



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



Going Green and Investing Green for  
An Ever-Bright Future

2020 社会责任报告  
SOCIAL RESPONSIBILITY REPORT

# Report Specification

The report is the 10th CSR Report issued by the China Energy Conservation and Environmental Protection Group.

## Period

This report contains CECEP's CSR performance from January 1, 2020 to December 31, 2020, with some information and data dating back prior to the start of this period.

## Report Boundary

This report covers the China Energy Conservation and Environmental Protection Group that is a subject and its subsidiaries.

## Data Description

This report uses data obtained from an analysis of relevant statistics. The business data primarily 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-CSR4.0) issued by the Chinese Academy of Social Sciences (CASS);

Social Responsibility Evaluation Indicator System of China's Industrial Enterprises (Trial) issued by the China Federation of Industrial Economics;

GRI Standards of Global Reporting Initiative;

ISO 26000: 2010 Guidance on Social Responsibility, etc.

## Language Version and Access

The 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.

## Appellation

For the convenience of statements and reading, "China Energy Conservation and Environmental Protection Group" is referred to as "CECEP", "the Group" and "we" in this report.

## 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 the CECEP outlook on CSR, sustainable development strategy evaluation and a comparison of domestic and international report standards  
Substantive evaluation: major stakeholder identification, topic database update, potential substantive topic screenings, 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 Group'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 2020 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 this report will facilitate our communication with all stakeholders so that joint efforts will promote sustainable development.

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## Leader's Address

2020 marks an extraordinary and an extraordinarily tough year.

The worldwide COVID-19 outbreak gripped the world in 2020 and cast a dark shadow of the situation. In the face of the pandemic, everyone made concerted efforts. CECEP, under extraordinary pressure, took proactive actions to develop an advanced overall plan. Focusing on the requirements of "Eight Full Implementations" and led by the party building, CECEP drove upgrades of "Five Strengthening", and promoted reform and development by "Three Strivings". We delivered an excellent "report card" through relentless efforts.

**Serving the national strategies and reflecting the role played by CECEP** - Based on serving the national development strategies for major areas, we assumed our responsibilities in major national strategies which included the development of the Yangtze River Economic Belt, ecological protection of the Yellow River Basin, and high-quality development, highly recognized by the National Development and Reform Commission. As of 2020, CECEP signed and implemented over 150 energy conservation, environmental protection, and green development projects in the Yangtze River Economic Belt, with a total investment of more than RMB 50 billion, delivering an effective solution for the ecological environmental management in the Yangtze River Economic Belt.

**Deeply ingraining the main green business and fulfilling the mission of CECEP** - We totally implemented President Xi Jinping's ecological civilization thought, and practiced the concept of "clear waters and lush mountains are invaluable assets". We also deeply cultivated the main responsibility and main business, with practical measures taken for carbon peaking and carbon neutrality. CECEP has generated a total of 69.358 TWh of green electricity during the "13th Five-year Plan", lowering carbon dioxide emissions by 53.6 million tons; treated 54.23 million tons of solid waste (ranking first in the industry); treated 4 billion tons of sewage, restricted and supplied 4.2 billion tons of water, and cut 910,000 tons of COD in total, winning the honor of "Top 10 Most Influential Enterprises in Water Industry of China" for 18 consecutive years. We stuck to President Xi Jinping's ecological civilization thoughts and made contributions to achieve the carbon peaking and carbon neutrality goals.

**Helping fight the pandemic and poverty alleviation, and passing the love of CECEP** - We did everything to prevent the pandemic and resume production while focusing on the six front stability and security in the six areas, and did well in the pandemic. In 2020, more than 14,000 people from 98 affiliates devoted themselves to pandemic prevention. Also, we assisted in the construction and operation of Wuhan Qianzishan Medical Waste Disposal Center. We took poverty alleviation as our important political responsibility and over-fulfilled the targeted poverty alleviation task. We invested RMB 19.2 million as capital for poverty alleviation in 2020, when two targeted counties were lifted out of poverty ahead of schedule. In addition, we kept promoting rural revitalization through efforts according to those same standards.

**Embracing challenges of the times, and delivering CECEP's solutions** - Under the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, CECEP continued to practice President Xi Jinping's ecological civilization thoughts, and established a concept of "clear waters and lush mountains are invaluable assets". Also, we will work together to build a world-class conglomerate integrating energy conservation, environmental protection, and health industry, making contributions to promoting green development, facilitating the harmonious co-existence between man and nature, and achieving carbon peaking and carbon neutrality goals, thereby pushing forward the ecological civilization construction in the new Chinese era.

Song Xin, Party Secretary and Chairman of China Energy Conservation and Environmental Protection Group

# About Us

## Understanding CECEP

China Energy Conservation and Environmental Protection Group (hereinafter referred to as "CECEP") is a central enterprise founded in 2010 after the merger between China Energy Conservation Investment Corporation (CECIC) and China New Era Group Corporation with the approval of the State Council.

CECEP is a central enterprise engaged in energy conservation and environmental protection. Since its establishment, it has taken "resource conservation and environmental protection" as its tenet while keeping in mind the original aspiration and mission. Up to now, it has made great contributions to the initiation, development, and expansion of China's energy conservation and environmental protection. Currently, CECEP has over 700 subordinate enterprises and six listed companies, with its business covering 110 countries and regions both at home and abroad, forming a "3+3+1" industrial pattern (concentrating on energy conservation & supply of clean energy, ecological environmental protection, and life health (three main businesses), rapidly developing green buildings, new green materials, and green engineering services (three businesses), and strengthening the strategic support capability). CECEP is a flagship enterprise engaged in energy conservation and environmental protection, covering multiple fields and businesses and with great comprehensive strength.

Recently, CECEP has built unique advantages throughout the industry chain regarding energy conservation and environmental protection, including planning consultation, R&D design, investment development, equipment manufacturing, engineering construction, operations management, and investment and financing services, with its businesses covering market segments of energy conservation and environmental protection. It provides comprehensive energy conservation and environmental protection solutions for the green development of an area or basin.

In the new era, CECEP implements decisions of the Central Committee of the Party, and gets involved in the major national strategic tasks, like protection of the Yangtze River, coordinated development of the Beijing-Tianjin-Hebei Region, construction of Xiong'an New Area, ecological conservation and high-quality development of the Yellow River Basin, construction of Guangdong-Hong Kong-Macao Greater Bay Area, construction of National Ecological Civilization Experimental Zone (Hainan), and practices the "Belt and Road" Initiative. CECEP is identified as the primary platform company of pollution control in the Yangtze River Economic Belt by the Leading Group Office for the Development of the Yangtze River Economic Belt.

As a central company with energy conservation and environmental protection at its core, CECEP bears in mind the original aspiration of resource conservation and environmental protection, and the mission of satisfying the increasing demand of the masses for a beautiful ecological environment, and facilitates building a world-class conglomerate integrating energy conservation, environmental protection, and health industry according to high-quality development requirements, thereby making greater contributions to protecting the ecological environment and building a beautiful environment in China and across the world.



**Whole Industry Chain**

A large energy conservation and environmental protection industrial group covering multiple fields, and businesses and with great comprehensive strengths



**Core Competencies**

Providing comprehensive services related to energy conservation and environmental protection for a region, city, or a river basin



**Development Vision**

Becoming a world-class conglomerate integrating energy conservation, environmental protection, and health industry



**Enterprise Mission**

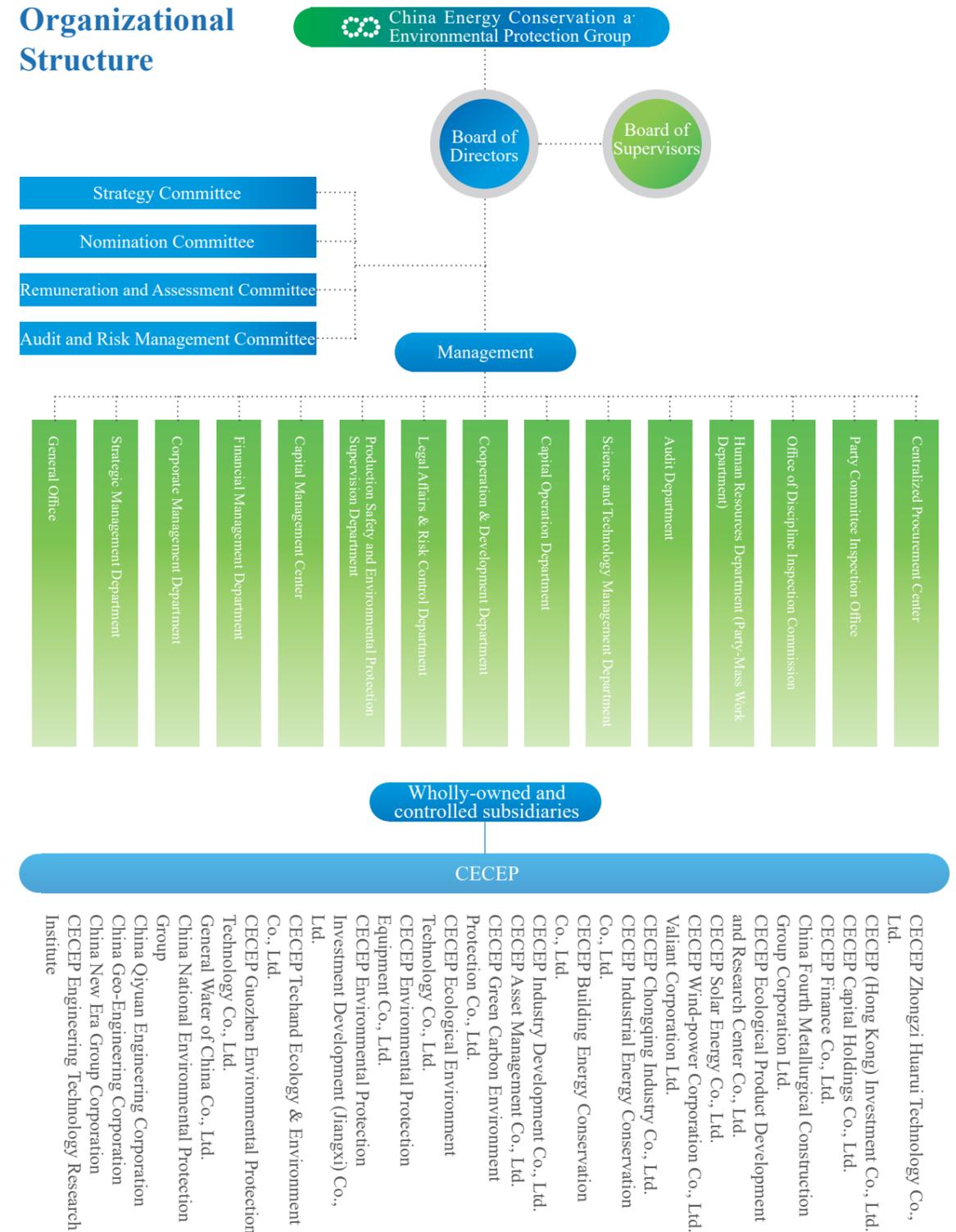
Achieving bluer skies, greener mountains, clearer waters, and a better life



**Key Value Concepts**

Loyalty, Pragmaticality, Innovation and Excellence

## Organizational Structure



# Belief Is Like a Beacon

## Staying True to Original Aspiration

## CSR Topic I

The Red Boat has sailed through the mountains and rivers, and the 100-year-old CPC is in its prime. To ensure the tenet of wholeheartedly serving the people is implemented throughout the company, CECEP always follows Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, firmly adheres to the general requirements for strengthening Party building and the Party's organizational line for the new era, continuously innovates party building, and gives full play to enforcing strict party self-governance in its leading and supporting roles. Also, CECEP works hard to build a clean government, fighting corruption, and facilitating the high-quality development of the Group to make new progress, thereby providing a strong guarantee for social responsibility.

### Leading High-Quality Development with High-Quality Party Building

In 2020, guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era and led by the Party's political building, CECEP conducted the special project of "party building consolidation and deepening year". By closely sticking to its strategic deployment, production, and operational tasks, CECEP continuously improved quality, increased efficiency, and upgraded the party building, and led high-quality development of the Group with high-quality party building.

#### Highlighting the Party's Political Building

Sticking to "Two Upholds" in strengthening innovative theories, taking learning and implementing the latest major speeches of President Xi Jinping, spirit of instruction, and important theoretical articles as the "first contents" of the Party Committee and the collective learning of the central group, sticking to one theme for each month, making in-depth communication according to the reform and development of the Group, and driving the high-quality development of the Group by relying on the transformation of the learning results.

● An advancement meeting of headquarters departments serving the grassroots and changing the working style was held to analyze and summarize the problems and deficiencies of headquarters departments. The basis of which the working style was changed and headquarters departments' services for the grassroots were improved, which laid a solid foundation for the completion of tasks throughout the year and high-quality Group development.

● Our Party Secretary and Chairman Song Xin led to promote the spirit of the Fifth Plenary Session to all our Party member teams, gross-roots subsidiary cadres and the first and second outstanding young crew training programs of the Group. Top leaders went to these contact points and grass-roots subsidiaries for such promotions.

● We organized to understand and implement the spirit of the Fourth Plenary Session of the 19th CPC National Congress and run the special training course for grass-roots Party organization secretaries. We studied the third volume of Xi Jinping's Governance and the Future of China, to learn and promote the spirit of the Fifth Plenary Session of the 19th CPC National Congress.

● We took the major political responsibilities, went all out in our pandemic response and production resumption, and held many rounds of standing committee meetings of the Party committee, the Leadership Group meetings and thematic working meetings. Under the instruction of top leaders, our Party members and teams forged ahead to ensure the "Two Upholds".

#### CECEP held the meeting to celebrate the 99th anniversary of establishing the CPC

Case

CECEP held the meeting to celebrate the 99th anniversary of establishing the CPC on July 1, 2020, aiming to review the Party's struggle course, extol the Party's great achievements, carry forward the Party's glorious traditions, stimulate party members to perform their responsibilities, and take the initiative.

Song Xin, Party Secretary and Chairman, led all party members of the Group to review the party oath and delivered a speech, emphasizing the party organizations and members of the Group at all levels should keep the Party's tenet in mind, keep true qualities as a party member, and struggle for the Party. In addition, they should remain true to the original aspiration with the oath, interpret the firm belief with practical actions, and make contributions to stability on the six fronts and security in the six areas, building a moderately prosperous society in all respects, and poverty alleviation.



Song Xin, the Party Secretary and Chairman of the Group, was leading all party members of the Group to review the party oath.



General Water of China Co., Ltd. (Yan'an) conducted thematic party day activities of "bearing the original aspiration and mission, and adding luster to the party flag" at Yangjieling, Yan'an where the 7th National Congress of the CPC was held.



The Middle West Area of CECEP Solar Energy Co., Ltd. was conducting thematic party day activities of "inheriting the spirit of the Long March and bearing in mind the original aspiration and mission"



The Voluntary Service Team of CECEP Wind-power (Henan) Corporation Co., Ltd. conducted thematic party day activities of "party building and poverty alleviation" at Shichang Village, Song County, Henan.

## Consolidating and Deepening "Three bases construction"

Carrying out the special project of "party building consolidation and deepening year for central enterprises", working harder on the "three bases construction", tightening up the political responsibility for governing the Party, promoting the integration of the party building and production & operation, and enhancing the political functions and organizing power of primary party organizations.

The annual seminar on Party building and anti-corruption was held. Starting with the "one book and one certificate", we broke down the CSR contents and responsibilities to increase our employees' awareness and performance of CSR.

To consolidate the grass-roots Party building foundation, we convened Party building promotion meetings in Beijing, Xi'an and Shandong, and communicated with the Party building departments of our second-level subsidiaries to strengthen work arrangements and guidance.

The themed activity of "Party members being the model of quality and efficiency improvement" was organized to report the meritorious deeds of Party organizations and members of our subsidiaries in the pandemic response, quality and efficiency improvement, and flood-fighting and emergency rescues.

Party organizations of our subsidiaries actively incorporate Party building in daily production and business operation. Representative cases are the "Three-color Party Building" of China Environmental Protection, the "Industrial Park Party Building" of CECEP Industry Development Co., Ltd. and the "Party Member Station" of Solar Energy Co., Ltd.

## Forming an Honest and Self-discipline Environment by Building a Clean Government

CECEP implemented the spirit of the conference on building a clean government and fighting corruption held by the State-owned Assets Supervision and Administration Commission, continuously enforcing strict party self-governance, and strictly punishing corruption. In addition, it conducted the spirit of eight provisions of the Central Committee, continued to purify political ecology, and improved efficiency in terms of building a clean government and fighting corruption, thereby providing a strong guarantee for the Group to complete all tasks throughout the year.

● CECEP performed the major political responsibility of "Two Upholds", and implemented the "First Agenda" system of the Standing Committee of the Party Committee by establishing the Leading Group for Publicity and Ideological Work and the Publicity Department of the Party Committee. The learning of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era was developed through intensive publicity, giving party lectures to grassroots groups, holding symposiums of factions, workers, and non-Party personages, "energy-conserving lecture room", etc.

● A tough position was maintained in the struggle against corruption, and collective honesty talks were organized in time. The main leaders of the Party Committee and the Discipline Inspection Commission gave guidance in honesty education and warning education, and noted typical discipline violations and regulations, through which the disciplines were interpreted and specified.

● A responsibility system was developed to implement the agenda of the Standing Committee of the Party Committee. The departmental performance assessment was strengthened, improved, and formed an atmosphere of "taking actions right away and working diligently", and "being strict, in-depth, careful and practical".

● In order to strengthen the anti-corruption, a special rectification group was established, specifying the person in charge of the party organizations at all levels is the first person responsible, who should follow up and supervise the entire process.

### CECEP held a 2020 conference on building a clean government and fighting corruption & warning education conference

Case

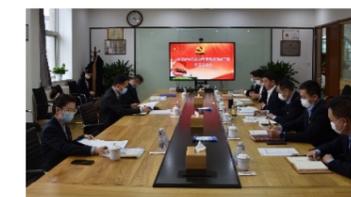
CECEP held a 2020 conference on building a clean government and fighting corruption & warning education conference on March 25, 2020. The conference sought to strengthen anti-corruption efforts in the Group and consolidate the landslide victory of anti-corruption. At the meeting, Song Xin, the Party Secretary and Chairman, on behalf of the Group's Party Committee, made a solemn commitment and signed letters of responsibility for a clean government with all members.



The 2020 meeting of democratic life where Song Xin, the Party Secretary and Chairman of the Group, directed the Party Committee of Solar Energy Co., Ltd.



Song Xin, the Party Secretary and Chairman of the Group, signed letters of responsibility for a clean government with all members



Yu Honghui, the General Manager of the Group and Party Deputy Secretary, was directing the Party Committee of Ecology of CECEP to hold the 2020 meeting of democratic life.

# Responsibility Is Heavy

## Achieving Carbon Peaking and Carbon Neutrality Goals

### CSR Topic II

As the only central enterprise primarily engaged in energy conservation and environmental protection, the CECEP mission always seeks to achieve bluer skies, greener mountains, clearer waters and better lives, and builds on the unique strengths of the whole industry chain with respect to energy conservation and environmental protection. It was identified as the main platform of pollution control in the Yangtze River Economic Belt. Also, CECEP makes all efforts to green transformation of economic and social development, and makes contributions to conserve clear waters, lush mountains, and achieve carbon peaking and carbon neutrality goals.

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As the only central enterprise mainly engaged in energy conservation and environmental protection, CECEP pays attention to nature, green, and low carbon. Since its development strategies align with carbon peaking and carbon neutrality, it would be a significant contributor in achieving "3060" goals.

– Song Xin, Party Secretary and Chairman of CECEP

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## Serving the National Strategies and Playing a Leading Role in Green Development

Based on serving the major national strategies, CECEP continued to play a leading role in major national strategies, like the coordinated development of the Beijing-Tianjin-Hebei Region, development of the Yangtze River Economic Belt, and construction of the Guangdong-Hong Kong-Macao Greater Bay Area.

In 2020, CECEP signed a total of nine strategic cooperation agreements in the Yangtze River Economic Belt, Yellow River Basin, and the Beijing-Tianjin-Hebei region. Models for systematic governance of mountains, rivers, forests, farmlands, lakes, and grasslands, comprehensive treatment of solid waste (two parks and one chain), space-air-ground integrated ecological environment monitoring network, etc., have gradually taken shape. CECEP invested RMB 300 million in establishing the National Green Development Fund, and founded CECEP (Hubei) Environmental Protection Industry Equity Investment Fund (RMB 1 billion), offering new solutions for serving major national strategies.

### Protecting the Yangtze River by energy conservation

### Case

In May 2018, CECEP was named as the main platform enterprise of pollution control in the Yangtze River Economic Belt by the Leading Group Office for the Development of the Yangtze River Economic Belt. For the last three years, CECEP carried out plans and made diligent efforts along the Yangtze River. It followed the principle of implementing strategies specific for cities and regions, and gave play to its advantages throughout the pollution treatment industry chain. Its down-to-earth work has secured a green Yangtze River Economic Belt.

From 2018 to 2020, CECEP signed and implemented over 150 energy-conservation, environmental protection, and green development projects in the Yangtze River Economic Belt, with a total investment of more than RMB 50 billion. CECEP has gone all out to restore and protect the ecosystems and environment in this belt, and help major regions develop into demonstration areas of ecological civilization. It has made continuous efforts in defending clear skies, clear waters and pollution-free lands.

## Focusing on "3060" and Building the Future by Actions

CECEP firmly practiced President Xi Jinping's ecological civilization inspiration and the concept of "clear waters and lush mountains are invaluable assets". It continuously improved the professional ability to help achieve carbon peaking and carbon neutrality goals by pushing forward green development, taking into account the overall situation, implement policies, and taking well-targeted steps in all aspects. It also remained committed to promoting the harmonious co-existence between man and nature by taking green actions, and made contributions to carbon peaking and carbon neutrality goals.



### Extended reading: "3+3+1" overall strategic layout



### Forming industry and technology layouts to help achieve carbon peaking and carbon neutrality goals

CECEP worked hard on utilizing biomass energy, provided energy efficiency services based on digital technologies in high carbon and energy consumption industries, and strengthened the capabilities of regional energy heating and integrated energy services. At the same time, it focused on carbon neutrality demands after carbon peaking, and developed and applied negative carbon technologies with top scientific research institutions at home and abroad.

### Leading companies to take actions for carbon peaking and carbon neutrality

CECEP accelerated to perfect the enterprise's carbon emission information disclosure system by constructing "Zero Carbon Parks" and "Zero Carbon Buildings". It also promoted international cooperation in climate investment and financing, to form a complete zero-carbon concept and zero-carbon enterprise development pattern, demonstrating for other enterprises and the society.

### Continuing to push forward developing standards, specifications and mechanisms related to carbon peaking and carbon neutrality

CECEP participated in constructing the national carbon trading market, assisted major industries and regions to develop a carbon peaking pathway and study methods, and drove the design of climate investment and financing system, improving China's voice and influence in international climate governance.

# Way Ahead Is Wonderful

## Making the Development Blueprint

## CSR Topic IV

CECEP made great strides during the "13th Five-year Plan" and showed its "energy conservation spirit and responsibility" to the country and people with practical outcomes. At the development intersection, CECEP strived to meet the increasing need of people for a better life and paid attention to building a world-class conglomerate integrating energy conservation, environmental protection, and health industry, becoming the most reliable and important force for the Party in promoting the ecological civilization development in the new era.

### Working Diligently and Providing "Energy-conservation Solutions"

#### Enumeration CECEP during the "13th Five-year Plan"

- CECEP had over 700 subordinate businesses, with its business in nearly 20 sub-industries across 110 countries and regions both at home and abroad;
- "38+2" list was developed to tackle core and key technologies, 33 new products, processes, and devices were created, nine production lines were increased, and 11 national projects and provincial awards were approved;
- CECEP accumulatively generated 69.358 TWh green electricity, lowering carbon dioxide emissions by 53.6 million tons;
- CECEP treated 54.23 million tons of solid wastes (ranking first in the industry);
- CECEP treated 4 billion tons of sewage, restricted and supplied 4.2 billion tons of water, and cut 910,000 tons of COD in total, winning the honor of "Top 10 Most Influential Enterprises in Water Industry of China" for 18 straight years;
- From 2018 to 2020, CECEP signed and implemented over 150 energy conservation, environmental protection, and green development projects in the Yangtze River Economic Belt, with a total investment of more than RMB 50 billion;
- CECEP invested over RMB 20 billion in the industry in poor areas, trained over 4,000 grassroots teams and technical personnel, funded over 2,400 college students, and provided more than 2,000 jobs.

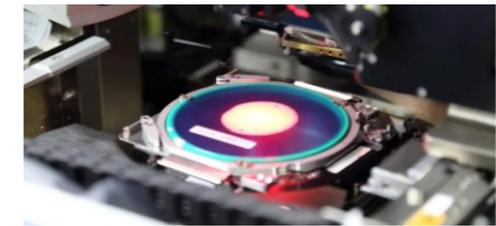
#### Pictures CECEP during the "13th Five-year Plan"



Works of CECEP displayed on "Brilliant Achievements - Grand Achievement Exhibition for Celebrating the 70th Anniversary of the Founding of the People's Republic of China"



Establishing "Science and Technology Innovation Alliance for the Great Protection of Yangtze River" with 16 companies



High optical efficiency GaN-based blue LED on silicon substrate won first prize of National Award for Technological Inventions, making LED technology of China in semiconductor lighting leading in the world

#### Witness CECEP during the "13th Five-year Plan"

The reform and development of CECEP has been extraordinary since 2015. Despite significant downward economic pressures, volatile international circumstances, and fierce industrial competition, we still rose to the challenges and made desirable achievements.

– Song Xin, Party Secretary and Chairman

## Setting Sail and Writing a "New Chapter for Energy Conservation"

CECEP dealt with unprecedented changes in the world by paying attention to its core businesses, main responsibilities, and innovation, seizing opportunities, and taking initiative measures. Based on serving major national strategies, it gave full play to the main platform of pollution control in the Yangtze River Economic Belt, preliminarily prepared the "14th Five-year Plan" for the Group, and strived to build a world-class conglomerate integrating energy conservation, environmental protection, and health industry, contributing to the next five-year plan.

### CECEP during the "14th Five-year Plan"

- **Sticking to Party leadership**

Holding the great banner of socialism high with Chinese characteristics, following Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, and implementing the spirit of the 19th National Congress of the CPC, the Second, Third, Fourth, and Fifth Plenary Sessions of the 19th Central Committee.

- **Vision**

Substantially construct a world-class conglomerate integrating energy conservation, environmental protection, and health industry by 2035.

- **Five-year development goal**

Further enhancing high-quality development, striving to make achievements in science and technology self-reliant, optimizing the distribution of the state-owned sector, reforming state-owned assets and businesses, and strengthening the party leadership and building.

- **Key tasks**

Optimizing traditional businesses of energy conservation and the supply of clean energy

Optimizing core businesses of ecological environmental protection;

Optimizing big health strategic opportunity industry;

Strengthening businesses of science and technology service innovations;

Improving strategic support capability overall.





Protecting Rivers and  
Plants  
Clear Waters and  
Lush Mountains



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## Focusing on green businesses

### Energy conservation

#### Industrial energy conservation

According to the demands of industrial parks and large industrial and mining companies ("intensive energy supply, mutual complementation by multiple energy resources, and smart operation"), CECEP established a multi-energy coupled supply system, which not only implemented the modern energy concept, but also demonstrated for the energy conservation and emission reduction industry.

#### The integrated energy service project initially built in Ningxia was officially put into operation

Case

On November 26, 2020, the digital integrated energy project at Yinchuan Economic and Technological Development Zone invested by CECEP United Power Co., Ltd. became fully operational. This project was one of the integrated energy service projects firstly built in Ningxia, and sought to build a system integrating renewable and clean energy (including solar energy, low-grade industrial waste heat, and natural gas) by incremental power distribution and an integrated energy system.

The project annually supplies the park with 130,000 tons of steam and 41.6 GWh of electricity, extracts 24 MW of waste heat from the park, and supplies industrial heating within 500,000 square meters, saving 19,029 tons of standard coal, lowering carbon dioxide emissions by 495,000 tons, and lowering the energy consumption costs by 10%-20% for businesses in the park.



Digital integrated energy project at Yinchuan Economic and Technological Development Zone

### Building Energy Conservation and Green Building

With technology, service, brand, and capital as its core, CECEP provides green and ecological integrated urban services by establishing an efficient and intelligent energy supply system, and promotes the green transformation of the building energy system. The Green Building Science and Technology Museum built by CECEP was listed in the typical application cases of energy conservation technology in 2020 national energy conservation week by the NDRC for publicity.

By the end of 2020, CECEP planned over 9 million square meters of green demonstration parks.

By the end of 2020, CECEP developed and operated 49 green demonstration parks, covering an area of over 9 million square meters, of which 276,700 square meters were certified as three-star (or above) national green building design.



Integrated energy project of Xiong'an Civil Service Center

### Clean energy

In 2020, CECEP had a total installed capacity of 12.94 GW in terms of green electricity and accumulatively generated 18.534 TWh green electricity, with year-over-year growth of 14.88%, lowering carbon dioxide emissions by 14.231 million tons and saving 5.708 million tons of standard coal.



CECEP's total installed capacity of green electricity was 12.94 GW



Accumulatively generated 18.534 TWh of green electricity



Reducing 14.231 million tons of carbon dioxide emissions



Saving 5.708 million tons of standard coal

### Wind Power Generation

CECEP is one of the earliest Chinese companies that utilize wind power. CECEP Wind-power Corporation Co., Ltd. is a listed company that mainly operates wind power, and is one of the early developers of GW and 10 GW wind power bases.

#### The first offshore wind power project of CECEP was successfully put into operation. Case



Yangjiang offshore wind power project of Wind-power Corporation Co., Ltd.

On January 16, 2021, the first five fan units of the Yangjiang offshore wind power project of Wind-power Corporation Co., Ltd. were grid-connected, marking another milestone and moving to a stage of construction and production.

This project marks the first offshore wind power project and the largest individual investment project of CECEP. Its total installed capacity is 300 MW. Once put into operation, it can generate 819 GWh of on-grid energy. This is of great importance to promote local economic green development in Guangdong and upgrade the local economy.

### PV Power Generation

CECEP solidly facilitated the investment and development of PV power stations. CECEP Solar Energy Co., Ltd., is the first listed company in China that mainly operates solar power generation and also manufactures solar cell modules. The invested power stations are distributed in 20 provinces, cities and autonomous regions in China, involving ground, tidal flat, desert, distribution type, PV agriculture, etc.

#### The first "new energy + energy storage" joint demonstration project in Zhejiang put into operation Case



CECEP (Changxing) PV-Energy Storage Demonstration Project

In 2020, the first "new energy + energy storage" joint demonstration project in Zhejiang co-launched by CECEP Solar Energy Co., Ltd. was put into operation. This project helped to effectively stabilize the electricity output of the PV power station, and accordingly relieve the shock from PV electricity generation fluctuations to grid stability. Meanwhile, the project increased grid capacity to incorporate renewable energy and improve the overall operation quality and reliability through digital smart control. Therefore, it serves as a major contributor to stable large-scale application of renewable energies, the construction of a highly flexible grid, and helps fulfill "dual carbon" goals.

### Clean Heating

CECEP highlighted development of the regional energy industry featured with "efficient conversion of low-grade renewable energy", "cascaded utilization", "mutual complementation by multiple energy resources", and "integrated optimization" through years of exploration and technological practice, market and business model, and found a new path of "low-carbon heating" for the intensive supply of clean energy in South China. In addition, CECEP also attempted to use graphene electric heating technology for clean heating in rural areas. Relying on the application of graphene and the energy conservation and environmental protection high-end equipment industrialization project, 120,000 graphene energy-conservation rapid electric heating stoves could be produced annually upon completion.

Producing 120,000 graphene energy-conservation rapid electric heating stoves upon the completion,

## Energy conservation & environmental protection

### Integrated service

Conducting 705 consulting service projects

Amount of investment, over RMB 30 billion

In 2020, the contract amount of consulting design business signed by CECEP was RMB 85.69 million, with a year-on-year growth of 4.1%.



### Planning Consultation

CECEP actively provided relevant national ministries and commissions, local governments, companies, public institutions, and international organizations with professional consultation services regarding policy making, planning formulation, thematic research, etc. It also strengthened capabilities to supply carbon peaking and carbon neutrality intellectual standards, conducted 705 consulting service projects, investing more than RMB 30 billion.

#### CECEP Consulting Co., Ltd. helped prepare the latest Catalogue of Projects Supported by Green Bonds. Case

On April 21, 2021, the People's Bank of China issued the Catalogue of Projects Supported by Green Bonds (Version 2021), the NDRC, and the China Securities Regulatory Commission. The Catalogue, as the only green finance standard providing technical support, was entrusted to CECEP Consulting Co., Ltd. by the China Institute of Finance.

It took three years to prepare the Catalogue and it was implemented on July 1, 2021. At that time, the Catalogue will positively impact regulation of the national green bond market, introduce more funds to support green industries and green projects, unify basic systems of the green bond market, and converging national and foreign green bond standards.

### Green Finance

CECEP created an integrated green finance service system at home and abroad by means of planning consultation, policy study, green industry funding, financial investment for green industry, green bond, etc.

#### The "Research on Green Agricultural Standards and Financial Support Models in China" concluded. Case

On June 10, 2020, the "Research on Green Agricultural Standards and Financial Support Models in China" (a cooperative project of the Agricultural Development Bank of China and the Climate Bonds Initiative (CBI)) undertaken by CECEP Consulting Co., Ltd. successfully concluded.

This project proposed green agriculture standards at the level of financial support for the first time, and also put forward evaluation and application methods of green agriculture suitable for financial institutions, making the standards more practical.



Final meeting of the "Research on Green Agricultural Standards and Financial Support Models in China"

## Guarding ecological environment

### Great Protection of the Yangtze River

CECEP has implemented over 470 energy conservation and environmental protection projects in the Yangtze River Economic Belt cumulatively

The capital involved was over RMB 120 billion

CECEP gave full play to its entire production chain advantage and took differentiated and targeted measures. Driven by innovative investment and financing ways and governance model, CECEP started pilot projects in Huzhou (Zhejiang), Xianning (Hubei), Hengyang (Hunan), Bijie (Guizhou), etc. to conduct an entire production chain treatment of solid wastes (like garbage). It successfully explored several models, including system governance and solid waste treatment by "two parks and one chain", and did it all with the systematic protection and restoration of the ecological environment in mind, providing great protection of the Yangtze River using an integrated energy conservation and environmental protection solution/business model that can be copied and promoted.

By the end of 2020, CECEP implemented over 470 energy conservation and environmental protection projects in the Yangtze River Economic Belt, involving RMB 120 billion.

Trenchless pipe repairing technology was applied in Xinyu, Jiangxi to accurately determine the defects of underground pipes. This reduced pollution to the utmost extent, effectively improved the water quality, and demonstrated the treatment of black and odorous water bodies.



Seminar of Innovative Governance Model for the Great Protection of Yangtze River (Xinyu) & Demonstration and Promotion Meeting of Trenchless Pipe Repairing Technology for Black and Odorous Water Bodies

#### CECEP - Foregoer of the Great Protection of Yangtze River

- Built iconic green buildings in Zhejiang like the Hangzhou Green Building Science and Technology Museum and the Xixi Center
- Completed the grate furnace waste incineration power generation project in China
- Completed the first toxic and harmful solid waste treatment project in China
- Completed the first medical waste treatment project by high-temperature cooking in China
- Completed the first sludge incineration power generation project with intellectual property rights in China
- Completed the first batch of national green development demonstration projects - riverside ecological improvement demonstration project in Jiayu County, Xianning
- Built the deepest and fully buried reclaimed water plants in China; these are the first plants integrated with the commercial complex - Liuchangmen and Guiyi Reclaimed Water Plants

### Solid Waste Treatment

CECEP explored a new model of "planning and construction services for solid wastes in counties" ("decentralized collection & transportation + centralized treatment"), promoted an integrated solid waste solution ("two parks and one chain"), and made all wastes treated in house by coordination between rural and urban areas and cyclic utilization of solid wastes in the system of "two parks and one chain".

In 2020, the China Environmental Protection treated 92,158 tons of solid wastes daily, with a year-on-year growth of 6.05%. Treated 13.37 million tons of household wastes and agricultural biomass accumulatively, with a year-on-year growth of 19.91%.

2020 The China Environmental Protection treated 92,158 tons of solid waste daily. Cumulatively treated 13.37 million tons of household wastes and agricultural biomass.



In April 2020, the household waste incineration power generation project in Jintang, Chengdu, Sichuan Province was officially put into operation.



In July 2020, CECEP Bijie Comprehensive Solid Waste Treatment Industrial Park was officially put into operation.



The China Environmental Protection affiliated with the Group was awarded the "2020 Top 10 Most Influential Solid Waste Enterprises" for the eleventh straight year and won high praise of "solid waste model central enterprise that arranges the comprehensive treatment of rural and urban solid wastes overall".

**The key projects of environmental governance and restoration in Xiong'an New Area were grid-connected for power generation. Case**

On September 30, 2020, CECEP Laishui household waste incineration power generation project was officially grid-connected for power generation. It was expected that 116 GWh on-grid energy would be generated annually, benefiting Laishui, Dingxing, Baigou New City and Zhuozhou. The project, with a total investment of RMB 500 million, had a daily treatment capacity of 1,000 t and an annual waste treatment capacity of 365,000 t. It was listed as one of the key construction projects of environmental governance and restoration upstream Baiyangdian, Xiong'an New Area directly under the supervision of the provincial government.



The domestic waste incineration power generation project of CECEP in Laishui

**Water Treatment**

In 2020, the daily water treatment capacity of the Group surpassed 15 million tons.

CECEP has a complete water treatment industry chain, covering raw water supply, tap water supply, domestic wastewater, industrial wastewater treatment, and comprehensive treatment of the water environment. In 2020, the Group could treat more than 15 million tons of water and cutting 210,000 tons of COD. CECEP General Water of China Co., Ltd. has been rated as a "Most Influential Enterprises in Water Industry" for 18 straight years and among the top 3 for three straight years. CECEP Guozhen has been rated as a "Most Influential Enterprises in Water Industry" six times. Qingxi Water Treatment Plant of CECEP Guozhen, Zhuzhuanjing Sewage Treatment Plant and Changsha Xianghu Sewage Treatment Plant were awarded "Double-hundred Leap" benchmark water plants issued by the E20 Environment Platform.



General Water of China Co., Ltd. was rated as a "Most Influential Enterprises in Water Industry" for 18 straight years



CECEP Guozhen was rated as a "2020 Top 10 Most Influential Enterprises in Water Industry of China"

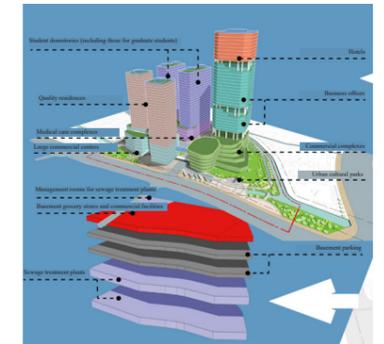
**The first deepest and fully buried reclaimed water plant was successfully put into operation. Case**

In November 2019, the major structure of Guiyi Reclaimed Water Plant, constructed by CECEP Water Development Co., Ltd., was fully capped and successfully put into operation. This project was the first belowground reclaimed water plant integrated with civil building in China, and also the deepest sewage treatment plant in Asia, with a total investment of RMB 753 million and a capacity of 50,000 t/day.

Guiyi Reclaimed Water Plant was constructed using several advanced technologies and new processes. After the wastewater is subject to advanced treatment, 20% of the high-quality reclaimed water is used for toilet flushing in the upper complex and municipal greening, and 80% high-standard effluent is discharged to Guancheng River to supply the local ecology. The reuse of all the wastewater makes wastewater "resource" and "energy".



Rendering of aboveground structures of Guiyi Reclaimed Water Plant



Schematic diagram of aboveground and underground structures of Guiyi Reclaimed Water Plant

**Ecological Governance and Restoration**

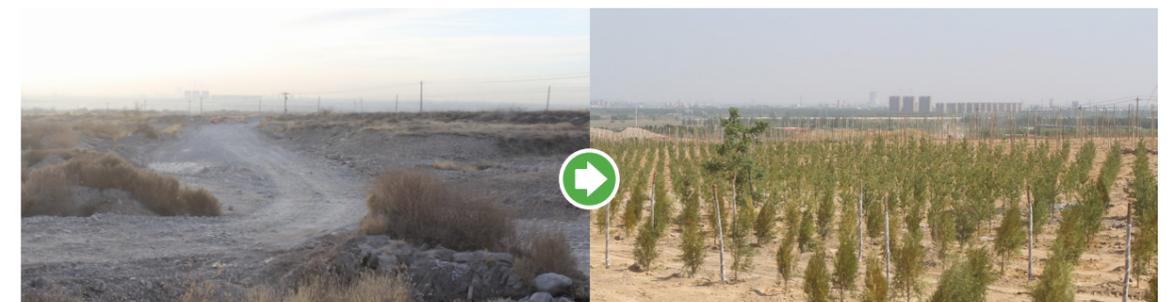
CECEP has already completed over 200 environmental restoration projects accumulatively

CECEP was one of the first companies engaged in pollution remediation (like soil and underground water) and heavy metal treatment, and its business covers mine, wasteland, watershed water, lake sediment, etc. As of this reporting period, CECEP already completed over 200 environmental restoration projects, including the first and the most complex comprehensive chemical pesticide pollution site treatment project in China, the largest and most complex comprehensive restoration project of multiple pollutants in the park, etc.

**Protecting the safety barrier of the northwest and building a beautiful Helan Case**

General Secretary Xi Jinping stressed the protection of the Helan Mountain ecology at an inspection in Ningxia on June 9, 2020. CECEP China Geo-engineering Corporation devoted itself to improving the ecological environment at Helan Mountain. According to the field research, it took differentiated measures based on the plans for the development and utilization of mineral resources versus the restoration and treatment of the geological environment. It finally determined a three-step measure, i.e. topographic and geomorphic regulation, debris flow channel governance, and ecological restoration.

By the end of 2020, CECEP completed 62.46 hectares of topographic and geomorphic regulation and 29.72 hectares of ecological restoration, substantially remediating the construction stone mining area at Taomengou and contributing to the restoration of the Helan Mountain ecology and building a beautiful Helan.



Pictures before and after the restoration of the ecological environment at Helan Mountain

**Building the "Millennium Forest Project" in Xiong'an New Area to promote local employment** Case

CECEP Techand Ecology answered the national call for building a "Beautiful Xiong'an". As carrying out the "Millennium Forest Project" in Xiong'an New Area (100,000 seeds and afforestation task), it promoted the joint construction between towns and businesses, exploited the advantages of personnel from surrounding villages to the fullest, and hired a large number of basic construction workers, driving up the local entrepreneurship and employment. It was commended by the Party Committee and the People's Government of Xiongxian County, and was awarded "Contribution to Entrepreneurship and Employment".



"Millennium Forest Project" in Xiong'an New Area

**Resource Recycling**

The resource recycling businesses of CECEP covered the production of new energy conservation and environmental materials, recycling of renewable resources, resource utilization of organic wastes, etc., and made exploration in promoting green, low-carbon and renewable development.

CECEP Green Carbon Environmental Protection (Zunyi) transformed the grain stillage and high-concentration wastewaters generated by making wine into a liquid organic fertilizer, which was provided to surrounding farmers for free. In 2020, the liquid organic fertilizer was used for fertigation of nearly 7,000 mu hilly lands accumulatively, effectively increasing the production and income of such farmers.

**Taking low-carbon actions**

**Low-carbon Development**

CECEP took proactive actions to build a two-level "carbon peaking and carbon neutrality" organizational system, study relevant cutting-edge subjects, verify carbon emissions, and update green and low-carbon technical service programs. It improved these systems by scientific planning and enhanced the comprehensive benefits by considering all aspects, making many contributions to the development of ecological civilization in China.



**Extended reading: CECEP carried out low-carbon research and tackled core technologies in advance**

CECEP Energy Conservation Co., Ltd. integrated 21 independent intellectual property rights by nine original core technologies, and built the largest regional energy project in the Yangtze River Delta, which was listed as a science and technology demonstration project by the Ministry of Housing and Urban-Rural Development. Upon completion, 75% of renewable energy sources could be utilized, reducing ~80,000 tons of carbon dioxide emissions annually or the equivalent of building another 800 ha broad-leaved forest.

CECEP Carbon Peaking and Peak Neutrality Research Institute was established to study green hydrogen production and hydrogen energy application technologies, develop energy conservation and energy efficiency services in high carbon and energy consumption industries based on digital technologies, and explore ecosystem carbon sink technology solutions integrated with CCUS technology and forest carbon sink development.

**Sticking to Green Operation**

CECEP paid attention to large companies, industrial parks, new infrastructure, and other high energy consumption scenarios, innovated zero-carbon energy alternative products and services, and sped up building demonstration projects, like "Zero-carbon Park", "Zero-carbon Building", and "Zero-carbon Factory".

In addition, CECEP continued to implement sustainable development strategies by promoting resource conservation as well as paperless and information offices, strengthening the management of electronic equipment and energy savings, and waste avoidance.

**Building an Ecological Industry Chain**

CECEP tried to build a green ecological industry chain with high technological content, cultural taste, and added economic value. It also tried to find a path to develop ecological health industry, achieving harmonious and benign development of economic, social, and ecological benefits.

"CECEP Eco Product Development Research Center", founded in July 2020, developed the sustainable ecological product value to achieve a new model, new business, and new path, thereby providing more quality ecological products for society by taking advantage of natural resources to benefit and develop a green economy.



Opening ceremony of CECEP Eco Product Development Research Center

# Seeking Overall Development with Ingenuity



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## Improving quality and efficiency

CECEP implemented special quality and efficiency actions proposed by the State-owned Assets Supervision and Administration Commission, strengthened the top-level design, and optimized the strategic layout. Also, it stuck to innovation, and developed measures to improve quality and efficiency. Businesses took various measures to tap the potential of all Group members who made efforts to accelerate quality and efficiency improvements.

### Strategic Optimization and Overall Layout

In 2020, CECEP preliminarily prepared major strategic planning and institutional mechanisms (including the "14th Five-year Plan") by adjusting the strategic structure, which pointed out a direction for high-quality Group development. The Group studied and reviewed 54 major matters by convening 20 board meetings in 2020, pushing its strategic deployment to new levels.



The Group was holding a seminar to prepare the "14th Five-year" strategic plan

### Cost Reduction and Efficiency Improvement by Fine Management

The Group reduced costs and improved efficiencies by conducting three-year benchmarking actions and implementing fine management & various objectives. In 2020, the Group completed the governance on "three batches", and disposed of 60 inefficient and invalid assets; reduced 25% of overheads of the headquarters compared with the budget, with a year-on-year decrease of 10%. All secondary subsidiaries reduced three kinds of expenses by RMB 2.232 billion, a drop of 20.68% compared with the budget, and over-delivered cost reduction objectives and efficiency improvements.

#### China New Era Group Corporation

Twenty-eight key tasks were planned, 139 specific measures were developed, and a weekly report system was established to specify schedule requirements, arrange construction periods in an inverted way, and implement responsibilities.

#### Building Energy Conservation Co., Ltd.

The core capacity building was strengthened, four platforms and one base were built, 25 specific objectives were put forward in terms of seven aspects, and quality & efficiency improvements were facilitated.

#### China Geo-engineering Corporation

The model integrated with "resource, engineering, financing, investment, and operation" and "localization +" model were developed to improve a comprehensive solution for integrated development. Several achievements were made in quality and efficiency improvement.

#### Assets Management Co., Ltd.

Losses were lowered and controlled by "differentiated policies for different businesses", and the loss reduction objectives set out by the Group were more than fulfilled.



Lean team of CECEP (Tangshan) Environmental Equipment Co., Ltd. affiliated with CECEP Environmental Protection Equipment Co., Ltd.

### Releasing Energy by Innovation

CECEP increasingly improved the science and technology innovation system, strengthened the building of scientific research platforms and talents, researched and developed major projects, standardized and guided the commercialization of science and technology innovation achievements, optimized the technological innovation environment, and drove the development by science and technology innovation.

#### Improvement of the Innovation System

CECEP continued to improve the systems and mechanisms for scientific and technological innovations in 2020, and issued the Guiding Idea on Further Promoting Science and Technology Innovation, where major tasks were planned in terms of ten aspects and measures for management of major scientific and technological innovation projects and capitals were revised. It also completed the sub-plans for science and technology innovation in the "14th Five-year Plan".

CECEP Science and Technology Association was officially established in August 2020. The Group held the 2020 Science and Technology Conference in December to make arrangements for science and technology innovation.



The inaugural meeting of CECEP Science and Technology Association was held



2020 first batch of Science & Technology Innovation Awards and CECEP Outstanding Young Scientific and Technological Paper Awards were issued by the Group

## Building an Innovation Ecology

CECEP released the innovation driving forces of industries, universities, and research institutes by cooperation and communication with governments, universities, and research institutes. It also strengthened technological innovation exchanges in relevant fields and expanded technological innovation by taking the lead to hold the thematic seminar on "Building a Market Platform According to Technical Standards", Science and Technology Innovation Summit (Hefei) on Comprehensive Governance of Typical River Basins in the Yangtze River Delta.

### Science and Technology Innovation Alliance for the Great Protection of the Yangtze River

CECEP held relevant seminars together with the People's Government of Hefei to discuss new technologies and models for pollution treatment in the Yangtze River Economic Belt.

### Industry-university-research technical cooperation

The Strategic Cooperation Agreements were signed with over ten universities and research institutions, including Zhejiang University, University of Science and Technology of China, and the Chinese Research Academy of Environmental Sciences. Efforts were made to thoroughly incorporate R&D from the entire industry chain and achievement the transformation of building an innovation ecology, and supporting industrial development by science and technology development.

### CECEP signed the agreement on strategic cooperation in science and technology innovation with the China University of Mining and Technology Case

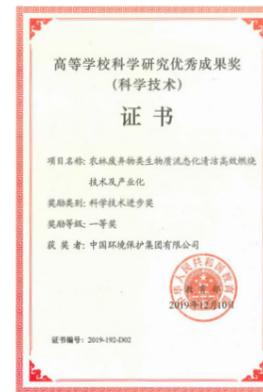
CECEP signed the agreement on strategic cooperation in science and technology innovation with the China University of Mining and Technology (Beijing) on April 22, 2020. The Parties focused on major national development strategies, and conducted in-depth and comprehensive cooperation by establishing an R&D platform, implementing technical demonstration projects, and academic exchange.

## Cultivating Innovation Achievements

CECEP invested RMB 1.06 billion in R&D in 2020. It concentrated on bottleneck problems, fast-tracked the tackling of key core technologies, and continued to promote major science and technology innovation projects. CECEP applied for 454 patents in 2020, including 237 invention patents; 405 patents were authorized, including 74 patents for invention. It undertook seven national key R&D programs as the first undertaking unit, including four provincial and ministerial science and technology programs. Five major science and technology innovation projects were accepted technologically in the pilot-plant test phase. It won nine provincial and ministerial scientific research awards. China Geo-engineering Corporation, General Water of China Co., Ltd., Valiant Corporation Limited, CECEP Guozhen, and other subsidiaries made great achievements in science and technology innovations, which moved to new development stages.

### Tackling Core Technologies

The list of key core technologies ("38+2") was developed; two technologies were included in the long list of first and second prizes of the 2020 National Science and Technology Award; 11 technologies were granted with national project (subject) awards and provincial and ministerial awards.



The project on Fluidized Clean and Efficient Combustion Technology of Agricultural and Forestry Waste Biomass and Industrialization", co-developed by China Environmental Protection Group and the China University of Mining and Technology, won the first prize in the Higher Education Outstanding Scientific Research Output Awards offered by the Ministry of Education.

### Participating in Technical Research

CECEP was the only business that participated in the 6th national technology forecast and research on the science and technology development strategy in the environmental field, research on national science and technology development planning for the "14th Five Year" and key technologies and equipment for the circular economy, research on the national green technology evaluation system, research on the pilot technical plan for the construction of the "waste-free city", etc.

### Participating in Preparing Standards

The Technical Specification for Lightning Protection Improvement for Power Grid in Wind Farm Located in Multiple Thunderstorm Region edited by Wind-power Corporation (Zhangbei) was approved as the national industrial standard; the Design Specification for New Energy Application of Buildings coedited by CECEP Hundred was officially issued and implemented; the Technical Specification for Inspection and Rehabilitation of Urban Sewer Pipeline edited by CECEP Guozhen, as well as the Spiral Sand and Water Separator and the Permanent Magnet Motor Submersible Mixer co-edited by CECEP Guozhen, were issued; the Code for Design of Boiler Plant coedited by China Qiyuan was officially issued.

## Forging Innovative Talents

CECEP attached great importance to building a team of sci-tech talents and optimized the talent cultivation and incentive system. It also provided them with a new platform to release their energy by conducting activities such as technology innovation week, innovation exchange, science and technology forum, and an innovation competition. By the end of 2020, the Group had 3357 R&D personnel, including two national sci-tech talents, one national science and technology award winner, and 75 experts granted with the special allowance of the State Council.

### Improving the Talent Cultivating Mechanism

The subsidiaries took differentiated measures to develop methods for assessing science and technology innovation, ensuring cultivating, introducing, and retaining talent, and treating new employees well.



Academician Ren Nanqi was appointed as the chief scientist by the Group.

**Building an Innovative Platform**

The science and technology exchange activities were actively carried out, like an outstanding young scientific and technological paper seminar and young scientific and technological backbone symposium, providing a good platform for talent development.



2020 CECEP held the Outstanding Young Scientific and Technological Paper Seminar

**Continuous "Five Small" activities for efficiency improvement by innovations**

The teams and workers of the Group were encouraged to conduct innovative activities for efficiency improvement and enhance their innovation capability. Eleven patents were applied for ten projects in the appraisal of the 2nd excellent achievements.



Improving the production process by "small inventions" "small innovations"

## Strengthening corporate governance

CECEP accurately realized the development situation of the Group by benchmarking world-class management, which prompted development by reform while it also prevented compliance management risks and managed enterprises according to law. The high-quality development of the business was promoted by high-quality governance.



CECEP held a world-class benchmarking management promotion action mobilization meeting

## Deepening Enterprise Reform



The Group established the Reform Division to deepen reform in all aspects, and also strengthened supervision and assessment. It also continued to drive forward special reform projects, including diversity of equities at the Group level, "Double-hundred Action" of the State-owned Assets Supervision and Administration Commission, and "Science Reform Demonstration Action". CECEP also issued the 2020 Work Plan of the Group for Comprehensively Deepening Reform, and completed the Three-year Action Implementation Plan for the Reform of the Group and five other special programs. Progress was made on pilot reform throughout the year, laying a solid developmental foundation.

**Great Achievement of Deepening Reform**

The project follow-up investment of Huashang Health affiliated with China New Era Group Corporation was included in the case set of "Double-hundred Action" of State-owned business reform initiated by the State-owned Assets Supervision and Administration Commission and the Group.

China Geo-engineering Corporation, CECEP Industry Development Co., Ltd., and Hi-Tech Optoelectronics Co., Ltd. affiliated with Assets Management Co., Ltd. were included in the fourth batch of businesses subject to mixed-ownership reform by the NDRC.

The equity incentive plans of Solar Energy Co., Ltd. and Wind-Power Corporation were approved by the State-owned Assets Supervision and Administration Commission and the Group.

Reform programs for the "Double-hundred Action" of the China New Era Group Corporation and China Environmental Protection as well as the "Science Reform Demonstration Action" of CECEP Environmental Protection Equipment Co., Ltd. and Valiant Corporation Limited were reported.

## Operating according to Law



CECEP strictly complied with relevant laws and regulations, improved compliance systems, risk prevention and internal control management systems and mechanisms, and raised risk prevention awareness. In addition, it performed the main responsibility of construction as a legal enterprise, and took various measures to pour a solid foundation for business development.

**Sticking to Managing Enterprises according to Law**

The Compliance Committee was established; the Compliance Management System was issued; the Negative List of Compliance Management and the List of Compliance Management Obligations were drafted.

**Improve risk prevention and control**

By the end of 2020, 25 secondary subsidiaries included in management established the "Three Importance and One Greatness" system. All of them built a violation accountability system, and key secondary subsidiaries recruited general counsels; systems like investment & merger management and standardized governance of listed companies were revised.

Strengthen internal control management

The internal control system supervision and evaluation plan was prepared, and the 2020 Internal Control Manual was revised and issued; the internal control supervision and evaluation have been conducted for nine secondary subsidiaries, and a post-evaluation was conducted on nine major items; verification has been done for 108 internal control defects that were evaluated in 2019, among which, 87 rectification items were completed, leading to a completion rate well above 80%.

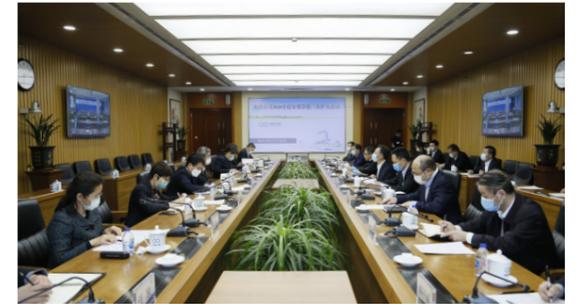


2020 Work Conference on Rule of Law Held by the Group

The safety and environmental protection accountability system (same responsibilities for the Party Committees and the governments, dual responsibilities for the same post, coordinated management, and accountability for dereliction) was established and implemented;

Five systems and procedures were revised and issued, including the Safety and Environmental Protection Accountability System;

By the end of 2020, 14 of 20 Class I and II regulated enterprises established a position of safety director, and 17 businesses established the Safety & Environmental Protection Department.



The Group held the Second Enlarged Meeting of the Security Commission in 2020

## Deepening Political Inspection

In 2020, 90.29% of the rectification measures were completed.

CECEP worked hard to strengthen discipline and fight corruption in strict accordance with the Instructions on inspection and implementation measures; implementing the "Two-responsibility" system, pushing forward the inspection overall, revising the Measures of the Group for the Party Committee Inspection, preparing the Interim Measures on Supervision of Inspection Rectification, and reviewing work from previous years, thereby creating a clean environment for the Group. In 2020, 158 or 90.29% of the 175 rectification measures specified in the rectification program were completed, and phased work was carried out for the remaining 17 measures, achieving phased results.

## Building a safety bottom line

### Strengthening Safety Management

CECEP shouldered the main responsibility of safety and environmental protection, strengthened work safety management, improved the safety and environmental protection organizational structure and top-level design, and implemented responsibilities at all levels to create a safe and stable development environment with a high sense of responsibility. The Group invested RMB 190 million in the system-wide work safety in 2020. The safety accident mortality rate per RMB 100 million was 0.006, remaining the leading level in the domestic industry and trade, and the work safety situation was stable overall.

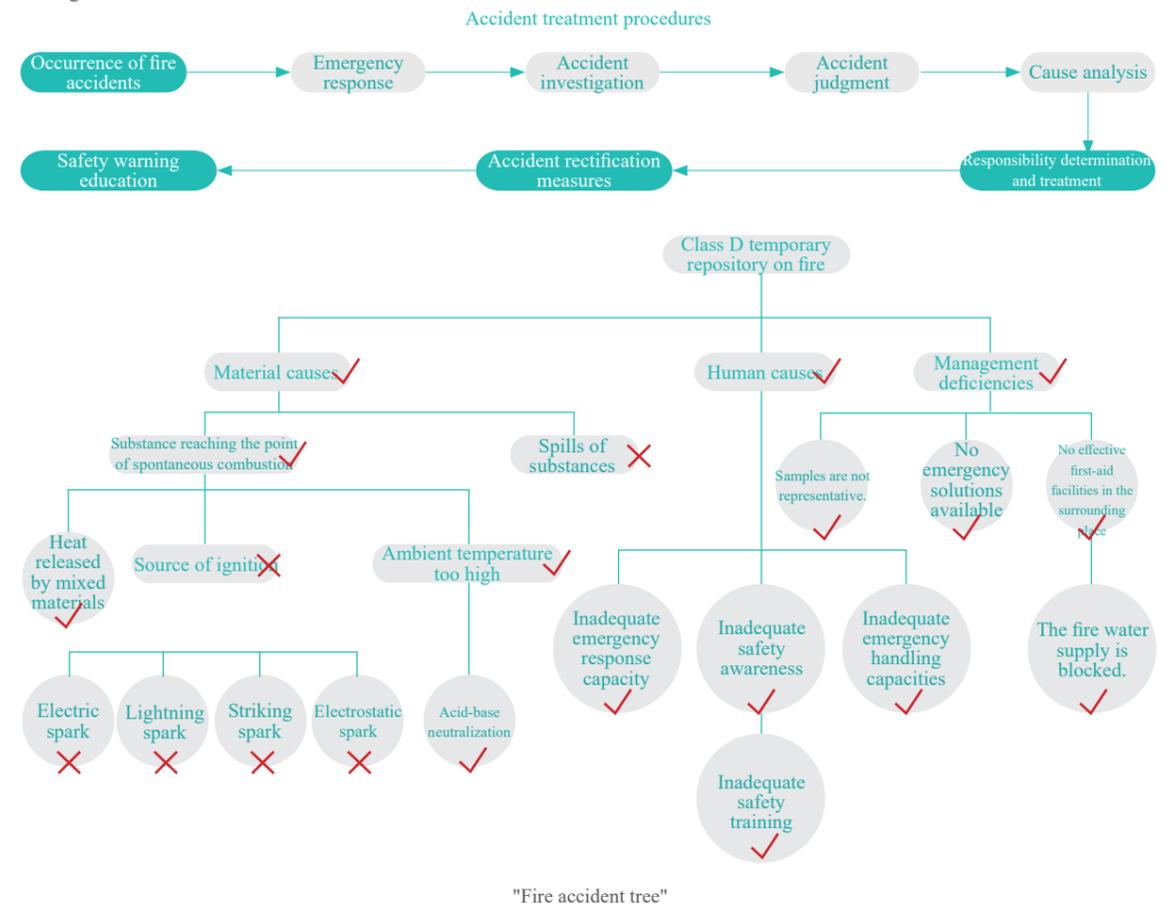
2020  
RMB 190 million was invested in the system-wide work safety



The safety accident mortality rate per RMB 100 million was 0.006

### The fire accident emergency response by a subsidiary of CECEP Ecological Environment Technology Co., Ltd. Case

On May 4, 2020, a general D-grade fire accident hit the Class D temporary repository of Yuantai Company, a subsidiary of CECEP Ecological Environment Technology Co., Ltd. The accident grabbed the attention of top CECEP leaders Ecological Environment Technology Co., Ltd., who analyzed the root cause, took rectification measures, and strictly held the relevant personnel accountable. Thanks to their rapid response, the accident was turned into an opportunity for improving work safety. The fire was extinguished quickly due to timely disposal, without causing personnel injuries and substantial property damages.



"Fire accident tree"

## Focusing on risk prevention and control

In 2020, CECEP continued to build the double risk prevention systems. Meetings were convened to discuss safety and environmental protection matters. Leaders learned to investigate and treat hidden dangers. The risk management and control capacity was really strengthened. In 2020, 1,965 supervision and inspection activities for different types were carried out, during which 30,120 hidden dangers were found with 29,737 rectified, achieving a rectification rate of 98.7%.

2020

At the Group level, 1,965 supervision and inspection activities were conducted

29,737 rectified

A rectification rate of 98.7%

### Investigation and treatment of hidden dangers strengthened

A three-level hidden danger investigation and treatment system covering the Group, the second-level subsidiaries, and grass-roots subsidiaries was formed.

### Emergency response capacity improved

A three-level emergency management system covering the Group, the second-level subsidiaries, and grass-roots subsidiaries was established. More than 1,400 emergency drills were conducted across the Group, which helped improve its emergency response capacity.



The emergency drill in limited space of General Water of China Co., Ltd.



The fire-fighting equipment use drill of China Environmental Protection

## Safety promotion activities

In 2020, CECEP conducted systematic safety & environmental protection training. It issued bulletins on safety & environmental protection, organized the work safety month, fire-fighting day, Law on the Prevention and Treatment of Occupational Diseases promotion week, environmental protection promotion week, etc. By participating in those activities, employees dramatically improved safety awareness and competence, and elevated the work safety level.

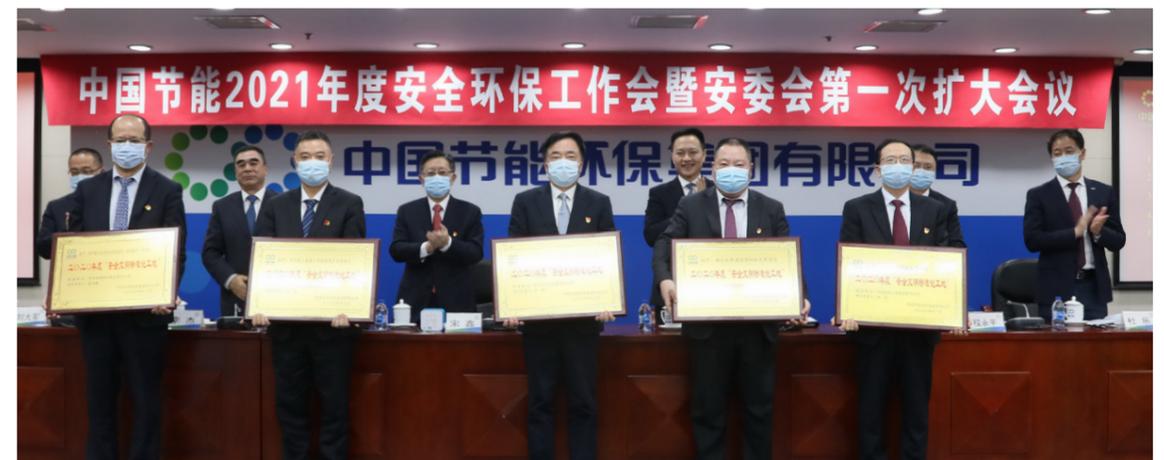
In 2020, the Group issued 14 safety & environmental protection bulletins, organized over 560 special training sessions to understand the important speeches of General Secretary Xi Jinping on work safety, and organized over 4,800 safety & environmental protection training sessions attended by 320,000 employees. Not a single occupational disease or suspicious occupational disease was diagnosed across the Group.

2020

Over 4,800 safety & environmental protection training sessions



Participation by 320,000 employees



In January 2021, the first five subsidiaries winning the title of "Safe, Civilized and Standard Construction Site" from the Group were commended at the 2021 Annual Safety & Environmental Protection Conference & the First Outreach Session of the Safety Committee.



China Qiyuan Engineering Corporation organizes all employees for a safety and quality pledge



Employees of CECEP Environmental Protection Equipment signing on the banner to make that promise

# Creating a Harmonious Environment by Love



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## Facilitating employee development

CECEP takes effective measures to protect employees' legal rights and interests. Employees are attracted and retained by sound business and reasonable employment policies. With their work enthusiasm, initiative, and creativity fully motivated, they are contributors to lifting the Group's operational quality and efficiency, and to the unification of corporate economic value and social value.

### Protecting employees' rights and interests

CECEP strictly abides by labor laws and regulations, protects its employees' rights and interests according to law, implements myriad systems, and takes effective and down-to-earth measures to secure a harmonious labor relationship, and accordingly, a healthy and sustainable Group development.



Fundamental rights

The fair employment principle, gender equality principle and "equal pay for equal work" principle are followed. CECEP forbids discrimination and forced labor. Employees from different ethnic groups or cultural backgrounds or with different genders, ages, or religious beliefs are treated equally at CECEP. Active efforts are made to build fair and reasonable remuneration and welfare systems. Employees' salary, social insurances and housing funds are paid in full and on time. CECEP complies with national rules on statutory vacations, marriage leave, maternity leave, etc. In 2020, CECEP paid social insurance for all employees.



Health rights

The Group implemented Guidelines for Establishing and Implementing Occupational Health and Safety Management Systems, and organizes employees for physical examination and psychological health counseling at regular intervals. The occupational health investigation was organized, during which 16 second-level subsidiaries were found with occupational disease hazards and ordered to rectify. This establishes a solid foundation for the accurate management of occupational health.



Democratic rights

The general membership meeting responds to common concerns of employees and problems directly related to their rights. An obstacle-free complaint channel is secured for employees, and they are always encouraged to give opinions and advice for the development of the Group. Employees are organized to co-discuss collective employment contracts and salaries, with the discussion results recorded according to law. This is to ensure a harmonious employment relationship.

### Focusing on talent cultivation

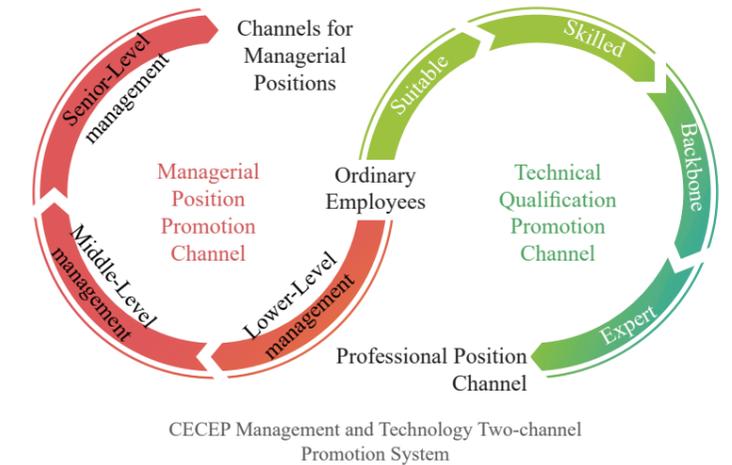
CECEP is fully implementing the "one starting point, three pillars, and five teams" talent strategy. It insists on accelerating the talent development of the Group through reform and innovation. By improving the marketing mechanisms and competing platforms, scientific and objective talent selection, evaluation, and motivation, CECEP seeks to build a HR operation mechanism encouraging talents to motivate and discipline themselves and stand out, so as to steadily improve the core competitiveness of the Group.



Further Reading: "One Starting Point, Three Pillars and Five Teams" Talent Strategy.

- Treating the talent selection, evaluation and motivation mechanism building as an important starting point for the "strengthening the company with talents" strategy.
- The three pillar systems, namely the HR management system, talent training and development system, and HR professional capacity system.
- Five talent teams, namely the leading talent team, professional management talent team, technological talent team, skilled talent team, and versatile talent team were established.

Based on institutional innovation, CECEP ensures employees smooth promotion channels. Its attention to talent selection, evaluation, and motivation effectively stimulated their work enthusiasm and creativity. Its systematic training systems, experience- and case-based teaching practices and other training programs ensures an orderly and all-around growth for employees. On such a basis, a talent team meeting the management improvement, transformation, and upgrading needs of the Group is cultivated, supporting its efficient, healthy, and sustainable development.



### The first outstanding young squad training program of the Group in 2020

Case

On November 24, 2020, the first outstanding young squad training program of CECEP in 2020 began in Beijing. CECEP Party Secretary and Chairman of the Group Song Xin attended the opening ceremony and taught the first lesson.

This program was designed to develop their political awareness, strategic thinking, professional competence, and leading and managing capacities. It seeks to prepare more teams for further development, strategic transformation, and Group reform.



The first outstanding young squad training program of CECEP in 2020



The first youth talent training program of CECEP Techand Ecology & Environment Co., Ltd.



The first skill competition for finance personnel of CECEP Solar Energy Co., Ltd. in eastern China

## Staff care

CECEP is people-oriented. Efforts like care for female employees, employee gyms, and wonderful cultural, sports and entertainment activities are often organized. It has created a healthy and positive corporate atmosphere to encourage employees to work hard for a better life.



CECEP Party Secretary and Chairman of the Group Song Xin visiting frontline employees of New Era Health Industry (Group) Co., Ltd.



"Army Day" revolutionary song competition of China Environmental Protection



Basketball competition of CECEP Building Energy Conservation Co., Ltd.



"Sunshine Cup" basketball competition organized by CECEP Solar Energy Co., Ltd.

## Consolidating cooperation network

### Cooperation for win-win results

CECEP takes the initiative to serve major regional strategies of China. It further cooperates with local governments, supports the national and industrial standards setting, drives industrial upgrades and forges towards high-quality development. To build its brands and improve its market position further, CECEP takes the initiative to organize international cooperation exchange activities, maintain deep cooperation with many partners, and build strategic cooperation networks.

In 2020, CECEP signed a total of nine strategic cooperation agreements in the Yangtze River Economic Belt, Yellow River Basin, and the Beijing-Tianjin-Hebei region. CECEP and sister companies affiliated with the China Railway entered into strategic cooperation agreements, agreeing to additional cooperation. CECEP has joined the China Chamber of International Commerce, China Enterprise Reform and Development Society and other industrial associations and organizations, which further its already wide strategic partner network.

#### At home

CECEP actively participates in the integrated development of the Beijing-Tianjin-Hebei region, and construction of the Guangdong-Hong Kong-Macao Greater Bay Area and Nansha Islands. CECEP focuses on regional markets. Furthermore, it cooperates with local governments, large businesses, scientific research institutes, institutions of higher education, and financial institutions.

#### Overseas

CECEP upholds the "Belt and Road" and "going global" strategies. It has joined China Chamber of International Commerce and is a deputy chairman unit. It has an active conference attendance schedule including China International Contractors Association, 2020 International Smart City Expo, 2020 Sino-Japanese Green Technology Exchange Meeting, and the 17th China-ASEAN Expo.

### CECEP entering into a strategic cooperation agreement with Hubei Province

#### Case

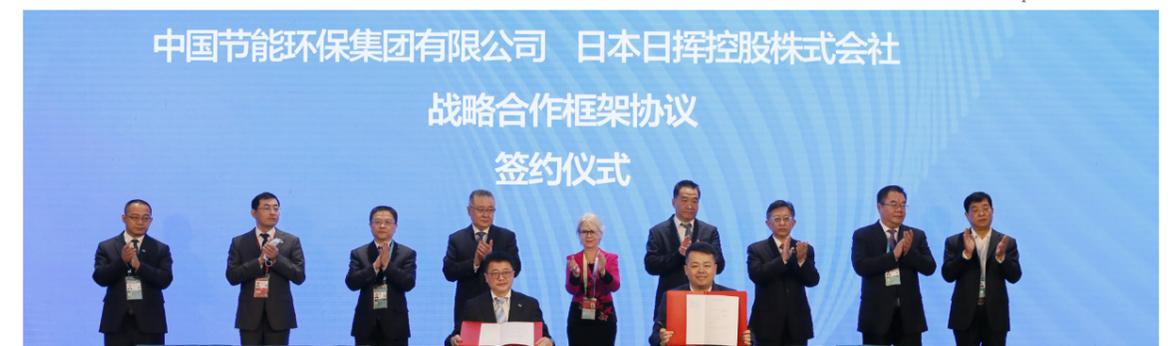
In March 2021, a signing ceremony between Hubei Province and central SOEs was held in Wuhan. CECEP was invited to attend and sign the agreement. In the future, both parties would, based on an established and solid foundation, further implement the green development philosophy, firmly seize the strategic opportunity of developing the Yangtze River Economic Belt. CECEP would further cooperate with Hubei on energy conservation and clean energies and establish a long-term stable strategic cooperation relationship with this province to contribute to its goals of "developing into a pivot, walking at the forefront and writing a new chapter".



CECEP entering into a strategic cooperation agreement with Hubei Province



Scan the code to watch CECEP at the Third China International Import Expo



CECEP entering into a strategic cooperation framework agreement with Japanese Rihui Holding Co., Ltd.

## Wholeheartedly and meticulously serving customers

Rate of qualified product: 100%

CECEP upholds the service philosophy of “wholeheartedly and meticulously serving customers”, and keeps improving the quality management system to protect the legitimate rights of customers. CECEP discourages misleading propaganda. Instead, it's honest with consumers and customers. It's committed to protecting customer information, and timely resolution of customer complaints. It seeks to improve its image by virtue of healthy and quality products and services.

## Improved accountability chain

Rate of electronic bidding: 100%

CECEP insists on green and open procurement. It has established sound procurement systems and cost control mechanisms. Procurement rules and systems like the Measures of China Energy Conservation and Environmental Protection Group on Procurement Management have been implemented. CECEP promotes centralized procurement, and endeavors to make procurement more intensive, regulated, IT-based and cooperative, to contribute to an open and compassionate business ecosystem.

- The online electronic procurement platform publicly announces bidding and procurement information. This is a fair, transparent, and healthy platform.
- The procurement leading group meets at regular intervals and works hard to establish a centralized, unified, and transparent procurement process.
- Strengthening responsibility performance management over suppliers in terms of environment, safety, and health, frequently organizing supplier training, establishing the list of qualified suppliers and a supplier evaluation system for regular supplier ratings. Suppliers rated as unqualified are removed.



Special bidding and procurement inspection by the First Inspection Team of the Group Party Committee over the Party committee of General Water of China Co., Ltd.



Lecture to promote centralized procurement by the Tianjin branch of CECEP

## Participating in programs for the public good

### Transfer of ecological value

The number of active users approached 600,000 from the launch on April 9 to late June, 2020

Retail sales: RMB 260 million

### Ecological and healthy products

CECEP Subsidiary New Era Health Industry (Group) Co., Ltd. uses ecological resources like pine trees, bamboo, and wintersweet to produce over 150 kinds (four collections) of ecological and health products. It has formed a complete green industry chain. After years of exploration, an "ecological resource planting - collection and initial processing - effective utilization - value realization - paying back society" ecological and health industry development and poverty alleviation path was found. A sound and harmonious circulation of economy, society and ecology was formed.

Backed by the health industry, CECEP accelerated the value transformation and improvement of ecological resources, and developed the ecological product e-commerce platform "Jian Kang Ke". From its online inception on April 9, 2020, the platform attracted nearly 600,000 active users and reported retail sales of RMB 260 million by June of this year.

In addition, since March 2020, New Era Health Industry (Group) Co., Ltd. launched the "Healthy Trip in China: Science Popularization Cloud Class". Invited health experts from TCM, nutrition and other fields shared their knowledge on pandemic response, health maintenance, immunity enhancement, chronic illness prevention, nutrition, health, etc., for free. Currently, the cloud class has been launched 70 times and listened to by more than one million people.

### Promotion of energy conservation and environmental protection

CECEP is resolute in implementing the plans and requirements of the Party Central Committee and the Ministry of Ecology and Environment, earnestly performing ecological responsibilities, making down-to-earth efforts in building energy conservation and environmental protection bases, and actively promoting energy conservation and environmental protection knowledge, to let the whole society be more aware of energy conservation.

In 2020, the Green Building Science and Technology Museum of CECEP was included by the National Development and Reform Commission in typical cases of energy-saving technology application under a week-long national campaign to promote energy conservation.



Party member employees of the Bijie branch of CECEP promoting garbage sorting knowledge at a school

## Dedicated to volunteer services



CECEP is dedicated to volunteer services and corporate social responsibilities, to pay back society, and promote volunteer services across the world. In 2020, the Group donated RMB 59,728,700.

2020 Expenditures of the Group on donations RMB 59,728,700



Hematopoietic stem cell volunteer activity of CECEP City Energy Conservation



Volunteer service activity on garbage sorting by the Tianjin branch of CECEP



Planting activity by the CECEP Wind-power Corporation Co., Ltd. in Huairou District, Beijing



Volunteer service activity on garbage sorting by the Tianjin branch of CECEP



The Flag-giving Ceremony of the Youth Volunteer Team of China Qiyuan Engineering Corporation & First Activity for Public Good successfully held at Xi'an Bailu Qinzhi Center

## Co-building overseas communities



CECEP is active in supporting the Belt and Road Initiative, business for assisting foreign countries and international engineering projects. In 2020, China Qiyuan Engineering Corporation contracted many international trade projects, such as the project to assist the Sierra Leone Diplomatic Training Institute, and the project of lead-acid cells for motor start in Uzbekistan; China Geo-Engineering Corporation was ranked No. 96 among the largest 250 international contractors globally in 2020.

At the same time, CECEP always pays attention to people's livelihoods overseas when it conducts projects. The local procurement policies are implemented to stimulate local economic and social development. CECEP is active in local community activities, and encourages its employees to engage with local residents in culture to help establish the overseas "friend circle". The Middle Eastern Branch of China Geo-Engineering Corporation made five donations to the Jubail Orphan Foundation, Wahaj women's benevolent association, and another six local charity organizations since 2017, donating SAR 3,230,585 (RMB 5,815,000) in total.

China Geo-Engineering Corporation was ranked No. 96 among the largest 250 international contractors globally in 2020.

The Middle Eastern branch of the China Geo-Engineering Corporation has donated RMB 5,815,000 since 2017.



President of Tanzania John Magufuli attends the cornerstone ceremony of a China Qiyuan Engineering Corporation project in his country



President of Cote d'Ivoire Alassane Ouattara attends the commencement ceremony of the 12-city water supply project



The China Geo-Engineering Corporation branches in Guinea and Mali gave supplies to local employees during Eid

## Work together against COVID-19

Soon after the pandemic hit, CECEP established a leading pandemic response group, which wasted no time in making response arrangements. Following the spirit of important speeches given by General Secretary Xi Jinping, the leading group issued many notices, made relevant plans, motivated employees with knowledge in this field to contribute, and took effective measures to resolutely control and win over the pandemic.

- Timely removing and treating medical wastes from Huoshenshan Hospital, an urgent assignment. This was a major contribution to the normal operation of the hospital;
- Subsidiaries like the CECEP Ecological Environment Technology Co., Ltd. and China Environmental Protection cooperated with their local health and pandemic response authorities on medical waste treatments, special solid waste treatments and community and street cleanings;
- Subsidiaries like General Water of China Co., Ltd. and CECEP Guozhen Environmental Protection Technology Co., Ltd. did everything to ensure safe drinking water and stable sewage treatment for local municipalities;
- Following the overall Group plan, subsidiaries like China Geo-Engineering Corporation and Valiant Corporation Limited purchased a large quantity of urgent protection suits, face masks, etc., from abroad for the pandemic response;
- Subsidiaries like New Era Health Industry (Group) Co., Ltd., CECEP Environmental Protection Equipment and Valiant Corporation Limited spared no effort in developing and supplying the urgently needed products to the market.

RMB 33,175,700 donated for COVID-19 response



14,000 employees fighting at the front of the COVID-19 response

### CECEP granted the title of "Advanced Collective in COVID-19 Response"

Case

In October 2020, the Commendation of SOEs in the COVID-19 Response & Excellent Performance Report Meeting was convened in Beijing. The China National Environmental Protection Group, a subsidiary of the Group, was awarded the "Advanced Collective in COVID-19 Response". Huang Junping from the CECEP (Guangxi) CleanTech Development Company Ltd, a subsidiary of CECEP Ecological Environment Technology Co., Ltd., was awarded "Outstanding CPC Members from Central SOEs" and "Advanced Individual in COVID-19 Response from Central SOEs". Mr. Liu Zhihong from the General Office of the Group was hailed as an "Advanced Individual in the COVID-19 Response from Central SOEs". At the National Commendation Conference for Fighting COVID-19 in September 2020, CECEP Ecological Environment Technology Co., Ltd. and its Party committee were awarded "National Advanced Collective in COVID-19 Response" and "National Advanced Grass-roots Party Organization", respectively.



Commendation of SOEs in COVID-19 Response & Excellent Performance Report Meeting



On March 13, 2020, 11 core members of the Wuhan Qianzishan project were sworn into the Party during the pandemic response.



CECEP presented with a pennant by Huoshenshan Hospital, Wuhan



Scan the code to watch the documentary on COVID-19 response Dan Dang (shouldering responsibility) sponsored by the SASAC, State Council  
The second episode Ji Jian Kuang Mo (infrastructure-holic) tells COVID-19 response stories by CECEP (from 11'15")

## Contributing to targeted poverty alleviation

CECEP made earnest efforts to implement the instructions of General Secretary Xi Jinping on poverty alleviation as well as the decisions and plans of the Party Central Committee and State Council on poverty alleviation and the requirements on poverty alleviation and development of the SASAC. To achieve an effective result in poverty alleviation in Songxian County of Henan, and Fuchuan Yao Autonomous County, Guagxi, efforts were made in strengthening the work organization, staffing, targeted funding, work method innovation, and cooperation with local people.

On February 26, 2020, as approved by the Henan Provincial People's Government, 14 counties, including Songxian, were officially removed from the list of impoverished counties. By then, the two aid objects had been lifted from poverty. In February 2021, the relevant comrades of the Group were granted the title of "National Advanced Individual in Poverty Alleviation" at the National Summary and Commendation Ceremony of Poverty Alleviation.



CECEP Party Secretary and Chairman Song Xin is our aid object Songxian County, Henan Province, for survey



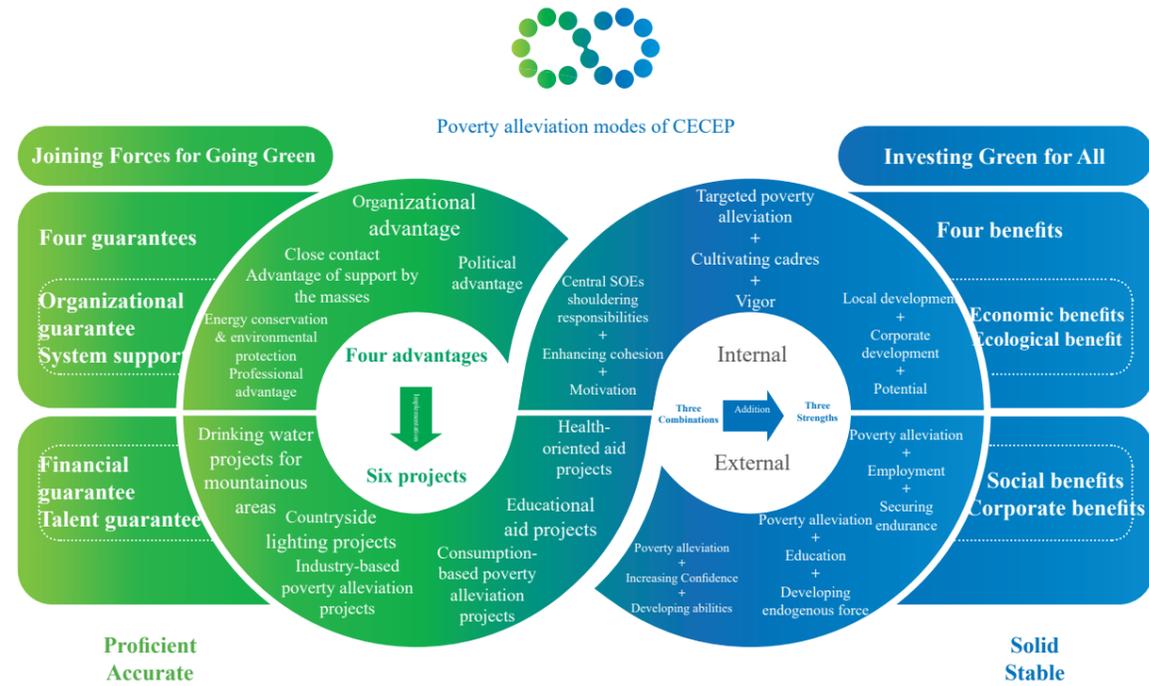
Mr. Yu Honghui, General Manager and Deputy Secretary of Party Committee of CECEP in our aid object Fuchuan Yao Autonomous County for survey



A responsible comrade granted the title of "National Advanced Individual in Poverty Alleviation"

## Poverty alleviation modes

CECEP applies its advantageous resources to meet local needs, sticks to the "beautiful life and hope" targeted poverty alleviation principle, gives play to its "four major advantages", ensures the "four guarantees", implements the "six projects", and assists poverty-stricken areas in developing "three capacities". Those efforts have contributed to both the economic, social, and ecological benefits to local areas and a development benefit to the Group itself.



## Poverty alleviation footsteps

CECEP has made targeted poverty alleviation efforts in Songxian County of Henan Province and Fuchuan Yao Autonomous County, Hezhou City, Guangxi Zhuang Autonomous Region since 2013. By late 2020, the Group had invested more than RMB 20 billion in poverty-stricken areas, including nearly RMB 60 million in targeted poverty alleviation, which was a major contribution to the economic and social development and local quality-of-life improvements.

**In Fuchuan**

Total funds donated:  
RMB 14.72 million

A total of RMB 14.72 million was donated and three poverty alleviation cadres were sent to help solve immediate problems facing local residents in industries, employment, education, and medical care.

- "Village Sweet Dew" project: Channeling spring water to build a reservoir, which solved the drinking water problem facing 1,322 local residents that persisted for hundreds of years;



Spring reservoir donated by CECEP in Fuchuan

### In Songxian County

A total of RMB 21.37 million was donated. Six poverty alleviation teams were dispatched here. Considering local conditions, we adopted different poverty alleviation policies like building infrastructure, developing industries, and stimulating consumption of local goods.

- "Village Sweet Dew" project: Digging three deep water wells, laying water pipes, and installing terminal equipment for Shichang Village, solving the drinking water problem for nearly 2,000 villagers;
- "Village Lighting" project: Building 1,766 solar energy street lamps for 97 villages around the country;
- "Tourism Based Poverty Alleviation" project: Investing nearly RMB 10 million in building lighting facilities for the tourist service center, ecological footpaths, and agritainments in the Shichang Village, turning this village into a 3A state-level scenic area;
- "Education Aid" project: Funding more than 640 students from poor families in Songxian County to go to college;
- "Health Aid" project: Providing "smart medical care for health-oriented poverty alleviation", donating nearly RMB 5 million for health-oriented poverty alleviation in Songxian County, Henan Province, making Songxian the only county in Henan with smart medical care available in the downtown county area, towns, and villages.

Total funds donated:  
RMB 21.37 million



Knowledge and practice complement each other.

The year 2021 begins the 14th Five-Year Plan period, and represents a particularly important year for the modernization of China. At the Fifth Plenary Session of the 19th CPC Central Committee, the grand blueprint of economic and social development for the 14th Five-Year Plan period and even by 2035 was proposed, which serves as a scientific guideline and fundamental principle for economic and social development in China.

Facing the new journey, CECEP, as a central SOE engaged in energy conservation and environmental protection, will follow the guidance of the Party Central Committee further with comrade Xi Jinping at its core. It will get down-to-earth to implement the ecological civilization thoughts expressed by President Xi, and practice his philosophy of "clear waters and lush mountains are invaluable assets". It will maintain the strategic capacity and systematic concept, and build a new development pattern. It places the Party leadership in a more important position

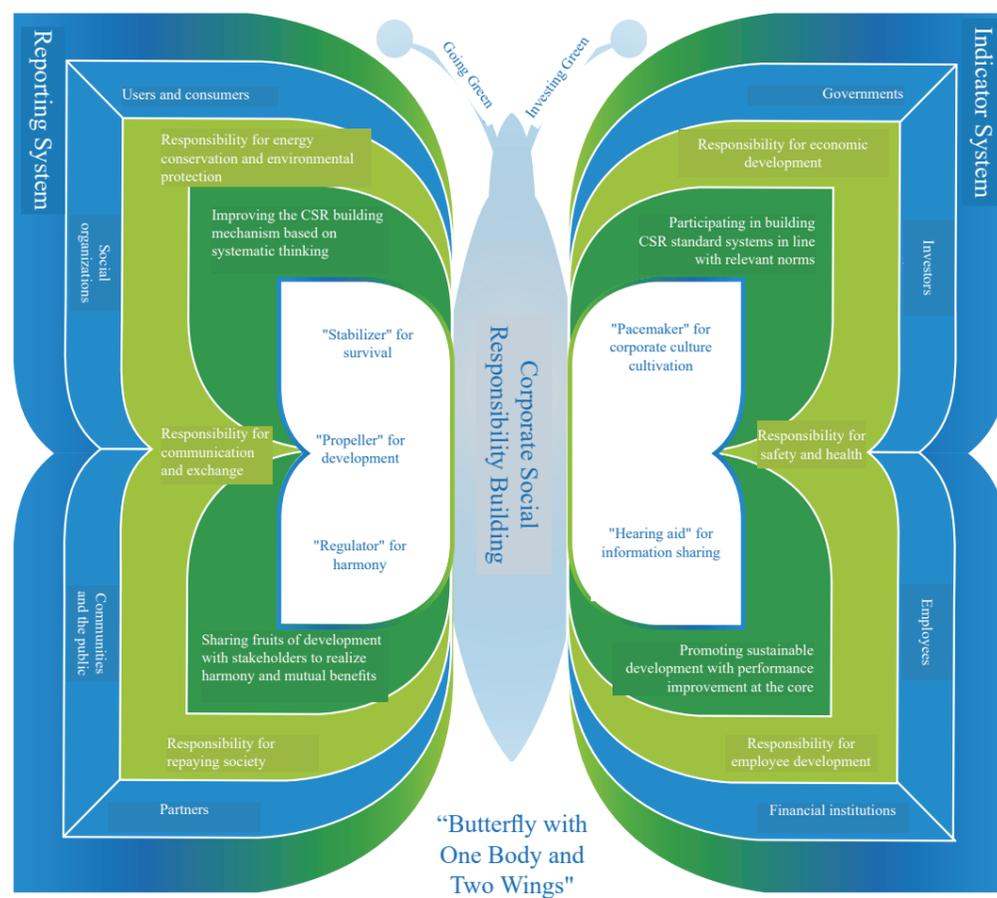
and ensures more effective Party building. CECEP will carefully implement the Three-year Action Plan for SOE Reform, serve the major regional strategies of China, and fully perform its duties as the main platform in pollution treatment along the Yangtze River Economic Belt. It will identify work focuses, strengthen business management, and prevent risks. It will shore up weak areas and solidify the foundation to accelerate high-quality development and open up a new journey towards a world leading group in energy conservation, environmental protection, and health industries to contribute to building a modern socialist country in an all-around way while also making additional progress in ecological civilization.

# CSR Management

Clearly seeing its assignments for the economy, environment, and society, CECEP, in addition to shouldering fundamental profit-making responsibilities, is active in energy conservation, environmental protection, and promotion of harmonious co-existence. It works hard to assure investors, satisfy customers, create value for stakeholders and society, help balance their employees' lives, and secure a better world and life for all. It seeks to be a world leading group in energy conservation, environmental protection, and health industries.

## CSR Model

CECEP keeps the mission of "achieving bluer skies, greener mountains, clearer waters and better life" firmly in mind, deepens the association 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 CSR 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 its social responsibilities.



## CSR Philosophy

Based on sustainable development, CECEP takes "Going Green, Investing Green" as its CSR philosophy, regards value creation as its 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 Promotion

CECEP further improved the CSR management system, integrated the concept of CSR into its strategic development, corporate governance, business operation, and kept improving its CSR organizational structure and governance mechanism. The Group makes active efforts to improve CSR planning, reporting, and indicator systems, and participates in compiling the China CSR Reporting Guide for Energy Conservation and Environmental Protection Industry (CASS-CSR 4.0), which is the first CSR compiling guidance in the energy conservation and environmental protection industry. CSR reports of CECEP are often rated as "Excellent" by top CSR rating institutions.

### CSR Governance

CECEP has established a CSR Leadership Group led by top Group leaders, strengthened the CSR organizational building, identified the boundaries between authorities and responsibilities, and realized top-down coordination and effective communication.



- Main Functions of the Leadership Group**
- Work out CSR strategies and overall objectives for CECEP
  - Make CSR-related decisions and work arrangements for CECEP
  - Lead the building of CECEP's CSR management system
  - Review and approve CECEP's CSR work plans
  - Review and release CECEP's CSR reports
  - Review and approve CECEP's major CSR events

- Main Functions of the CSR Promotion Office**
- Implement CSR decisions and CECEP deployment
  - Coordinate the building and implementation of CECEP's CSR management system
  - Work out CECEP's CSR programs and plans
  - Formulate and implement CSR training programs
  - Organize research on CECEP's key CSR research subjects
  - Organize the development of CECEP's CSR management tools
  - Organize the compilation of CECEP's CSR reports
  - Participate in domestic and overseas CSR exchanges

## CSR Planning

CECEP observes SASAC's requirements for promoting CSR management, practices, and communication in central SOEs. Based on actual situations, CECEP timely adjusts its planning and fully integrates its social responsibility into various kinds of work.

Implementation Phase Content	2014-2015 Philosophy Introduction	2016-2017 System Improvement	2018-2020 Overall Integration
Further improved the CSR organizational system	Built the CSR Leadership Group and the CSR Promotion Office, then identified CSR part-time/contact persons at all departments	Improved the top-down CSR organization system to cover all departments and subsidiaries of CECEP	Conducted pilot projects of CSR management and integrated CSR requirements into routine operations of all business sectors of CECEP
Further improved the CSR indicator system	Improved the CSR indicator system according to SASAC requirements	Organized the guidance preparation on the CSR report compilation in accordance with the GB/T 36000-2015 Guidance on Social Responsibility and the UN 2030 Agenda for Sustainable Development, and other relevant standards	Incorporated the philosophy and requirements of CSR from related standards into current institutional documents
Enhanced the CSR capability building	Regularly organized CSR training sessions to popularize CSR knowledge	Guided and organized subsidiaries to conduct CSR training and communication	Urged subsidiaries to continuously promote CSR integration into employees' post responsibilities in a comprehensive and profound way
Continuously conducted stakeholder management	Identified and sorted out CECEP stakeholders in each business sector	Conducted surveys on stakeholders to understand their expectations and requirements	Conducted categorized management of stakeholders, and continuously improved communication strategies for different stakeholders

## CSR Integration

CECEP integrates CSR into its corporate development strategy, daily operation management, supply chain management, and internationalized operation to promote the transformation of CSR into the endogenic power of corporate development. CECEP encourages its subsidiaries to innovate CSR management, carry out special CSR practices, and build a CSR brand to improve the Group's CSR level.

## CSR Communication

CECEP continuously improves communication with stakeholders. By compiling and releasing high-quality CSR reports and organizing CSR communication activities, it discloses important information, responds to public concerns, creates opportunities to engage stakeholders in corporate operation management, and improves operation transparency, all in a timely manner.

### Information Notification

Expand information disclosure channels including CSR report releases to disclose more relevant operating information

### Information exchange

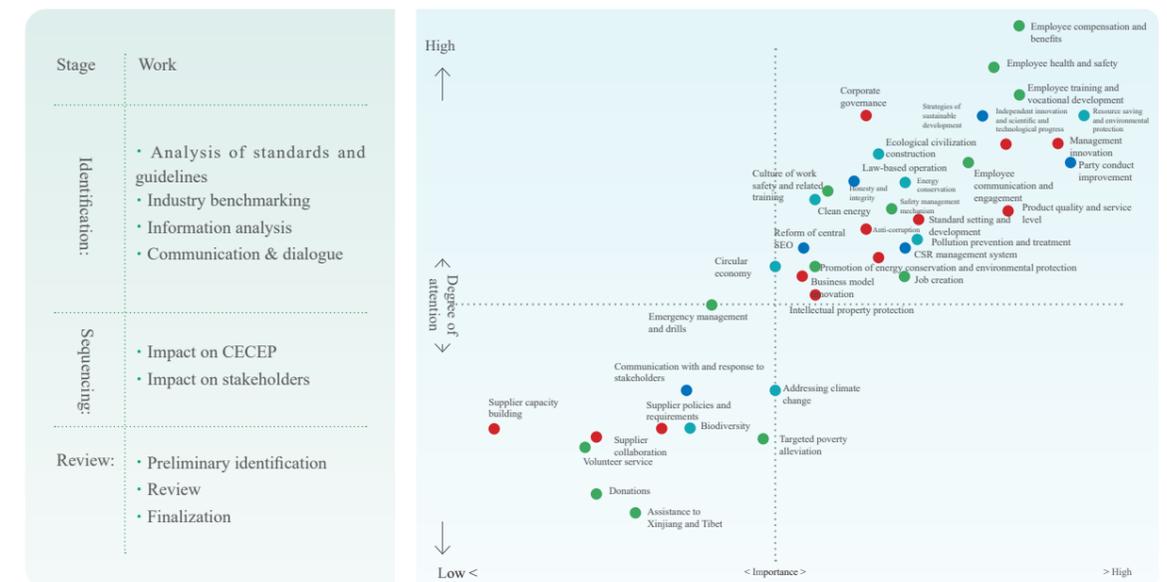
Respond to stakeholders' opinions, suggestions and appeals, and regularly conduct stakeholder satisfaction surveys

### Joint Actions

Invite stakeholders to formulate and implement CSR action plans

### Information Disclosure

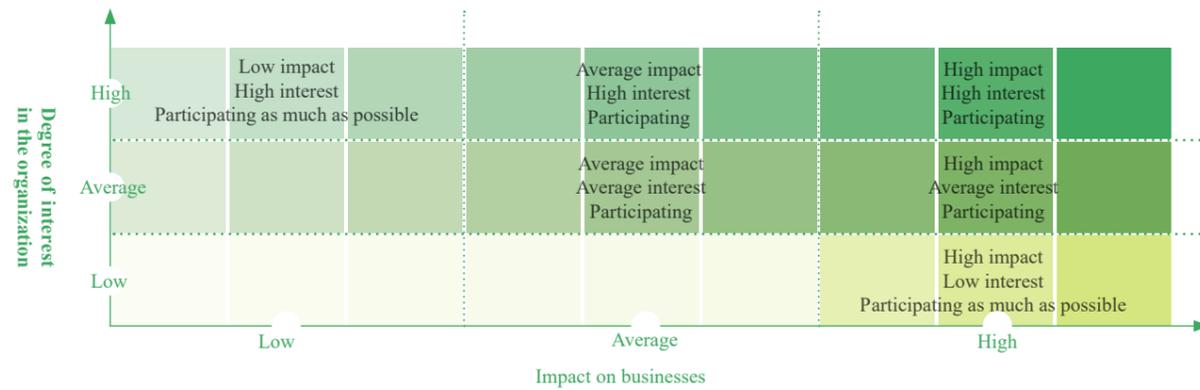
In 2020, we learned the expectations and appeal of stakeholders through questionnaires and consultations with experts. During CSR report preparation, the different degrees of importance attached by important stakeholders to different issues were fully reflected, which makes the report contents more specific. Topics, ranking and review efforts in 2020 CSR Report:



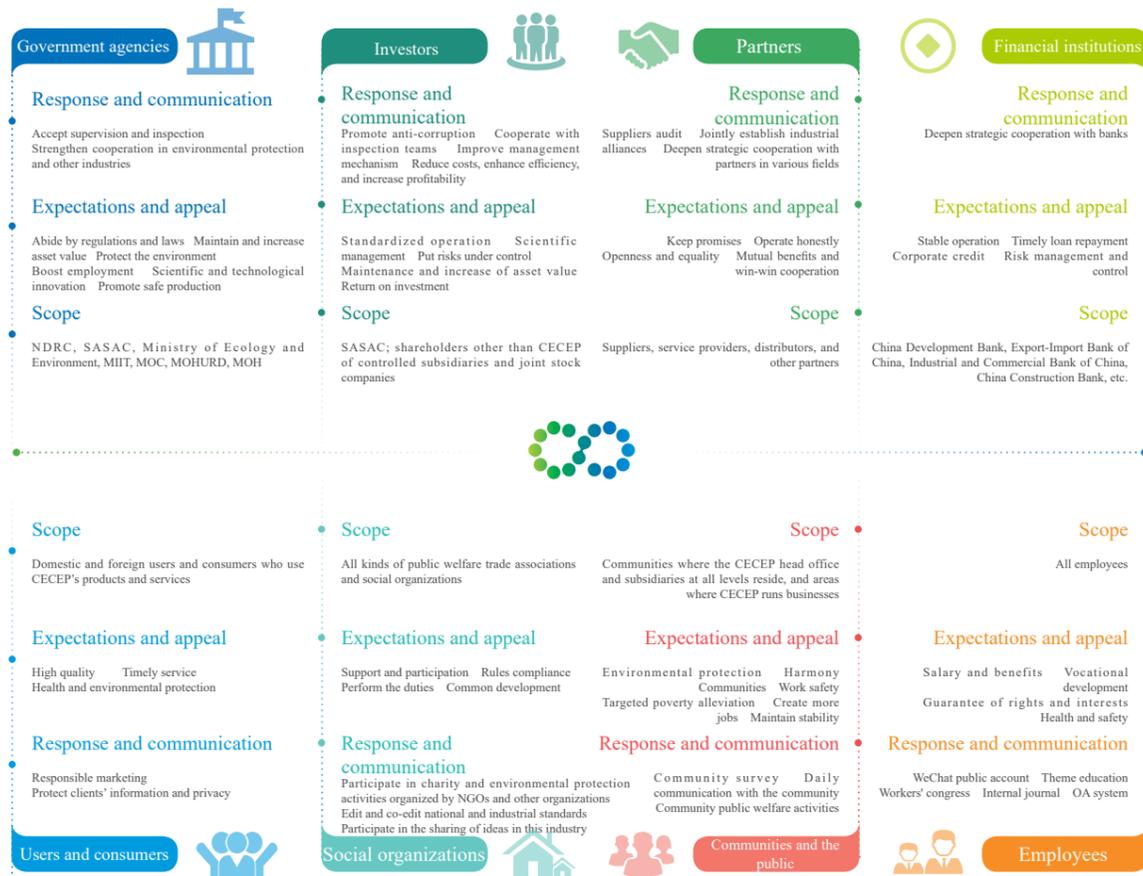
● Responsibility management perspective ● Market performance perspective ● Social performance perspective ● Environmental performance perspective

### Communication and Participation

In 2020, CECEP created economic benefits while keeping in communication with all stakeholders involved in its main businesses and corporate operation/management. Compared with previous years, in the substantive issue survey part, a questionnaire survey of the engagement by the Board of Directors, the Board of Supervisors, and management was added. Through investigation, the Group fully understood their opinions, expectations, and demands. In addition, CECEP also secured long-term and effective communication with stakeholders through other communication channels.



#### Principles for selecting shareholders



Communication with shareholders

### CSR Sharing

CECEP has been actively advancing responsible sharing and communication and promoting CSR development in the industry. On May 20, 2020, the "Open Class on Responsibility Sharing" sponsored by the China CSR Hundred People Forum was launched in CECEP. CECEP Party Secretary and Chairman of the Group Song Xin gave an open class on the theme of Staying True to the Original Missions and Sticking to Green Development. In the class, he shared CECEP's work in strengthening CSR management, developing the primary business, and contributing to poverty alleviation and pandemic response.



On November 13, 2020, China CSR Hundred People Forum and China Enterprise Reform and Development Society organized more than 30 members of China CSR Hundred People Forum to sponsor the Third Beijing CSR Exhibition and Release of the 2020 CSR Blue Book in Beijing. Party Secretary and Chairman of the Group Song Xin made a keynote speech.



On April 25, 2021, the ESG China Forum 2021 Spring Summit on the theme of "Responsible, High-quality and Sustainable", sponsored by the China CSR Hundred People Forum and China Reform Holdings Corporation, and organized by Creative Cloud, was convened in Beijing. Mr. Yu Honghui, General Manager and Deputy Secretary of the Party Committee of the Group made a keynote speech at the forum.



## CSR Honors

- Titles of state-level advanced collective, advanced grass-roots and advanced individuals in the COVID-19 response;
- The CSR Report of the Group won "Five Stars" for five consecutive years;
- The poverty alleviation cases in the Being Decisive to Win the Battle against Poverty: CECEP's Responsibilities and Actions were selected into the book Poverty Alleviation: Strengths of Central SOEs co-edited by SASAC News Center of the State Council and CPPCC News.
- The targeted poverty alleviation and overseas development cases of the Group were cited in the Blue Book on Central SOEs' CSR and Blue Book on Central SOEs' Overseas CSR.
- The poverty alleviation video of the Group won the third award at the "Poverty Alleviation Stories I Experienced" work collection and exhibition activity;
- We won honors like the "CSR Golden Ox Award - Award for Targeted Poverty Alleviation" granted by the China CSR Hundred People Forum;
- A top 10 Contributor to Poverty Alleviation - Energy Based Poverty Alleviation;

- CECEP ranked No. 1 in the Index of CSR Development of Energy Conservation and Environmental Protection Industry in the 2020 CSR Blue Book. Furthermore, the book cites its experiences and practices;
- Our subsidiaries CECEP Wind-power Corporation Co., Ltd. and Chengdu CECEP Renewable Energy Co., Ltd. were granted the title of "CSR Demonstration Base" by Chinese Academy of Social Sciences;
- CECEP Xi'an Qiyuan Mechanical and Electrical Equipment, subsidiary of CECEP Environmental Protection Equipment, won the title of "State-Level Green Plant";
- The Bengbu branch of General Water of China Co., Ltd. won the title of "Winning Enterprise" at the nation-wide "Ankang Cup" competition;
- The Engineering Department of the CECEP City Energy Conservation affiliated with CECEP Building Energy Conservation Co., Ltd. won the title of "Winning Team" at the nationwide "Ankang Cup" competition;
- The Hong Kong subsidiary of the China Geo-Engineering Corporation won the "occupational safety and health award" for two consecutive years.

# Appendix

## Core Performance

Indicator	Unit	2020	2019	2018
<b>Economic performance</b>				
Total assets	in RMB 100 billion	2213.41	1725.80	1563.58
Operating revenue	in RMB 100 billion	443.94	452.30	468.40
Total profit	in RMB 100 billion	35.51	32.29	34.02
Asset-liability ratio	%	67.11	69.25	69.54
Total tax	in RMB 100 billion	35.87	36.07	42.20
Energy conservation and environmental protection R&D investment	in RMB 100 billion	10.6	9.60	7.19
Proportion of energy conservation and environmental protection R&D investment in business revenue	%	2.39	2.10	1.45
Number of scientific and technological staff	Persons	3357	3243	2305
Number of major scientific research platforms		3	1	3
Number of science and technology awards at provincial and ministerial levels		9	10	20
Commercialization of scientific and technological achievements	%	100	100	100
Number of newly-developed products		69	85	79
Patent applications		454	706	291
Granted patents		405	445	209
Number of national, industry and local standards hosted and participated		6	5	7
Competitive bidding rate for infrastructure projects	%	97.62	99.70	99.89

Indicator	Unit	2020	2019	2018
<b>Environmental performance</b>				
Water treatment capacity	0.1 billion tons	17.68	17.58	16
Solid waste treatment	10,000 tons	1457	1200	1000
Smoke treatment	0.1 billion m3	377	102	4482
COD reduction	10,000 tons	21.33	21.11	18.14
Green power generation	100 million kWh	185.34	161.51	131.43
Organizing environmental protection training	Times	4800	4856	5844
Electricity consumption of CECEP office buildings	10,000 kWh	232.34	271.05	276.11
Water consumption of CECEP office buildings	10,000 tons	2.41	4.21	3.90
Total trainees	Person-times	320000	80468	96012
<b>Social performance</b>				
Total employees	Persons	38006	36295	36188
Signing rate of employment contract	%	100	100	100
Proportion of female employees	%	25.77	28.10	28.50
Ratio of female managers	%	31.6	28.68	27.82
Ratio of minority employees	%	3.04	2.31	3.27
Per capita paid vacation	Days	10.5	9.2	10.5
Employee satisfaction	%	95.8	87.6	98.26
Employee turnover rate	%	11.3	12.7	9.89
Annual newly-recruited staff	Persons	5608	4747	6863
Total donations	in RMB 10,000	5972.87	1591.69	1175.42
New graduates recruited	Persons	36	25	12
Coverage of physical examination	%	100	100	100
Signing rate of employment contract	%	100	100	100
Social insurance coverage rate	%	100	100	100

# Indicator

Contents	UN Sustainable Development Goals	CASS-CSR4.0 for energy conservation and environmental protection industry	
Report Specification		P1.1-1.3	
Leaders' address		P2.1, P2.2, P3.1, P3.2	
About Us		P4.1-4.4, M1.6-1.8	
Belief Is Like a Beacon Staying True to Original Aspiration		P3.2, M1.3, S1.1	
Responsibility Is Heavy Achieving Carbon Peaking and Carbon Neutrality Goals	Goals 7, 11, and 13	P3.2, E1.3, E1.7, E1.9, E2.4, E2.24	
Way Ahead Is Wonderful Making the Development Blueprint	Goals 1, 12, and 17	P4.1-4.3, M2.4, M3.6, S1.5, S1.6, S4.12, E1.7, E1.9, E2.24	
Protecting Rivers and Plants, Clear Waters and Lush Mountains	Focusing on Green Businesses	Goals 7, 12, and 13	E1.3, E1.9, E2.1, E2.4, E2.7, E2.8, E2.24, E2.25
	Guarding the ecological environment	Goals 12, 13, 14, and 15	E2.15, E2.16, E2.18, E3.3
	Taking low-carbon actions	Goal 13	E1.3, E1.6, E1.7, E1.9, E2.7, E3.1
Seeking Overall Development with Ingenuity	Improving quality and efficiency	Goals 11, 16, and 17	M1.1, M2.4-2.7, M3.4, M3.5, S1.4
	Strengthening corporate governance		M1.1, M1.3, M2.8, S1.4
	Building a safety bottom line	Goals 3, 4, and 12	S2.11, S3.1-3.6
Creating a Harmonious Environment by Love	Facilitating employee development	Goals 1, 3, 4, 5, and 8	S2.2-2.4, S2.7, S2.10, S2.11, S2.13, S2.14, S2.16-2.18
	Consolidating a cooperation network	Goals 8, 12, and 17	M2.2, M2.3, M2.8, M2.11, M2.15, M3.1, M3.4, M3.6, M3.8, M3.10, M3.15
	Participating in programs for public good	Goals 1, 3, 5, 10, 11, 15, and 17	S4.2, S4.4-4.6, S4.8-4.10, E3.6
	Contributing to targeted poverty alleviation	Goals 1, 2, 3, 4, 8, and 10	S4.12, S4.13
Outlook		A1	
CSR Management		A3, P1.3, G1.1-1.2, G2.1-2.4, G3.1-3.3, G4.1-4.3, G5.1-5.2, G6.1-6.3	
Core Performance		A2	
Indicator		A5	
Rating report		A4	
We are listening		A6	

# Rating report



## The Rating Report of the 2020 CSR Report of China Energy Conservation and Environmental Protection Group

Entrusted by the 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 CSR Report 2020 ("the Report").

### I. Rating Basis

The China CSR Reporting Guide for Energy Conservation and Environmental Protection Industry (CASS-CSR 4.0) issued by the Chinese Academy of Social Sciences and the China Rating Standards for CSR Reports (2020) issued by the Chinese Expert Committee on CSR Report Rating.

### II. Rating Process

- The rating panel reviewed and confirmed the Procedural Information Confirmation Document for CSR Reporting and relevant supporting materials presented by the compiling team of the Report;
- The rating panel assessed the compilation process and disclosed contents of the Report and prepared the rating report;
- The vice chairman of the Expert Committee, leader of the panel and members of the panel jointly reviewed and approved the rating report.

### III. Rating Conclusions

#### Procedure (★★★★★)

The CSR Office (Party-Mass Work Department) set up a task force to compile the report and conduct specific and key reporting works in a unified way. The company's Party Secretary and Chairman were responsible for final approval of the report. The report is defined as an important tool to disclose information about the company's CSR performance, strengthen CSR management, and enhance communication between stakeholders. It has specific functions and value. For the report, substantive issues were specified 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 New Era Health Industry (Group) Co., Ltd. and the China Geo-Engineering Corporation to issue CSR reports that promote longitudinal management. The company plans to release the report on its official website and under the Centralized Release of Central SEOs' CSR Reports activity. The report will be available in electronic and printed versions and shows excellent procedural performance.

#### Substantiality (★★★★★)

The Report has systematically elaborated on the key issues of the energy conservation and environmental protection industries such as macro policy implementation, product quality management, sustainable product supply, vocational health management, work safety, technological innovation, energy conservation and emission reduction, a circular economy, addressing climate change, and ecological protection and rehabilitation, with substantive excellent performances made.

#### Integrity (★★★★★)

The Report systematically revealed 91.22% of core indicators in the energy conservation and environmental protection industries from such perspectives as "Protecting Rivers and Plants, Clear Waters and Lush Mountains", "Seeking Overall Development with Ingenuity", and "Creating a Harmonious Environment by Love". It ensures integrity excellence.

#### Balance (★★★★☆)

The Report discloses negative data like "employee turnover rate", "casualties per RMB 100 million", and "serious emergent environmental incidents". It excels in terms of balance.

#### Comparability (★★★★★)

The Report revealed comparative data over three years in 37 key indicators including "business revenue", "total profit", "annual newly-recruited staff",

"granted patents", "energy conservation and environmental protection R&D investment" and "green power generation", showing excellent comparability.

#### Readability (★★★★★)

On the theme of "Going Green and Investing Green for An Ever-Bright Future", the Report adopted a topic framework structure to make a systematic explanation of CECEP's annual duty performance and respond to stakeholder expectations. The cover design was inspired by a water droplet. With the main businesses established in the design, the identity of the report is high. The page spreads adopt pictures of our CSR performance in real life, which make the report more reliable. The "Further Reading" part is added, and the QR code to extend report contents, which better promotes the report and makes it more readable.

#### Innovation (★★★★★)

The Report begins with the CSR topics "Belief Is Like a Beacon, Staying True to Original Aspiration" and "Responsibility Is Heavy, Achieving Carbon Peaking and Carbon Neutrality Goals". Focusing on the CSR actions and effects of the company in deepening the Party building and contributing to achieving the "dual carbon" goals, this Report fully demonstrates CECEP's responsibility assuming the attitude as a central SOE. This Report performs well in innovation.

#### Overall Rating (★★★★★)

After deliberation, the rating panel assigned "Five Stars" to the 2020 CSR Report of China Energy Conservation and Environmental Protection Group, considering it an excellent CSR report.



It's the sixth five-star CSR Report of CECEP in a row.

### IV. Suggestions for Improvement

More details on negative data and weaknesses in responsibility fulfillment should be given, and the report should be made more balanced in its contents.

Vice Chairman of the Expert Committee

Head of the Rating Panel

Leader of the Rating Panel

Process evaluator

Ren Jiaojiao

Date of issuance: September 14, 2020



Scan here for rating details

## We are listening

Dear readers,

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

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

Yes  No  Average

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

Yes  No  Average

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

Yes  No  Average

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

Yes  No  Average

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

Yes  No  Average

6. Do you have any suggestions and advice for future CSR performances and reports?

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