

Fostering Unity for a Greener Future



CONTENTS

02 Report Introduction

04 Address from the Chairman

06 About Us

08 CSR Management

25 Strengthening Corporate Governance to Build a Solid Development Foundation

26 Deepening Business Reform to Boost Development
Momentum

28 Leveraging Lean Quality Management to Elevate
Development Levels

31 Prioritizing Work Safety Management to Ensure a Solid
Development Foundation

45 Seizing Opportunities to Achieve Win-win Outcomes

46 Supporting the Belt and Road Initiative to Expand
International Cooperation

49 Enhancing Domestic Collaboration to Share
Cooperation Opportunities

50 Creating a Responsible Supply Chain to Drive
Industry Progress

67 Putting People as the Foremost to Help Employees Fulfill Their Dreams

68 Improving Management Systems to Safeguard
Employee Rights

69 Creating Optimal Career Environments to Support
Employee Growth

72 Advocating Work-Life Balance to Enhance
Employee Wellbeing

87 A Look into 2023

88 Appendices

CSR Topic I 14
Embodying the Spirit of the 20th
CPC National Congress, Staying
True to Our Original Aspiration

CSR Topic II 20
Focusing on Green Development,
Uniting for the Promotion of “Dual
Carbon”

37 Boosting Independent Innovation to Activate Development Potential

38 Strengthening the Basis for Sci-Tech Innovation
to Improve Results

40 Fostering Technical Breakthroughs for
Competitive Industry Edge

42 Accelerating Industry-University-Research
Cooperation to Advance Industrial Upgrading

53 Promoting Green Development to Conserve Lucid Waters and Lush Mountains

54 Stringent Environmental Management to Control
Environmental Risks

57 Strong Commitment to Green Operations and
Resource Efficiency

61 Strengthening Ecological Governance to Sustain
Our Common Habitat

75 Practicing Philanthropy to Build a Harmonious Society

76 Embracing Social Responsibility to Support Rural
Revitalization

80 Organizing Charitable Initiatives to Strengthen
Philanthropic Efforts

82 Enhancing Cultural Exchange to Build a
Harmonious Community

Report Introduction

The report is the 12th CSR Report issued by the China Energy Conservation and Environmental Protection Group.

► Period

This report contains CECEP's CSR performance from January 1, 2022 to December 31, 2022, 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);
 China CSR Reporting Guide for Energy Conservation and Environmental Protection Industry (CASS-CSR4.0) issued by the Chinese Academy of Social Sciences (CASS);
 Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-ESG5.0) issued by the Chinese Academy of Social Sciences;
 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) 010-83052895.

► 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 2022 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.

Address from the Chairman



Song Xin, Party Secretary and Chairman of CECEP

As time progresses, our unwavering commitment to progress continues. The year 2022 marked a momentous chapter in the history of the Communist Party of China (CPC) and our country. It also signified a pivotal year for CECEP's technological innovation. Guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era and under the steadfast leadership of the SASAC Party Committee, we have fervently embraced the spirit of hard work, dedication responsibility, and innovation. Our endeavors in technological innovation, market expansion, SOE reform, quality enhancement, and industry benchmarking have made significant contributions to our nation's steady and robust socio-economic growth.

This year, we have united as one, elevating the banner of Party building. With resolute political enthusiasm, heightened political awareness, and an unwavering work ethic, we have fully strengthened theoretical education through our in-depth study of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era and embraced and disseminated the spirit of the 20th CPC National Congress. Our comprehensive and rigorous Party self-governance, the strengthening of primary-level Party organizations, and the cultivation of an excellent team of officials and talent have consolidated the key role of primary-level Party organizations and have paved the way for high-quality Party building and development. The new era model workers' spirit is thriving, and CECEP's honor as the recipient of the "National May 1st Labor Award" has invigorated our officials and staff.

This year, we have persevered in the face of challenges, authoring a new chapter in high-quality development. By focusing on our core responsibilities in energy conservation and environmental protection, we have achieved remarkable progress and surpassed key operational indicators year-on-year, registering an 11.48% increase in operating revenue. We have pursued reform-driven development and successfully completed 68 reform tasks and 89 specific reform measures over the past three years, injecting vigor into high-quality development. Meanwhile, we have ensured stable growth and enhanced operational efficiency while managing risks. Furthermore, we have expanded our market, securing over 1,500 projects this year and fine-tuned our internal capabilities, improving the quality and efficiency of our development and our refined management.

This year, our commitment to technological innovation has been resounding. Focusing on the "Year of Technological Innovation", we have successfully built a foundation for original technology, with numerous technological innovations successfully transformed into practical applications. Key core technologies in low-carbon and zero-carbon areas have also made breakthroughs. We have not only established and deployed a batch of high-tech R&D platforms, but also initiated and secured acceptance for national key R&D projects. Our innovative development has taken solid strides forward. For instance, we have established five new provincial and ministerial-level R&D platforms and ten high-tech enterprises, acquired 164 new patents for invention, led or participated in the development of 16 group, regional, industry and national level standards, and received seven provincial and ministerial-level science and technology achievement awards.

This year, we have fostered consensus and taken a proactive stance, charting a new path for responsible practices. By placing national interests at the forefront, we have based our actions on internal and international imperatives and integrated our development into the national strategy, vigorously implementing the "Carbon Peaking and Carbon Neutrality" strategy and building greater synergy between pollution and carbon emissions reduction. We have taken the initiative to serve regional development and supported various national strategies, including the Yangtze River Economic Belt governance, the Yellow River Basin ecological protection, and the Yangtze River Delta integrated development. Our people-oriented approach has created a satisfying work environment beneficial for both employees and the Group. Our commitment to cooperation and mission-sharing has driven the development of the industry chain. We have remained dedicated and responsible, actively participating in rural revitalization, volunteering and providing assistance to those in need. Our effort is a strong testimony to our role as a state-owned enterprise directly under the central government.

As the river of time flows incessantly, our dedication knows no bounds. 2023 heralds the comprehensive implementation of the spirit conveyed by the 20th CPC National Congress and is a pivotal year for the launch of the 14th Five-Year Plan. It is also designated as the "Year of Capacity Enhancement" by the Group's Party Committee. Guided by the spirit of the 20th CPC National Congress, President Xi Jinping's ecological conservation thoughts, and the concept that "lucid waters and lush mountains are invaluable assets", we will embark on new development initiatives, carve new horizons, and script new chapters for development. Our unwavering goal is to swiftly build a world-class conglomerate integrating energy conservation, environmental protection, and the health industry. Our mission continues, as we endeavor to contribute to the harmonious coexistence of humanity and nature.

About Us

Understanding CECEP

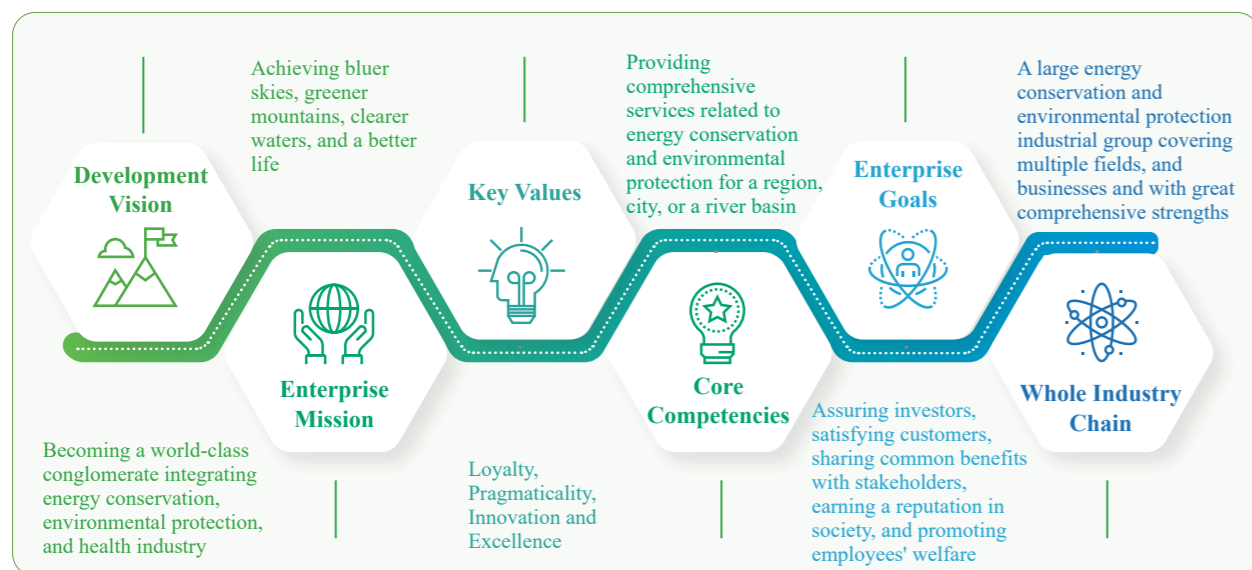
China Energy Conservation and Environmental Protection Group (hereinafter referred to as "CECEP") is a central enterprise founded in 2010 after the merger between China Energy Conservation Investment Corporation (CECIC) and China New Era Group Corporation with the approval of the State Council.

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. Up to now, it has made great contributions to the initiation, development, and expansion of China's energy conservation and environmental protection. By the end of 2022, CECEP has had 693 subordinate enterprises and six listed companies, with its business covering 110 countries and regions 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.

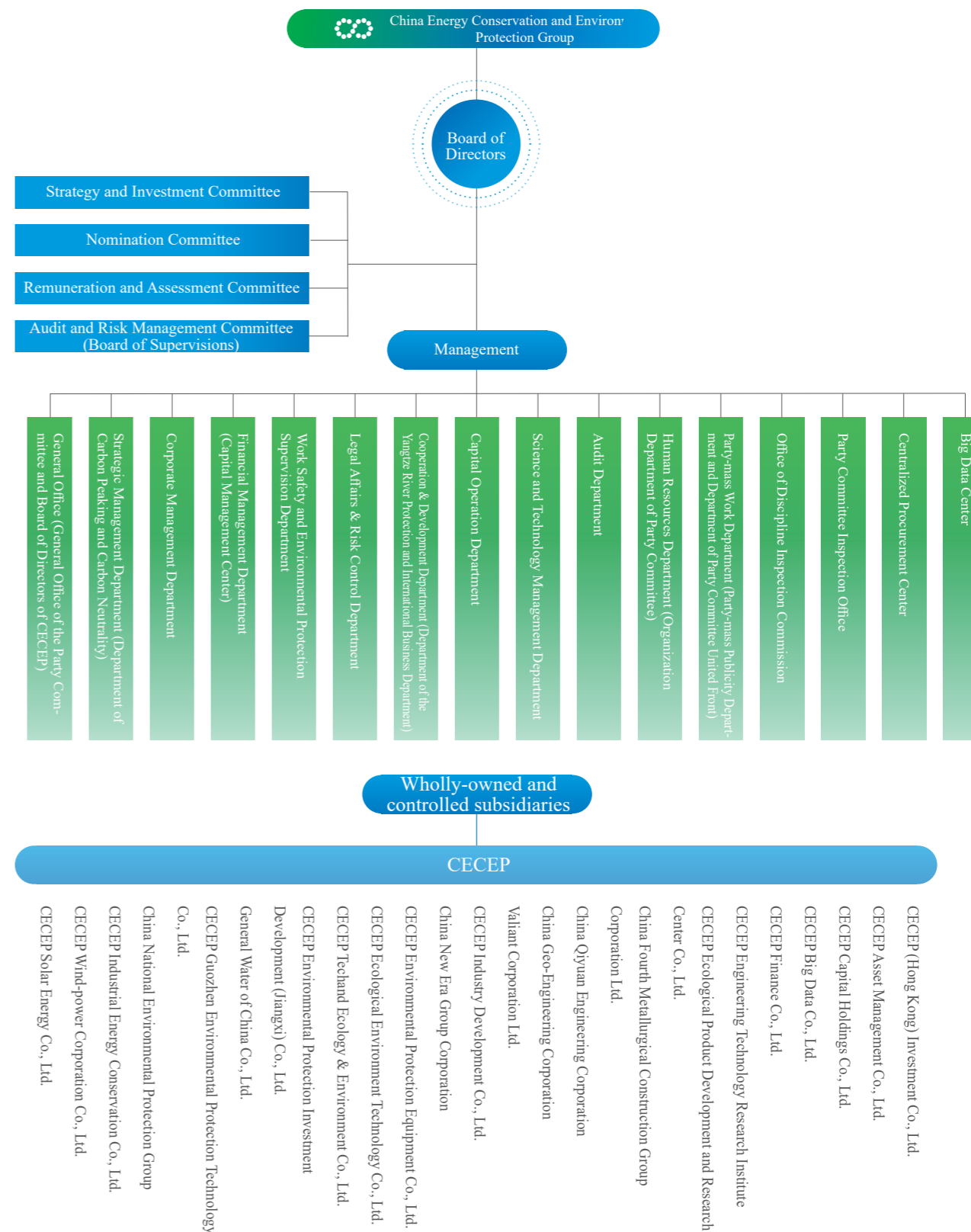
Recently, CECEP has built the industry chain regarding energy conservation and environmental protection, including planning consultation, R&D design, investment development, equipment manufacturing, engineering construction, operations management, and investment and financing services, with its businesses 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 CPC Central Committee, 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 Pilot 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 people 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.



Organizational Structure



CSR Management

Clearly seeing its assignments for politics, 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.

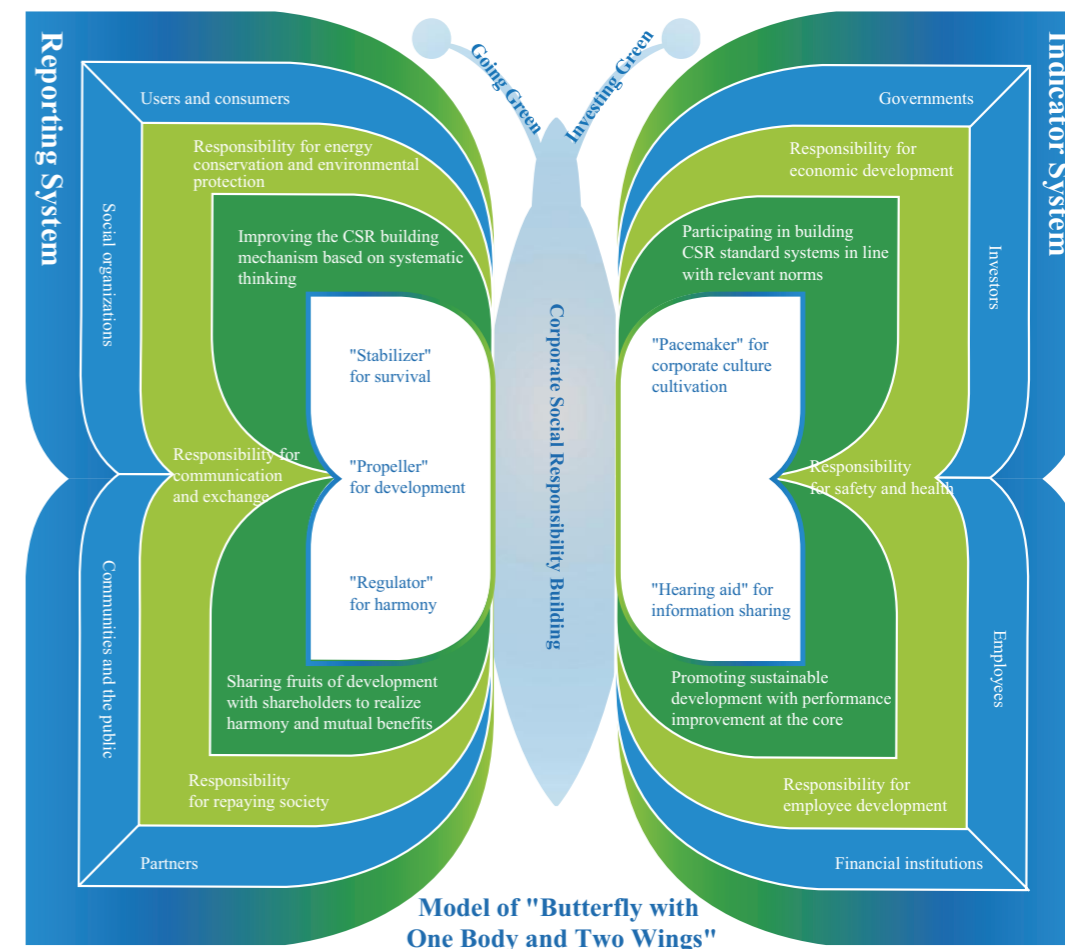
CSR Philosophy

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 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 Promotion

CECEP further improves the CSR management system, integrates the concept of CSR into its strategic development, corporate governance, and business operation, and perseveres in 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.

Guiding High-Quality Development through ESG Principles

CECEP places a strong emphasis on ESG principles within its development strategy, deeply integrating them into the core of corporate growth. Committed to the principles of green and sustainable development, we drive high-quality corporate growth, strengthen ESG performance through comprehensive governance and practices, and validate these principles through our achievements in green development. As the Vice Chairman of the ESG Alliance of Central State-owned Enterprises, we actively engage in ESG activities with other central state-owned enterprises and have taken the lead in the research and development of the Study on ESG Special Report Compilation for Listed Companies Controlled by Central State-owned Enterprises under the oversight of the State-owned Assets Supervision and Administration Commission of the State Council. Working alongside all stakeholders, we aim to create a world characterized by clean waters and blue skies, promote ecological progress, and enhance the well-being of the public. CECEP is dedicated to providing ESG solutions and contributing to the strength of central state-owned enterprises and accelerating the process of becoming a world-class company, the transformation to a green and low-carbon economy, and the creation of a beautiful country where people and nature coexist harmoniously.

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.

- CSR Leadership Group - CSR Promotion Office (Party-Mass Work Department) - Personnel for Special CSR Responsibilities
- CSR Contacts of Headquarters and Departments - CSR Promotion Office (Party-Mass Work Department) - CSR Contacts of Subsidiaries



- 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 CECEP's CSR decisions and 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 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

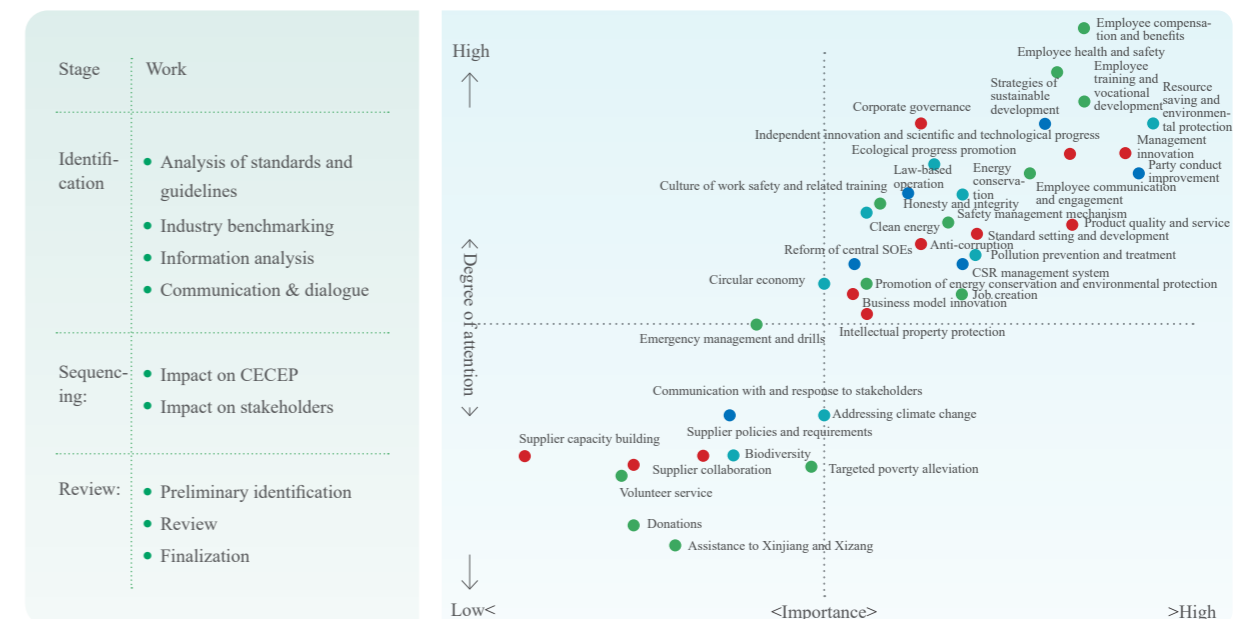
Respond to stakeholders' opinions, suggestions, and appeals, and regularly conduct stakeholder satisfaction surveys.

Joint Actions

Invite stakeholders to formulate and implement CSR action plans.

Information Disclosure

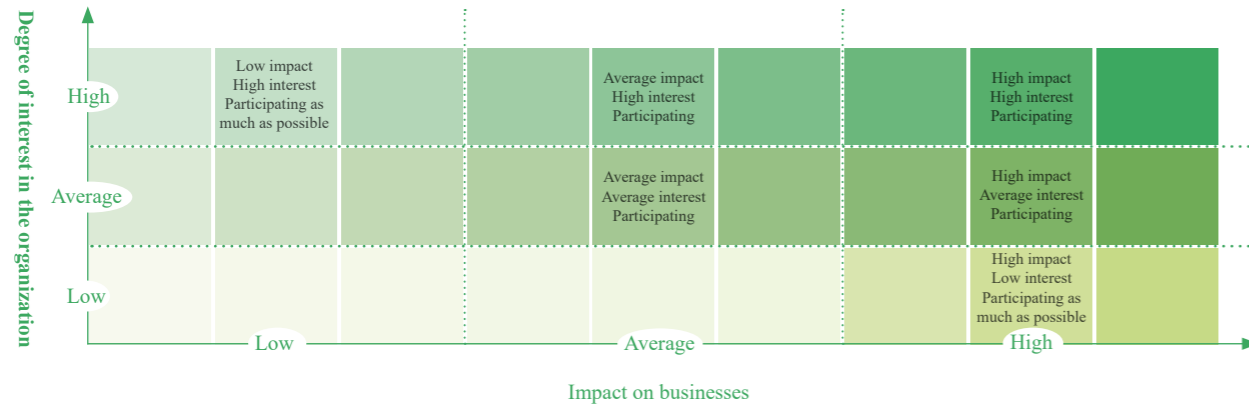
In 2022, we learned the expectations and appeal of stakeholders through questionnaires, consultations with experts and other kinds of communication and symposiums. During CSR report preparation, the different degrees of importance attached by important stakeholders to different issues were fully reflected, which makes the report contents more specific. Topics identification, sequencing and review efforts in 2022 CSR Report:



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

CSR Communication

In 2022, CECEP created economic benefits while strengthening communication with all stakeholders based on 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.



CSR Sharing

CECEP has been actively advancing responsible sharing and communication, leveraging our experience as a central state-owned enterprise to enhance social value creation. This supports the development of CSR within the industry. Through genuine sharing and exchanges, we aim to foster public awareness of CECEP's contributions to the industry and social harmony.



During the "Two Sessions", Mr. Song Xin, Party Secretary and Chairman of CECEP, participated in a multimedia interview titled "Dialogue with New State-owned Enterprises for a Better New Era". This interview was jointly organized by SASAC News Center and various media outlets. In the interview, Mr. Song discussed topics such as advancing energy conservation, safeguarding the environment, and improving people's well-being.



Mr. Zhu Qingfeng, a member of the Standing Committee of the Party Committee and Chief Accountant of the Group, attended the launch meeting for Study on Guidelines for ESG Information Disclosure by Listed Companies Controlled by Central State-owned Enterprises and delivered an address.

Principles for selecting stakeholders

<p>Government agencies</p> <p>Response and Communication</p> <ul style="list-style-type: none"> Accept supervision and inspection Strengthen cooperation in environmental protection and other industries <p>Expectations and appeal</p> <ul style="list-style-type: none"> Abide by regulations and laws Maintain and increase asset value Protect the environment Boost employment Scientific and technological innovation Promote safe production <p>Scope</p> <ul style="list-style-type: none"> National Development and Reform Commission, State-owned Assets Supervision and Administration Commission of the State Council, Ministry of Ecology and Environment, Ministry of Industry and Information Technology, Ministry of Commerce, Ministry of Housing and Urban-rural Development, National Health Commission 	<p>Investors</p> <p>Response and Communication</p> <ul style="list-style-type: none"> Promote anti-corruption Improve management mechanism Reduce costs and enhance efficiency Increase profitability <p>Expectations and appeal</p> <ul style="list-style-type: none"> Standardized operation Scientific management Put risks under control Maintenance and increase of asset value Return on investment <p>Scope</p> <ul style="list-style-type: none"> SASAC; shareholders other than CECEP of controlled subsidiaries and joint stock companies 	<p>Partners</p> <p>Response and Communication</p> <ul style="list-style-type: none"> Suppliers audit Jointly establish industrial alliances Deepen strategic cooperation with partners in various fields <p>Expectations and appeal</p> <ul style="list-style-type: none"> Keep promises Operate honestly Openness and equality Mutual benefits and win-win cooperation <p>Scope</p> <ul style="list-style-type: none"> Suppliers, service providers, distributors, and other partners 	<p>Financial institutions</p> <p>Response and Communication</p> <ul style="list-style-type: none"> Deepen strategic cooperation with banks <p>Expectations and appeal</p> <ul style="list-style-type: none"> Stable operation Timely loan repayment Corporate credit Risk management and control <p>Scope</p> <ul style="list-style-type: none"> China Development Bank, The Export-Import Bank of China, Industrial and Commercial Bank of China, China Construction Bank, etc.
<p>Users and consumers</p> <p>Response and Communication</p> <ul style="list-style-type: none"> Responsible marketing Protect clients' information and privacy <p>Expectations and appeal</p> <ul style="list-style-type: none"> High quality Timely service Health and environmental protection <p>Scope</p> <ul style="list-style-type: none"> Domestic and foreign users and consumers who use CECEP's products and services 	<p>Social organizations</p> <p>Response and Communication</p> <ul style="list-style-type: none"> Participate in charity and environmental protection activities organized by NGOs and other organizations Edit and co-edit national and industrial standards Participate in the sharing of ideas in this industry <p>Expectations and appeal</p> <ul style="list-style-type: none"> Support and participation Rules compliance Perform the duties Common development <p>Scope</p> <ul style="list-style-type: none"> All kinds of public welfare trade associations and social organizations 	<p>Communities and the public</p> <p>Response and Communication</p> <ul style="list-style-type: none"> Community survey Daily communication with the community Community public welfare activities <p>Expectations and appeal</p> <ul style="list-style-type: none"> Environmental protection Harmonious communities Work safety Targeted poverty alleviation Create more jobs Maintain stability <p>Scope</p> <ul style="list-style-type: none"> Communities where the CECEP head office and subsidiaries at all levels reside, and areas where CECEP runs businesses 	<p>Employees</p> <p>Response and Communication</p> <ul style="list-style-type: none"> WeChat official account Theme education Workers' congress Internal journal OA system <p>Expectations and appeal</p> <ul style="list-style-type: none"> Salary and benefits Vocational development Guarantee of rights and interests Health and safety <p>Scope</p> <ul style="list-style-type: none"> All employees

CSR Topic I

Staying True to Our Original Aspiration
Embodying the Spirit of the 20th CPC National Congress

During this auspicious occasion, we hold steadfast to our founding mission and unwavering commitment. In the year of the 20th CPC National Congress, CECEP, under the guidance of the Party's leadership, has vigorously intensified Party building on the basis of taking the study, dissemination, and implementation of the spirit of the 20th CPC National Congress as the main line. We have ensured the continuous dissemination of Party ideology, fortified our ideological security, reinforced primary-level development, basic work and ability, and strengthened the three teams comprising secretary of the Party committee, instructor of Party building work, and Party members. Our commitment to comprehensive and rigorous Party self-governance serves as a robust guarantee for the high-quality development of our Group.

Party Building for a Strong Development Foundation

Under the guidance of political development, we have made the study of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era a regular practice. Through reinforcing Party building and upholding Party integrity, we have fortified the political foundation for our Group's development. This has resulted in strengthened primary-level Party organizations, ensuring the effective implementation of Party theory and policies. Consequently, there has been a continuous enhancement in the capacity for political judgment, thinking, and implementation among Party members and officials. Additionally, we have facilitated the seamless integration of Party building with our production and operations.

Strengthening Theoretical Education

We rigorously adhere to the Party Committee's "First Agenda" system, fostering a deeper political awareness in Party organizations at all levels. We leverage the CECEP Party Building Think Tank's capabilities, organizing activities to gather innovative cases in ideological and political work across the Group. We are committed to the profound development, substantiation, and realization of theoretical innovations. By prioritizing the integration of learning and practical application, we efficiently convert our knowledge into concrete measures and a roadmap to advance the high-quality development of the Group.

In 2022

- ▣ **32** meetings of the Standing Committee of the Party Committee were convened. **13** collective study sessions were organized for the Party Committee's theoretical study central group.
- ▣ **4** sessions of the "CECEP Grand Lecture Series" were organized.
- ▣ **50** issues of the Pioneer newsletter were published.

Outstanding cases of innovative enterprise Party building in 2022

- ◆ The Party Committee of CECEP Wind-power Corporation Co., Ltd. for their work Driving Party Building to Promote Production Through the "Four-Wheel Drive" Approach.
- ◆ The Party Committee of CECEP Industry Development Co., Ltd. for their work Fostering High-Quality Park Development Through Innovative Party Building and Co-construction.
- ◆ The Party Committee of China New Era Group Corporation for their work Building Resilient Mobile Party Branches as Fortresses.

Consolidating Primary-level Foundations

We continually enhance the development of primary-level Party organizations by refining their structures. This involves ensuring effective publicity and education, holding individuals accountable for their responsibilities, and establishing standardized regulations. We also rigorously oversee the selection and appointment of personnel, emphasizing the dual criteria of virtue and talent with virtue taking precedence. Additionally, we focus on nurturing young League members to bolster the primary-level Party organizations' ability to take on challenges. These organizations play a pivotal role in innovating their work methods, thereby enhancing their creativity, and delivering more tangible results in Party building.

In 2022

- ▣ We intensified the standardization and regularization of primary-level Party organization. This involves the assessments of **22** exemplary primary-level Party branches and the compilation of two important documents: the Guidance Manual for Party Organization Election and Transition and the Standardized Practice Manual for Developing Party Members.
- ▣ We actively participated in the "New Journey of Dedication to the Party for the Centenary" series of events to commemorate the **100**th anniversary of the founding of the Communist Youth League of China.

Case

the Group's Party Committee convened a meeting to drive the progress of Party building, facilitating the implementation of various tasks within primary-level Party organizations.

In August, the Group's Party Committee organized a meeting to advance Party building. This meeting involves reviewing the progress of ongoing initiatives, analyzing the current situation and tasks, and outlining future steps to ensure the effective execution of various annual Party building tasks.



The Party building work progress meeting



Collective theoretical study



Celebrations for the 101st anniversary of the founding of the CPC and the "CECEP Grand Lecture Series"

- ◆ The Party Committee of CECEP Solar Energy Co., Ltd. for their work Deepen "Four Integration" Construction and Promote Primary-level Party Building Operations Advance with Production for High-Quality Enterprise Development.
- ◆ The Party Committee of China National Environmental Protection Group for their work Promoting the Spirit of Jiao Yulu to Enhance Enterprise Quality and Efficiency.

Integrating Party Building with Business Operations

We have significantly advanced the integration of Party building with production and business operations, effectively aligning Party building with the Group's high-quality development and operational targets. We organized activities including "Party Member Responsibility Areas, Exemplary Posts, Vanguard Teams", "Keeping the Economic Fundamentals Stable and Ensuring a Strong Start", "Maintaining Momentum, Pursuing Overall Goals, and Celebrating the 20th CPC National Congress", "Marking the 20th CPC National Congress, a Hundred Days of Dedication, and Year-round Success". This has converted our Party's political strength into market expansion and business proficiency.

Strengthening Integrity Building

We have fully absorbed the spirit of the Sixth Plenary Session of the 19th Central Commission for Discipline Inspection and rigorously implemented the SASAC's Party Conduct, Integrity, and Anti-Corruption and Warning Education Conference. We are committed to advancing comprehensive and strict Party governance, continually enhancing the system, and enforcing political supervision. We have also rigorously implemented special rectification efforts, making integrated efforts to ensure that officials do not have the audacity, opportunity, or desire to become corrupt. We have effectively utilized tools like collective integrity discussions, pre-appointment interviews for officials, and warning education. These measures cultivate a culture of adherence to Party rules and discipline, fostering a clean and virtuous atmosphere.

In 2022, CECEP focused on key tasks, creating and regularly updating a political supervision checklist to ensure the seamless integration of comprehensive and strict Party governance into our strategic planning, covering key personnel and Addressing Critical Stages.



Integrating Comprehensive and Strict Party Governance into Strategic Planning

We incorporated into our political oversight progress on key initiatives, such as the swift implementation of the "14th Five-Year Plan", fostering technological innovation, advancing the three-year plan for SOE reform, and the "Strict Fiscal and Financial Discipline, Legal and Compliance Operation" special campaign.



Addressing Critical Stages

We closely monitored important holidays and key milestones, urging the entire system to strictly adhere to the principles of comprehensive and strict Party governance. Particular attention were placed on the monitoring of issues such as improper use of public funds, unauthorized acceptance of hospitality, inappropriate gifting, or receipt of presents and monetary gifts, improper disbursement of allowances or benefits, and unauthorized use of public vehicles.



Covering Key Personnel

We made targeted efforts to address potential business contact related issues, involving leaders, personnel in critical positions engaging in business and entrepreneurial activities and their family members, and individuals with specific affiliations conducting business with our organization. We required all individuals in the system to declare their connections, aiming to proactively prevent issues related to the exchange of interests.



CECEP's Annual Conference on Party Conduct, Integrity, and Anti-Corruption & Warning Education Conference in 2022

Mobilizing for Our Mission

We have prioritized the study, dissemination, and implementation of the spirit of the 20th CPC National Congress for the year. We proactively prepared for the Congress's significant convening, focusing on deeply understanding and promoting its essence. Our ongoing efforts to educate ourselves about Party history and reinforce ideological work have been crucial in showcasing our Group's exemplary image. This collective mobilization bolsters our determination to achieve further milestones in green development during this era of high-quality growth.

Advocating the Spirit of the 20th CPC National Congress

In 2022, the spotlight was on the 20th CPC National Congress. Our Group's Party Committee led efforts to embrace, study, and apply the Congress's spirit. We provided strong organizational leadership, intensified our outreach, and ensured that the Congress's spirit reached every level, from the primary level to the broader public.

Building Momentum for the 20th CPC National Congress

- Conducted themed activities like "Making Achievements in the New Era, Celebrating the 20th CPC National Congress", inspired by General Secretary Xi Jinping's directives.
- Organized events such as "Marking the 20th CPC National Congress, a Hundred Days of Dedication, and Year-round Success" and "Flagship Guiding Development, Celebrating the Themed Party Day of the 20th CPC National Congress".

Continuing to Make Strong Efforts to Implement the Spirit of the 20th CPC National Congress

- Held a symposium for studying, promoting, and implementing the spirit of the 20th CPC National Congress throughout the Group.
- Leading members of the Group's leadership team set an example by leading communication activities at the primary level.
- Created posters and promotional materials on the spirit of the 20th CPC National Congress for wide dissemination in office areas of various departments.

Organizing Thorough Study of the 20th CPC National Congress

- Party Committee members of the Group promptly studied key documents and the spirit of the 20th CPC National Congress through the Standing Committee of the Party Committee and the Party Committee's theoretical learning center.
- Conducted two joint study sessions for the Party Committee of the Group and the Party organizations of the Group's second-level subsidiaries.
- Invited experts to provide specialized guidance on the report to the 20th CPC National Congress and the new Party charter.



Deputy Secretary of the Party Committee and General Manager of the Group, Liu Jiaqiang, delivers a special Party class at CECEP Techand Ecology & Environment Co., Ltd.



The visit of China New Era Group Corporation to the CPC History Exhibition Hall



Themed Party Day event hosted by CECEP Wind-power Corporation Co., Ltd.



The visit of CECEP Solar Energy Co., Ltd. to a revolutionary tradition education base



The themed creative competition held by CECEP Industry Development Co., Ltd.

Intensifying Responsibilities in the Ideological Domain

- ◆ We strengthened management through clear guidance, issuing the Notice on Creating a Favorable Environment in CECEP for Public Opinion.
- ◆ We enhanced positive publicity efforts to emphasize our role as a "main force" in promoting ecological conservation.
- ◆ We intensified our analysis and assessment of the ideological landscape, making great effort to study and deal with major ideological issues.



CECEP 2022 Annual Party Building Conference

Strengthening Ideological and Political Work in the New Era

In our commitment to promoting the study of Party history, we are integrating this educational effort with core business operations, striving to consolidate and expand its results.

Consolidating and Expanding Party History Education Outcomes

- ◆ To ensure the regular and long-term study of Party history, we implemented Opinions of the Party Committee of CECEP on Promoting the Regular and Long-term Implementation of Party History Study and Education, a plan featuring six major areas and 12 specific measures.
- ◆ We organized activities like the "Three Meetings and One Class" and themed Party Day help members and officials draw wisdom and strength from the Party's centenary history.
- ◆ We deepened and consolidated practical actions to serve the people by establishing long-term mechanisms and addressing our employees' concerns.

Enhancing the Way for Publicity and Promoting Cultural-Ethical Advancement

- ◆ We developed the Key Points of the Group's 2022 Publicity and Ideological Work to foster innovation in theory, methods, and primary level engagement.
- ◆ We organized a series of events, including "Central SOEs Taking the Lead in Supporting the Winter Olympics", SOE Open Day themed on "Pillars of the Great Nation in the New Journey", and themed education for the people "Jointly Contributing to the Great Rejuvenation of the Nation".

CECEP Honors List

<p>★★★</p> <p>Party Committee of CECEP Wind-Power Corporation Co., Ltd.: "Western China Vanguard" and "Willingness and Action" selected as a 2022 National Excellent Enterprise Party Building Brand.</p>	<p>★★★</p> <p>Youth League Branch of CECEP Guozhen Environmental Protection Technology Co., Ltd.: Honored as the "May Fourth Red Flag Youth League Branch" in Anhui Province.</p>	<p>★★★</p> <p>Li Liang from CECEP Environmental Protection Equipment Co., Ltd.: Recognized as an "Outstanding Communist Youth League Cadre in Shaanxi Province".</p>
---	---	--

Remaining true to our original aspiration, CECEP will continue to study and implement Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era and the spirit of the 20th CPC National Congress. We will fully understand the critical importance of "the Two Affirmations", strengthen the "Four Consciousnesses", bolster the "Four Confidences", and ensure "Two Upholds". With determination and enterprising spirit, we aim to accelerate our magnificent journey in constructing a world-class, eco-friendly, and healthy energy-saving industry conglomerate.

CSR Topic II

Uniting for the Promotion of "Dual Carbon" Focusing on Green Development

Promoting ecological and low-carbon development is at the core of CECEP's mission. Focusing on internal and international imperatives, we prioritize national interests and remain dedicated to aligning our growth with key national strategies, particularly the "Dual Carbon" initiative, to advance green and low-carbon economic and social progress.

Top-Level Design, Implementing the "Dual Carbon" Strategy

We conduct a comprehensive evaluation of our Group's carbon assets, governance structure, and intellectual resources. Our unwavering commitment lies in the continuous enhancement of the deployment of the Carbon Peaking & Carbon Neutrality strategy, the fortification of the strategy's framework, the strengthening of our strategic ability to serve "Dual Carbon" and the reinforcement of our capacity to effectively support and facilitate the orderly implementation of the strategy.

Clear Implementation Roadmap for "Dual Carbon"

In line with the Carbon Peaking and Carbon Neutrality Action Plan and the "1+3+3" "Dual Carbon" framework, we rigorously adhere to the timelines and tasks associated with carbon peaking and carbon neutrality. We actively lead the development of CECEP's Carbon Peaking Action Plan and encourage our high-emission subsidiaries to create their "Dual Carbon" plans, thus contributing to national goals. This approach combines "zero carbon industries" with "carbon-negative technologies" and strengthens our corporate management systems for "Dual Carbon". We also leverage the exemplary role of "zero carbon" models and enhance our capabilities in carbon peaking and carbon neutrality standards and support, ensuring effective strategy implementation.

In 2022, the Department of Carbon Peaking and Carbon Neutrality, in partnership with the Carbon Peaking and Carbon Neutrality Research Institute, created the "Carbon Peaking Action Plan" as required by the SASAC. The plan designates lead responsibilities for critical tasks and major projects, along with safeguard measures, at the headquarters or secondary subsidiary levels. This forms a solid foundation for implementing the carbon peaking plan.

The "11265" Carbon Peaking Strategic Framework

Mission: Leading in comprehensive carbon peaking and carbon neutrality solutions.

Goal: Achieving carbon peaking by 2030.

Dual Focus: Serving societal and corporate carbon peaking.

Six Actions: Green energy services, pollution reduction collaboration, intellectual standards enhancement, green tech innovation, digital empowerment for low-carbon initiatives, and green enterprise leadership.

Five Projects: Green power enhancement, energy efficiency optimization, integrated regional solutions demonstration, digital platforms demonstration, and energy saving and low-carbon tech innovation demonstration.

Enhancing the "Dual Carbon" Organizational Framework

The Carbon Peaking and Carbon Neutrality Leadership Group oversees the comprehensive execution of "Dual Carbon" initiatives, aiming to integrate them with our corporate operations. They have improved communication mechanisms and introduced a "Dual Carbon" work ledger, ensuring effective implementation. With a two-tier organizational structure comprising the Department of Carbon Peaking and Carbon Neutrality and the CECEP Carbon Peaking and Carbon Neutrality Research Institute, we support internal carbon asset management, facilitating the implementation of decisions related to CECEP's green and low-carbon transformation.

Responsibilities in the "Two-Tier Organizational Structure"

Department of Carbon Peaking and Carbon Neutrality

- Develop management systems for CECEP's "Dual Carbon" objectives.
- Oversee work decomposition and coordinate carbon-related business and technology strategies.
- Drive "zero carbon" projects, technology demonstrations, and promotion effort.

CECEP Carbon Peaking and Carbon Neutrality Research Institute:

Research "Dual Carbon" theories, policies, standards, methodologies, and track carbon-related technologies. Support internal carbon asset management. Actively engage in developing carbon peaking and carbon neutrality standards, regulations, and mechanisms. Contribute to climate investment and financing system design and international collaborations.



By the end of 2022

- 10 secondary subsidiary companies within CECEP have established "Dual Carbon" work mechanisms.

Strengthening "Dual Carbon" Foundations

We prioritize the ongoing training of "Dual Carbon" experts and integrate essential "Dual Carbon" technologies into the Group's comprehensive R&D plan. This includes initiatives such as green financial innovation, "Dual Carbon" technology development, and forward-looking projects research. We are also exploring the creation of a digital and intelligent carbon management system and establishing a platform for "Dual Carbon" research and exchange. We consistently provide financial support for carbon neutrality technology and mode innovation while actively participating in and organizing activities related to the selection of exemplary carbon peaking and carbon neutrality cases. These efforts aim to motivate our subsidiaries to actively engage in "Dual Carbon" work while providing comprehensive support for our "Dual Carbon" goals in terms of personnel, resources, and finances.

In 2022

- CECEP Hangzhou Energy and Environmental Industry Park and the Guiyang Zhongtian Future Ark Energy Centralized Supply Project received the third prize for the 2022 Carbon Peaking and Carbon Neutrality Action Typical Cases from the SASAC.



The establishment of the CNEPG's Carbon Peaking and Carbon Neutrality Industrial Park

Leading the Way in Green Development through Collaboration

We are dedicated to harmonizing human life with nature, supporting local green economies, and partnering with national bodies, local governments, leading companies, and diverse collaborators. By capitalizing on our strengths, we actively participate in shaping green and low-carbon policies and standards, driving progress in both industry and society toward environmental sustainability.

Supporting Local "Dual Carbon" Economic Growth

We have cooperated with more than 10 local governments in such fields as green development and ecological conservation to contribute to high-quality green development in both economy and society. Our research on "Dual Carbon" strategies for central SOEs has provided "Dual Carbon" consulting services for over 20 central SOEs and financial institutions.



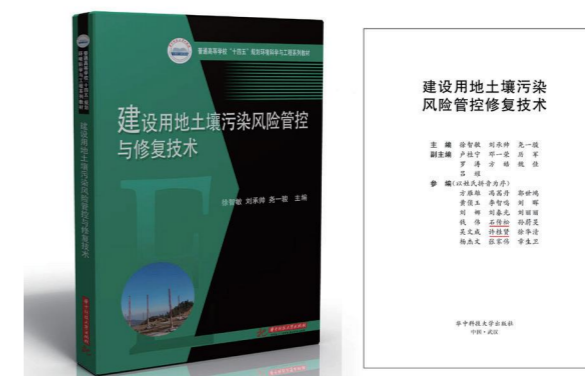
CECEP collaborates with the Wenzhou Municipal Government, Zhejiang Province, to enhance ecological protection, clean energy supply, and "Dual Carbon" initiatives.



Party Secretary and Chairman of the Group, Song Xin, attends the Sichuan Province Investment Promotion Conference for the Energy Conservation and Environmental Protection Industry and Environmental Infrastructure.

Involving in the Formulation of "Dual Carbon" Policy and Standards

We actively engage in shaping national "Dual Carbon" strategies, green industry standards, and regulations, taking charge of over 20 national policy research projects. This includes the study of policies like the National Key Energy Conservation Technology Promotion Catalog, National Key Promotion of Low-Carbon Technology Catalog, and Industrial Energy Efficiency Improvement Action Plan. We also contribute to the development of standards and guidelines, addressing four domestic gaps, such as the Climate Investment and Financing Project Classification Guide and Guidelines for Assessing Climate-Friendly Financial Institutions. Our support extends to aiding over 10 regions, including Beijing, Chongqing, and the Yangtze River Delta Integration Demonstration Zone, in creating carbon-related standards or programs.



We have co-authored higher education textbooks for the "14th Five-Year Plan", specifically focusing on "Construction Land Soil Pollution Risk Control and Remediation Technology".

Promoting Green Development Through Collaboration

Leveraging our expertise in energy conservation and environmental protection, we play an active role in shaping China's carbon peaking and neutrality strategies. We submitted 7 proposals during the "two sessions", covering areas like energy efficiency, resource recycling, and urban greening. We also hosted events such as the Climate Investment and Financing Side Event at the 27th Conference of the Parties (COP27) under the United Nations Framework Convention on Climate Change, and a forum on zero-carbon construction in nearly zero-carbon industrial parks. Furthermore, we actively engaged in significant conferences and activities related to green development and low-carbon environmental protection, including the Cross-Strait Industrial Cooperation Zone (Hunan) Digital and Low-Carbon Development Forum, the Beijing News Think-Tank Spring Summit, and International Clean Air Blue Sky Day-themed promotional events. Through these engagements, we shared our experiences in green development and acted as a model for green progress.



Chairman Song Xin attends the 2022 International Clean Air Blue Sky Day-themed event, exchanging ideas on green and low-carbon development.



CECEP organizes a forum on zero-carbon construction in nearly zero-carbon industrial parks, focusing on "Zero-Carbon Construction for Advancing the 'Dual Carbon' Strategy".

Gazing into the future, CECEP will remain committed to the mission of "making our country's sky bluer, mountains lush, waters clearer, and life better". We will follow General Secretary Xi Jinping's guidance and wholeheartedly implement the requirements of ecological conservation and national "dual carbon" strategic objectives. By actively promoting green development and nurturing low-carbon industries, we will lead the way, embodying the spirit of a "trailblazer" in scripting a new chapter for ecological conservation in this new era!

01

Strengthening Corporate Governance to Build a Solid Development Foundation

Prioritizing Work Safety Management to Ensure a Solid Development Foundation

31

Leveraging Lean Quality Management to Elevate Development Levels

28

Deepening Business Reform to Boost Development Momentum

26

2022 CECEP Highlights

- CECEP achieved **100%** completion of the SOE reform three-year action plan.
- CECEP reduced "Three Expenses" actual expenditure by **14.75** billion yuan compared to the comprehensive budget.
- CECEP invested **2.36** million yuan in work safety.

CECEP has actively integrated with the national "14th Five-Year Plan", continuously advancing the SOE reform, enhancing internal management, and ensuring secure and stable based on our strategic deployment and business layout. Our goal is to become a world-class industrial group integrating energy conservation, environmental protection, and health industry.

Deepening Business Reform to Boost Development Momentum

In 2022, CECEP accomplished all

68 reform tasks and

89 specific reform measures outlined in the SOE reform three-year action plan.

Enhancing Modern Corporate Systems

In 2022

- ▣ The Party Committee of the Group led the revision of Party organization rules of procedure and developed a pre-discussion checklist.
- ▣ The Group had **9** directors, among whom **5** were external directors.

CECEP is dedicated to implementing General Secretary Xi Jinping's important directives, actively embracing change, and establishing a complete set of reform and promotion mechanisms for vertical penetration, horizontal coordination, system integration, and efficient operation. This approach ensures significant progress in critical reform areas, leading to the continuous realization of reform benefits.

In 2022, CECEP accomplished all 68 reform tasks and 89 specific reform measures outlined in the SOE reform three-year action plan. Our subsidiary, China National Environmental Protection Group, was recognized as a benchmark company in the SASAC's "Double-Hundred Action" special assessment. CECEP Solar Energy Co., Ltd. was also chosen as a demonstration enterprise for corporate governance by SASAC.



2022 CECEP SOE Reform Three-Year Action Plan Progress Meeting

We have actively given full play to to enhance the role of the Party Committee in providing strategic direction, overseeing comprehensive planning, and ensuring effective implementation. We have standardized and implemented the requirements and procedures set by the Party committee of the Group. For example, all necessary Board of Directors shall be established and external directors shall make up the majority of the board. We have also clarified the responsibilities and boundaries among the Party Committee, the Board of Directors, and the management team, consistently raising the standard and efficiency of board decision-making. This has further advanced the maturity of our modern corporate governance system with Chinese characteristics. In 2022, we conducted the first training seminar for the building of the subsidiary board, offering guidance on enhancing corporate governance structures and setting clearer direction and requirement for the development of the board.



Sun Tieshi, Member of the Standing Committee of the Party Committee and Secretary of Discipline Inspection Commission of the Group, leads a team on a research visit to CECEP Building Energy Conservation Co., Ltd.

Optimizing Structural Layout

Adhering to the direction of "socialist market economic reform", we continued our efforts to optimize the layout and structure of state-owned economy by divesting non-core assets, addressing key underperforming subsidiaries, and focusing on the "three batches" initiative aimed at developing a batch of SOEs featuring innovation, restructuring a batch of SOEs and cleaning up and withdrawing a batch of SOEs. These actions have led to a leaner, more efficient organizational structure and continuous improvement in resource allocation.

In 2022

- ▣ CECEP achieved a **100%** completion rate for divesting "non-core" assets in **18** enterprises.
- ▣ CECEP reduced losses by **57%** in **17** key underperforming subsidiaries identified by SASAC.
- ▣ CECEP managed and disposed of **50** low-efficiency or non-performing assets as part of the "three batches" initiative.

Case Responsible Restructuring

In line with the directives of the SASAC to strengthen, expand, and improve core businesses, optimize resource allocation, and enhance management efficiency, we consolidated four secondary companies in our energy-saving business sector into a single entity in 2022. This strategic move aimed to create a strategic platform for energy-saving business development with core capabilities in areas such as technology, market expansion, and digital solutions.

Throughout the restructuring process, we adhered to a people-oriented approach, focusing on employee placement. We listened to employees' feedback and aspirations. A public rigorous selection process was conducted for mid and lower-level positions within the new company. For those who were not selected, we provided placement options through internal transfers and recommendations within the Group, guaranteeing the orderly proceeding of the work regarding employee placement a seamless transition for employees and business operations.

Promoting Market-Oriented Operations

We focused on three fundamental institutional reforms featuring flexible transfer of posts among management and staff and proper allocation of income in 2022. These reforms aimed to improve labor and compensation systems to make them more market-oriented, establish fixed-term contracts and contract-based management for executive members, and adjust performance evaluation mechanisms based on performance optimization. We established an appointment and dismissal mechanism according to the principle of talents demand matching individual capabilities. We also developed a comprehensive executive management assessment framework for managers, emphasizing individual and team-shared responsibility, collective and individual contributions, as well as holistic and specific targets to ensure alignment with our Group's strategic objectives and key annual (tenure) tasks.

In 2022

- ▣ CECEP successfully introduced fixed-term contracts for executive management across **532** subsidiaries.
- ▣ CECEP achieved **100%** adherence to market-oriented recruitment practices, with **4,212** new hires following the SASAC guidelines.
- ▣ CECEP implemented mid-to-long-term incentive programs in **161** out of **165** eligible subsidiaries accounting for **97.58%**.
- ▣ CECEP introduced employee stock ownership plans in **15** enterprises.

Leveraging Lean Quality Management to Elevate Development Levels

We remained committed to prioritizing development, focusing on operational objectives, and dedicated ourselves to enhancing quality and efficiency. We rigorously upheld quality management, exemplifying the excellence style of a central SOE. We seized market opportunities and continuously expanded our revenue sources, promoting comprehensive quality and efficiency development and improvement, while consistently strengthening the foundation for high-quality and sustainable growth.

Fine Management

We have emphasized the importance of efficiency, effectiveness, and profitability in our management approach. We have actively engaged in benchmarking world-class management practices, closely aligning with the objectives in the "Benchmarking Checklist". We have deeply analyzed practical business management, implementing fine management across various aspects. This includes enhancing the informatization and digitization of our operational management, aiming to reduce costs, increase efficiency, and foster high-quality development.

In 2022, our headquarters successfully reduced actual management expenses by 85.78 million yuan compared to the comprehensive budget, marking a year-on-year increase of 17.52%. Furthermore, the cumulative actual expenses in the "Three Expenses" category across all second-level subsidiaries dropped by 1.389 billion yuan compared with the comprehensive budget, with a year-on-year increase of 20.89%. Notably, financial expenses reduced by an impressive 950 million yuan, surpassing the objectives for cost reduction and efficiency improvement.

Indicator	Unit	In 2021	In 2022
Reduction in Management Expenses of the Headquarters	Ten Thousand Yuan	7299.25	8578
Cumulative Cost Reduction in "Three Expenses" Across All Second-level Subsidiaries	Hundred Million Yuan	11.49	13.89
Cost Reduction Leveraging Electronic Procurement Platform	Hundred Million Yuan	9.70	8.43

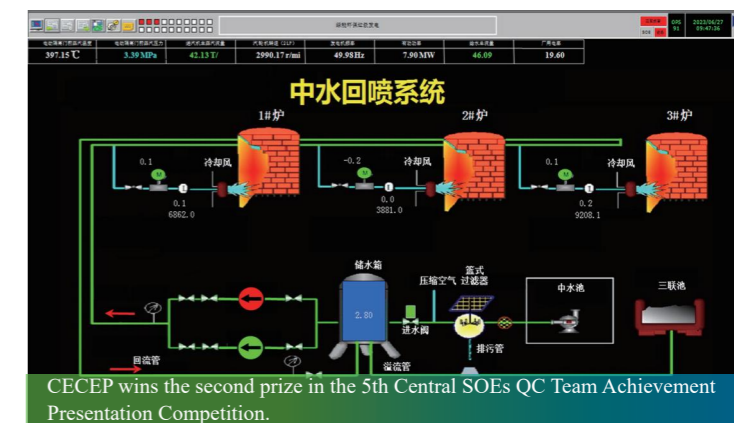
Case Outstanding Digital Transformation of CECEP Solar Energy Co., Ltd. in 2022

CECEP Solar Energy, adapting to industry trends, prioritized technological innovation and organizational transformation. Leveraging new technologies such as cloud computing, big data, the Internet of Things, and 5G, the company focused on a digitalization approach. With the effort, CECEP Solar Energy aimed to construct a "Platform + Ecosystem" model. It also developed the "5G-Based Industrial Internet Photovoltaic Smart Manufacturing and Smart Maintenance Collaborative Innovation Cloud Platform." This outstanding initiative earned the company recognition on the list of "Outstanding Digital Transformation Cases of Listed Companies in 2022" by the China Association for Public Companies (CAPCO).



Quality Enhancement

Following our service philosophy of "wholeheartedly and meticulously serving customers", we have established and enhanced a robust quality management system and improved the quality management skills. We have been focused on providing high-quality products and services to our customers, safeguarding consumer rights, and continually improving customer satisfaction.



Case The project participated by Xi'an Si Fang Construction Supervision Co., Ltd. received the National Quality Engineering Award.

In December 2022, the "Annual Production of 500 MW High-Efficiency Monocrystalline PERC Photovoltaic Cells and 3 GW High-Efficiency Monocrystalline Photovoltaic Module Production Base Project", which involved Xi'an Si Fang Construction Supervision Co., Ltd., a subsidiary of China Qiyuan Engineering Corporation, used a digitalized supervision platform to standardize the workflow, specialize forms, and visualize processes. This contributed to the project meeting quality standards and receiving the National Quality Engineering Award.



Market Expansion

With a resolute market-oriented approach, we have strengthened our core market institutions at home and abroad, bolstered top-level planning, optimized resource allocation, and incentivized performance. This has facilitated the creation of a highly effective and complete market development system, aligning the Group and the subsidiaries for mutual benefits. Our consistent efforts in market research, increased understanding the organizational structure of market development and innovative market penetration have led to the establishment of the Comprehensive Solution Coordination Center. We have fine-tuned collaborative mechanisms, amplifying CECEP's distinctive market advantage and fortifying our foundation for sustainable growth.

In 2022

- We basically established a team of **230** experts spanning various domains, including technology, consulting, economy and law, in the Comprehensive Solution Experts Database.
- We completed the design of **4** specific sub-solutions, including "Dual Carbon +", "Ecological Governance +", green and low-carbon services for industrial parks, and "Big Data + Precise Environmental Governance".
- We proactively extended our services through strategic collaborations with more than **29** provinces, municipalities, and over **10** leading industry companies.
- Our dynamic market expansion secured **1670** projects with a contract value of **83.026** billion yuan, including signed projects worth **56.488** billion yuan, reflecting a **3.42%** year-on-year growth.



Liu Jiaqiang, Deputy Secretary of the Party Committee and General Manager of the Group, conducts a research visit to CECEP Guozhen Environmental Protection Technology Co., Ltd.

Prioritizing Work Safety Management to Ensure a Solid Development Foundation

We firmly commit to risk prevention, continuously enhance our working mechanism for risk prevention and mitigation, and enforce risk control responsibilities, ensuring that all types of risk control measures are implemented. We constantly implement comprehensive governance initiatives and carry out all kinds of safety guarantee related work in an in-depth and detailed manner to secure the stable development of the Group.

Risk Management

Our approach is to strengthen the internal control system, rigorously implement risk prevention responsibilities and promote compliance. We have strengthened the internal control system to guarantee the strict fulfillment of risk prevention and control responsibilities. We prioritize risk awareness and enhance risk assessment and early warning capabilities. We actively promote comprehensive governance initiatives such as "Strengthening Compliance Management Year" and "Strict Compliance with Financial Disciplines and Legal Operations" to leverage the audit rectification and reform to address both symptoms and root causes and prevent significant risks or systemic risks effectively.



Compliance management

- We established a comprehensive compliance management system involving all employees, covering the entire process, and forming a "1+N" compliance management system. We also issued Compliance Management Regulations and Compliance Management Manuals so as to define basic requirements of compliance management and business management.
- We integrated compliance requirements into key nodes of the business process, forming a "compliance risk repository" defining 11 major business areas, 45 compliance focuses, 269 compliance negative lists, and 263 compliance obligations, which promotes the integration of compliance management and operational activities



Stringent Internal Control

- We established a five-level risk management organizational structure, including the Board of Directors, the Board's Audit and Risk Management Committee, the Group's Executive Team, various functional departments at the Group's Headquarters, and all second-level subsidiaries. Regulations such as the Comprehensive Risk Management Regulations were issued successively to create a well-defined power structure with clear division of labor, definite responsibilities, and effective coordination and check-and-balance, thus improving the system for internal control and risk management with Chinese characteristics.
- In line with the Group's strategic goals and practical management, we clarified the direction of risk management, strengthened the analysis of risk sources, standardized operational procedures, promoted risk prevention, and strengthened control over investment projects. We conducted regular inspections, self-assessment, and used improvement as a driving force to continuously reduce the possibility of risks.



Legal Compliance

- We committed to studying and implementing Xi Jinping Thought on the Rule of Law. We concurrently advanced the integration of legal affairs, compliance, risk management, internal control, and accountability. Our aim is to deepen the establishment of the system for the chief legal counsel. This approach ensures organized support for integrated compliance management and provides strong legal protection for the Group's reform and development.

Case Continuous Improvement of Data Standardization in the Finance Company

In February 2022, CECEP Finance Co., Ltd. established the EAST data control platform. This platform can conduct comprehensive data quality analysis and create the problem tracking list. It has laid a solid foundation for improving the data governance level of CECEP Finance and strengthening digital communication with regulatory agencies. This platform is an essential engine for the continuous improvement of the company's risk governance system.



CECEP Treasury Unified Payment and Settlement Platform



CECEP Treasury Management Information System

Work Safety Management

We prioritized both development and safety, diligently implementing General Secretary Xi Jinping's directives and instructions on work safety and acting on the requirements of the national teleconference on production safety and work safety-themed meetings for SOEs directly under the central government. We adhered to the principle of "people first, life first" and consistently refine long-term work safety mechanisms. We have expedited rectifications and inspections, enhance emergency drills, raise safety awareness, and improve our inherent safety capabilities. By comprehensively fulfilling the three-year national work safety campaign, we contributed to creating a safe environment for the 20th CPC National Congress and the Beijing Winter Olympics.

Safety Management

We established and improved the "Party-led Safety" mechanism, comprehensively implementing the "shared responsibility between the Party and the government" and the "dual responsibilities for one post" in work safety, as well as the "Three Supervisions and Three Necessities" work safety responsibility system. Throughout the year, we held the Work Safety Committee (Expanded) Meeting three times and 11 Themed Meetings. We continuously improved work safety regulations, guidelines, and the supervisory system. During the year, we revised three work safety regulations and issued 81 work safety work notices and advisory letters to strengthen the implementation of work safety. We accelerated the development of standardized, information-based, and intelligent work safety, creating a risk list for work safety. At the Group level, we organized 6 major safety inspections and rectification activities, resolutely preventing safety accidents. We consistently promoted the safety "blacklist" system for contractors and established a comprehensive safety framework through collective efforts.

In 2022

- ▣ Our total work safety investment amounted to **236** million yuan, marking a **3.5%** increase over the previous year. No significant or higher-level production safety accidents occurred throughout the year. The work-related fatality rate per 100 million yuan of output value was **0.0019**, a **50%** decrease year-on-year.
- ▣ We held **3** Work Safety Committee (Expanded) Meetings and **11** Themed Meetings within the Group.
- ▣ We assigned **385** full-time and part-time safety directors at all levels and **804** full-time safety management personnel, including **256** registered safety engineers (a **16.9%** increase year-on-year).
- ▣ Second-level subsidiaries discussed and made decisions on over **100** significant safety and environmental protection issues throughout the year. Senior leaders conducted nearly **200** safety and environmental protection inspections, promoting the rectification of more than **600** issues.
- ▣ We jointly penalized **14** contractors with safety risks.
- ▣ **8** second-level subsidiaries established safety and environmental protection smart control platforms. A total of **108** hazardous chemical production and usage companies, **36** construction sites, **163** major polluting units, and **160** other production and operating companies were integrated into the control platform. Over **1100** warning messages were processed throughout the year.



Hu Naimin, Member of the Standing Committee of the Party Committee and Deputy General Manager of the Group, conducts safety and environmental protection inspections of Moutai Lees Resource Utilization Project.



Hu Naimin, Member of the Standing Committee of the Party Committee and Deputy General Manager of the Group, inspects the Shanghai Coca-Cola project by McWong Environmental Technology Co., Ltd.

Special Rectification

CECEP maintained a prominent position in the three-year special work safety rectification effort. Based on the 2020 mobilization, investigation and rectification and 2021 concentrated efforts, we integrated into our targeted rectification the addressing of hazardous chemicals and gas, the one-hundred-day zero-incident campaign in the industrial and commercial sectors, fire safety in high-rise buildings, equipment modernization, and environmental facility enhancement. Collectively, these campaigns are referred to as the "2 + 8 + N" initiative. Through these actions, we significantly improved our work safety governance system and capabilities. All tasks outlined in this special rectification drive were successfully completed.

As of the end of 2022, the entire group developed 1,424 refined regulations and measures, identifying and rectifying over 71,000 issues and hidden dangers with a one-time rectification rate of 99.99%. CECEP withdrew from three hazardous chemical production companies, canceled or exited 6 major hazardous sources of hazardous chemicals and ceased operations at 2 non-coal mining companies, and 1 tailings pond, successfully resolving more than 50 long-standing "difficult" issues.

Safety Education

We continually enhanced our safety training and emergency management systems. Leveraging initiatives such as "Work Safety Month" and "Top Leadership Talks on Safety", we consistently promote safety culture. We actively conduct various emergency drills, including fire safety and traffic accidents, effectively raising employees' safety awareness and emergency response capabilities.



The fire emergency drill conducted in Huzhou Industrial Park of CECEP Industry Development Co., Ltd.



The comprehensive offshore wind farm emergency response drill of Yangjiang Branch of CECEP Wind-power Corporation Co., Ltd.

Beautiful China – Safety Standardization

The "CECEP Beautiful China Initiative – Safety and Environmental Protection Standardization" has been a pivotal initiative in line with the spirit of the 20th CPC National Congress. It has significantly supported the building of a beautiful China and enhanced intrinsic safety and environmental protection levels.

In 2022, 8 second-level subsidiaries of CECEP, such as General Water of China Co., Ltd., China National Environmental Protection Group, CECEP Industry Development Co., Ltd., CECEP Solar Energy Co. Ltd., China New Era Group Corporation, CECEP Guozhen Environmental Protection Technology Co., Ltd., CECEP Wind-power Corporation Co., Ltd., and CECEP Environmental Protection Investment Development (Jiangxi) Co., Ltd., had 12 primary-level units awarded the title of "CECEP Beautiful China Initiative – Safety and Environmental Protection Standardization Demonstration Units". Additionally, 6 second-level subsidiaries of CECEP, including CECEP Industry Development Co., Ltd., CECEP Guozhen Environmental Protection Technology Co., Ltd., China Geo-Engineering Corporation, General Water of China Co., Ltd., CECEP Solar Energy Co. Ltd., and CECEP Industrial Energy Conservation Co. Ltd., had 7 building projects granted the title of "CECEP Beautiful China Initiative - Safety and Environmental Protection Standardization Demonstration Sites".

In 2022

- ▣ The Group organized over **11,000** safety and environmental protection training sessions, with a total of almost **55,000** training hours.
- ▣ The Group conducted various emergency drills totaling nearly **2,500** times.

The "CECEP Beautiful China Initiative - Safety and Environmental Protection Standardization Demonstration Units" in 2022



CECEP Guiyang Energy Conservation Water Service Co., Ltd., a subsidiary of General Water of China Co., Ltd.



CECEP Solar Energy Technology (Korla) Co., Ltd., a subsidiary of CECEP Solar Energy Co., Ltd.

CECEP Honors List



Valiant Corporation Ltd. and China New Era Group Corporation received "Excellent" ratings in the "Science Reform Demonstration Action" and "Double-hundred Action" Annual Special Evaluation.



Yantai New Era Health Industry Co., Ltd. was named "Shandong Provincial Quality Benchmark Enterprise" for 2022.



CECEP Solar Energy Co. Ltd. was recognized as an SOE Corporate Governance Demonstration Enterprise.



CECEP Environmental Protection Equipment Co., Ltd. earned the Second Prize in the Third Excellent Corporate Safety Culture Paper Selection.



The "Initial Rainwater Storage Project of Beijing-Taipei Expressway", with the EPC in the charge of CECEP Guozhen Environmental Protection Technology Co., Ltd., met the 2022 "Municipal Engineering Highest Quality Evaluation" standards.



The second-phase project of the Water Plant in Guzhen Economic Development Zone, with the investment and construction in the charge of General Water of China Co., Ltd., achieved the "Anhui Construction Work Safety Standardization Demonstration Site" award for 2022.



The "Jitai Tongda City Shantytown Renovation Project", undertaken by China Geo-Engineering Corporation, was granted the "Jiangxi Construction Work Safety Standardization Demonstration Site" title for 2022.



CECEP was designated one of the "Top Ten Enterprises in the National Industrial Worker Team Construction Reform Special Action for Industrial Workers".



CECEP received recognition as a "Demonstration Unit for the Reform and Construction of Industrial Worker Teams in the National Mechanical, Metallurgical, and Building Materials System".

02

Boosting Independent Innovation to Activate Development Potential

Accelerating Industry-University-Research Cooperation to Advance Industrial Upgrading

42

Fostering Technical Breakthroughs for Competitive Industry Edge

40

Strengthening the Basis for Sci-Tech Innovation to Improve Results

38

2022 CECEP Highlights

- R&D investment: **1.63** billion yuan
- Science and technology personnel: **4941**
- Establishment of **5** new provincial and ministerial-level R&D platforms
- Addition of **10** new high-tech enterprises

- Acquisition of **164** new invention patents
- Leadership or participation in the development of **22** group, regional, industry, and national standards
- Receipt of **7** provincial and ministerial-level scientific and technological achievement awards

CECEP staunchly believes in the power of technology as a primary productivity driver and innovation as the leading force for progress. Prioritizing technological innovation, we have made our "Year of Technological Innovation" a notable success. We have improved our innovation system, strengthened R&D platforms, and addressed key technical challenges. This collaborative effort has sparked innovation, channeled creativity, and enhanced our core competitiveness, fast-tracking our role as a significant contributor to national strategic technology initiatives.

Boosting Independent Innovation to Activate Development Potential

Strengthening the Basis for Sci-Tech Innovation to Improve Results

In alignment with the Group's "14th Five-Year" strategic plan and specific technological sub-plans, we have refined our technological innovation management. We have established R&D platforms and R&D communication platforms and cultivated an innovation-driven culture to solidify the foundation for continuous improvement in our technological innovation capabilities.



Liu Jiaqiang, Deputy Secretary of the Party Committee and General Manager of the Group, visits the University of Science and Technology of China.

Building a Sci-Tech Innovation System

In line with the Group's main business development needs, we continually refine our top-tier design for scientific and technological innovation. We have crafted an implementation guide, Guidelines for Further Promoting Scientific and Technological Innovation Work (Trial), alongside detailed plans for the "Year of Technological Innovation" and adjustment schemes for innovation structure. We persevere in deepening refined and standardized management of scientific and technological innovation, improving R&D fund and sci-tech project process management and intensifying evaluations of our subsidiaries' innovation initiatives.



The board of directors holds a strategic seminar to advance the implementation of CECEP's "14th Five-Year Plan" for Science and Technology.

Establishing Scientific Research Platforms

We have created high-standard platforms for sci-tech innovation research and communication, actively setting up R&D centers. We host events such as youth employee exchange forums and other sci-tech exchanges, offering a robust research infrastructure and a positive innovation culture to address key technologies and major project R&D. In 2022, CECEP added five provincial and ministerial level R&D platforms and 10 high-tech enterprises.



Analysis & Testing Center of Valiant Corporation Ltd. (National Enterprise Technology Center)

Case The Construction of CECEP Shunyi Sci-Tech Innovation Base

In May 2022, we started constructing the CECEP Shunyi Sci-Tech Innovation Base. The plan includes developing diverse innovation platforms like the research center of the CECEP Engineering Technology Research Institute, the base of the headquarters of the National Engineering Research Center for Solid Waste (under construction), the laboratory of the headquarters of the Engineering Technology Center for Pollution Site and Underground Water Restoration, and the Group's technology demonstration center and technology exchange training center. These platforms are designed to form a new hub aggregating the Group's sci-tech innovation resources.



The CECEP Sci-Tech Innovation Base has been completed and is now operational.

Case Hosting a Youth Employee Exchange Forum to Promote Sci-Tech Innovation

On April 20, 2022, the Group held a youth employee exchange forum to facilitate communication between headquarters and frontline staff. The dialogue centered around sci-tech innovation, talent cultivation, digital transformation, low-carbon tech R&D, and hydrogen industry development. This exchange fostered a culture valuing technological innovation.



The Youth Employee Exchange Forum

Cultivating Innovative Talents

Focusing on key core technology tasks, we recruit R&D talents via diverse, market-oriented strategies and build high-level R&D teams. We stress training and leveraging top-tier technical talents, offering skills development and promoting further education to ensure a competitive advantage in tech R&D. In 2022, the Group recruited a group of high-level sci-tech innovative talents, bringing the total number of science and technology staff to 4,941.



Cultivating Innovative Talents

Fostering Technical Breakthroughs for Competitive Industry Edge

We stay committed to mastering key core technologies, dynamically updating our list of these crucial technologies, encouraging innovation through positive incentives, and energetically propelling our main business's essential technological advancement. We actively seek national projects, aiming to establish a new paradigm for tackling key technologies through innovation-driven development.

Encouraging Sci-Tech Innovation

We proactively establish reward systems for sci-tech innovation, with the focus on "precise and effective" positive incentives, and hasten the development of an incentive mechanism that fosters innovation. We continuously organize "Five Small" innovation activities and engage in sci-tech talent-related selection activities, stimulating a passion for innovation among our subsidiaries and employees.



CECEP's Outstanding Tech Professionals



Li Jie, Member of the Standing Committee of the Party Committee and Deputy General Manager of the Group, attends the unveiling ceremony of the National Center of Technology Innovation for Green and Low-Carbon Building.

Achieving Sci-Tech Goals

The Group continues to ramp up the investment in technological innovation, constantly improving the structure of the technological innovation system. We are making steady progress in technological innovation, with a consistent increase in the yield of technological achievements.

Year	In 2020	In 2021	In 2022
R&D Investment (100 million yuan)	10.6	14.29	16.63
Patent Applications	454	459	788
Granted Patents	405	584	735
Leading Key National R&D Projects and Sub-Projects Undertaken	15	15	16
Provincial and Ministerial Level Sci-Tech Achievement Awards	9	14	7

Energy Conservation and Environmental Protection Sci-Tech Innovation Achievements



Energy-saving Ecological Project Innovation

These efforts have resulted in 33 new products, processes, and devices, nine new production lines, and multiple patents in areas like sewage treatment and efficient photovoltaic cells, which have addressed challenging issues in the fields of energy conservation and pollution reduction in the West.



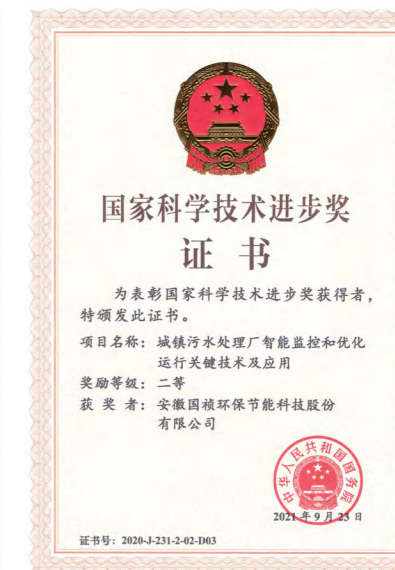
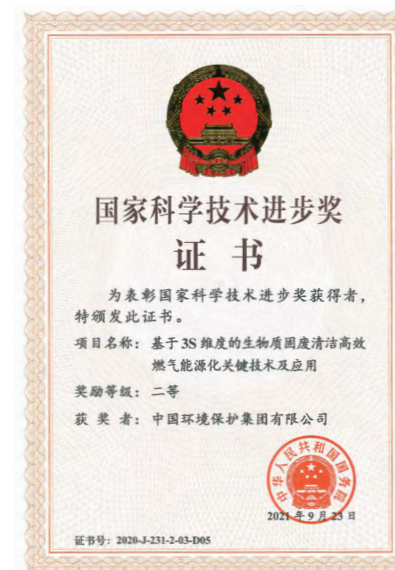
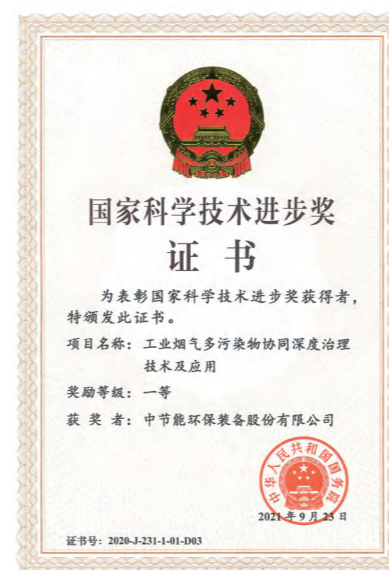
"Dual Carbon" Models Innovation

Our exploration has resulted in a series of comprehensive energy-saving and environmental protection solutions that can be replicated and promoted. These include the "two parks, one chain" model and the "air-space-land" integrated model.



Green Development Technology Innovation

We have successfully researched and implemented key technologies in energy-saving and emission-reducing areas, such as organic solid waste collaborative disposal, multi-source solid waste recycling, and smart ecological management and control. Our self-developed eco-materials for vehicle exhaust purification are at the leading edge globally.



National Science and Technology Progress Awards

Accelerating Industry-University-Research Cooperation to Advance Industrial Upgrading

We improve the open sharing of significant scientific and technological resources, continually bolstering cooperation and exchanges with research institutes and universities. We actively participate in the joint establishment of industry-university-research collaboration platforms, vigorously promoting the transformation and application of innovative results. Our aim is to make the dynamism of industry-university-research innovation a tangible driving force for the Group's high-quality development.

Boosting Independent Innovation to Activate Development Potential

Case Hosting the "Year of Technological Innovation" Energy Storage Technology Exchange Meeting

On August 9, 2022, the Group hosted the "Year of Technological Innovation" Energy Storage Technology Exchange Meeting. Experts and scholars from relevant ministries, associations, academic circles, and enterprises gathered to discuss policy trends and technical advancement in the new energy and energy storage industries against the backdrop of carbon peaking and carbon neutrality. These experts and scholars shared their cutting-edge insights into industry development and promoted technological innovation. This meeting played a significant role in the Group's efforts to build a new power system centered on new energy.



CECEP's "Year of Technological Innovation" Energy Storage Technology Exchange Meeting

Case CECEP Techand Signed Postdoctoral Joint Training Framework Agreement

In May 2022, CECEP Techand Ecology & Environment Co., Ltd. and the Shenzhen Research Institute of China University of Geosciences signed a postdoctoral joint training framework agreement. This deepened their collaboration in areas such as scientific research and development, and high-level talent training, thereby enhancing CECEP Techand's overall technological innovation capabilities. This partnership also provided effective support for making breakthroughs and implementing results in comprehensive water environment management, soil remediation, and slope management.

CECEP Honors List

- ★★★

CECEP Science and Technology Association was awarded the "Excellent Organization of the 2022 National Science and Technology Workers' Day Activities".
- ★★★

The Chen Tianlei Innovation Studio of Lanzhou Engineering & Research Institute of Nonferrous Metallurgy Co., Ltd., a subsidiary of China Geo-Engineering Corporation, was rated as a "Demonstrative Model Worker Innovation Studio of Gansu Province".
- ★★★

China Qiyuan Engineering Corporation passed the "National High-Tech Enterprise" certification.
- ★★★

China Qiyuan Engineering Corporation won the 2022 China Machinery Industry Science and Technology Award.
- ★★★

CECEP Wind-Power Corporation's project was honored with the 2022 "Machinery Industry Science and Technology Award".
- ★★★

CECEP City Energy Conservation Co., Ltd., a subsidiary of CECEP Industrial Energy Conservation Co., Ltd., was selected as one of the "Specialized and Sophisticated SMEs that Produce Novel and Unique Products in Jiangsu Province for 2022".
- ★★★

The Wuwei branch of CECEP Solar Energy Co., Ltd., was rated as a "Science and Technology Innovative Enterprise in Gansu Province for 2022".
- ★★★

CECEP Solar Energy Technology (Zhenjiang) Co., Ltd. was shortlisted for the "Intelligent Manufacturing Demonstration Factory in Jiangsu Province for 2022".
- ★★★

CECEP Solar Energy Technology (Zhenjiang) Co., Ltd. obtained the certification of "Specialized and Sophisticated SMEs that Produce Novel and Unique Products in Jiangsu Province".
- ★★★

The Hami, Shanshan, and Rongchuang branches of CECEP Solar Energy Co., Ltd. received certifications as "Specialized and Sophisticated SMEs that Produce Novel and Unique Products in Xinjiang Uygur Autonomous Region of China".
- ★★★

The Horgos, Shanshan, and Rongchuang branches of CECEP Solar Energy Co., Ltd. were certified as High-Tech Enterprises.

03

Seizing Opportunities to Achieve Win-win Outcomes

Creating a Responsible Supply Chain to Drive Industry Progress

50

Enhancing Domestic Collaboration to Share Cooperation Opportunities

49

Supporting the Belt and Road Initiative to Expand International Cooperation

46

2022 CECEP Highlights

- CECEP released **11** regulations including the Procurement Management Measures.
- CECEP accumulated audit approvals for **63366** suppliers in the supply database.

CECEP adheres to the concept of win-win cooperation, actively promoting the establishment of both international and domestic "circles of friends". We continually expand the scope of cooperation, fortify collaborative efforts, and share opportunities and challenges with all sectors of society. Additionally, we persist in strengthening supplier management, thus propelling the collective progress of the supply chain and the industrial chain.

Seizing Opportunities to Achieve Win-win Outcomes

Supporting the Belt and Road Initiative to Expand International Cooperation

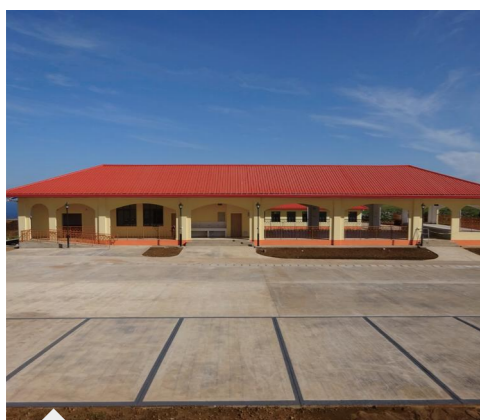
We continually enhance our global presence, actively participate in initiatives such as the Green Silk Road Envoy Program and the South-South Cooperation on Climate Change, and commit ourselves to the Belt and Road Initiative. We consistently broaden the scope of our overseas business collaborations, strive to expand our overseas "circle of friends", and vigorously promote economic and livelihood development in the regions where our overseas projects are situated.



China-Pakistan South-South Cooperation Project on Climate Change: Delivery Ceremony of 3,000 Sets Household Solar Power System

Overseas Aid Projects Shining Bright

In 2022, numerous CECEP subsidiaries advanced international development through unique Party building initiatives. They implemented the "going global" strategy and the Belt and Road Initiative, successfully constructing international business platforms, formulating market strategies, and expanding business operations with multiple measures. This further elevated CECEP's brand recognition and competitive edge globally.



In May, the Kagera Vocational Training and Service Centre in Tanzania, aided by China Qiyuan Engineering Corporation, was completed and accepted. Since its completion, the center has played a positive role in improving local vocational education and promoting Tanzania's industrialization.



In May, the China Geo-Engineering Corporation aid project, which included the construction of 200 wells in 11 regions of Rwanda, was successfully accepted, solving the drinking water problem for 110,000 locals.



In August, the one-stop border port and the 34-kilometer Matema Highway in Kasumulu, Mbeya, constructed by China Geo-Engineering Corporation, were successfully inaugurated. These two projects are set to enhance international economic, trade, and cultural exchanges between Tanzania and Malawi effectively.

In September, the restoration and reconstruction project of Sindupalchowk District Hospital in Nepal, aided by China Qiyuan Engineering Corporation, officially commenced. This project forms part of the post-earthquake reconstruction efforts undertaken by the Nepalese government. Upon completion, it will serve as the largest district hospital in Nepal, responsible for providing medical services to about 200,000 residents in Sindupalchowk District.



In November, the second phase of the Abidjan Water Supply Project, undertaken by the Ivory Coast branch of China Geo-Engineering Corporation, was awarded the 2022 Overseas Sustainable Infrastructure Project Award. The project has improved the locals' health and sanitation standards.

In December, the Foreign Service Academy project in Sierra Leone, aided by China Qiyuan Engineering Corporation, was officially completed. This achievement not only symbolizes the profound friendship between China and Sierra Leone, but also establishes a hub for cultivating diplomatic talents in Sierra Leone and throughout West Africa.



Seizing Opportunities to Achieve Win-win Outcomes

Efficient Operation of Overseas Wind Power Projects

In 2022, CECEP Wind Power Australia Holding PTY LTD continued to strictly adhere to the directives of the SASAC, the Group, and the CECEP Wind-power Corporation Co., Ltd. In response to shifts in global energy supply, the company promptly adjusted bidding strategies and actively adapted to changes in the electricity market. Committed to the clean energy sector, the company implemented energy-saving and emission reduction policies, generating clean electricity that significantly contributed to regional and global green development. The company has played a crucial role in worldwide energy conservation and emission reduction.



175 MW White Rock Wind Farm Project in New South Wales, Australia

MP International Cooperation Project Brings Benefits Overseas

The COVID-19 Antigen Detection Kit (for both professional and home antigen tests) developed by MP Biomedicals is registered in nearly 40 countries and sold in over 20 countries. Australia bought 40.69 million kits, while European countries, including Germany, France, the Netherlands, and the Czech Republic, purchased 30.68 million kits, aiding their fight against the pandemic.



COVID-19 Antigen Detection Kit



FastPrep-24™ 5G快速样品制备仪 FastPrep-96™ 高通量快速样品制备仪
MP Life Science Division

Enhancing Domestic Collaboration to Share Cooperation Opportunities

By giving play to complementary advantages and focusing on energy conservation and environmental protection, we diligently foster relationships with local governments, industry partners, and research institutions to learn from their strengths. Our goal is to build a multi-faceted strategic cooperation system, leveraging shared development opportunities for mutual benefit.

In 2022, CECEP entered strategic agreements with diverse partners including local governments like those of Anhui and Qinghai provinces, industry players such as CCTC and SANY, financial bodies like Agricultural Bank of China and Bank of Shanghai, industry organizations like the China National Environmental Monitoring Centre and the China Electricity Council, and universities like China University of Geosciences, Beijing and North China Electric Power University.



CECEP has established a strategic partnership with Anhui Province, fostering deep collaboration in sectors like ecological and environmental protection planning consulting, as well as comprehensive clean energy applications.



Cao Huabin, Member of the Standing Committee of the Party Committee and Deputy General Manager of the Group, attends the signing ceremony of the "14th Five-Year" Comprehensive Strategic Cooperation Framework Agreement with Shenzhen Municipal People's Government.



CECEP signs a strategic cooperation agreement with Bank of Shanghai to deepen cooperation in various fields and jointly promote green and high-quality economic and social development.

Creating a Responsible Supply Chain to Drive Industry Progress

We are committed to green and transparent procurement, continually refining our procurement management and internal control systems to boost standardization and legality in procurement operations. We fervently advocate for centralized procurement, establishing an electronic procurement platform to encourage streamlined and data-driven processes. We build a centralized supplier database at both Group and subsidiary levels, rigorously managing suppliers to foster mutual growth of upstream and downstream enterprises.

In 2022

- A total of **11** regulations, including the Procurement Management Measures, were introduced, and **4** internal control processes involving procurement plan management and procurement execution management were set up.
- We audited and approved a total of **63366** suppliers in our supply base, reducing centralized procurement costs by **658** million yuan. **3** suppliers found in violation of regulations were expelled, while **56** who failed annual assessments received a one-year transaction restriction as a penalty.

Case

Building a High-Level Electronic Procurement Platform

CECEP independently developed an electronic procurement platform centered around digital services support and online management of the complete procurement process. The platform is connected to China's public bidding service platform, sharing information such as tender notices and bid-winning announcements. Adhering strictly to national e-tendering technical specifications, the platform has achieved the highest level three-star certification from the country.

CECEP Honors List

★ ★ ★

The trade unions of China National Environmental Protection Group, General Water of China Co., Ltd., CECEP Building Energy Conservation Co., Ltd., and New Era Health Industry (Group) Co., Ltd. have been recognized as "Advanced Economic and Technical Units of the National Machinery, Metallurgy and Building Materials Industry".

★ ★ ★

General Water of China Co., Ltd. has been rated as one of the top 10 influential enterprises in China's water industry for 20 consecutive years, ranking third for five consecutive years.



04

Promoting Green Development to Conserve Lucid Waters and Lush Mountains

Strengthening Ecological Governance to Sustain Our Common Habitat

61

Strong Commitment to Green Operations and Resource Efficiency

57

Stringent Environmental Management to Control Environmental Risks

54

2022 CECEP Highlights

- CECEP invested a total of **820** million yuan in environmental protection.
- CECEP succeeded in executing over **4,000** projects in energy conservation, environmental protection, and clean energy.
- CECEP's green power installed capacity reached **17,766,700** kilowatts, a year-on-year increase of **23.93%**
- CECEP conducted **758** environmental training workshops, benefiting **15,578** participants.

CECEP has rigorously applied General Secretary Xi Jinping's profound statements on pursuing green development and promoting harmony between humanity and nature. Committed to the ethos of "Conserving Resources and Protecting the Environment", we have continually reinforced our approach to environmental stewardship, proactively addressed climate change, concentrated on growing green sectors, and demonstrated our dedication to sustainable, low-carbon development in enhancing ecological conservation through concrete measures.

Stringent Environmental Management to Control Environmental Risks

We are steadfast in advancing the implementation of the action plan outlined by the Central SOEs Ecological Environmental Protection Work Promotion Meeting. This involves refining our environmental management systems, boosting our capabilities in green management, proactively addressing climate change, and supporting the green progress of the Group. In 2022, all companies within our network that fall under categories I and II for environmental regulation successfully adopted each of the 19 mandated initiatives of the action plan.

Environmental Management

Committed to sustainable growth, we have embedded environmental management into our Group's strategic development plan. We set clear environmental goals at every operational level, continuously strengthen our environmental protection competencies, and ensure the systematic and efficient execution of environmental conservation efforts.

----- Planning Ahead ----- Capability Enhancement ----- Implementation -----

To better implement the 20th CPC National Congress's vision for a healthier China prioritizing environmental conservation, we have crafted a strategic plan for the Group. This includes concrete environmental milestones for the years 2023, 2025, 2027, and 2030.

We have released a detailed work plan titled Embracing the Spirit of the 20th CPC National Congress to Substantially Elevate Ecological Environmental Protection Proficiency, outlining a comprehensive task list aimed at bolstering our environmental protection skill set.

We maintain ongoing monitoring and analysis of ecological and environmental protection efforts within our subsidiaries, produce specialized summary reports, and foster an environment where subsidiaries are encouraged to adopt best practices, identify areas for improvement, and enhance their operations based on accumulated experience.

Case Collaborative Training on Pollution and Carbon Reduction Strategies

On September 26, 2022, China National Environmental Protection Group, in partnership with the Center for Environmental Education and Communications (CEEC) of the Ministry of Ecology and Environment, launched a targeted training course in Hengshui, Hebei Province. This course was dedicated to strengthening pollution control and carbon reduction strategies among attendees. It focused on the essential objectives and pivotal tasks necessary for achieving synergies in pollution and carbon reduction, while also covering ecological environmental laws, enforcement, and exemplary cases. The training successfully enhanced the capabilities of 50 participating officials and staff members in these critical areas, demonstrating tangible benefits.



The opening ceremony of Collaborative Training on Pollution and Carbon Reduction Strategies

Climate Resilience

We are committed to building a hub that consolidates intellectual capital for climate-related investment and finance. We develop innovative products in this field, conduct vital researches, set industry standards, and organize events centered on climate governance to elevate industry and societal engagement with climate change actions.

- ▣ We played a key role in drafting the Guiding Opinions on Promoting Investment and Financing to Respond to Climate Change, which received endorsement from the Ministry of Ecology and Environment and four other ministries.
- ▣ We authored and released China's inaugural voluntary standard for climate investment and financing – the Climate Investment and Financing Project Classification Guide, thereby establishing benchmarks in China's sector of climate finance.
- ▣ We completed the Research on the Entry Standards for the National Independent Contribution Project Database at the request of the Climate Department of the Ministry of Ecology and Environment, aiding China in highlighting its progress in combating climate change.

Case Co-Hosting the COP27 Side Event on Climate Investment and Financing and Contributing to Global Climate Governance

The 27th United Nations Climate Change Conference featured a prominent side event on climate investment and financing on November 14, 2022, in Sharm El Sheikh, Egypt. Spearheaded by CECEP and in collaboration with various entities, this side event stood out as one of the premier and most influential large-scale forums, garnering significant attention and engagement internationally.



CECEP Chairman Song Xin at the COP27 Side Event on Climate Investment and Financing

Climate change presents a profound challenge for humanity, making a green, low-carbon transition an essential journey for all nations."

— Excerpt from CECEP Chairman Song Xin's keynote speech

Green Culture

Our "Practicing Low-carbon Lifestyle, Building a Beautiful China" initiative leads to a range of activities, from energy-saving pledges to online training and knowledge contests, all aimed at fostering a culture of sustainability. These programs are part of our commitment to enhancing CECEP's "Green" brand identity. In 2022, we hosted 758 environmental training sessions with 15,578 attendees. Notably, the Shijiazhuang branch's live event for the National Low-Carbon Day in Hebei Province garnered over 100,000 views and received 948,000 video clicks.

Case Themed Training for the China Environmental Protection Volunteer Speech Team by China National Environmental Protection Group



Themed Training for the China Environmental Protection Volunteer Speech Team

In April 2022, the Party Committee of the China National Environmental Protection Group held themed training for the China Environmental Protection Volunteer Speech Team, focusing on environmental stewardship. This series, titled "Being Environmental Protectors Upholding Green Original Aspirations", drew over 160 participants from the group, bolstering the effectiveness of our ecological education bases and the skills of our volunteer speakers.

Case Recognition of Pingdingshan Branch of China National Environmental Protection Group as Henan Province's Ecological Environment Promotional Education Base

In June 2022, the Pingdingshan branch of China National Environmental Protection Group was rated as Henan Province's Ecological Environment Promotional Education Base, reflecting its ongoing investment in and enhancement of environmental education through creative measures. The branch's diverse public activities, including open days and lectures, have significantly advanced the spread of green development principles and the fostering of a green culture.



On World Environment Day, the Hengshui branch of China National Environmental Protection Group engaged in the "Sort Your Waste, Save the Planet" campaign, emphasizing individual responsibility in environmental protection.



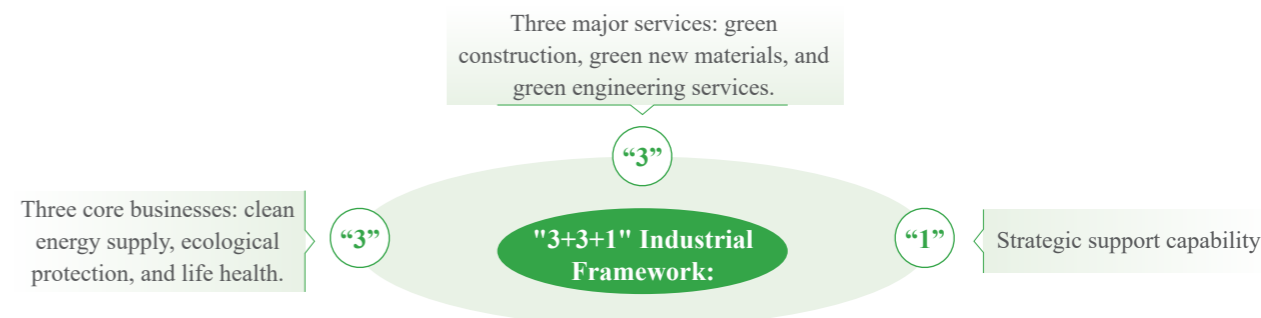
The Shijiazhuang Branch of China National Environmental Protection Group hosts Live Video Promotion for the National Low-Carbon Day 2022 in Hebei Province

Strong Commitment to Green Operations and Resource Efficiency

General Secretary Xi Jinping highlighted the importance of advancing new and clean energy sources, focusing on solar, silicon, hydrogen, and renewable energies. As a response to this vision, CECEP has been committed to the mission of achieving bluer skies, greener mountains, clearer waters, and a better life through greener practices in business operations and corporate culture. With these efforts, we aim to be an active pacesetter in eco-friendly operations.

Core Green Business

Centering on the "3+3+1" industrial framework, we prioritized our core sectors, promoted emissions and carbon reduction and developed demonstration projects to make due contributions to achieving the "carbon reduction", "zero carbon" and "carbon negative" goals. By the end of 2022, CECEP had generated 28.168 billion kWh of electricity – a 15.67% increase from the previous year – resulting in a reduction of 21,242,100 tons of carbon dioxide emissions and saving 8,520,070 tons of standard coal.



Case Actively developing clean energy for continuous progress in this field

CECEP has expanded its clean energy footprint through subsidiaries focused on wind and solar power. CECEP Wind-Power Corporation Co., Ltd. has established and is developing projects totaling an installed capacity of 5.48 million kilowatts, plus a pipeline of 1.005 million kilowatts in wind power projects. This puts it on the track for a professional wind-power company with domestic and global presence. Similarly, CECEP Solar Energy Co., Ltd. excels in developing, constructing, and managing diverse photovoltaic projects – including ground-mounted, water-based, coastal, distributed, and agrivoltaic systems.



The CECEP Guixi Liukou Fishing and Photovoltaic Complementary Solar PV Park



The CECEP Yangjiang Nanpeng Island Offshore Wind Power Project

Case Advancing Low-Carbon Construction for Sustainable Living

CECEP Building Energy Conservation Co., Ltd. specializes in reducing energy use and emissions within the building sector. It champions district energy solutions that feature efficient conversion of low-grade renewable energy, tiered energy use, diverse energy integration, and comprehensive optimization strategies. It aims to become a pacesetter in energy supply in South China, an explorer of heating supply with clean energy in North China, and a practitioner of zero carbon energy supply throughout China. By the end of 2022, the company had overseen clean energy projects across more than 160 million square meters and provided building energy-saving services to over 64 million square meters.



Low-Carbon Buildings

Implementing the Beautiful China Initiative

CECEP Industry Development Co., Ltd., a leader in CECEP's green building initiatives, is dedicated to advancing energy efficiency, emission reduction, and environmental protection. The company actively builds green buildings, promotes the development of green buildings and develops eco-friendly industrial and business parks, aiming to lead and innovate in green construction and support China's "dual carbon" objectives.

As of late 2022, it has developed 51 green park projects in major Chinese cities, including Beijing, Shanghai, Hangzhou, Shenzhen, Huzhou, Shaoxing, Jiaxing, Suzhou, Wuxi, Chengdu and those in Fujian. Encompassing a total planned construction area of nearly 10 million square meters, these parks house about 1,900 enterprises, generating an annual output value of approximately 130 billion yuan and contributing nearly 4 billion yuan in taxes.

Green Production

Leveraging management and technology, we strive to encapsulate and leverage our expertise and technological advancements in energy saving, consumption reduction, and resource recycling. Our aim is to foster a transformation toward low-carbon, clean, and sustainable production processes, aligning with the Group's commitment to a greener economy.

Case Creating a Smart Low-Carbon Water Plant Demonstration Project

The Bengbu Fourth Wastewater Treatment Plant pioneers a smart, low-carbon initiative aiming to cut carbon emissions by over 50%. The project's roadmap, outlined in the Smart Low-Carbon Water Plant Demonstration Construction Project Work Plan, is already underway. To date, the plant's reclaimed water reuse system and intelligence upgrade are operational, producing 20,000 tons of reclaimed water each day. Additionally, its distributed photovoltaic power generation is moving forward after completing feasibility studies and filing, with an anticipated average annual output of 1,802,700 kWh and an estimated annual reduction of 1,842 tons of CO₂ emissions.



The Bengbu Fourth Wastewater Treatment Plant

Beautiful China · Green Park Projects



The First Green Park in Beijing



The First Green Park in Shanghai



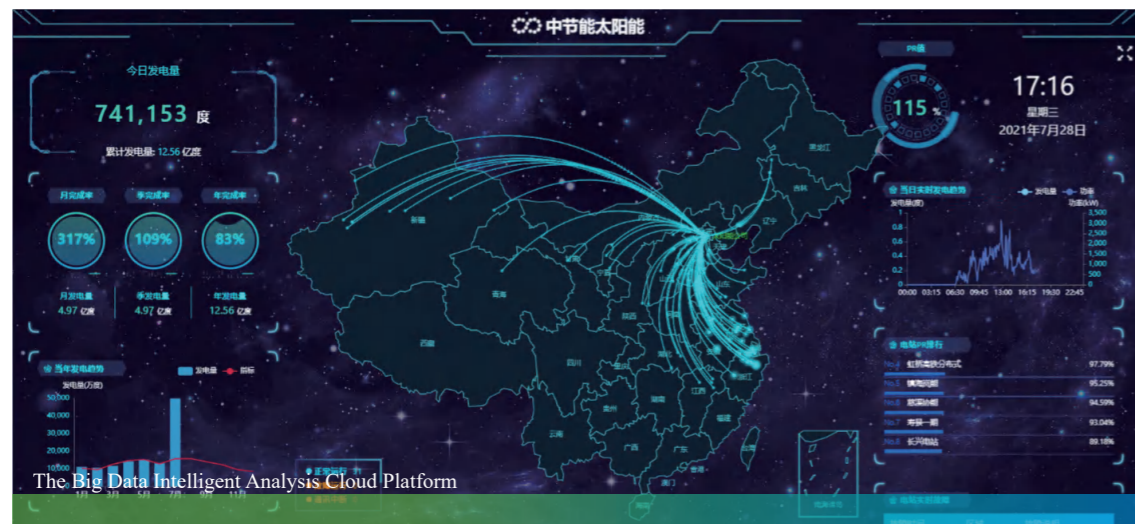
The First Green Park in Taihu Lake



The First Green Park in Xixi

Case The Big Data Intelligent Analysis Cloud Platform of CECEP Solar Energy Co., Ltd.

Addressing operational inefficiencies like extended inspection periods and slow fault response times, CECEP Solar Energy Co., Ltd. has deployed an energy internet platform across 32 power stations, enhancing 4,560 pieces of core equipment in East China. The platform's intelligent maintenance capabilities, including centralized monitoring, big data analytics, remote diagnostics, and real-time maintenance, have boosted operational and maintenance efficiency by 50%. These upgrades have led to utilization rates that surpass regional averages by 2%-4%. The impact is substantial: the 32 power stations have collectively produced 2.64 billion kWh of electricity, equating to a saving of 805,000 tons of standard coal, the planting of 400 million trees, and a reduction of 2.197 million tons in CO₂ emissions.



Green Office Practices

We introduce a digital management cloud platform to facilitate low-carbon and eco-friendly office operations. Leveraging digital technologies, we monitor, analyze, and issue early warnings for energy consumption, leading to significant energy savings. Our commitment to green office practices includes robust efforts in conserving water and electricity and utilizing green energy sources. In 2022, the Group's electricity use totaled approximately 2,404,900 kilowatt-hours, and water use reached 24,656 cubic meters, marking a 7.84% decrease from the previous year.

Case CECEP Property Management Co., Ltd. Enhanced Green Office Practices Through Digitalization

CECEP Property Management Co., Ltd. has developed a bespoke digital property management cloud platform that integrates functions such as collaborative work and financial management. The platform has evolved into the Smart Park Management Cloud Platform V9.0, servicing all managed properties. This digital solution has enabled a paperless office environment by digitizing documents and administrative workflows, contributing to a more sustainable office ecosystem. Furthermore, the platform's mobile app supports a "mobile office" experience, offering interconnected module functionality that enhances efficiency and convenience for office tasks.

Strengthening Ecological Governance to Sustain Our Common Habitat

In fulfilling our commitment to General Secretary Xi Jinping's vital directives on ecological governance, we embrace a holistic approach that respects ecosystem integrity. We actively disseminate and implement proven and innovative strategies in comprehensive, systematic management, and source control. Our efforts extend from localized interventions to wider regional initiatives, as we energetically advance the overall preservation and systematic rehabilitation of local ecologies. Through dedicated pollution control measures, we aid in the creation of an ecologically balanced and beautiful environment.



Du Le, Member of the Standing Committee of the Party Committee and Deputy General Manager of the Group, conducts a review of the Yaodian Wastewater Treatment Project led by General Water of China Co., Ltd.

CECEP intensifies the adherence to the principles outlined at the Central SOEs Ecological Environmental Protection Work Promotion Meeting. In this spirit, we developed and circulated the Implementation Plan for Enacting the Principles of the Central SOEs Ecological Environmental Protection Work Promotion Meeting, which oversees and assesses the environmental protection activities across our second-level subsidiaries. Furthermore, we crafted and shared the CECEP Production Processes Safety and Environmental Protection Overview, which employs clear language and illustrative examples to elucidate the production processes, safety, and environmental protocols of 11 group companies, from data analysis to practical application. This guide serves to engage the Group's leading safety officers, both full-time and part-time safety managers, supervisors at various levels, and technical personnel in enhancing their industry knowledge and understanding of safety and environmental conservation. Our goal is to mitigate risks through technological innovation and bolster safety through strategic management.



Pollution Prevention

The Notice on Further Strengthening the Work of Ecological and Environmental Protection was issued to emphasize pollution prevention and control. It mandates comprehensive environmental risk assessments and the creation of an environmental protection checklist to proactively mitigate pollution sources.

In 2022

- Of **106** critical environmental issues identified, **81** were resolved, resulting in a **73%** rectification rate. Additionally, **73** initiatives to enhance environmental compliance were completed.
- Solid waste processing increased by **14.3%** year-over-year to **24.364** million tons, with daily capacity reaching **104,000** tons, maintaining a leading position in the industry.
- Water production and sewage treatment volumes rose to **3.5** billion tons, an **8.3%** increase from the previous year, with a **9.6%** improvement in COD reduction, totaling **502,000** tons.

Case

The Yan'an Yaodian Wastewater Treatment Plant of General Water of China Co., Ltd. Passed the Acceptance Inspection

In March 2022, the Phase II of the Yan'an Yaodian Wastewater Treatment Plant, along with its pipeline network, constructed by CECEP Yan'an Wastewater Treatment Co., Ltd., a subsidiary of General Water of China Co., Ltd., passed environmental protection acceptance inspection. With a total wastewater treatment capacity of 50,000 tons per day and a reclaimed water capacity of 40,000 tons per day, the project significantly contributes to the region's efforts in both pollution control and carbon emission reduction.



The Yan'an Yaodian Wastewater Treatment Plant of General Water of China Co., Ltd.

Ecological Conservation

Firmly dedicated to environmental protection, we actively uphold our primary responsibility for the significant conservation efforts of the Yangtze River and are deeply involved in the ecological preservation of the Yellow River Basin. Through accumulating expertise in ecological protection, CECEP aims to be a pioneer, contributor, and leader in advancing China's national ecological conservation.

Case

Pioneering Yangtze River Conservation Efforts to Facilitate Ecological Conservation in the Yangtze River Economic Belt

CECEP continues to play a major role in pollution control in the Yangtze River Economic Belt and give full play to our leading role and driving force in this respect. We have established numerous large-scale waste management centers in key densely populated urban areas including the Chengdu-Chongqing region, the mid-Yangtze region, and the Yangtze River Delta. Our "Two Parks and One Chain" approach has bolstered recycling in Bijie and Xianning to build a solid waste management system that spans the Yangtze River. In Yichang, Hubei Province, our flagship shoreline restoration project, "Emerald Ribbon Waterfront", serves as a model for environmental rehabilitation. By the end of 2022, CECEP managed 31 solid waste treatment facilities across 11 provinces and cities along the Yangtze River, with a daily processing capacity of 26,000 tons. Our commitment extends to over 500 initiatives in energy conservation, environmental protection, ecological restoration, and green development, cumulatively valued at over 130 billion yuan.



CECEP Techand Ecology & Environment Co., Ltd. has established a model site for the Yangtze River shoreline restoration. Attractions such as Lighthouse Square and "Hundred Boats Competing" have turned into celebrated landmarks, earning widespread acclaim from the public.



The Jiaxing "Five Waters Co-Governance" Project

Ecological Restoration

CECEP continues to enhance its ecological resilience capabilities, integrating internal resources and technology to offer bespoke solutions that improve local environments, create demonstration projects for continuous progress in local ecology, and restore local ecological functions.

Case Aksu River Basin Integrated Ecological Restoration Project

In May 2022, a 5.373-billion-yuan project commenced in Aksu Prefecture for the integrated protection and restoration of the important Tarim River source area in Xinjiang, addressing mountains, waters, forests, fields, lakes, grasslands, and deserts. This significant investment marks a first in Xinjiang, first batch in China, and Aksu's largest ecological project in terms of one-time central funding, the broadest involved fields, and the most comprehensive work. It aims to improve the Aksu River Basin's environment so that a beautiful scenery featuring clear water, unobstructed river, and green banks can be created. The project also aims to develop local eco-industries and support regional ecological safety and economic growth.



The Groundbreaking Ceremony for Aksu River Basin Integrated Ecological Restoration Project

Case Desertification Control Initiatives to Improve the Ecological Environment

CECEP Solar Energy Co., Ltd. has implemented measures against desertification in various deserts including Taklamakan Desert, Kubuqi Desert, Tengger Desert, and Badain Jaran Desert. The efforts in terms of wind prevention and sand fixation and soil and water conservation encompass photovoltaic sand control and square grid sand barriers, enhancing the local ecological state through the innovative "photovoltaic + ecology + agriculture and forestry" model.



Photovoltaic Sand Control



Jiayu Riverside Ecological Improvement Demonstration Project

CECEP Honors List

- ***

CECEP won the 2022 "Green Environmental Protection Award" at the Responsible Golden Bull Awards.
- ***

The Yantai Branch of China New Era Group Corporation achieved national "Green Factory" status.
- ***

Yantai New Era Health Industry Co., Ltd. achieved national "Green Factory" status.
- ***

CECEP Guozhen Environmental Protection Technology Co., Ltd. earned two Class-A qualifications in environmental pollution control.
- ***

CECEP Industry Development Co., Ltd. maintained its lead as a "Green Ecological Urban Area Development Operator".
- ***

CECEP Guozhen Environmental Protection Technology Co., Ltd., General Water of China Co., Ltd., and CECEP Techand Ecology & Environment Co., Ltd. ranked among the top 50 Chinese environmental firms.
- ***

CECEP Solar Energy (Zhenjiang) Co., Ltd. was named a "Jiangsu Province Green Development Leader".
- ***

The Yunnan Branch of CECEP Guozhen Environmental Protection Technology Co., Ltd. was designated an ecological education base in Yunnan Province.
- ***

The Xiangtan branch of General Water of China Co., Ltd. was ranked among the top 10 environmental protection facilities of 2022 in Hunan Province.
- ***

CECEP Runda Environmental Protection Co. received top rating in pollution-free evaluation for the first batch of household waste incineration plants in Shandong Province.
- ***

The Linyi Branch of China National Environmental Protection Group earned qualifications as "AAA Level Household Waste Incineration Plant in Shandong Province".
- ***

Recognition of Pingdingshan Branch of China National Environmental Protection Group as Henan Province's Ecological Environment Promotional Education Base
- ***

Valiant Corporation Ltd. was listed as a national-level green factory.

05

Putting People First to Help Employees Fulfill Their Dreams

Advocating Work-Life Balance to Enhance Employee Wellbeing

72

Creating Optimal Career Environments to Support Employee Growth

69

Improving Management Systems to Safeguard Employee Rights

68

2022 CECEP Highlights

- CECEP achieved a **100%** rate of contract signing with employees.
- CECEP's employees enjoyed an average of **10.1** days of paid leave.
- CECEP secured **100%** coverage of social insurance.
- CECEP held nearly **1,500** training sessions for talent development.

Following the people-oriented approach, CECEP is dedicated to protecting the rights and interests of employees, promoting their growth and development, ensuring their health and well-being, and constantly fostering a sense of happiness, accomplishment, and belonging. We aim to seamlessly integrate individual employee progress with the collective advancement of the Group.

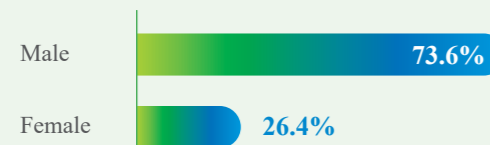
Putting People as the Foremost to Help Employees Fulfill Their Dreams

Improving Management Systems to Safeguard Employee Rights

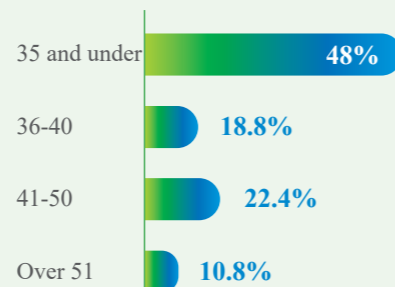
We rigorously abide by laws and regulations, including the Labor Law and the Labor Contract Law, uphold equal employment opportunities, stand against employment discrimination, and consistently enhance our recruitment, attendance, salary management, and democratic governance procedures. By lawfully safeguarding our employees' rights and interests, we tap into the full potential of our workforce, offering robust human resources support for CECEP's healthy and sustainable growth. As of 2022, CECEP had a total of 37,062 employees.

Employee Structure

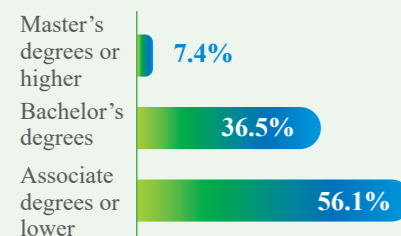
Gender Breakdown



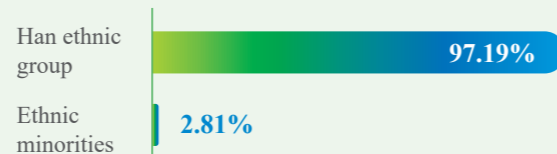
Age Distribution



Educational Levels



Ethnic Diversity



CECEP Second Employee Symposium of 2022

Equal Employment

We uphold the principle of equal employment, valuing employees' privacy and promoting gender equality and "equal pay for equal work". We ensure fairness in our treatment of employees regardless of their race, gender, age, religion, or cultural background and we unequivocally reject discrimination.

Our trade union system and democratic management are anchored by the Workers' Congress, which ensures open dialogue with our staff to address their immediate and significant issues. We invite employees to give their advice on the Group's growth to nurture a harmonious workplace.

Democratic Management

Salary and Benefits

We implement a competitive salary structure aligned with market trends, strictly observe minimum wage laws, and abide by national rules on statutory vacations, marriage leave, maternity leave, etc. We contribute to social security and housing funds and offer additional benefits like corporate pensions and supplementary health insurance.

We are committed to enhancing our occupational health management system, well fulfilling occupational health related work, and fostering a culture of safety through the collection of works on this front and educational initiatives such as the Week to Popularize Occupational Disease Prevention Law. With these efforts, we raise our employee's awareness of occupational health. In 2022, we had no occupational health incidents that impacted our reputation.

Occupational Health

Creating Optimal Career Environments to Support Employee Growth

In our effort to further implement the strategy of developing the Group with talent, we emphasize strengthening talent development across five key areas, continuously fine-tune the talent cultivation mechanism to satisfy our employees' diverse needs for overall progress. We persevere in providing our employees with career advancement opportunities, ensuring their well-being, and fostering a dynamic work environment that aligns with the Group's growth.

A Glimpse into Talent Cultivation of CECEP

CECEP's Five Pillars of Talent Development:

First, we prioritize cultivating our talent pool, focusing on recruiting and training managerial, technical, and skilled professionals, and encouraging their innovation and entrepreneurship.

Second, we build attractive platforms for talent acquisition, enhancing our support systems to become a hub for talent attraction and retention.

Third, we invest in the advancement of young talent, streamlining the channels for their career progress, removing barriers and the rigid system, thus fostering a climate where they can thrive with clear goals and aspirations.

Fourth, we drive scientific and technological innovation, recognizing tech talent as pivotal to our progress. Selected companies will act as talent incubators for the Group, merging scientific and technological innovation with talent-centric strategies.

Fifth, we expedite the development of our talent cultivation system, defining clear career paths for different talent categories, and forming high-caliber talent tiers.

Employee Training

In 2022, CECEP refined the CECEP Employee Training Management Measures to streamline the execution of training programs. The Group capitalized on internal resources, as well as those from higher authorities and industry associations, focusing on key areas such as Party building, leadership development, professional knowledge, skills enhancement, and orientation for new hires. Throughout the year, CECEP hosted nearly 1,500 training sessions in various disciplines, benefiting around 90,000 participants.

Putting People as the Foremost to Help Employees Fulfill Their Dreams

Case New Employee Orientation for 2022

On August 12, CECEP held its annual orientation for newcomers under the theme "Forge Legends through Dedication, Seek Development through Endeavor, and Cast a Splendid Life on the Path to Advancing Ecological Civilization". The program covered the Group's strategic direction and sector involvement, indoctrinated recruits in the principles of President Xi Jinping's ecological conservation thoughts, eased their transition into the corporate culture, and helped them set personal objectives.



New Employee Orientation

Case Online Leadership Training for Promising Young Officials

CECEP provided targeted online leadership training for promising young officials selected by the Party Committee for advancement in 2022. The curriculum included personal and team leadership, management and communication, competition and negotiation, crisis management, and skill refinement. This initiative equipped all newly promoted young officials with enhanced leadership skills and abilities to perform duties.



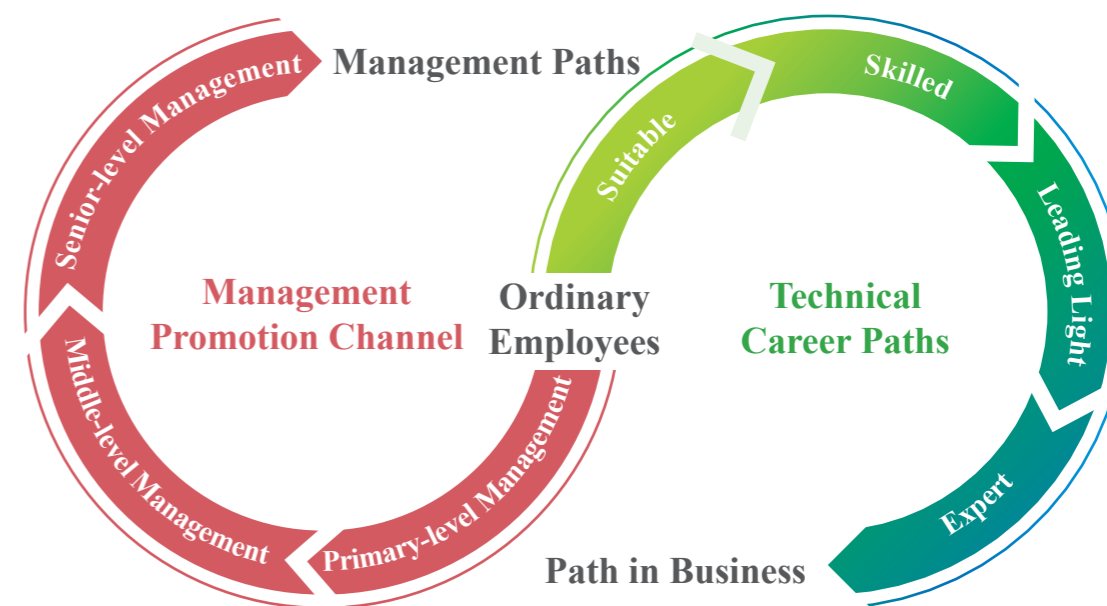
The Annual Archives Management Training of CECEP Techand Ecology & Environment Co., Ltd. in 2022



The Sales Enhancement Training of CECEP Solar Energy Co., Ltd.

Promotion Channel

The Group has refined the job title and rank system, incorporating innovative institutional mechanisms to offer dual career paths in management and business. This ensures a robust framework for professional growth and stimulates the dynamism of our human resources.



CECEP Dual Career Paths in Management and Business

Putting People as the Foremost to Help Employees Fulfill Their Dreams

Advocating Work-Life Balance to Enhance Employee Wellbeing

We prioritize the overall well-being of our staff, actively supporting their physical, mental, and emotional health. By providing care for employees facing hardships and visiting them during vacations, we foster a vibrant work culture. We also enhance workspaces and organize diverse cultural and sports events, contributing to a lively, healthy, harmonious, and warm work environment.



Song Xin, Secretary of the Party Committee and Chairman of the Group, extended New Year wishes to front-line workers at Beijing's inaugural project site during the 2022 Spring Festival.



China Qiyuan Engineering Corporation hosts its second "Welcoming the 20th CPC National Congress, Building Qiyuan Dreams" Family Open Day.



The staff of CECEP Solar Energy (Zhenjiang) Co., Ltd. competes in the Zhenjiang Occupational Health Expertise Competition.



Female employees craft preserved flower photo frames for Women's Day.



Flower-arranging sessions for Women's Day.



Regular yoga club activities for employees.



Basketball and badminton competitions.

CECEP Honors List

- ★★★

CECEP was honored with the "National May Day Labor Certificate".
- ★★★

CECEP won the "Organizational Contribution Unit" award in the Second Occupational Health Promotional Initiative
- ★★★

China Qiyuan Engineering Corporation received the "Shaanxi Harmonious Labor Relations Enterprise" accolade.
- ★★★

CECEP Lattice Technology Co., Ltd. earned the "Jiangxi May Day Labor Certificate".
- ★★★

Seven CECEP employees were titled "National Machinery Metallurgy Building Materials Industry Experts".
- ★★★

Chen Dan of the Central China Division of CECEP Solar Energy Co., Ltd. was recognized as an "Outstanding Individual" in the National Ankang Cup Competition.

Practicing Philanthropy to Build a Harmonious Society

06

Enhancing Cultural Exchange to Build a Harmonious Community

82

Organizing Charitable Initiatives to Strengthen Philanthropic Efforts

80

Embracing Social Responsibility to Support Rural Revitalization

76

2022 CECEP Highlights

- **29.815** million yuan was earmarked for rural revitalization programs.
- **10.88** million yuan was allocated for consumer aid.
- **36.766** million yuan was donated to international causes.

CECEP is committed to its social responsibilities, spearheading initiatives in rural revitalization, disaster relief, poverty assistance, and international aid to people's wellbeing. These efforts contribute to societal harmony and happiness while reinforcing a responsible corporate reputation.

Embracing Social Responsibility to Support Rural Revitalization

Organizational Leadership



CECEP 2022 Meeting on Rural Revitalization Support

Targeted Assistance



Liu Dajun, Deputy Secretary of the Party Committee of the Group, conducts field research on rural revitalization efforts in Songxian County

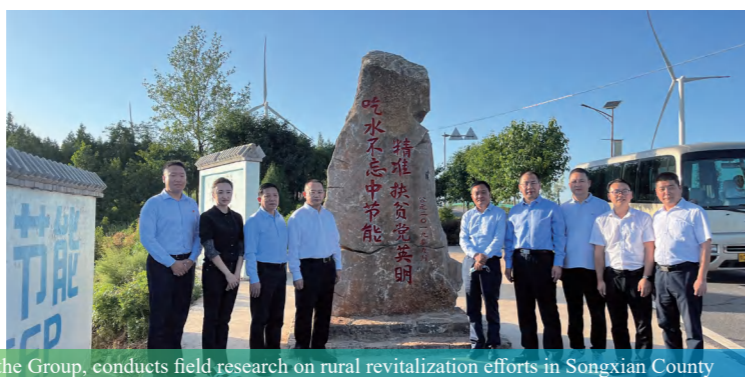
Our approach focuses on the five pillars of revitalization: industry, talent, culture, ecology, and organization. By leveraging our strengths and understanding local conditions, we strengthened our efforts in organization and leadership, advanced relevant causes in a coordinated way, and continuously invested funds in these causes. Based on these endeavors, we provided targeted support to areas like Songxian County in Henan Province and Fuchuan Yao Autonomous County in Guangxi Province, fostering high-quality economic and social progress.

Following the strategic method that includes top-level planning, systemic thinking, and collaborative execution, we held the annual meeting on rural revitalization support to analyze our overall work in this regard, arrange themed assistance work and take measures to advance relevant work. We timely updated our leadership teams, strengthened supervision of the leadership and offered them effective guidance. We made CECEP 2022 Targeted Assistance Work Plan to implement our concrete assistance work. We conducted in-depth research, actively organized exchanges, instructed assistance projects, and discussed and made specific measures to open a new chapter in rural revitalization.

In 2022, CECEP held four Party committee sessions and one themed meeting on rural revitalization, propelling these initiatives forward. A total of 13 research activities were carried out to guarantee the effective delivery of assistance programs.

Concentrating on the "five major revitalizations", we made great efforts to solve the problems of the greatest, most immediate, and most practical concern to the local people. Through continuous investment, the introduction of assistance funds, improvement in assistance level and innovation in assistance methods, we evolved our aid from mere support ("blood transfusion") to sustainable development ("blood production"). Our goal is to foster rural areas featuring thriving businesses, an eco-friendly environment, social etiquette and civility, effective governance, and prosperous rural population.

In 2022, we invested a total of 29.815 million yuan and facilitated 3.73 million yuan of gratuitous and compensated assistance funds and attracted an additional 7.3 million yuan in investments. We provided 10.88 million yuan in consumer aid, including 3.34 million yuan for Songxian County, 1.74 million yuan for Fuchuan, and 5.8 million yuan for other regions.



Industrial Revitalization

In Songxian County, Henan Province

- We invested in clean energy projects, including a 690-million-yuan wind power project (100 MW capacity) and a comprehensive county-wide photovoltaic initiative.
- We donated 9 million yuan to Jiugao Town for the development of a high-end tourism route in northern Songxian County.
- We invested 11.27 million yuan in Shichang Village of Songxian County to help it become a model "Energy Conservation Town", showcasing energy efficiency, environmental protection, and cultural tourism.

In Fuchuan Yao Autonomous County, Guangxi Province:

- We established an eco-friendly fruit and vegetable greenhouse project in Bainiu Village, Gepo Town, utilizing a pioneering "cloud farm" adoption model.
- We leveraged digital empowerment to expand marketing channels and increase the branding and investment appeal of Fuchuan produce, attracting 7 million yuan from investors.
- We launched a specialized bond in Chaodong Town to support tertiary sector integration, underwriting the Lengquan taro base and cold chain logistics advancements, with total financing reaching 490 million yuan and funds secured amounting to 100 million yuan.

Organizational Revitalization

- We initiated a mentorship system within assisted village Party branches, forming two professional cooperatives.
- We offered a donation of 56,900 yuan to build a Party building plaza in Shichang Village, Songxian County, aiming for a "Five-Star" Party branch status.
- CECEP Finance Co., Ltd. contributed 20,000 yuan to the Fuchuan CPPCC Party Branch to purchase books on Party building and current affairs.

Talent Revitalization

- We delivered training to 1,405 participants, including 130 primary-level officials, 188 rural revitalization leaders, and 1,087 technicians.
- In Fuchuan, we allocated 7.4 million yuan for educational initiatives, building kindergartens, granting university scholarships, and sponsoring academic activities. Additionally, we donated a total of 508,000 yuan to support the students from 186 financially challenged families in Songxian County in attending university, with a total of 336 students supported.

Cultural Revitalization

- We contributed 300,000 yuan towards the establishment of a Yaoxiu Hall, fostering the development of Yaoxiu culture in Fuchuan.
- In Songxian County's Shichang Village, we founded a performing arts group centered around the "Two Mountains Stage".
- We engaged in primary-level publicity, educating villagers on agricultural policies and local regulations as we visited different communities.

Ecological Revitalization

- Our "Mountain Area Illumination" initiative involved a donation of 400,000 yuan, lighting up 13 village-level elderly care service networks and 9 towns and villages in Songxian County with 105 solar streetlights, positively impacting over 8,000 residents.
- We donated 870,000 yuan to an environmental cleanup project in the settlement referred to as Laopuzhai in Xinshi Village, Liujia Town, Fuchuan, leading to significant overall improvement in areas of about 9,000 square meters in Fuchuan.
- We implemented the "Mountain Dew" project by investing 191,700 yuan in Songxian County, where two wells were repaired and small-scale water projects were developed.
- General Water of China Co., Ltd. solved problems regarding water safety for 89,428 households (369,704 people) by laying 2,121.28 kilometers of pipelines in Bengbu and three surrounding counties over the year.

Practicing Philanthropy to Build a Harmonious Society

Case Boosting Rural Incomes with Innovative Land Management

China New Era Group Corporation, a CECEP subsidiary, implemented a land transfer model in Fuchuan that tripled the revenue from a single plot of land based on the resource advantages. The model, combining the innovative "entrusted management" method, improved the collective economic operation system, leading to the cultivation of nearly 2,000 acres of crops such as taro and citrus fruits. The approach significantly increased incomes for residents of Xinshi Village, Liujia Town, and over 200 nearby households, raising the village's annual collective income from just over 10,000 yuan to more than 240,000 yuan.



The land transfer model in Fuchuan, Guangxi Province that triples the revenue from a single plot of land.

Rural Revitalization – Cherished Moments



CECEP Solar Energy Co., Ltd. utilizes barren hills to establish photovoltaic stations, supplying clean power across several counties.



The Jiaxing Branch of CECEP Industry Development Co., Ltd. contributes educational materials to Xinguang Primary School in Gaojiaqiao Village, Gaozhao Sub-district, Jiaxing.



CECEP Industry Development Co., Ltd. sponsors the construction of Songxian County's "Two Mountains Stage".



In Songxian County, Henan, CECEP Wind-power Corporation Co., Ltd. invests around 2 million yuan to construct eco-friendly greenhouses for local fruit and vegetable production.



Shichang Village of Songxian County is transformed into an "Energy-Saving Town".



The initiative encourages a "Buy Instead of Donate" model, creating diversified platforms for product exhibition and sales.

Case Enhancing Education through Comprehensive Support

The China New Era Group Corporation formed the "Guo Mingyi Charity Team", gathering 150,000 yuan in donations to enhance educational facilities in Fuchuan, Guangxi Province. It also established the "Guozhen Charity Fund", which funded the construction of 27 Guozhen Hope Primary Schools across 20 provinces, set up 337 Guozhen libraries, and supported over 16,000 underprivileged children in their pursuit of education.

CECEP Solar Energy Co., Ltd. has shown its commitment by partnering with poor villages in Qinghai and Gansu provinces and donating 200,000 yuan worth of educational resources to Dunhuang City Primary School to improve its educational conditions. The company was thus recognized as a "Caring Enterprise" by the local government.



A donation of the Yaoxiu Hall is made to foster the growth of Yaoxiu culture in Fuchuan.



Research and educational programs are organized to support the establishment of exemplary "Five-Star" Party branches.

Organizing Charitable Initiatives to Strengthen Philanthropic Efforts

As a central SOE, CECEP is steadfast in the commitment to social responsibility, swiftly responding to urgent societal needs and tackling challenging issues with empathy and dedication. We actively engage in volunteer services within our operations and play a crucial role in emergency responses such as epidemic management, flood control, disaster relief, and supply guarantees, prioritizing the safety of lives and property.

Case 10 Million Yuan Aid for Sichuan Earthquake Relief

Following the devastating 6.8 magnitude earthquake on September 5 in Luding County, Ganzi Tibetan Autonomous Prefecture, Sichuan, CECEP promptly acted on directives from General Secretary Xi Jinping and the SASAC Party Committee. The Group quickly donated 10 million yuan to support the relief efforts and hasten recovery in the earthquake-stricken region, ensuring the swift resumption of normalcy in production and daily life.



Case The "Joint Effort" Award of McWong Environmental Technology Co., Ltd.

During Shanghai's critical COVID-19 outbreak in March 2022, McWong Environmental Technology Co., Ltd., under the supervision of the acting Party committee of CECEP Guozhen Environmental Protection Technology Co., Ltd., effectively balanced production and virus prevention. The Coca-Cola project team under CECEP Guozhen Environmental Protection Technology Co., Ltd. established makeshift accommodations within the plant, maintaining operations for over 70 days. This dedication enabled Coca-Cola CPS China's production to proceed smoothly, earning McWong the "Joint Effort" award in recognition of its unwavering commitment.



Volunteer Activities – Cherished Moments



Engaging in a series of volunteer activities to safeguard the Yangtze River.



Assessing earthquake-damaged buildings and conducting urgent evaluations.



Providing essential aid to physically challenged individuals.



Helping with evacuation and emergency pumping during typhoon emergencies.

Supporting nucleic acid testing through volunteer services.



Leading community enhancement volunteer initiatives.

Enhancing Cultural Exchange to Build a Harmonious Community

Implementing the Healthy China Initiative

We are dedicated to the "I Do Practical Things for the People" initiative, fostering effective community dialogue to understand and meet residents' needs, and focusing on delivering tangible benefits. We remain attentive to the wellbeing of people abroad and provide benefits to them, enhancing China's cultural ties with other nations and nurturing harmonious international relationships.

CECEP is committed to the national Healthy China Initiative, actively driving healthcare development and treating public health improvement as a core responsibility. The Group innovates in promoting personalized health activities, spreading traditional Chinese health practices, and advocating for healthy living concepts to guide the public into an era of enhanced wellbeing.

In 2022, China New Era Group Corporation championed the promotion of science, health, and culture in communities, primary levels, and rural areas. By year-end, the company had launched 9,834 "Three Promotion" initiatives, impacting 1,300,200 people. Of these activities, 5,920 offline events reached 259,100 individuals, and 3,914 online events involved 1,041,100 people. These efforts significantly raised health standards and quality of life for many, contributing to the Healthy China Initiative.



China New Era Group Corporation is devoted to the Healthy China Initiative, advancing foundational research, and conducting numerous projects on topics including pine pollen enzyme hydrolysis, fermentation, and healthy water quality.



The "Forge Ahead into the New Journey, Build Achievements in the New Era" conference convened by New Era Health Industry (Group) Co., Ltd. in Hangzhou to embody the spirit of the 20th CPC National Congress.

Community Engagement

By the end of 2022

- CECEP had reduced rents totaling **107,459,400** yuan, including a **101,703,400** yuan reduction for small and micro-sized service industry businesses and a **5.756** million yuan cut for self-employed individuals.

Case Ensuring Access to High-Quality Drinking Water

To satisfy the demand for high-quality drinking water, the Xiangtan branch of General Water of China Co., Ltd., launched the inaugural pipeline direct drinking water initiative at Dongfang Mingyuan residential community's second phase in Xiangtan. Featuring an innovative circulating pipeline design that eliminates stagnant water, the system delivers fresh, national standard-compliant natural drinking water directly to homes. The enthusiastic reception from pilot users signals promising prospects for expanding pipeline direct drinking water projects.



Public Benefit Pipeline Direct Drinking Water Initiative

Community Exchange - Cherished Moments



Opening environmental protection and urban sewage and garbage treatment facilities to the public.



Providing public lectures for end-users of the energy supply process.



Popularizing water conservation knowledge and providing free tap water pressure and quality monitoring for residents.

Overseas Social Initiatives

In expanding into international markets and supporting the Belt and Road Initiative, we have grasped the immediate needs of local communities. Our commitment lies in enhancing their living conditions and road infrastructure, spreading the spirit of Chinese goodwill through practical endeavors.

Practicing Philanthropy to Build a Harmonious Society

Case Enhancing Community Life through Hydropower

Konio-Peulh, a village 35 kilometers southeast of Bamako in the Republic of Mali, faces severe infrastructure deficiencies, relying on scarce hand-pumped wells and lacking electricity access. Recognizing these challenges, China Geo-Engineering Corporation initiated the Mali Solar Demonstration Village project through photovoltaic technology. This innovation substantially improved the lives of nearly ten thousand villagers, fostering a bond between the Chinese and Malian communities and strengthening the longstanding friendship between both nations.



Photovoltaic Water Supply System

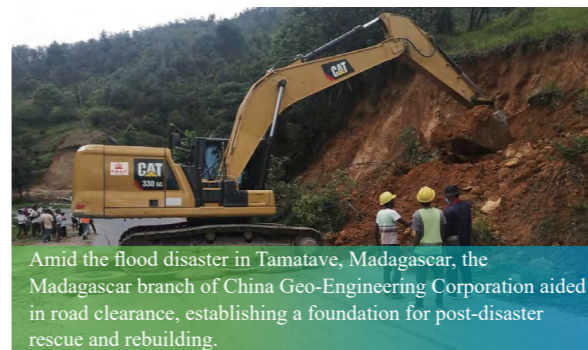


Centralized Photovoltaic Power Station

“Our village never had access to electricity, and water scarcity was a constant struggle, especially during the dry season, severely impacting our daily lives. We've yearned for modernity and better lives for our descendants and we were determined to get rid of poverty. I want to thank our Chinese friends for helping us drill wells, erect power stations, and install electric lights. We no longer worry about basic amenities. Thank you!”

– Jean Doumbia, Head of Konio-Peulh

Overseas Social Initiatives – Cherished Moments



Amid the flood disaster in Tamatave, Madagascar, the Madagascar branch of China Geo-Engineering Corporation aided in road clearance, establishing a foundation for post-disaster rescue and rebuilding.



CECEP Lattice Technology Co., Ltd., a subsidiary of CECEP Environmental Protection Investment Development (Jiangxi) Co., Ltd., contributed over 4,000 sets of LED road lights and 2,000 sets of household photovoltaic power systems, along with services including goods inspection and technical training, to the Republic of Fiji.

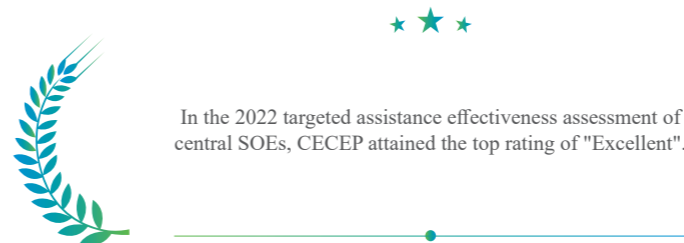
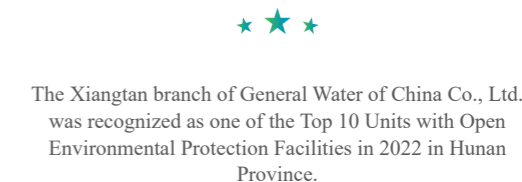


The Guinea-Mali branch of China Geo-Engineering Corporation voluntarily maintained the challenging road section between Guinea and Senegal, easing international travel and earning commendation from local authorities and residents.



The Cote d'Ivoire branch of China Geo-Engineering Corporation donated chalk, classroom light tubes, and other essential materials to the Eri-Makugi B/C primary school.

CECEP Honors List



A Look into 2023

We are dedicated to translating insight into action and facing challenges head-on. 2023 is a pivotal year in our nation's march towards its second centenary goal and also our "Year of Capacity Enhancement". This year, our focus will span Party building strengthening, team development, market expansion, pursuit of innovation, deepening the reform, refined management, and risk prevention. Embracing new ideas from the 20th CPC National Congress, we aim to boost the quality of political leadership in Party building. Taking talent as our prized asset, we will comprehensively bolster the fundamental and strategic support capabilities of our top-tier personnel. Aligned with national strategic goals, we will fortify our market expansion abilities, contributing to a new development paradigm. We will also thoroughly implement the strategy of improving the Group through science and technology, and comprehensively enhance our ability to innovate in core technologies in key fields. With steadfast commitment to reform, we will deepen our capacities in this regard and reach global standards for modernized operations and management. We will advance a safety risk control system on a continuous basis, comprehensively improve our ability to coordinate development and security, and promote the high-quality development of the Group across the board.

New concepts pave our way to fresh horizons, necessitating new actions. In 2023, CECEP will further unite around the CPC Central Committee with Comrade Xi Jinping at its core. Through tangible initiatives, we will deeply embed the "Two Mountains" concept, engage actively in cooperative exchanges, and wholeheartedly contribute to societal welfare. With these efforts, we will continue to contribute to the building of a great modern socialist country that is prosperous, strong, culturally advanced, harmonious, and beautiful.

Appendices

Core Performance

Indicator	Unit	In 2022	In 2021	In 2020
Economic Performance				
Total assets	in 100 billion yuan	2815.38	2645.59	2213.41
Operating revenue	in 100 billion yuan	591.29	530.37	443.94
Total profit	in 100 billion yuan	49.46	50.12	35.51
Asset-liability ratio	%	69.52	69.94	67.11
Total tax	in 100 billion yuan	38.86	40.46	35.87
R&D investment	in 100 billion yuan	16.63	14.29	10.6
Proportion of R&D investment in business revenue	%	2.81	2.69	2.39
Number of scientific and technological staff	Persons	4941	5221	3357
Number of major scientific research platforms	/	3	5	3
Number of science and technology awards at provincial and ministerial levels	/	7	14	9
Commercialization of scientific and technological achievements	%	100	100	100
Number of patent applications	/	788	459	454
Number of granted patents	/	735	584	405
Number of national, industry and local standards hosted and participated	/	22	11	6
Competitive bidding rate for infrastructure projects	%	95.06	94.98	97.62
Social performance				
Total employees	Persons	37062	33612	38006
Signing rate of employment contract	%	100	100	100
Proportion of female employees	%	26.4	24.2	25.77
Ratio of female managers	%	32.37	21.6	31.6
Ratio of minority employees	%	2.81	2.5	3.04
Per capita paid vacation	Days	10.1	9.8	10.5

Indicator	Unit	In 2022	In 2021	In 2020
Employee satisfaction	%	96.7	96.5	95.8
Employee turnover rate	%	9.2	9.5	11.3
Annual newly-recruited staff	Persons	3635	8667	5608
Total donations	in 10,000 yuan	3676.6	3988.1	5972.87
New graduates recruited	Persons	546	520	586
Coverage of physical examination	%	100	100	100
Social insurance coverage rate	%	100	100	100
Environmental performance				
Water treatment capacity	100 million tons	34.96	32.28	17.68
Solid waste treatment	10,000 tons	2436.43	2129.82	1457
COD reduction	10,000 tons	50.2	45.79	21.33
Green power generation	100 million kWh	281.68	243.51	185.34
Organizing environmental protection training	Times	758	556	4800
Total trainees	Participants	15578	13965	320000
Electricity consumption of CECEP office buildings	10,000 kWh	240.5	224.7	232.34
Water consumption of CECEP office buildings	10,000 tons	2.47	2.68	2.41

Index

Contents	UN Sustainable Development Goals	CASS-CSR4.0 for energy conservation and environmental protection industry	
Report Introduction	-	P1.1-1.3	
Address from the Chairman	-	P2.1-2.2; P3.1-3.2	
About Us	-	P4.1-4.4; M1.6-1.8	
CSR Management	-	G1.1-1.2; G2.1; G2.3-2.4; G3.1-3.3; G4.3; G6.1-6.2	
CSR Topic I: Embodying the Spirit of the 20th CPC National Congress, Staying True to Our Original Aspiration	-	P3.1-3.2; M1.1; M1.3; A3	
CSR Topic II: Focusing on Green Development, Uniting for the Promotion of "Dual Carbon"	-	P3.1-3.2; M3.4-3.7; E1.1; E1.5; E1.7; E1.9	
Strengthening Corporate Governance to Build a Solid Development Foundation	Deepening Business Reform to Boost Development Momentum	Goal 8	M1.1; S1.4
	Leveraging Lean Quality Management to Elevate Development Levels	Goals 8 and 12	M1.1; M1.5-1.6; M2.1-2.2
Boosting Independent Innovation to Activate Development Potential	Prioritizing Work Safety Management to Ensure a Solid Development Foundation	Goals 9 and 11	S1.1; S3.1-3.6; A3
	Strengthening the Basis for Sci-Tech Innovation to Improve Results	Goals 8 and 9	M2.5
Seizing Opportunities to Achieve Win-win Outcomes	Fostering Technical Breakthroughs for Competitive Industry Edge	Goals 8 and 9	M2.6; M2.7; M2.10
	Accelerating Industry-University-Research Cooperation to Advance Industrial Upgrading	Goals 8 and 9	M2.8; A3
Promoting Green Development to Conserve Lucid Waters and Lush Mountains	Supporting the Belt and Road Initiative to Expand International Cooperation	Goal 17	M2.1; M3.4
	Enhancing Domestic Collaboration to Share Cooperation Opportunities	Goal 16	M3.4
	Creating a Responsible Supply Chain to Drive Industry Progress	Goals 8 and 16	M3.5; M3.11-3.16; E1.8; E2.2; A3
Putting People as the Foremost to Help Employees Fulfill Their Dreams	Stringent Environmental Management to Control Environmental Risks	Goals 13 and 15	E1.1; E1.5; E1.7; E1.10-1.11
	Strong Commitment to Green Operations and Resource Efficiency	Goals 12 and 14	E1.5; E1.9; E2.1; E2.5; E2.8; E2.19-2.20; E2.33; E2.41-2.43; E3.1-3.2
	Strengthening Ecological Governance to Sustain Our Common Habitat	Goal 15	E3.3-3.4; A3
Practicing Philanthropy to Build a Harmonious Society	Improving Management Systems to Safeguard Employee Rights	Goals 5, 8 and 10	S2.1-2.4; S2.7; S2.9-2.12
	Creating Optimal Career Environments to Support Employee Growth	Goal 16	S2.16-2.18
	Advocating Work-Life Balance to Enhance Employee Wellbeing	Goals 1 and 3	S2.19-2.20; A3
A Look into 2023	Embracing Social Responsibility to Support Rural Revitalization	Goals 1, 2, 3, 4 and 10	S4.5; S4.8; S4.12-4.13; S4.15
	Organizing Charitable Initiatives to Strengthen Philanthropic Efforts	Goals 1, 11 and 15	S4.6; S4.10; E3.6
	Enhancing Cultural Exchange to Build a Harmonious Community	Goals 3, 6, 16 and 17	S4.1; S4.16; A3
Appendices	-	-	A1
	Core Performance	-	A2
	Index	-	A5
	Rating Report	-	A4
Feedback and Comments	-	A6	

Rating Report



The Rating Report of the 2022 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 2022 CSR Report of CECEP ("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 functional departments and subsidiaries provided basic information and reviewed relevant content. 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, enhance communication between stakeholders, and improve the corporate brand image. 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, industry benchmarking analysis, analysis of major matters of the company, expert opinions, and stakeholder investigation. The company actively drives subsidiaries China Geo-Engineering Corporation and CECEP Techand Ecology & Environment Co., Ltd. to issue CSR reports independently to promote longitudinal management of CSR. The company plans to release the report on its official website and under the Centralized Release of Central SOEs' CSR Reports activity. The report will be available in electronic and printed versions and shows excellent procedural performance.

Substantivity (★★★★★)

The Report has systematically elaborated on the key issues of the energy conservation and environmental protection industries such as macro policy implementation, work safety, scientific and technological innovation, addressing climate change, green operation, ecological restoration and rehabilitation, pollution prevention and control, occupational health management, and employee rights protection, with substantive excellent performances made.

Integrity (★★★★★)

The report systematically revealed 92.09% of core indicators in the energy conservation and environmental protection industries from such perspectives as "Strengthening Corporate Governance to Build a Solid Development Foundation", "Boosting Independent Innovation to Activate Development Potential", "Seizing Opportunities to Achieve Win-win Outcomes", "Promoting Green Development to Conserve Lucid Waters and Lush Mountains", "Putting People First to Help Employees Fulfill Their Dreams", and "Practicing Philanthropy to Build a Harmonious Society". It ensures integrity excellence.

Balance (★★★★)

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

Comparability (★★★★★)

The Report revealed comparative data over three consecutive years in 37 key indicators including "total assets", "business revenue", "asset-liability ratio", "total employees", "ratio of female managers", "total donations", "water treatment capacity", "solid waste treatment", and "green power generation", showing excellent comparability.

Readability (★★★★☆)

The Report, themed on "Fostering Unity for a Greener Future", follows a stakeholder-focused framework. It systematically presents the company's principles, practices, and outcomes concerning CSR responsibilities in six sections. The structured framework is clear, emphasizing key topics and thoroughly meeting stakeholders' expectations. The cover design integrates the corporate identity into the main business segments, enhancing recognition. Real-life visuals across chapters, coupled with narrative introductions and key performance data, help readers swiftly grasp vital information. Enriched with diverse cases, the Report showcases the company's accountability achievements, enhancing its communication power and readability.

Innovation (★★★★★)

The Report begins with two CSR topics: "Embodying the Spirit of the 20th CPC National Congress, Staying True to Our Original Aspiration" and "Focusing on Green Development, Uniting for the Promotion of "Dual Carbon". These highlight the company's commitment to the 20th CPC National Congress's ideals and its role in "dual carbon" strategy. They underscore the responsibility of CECEP as a central SOE and the Report's relevance. Its innovative structure boosts adaptability, concluding each chapter with the "CECEP Honors List" showcasing major yearly achievements. Ongoing report ratings enhance CSR standards and credibility, displaying innovative performance.

Overall Rating (★★★★★)

After deliberation, the rating panel assigned "Five Stars" to the 2022 CSR Report of CECEP, considering it an excellent CSR report.



It's the eighth 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 Rating Panel

Expert of Rating Panel

Date of issuance: October 16, 2023



Scan here for rating details

Feedback and Comments

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?

**Please leave your contact information.
We will keep it strictly confidential:**

Name: -----

Employer/occupation: -----

Contact Tel.: -----

E-mail: -----

Mailing address: -----

Postal code: -----

Contact Us:

CSR Office, China Energy Conservation and Environmental Protection Group
(Party-Mass Work Department)

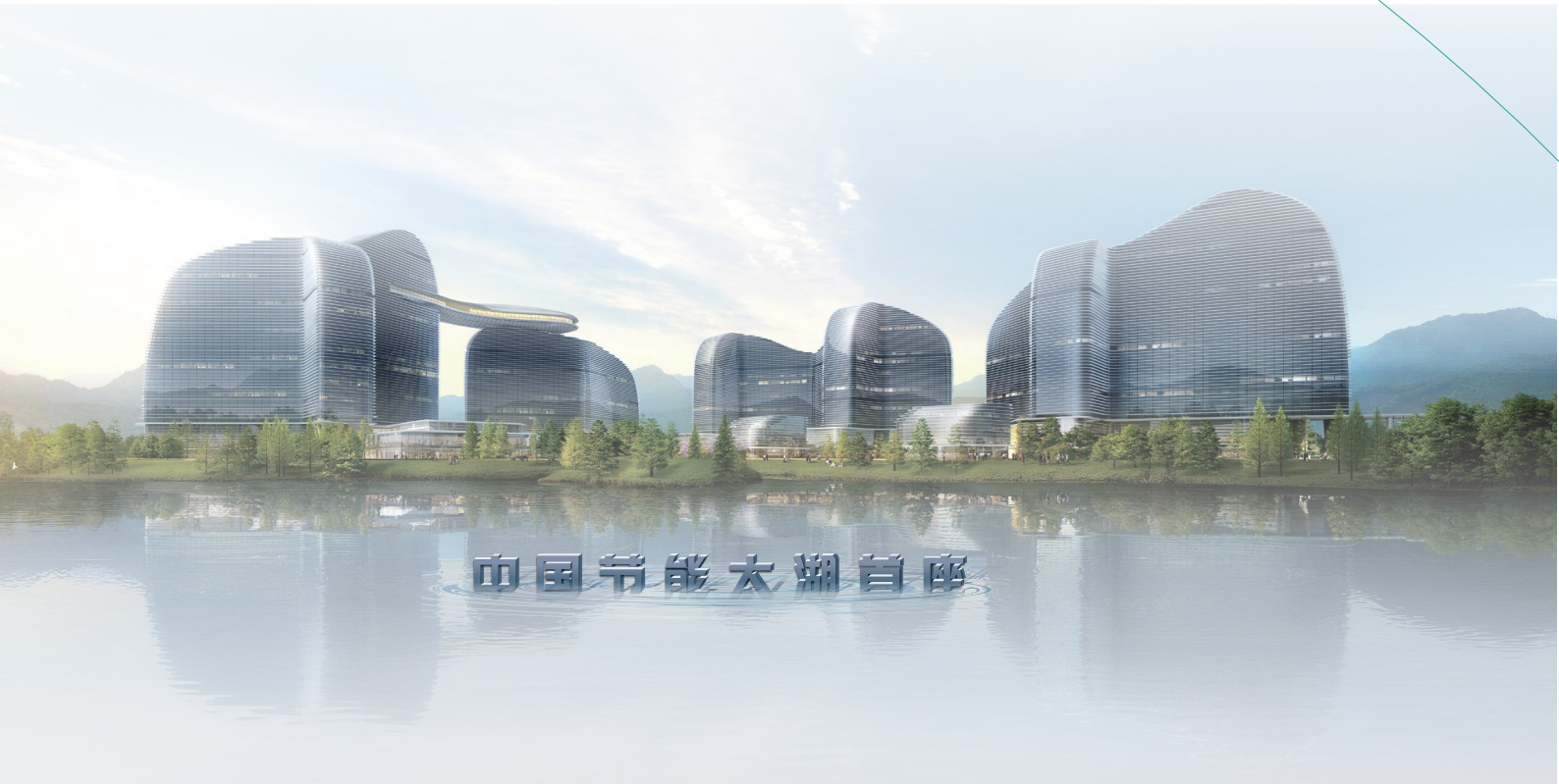
Address: CECEP Building, 42 Xizhimen North Street, Haidian District, Beijing,
P.R.C.

Contact person: Yang Chao

Postal code: 100082

E-mail: yangchao5@cecep.cn

Tel: (86) 010-83052077



中国节能环保总部

报告出版的环境考虑

纸张:采用环保纸张印刷

油墨:采用环保油墨以减少空气污染



中国节能环保集团有限公司
China Energy Conservation and Environmental Protection Group

China Energy Conservation and Environmental Protection Group

Address: 42 Xizhimen North Street, Haidian District, Beijing (100082), P.R.C.

URL: www.cecep.cn