection industry and achieve a moderately prosperous society in all respects!





# Appendix

## Core Performance

Indicator	Unit	2019	2018	2017
<b>Economic Performance</b>				
Total assets	RMB100 million	1725.80	1563.58	1444.82
Business revenue	RMB100 million	452.30	468.40	522.13
Total profit	RMB100 million	32.29	34.02	25.33
Asset-liability ratio	%	69.25	69.54	69.95
Total tax	RMB100 million	36.07	42.20	44.33
Energy conservation and environmental protection R&D investment	RMB100 million	9.60	7.19	9.32
Proportion of energy conservation and environmental protection R&D investment in business revenue	%	2.10	1.45	1.78
Number of science and technology staff	Persons	3243	2305	2077
Number of major scientific and technological platforms	Items	1	3	3
Number of science and technology awards at provincial and ministerial level	Items	10	20	13
Commercialization of scientific and technological achievements	%	100	100	100
Number of newly-developed products	Items	85	79	85
Sales of new products	RMB10,000	457903	496945	536913
Patent applications	Items	706	291	380
Number of authorized patents	Items	445	209	255
Number of hosting or participation in the formulation of national, industry and local standards	Items	5	7	1
Number of newly-launched projects	Items	32	38	29
Competitive bidding rate for infrastructure projects	%	99.70	99.89	99.51
<b>Environmental Performance</b>				
Water treatment	100 million tons	18	16	15
Solid waste management	Ten thousand tons	1200	1000	900
Smoke treatment	100 million cubic meters	102	4482	120
COD reduction	Ten thousand tons	21.11	18.14	15.49
Green power generation	100 million kWh	161.51	131.43	117.55
Organizing environment training	Times	4856	5844	3396
Total trainees	Person/times	80468	96012	58879

Indicator	Unit	2019	2018	2017
Social Performance				
Total staff	Persons	36295	36188	36299
Signed labor contracts	%	100	100	100
Proportion of women in employment	%	28.10	28.50	27.65
Proportion of women in leadership	%	28.68	27.82	26.80
Proportion of ethnic minorities in employment	%	2.31	3.27	3.60
Per capita paid vacation	Days	9.2	10.5	10
Employee satisfaction	%	87.6	98.26	98.10
Staff turnover rate	%	12.7	9.89	9.78
Newly-recruited staff	Persons	4747	6863	5765
Employee training	Times	30	17	16
Coverage of employee training	%	100	100	100





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## Rating Report

### Rating Report on CECEP Corporate Social Responsibility Report 2019

Entrusted by China Energy Conservation and Environmental Protection Group (CECEP), a panel of experts from the Chinese Expert Committee on CSR Report Rating has conducted the rating on the CECEP Corporate Social Responsibility Report 2019 ("the report" for short).

#### I. Rating Basis

The Chinese Corporate Social Responsibility Report Guide (CASS-CSR 4.0) issued by the Chinese Academy of Social Sciences and The Chinese Corporate Social Responsibility Report Rating Standards (2020) issued by the Chinese Expert Committee on CSR Report Rating.

#### II. Rating Process

- The panel reviews and confirms The CSR Report Procedural Information Confirmation Document and relevant supporting materials presented by the compiling team of the report;
- The panel assesses the compilation process and disclosed contents of the report and prepares the rating report;
- The vice chairman of the Expert Committee, leader of the panel and members of the panel jointly review and approve the rating report.

#### III. Rating Conclusion

##### Procedure (★★★★★)

The CSR Office (Party-Mass Work Department) set up a task force to compile the report and the company's top leader is responsible for the final approval of the report. The report has been defined as an important tool to disclose information about the company's CSR performance, enhance communication between stakeholders, promote the company's brand image and create a corporate cultural atmosphere. The report has identified substantive issues based on research on relevant national policies, CSR standards at home and abroad, analysis of major matters of the company, analysis of industry standards and stakeholder investigation. The company actively drives subsidiaries to issue social responsibility report to promote the longitudinal management. The company plans to release the report on its official website. The report will be presented in electronic, printed and long chart versions, with excellent procedural performance.

##### Substantiality (★★★★★)

The report has systematically elaborated on the key issues of the energy conservation and environmental protection industry, such as product quality management, technological innovation, vocational health management, production safety, R&D and addressing climate change hazardous chemicals management, reduction of "three wastes" emissions, liability procurement and peripheral environmental governance, with excellent substantive performance.

##### Integrity (★★★★☆)

The report systematically reveals 86.62% of core indicators in the energy conservation and environmental protection industry from such perspectives as "Greenness: Root for Development", "Innovation: Source of Power", "Safety: Key to Success", "Sincerity: Soul of the Group", "Excellence: Foundation of Greatness" and "Kindness: Wish Embedded in Blueprint", showing excellent integrity performance.

##### Balance (★★★★☆)

The report reveals such negative data and information as "number of significant risk events", "employee turnover rate", "number of serious pollution events", "recordable accident rate", "number of employee casualties" and "relatively serious or more serious work safety accidents", showing excellent balance performance.

##### Comparability (★★★★★)

The report reveals comparative data over three consecutive years in 37 key indicators including "total assets", "business revenue", "total tax", "water treatment amount", "COD reduction amount", "proportion of female managers", showing excellent comparability performance.

##### Readability (★★★★★)

The Report comprehensively shows the CECEP's responsibility fulfillment concept, practice and effect regarding key issues from six dimensions of "Greenness, Innovation, Safety, Sincerity, Excellence And Kindness", fully responds to the responsibility expectations of stakeholders, and correctly interprets the company's in-depth understanding on the fulfillment of social responsibilities; the cover is themed by green earth, while integrating elements related to the main business of the company; the pages spreading across chapters show the company's responsibility fulfillment scenarios will full and real pictures, improving the readability and legibility of the report; a distinctive sector titled "Seeing CECEP in Pictures" is set, which focuses on the annual highlights in responsibility fulfillment by the company, further improving the readability of the report. All these prove the report's excellent readability performance.

##### Innovation (★★★★☆)

The first chapter of the report sets up three responsibility-related special topics, namely "Forge a CECEP Iron Army with high-quality Party building", "The epidemic calls for our action, and it is our duty to bring it under control" and "Protection of the Yangtze River with all wisdom is under action", focusing on the company's actions and achievements in actively deepening Party building, contributing to epidemic prevention and control and controlling pollution in the Yangtze River Economic Belt, which demonstrates CECEP's assumption of responsibility for implementing macro policies as a central enterprise; in addition, relevant comments from stakeholders are cited to support the company's responsibility fulfillment achievements, improving the credibility of the report. All these prove the report's excellent innovation performance.

##### Overall Rating (★★★★★)

After deliberation, the rating panel has rated the CECEP Corporate Social Responsibility Report 2019 a five-star report, as an excellent CSR report.



#### Chinese Expert Committee on CSR Report Rating

Chinese Expert Committee on CSR Report Rating

CECEP CSR Report has successively received five-star ratings for the past five years

#### IV. Suggestions for Improvement

1. The reveal of core industry indicators should be enhanced to improve the integrity of the report.
2. The reveal of negative data and weakness in responsibility fulfillment should be enhanced to improve the balance of the report.

Vice Chairman of the Expert Committee

Head of the Rating Panel

Leader of the Rating Panel

Process evaluator Ren Jiaojiao  
Date of issuance: September 27, 2020



Scan here for rating details



## We look forward to hearing your suggestions



Dear readers:

Thank you for taking time to read this report. To further improve our CSR performance so that our next report would better meet your expectation, we look forward to your suggestions and feedback.

1. Are you satisfied with this report as a whole?

☐ Yes

☐ No

☐ So-so

2. Does this report include all the information you need?

☐ Yes

☐ No

☐ So-so

3. Do you think this report faithfully reflects the influence of CECEP's CSR practices to stakeholders?

☐ Yes

☐ No

☐ So-so

4. Can you easily find the information you want in this report?

☐ Yes

☐ No

☐ So-so

5. Are you satisfied with the design and layout of this report?

☐ Yes

☐ No

☐ So-so

6. Your suggestions and advice on our future CSR performance and CSR report:

Contact us:

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which will be strictly kept confidential:

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Organization/Occupation:

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