

Environmental, Social and Governance (ESG) Report 2024



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About the Report

China Energy Conservation and Environmental Protection Group publishes its Environmental, Social and Governance (ESG) Report 2024 (hereafter the “report”), which provides a systematic disclosure of ESG management, actions and performance in 2024.

Reporting Period

The reporting period covers January 1, 2024, to December 31, 2024 (hereafter “this year” or “the reporting period”), with certain information traced back to prior years where appropriate.

Reporting Boundary

The report focuses on China Energy Conservation and Environmental Protection Group as the primary reporting entity and covers both the parent company and its subsidiaries. Unless otherwise stated, key performance indicators (KPIs) include all wholly owned and controlled subsidiaries.

Basis for Preparation

The report follows the ESG reference indicator system and specialized reporting template issued by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC). It also draws on the International Sustainability Standards Board’s IFRS S1 *General Requirements for Disclosure of Sustainability-related Financial Information* and IFRS S2 *Climate-related Disclosures*. In addition, the report references the *China Corporate Sustainability Disclosure Standards General Standards* by Ministry of Finance of the People’s Republic of China; the *Guidelines for Sustainability Reporting of Listed Companies (Trial)* issued by the Shanghai, Shenzhen, and Beijing stock exchanges; the *Global Reporting Initiative Standards for Sustainability Reporting (GRI Standards)* issued by the Global Sustainability Standards Board (GSSB); the Guiding Opinions on SOEs' Fulfillment of Social Responsibilities issued by SASAC; the *Guidance on Social Responsibility Reporting* (GB/T 36000-2015) issued by the Standardization Administration of China; and *China CSR Reporting Guide* (CASS-ESG 6.0) issued by the Chinese Academy of Social Sciences.

Description of Titles

Short Name	Full Name
"CECEP", "the Group", "the Company", and "we"	China Energy Conservation and Environmental Protection Group
"Solar Energy Company"	CECEP Solar Energy Co., Ltd.
"Wind-power Corporation"	CECEP Wind-power Corporation Co., Ltd.
"Energy Conservation Company"	CECEP Industrial Energy Conservation Co., Ltd.
"CECEP Guozhen"	CECEP Guozhen Environmental Protection Technology Co., Ltd.

Short Name	Full Name
"General Water of China"	General Water of China Co., Ltd.
"CECEP (Jiangxi) "	CECEP Environmental Protection Investment Development (Jiangxi) Co., Ltd.
"CECEP Techand Ecology"	CECEP Techand Ecology & Environment Co., Ltd.
"CECEP Ecological"	CECEP Ecological Environment Technology Co., Ltd.
"CECEP Environmental"	CECEP Environmental Protection Equipment Co., Ltd.
"New Era Group"	China New Era Group Corporation
"CECEP Industry"	CECEP Industry Development Co., Ltd.
"Valiant Corporation"	Valiant Corporation Ltd.
"China Geo-Engineering"	China Geo-Engineering Corporation
"China Qiyuan"	China Qiyuan Engineering Corporation
"Fourth Metallurgical Construction Company"	China Fourth Metallurgical Construction Group Corporation Ltd.
"Research Center"	CECEP Ecological Product Development and Research Center Co., Ltd.
"CECEP Institute"	CECEP Engineering Technology Research Institute
"Finance Company"	CECEP Finance Co., Ltd.
"Big Data Company"	CECEP Big Data Co., Ltd.
"CECEP Capital"	CECEP Capital Holdings Co., Ltd.
"Asset Management Company"	CECEP Asset Management Co., Ltd.
"Venture Capital Company"	CECEP Innovation Venture Capital Co., Ltd.
"CECEP (Hong Kong) "	CECEP (Hong Kong) Investment Co., Ltd.

Data Source

The data cited in this report are sourced from formal documents published internally or externally by China Energy Conservation and Environmental Protection Group Co., Ltd.

Language Versions 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).

Opening Remarks

China's ESG development emphasizes green growth and aligns with the strategic vision articulated in the Report to the 20th National Congress of the Communist Party of China that Chinese modernization is the modernization of harmony between humanity and nature, and it implements Xi Jinping Thought on Ecological Civilization. As a leading central SOE committed to building a Beautiful China, CECEP consistently upholds "conserving resources and protecting the environment" as its core purpose, regarded "meeting people's ever-growing demands for a beautiful environment" as its mission, and set "becoming a world-class conglomerate integrating energy conservation, environmental protection, and health industry" as its vision. This development positioning is closely aligned with the principles of ESG. Against the backdrop of accelerating global climate governance and a growing consensus on green development, CECEP deepens its commitment through progress in ecological conservation, technological innovation, transformation and upgrading, and fulfilment of social responsibilities, contributing to the transition to green economy and society and to a form of modernization characterized by harmony between humanity and nature.

Upholding our founding mission, we provide a demonstrable green-industrial performance record.

As a pioneer in ecological civilization, we have embedded green and low-carbon development principles into every corporate context, pursuing "zero-carbon," "zero-waste," and "green" objectives to environmentally friendly advance high-quality development. In support of major national strategies, we act as the primary platform for pollution control in the Yangtze River Economic Belt and participate in the special plan for ecological conservation and restoration in the Yellow River Basin. By the end of 2024, we had invested more than RMB 65 billion in energy-saving, environmental protection, clean-energy, and green-development projects across the Yangtze River Basin, and has gradually established multiple replicable and scalable models for pollution control, ecological restoration, and green development. To address climate change, we have engaged in policy making and pilot initiatives. We have completed policy research tasks include the *List of Nationally Promoted Low-Carbon Technologies (Fifth Batch)*; *Research on Guidelines for Financial Support of High-Quality Energy Development*; and the *Green Development Evaluation Metric System for Central State-owned Enterprises*, all of which contributed to refining national environmental and climate policy standards. The Group also hosted the COP29 China Pavilion's Side Event on green climate finance, contributing Chinese perspectives to global environmental governance.

Persevering in our efforts, we strive to be contributors to value creation.

We adhere to a people-centred development philosophy, foster an inclusive and equitable employment culture, continuously enhance employee well-being, and comprehensively protect employee rights. In implementing green supply chain development requirements, we apply the principles of "open sourcing, dynamic management, science-based selection, and win-win cooperation." Through regular supplier social responsibility audits and capacity-building training, we guide and support upstream and downstream partners in meeting social responsibility standards and initiatives, building a transparent, resilient, and sustainable supply chain. We actively implement rural revitalization and assistance programs in Xinjiang, Tibet, and Qinghai, receiving the central government agency's highest rating (Excellent) in targeted pairing-off assistance to poverty alleviation for four consecutive years. In response to sudden disasters, we immediately activate emergency mechanisms to execute environmental emergency response and livelihood protection tasks effectively, demonstrating the central SOE's responsibility to safeguard the social welfare baseline with dependable performance.

Strengthening foundations and core competencies, we are committed to standardized governance.

We continuously refine the Chinese modern enterprise system with distinct characteristics. We enforce the Party Committee's pre-decision procedures, establish deliberation rules for the Party Committee, the Board of Directors, and management meetings, and govern the Board's routine operations in accordance with law. We have integrated ESG and social responsibility disclosure processes to ensure coordinated, top-down alignment between headquarters and subsidiaries and to amplify the exemplary effects of sustainable development. Our standardized compliance management system has been continuously strengthened and organized under a "1+N" compliance framework. Guided by a *Compliance Management Manuals*, we have issued specialized compliance guidelines for each business sector and implemented a grid-based management model covering 11 major business areas and 45 key compliance priorities. We have fully implemented state-owned enterprise (SOE) reform tasks with measurable results, achieving a perfect score on the assessment for deepening SOE digitalization reform. These efforts have improved management efficiency and green operating standards and have laid a solid foundation for the next phase of SOE reform.

Looking ahead, CECEP will continue to drive development through innovation and embed ESG principles in practice. We seek to serve as the leader in the energy-conservation and environmental-protection sector, as a model for green, low-carbon development and as a contributor to building a Beautiful China.

About CECEP

Company Profile

China Energy Conservation and Environmental Protection Group is a central SOE 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. As a central SOE engaged in energy conservation and environmental protection, CECEP takes "resource conservation and environmental protection" as its tenet since its establishment. Up to now, it has made great contributions to the initiation, development, and expansion of China's energy conservation and environmental protection. Currently, CECEP has 700-plus subsidiaries and six listed companies, with its business covering 110 countries and regions at home and abroad.

Currently



CECEP has subsidiaries

700+



listed companies

6



business covering

110

countries
and regions at home and abroad

Business Segments

CECEP has developed a coherent industrial layout centered on strengthening and expanding three core businesses—energy conservation and clean energy supply; ecological environmental protection and resource recycling; and new energy development and equipment manufacturing. The Company is accelerating the cultivation of chemical reagents, health products, and related services as prospective core businesses, while prospectively venturing into emerging industries to strengthen its strategic-support capabilities. In recent years, CECEP has built distinctive advantages across the entire energy-conservation and environmental-protection value chain, spanning planning and consulting, R&D and design, investment and development, equipment manufacturing, engineering construction, operations management, and financing services. Its operations cover almost all segments of the energy-conservation and environmental-protection markets, enabling the company to deliver comprehensive energy and environmental solutions for the green development of regions and river basins.



Six Listed Subsidiaries

CECEP Solar Energy Co., Ltd. (Ticker Symbol: SZ000591)

As a controlled subsidiary within CECEP’s clean energy division, Solar Energy Company is China’s first A-share listed enterprise primarily engaged in solar power generation, with photovoltaic manufacturing as a supporting business. Its core activities cover the full spectrum of solar energy applications, including investment, construction, operation, and production related to solar farms and module manufacturing. Its solar farm assets span 24 provinces, municipalities, and autonomous regions, and include a variety of solar farm types such as ground-mounted, coastal, desert-based, floating, water-based, distributed, building-integrated photovoltaic (BIPV), and agrivoltaic installations. By the end of December 2024, total installed capacity, including operational, under-construction, planned, and pre-purchase agreement projects, reached approximately 12.114 GW. In 2024, total electricity sales were approximately 6.966 billion kWh. The resultant green power is equivalent to saving about 2.1194 million tons of standard coal and to reducing CO2 emissions by approximately 5.7692 million tons.

CECEP Wind-power Corporation Co., Ltd. (Ticker Symbol: SH601016)

As a modern joint stock company within CECEP, CECEP Wind-power Corporation has consistently prioritized wind farm operations as its core business. Strong market performance has enabled its inclusion in the CSI 500 and SSE 380 indices and its listing among the Global Top 500 New Energy Enterprises for eight consecutive years. Operating under a group-based development model that covers the full industry chain, CECEP Wind-power Corporation controls over 50 wholly owned and controlled subsidiaries. Through methodical project sequencing, CECEP Wind-power Corporation has achieved cumulative installed capacity exceeding 8 GW across operational, under construction, and approved projects. Guided by a dual track strategy of onshore and offshore development with global expansion, its business network now covers 14 provincial-level regions in China, and it has commissioned the Yangjiang Offshore Wind Farm (Guangdong, China) and the White Rock Wind Farm (Australia). Its international industrial footprint continues to deepen through ongoing optimization of resource allocation.

Valiant Corporation Ltd. (Ticker Symbol: SZ002643)

As a platform-based enterprise within CECEP that emphasizes R&D-driven innovation, Valiant Corporation operates an integrated innovation platform covering organic synthesis, purification, inorganic synthesis, and polymerization. Since its founding, Valiant Corporation has focused on the development and industrialization of advanced new materials, steadily expanding its product portfolio and business scope. This progression has broadened its position from a specialist in a single material category to a leader across multiple categories. Today, Valiant Corporation concentrates on the research, development, production, and sales of products in four principal sectors: environmental protection materials, electronic information materials, new-energy materials, and life sciences and pharmaceutical materials.

CECEP Environmental Protection Equipment Co., Ltd. (Ticker Symbol: SZ300140)

As a subsidiary of CECEP specializing in solid waste management and environmental protection, CECEP Environmental operates in municipal waste-to-energy and cogeneration, energy saving and environmental protection equipment, and specialized electrical equipment. Its operations extend across more than 30 provinces and municipalities in China and over 50 countries and regions worldwide, maintaining a leading position in domestic industry scale. Guided by a green development philosophy, CECEP Environmental actively supports major national and regional initiatives, including the Belt and Road Initiative, Yangtze River ecological protection, Yellow River Basin conservation, Beijing–Tianjin–Hebei environmental governance, and the Guangdong–Hong Kong–Macao Greater Bay Area development. It aims to become a world-class enterprise in the ecological and environmental protection sector.

CECEP Guozhen Environmental Protection Technology Co., Ltd. (Ticker Symbol: SZ300388)

As a subsidiary of CECEP specializing in integrated water environment management, municipal sewage treatment, rural water environment remediation, and industrial water system services, CECEP Guozhen provides comprehensive environmental solutions summarized as Three Vertical and Three Horizontal Water Management Capabilities. Its services cover smart operations, engineering construction, intelligent manufacturing, municipal and industrial water utilities, and watershed management. CECEP Guozhen is committed to water resource development and utilization and has developed a robust, vertically integrated industry chain. It is a leading example of mixed ownership reform and serves as an industry benchmark.

CECEP Techand Ecology & Environment Co., Ltd. (Ticker Symbol: SZ300197)

As a subsidiary of CECEP that provides ecological restoration and environmental construction services, CECEP Techand Ecology focuses on ecological restoration, environmental protection, landscape design, and ecological technologies. CECEP Techand Ecology maintains a vertically integrated industry chain covering planning, design, research and development, financing, construction, production, resource recycling, and operations. It supports multiple technological innovation platforms centered on an academician workstation and sustains a comprehensive technology system for ecological restoration and environmental remediation. CECEP Techand Ecology holds 418 nationally authorized patents and has received ten provincial- and ministerial-level science and technology awards. Recognized as a national high-tech enterprise, a key company in China’s environmental protection sector, and a leader in ecological restoration, CECEP Techand Ecology has completed more than a thousand restoration and remediation projects, offering clients combined solutions for ecological construction and operation.

Awards in 2024

Group-level Awards

China Energy Conservation and Environmental Protection Group

Included into the Central SOE Responsibility Management Pioneer 30 Index with an outstanding four-star rating for three years in a row

CECEP CSR Report Receives the highest rating from the China Corporate Social Responsibility Report Rating Expert Committee for the ninth consecutive year

Awarded Green Booth Award 2023 at the Second China International Supply Chain Expo

ESG Ratings for Subsidiaries

CECEP Guozhen Environmental Protection Technology Co., Ltd.

Received an AA rating in Wind's ESG assessment

Valiant Corporation Ltd.

Received rating in Wind's ESG assessment

CECEP Environmental Protection Equipment Co., Ltd.

Received rating in Wind's ESG assessment



Awards for Subsidiaries

CECEP Wind-power Corporation Co., Ltd.

Outstanding Practices in Sustainability Among Public Companies 2024

China Association for Public Companies

November 2024

Shanghai Stock Exchange's Rating of A for Annual Listed Company Disclosure 2023-2024

Shanghai Stock Exchange

October 2024

Best Practices in Board Office Management for Public Companies 2024

China Association for Public Companies

December 2024

CECEP Solar Energy Co., Ltd.

Outstanding Practices in Corporate Culture Development Among Public Companies 2024

China Association for Public Companies

November 2024

Best Practices in Board of Directors Offices for Public Companies 2024

China Association for Public Companies

November 2024

Best Practices in Board of Directors for Public Companies 2024

China Association for Public Companies

November 2024

CECEP Guozhen Environmental Protection Technology Co., Ltd. General Water of China Co., Ltd.

Top 10 Most Influential Water Companies in China

E20 Environmental Platform

March 2024

CECEP Environmental Protection Equipment Co., Ltd.

ESG Golden Bull Award: Top 20 Rising Stars

China Securities Journal, China Reform Holdings Corporation Ltd.

December 2024

AAA-Rated Municipal Waste-to-Energy Plant

China Association of Urban Environmental Sanitation

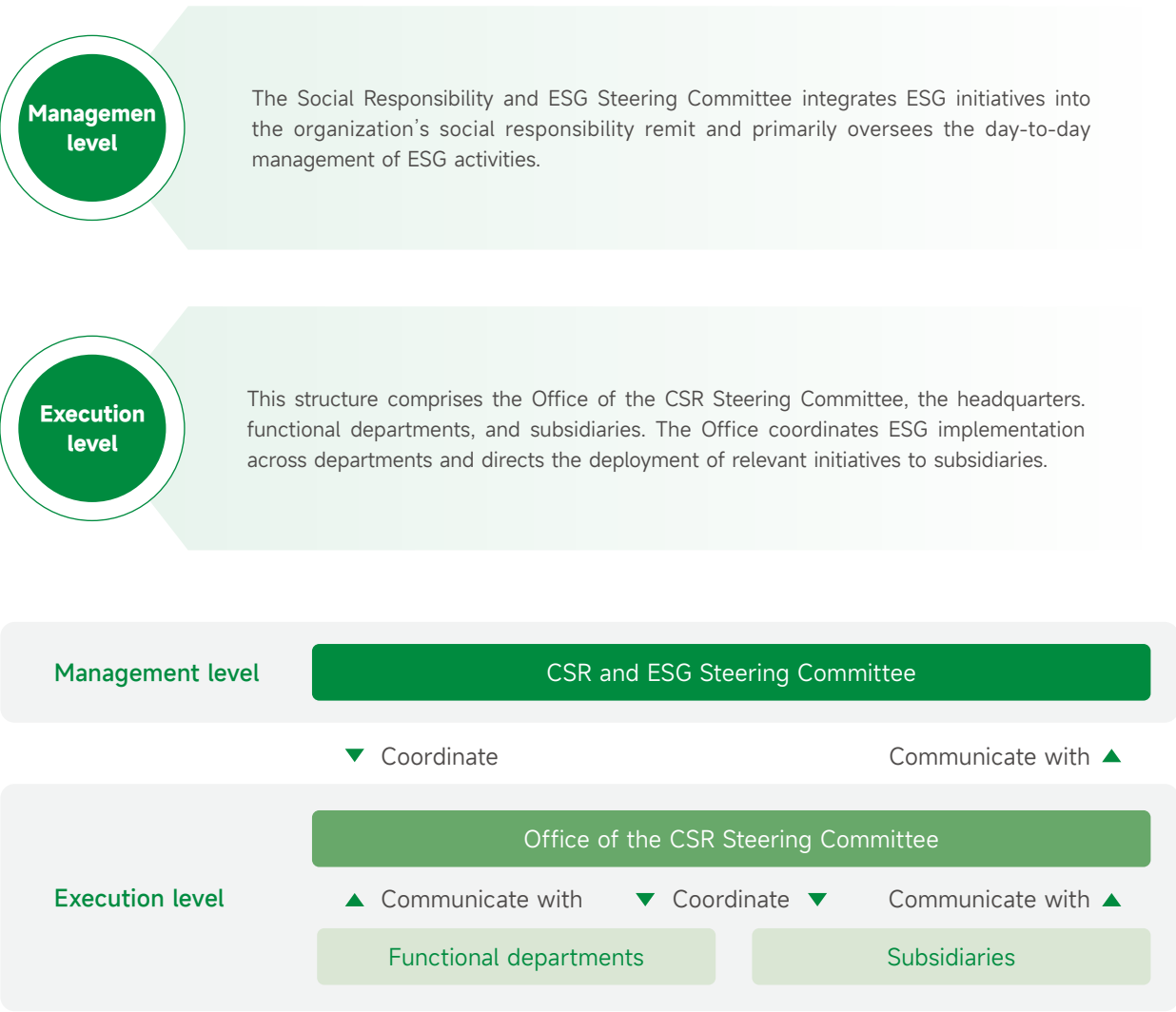
March 2024

ESG Governance

CECEP integrates sustainability principles into core operations and systematically strengthens ESG governance framework. By refining governance mechanisms and embedding ESG considerations into strategic planning and industrial coordination, CECEP builds capacity and steadily raises ESG management standards, thereby establishing a solid foundation for the group’s long-term sustainable development.

ESG Governance Architecture









The Group advances social responsibility initiatives alongside the comprehensive implementation of the ESG governance system. Building on the current social responsibility management structure, The Group develops an ESG governance architecture that includes both management and execution levels. This architecture integrates ESG requirements into corporate governance, business processes, and daily operations, ensuring effective implementation and continuous improvement.



ESG Topic Assessment

Stakeholder Communication

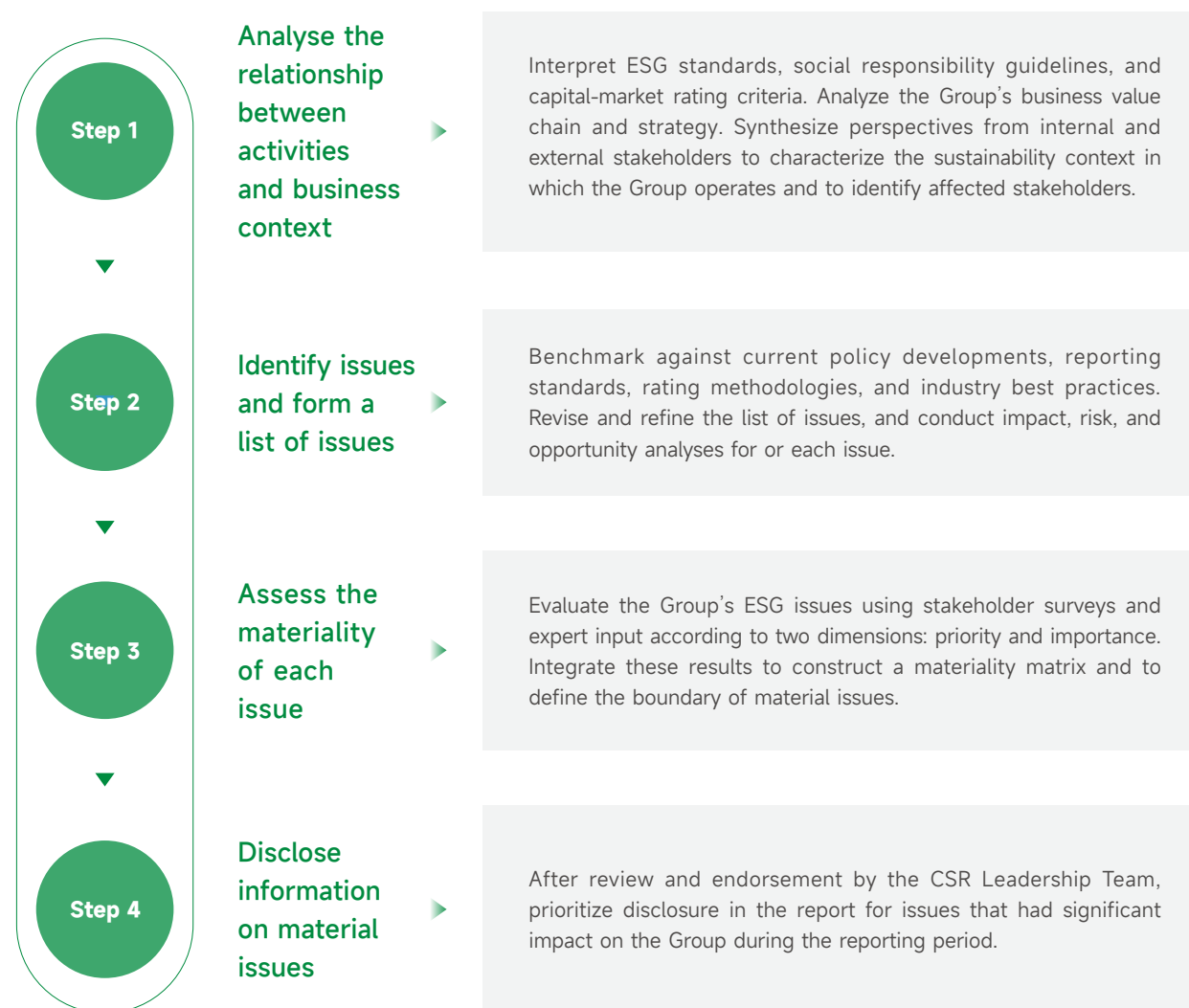
The Group maintains proactive engagement with stakeholders, including government and regulators, investors and shareholders, partners, financial institutions, and users. Through multiple routine and specialized communication channels, the Group ensures timely, comprehensive understanding of stakeholder needs and expectations.

Stakeholders	Concerns	Ways to Communicate	Scope
 Government and Regulators	<ul style="list-style-type: none">Compliance with laws and regulationsPreservation and appreciation of valueEnvironmental protectionJob creationTechnological innovationWorkplace safety	<ul style="list-style-type: none">Open to supervision and inspectionsFocus on core ecological and environmental protection businessStrengthen industrial cooperation	National Development and Reform Commission, SASAC, Ministry of Ecology and Environment, Ministry of Industry and Information Technology, Ministry of Commerce, Ministry of Housing and Urban-Rural Development, National Health Commission, etc.
 Investors and Shareholders	<ul style="list-style-type: none">Standardized OperationsProper managementControlled riskPreservation and appreciation of valueInvestment returns	<ul style="list-style-type: none">Fight against corruption and promote integrityReduce costs and enhance efficiencyImprove governance mechanismsEnhance profitability	SASAC, Shareholders other than CECEP in subsidiaries at all levels
 Partners	<ul style="list-style-type: none">Promise keepingIntegrityTransparency and equalityMutual benefits	<ul style="list-style-type: none">Strengthen supplier managementDeepen strategic partnerships	Suppliers, service providers, distributors, and other partners
 Financial Institutions	<ul style="list-style-type: none">Prudent operationTimely loan repaymentsCorporate reputationRisk control	<ul style="list-style-type: none">Strengthen strategic cooperation with banks	China Development Bank, Export-Import Bank of China, Industrial and Commercial Bank of China, China Construction Bank, etc.
 Users and Consumers	<ul style="list-style-type: none">Quality assurancePrompt ServiceHealth and greenness	<ul style="list-style-type: none">Practice responsible marketingProtect customer information and privacy	Domestic and international users and consumers of CECEP’s products and services
 Social Organizations	<ul style="list-style-type: none">Support and participationCompliance with rulesFulfillment of obligationsMutual development	<ul style="list-style-type: none">Participate in activities organized by NGOs and other organizationsParticipate in drafting national and industry standardsIncrease industry exchanges	Various pro bono industry associations and social organizations
 Communities and the Public	<ul style="list-style-type: none">Environmental protectionHarmonious communitiesWorkplace safetyProsperity for allStable employmentContribution to stability	<ul style="list-style-type: none">Engage in community survey and daily communicationJoin in pro bono community activities	Communities where CECEP’s headquarters and subsidiaries are located, as well as regions relevant to CECEP’s business operations.
 Employees	<ul style="list-style-type: none">Compensation and benefitsCareer developmentRights protectionHealth and safety	<ul style="list-style-type: none">WeChat Official AccountThematic lectureCommunication with trade unions and employee representative conferencesInternal publications, office systems, etc.	All employees

Materiality Analysis

The Group conducts materiality assessments of ESG issues to better address stakeholder expectations and demands. During the reporting period, the Group evaluated each issue along two dimensions: priority and importance. This comprehensive approach identified the impacts, risks, and opportunities associated with each issue, providing clear guidance for the Group's ESG strategy and improving overall ESG management capabilities.

Materiality Assessment Process



Materiality Matrix



Our Commitment to SDGs

Guided by the United Nations Sustainable Development Goals, CECEP aligns corporate development with this global agenda. The Group leverages core strengths to advance social progress and address global challenges, contributing expertise and solutions.

SDGs	Our Philosophy	Our Actions in 2024
	Guided by rural revitalization as the primary pathway, pursuing the overarching goal of eradicating all forms of poverty	Spent RMB 12.076 million in consumption-based assistance. Invested RMB 187.379 million in reimbursable and RMB 23 million in non-reimbursable assistance Deeply integrated rural revitalization strategy with mechanisms for realizing the value of ecological products
	Promoting ecological agriculture, strengthening food security and advancing the elimination of hunger with greenness	Increased investment in ecological-environment infrastructure Expanded joint development across upstream and downstream segments of the industry chain in rural area Introduced an innovative model for "Load on the Future Yield Right of Value of Ecosystem Product (VEP) in Specific Geographic Unit"
	Prioritizing the health and safety of people and the environment, and implementing the Healthy China strategy through concrete actions	Obtained occupational health and safety management system certification for 126 companies Promoted China-Tanzania friendship and supported the China-Africa community of health for all New Era Group's Healthy China volunteer services reached 295,000 users
	Recognizing education as the most effective means to break the intergenerational cycle of poverty, and establishing systematic student-assistance programs to support sustained educational attainment	Helped 3,000 beneficiaries through public-education assistance program "Green Seedlings in Warm Winter" Donated RMB 1.1 million through "Make Your Dream Come True Action" student-aid initiative Provided one-on-one micro-wish support to 100 children in targeted pairing-off assistance counties
	Upholding gender equality, and developing a robust framework to protect women's legal rights and interests	Advocated equal employment policies Provided "two-cancer" insurance for low-income, eligible women in rural area
	Grounded in water-resource management and water-security business, supporting and participating in drinking-water improvement projects in targeted pairing-off assistance areas to deliver professional, public-benefit outcomes	A subsidiary of General Water of China in Guiyang was recognized as a "Best Practice Case in Safety Culture" by the Emergency Management Department's Education Center Assisted in developing Fuchuan's brand"Yaoshan Spring Water"
	Concentrating on core business in energy conservation, environmental protection, and new energy, while strengthening core functions to better serve national ecological-civilization development and green-development strategies	Installed renewable generation capacity totaled 25.6885 million kilowatt, produced 28.313 billion kilowatt-hours of green electricity, which corresponds to a reduction of about 8.54 million tons of standard-coal equivalent in energy consumption
	Committed to ensuring livelihoods and employment while promoting inclusive growth, and contributing to shared prosperity within a community of common destiny	Employed 1,794 individuals annually Increased villagers' incomes by RMB 30,000 through the ton-bag "Wealth Building Workshop"

SDGs	Our Philosophy	Our Actions in 2024
	Assuming responsibilities, developing an innovation-driven industrial ecosystem and constructing future-oriented green infrastructure to establish a robust foundation for sustainability	The energy-conservation and environmental-protection industry continued to scale up Built eight industry chains, including green and smart industry chains Emerging industries generated revenue of RMB 36.64 billion
	Promoting equity across different regions, improving the ecological environment in underdeveloped areas, and offering local residents fairer conditions for survival and development through environmental services	Launched ecological conservation projects across multiple regions, including the Yangtze River Economic Belt, the Beijing-Tianjin-Hebei area, and the Yellow River Basin
	Applying systematic green-innovation solutions, supporting cities' low-carbon transitions and community revitalization, and enhancing the quality of human habitats	Annually invested RMB 187 million in CECEP's 100 MW Songxian (Jiugao Town) wind farm project and created more than 100 jobs. The China-assisted Mali Solar Demonstration Village Project in rural Africa was selected as one of the "Top 10 Cases" in the Blue Book for Central State-Owned Enterprises' Overseas ESG Efforts
	Integrating responsibility and efficiency across production and consumption cycles, promoting green lifestyles and implementing circular-economy practices to reshape the way toward a sustainable society	Promoted waste-to-resource utilization through core operations and processed 25.846 million tons of solid waste annually Saved energy and reduced energy consumption across the entire production and operation lifecycle Increased resource efficiency through technological innovation, and invested 2.86% of revenue in R&D
	Translating climate-change challenges to opportunities for green transition and developing climate-resilient models for development	Built a "1+3+3" carbon peaking and neutrality strategy Ranked among the Top 50 Chinese enterprises for carbon neutrality contributions - Energy Company
	Committed to comprehensive water-environment management and ecological restoration in key river basins so as to restore healthy aquatic ecosystems that provide a resilient foundation for aquatic life	Actively advanced smart environment monitoring systems Piloted region-specific ecological conservation solutions to establish an industrial model of "Environment Restoration +"
	Guided by the thorough understanding that "mountains, waters, forests, farmlands, lakes, grasslands, and deserts form a unified community of life," protecting, restoring, and promoting the sustainable use of terrestrial ecosystems	Grew more than 200 resilient plant species with environmental stress resilience Built comprehensive restoration projects for mountains, waters, forests, farmlands, lakes, grasslands, and deserts across multiple regions nationwide
	Practicing green mission, fostering economic prosperity through sustainability and contributing to peaceful progress	Improved corporate governance and ESG management systems Held zero-tolerance attitudes towards corruption Advanced green development and mutually beneficial cooperation through extensive overseas projects
	Pursuing coordinated, sustainable responses to ecological challenges and creating a new pattern of cooperative, mutually beneficial development in partnership with stakeholders and host governments	Formed multi-tiered, cross-sector strategic partnerships Engaged social stakeholders in targeted pairing-off assistance. Built new models of ecological governance through coordinated efforts between central SOEs and local areas

Pooling Every Drop Applying the “Two Mountains” Theory to Build an Eco-friendly Landscape

As a SOE committed to supporting China’s strategies, CECEP operationalizes the principle that “lucid waters and lush mountains are invaluable assets.” Drawing on core capabilities in energy conservation and environmental protection, the Company delivers environmental governance and transparent disclosure, positioning itself as a steward of natural capital and a partner in creating green value.

Leading in Standard-setting to Refine Top-Level Design for Ecological Product Value Realization

CECEP continues to strengthen its state-recognized leadership in research on the value realization of ecological products. The Company supports national and local development and reform commissions, agricultural and rural affairs authorities, and ecological and environmental protection agencies in conducting policy and planning research, and actively provides assistance to national pilot programs on ecological-product value realization.

On a national level

- Conducting research on the National Development and Reform Commission’s **lists of ecological product industry** and the **criteria for selecting VEP projects**; supporting the identification of national model cases for ecological product value realization and compiling these cases into a handbook
- Leading the development of China’s first **group standard for the evaluation of agricultural ecological products**

At the local level

- After completing the **15th Five-Year Plan Research on Realizing the Value of Ecological Products** for Ningxia and Jiangxi, we assisted the Ningxia Hui Autonomous Region in compiling China’s first **List for Green Finance-endorsed Ecological Product Industry Projects**. We supported Hainan Province in developing the nation’s first Three-Year Action Plan for Realizing the Value of Agricultural Ecological Products and conducted China’s inaugural watershed-level ecological-product value accounting for the agricultural sector
- We supported Hainan Province in developing the nation’s first **Three-Year Action Plan for Realizing the Value of Agricultural Ecological Products** and conducted China’s first watershed-level ecological-product value accounting for the agricultural sector
- We collaborated with Yanqing District (Beijing), Fuzhou City (Jiangxi), Huaihua City (Hunan), and Shangluo City (Shaanxi) to design Huaihua’s **Ecological Product Value Realization Project Certification System**, establish project standards, and provide technical support for selecting ecological-product industry projects in Huaihua

Integrating Industry and Finance to Establish a Model Project for Ecological Product Value Realization

CECEP remains committed to supporting major national strategies and serves as the primary platform for pollution control in the Yangtze River Economic Belt. This role also applies to other key regional initiatives, including the Yellow River Basin, Xiong’an New Area, the Guangdong–Hong Kong–Macao Greater Bay Area, and the Beijing–Tianjin–Hebei integration. Through business model innovation, the Company links enhanced ecological assets resulting from environmental governance with the development of green industries.



“Five-Chain Integration” Creates the “Linyi Model” for Integrated Solid Waste Management

CECEP (Linyi) Environmental Energy Co., Ltd. operates a 1,500-ton-per-day municipal waste-to-energy plant. On the existing site, the company focuses on the municipal waste-to-energy business while concurrently constructing facilities for food waste, animal carcasses, sludge, and sewage treatment. These systems are integrated via overhead utility tunnels and interconnected networks for steam, reclaimed water, and biogas. A digitalized, end-to-end monitoring platform provides real-time visualization of waste flows, energy dispatch, and emissions. Shared infrastructure, including roads, green space, and emergency reservoirs, is developed in collaboration with the municipal government and surrounding communities, transforming the project into an open-loop public service park. Energy is used in a tiered manner, and thermal efficiency is substantially improved, while integrated treatment of multiple solid-waste streams enables closed-loop park operations. All wastewater, residues, and biogas are processed on site, eliminating secondary transport and associated pollution. Government agencies can share environmental infrastructure without additional land or public facilities, yielding sustained reductions in regional operating costs. The site thereby establishes a demonstration model for converting legacy assets into new drivers of growth through integrated “waste–green energy–public services” operations.



Linyi Solid Waste Eco-Recycling Industrial Park



Mutual Splendor in the Red Townscape and the Green Scenery

The Jinggangshan Ciping Town Sewage Pipeline Network Upgrade and Yicui Lake Water System Treatment EPC Project, implemented by CECEP Techand Ecology, is located in Ciping Town, Jinggangshan City, Jiangxi Province. The project systematically examines the ecological conservation and urbanization challenges in Ciping Town and seeks to balance three key relationships: urban growth with intact ecosystems, residents' well-being with ecological quality, and urban living spaces with tourism development zones. By remediating the Yicui Lake water system and upgrading the sewage pipeline network, the project optimizes the supply of distinctive ecological products, including material, regulatory, and cultural-service benefits. It realizes ecological product value through three pathways: appreciation of ecological product value, concession-based operation of ecological spaces, and the synergistic integration of ecological spaces with adjacent industrial layouts.



Jinggangshan Ciping Town Sewage Pipeline Network Upgrade and Yicui Lake Water System Treatment Project

Highlights

Rainwater-separated sewage system covered in

all town

Extended the service life of the drainage pipeline network to

50 years

Increased COD flow to sewage treatment plant to

Over **132** mg/L

The length of visitor's stay increased by

45%

Annual visitors in the project area exceeded

2 million



Supporting Targeted Pairing-off Assistance Songxian County By Realizing the Value of Ecological Products

In targeted pairing-off assistance to Songxian County, Luoyang, Henan Province, CECEP capitalizes on the county's natural resource endowments. Emphasizing wind power development and carbon sink resource development as primary drivers, the Company launched multiple projects: the 100 MW Songxian County Jiugao Town Wind Farm; the distributed wind-power program Thousand Towns and Ten Thousand Villages Harness the Wind Initiative; forestry carbon sinks; soil- and -water conservation carbon sink projects; and energy saving livelihood measures for rural towns. Collectively, these measures enable Songxian County to achieve an early breakthrough in ecological product value from zero, outpacing other counties in Luoyang City and stimulating momentum for rural revitalization and sustainable development across the county.



CECEP Wind Farm in Jiugao Town

Highlights

Annually provided green electricity of

230 million kWh

Equivalent to saving standard coal of

88,000 tons

Reduced CO₂ emissions

215,000 tons

Involving farmers from 16 townships in Songxian County

80000 forest farmers

Estimated annual carbon credits generated

100,000 tons

Economic value converted from ecological value

RMB **10 million**



Fishery-solar Hybrid Project to Gain both Ecological and Economic Benefits

CECEP's Zhejiang Changxing Comprehensive Demonstration Project for 70 MW PV-based Smart Agriculture is sited in Yantao Village, Lvshan Township, Changxing County, Huzhou City, Zhejiang Province, and covers more than 550 mu. This innovation demonstration project integrates PV-based electricity generation with smart agriculture, comprising a 50 MW fishery-solar hybrid project and a 20 MW agriculture-solar hybrid project. Guided by the principle of "ecological priority and green development," the project uses integrated photovoltaic technologies to combine renewable-energy generation with agricultural and aquaculture production. It leverages the ecological material product of energy within agricultural landscapes to raise agricultural product quality and to improve the comprehensive efficiency of land use, reimagining the value chain of traditional agricultural production.



Changxing Comprehensive Demonstration Project for PV-based Smart Agriculture

Highlights

Overall ecological value throughout the project construction and operation lifecycle

RMB **2,290,512,500**

Including ecological value

RMB **1,084,837,100**

Resource value

RMB **594.8573 million**

Environmental value reduction

RMB **610.8181 million**

(Including the value of greenhouse gas

RMB **372.1115 million**)

The project increased the yield per mu of farmland from less than RMB1,000 to at least an average of

RMB **35,000**

Provided job opportunities for residents in towns and villages

Over **100** jobs

Effectively addressed the employment of surplus workforce and created space for returning farmers to start businesses in rural areas.

Annual electricity generated

76.09 million kWh

Reduced annually the use of standard coal by

21,300 tons

Reduced CO₂ emissions

64,000 tons

Unleashing Infinite Possibilities: Advancing the Carbon Peaking and Neutrality Strategy to Address Climate Change

Against the backdrop of China's deepening carbon peaking and neutrality strategy and the accelerating global consensus on sustainability, CECEP has fully implemented the major strategic directives of the CPC Central Committee and the State Council on carbon peaking and carbon neutrality. The Company has steadily advanced carbon-peaking actions, consistently treating support for the national carbon peaking and carbon neutrality agenda as a core mission. The Company has taken an active role in policy and standard development and pilot program deployment, intensified investment in green technology R&D, and leveraged its industry leadership to scale impact.

Across key sectors, the Group has prioritized energy mix optimization, materially increased the share of clean energy, strengthened end-to-end carbon emissions management, and built a robust monitoring and assessment framework. Through these concrete measures, the Group has delivered measurable carbon reductions while growing the scale and competitiveness of green businesses. These achievements not only underpin the Group's own low-carbon transition but also enable the Group to contribute its expertise and resources to society's pursuit of the carbon peaking and carbon neutrality goals through professional practice.



Hosting COP29 Side Events to Voice China's Narrative on Global Climate Governance

In November 2024, the 29th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP29) convened in Baku, Azerbaijan. CECEP, together with the Chinese Society for Environmental Sciences, organized the COP29 China Pavilion's side events. The Group's affiliated research center and the Climate Finance and Investment Professional Committee of the Chinese Society for Environmental Sciences co-organized side events themed "Climate Finance and Investment" and "China's SOEs Towards Green Development." These initiatives helped to deepen and consolidate international cooperation on climate issues.



COP29 On-site



Governance

The Group has integrated its carbon peaking and neutrality efforts with its climate-change response strategy. Building on an established carbon peaking and neutrality management framework, The Group has built a two-tier organizational system to advance mitigation efforts. This system creates communication channels between carbon peaking and neutrality and climate-change functions and enables top-down coordination of the "11265" carbon-peak strategy. The annual work ledgers break down targets, clarify responsibilities, and strengthen oversight and implementation of carbon peaking and neutrality and climate-change measures.

- Conduct research on theories, policies, standards, and methodologies for carbon peaking and carbon neutrality, and monitor developments in carbon-related technologies
- Support carbon-asset management across the system
- Actively contribute to the development of standards, regulations, and institutional mechanisms for carbon peaking and carbon neutrality
- Proactively participate in designing climate-finance frameworks and in fostering international cooperation



○ Strategy

CECEP develops a *Carbon Peak Action Plan* and advances several concrete tasks: deepening innovation-driven development to create integrated energy services; strengthening competitive advantages to promote coordinated pollution reduction and carbon mitigation; and intensifying research to improve intellectual contributions and standards for achieving peak carbon emissions and carbon neutrality. In 2024, leveraging business expertise, the Group pioneered research on carbon-emission evaluation and management for medium- to low-emission companies and issued the Carbon Emission Evaluation Measures for Investment Projects (Trial Implementation), which enhances the scientific rigor of carbon assessments and investment decision making and integrates carbon-emission management with business decision processes.

	Risk Type	Climate Related Risks	Potential Financial Impact	Solutions
Transition risk	Policy and legal risk	Climate-related regulations are becoming increasingly stringent, requiring the Group to achieve compliance across production and operational activities	Increased emission costs and higher expenditures to meet operational compliance	Ensure compliance with laws and regulations to maintain lawful operations. Leverage core competencies to integrate pollution mitigation and greenhouse gas emission reductions
	Technology risk	The Group is required to accelerate the transition of existing products and services toward low-carbon technologies	Rising investment and R&D spending on new technologies further elevate operating costs	Conduct innovative low-carbon technologies Strengthen mature zero-carbon technologies Pursue prospective negative carbon technologies
	Market risk	Customer demand for climate-mitigation and adaptation products and services is rising.	Failure to offer appropriate climate-aligned products and services may reduce market demand and result in customer losses, causing supply-demand imbalances and revenue decline	Pilot in building CECEP carbon-neutral brands Promote model projects for low carbon operation upgrades and implement zero-carbon and negative-carbon technology
	Reputational risk	Stakeholders expect firms to take proactive measures and improve transparency in information disclosure	Delayed disclosure of climate-related information can prompt negative comments and reputational harm	Require listed subsidiaries to disclose performance data via ESG reports, official accounts, and other appropriate media. Encourage employees to adopt and green, low-carbon practices
Physical risk	Acute risk	Frequent extreme weather events, including ice storms, heavy snowfall, fog, and seasonal flooding, substantially increase workplace safety risks	Extreme weather events may cause casualties and property damage, necessitating additional investment in safety and production controls	Establish robust emergency response mechanisms for climate events, defining contingency measures for climate-related incidents Deploy digital, intelligent carbon management platforms to deliver timely risk alerts and to continuously improve emergency-support systems
	Chronic risk	Climate change reduces the service life of the Group's tangible assets	Climate impacts impose risks of terminal damages on operations and increase procurement and maintenance costs	Strengthen management of green and low-carbon supply chains Enhance real-time monitoring and detection of weather variations to mitigate their impacts on operations

○ Risk Management

CECEP attaches great importance to climate-change risk management and continually refines its risk management framework to address threats that climate change poses to corporate operations. Drawing on actual business activities, the Group systematically identifies potential impacts and risks arising from extreme weather events, including heavy snow, strong winds, and typhoons. On this basis, the Group formulates targeted emergency-response plans, enhances coordination with meteorological agencies and traffic-police authorities, and continually optimizes emergency-support mechanisms. By fully leveraging meteorological information systems, the Group implements real-time monitoring of temperature and other relevant environmental data at critical nodes of major projects, enabling timely monitoring, forecasting, and early-warning functions.



○ Metric and Target

CECEP institutes a “1+3+3” carbon peaking and neutrality strategy framework. The Group’s carbon peaking and neutrality vision is to achieve its own carbon-peak and carbon-neutrality targets at the earliest feasible date and to evolve into a world-class provider of carbon-peak and carbon-neutrality solutions. The Group aims to lead the high-quality development of green industries and to generate original low-carbon, zero-carbon, and negative-carbon technologies. To this end, the Group will strengthen technological innovation, intellectual support, and exemplary role, positioning itself as a key participant, a significant contributor, and a proactive guide in China’s progress toward carbon peaking and neutrality.

Transition risk

Physical risk



Leading by Green Development

Creating a Low-Carbon Future Together

CECEP continues to deepen the study and implementation of Xi Jinping Thought on Ecological Civilization and fully implements the directives of the SASAC. The Group strictly follows the guidance of the National Conference on Ecological and Environmental Protection and the Work Conference on Central SOEs' Environmental Protection and Low-Carbon adheres to the principle of green development, and supports high-quality economic development through a high-quality ecological environment. Attentive to public aspirations for a healthy environment, the Group takes a leading role in green, low-carbon, and high-quality development. The Group advances low-carbon, health-oriented, and exemplary industrial projects and is committed to delivering premium green and healthy products together with professional ecological-environment management services. Collaborating with all sectors of society, the Group seeks to establish a modern green industrial system. Driven by innovation and guided by practical action, the Group contributes to a future in which humanity and nature coexist harmoniously, supporting the construction of a "Beautiful China" and promoting a green, sustainable, and better standard of living.



Environmental Compliance Management

CECEP regards environmental compliance management as a systemic undertaking. The Group elevates green development to a core strategy and achieves a transformative shift from passive compliance to proactive leadership through an integrated approach that includes top-level planning, green energy provision, technological enablement, standardization initiatives, and ecological restoration.



Ecological and Environmental Management

Guided by the principle of green development, the Group continuously strengthens its ecological and environmental management system by refining institutional frameworks, optimizing industrial structures, and accelerating integration; these measures promote the implementation of internal green management practices.



Institutional Development

The Group implements Xi Jinping Thought on Ecological Civilization and continues to develop and refine management systems and institutions for ecological and environmental management. The Group has updated the *Environmental Protection Compliance Management Regulations*, a comprehensive programmatic document for regulatory adherence. By the end of 2024, subsidiaries had established or revised 3,344 institutional documents, and 121 subsidiaries had achieved environmental management system certification.



Management Structure

The Group's Safety and Environmental Protection Supervision and Management Department oversees environmental compliance throughout the organization. Business units implement the mandated dual responsibilities for each position and the "three managements and three musts" framework for environmental protection, and bear direct accountability for environmental performance within their respective domains. The principal business executive in each subsidiary serves as the chief environmental officer, with overall responsibility for the subsidiary's environmental management. The Group and its subsidiaries execute environmental protection target agreements at each organizational level, and compliance with these agreements is subject to performance evaluation.



Main Measures

The Group's green management is anchored in strategy, reinforced by compliance management, and advanced through industry-wide green transformation enabled by innovative technologies. In 2024, the Group's main measures for ecological and environmental management are as follows:

Eco-Environmental Risk Management

The Group prepares the Management Rules on Environmental Protection Inspection and Supervision and the Emergency Response Plan for Environmental Incidents, which defines incident classification and grading, organizational structures and responsibilities, monitoring and early-warning systems, tiered response protocols, information-reporting mechanisms, and emergency-handling procedures. Using an information management and control platform, the Group issues early warnings and operational guidance to subsidiaries at all levels. In 2024, the Group conducted ecological and environmental risk inspections and provided guidance and assistance. Those measures eliminated 270 identified issues and hazards, advanced upgrades to 52 outdated environmental facilities and process technologies and supported improvements to monitoring and surveillance systems at 59 grassroots subsidiaries.

Ecological and Environmental Protection Information-Based Supervision

The Group advances the informatization of ecological and environmental compliance management by developing the Green Account Big Data Management Platform—Green Archives. This platform establishes a direct data channel to the core of ecological and environmental compliance management, enabling a single-graph view of key enterprises with pollution emission, one-click reporting of issues and hazards, and unified network access to work tasks. Following public testing by 682 subsidiaries, the platform is officially launched.

Ecological Space Management and Project Access Compliance

The Group requires all subsidiaries at every level to implement biodiversity conservation measures during investment and construction activities, as set forth in the *Environmental Protection Compliance Management Regulations*. Investment and construction projects must conform to local government's biodiversity conservation master plans and secure all requisite approvals for compliance before construction.



Management Effectiveness

In 2024, the Group maintained stable environmental management and reported no major or higher-level sudden environmental incidents. Subsidiaries including CECEP Feixi, Energy Conservation Company's PCB Wastewater Treatment Plant, and Chengbei Wastewater Treatment Plant were jointly recognized as Company of Environmental Integrity in Anhui. New Era Group Yantai was designated a Company of Green Supply Chain Management in Shandong. General Water of China Shenzhe's research on quantitative dosing of sludge conditioners received the Third Prize in the Employee Technological Innovation of National Mechanical, Metallurgical, and Building Materials Industry.

○ Consolidating the Foundation of Green Development

The Group faithfully implements the decisions and directives of the CPC Central Committee and the State Council, and positions support for major national strategies at the core mission. The Group actively participates in regional flagship initiatives, including comprehensive protection of the Yangtze River, ecological conservation in the Yellow River Basin, development of the Guangdong-Hong Kong-Macao Greater Bay Area, and coordinated development of the Beijing-Tianjin-Hebei region. The Group undertakes landmark ecological-restoration projects that strengthen national ecological-security frameworks and promote balanced regional development. Concurrently, the Group advances upgrading to green industry through demonstration projects, such as low-carbon wastewater treatment facilities and green factories, establishing replicable, scalable technical solutions and management standards to drive industry-wide green transformation. The Group is also expanding investment and operational capacity in clean energy, notably wind and solar power, to increase green electricity supply and to underpin national energy security and carbon peaking and neutrality targets. The Group has issued an *Implementation Plan for Enhancing Integrated Solutions Capabilities of Green Regional Energy and Environment*, adopting a systematic approach that coordinates the lifecycle of planning, design, construction, and operation. The Plan compels subsidiaries to strengthen integrated-service capabilities and to build a green, low-carbon integrated solutions supply system that aligns with SOE standards.

CECEP Guozhen Wastewater Treatment Plant + Photovoltaic + Energy Storage Project

In 2024, newly installed photovoltaic capacity totaled 1,350.65 kW, producing an average of 1.5154 million kWh annually. A new energy storage station with an installed capacity of 100 kW/215 kWh was commissioned, yielding a storage ratio of 2.59%, up from 1.49% in 2023. The innovative model of "PV + wastewater treatment plant" was fully advanced, upgrading wastewater treatment facilities into "urban energy conversion hubs" and promoting the deep integration of resource recycling with green, low-carbon development.

Energy Conservation Company Feixi Waste-to-Energy and Biogas Purification Project

Focusing on the Yangtze River Economic Belt, provincial capitals, and economically developed cities in South China, the Group prioritizes industrial and wastewater heat recovery as well as shallow geothermal energy to provide multi-energy complementary regional clean energy supply services. Its Feixi waste-to-energy biogas purification project, once operational, is projected to save 2,815 tons of standard coal annually and to reduce CO₂ emissions by 7,320 ton per year.

CECEP Industry Demonstration Low-Carbon Industrial Park Project

The Group continues advancing the development of CECEP's signature demonstration zones of Low-Carbon (Near-Zero Carbon) Industrial Park. Develop and finalize the Green Building Plan for the Zero-Carbon Pavilion within the Near-Zero Carbon Zone of CECEP (Jiashan) Intelligent Manufacturing Industrial Park.



○ Ingraining an Eco-Conscious Culture

The Group accelerates the adoption of green production practices and sustainable lifestyles, guiding internal and external stakeholders to align with green development requirements, and encouraging citizens to adopt conscious, action-oriented commitments to advance green development.

Promoting Green Office Practices

To promote operation model innovation and green transformation, the Group launched the trial operation of Digital Archives (Phase I) on 22 October 2024. The Digital Archives supports management functions across 14 archive categories and houses 386,000 electronic documents. Following the Phase I launch, the system centralizes online management of all archive categories at headquarters, automates electronic document archiving from the OA system, facilitates online transfer and archiving of electronic files, supports online reading and use, and enables the development of specialized digital-archive resource databases, substantially improving archival management efficiency.

Conducting Educational Training

The Group organizes training on Introduction to Safety and Environmental Protection Regulations for Production Processes and holds activities to promote outstanding teaching materials and recognize exemplary instructors. In total, 650 training sessions are delivered to 14,000 participants. Fifteen outstanding training materials and ten exemplary instructors are honored, creating benchmarks for best practice. The initiative promotes broad implementation of training outcomes and facilitates the widespread dissemination of environmental protection principles, knowledge, and skills across the Group's production processes.

Energy-Saving and Eco-Friendly Living

The Group cultivates environmental awareness among all employees and actively encourages the integration of eco-friendly practices into both work and daily life. Routine measures include saving water, electricity, and paper, and providing dedicated recycling bins for items such as paper, ink and toner cartridges, plastic bottles, and metal. Equipment is subject to regular inspection and maintenance to prevent leaks, spills, drips, and other waste.

Environmental Science Popularization

The Group employs a dual strategy of "inviting in" and "going out" to deliver collaborative environmental outreach with communities and schools, extending environmental values into the wider society. The Group hosts public visits to operational sites to answer questions and improve understanding of environmental facilities, fostering environmental awareness. Concurrently, the Group publicizes achievements in ecological conservation, green development, and civic initiatives through external outreach activities, such as environmental consultation booths, photographic exhibitions of accomplishments, and distribution of educational materials.



CECEP Guozhen promoted Environmental Protection Day at Schools

Efficient Use of Resources

CECEP upholds the core value of sustainable development and continuously improves resource conservation and efficient use. Through systematic management and technological innovation, the Group implements responsible stewardship of key resources across its life cycles. This approach minimizes environmental footprints and strengthens the resource base that supports the long-term viability of business and society.

Water Use

Water resources are essential to sustainable economic and social development; their protection and rational use are a shared responsibility. The Group leverages technological and managerial strengths in water conservation, pollution control, and intensive resource use to promote efficient water use and high-quality water-environment management. The Group seeks to maximize synergistic ESG value and to use the capabilities of a central SOE to advance ecological civilization. The Group has implemented water-conservation and ecological-restoration projects in key river basins and regions. To address industrial park and urban domestic water waste and wastewater discharge, the Group adopts an integrated approach of water conservation at the source, water control during the process, and end-use recycling. By constructing reclaimed water systems, upgrading water supply and drainage networks, and advancing wastewater recovery and ecological water replenishment projects, the Group increases regional water-use efficiency, improves aquatic ecological quality, and promotes sustainable water-resource management and protection.

Case Valiant Corporation Saves Water for Production Through Technological Upgrades

Modification 1: Crystallization-reactor jacket cooling-water recovery

Before the modification, circulating water from the crystallization reactor for cooling was discharged through the jacket to the wastewater system for treatment after use.

After the modification, a circulating-water transfer and collection tank was installed to return used cooling water to the cooling tower for reuse. This measure conserved 1,650 tons of freshwater in 2024.



Transfer and Collection Tank



Circulating Water Tower

Modification 2: Recovery and reuse of ultrapure-water concentrate

Before the modification, ultrapure-water concentrate from the workshop's water purifier was discharged to the wastewater system for treatment.

After reconfiguring the piping, the ultrapure-water concentrate is recovered for reuse in the workshop's cleaning area and in cooling towers. This modification is projected to conserve 1,500 tons of tap water annually.



General Water of China Builds up Flood-control Efforts at Wuhua Mountain Reservoir and Completes the First Flood-prevention Task in 2024

Since the beginning of the 2024 summer, water levels in Wuhua Mountain Reservoir have risen continuously due to persistent heavy rainfall. Suifenhe General Water of China Co., Ltd., a subsidiary of General Water of China, made an early assessment on the situation and implemented early-response measures by launching comprehensive flood-prevention and power-generation protection efforts. A leadership rotation system was instituted for reservoir duty personnel, ensuring continuous 24-hour staffing and immediate rainfall and water-level monitoring and analysis. Coordination with the Suifenhe Water Affairs Bureau was intensified, and responsibilities for all reservoir staff were explicitly assigned to enable rapid execution of flood-control tasks. At the same time, communication with downstream villages was strengthened to support joint flood-mitigation efforts. While dam safety was maintained as the top priority, science-based scheduling was optimized scientifically to improve power-generation efficiency. As of May 31, electricity output increased by approximately 900,000 kWh compared with the same period last year.



Water Level Monitoring at Wuhua Mountain Reservoir



During pipeline repairs, Xiangyang General Water of China Co., Ltd. has arranged water tanks to supply water to residents, ensuring uninterrupted water service.



Xiangyang General Water of China Co., Ltd. participated in the Xiangyang 3·15 World Consumer Rights Day event, with staff on-site to address users' water-related inquiries.



Pre-holiday inspection of equipment operation by water staff at the secondary pump house of the Heihu Mountain Water Plant



Employees at the Heihu Mountain Water Plant conducted trial operation and debugging of the automated control system in the plant's central control room.

Energy Management

The Group aims to reduce energy consumption and improve efficiency. The Group implements a responsibility mechanism of “shared responsibility between Party and administrative leadership, with dual accountability for each position,” and prioritizes energy substitution and structural upgrades. The Group coordinates key initiatives across subsidiaries, including energy-saving retrofits, green power adoption, and improvements in office energy use. Subsidiaries exploit locally available resources—geothermal, industrial waste heat, biomass, air-source energy, and clean coal-fired cogeneration—to provide centralized heating and cooling for urban areas and integrated energy services (electricity, steam, and heat) for companies and industrial parks.

As a pioneer and practitioner in energy conservation and clean-energy supply, the Group continuously increases R&D investment and deploys advanced energy-saving technologies. The Group builds a technology- and data-driven energy-saving service model to transform and upgrade energy-management operations. Concurrently, the Group expands its role across energy production, supply, and consumption to improve popularity and access to clean energy and accelerate progress toward sustainable energy goals. Through wind and solar subsidiaries, the Group actively develops clean generation capacity and incubates and introduces advanced energy-saving methods, clean energy supply and renewable energy technologies to form an ecosystem of clean energy production + energy-saving services + clean energy supply. These efforts support the state’s efforts to establish a new power system centered on renewables and help meet the central SOEs’ responsibilities for achieving the carbon peak and carbon neutrality.

Energy Conservation Company's Technical Renovation + Full-Service Outsourcing Operation project Boosts Innovative Development in Jinzhong Development Zone

The Technical Renovation + Full-Service Outsourcing Operation project, carried out by Energy Conservation Company at the Innovation and Entrepreneurship Incubation and Translation Center in the Jinzhong Development Zone (Shanxi Comprehensive Reform Demonstration Zone), is implemented on-site. The renovation principally upgrades the energy systems of nine buildings, replacing municipal heating with technologies such as ultra-low-temperature air-source heat pumps, multi-split systems, and off-peak electricity-to-heat storage to improve energy efficiency and reduce carbon emissions. The initiative is managed under an outsourcing energy management model and covers a total floor area of 154,800 square meters.



Energy Outsourcing Operation in Innovation and Entrepreneurship Incubation and Translation Center in the Jinzhong Development Zone



Energy Conservation Company Implements Feixi Biogas Purification Project's carbon dioxide capture and utilization initiativePurification in Feixi County

The Feixi Biogas Purification Project's carbon dioxide capture and utilization initiative, led by Energy Conservation Company, is sited in the Feixi Eco-industrial Demonstration Park. The project collects biogas from food-service waste treatment, kitchen-waste processing, and municipal waste-to-energy, purifies and compresses it to vehicle-grade compressed natural gas (CNG), and thereby achieves resource recovery of biogas. At full capacity, the facility will harmlessly treat 21 million cubic meters of biomass-derived biogas per year and reduce CO2 emissions by 7,320 tons annually.

By recycling biogas into CNG, the initiative strengthens the clean-fuel supply chain for vehicles operated by the subsidiary Hefei Shikai Public Transport Energy Development Co., Ltd. The project showcases Energy Conservation Company's technical expertise and commitment to energy conservation, carbon reduction, and resource recycling.



Feixi Biogas Purification Project's Carbon Dioxide Capture and Utilization Initiative

Material Management

The Group complies with applicable laws, regulations, and policy standards, including the *Law of the People's Republic of China on Environmental Protection* and the *Law of the People's Republic of China on Circular Economy Promotion*, as well as technical standards such as flue-gas purification emission limits and leachate-treatment norms. These requirements are integrated into production planning and management procedures across all subsidiaries. Each project company verifies consumption metrics for auxiliary fuels, environmental-protection consumables, and process water, strictly controlling resource use.

In procurement, the Group implements the work requirements for building green supply chains. The revised *Supplier Management Rules 2024* introduce two key changes. First, “Basic Requirements for Strategic Suppliers” now requires carbon-emission monitoring, carbon-footprint tracking, and the establishment of green supply-chain management systems. Second, “Basic Requirements for Centralized Procurement Suppliers” now require sound environmental and low-carbon management systems, appropriate safety and environmental qualifications supported by strong performance records, and active promotion of green, low-carbon production. Four internal control processes, including procurement planning, management and procurement execution management, have been implemented and integrated into the electronic procurement platform via information technology means. These measures ensure comprehensive coverage of sustainability practices across procurement management and procurement activities.

Pollution Prevention and Control

Guided by Xi Jinping Thought on Ecological Civilization, CECEP views pollution prevention and control as a primary responsibility. The Group addresses challenges in waste gas, waste water, industrial residue treatment, and ecological restoration, striving to exceed regulatory requirements and to contribute to sustained improvements in regional ecological quality. In 2024, the Group held an environmental protection and low-carbon development conference to communicate the outcomes of the State-owned Assets Supervision and Administration Commission's (SASAC) meeting on central SOEs' environmental protection and low-carbon development. The Group seeks to further strengthen environmental management capabilities across all organizational levels, intensify pollution-control efforts, and protect ecological-security baselines and red lines.

Waste Gas Treatment

The Group complies with national and local laws, regulations, and policy standards, as well as relevant industry air pollution emission limits, including the *Law of the People's Republic of China on Environmental Protection*, the *Law of the People's Republic of China on Air Pollution Prevention and Control*, the *Action Plan for Continuous Improvement of Air Quality*, and *Implementation Plan on Action on Continuous Improvement of Air Quality*. Under the Environmental Protection Compliance Management Regulations, the Group has strengthened measures to prevent and control air emissions pollution. The principal air pollutants from the Group's operations are sulfur dioxide (SO₂), nitrogen oxides (NO_x), particulate matter (PM), and volatile organic compounds (VOCs). Total emissions, approved emission quotas, and any exceedances are recorded in each subsidiary's Pollutant Discharge Permit Implementation Report and disclosed in their environmental information reports.

Case Energy Conservation Company Implements a Waste Heat Recovery From Coal Gas in Coke Oven Rising Tubes at Bayuquan

Energy Conservation Company implements a Waste Heat Recovery from Coal Gas in Coke Oven Rising Tubes at Bayuquan for Ansteel Group's Bayuquan Iron & Steel Branch, installing two heat recovery units at rising tubes. By capturing substantial waste heat from coal gas generated during coking, the project produces steam supplied to the Bayuquan facility for production, enabling energy recycling and improved efficiency. Annual waste heat recovery produce 581,000 GJ enthalpy of steam in total, comprising 196,900 GJ from saturated steam and 384,000 GJ from superheated steam.

Wastewater Treatment

The Group complies with national and local laws, regulations, and policy standards, as well as applicable industry water pollution discharge limits, including the *Law of the People's Republic of China on Environmental Protection* and the *Law of the People's Republic of China on Water Pollution Prevention and Control*. Under the *Environmental Protection Compliance Management Regulations*, the Group has strengthened measures to prevent and control wastewater pollution. The principal wastewater pollutants from the Group's operations are chemical oxygen demand (COD), ammonia nitrogen (NH₃-N), total nitrogen (TN), and total phosphorus (TP). Total discharge volumes, approved discharge quotas, and any exceedances are reported in each subsidiary's Pollutant Discharge Permit Implementation Report and disclosed in their environmental information reports. In 2024 the Group treated 3.688 billion tons of wastewater, contributing to improved watershed water quality.

In 2024, the Group treated wastewater
3.688
billion tons

Case CECEP Guozhen Signs Contract for Ethiopia's Largest Wastewater Treatment Project

In 2024, CECEP Guozhen, a subsidiary of CECEP, signed a contract with Ethiopian authorities to construct the Addis Ababa Eastern Catchment Wastewater Treatment Plant Project. The project comprises two wastewater treatment plants that deploy multiple advanced treatment technologies, with a contract value of approximately RMB 187 million. The plants will provide wastewater-treatment services to most areas of Bole and Yeka, benefiting about 885,000 residents in eastern Addis Ababa. Upon completion, the project is expected to strengthen local wastewater management capacity, improve environmental conditions in industrial and residential areas, and enhance the well-being of local communities.



Visualization of Kitime Wastewater Treatment Plant



Visualization of Koye Fetcbe Wastewater Treatment Plant After Renovation

Case General Water of China Boosts Momentum Through Innovation and Drives Development by Enhancing Quality and Efficiency

General Water of China applies its technological method "Process Diagnosis and Full-Process Efficiency Analysis for Municipal Sewage Treatment Plants" to drive improvements in quality and efficiency. The Company diagnoses key operational issues and implements targeted optimization measures across its facilities. In 2024, system-wide electricity consumption per unit, carbon-source chemical usage, and production and operating costs all declined to varying degrees, indicating measurable efficiency improvements. The company also deployed its "Intelligent Dephosphorization Chemical Dosing System" to enable more refined plant operations. The system was industrialized and applied across five subsidiaries in 2024, including Yan'an, Xiangtan, Shenzhen, and Wenzhou. Following the system's implementation at the Xiangtan wastewater treatment plant, dephosphorization chemical consumption decreased substantially.

○ Solid Waste Management

The Group strictly adheres to national and local laws, regulations, and policy standards, including the *Law of the People's Republic of China on Solid Waste Pollution Prevention and Control*, the *National Catalogue of Hazardous Wastes*, and the *Standard for Pollution Control on Hazardous Waste Storage*. In accordance with the *Environmental Protection Compliance Management Regulations*, the Group establishes explicit requirements for solid-waste prevention and control. In 2024, the Group processed 25.846 million tons of solid waste, facilitating effective treatment and resource recovery.

Case Feixi Waste-to-Energy Biogas Purification Project Implemented by Energy Conservation Company

The Feixi Waste-to-Energy Biogas Purification Project, implemented by Energy Conservation Company, treats biogas produced from food-waste processing and municipal waste-to-energy at CECEP (Feixi) Environmental Energy Co., Ltd. The purified biogas is compressed into vehicle-grade natural gas, enabling its reuse as a resource. Upon completion, the project is expected to save 2,815 tons of standard coal annually and to reduce CO₂ emissions by 7,320 tons per year.



Visualization of Feixi Waste-to-Energy Biogas Purification Project

Case Pingquan Municipal Waste-to-Energy Cogeneration Project, Developed by CECEP

In December 2024, the Pingquan Municipal Waste-to-Energy Cogeneration Project, developed by CECEP, began trial operations. As a pilot compact municipal waste-to-energy project by CECEP Environmental, it treats 73,000 tons of waste per year, supplies approximately 40,000 tons of steam externally, generates about 27 million kWh of electricity, and exports roughly 18 million kWh to the grid. The facility also co-processes 30 tons of food waste daily. Its successful operation contributes to waste volume reduction, resource recovery, and safe treatment of municipal solid waste in Pingquan City, improving urban environmental sanitation and supporting a healthier local social environment. For counties with relatively low waste generation, the deployment of small-scale treatment facilities to achieve safe recycling of municipal solid waste represents a replicable model. This project is therefore significant for advancing the sustainable social and ecological development of Pingquan City.



Completed Pingquan Project

○ Ecological Restoration at Mines

The Group complies with national regulations, including the *Law of the People's Republic of China on Mineral Resources* and the *Law of the People's Republic of China on Mine Safety*, as well as *Technical Specifications for Land Reclamation and Ecological Restoration for Coal Mines*, *Technical Specifications for Land Reclamation and Ecological Restoration for Metal Mines*, *Technical Specifications for Land Reclamation and Ecological Restoration for Petroleum and Natural Gas Projects*, and *Technical Specification for Monitoring and Evaluation of Land Reclamation and Ecological Restoration in Mines*. The Group strengthens ecological protection and restoration across mining areas. The Group extends efforts from end-of-pipe remediation to upstream source control, restoring and enhancing ecosystem diversity, stability, and resilience in mines. The Group also partners with relevant companies to promote green mine construction and to create an improved ecological landscape of clear waters and verdant mountains.

Case China Geo-Engineering's Ecological Restoration Demonstration Project Targeting Historical Abandoned Mines in the Southern Foothills of the East Tianshan Mountains in Turpan City

On 21 October 2024, China Geo-Engineering began work on an ecological restoration demonstration project targeting historical abandoned mines in the southern foothills of the East Tianshan Mountains in Turpan City. This project marks the autonomous region's first batch of national-level demonstration project for abandoned-mine ecological restoration and the first project of its kind in Turpan City. With a total investment of RMB 520 million, the project will restore 134 historical abandoned mines across a cumulative area of 1,599.63 hectares. Upon completion, it is expected to enhance the land's productive and ecological functions, increase regional windbreak and sand fixation capacity, protect key national facilities in the area, and help preserve sites of historical and cultural significance.



Turpan Demonstration Project Groundbreaking Ceremony

Case China Geo-Engineering Supervises the Comprehensive Polymetallic Resource Recycling and Environmental Upgrade Project at Xikuang Rare and Precious Metals Co., Ltd

The Comprehensive Polymetallic Resource Recycling and Environmental Upgrade Project at Xikuang Rare and Precious Metals Co., Ltd. is a priority initiative for Qinghai Province and Haixi Prefecture. The project marks Western Mining's commitment to advancing green, low-carbon, and circular development while promoting the green industrial transformation and upgrading. Supervised by Lanzhou Engineering & Research Institute of Nonferrous Metallurgy Co., Ltd. (a subsidiary of China Geo-Engineering), the major environmental and technological upgrading projects established an integrated smelting system for copper, lead, and zinc resources. With high-efficiency production and recovery, it is a new benchmark developed collaboratively by participating constructors over 15 months by large-scale modern smelting companies in China.



Completion and Production Ceremony for the Project Supervised by Lanzhou Engineering & Research Institute Of Nonferrous Metallurgy

Devotion to Core Green Business

Based on a systematic business portfolio and development strategy, the Group continuously pursues full-cycle green management across green production, intelligent manufacturing, innovation, and services. The Group promotes coordinated development across sectors such as green energy, green building, eco-materials, green healthcare products, and green finance.

Green Energy

CECEP sticks to steady development while reinforcing clean energy foundation and improving the competitiveness and quality of energy conservation and clean energy businesses. The Group also prioritizes technological breakthroughs aligned with national carbon peaking and neutrality targets, revising the List of Key Core Technologies for Priority Development of China Energy Conservation and Environmental Protection to focus on core technology R&D in energy conservation, clean energy, and low carbon environmental management. In 2024, the Group's green power installed capacity exceeded 25.6885 million kilowatts, resulting in an estimated annual reduction of 21.28 million tons of CO₂.



Wuwei Solar Farm in Northwest China



Jianli Solar Farm



Dongtai Solar Farm in East China



Khorgos Solar Farm in Xinjiang



Zhuxianzhuang Solar Farm, Yongqiao District, East China



Ruicheng Solar Farm in Shanxi Province, North China



Solar Energy Company Prepares for Changes in Module Recycling Industry

Solar Energy Company conducts R&D on photovoltaic module recycling, developing recycled module processing technologies and equipment to reduce modules' carbon footprint and enable closed-loop green development throughout lifecycle. The company completed the research project Development of Key Technologies for Module Recycling and Industrial Application, which proposed a technical pathway of containerized module disassembly + efficient delamination of laminated components + high value utilization of byproducts. The company also independently developed, and in collaboration built, the first 10,000-ton-capacity module recycling facility and has carried out small scale module disassembly trials.



China National Environmental Protection Hangzhou Completes First Green Electricity Certificate Trading

On 8 April 2024, China National Environmental Protection Hangzhou completed Zhejiang's first green certificate trading for a waste-to-energy project on the Beijing Power Exchange Center's Platform, with a trading volume of 3 MWh. This initiative reflected the company's effort to secure new revenue streams as national subsidies expire. The green certificates served as renewable energy consumption credentials and this trading corresponded to an avoided CO₂ emission of 2,072.40 kg. By the end of 2024, all 34 project companies under CECEP had been registered on the National Renewable Energy Power Generation Project Management Platform; 14 of these companies had applied for and received green certificates. Going forward, the company will scale up transactions, pursue sustainability pathways, and contribute to national carbon peaking and neutrality.



Green Building

CECEP Industry, a subsidiary of the Group, is committed to incorporating green-building principles across the entire project development lifecycle. All new projects are designed to achieve full green-building compliance, and each industrial park is planned and designed to meet green-building star-rating standards. Adapting to local conditions, the company adopts appropriate green technologies for industrial parks, such as Solatube daylighting systems, rooftop photovoltaic installations, and rainwater recycling systems. This move improves the quality of ecological space through architectural sustainability and creates replicable, scalable benchmark projects for urban renewal and industrial-park retrofit.

Case CECEP Fuyang Eco-Industrial Park Takes Home the MUSE Design Awards

In 2024, CECEP Fuyang Eco-Industrial Park, developed and constructed by CECEP Industry, was honored with the Silver Award in the Architectural Design category at the MUSE Design Awards of America. With extensive expertise in green building, CECEP earned the judge's recognition for the park's innovative design. Located in Hangzhou's Fuchun Bay New City, this multi-functional complex attracts high-quality enterprises and fosters business growth through industrial support, striving to establish a premier environmental protection industrial base.

Case Building 63 in the CECEP (Zhuji) Eco-Industrial Park Obtains the Three-Star Green Building Label From the Ministry of Housing and Urban Rural Development

On 17 December 2024, Building 63 in the CECEP (Zhuji) Eco-Industrial Park was awarded the Three-Star Green Building label from the Ministry of Housing and Urban Rural Development. The building was renovated with multiple green and low-carbon technologies and was converted into the CECEP Zero Carbon Smart Technology Pavilion for public exhibition and communication. As the CECEP Zero Carbon Building 1.0 pilot, the project met both the Three Star Green Building and Zero Carbon Building standards through four systems and ten technologies. After the implementation of the project, based on the simulated calculation of building carbon emissions, rooftop photovoltaic installations and associated systems will produce approximately 107,200 kWh annually, exceeding the building's designed annual electricity consumption. The overall carbon reduction rate will reach 100% across the building.

Eco-materials

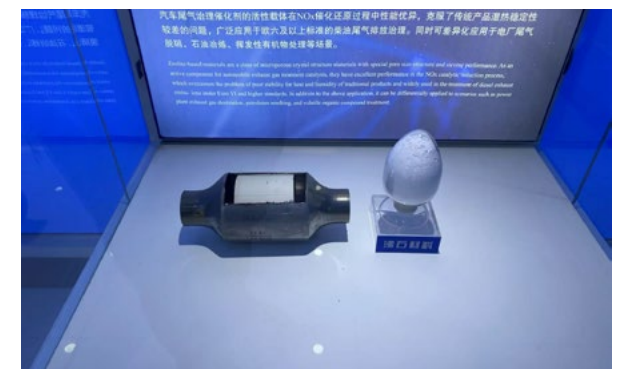
Leveraging its production technology and full lifecycle service capabilities, the Group continuously promotes green, low-carbon development across its business and its product supply chains. The Group empowers intrinsic momentum for business and product sustainability, enhances the international visibility and credibility of green and low-carbon brands using the strengths of SOEs.

Case Research Center of CECEP Assists Export Products in Securing China's First International Environmental Product Declaration Certification

On 10 April 2024, the Research Center of CECEP helped obtain the country's first international Environmental Product Declaration (EPD) for an exported mechanical safety device used on oil drilling platforms. EPD certification is prepared in accordance with international standards and used for global mutual recognition. Research Center completed the declaration with life cycle assessment (LCA) methodology, increasing the product's international profile.

Case Valiant Corporation Develops Zeolite-based Environmental Materials for Automotive Exhaust Purification Catalysis

Valiant Corporation's production technology for its "zeolite for automotive" eco-friendly series ranks among the world's most advanced in the environmental protection sector. As a global leader in high-end eco-friendly automotive zeolite materials, Valiant Corporation's products are widely used in Euro VI vehicle emission treatment, petroleum refining, and related applications. Beyond automotive uses, the company continues to expand zeolite molecular sieve applications across other industries. The company has developed a range of non-automotive zeolite molecular sieves for flue gas denitrification, refinery catalysis, and volatile organic compound (VOC) abatement. By 2024, these products had been sold in the petrochemical catalytic cracking and VOC treatment markets.



Valiant Corporation's "Zeolite for Automotive" Eco-friendly Series

Green Health Product

New Era Group, a subsidiary of CECEP, adheres to its corporate mission of developing national industries and promoting human health. Guided by principles of energy conservation, environmental protection, sustainability, and wellness, the company focuses on developing, integrating, and comprehensively utilizing local natural resources. The company has established a competitive advantage in products such as pine pollen and developed a complete green ecological industry chain.

Case

New Era Group Builds Green Industry Chain and Launches Green Health Products

New Era Group has established a complete green ecological industry chain, and embedded environmental protection and sustainability across raw-material sourcing, product R&D, and manufacturing processes as key considerations. By selecting eco-friendly materials, optimizing production techniques, reducing energy waste, and lowering carbon emissions, the company continuously introduces green healthcare products that respond to market demand. By the end of 2024, the health-industry company had launched four major brands—Guozhen, Zhuzhen, Xianglangge, and Jiankangke—covering six categories and more than 300 varieties of green health products. These products combine high technological content, cultural value, and enhanced added value, and they are supported by an integrated capability system spanning production, university, research, and application.



Product Production Line

Green Finance

As a major participant and leader in China’s ecological civilization, the Group leverages its unique integration of industry and finance to promote green finance with a focus on institutional innovation, technological advancement, service enhancement, and international engagement. The Group strengthens R&D in green finance and sustainable financing, advances climate-finance pilot projects and ESG businesses, and consistently promotes a financial development pathway with Chinese characteristics.



The financial company received a “Good” rating in the green finance assessment.

Green Standard Formulation

The Group make full use of industry leadership to establish a leading green standards system and directs its subsidiaries to obtain professional certifications based on these standards, embedding green principles across operations and services and setting industry benchmarks.

- The Group led the revision of the Catalog of Green Finance-Supported Project 2025 , commissioned by the central bank and jointly promulgated by the People’s Bank of China and relevant ministries; this catalog has catalyzed China’s green finance market, now valued at over RMB40 trillion.
- The Group spearheaded the development of the Green Development Evaluation Indicator System for Central SOEs, providing key support to the SASAC in promoting green development among Central SOEs.
- The Group effectively contributed to the List of Nationally Promoted Low-Carbon Technologies (Fifth Batch) published by the Ministry of Ecology and Environment.
- The Group contributed to the industry standard Green Bond Environmental Benefit Disclosure Indicator System (JR/T0322-2024) , a reference for green development, and actively supported climate-finance pilot projects in Shenzhen, Xixian New Area, and Miyun District.
- The Group undertook ESG standard research projects commissioned by the Ministry of Finance and SASAC, establishing a solid foundation for expanding its ESG business.
- The Group published the General Principles for Value Accounting of Ecological Product at the ProjectLevel (T/CAQI3632023), China’s first ecological value accounting standard for infrastructure projects, advancing marketbased mechanisms for ecological products.

Case

CECEP Criteria Facilitates Inclusion of Green Financial Bonds in the List of Existing Chinese Green Bonds Compliant with the China-EU Shared Classification Catalogue for Green Finance

In 2024, Research Center of CECEP Criteria, certified three green financial bonds issued by the Export-Import Bank of China, with a combined issuance of RMB 20 billion. These bonds were subsequently included in the List of Existing Chinese Green Bonds Compliant with the *China-EU Shared Classification Catalogue for Green Finance*, marking the first inclusion of policy-bank bonds on that list. This inclusion broadens the pool of high-credit-rated Chinese green bonds recognized under *Shared Classification Catalogue for Green Finance* As an independent third party certification agency, CECEP Criteria evaluated the three green financial bonds’ conformity with the *Shared Classification Catalogue for Green Finance’s* requirements and issued a certification report.

Green Finance Information Platform

The Group continuously develops core financial elements and builds a diversified, specialized system of green finance and low-carbon products and services. By focusing on data and information across ecological environment, energy conservation and low carbon initiatives, and green industries, the system provides companies and institutions with one-stop, comprehensive, and diversified knowledge and data services.



China's First Ecological and Environmental Data Product Completes On-Exchange Trading to Empower Financial Institutions to Efficiently Identify Green Companies

On February 20, 2024, CECEP Digital Technology Co., Ltd., a subsidiary of China Energy Conservation and Environmental Protection Group, completed the first domestic on-exchange trading of an ecological-environment data product developed in collaboration with the Hengshui Municipal Bureau of Ecology and Environment. The product integrates multi-source data, privacy computing, and artificial-intelligence algorithms to evaluate corporate green ratings using proprietary models and delivers results in report form. Primarily targeted at financial institutions such as banks, it helps identify green companies, identify credit clients, design financial products, promote green finance development, and facilitate upgrades in the environmental industry.



Research Center's Project-level Ecological-product Value Accounting Information-based Platform Secures the Title of Technology of China

On November 29, 2024, at the "Technology of China" Conference and the "Technology of China" Award Ceremony 2023, organized by the China Association Of Productivity Promotion Centers, the Research Center's project-level ecological-product value accounting information-based platform was awarded the title of Technology of China. This platform is China's first integrated information system for project-level ecological-product accounting, unifying data entry, automated calculation, result visualization, statistical analysis, decision support, market trading, certification, and financial services. It establishes a closed-loop system for ecological-product accounting, evaluation, and trading that is applicable across infrastructure industry segments. As a major advancement in ecological-product value accounting, the platform is important for promoting the development of ecological-product-related industries.

Enhanced International Influence

The Group continues to strengthen international competitiveness and normative influence, providing financial support for the joint development of the Belt and Road Initiative.



CECEP Fund Attends the Asia Clean Energy Forum 2024 on Invitation

From June 3 to June 8, 2024, CECEP Fund Management Co., Ltd., a subsidiary of CECEP Capital, participated in the Asian Clean Energy Forum (ACEF) 2024 in Manila, Philippines, at the invitation of the Asian Development Bank (ADB). As the implementing agency for ADB-funded projects, the company delivered a keynote presentation at a regional session, sharing its experience implementing the CECEP-ADB Fund project and highlighting the application of advanced technologies in key projects. The visit strengthened ties and cooperation between CECEP Fund and the ADB, helping to ensure the continued effective operation of the CECEP-ADB Fund. This collaboration secured ADB sovereign loan's support for the national strategy to prevent and control air pollution in the Beijing-Tianjin-Hebei region.

Carbon Emissions Trading

The Group initiates research project on Carbon Asset Management Work Plan that, grounded in its business characteristics, examines concrete implementation pathways for greenhouse-gas emissions management, carbon-asset management, and carbon-trading management. At the implementation level, each subsidiary actively assesses its carbon-reduction potential and participates in the carbon-trading market.



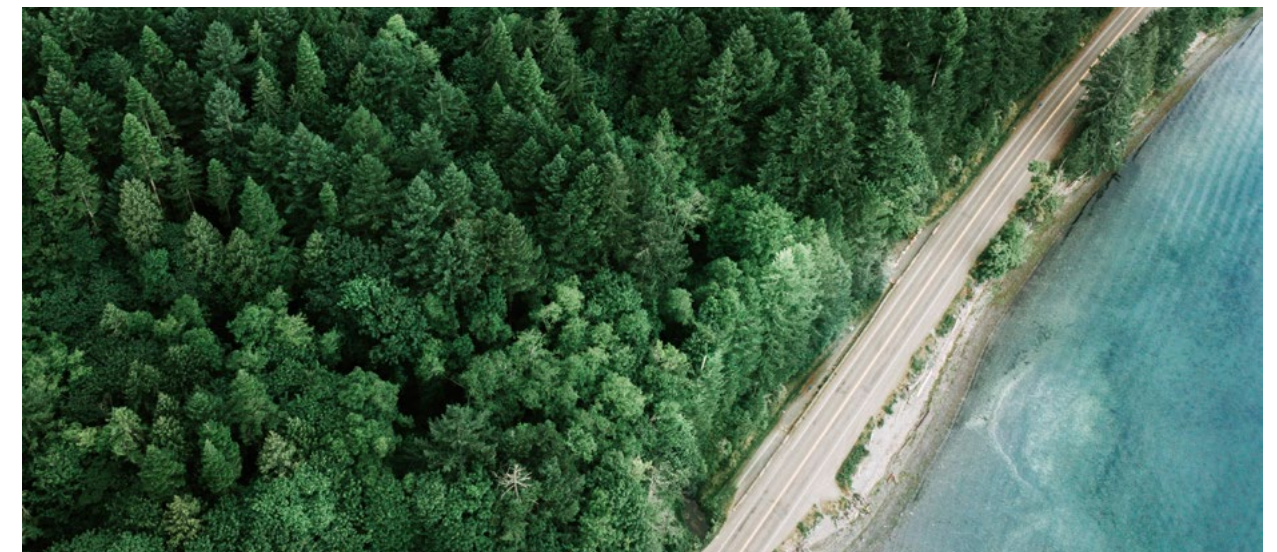
Energy Conservation Company's Subsidiary Lu'an Company Completes Carbon Allowance Trading

Lu'an Company, a subsidiary of Energy Conservation Company, under CECEP, held approximately 159,000 tons of carbon emission allowances after fulfilling its obligations in the third carbon target fulfillment cycle in 2024. By signing a Purchase-and-sale Agreement for China Carbon Emission Allowances with Xinjiang Guotai Xinhua Chemical Co., Ltd., the company transferred 159,000 tons of allowances, effectively monetizing its environmental equity assets.



China National Environmental Protection Group Develops International and Domestic Voluntary Emission Reduction Projects

CECEP's subsidiary, China National Environmental Protection Group, has completed account registration in the Verified Carbon Standard (VCS) registry. It independently developed the Fengxi Kitchen Waste VCS project, prepared the project design documents, refined the monitoring plan, and estimated average annual emissions reductions of 18,200 tons of CO₂ equivalent. Concurrently, the China National Environmental Protection Group carried out policy research and market analysis on the value realization of carbon-reduction products in Hebei Province. In collaboration with intermediaries, it developed the Jinzhou Biomass Power Generation Project, using an emissions-reduction revenue-sharing model to mitigate development risks. The company also completed the technical work for the emissions reduction project and finalized the Emissions Reduction Assessment Report for the Jinzhou Biomass Project covering 2015–2023, with projected emissions reductions of 1.205 million tons of CO₂ equivalent during the accounting period.



Innovation-Driven Development

Contributing to Social Well-being

CECEP remains committed to its founding mission, with innovation-driven development as its core engine and social responsibility integrated into its growth. The Group leverages technology to empower products and services, delivering high-quality green energy that improves the well-being of millions of households. Through institutional innovation, the Group energizes talent and builds platforms that align employee development with business growth. By introducing new models, the Group broadens avenues for community co-building and volunteer services, ensuring that the benefits of development are returned to the public. In doing so, the Group contributes green capacity to strengthen overall social welfare.



Innovation-Driven Development

Technological innovation is the principal driver of development, and green development characterizes high-quality growth. The Group actively promotes technological innovation and industrial upgrading and is committed to cultivating an integrated innovation force. Through systematic investment in technology, the establishment of advanced research platforms, and deep industry–university–research integration, the Group has created a dynamic innovation ecosystem that sustains the Company’s long-term development and enhances its core competitiveness.

Increasing investment in science and technology

The Group consistently increases R&D funding to meet development needs by pouring 2.61% of revenue into R&D every year. With 5,216 scientific and technical staff, the Company effectively advances the implementation of related tasks.

Developing Innovation platform

The Group has steadily expanded research infrastructure, establishing three additional provincial/ministerial-level R&D platforms. The Group initiated a branch center of the National Innovation Center for Green and Low-Carbon Building Technologies, actively participated in the National Innovation Center’s collaborative programs, and contributed to the development of two national standards. These activities solidify the hard power supporting national innovation and corporate development.

Promoting industry–university–research-market collaboration

The Group focuses on self-reliance in science and technology by promoting deep integration among industry, university and research institutions and by accelerating the translation of scientific results into practical applications to fully enhance technological competitiveness. The Group also prioritizes building an innovation ecosystem that links industry, universities, research institutes, and end-users, actively participates in central SOE innovation consortia, and continuously refines the industrial incubation model.

Case

Valiant Corporation Encourages Active Job-hunting and Promotes University-enterprise Cooperation.

From 2021, Valiant Corporation established the Valiant Scholarship at several universities—including Dalian University of Technology, Beijing University of Chemical Technology, and Qingdao University of Science and Technology—to give back and encourage outstanding students to pursue careers in scientific research. The scholarships demonstrate Valiant’s strong commitment to education and constitute a significant initiative in fulfilling the company’s social responsibilities and promoting social progress.



Valiant Scholarship Signing Ceremony

Securing Technological Innovation Achievements

In 2024, the Group secured 681 new patents, including 320 invention patents, and received six provincial-level or higher awards.

Key Technological Achievements

No.	Project Name	Honors and Awards	Award Winner	Issued by
1	Research and Application of Key Technologies for Quality Control of Maca in China	Third Prize in Science and Technology Award	Guozhen Health Technology (Beijing) Co., Ltd.	China National Food Industry Association
2	Key Technologies and Applications for High-Quality Development of Marine-Derived Collagen	Second Prize of Science and Technology Progress Award by the Ministry of Natural Resources	New Era Health Industry (Group) Co., Ltd.	Ministry of Natural Resources
3	Key Technologies and Integrated Application of Regional Energy Systems for Low-Carbon, Flexible, and Smart Buildings	Third Prize of the Jiangsu Provincial Science and Technology Award	CECEP City Energy Conservation Co., Ltd	Jiangsu Provincial People's Government
4	Funding for Innovation Foundation Building and Capacity Expansion	Funding Support for Innovation Foundation Building and Capacity Expansion	CECEP. Valeen Technology Co., Ltd.	Chaoyang District Science and Technology Commission
5	Key Technologies for High-Parameter Synergistic Efficient Clean Incineration of Multi-Source Organic Solid Waste	First Prize for Technological Invention Award	Hainan University, Tianjin University, Everbright Environmental Technology (China) Co., Ltd., Tsinghua University, China Association of Urban Environmental Sanitation , CECEP (Feixi) Environmental Energy Co., Ltd	The People's Government of Hainan Province
6	Innovation and Application of Precise Green Remediation Materials and Key Technologies for Polluted Sites	First Prize of the Zhejiang Provincial Science and Technology Progress Award	CECEP DADI (Hangzhou) Environmental Remediation Co., Ltd. (Second Author)	People's Government of Zhejiang Province
7	Research and Application of Core Technologies for Green Production and Key Intelligent Equipment for Lead-Acid Batteries	Third Prize of the Science and Technology Award	China Qiyuan Engineering Corporation	China Machinery Industry Federation
8	Standard for Design of Rail Transit Depot Superstructure SJG121-2022	First Prize of the Science and Technology Award of Guangdong Engineering Exploration& Design Association	Shenzhen Machinery Institute Architectural Design	Guangdong Engineering Exploration& Design Association

Case

China Qiyuan and its subsidiaries Receive Awards for Outstanding Engineering Survey and Design

In 2024, China Qiyuan and its subsidiaries won three first-place, four second-place, and five third-place awards in the Outstanding Engineering Survey and Design Awards of the Machinery Industry, and two first-place, three second-place, and five third-place awards in the Outstanding Engineering Consulting Awards of the Machinery Industry.



Multiple Projects by Lanzhou Engineering & Research Institute Of Nonferrous Metallurgy, Affiliated to China Geo-Engineering, Win Awards for Outstanding Survey, Design, and Consulting

In September 2024, China National Association for Non-ferrous Metals Construction Industry announced the results of the Outstanding Engineering Survey, Design, and Consulting Awards 2024 for the nonferrous metals construction industry. Lanzhou Engineering & Research Institute Of Nonferrous Metallurgy Co., Ltd., a subsidiary of China Geo-Engineering, received one first prize, three second prizes, and two third prizes for Outstanding Engineering Design. The company also won one first prize, four second prizes, and one third prize in the Outstanding Engineering Consulting Achievement Awards. Concurrently, the Gansu Rural Housing Architectural Style Atlas—submitted as a joint applicant—received the second prize in the Gansu Provincial Outstanding Engineering Survey and Design.



CECEP Digital Technology's Research Project Wins First Prize for Scientific and Technological Progress at the Environmental Protection Science and Technology Awards 2024

As the primary implementer of the "Key Technologies and Applications for Smart Control of Urban Water Quality Safety" project, CECEP Digital Technology Co., Ltd, a subsidiary of Big Data Company collaborated with teams, including Academician Ren Nanqi's group from the School of Civil and Environmental Engineering at Harbin Institute of Technology (Shenzhen), to develop a suite of core technologies and products: perception of water quality risks in urban water systems, urban water quality risk assessment and early warning, digital source-factory-network-river simulation, integrated intelligent decision making, and system management. These technologies have been successfully deployed in demonstration projects in Yanqing, Xi'an, and Xianning, producing positive results. The construction of an integrated management platform has substantially reduced redundant costs in environmental risk monitoring and delivered significant environmental, social, and economic benefits. The project received the First Prize for Scientific and Technological Progress in Environmental Protection Technology 2024.

Safeguarding Employee Rights

The Group is committed to providing all employees with equal opportunities, clear career pathways, and robust safety protections to ensure their rights and interests are effectively safeguarded.

Diversity and Equality in the Workplace

CECEP is committed to building a diverse, equitable, and inclusive workplace, regarding this commitment as core cornerstone to the Group's sustainability. We regard employees' varied backgrounds, perspectives, and skills as vital assets that drive organizational innovation. To support this, we prepare systematic systems and policies to ensure equal opportunity and equal pay for equal work across recruitment, promotion, and career development, and we strictly oppose all forms of discrimination. We continuously cultivate a respectful, safe work environment that gives sense of belonging and encourages employees to express themselves and pursue holistic development. Leveraging this broad pool of insight and power, we drive both the Group and society toward a more equitable and resilient future.

Streamlining Channels for Employee Development

The Group follows the principle of "placing the right person in the right role and maximizing individual potential" by forming a dual career-track system for managerial and professional positions. This system replaces a single promotion pathway and aligns workforce development with the Group's business needs while supporting employees' career goals and strengths. It also facilitates seamless transfer between managerial and professional tracks. Concurrently, the Group systematically cultivates three talent pipelines, supported by evidence-based training, structured practical experience, and innovation incentives. Together, these measures fully strengthen the core staff for high-quality development and continuously activate the core engine of sustainable growth.



Training Program at General Water of China



Academician's Lecture Series at CECEP Guozhen



Environment Training Program at CECEP



New Employee Outward Bound Training at Valiant Corporation

Fortifying Security Line of Defense

The Group strictly implements a workplace safety responsibility system. In promoting workplace safety standardization, the Group safeguards employees' occupational health and safety and creates a secure, comfortable work environment.

Improving the management system

The Group develops a workplace safety policy anchored in the principles of people-orientation, safety-first, prevention-focus, and comprehensive management. The Group continuously refines safety management system and has promulgated regulations and procedures such as, including the *Occupational Health Management Rules (Revised 2024)*, the *Management Regulations on Workplace Safety for Outsourced Projects and Outsourced Labor (Trial)*, the *Compilation of Criteria for Identifying Major Internal Safety Hazards (Trial)*, the *Technical Regulations on Gas Safety (Trial)*, and the *Guidebook on Workplace Safety Compliance Management (First Edition)*. Specialized manuals have been developed as well, including the *CECEP Safety and Environmental Protection: Building a Beautiful China through Standardization* special issue and the *CECEP Water Safety and Environmental Protection: Essential Knowledge and Skills* handbook. Concurrently, the Group continues to improve workplace safety supervision and management system by implementing the "Four Must-Haves" requirements and building a workplace safety talent pool centered on registered safety engineers.

Preventing Security Risks

In 2024, the Group convened three workplace safety meetings and carried out 42 leadership-led safety inspection surveys. Safety-risk identification was conducted across 54 specialized sectors, including clean energy supply, municipal waste-to-energy, domestic sewage treatment, industrial wastewater treatment, fine chemicals, industrial park operations, construction, and landscaping. The Group prepared safety-risk identification maps and developed prioritized inspection checklists covering major business areas and critical workplace safety processes. The Group scientifically launched a dual prevention mechanism for workplace safety to achieve dynamic zero major accident hazards. Over the year, the Group remediated 46,825 safety hazards and dynamically cleared 22 major risks, mitigating a series of significant threats and strengthening the overall safety-risk defense system.

Ensuring Occupational Health and Safety

The principal occupational health hazards for employees identified at certain subsidiaries arise from volatile odours emitted by raw materials or wastes during the production process and techniques, as well as heat and noise from mechanical equipment operation. Proportionate to each subsidiary's scale and the severity of identified occupational health hazards, the Group has implemented a suite of control measures to effectively prevent occupational health risks: appointing dedicated occupational health managers; building work environments meet regulatory occupational health standards; conducting regular monitoring and reporting of hazardous factors; strengthening employee occupational health supervision; installing prevention facilities and protective equipment; and delivering targeted occupational health training. As of the end of 2024, among the 11,022 employees exposed to occupational health hazards at CECEP, there were no confirmed or suspected occupational disease cases, indicating that occupational disease risk remains effectively controlled.

Health and Safety Training

The Group holds 2,703 “Top Leadership’s Lecture on Safety,” reaching more than 44,000 participants; organizes 1,422 accident warning education sessions and 710 train sessions for contractors; and engages more than 99,000 employees in safety knowledge competitions.

Safety Emergency Response Plan

The Group establishes comprehensive emergency-response plans for workplace safety accidents, along with specialized plans for natural disasters, public-health emergencies, and overseas public-safety events. During the year, the Group conducted more than 3,200 emergency drills. All subsidiaries actively participated in disaster prevention, mitigation, and relief efforts, fulfilling their social responsibilities as a SOE Specific actions include:

- Through unified coordination, CECEP Guozhen, the subsidiary of CECEP, mobilized emergency-rescue teams from its subsidiaries in Hefei, Wuhu, Bozhou, Suzhou, and other locations. These teams participated in local flood-prevention and disaster-relief operations, deploying more than 1,380 personnel, over 350 emergency vehicles, and more than 1,000 pieces of rescue equipment. The company received commendation letters from the Anhui Provincial Department of Housing and Urban-Rural Development and letters of appreciation from local governments. Its subsidiary, Bozhou Guozhen Drainage Facility Operation and Management Co., Ltd., was awarded the title “Advanced Collective in Flood Control and Disaster Relief in Anhui Province” for 2024.
- China Geo-Engineering, the subsidiary of CECEP, actively contributed to earthquake relief after the 7.1-magnitude quake in Aksu Prefecture, Xinjiang Uygur Autonomous Region, and received a letter of appreciation from the Wushi County People’s Government of Xinjiang, demonstrating its role to serve the Party and the public through tangible actions.
- Solar Energy Company, the subsidiary of CECEP, hosted a comprehensive natural disaster emergency drill for the new energy sector, organized by the Guizhou Regulatory Office of the National Energy Administration and the Guizhou Energy Administration. The exercise strengthened preparedness and response capabilities for natural disasters.

Security Risk Assessment

The Group develops a classification system to assess inherent safety risks across its subsidiaries and conducts annual inherent safety assessments for its primary-level subsidiaries. The group-wide inherent safety risk assessment in 2024 categorized subsidiaries as follows: 28 at Level 1, 165 at Level 2, 95 at Level 3, and 443 at Level 4. At the same time, the Group carried out a review of subsidiaries operating in high-risk industries to identify priorities for safety supervision. In 2024, the Group initiated targeted investigations and rectifications of significant accident hazards and chain-wide corrective actions addressing single-issue problems such as building insulation materials, gas safety, hazardous chemicals, and electric bicycles. These measures comprised leadership-led inspections, Four Nos, Two Directs safety checks, cross-company inspections among second-tier subsidiaries, and specialized supervision and assistance in construction safety, contractor safety, outsourced and leased building, high-rise fire safety, and disaster prevention and mitigation. As a result, the Group prevented or mitigated multiple risks of major hazards and further strengthened the foundation for workplace safety.



CPR Training for CECEP Staff



CECEP’s Lijiang Company hosted the launch ceremony for the local government’s Occupational Disease Prevention and Control Law Awareness Week.



Zhenjiang Company subsidiary of Solar Energy Company, engaged psychologists to provide mental health counseling for employees.



Wangjiang Guozhen, a subsidiary of CECEP Guozhen, conducted occupational health prevention awareness campaigns in the community.

○ Prioritizing Employee Well-being

The Group pays close attention to employees' work-life balance. By rigorously enforcing annual leave policies and expanding employee visiting programs, the Group helps staff reconcile professional responsibilities with family commitments. The Group also regularly organizes team-building and cultural activities to foster a positive, harmonious organizational climate and to enhance employees' sense of belonging and well-being. Going forward, the Group will continue to solicit employee feedback and refine the welfare system to promote harmonious relations with society and the environment.



Employee's Sports Meet at General Water of China



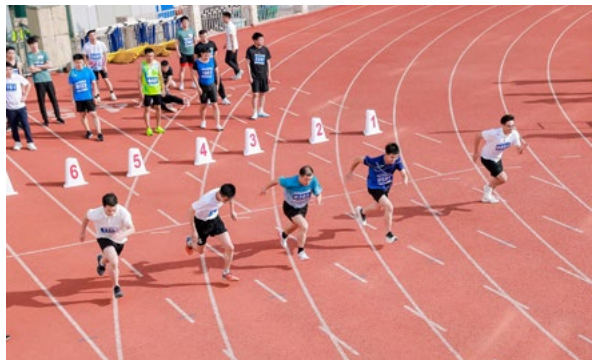
Valiant Soccer League



Golden Autumn Birthday Celebration at China National Environmental Engineering Company



Wind-power Corporation Hosts First Employee Basketball Tournament



CECEP "Gathering Innovation for the World" Second Employee Track and Field Games



CECEP Guozhen "Hands in Hands" Educational Field Trip

Partnering for Mutual Success

The Group collaborates with value-chain partners to embed ESG principles across supplier management and cooperative exchanges. Through empowerment and coordinated action, the Group and its partners advance industry progress and convert sustainability achievements into measurable commitments to customers and society.

○ Sustainable Supply Chain

The Group continually deepens engagement and cooperation with stakeholders to promote sustainable development across the supply chain, enables upstream and downstream partners to co-create and share value, and jointly establishes a long-term, mutually beneficial, complementary business ecosystem.

| System Building

The Group actively establishes procurement management systems and internal control frameworks. The Group has issued 12 regulations, including the Procurement Management Measures, and revised management systems such as the *Special Assessment Rules for Procurement and Supply Chain Management of Second-Tier Subsidiaries*, *Supplier Management Rules*, *Supplier Blacklist Management Regulations*, *Non-competitive Management Rules*, and *Procurement Plan Management Rules*, further refining the procurement and supply chain management system.

| Measures and Results

Transparent Procurement

The Group implements transparent, centralized procurement practices by deploying a full-process online electronic procurement platform to standardize operations. The platform interfaces with China Tendering and Bidding's Public Service Platform, enabling information exchange and active exposure to oversight to enhance procurement transparency and compliance. Its development conforms to national technical specifications for electronic bidding platforms and has attained the highest national certification—three-star certification.

Supplier Management

The Group continues to expand its supplier base, cumulatively approving more than 100,000 suppliers. The Group maintains a two-tier centralized supplier database at both Group headquarters and subsidiary levels, applying dynamic management that combines routine inspections with annual evaluations. In 2024, 98 suppliers that failed the annual evaluation were placed on the Group's supplier "gray list" and suspended from transaction for two years.

Green Supply Chain

The Group revises Supplier Management Rules to strengthen assessment of suppliers' low carbon and green credentials and to establish a rigorous green-access mechanism. Specifically, first, "Basic Requirements for Strategic Suppliers" require carbon-emission monitoring, carbon-footprint tracking, and the establishment of green supply-chain management systems. Second, "Basic Requirements for Centralized Procurement Suppliers" require sound environmental and low-carbon management systems, appropriate safety and environmental qualifications supported by strong performance records, and active promotion of green, low-carbon production.



Valiant Corporation's Green Procurement Initiative

Valiant Corporation actively collaborates with suppliers to explore green, low-carbon supply-chain measures, prioritizing bulk packaging and containers over smaller packages and drums to reduce packaging use. In 2024, Valiant Corporation implemented pallet-rotation measures that replaced single-use pallets with reusable ones, cumulatively reducing raw-material packaging items by approximately 92,000 units.

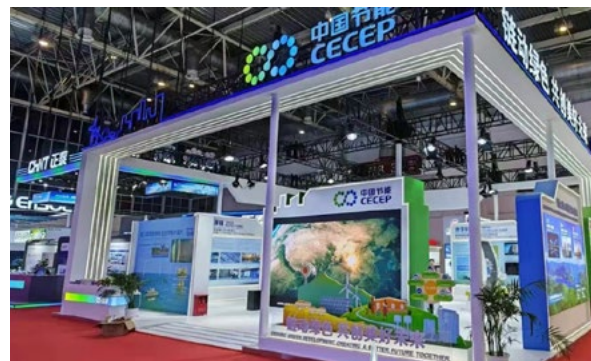
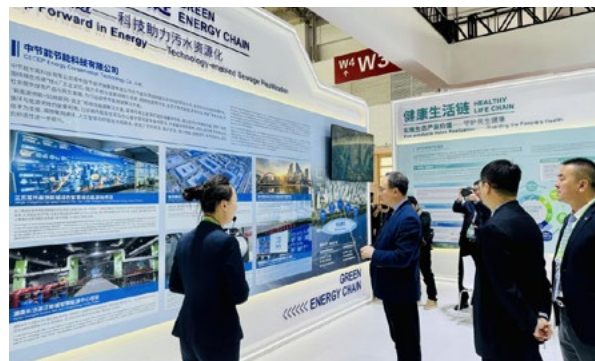
Strengthening Cooperation and Exchange

While implementing standardized operations, the Group maintains an open, enterprising concept and emphasizes close communication with partners. The Group also actively participates in and hosts exchanges, including seminars, exhibitions, and industry forums to foster strategic collaboration.



Energy Conservation Company Participates in The 2nd China International Supply Chain Promotion Expo

Energy Conservation Company actively prepares for the The 2nd China International Supply Chain Promotion Expo to showcase its integrated energy solutions—"new energy supply + 5G IoT + public well-being"—using case studies and videos. By harnessing renewable resources to create regional centralized energy systems, the company couples ecological recycling benefits with energy provision by recovering heat from wastewater. This approach enables centralized cooling and heating services for residential and commercial buildings in the region. The exhibition also presents additional industry chains within CECEP, illustrating CECEP's effectiveness on building a Beautiful China and a community with a shared future for humanity. The exhibition receives widespread praise from both domestic and international visitors.



Energy Conservation Company attended The 2nd China International Supply Chain Promotion

Protecting Customer Rights

The Group integrates the principle of safeguarding customer interests across product development and service delivery. By providing high-quality, energy-efficient, and environmentally friendly solutions and a robust service system, the Group creates long-term customer value and protects customers' rights and interests.

Enhancing Quality Management

The Group continues to require its subsidiaries to obtain certifications in safety, environmental protection, quality, and integration of informatization and industrialization. All 134 subsidiaries have achieved three or four standard certification continuously, substantially improving the normalization and standardization of quality management.

Data Information Security

For three consecutive years, the Group has implemented the Ministry of Public Security's unified deployment to successfully conduct group-wide offensive-defensive cybersecurity exercises. These drills proactively has identified and mitigated a range of cyber risks, with no breaches reported across designated target systems. Building on this progress, the Group systematically has established routine monitoring and early-warning mechanisms for cyber and information security and developed refined cyber-security incident-response plans to ensure full-process coverage and precise control of cybersecurity safeguards during major events and sensitive periods. The Group successfully has completed multiple critical security operations, including the Party's centenary celebrations, the Beijing Winter Olympics, sessions of the National People's Congress and the Chinese People's Political Consultative Conference, and major annual holidays, with no cybersecurity incidents reported.



Energy Conservation Digital Technology Upgrades Digital Strategy in Response to CECEP's Key Digitalization Strategy

On 13 March 2024, Energy Conservation Digital Technology Co., Ltd., a subsidiary of Big Data Company, held a strategy launch event in Beijing to present its "Dual Circulation of Data" development strategy. Grounded in "national needs, industry trends, current priorities, and SOE capabilities," the company will build on years of sectoral expertise. Leveraging technologies and products empowered by "Big Data + AI + Industry Capabilities", it pursues two principal directions: industry digitalization and intelligence, and the industrialization of data as an economic element. Focused on CECEP's core businesses, the company aims to exploit the multiplier effects of data to implement the development strategy of "Dual Circulation of Data" and accelerate the construction of a digital ecosystem characterized by joint contribution and shared benefits, mutual complementarity and promotion, and cross-sector integration. The launch also introduced an innovative business model of "Dual Circulation of Data BOS (Build-Operate-Share)"; the company intends to become a leading provider of digital intelligence solutions and data-asset services for the energy conservation, environmental protection, and health sectors.



I Directing Customers' Business Upgrade

China Energy Conservation, a subsidiary of CECEP, builds a systematic, quantifiable evaluation mechanism for park investment promotion and project admission. Using multidimensional admission criteria, China Energy Conservation assigns comprehensive scores to companies to be admitted to key factors — including industry attributes, economic indicators, and high technology — to rigorously control project entry. In addition, China Energy Conservation signs tenant commitment letters that explicitly record the principal obligations of incoming projects (for example, industry type, output-value targets, and expected tax contributions). These measures ensure that admitted projects align with the park's industrial positioning and green-development requirements and safeguard the quality and long-term sustainability of the park's industries from the outset.



CECEP Property Service Wins Eight Awards, Ranking 45th on the List of Top 100 China Property Service Capability 2024

On 17 May 2024, at Top 100 China Property Service Capability Summit and Brand Value Summit, CECEP Property Service improved its rankings and received multiple honors, including: 45th place in the Top 100 China Property Service Capability 2024; Top 20 China Office Property Service Capability 2024; Top 20 China Public Building Property Service Capability 2024; Top 10 China Industrial Property Service Capability 2024; China Leading Company in Red Property Service 2024; China Leading Company in Low Carbon Property Operation 2024; Top 100 China Property Service Company Brand Value 2024; and Top 30 China Property Service Brand in China East 2024. Grounded in analysis of current conditions and future industry trends, CECEP Property Service has summarized an operational model focused on zero-carbon parks and eco-districts. This model is guided by a distinctive “Four Hearts + Four Colors” Party building brand, emphasizes full-cycle large-scale operations, is driven by the carbon peaking and neutrality concept, aligns with national strategic strategies, and is supported by digital infrastructure.

I Raising the Quality of Service

The Group is committed to establishing a standardized, precisely tailored service system covering the entire customer lifecycle. By leveraging digital management tools and investing in professional talent development, the Group continuously enhances service quality to deliver high-quality quality reliable green wellness services to the public, which reconciles economic benefits with social value.



CECEP Industry Starts Strategic Deployment of Silver Economy Through Wellness

In the third quarter of 2024, CECEP Industry officially established a dedicated task force for the silver economy and wellness, formally initiating strategic research and business expansion in this area. In October 2024, CECEP Industry hosted a thematic forum, Silver Economy and Wellness, titled “Charting a New Chapter for the Silver Economy and Wellness Sector: Uniting Forces for a New Blueprint of High-Quality Development Transformation.” Going forward, the company will leverage CECEP's platform advantages of green industrial parks and expertise in green, low-carbon, full lifecycle services. In alignment with national policies promoting the silver economy and broader societal trends, it will integrate existing asset planning with low-carbon retrofits. Adopting a “home-based elderly care + property management” model, CECEP Industry will cultivate new drivers for transformation and upgrading and develop diversified, CECEP-characteristic health and wellness products and services at communities and industrial parks. In 2024, CECEP Industry signed the wellness-based project based on extensive consultation, joint contribution, and shared benefits in Bailidian Town, Huzhou — its first pilot of the “Home-based Model: Value-added Property Management Services” and intended wellness benchmark for government-enterprise cooperation in the sector.

Contributing to a Better Society

The Group actively fulfills social responsibilities by applying its core strengths to philanthropic initiatives and leveraging green development to promote rural revitalization. The Group offers sustainable solutions that integrate environmental governance, clean energy supply, and ecological industry development across urban and rural areas, shifting the focus from external aid to self-sustaining growth. Through concrete actions, the Group advances a contemporary vision of thriving villages and contributes professional expertise toward achieving shared prosperity.

Supporting Rural Revitalization

The Group regards supporting the national rural revitalization strategy as a core social responsibility and a critical development opportunity. The Group is committed to deeply integrating its expertise in ecological conservation and green energy into rural development. Moving beyond isolated project-level thinking, the Group emphasizes integrated solutions that combine environmental governance, clean energy supply, and ecological industry development, thereby promoting sustainable outcomes for rural communities.

As a central SOE, CECEP maintains close partnerships with its designated pairing-off assistance regions and is fully committed to targeted pairing-off assistance responsibilities. For four consecutive years, CECEP has received an “Excellent” rating in the SOE's performance evaluations of designated pairing-off assistance work. In 2024, the Group advanced rural revitalization and assistance initiatives in Xinjiang, Tibet, and Qinghai. First, CECEP studied and implemented General Secretary Xi Jinping's directives on agriculture, rural areas, and farmers, and executed the CPC Central Committee's decisions on the rural revitalization strategy together with guidance from the Party Committee of SASAC and the Ministry of Agriculture and Rural Affairs. The Group combined its political and organizational capacities, close ties to local communities, and technical expertise in energy conservation and environmental protection with the resource and geographic advantages of designated pairing-off assistance regions. CECEP focused precisely on the five priority areas of industrial development, talent cultivation, ecological protection, cultural revitalization, and organizational strengthening, and completed targeted pairing-off assistance programs in Songxian County, Henan Province, and Fuchuan Yao Autonomous County, Guangxi. Second, leveraging its industry chain to stimulate local business development, the Group advanced a provincial-level key project: the Songxian Jiugao Town 100 MW Wind Farm. Upon completion, the project is projected to generate approximately RMB 10 million in annual tax revenue and directly create more than 100 jobs. In October 2024, under joint promotion by the Group and local government leaders, CECEP signed a cooperation agreement with Fuchuan for a photovoltaic plus multifunctional integrated demonstration project combining animal husbandry and fisheries, with a planned investment of roughly RMB 1.25 billion. Third, subsidiaries at all levels were instructed to assess local needs carefully and intensify their efforts based on their reality. The Notice On Implementing Comprehensive Rural Revitalization and Assistance to Xinjiang, Tibet, and Qinghai in Procurement and Supply Chain Management was promptly issued and received commendation from SASAC.



Series of Health Products Developed by CECEP

Over the past decade, the Group has guided farmers, self-employed individuals, and township enterprises in raw-material growing areas for ecological products to protect and plant ecological resources. This initiative has produced more than 30 distinctive ecological resource species and has cumulatively protected over 280,000 mu (approximately 18,667 hectares) of forestland, an average of 28,000 mu (approximately 1,873 hectares) per year. These measures have generated more than RMB 2 billion in income for local farmers, self-employed individuals, and township enterprises.

The Group has also partnered with financial institutions to innovatively develop the model of Load on the Future Yield Right of Value of Ecosystem Product (VEP) in Specific Geographic Unit. This model monetizes abundant rural ecological resources, expands farmers' income channels, enhances the value of rural ecological products, and promotes coordinated urban-rural regional development to advance shared prosperity.



CECEP Ecological Xinyang Company Visits Shichang Village



The Party Secretary of Songxian County Visits the CECEP Songxian County Jiugao Town Wind Farm Project to Research Rural Revitalization Efforts



Jiangxi Company Boosts High-Quality Industrial Revitalization and Development

Jiangxi Company focuses on a “One Village One Product” strategy, investing RMB 1.537 million to develop three industry clusters: 230 mu of organic rice paddies, 510 mu of tea-oil camellia forests used to rehabilitate degraded hills, and a beef-cattle breeding base with 30–60 head. By adopting a “cooperative + farmer” benefit-sharing mechanism, the company increased the village collective economy from RMB 152,000 in 2021 to RMB 644,500 in 2024, a 324% rise. Pioneering a dual distribution approach—direct procurement by corporate canteens and WeChat community marketing—the initiative achieved cumulative sales of RMB 501,000 in agricultural product sales, bringing products from these restored landscapes directly to households nationwide.



CCECEP Techand Ecology Conducts Pairing-off Assistance & Care Activity

From November to December 2024, the Trade Union of CECEP Techand Ecology, together with CECEP's Fifth Party Branch, Techand Construction's Party Branch, and CECEP's Youth League Committee, organized joint Party-Union-Youth League activities and assistance visits to Songxian County, Henan Province, and Fuchuan County, Guangxi Zhuang Autonomous Region—both designated pairing-off assistance sites of the Group. The initiatives, conducted under the theme “Fulfilling SOE Responsibilities to Support Rural Revitalization”.



“Fulfilling SOEs' Responsibilities to Support Rural Revitalization” Joint Party-Worker-Youth League Initiative and Pairing-off Assistance & Care Activity

Elevating the Public Welfare Brand

The Group always considers communities integral to sustainability. Through diverse pro bono initiatives—including environmental education, collaborative development of green spaces, and community outreach, the Group addresses local needs. By converting corporate expertise into tangible community services that demonstrate care, the Group is committed to being a responsible corporate citizen, deeply rooted in communities and dedicated to co-creating a better future.



Employees Donate Blood at General Water of China in Xiangyang



CECEP Guozhen Conducts Emergency Rescue and Disaster Relief Activities



Valiant Corporation Launches Volunteer Service Initiative



Learning from Lei Feng Campaign at Wind-power Corporation



Making Solid and Sustained Progress

Building up the Foundation of Governance

CECEP anchors in sustainability strategy, elevating ESG governance as the central pillar for modernizing corporate systems and promoting high-quality growth. Pursuing its goal of “becoming a world-class conglomerate integrating energy conservation, environmental protection, and health industry,” the Group emphasizes political guidance as its foundation, economic empowerment as its core, environmental stewardship as its responsibility, and social commitment as its mission. The Group continues to deepen the all-round integration of ESG into corporate governance, reform, and development through systematic, routine measures that strengthen the basis for long-term value creation and sustainable development.



Standardizing Corporate Governance

The Group integrates Party leadership across corporate governance, establishes a governance framework with clear boundaries, coordinated processes, and effective checks and balances, and continually refines a modern corporate governance mechanism for SOEs with Chinese characteristics.

Strengthening Leadership by Party Building

Guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, the Party Committee of CECEP deeply studies General Secretary Xi Jinping’s major expositions on strengthening Party discipline comprehensively. The Group effectively promotes discipline education using a strategic perspective, rigorous standards, and a pragmatic work style. By implementing the “first agenda item” system, convening Party Committee theoretical study group sessions, operating the “three meetings and one lecture” system, and organizing themed Party days, the Committee promptly studies relevant directives and conducted extensive, focused discussions and exchanges. These measures ensure that Party members and officials fully understand the importance of discipline building and enhance their awareness of discipline and rules.

Upskilling with the Party's new theory

The Party Committe thoroughly implements Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era by firmly institutionalizing the “first agenda item,” “primary agenda item,” and “priority for training” systems. The Party Committe establishes mechanisms to consolidate and expand the achievements of thematic education. Centered on Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, and conducts seven rounds of rotational training for Party members and cadres, and one dedicated study session. The Party Committee deeply studies, publicizes, and implements the guidance of the Third Plenary Session of the 20th CPC Central Committee, with leadership team members at all levels taking the lead in delivering grassroots lectures. In 2024, the Party Committee Standing Committee convened 33 meetings addressing 374 agenda items, including 102 “first agenda items” devoted to studying and implementing the guidance of General Secretary Xi Jinping’s important speeches and directives. Meeting minutes were recorded and promptly submitted to the supervision system. Continuous efforts strengthened supervision and implementation, effectively driving the execution of all decisions and deployments of the Group Party Committee.

Firmly conduct Party Discipline Education

The Party Committee developed a Party Discipline Education Work Plan and a Key Tasks List, and systematically organized specialized discipline studies and concentrated discussions across 565 Party organizations involving more than 8,500 Party members, thereby promoting deeper learning and comprehension. The Party Committee convened discipline warning-education conferences and arranged visits to warning-education exhibitions to reinforce vigilance, strictly enforce Party discipline, and strengthen preventive education. External experts were invited to provide targeted guidance on discipline education to Party members throughout the system. The SASAC Party Committee featured CECEP’s practices and experiences in Party discipline education in its Discipline Education Bulletin (Issues 1 and 14). The SASAC Party Committee website also published a report titled “CECEP: Mastering the Three-Character Mantra of ‘Swift, Deep, and Integrated’ to Advance Party Discipline Education with Depth and Substance.”

Strengthening grassroots Party building

The Group Party Committee convened a symposium to standardize and continuously improve the quality of grassroots Party building. It organized training sessions for Party affairs cadres and newly appointed branch secretaries and developed implementation measures for Party building instructors. Party organizations at all levels were mobilized to implement the “Strengthening Foundations Through Systems” campaign, with priority given to resolving issues identified during the SASAC Party Committee inspection. Party building was consistently integrated with core business operations and advanced in parallel with the Group’s key priorities, including market expansion, technological innovation, operational management, workplace safety, and the “Year of Quality and Efficiency Enhancement” initiative. The scope of “Party Building Plus” initiatives was expanded; ongoing activities such as Party Member Responsibility Zones, Model Posts, and Pioneer Teams were sustained. Party organizations and members at all levels were guided to convert the Party’s organizational strengths into drivers of high-quality development.

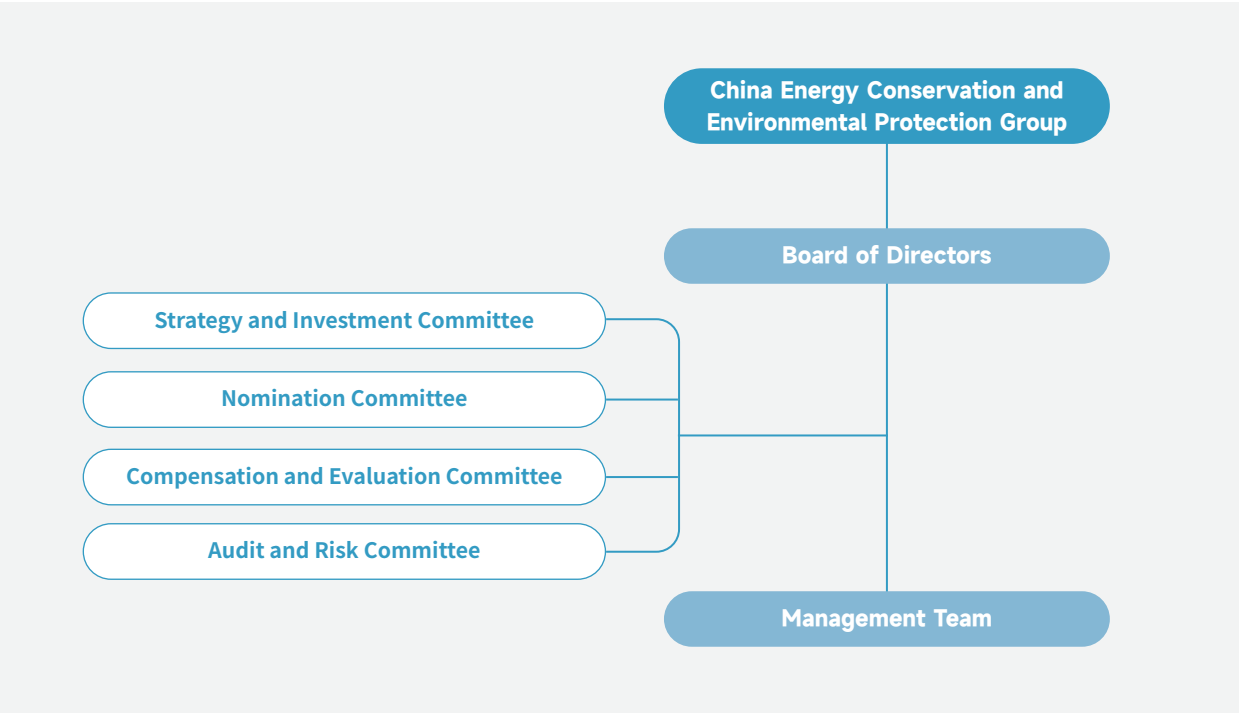
Boosting Governance Effectiveness

CECEP focuses on the "Year of Quality and Efficiency Enhancement," continuously optimizing corporate governance framework and refining a modern enterprise system with Chinese characteristics. The Group institutionalizes the Party Committee’s procedures for prior review and discussion of major operational and managerial matters, standardizes board conduct, completes several key reforms, and establishes a corporate governance mechanism marked by legally defined and transparent responsibilities, coordinated operations, and effective checks and balances.

This year, in line with SOE reform requirements, the Group conducted a comprehensive review and refinement of its corporate governance system centered on the Articles of Association. First, the Group completed revisions to the Group Articles of Association, which clarify and improve fundamental principles governing the Group’s organization and activities, consolidate the foundation of corporate governance, and promote the maturation of the modern enterprise system with Chinese characteristics. Second, the Board of Directors’ authorized decision-making framework was dynamically adjusted to optimize the scope of delegated authority, thereby clarifying responsibilities, improving efficiency, and strengthening management capabilities. This refinement supports a decision-making system characterized by lawful exercise of authority, categorized oversight, delegated operational authority, and alignment of rights with responsibilities. Third, the Group guided subsidiaries in revising their articles of association using the Group’s charter management as a model, thereby promoting standardized operations of subsidiary boards and enhancing the quality and coverage of term-based and contractual management practices.

Board Structure Standardization

The Group’s Board of Directors is well balanced, with the proportion of independent directors meeting regulatory requirements and ensuring independent, standardized decision-making. As of the end of 2024, the Board comprises nine directors, including five external directors, which supports effective and compliant board operations. Four standing committees—the Strategy and Investment Committee, the Nomination Committee, the Compensation and Evaluation Committee, and the Audit and Risk Committee—are established under the Board to provide specialized advice for informed decision-making.



Efficient Operation of Board of Directors

In 2024, the Group established a closed-loop system centered on planning, communication, organization, execution, and supervision to coordinate the Board of Directors' annual work plan. Throughout the year, the Group held 16 Board meetings, 20 meetings of specialized committees, and seven external director communication sessions. As a result, 73 motion documents were prepared, 69 supervision and reminder notices were issued, and all agenda items were implemented (100% execution rate). Requirements from the Board's annual strategy symposium were translated into supervision items, with specialized reports on operational outcomes, which support full-cycle, closed-loop management that covers decision-making, oversight, and feedback.

Performance of Duties by External Directors

The Group actively implements the work requirements of SASAC by organizing external directors to participate in key events, including the SASAC Annual Work Conference, Mid-Year Work Conference, Quarterly External Director Communication Meetings, Central SOE Board Development Promotion Meetings, and related training sessions. This involvement ensures comprehensive support in information sharing, operational assistance, and resource allocation.

Well-established Management Team's Performance Mechanism

The Group strengthens the mechanism requiring the General Manager to report to and be accountable to the Board of Directors. The General Manager should promptly report significant operational matters and major risk warnings arising in the Group's business activities, ensuring the Board remains informed of business operational status.

Implementation and Effectiveness of Contract-based Management

The Board signs annual operation responsibility agreements with members of the management team, conducts yearly performance evaluations, and advances standardized term-based and contractual management of executives. The performance evaluations of the Board and individual directors were completed on schedule, and the Board supported the completion of the annual evaluations 2023 for subsidiary boards of directors.



Compliant and Stable Operations

CECEP continues to refine its compliance and risk-management systems, strengthen business-ethics development, and uphold law-based corporate governance. By integrating compliance requirements into business processes and implementing systematic mechanisms for risk identification, assessment, and control, the Group effectively mitigates operational risks, thereby reinforcing the foundation for stable operations and sustainable development.

Upholding Business Ethics

Party organizations at all levels within the Group adhere to Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era as their guiding ideology. They thoroughly implements the guidance of the Fourth Plenary Session of the Central Commission for Discipline Inspection and conscientiously executes the decisions and arrangements adopted at the Party Conduct and Clean Governance and Anti-Corruption Work Conference of the Party Committee of the SASAC. Consistently upholding reform and strict Party governance, they delivers high-quality education on Party discipline, strengthened rectification of conduct, enforces discipline, and intensifies anti-corruption efforts. Inspections are fully leveraged as an effective deterrent, the system for comprehensive and rigorous Party self-governance are improved, misconduct and corruption that harm the public interest are resolutely addressed, and the difficult, protracted, and comprehensive campaign against corruption are persistently pursued. These measures advances the Party conduct, integrity, and anti-corruption work.

Intensifying Risk Prevention

The Group continually refines its risk-management framework, establishing a risk early-warning platform to monitor risk indicators in a real-time manner and issue timely risk alerts. The Group implements multiple systems to standardize risk prevention and control, strengthening oversight in key areas such as investment, financing, and operations, and thereby effectively mitigating and resolving diverse risks.

This year, CECEP steadily advanced its compliance system by implementing a "1+N" compliance management framework and developing a Compliance Management System that specifies core content, requirements, and operational mechanisms. The system also delineates red lines and minimum standards for business conduct, establishes a compliance risk repository, and classifies 11 major business domains, 45 compliance priorities, 269 compliance negative lists, and 263 compliance obligations. By embedding compliance requirements at critical nodes in business processes, CECEP promotes the combination of compliance management and operations. For overseas business segments, CECEP tailor-makes three Overseas Business Compliance Guidelines and creates a networked, all-coverage management model for international business. Adhering to the principle that "those who manage the business are responsible for compliance," the Group has built a compliance management system characterized by full participation, end-to-end monitoring, and comprehensive coverage, thereby establishing the three lines of defense for compliance management.

Divided by primary business areas

11

Key compliance areas

45

Compliance negative lists

269

Compliance negative lists

263

A Look into 2025

In 2025, the final year of the 14th Five-Year Plan and the Group's designated "Year of Value Creation," guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, the Group will thoroughly study and internalize Xi Jinping Thought on Ecological Civilization, fully implement General Secretary Xi Jinping's latest directives concerning state-owned assets and SOEs, and remain firmly committed to pursuing high quality development. Prioritizing the strengthening of core functions and the enhancement of core competitiveness, the Group will implant value creation across the full cycle of reform and development. Through concrete actions and accountable leadership, the Group will further elevate ESG practices and mobilize the capacity of SOEs to accelerate the development of a Beautiful China in which humanity and nature thrive together.

Economic

CECEP will capitalize on innovation to generate new growth momentum. As a national-level science and technology innovation entity, the Group will deepen digital transformation and lean management to streamline management processes and improve operational efficiency. The Group will pursue emerging growth areas such as clean energy and ecological restoration while enhancing synergism across the industry chain. By optimizing the R&D-to-commercialization pathway, the Group will accelerate deployment of technologies, including perovskite solar cells and smart energy management systems. These efforts will convert innovation outcomes into core competitive advantages and supply green power for the country's sustained economic development.

Environmental Protection

CECEP will reinforce its actions to green development. The Group will continue to increase environmental investments, steadily expand installed capacity of clean energy, advance operational model innovation, and enforce strict control of pollutant emissions to protect blue skies and clear waters. By proactively aligning with national initiatives—such as the Yangtze River Ecological Protection Initiative and the Yellow River Basin Ecological Conservation and High Quality Development Strategy—the Group will develop more exemplary ecological governance projects that practically demonstrate the principle that "lucid waters and lush mountains are invaluable assets."

Social Well-being

CECEP will maintain a people-centred approach and fulfil its social responsibilities with commitment. The Group will promote employee development and well-being by enhancing training programs and protection institutions, ensuring that every member of the CECEP family benefits from the pairing-off Group's progress. Strengthening its role in rural revitalization, the Group will upgrade its assistance model of "wind power + photovoltaic + specialty industries" and broaden initiatives such as the "ton-bag industrial assistance for villages" program to help more communities raise incomes and achieve prosperity. By actively participating in public welfare, philanthropy, and emergency relief, the Group responds to social expectations through concrete action and contributes to steady advancement toward shared prosperity.

At this new historical juncture, CECEP will seize the opportunities of the "Year of Value Creation" to deepen reforms, intensify innovation, and optimize its strategic layout. The Group will spare no effort in meeting the goals and tasks set forth in the 14th Five-Year Plan, demonstrating its responsibility to support national strategies and contributing more substantively to the pursuit of modernization that harmonizes human development with the natural environment.



Key ESG Performance

	KPI	Unit	2022		
			2022	2023	2024
Environmental	Total green electricity generation	‘00,000,000 kwh	281.68	278.20	283.13
	CO ₂ emissions reduction by green electricity	‘0,000 tons	/	2,098.00	2,128.00
	Energy savings by green electricity	‘0,000 tons of standard coal equivalent	/	841.00	854.00
	Installed capacity of green electricity	GW	/	2,193.00	2,568.85
	Installed capacity of green electricity: solar power	GW	/	1,269.82	1,510.12
	Installed capacity of green electricity: wind power	GW	/	713.25	850.55
	Installed capacity of green electricity: waste-to-energy	GW	/	190.85	190.20
	Daily solid waste treatment capacity	‘0,000 tons	/	10.60	10.24
	Solid waste treatment capacity	‘0,000 tons	2,436.43	2,536.00	2,584.60
	Daily water and wastewater treatment capacity	‘0,000 tons	/	1,441.30	1,408.30
Social	Water treatment capacity	‘00,000,000 tons	34.96	36.01	36.88
	COD reduction	‘0,000 tons	50.20	50.00	52.38
	R&D spending (in energy conservation and environmental protection)	‘RMB 00,000,000	16.63	17.74	12.72
	R&D spending (in energy conservation and environmental protection) as a percentage of business revenue	%	2.81	3.19	2.61
	Number of scientific and technological staff	Employees	4,941	5,755	5,216
	Number of major scientific research platforms	Platforms	3	3	3
	Number of science and technology awards at provincial and ministerial levels	Awards	7	2	6
	Commercialization of scientific and technological achievements	%	100.00	100.00	100.00
	Number of patent applications	Applications	788	828	702
	Number of granted patents	Patents	735	740	681
	Number of national, industry and local standards hosted and participated in	Standards	22	25	20
	Number of new invention patents	Patents	5	14	3
	Total system-wide workplace safety spending	‘RMB 00,000,000	2.4	2.45	2.84
	Cumulative number of emergency drills conducted	Drills	2,500	3,000	3,200
	Number of major or fatal workplace safety accidents	Accidents	0	0	0
	Work-related fatality rate per RMB100 million industrial output value	%	0.0019	0.0017	0.0016

	KPI	Unit	2022		
			2022	2023	2024
Social	Average employee health training hour	Hours	/	2.57	2.35
	Safety training organized	Sessions	/	8,000	10,000
	Number of participants in safety training	‘0,000 employees	/	33.00	28.70
	Total safety training hour	‘0,000 hours	/	6.60	7.20
	Safety awareness lecture organized	Lectures	/	1,400	2,700
	Number of participants in awareness lecture	‘0,000 employees	/	3.00	4.40
	Total number of employees	Employees	37,062	36,234	32,980
	Percentage of employee signing employment contract	%	100.00	100.00	100.00
	Percentage of female employee	%	26.40	22.59	23.15
	Percentage of female manager	%	32.37	33.59	33.16
	Percentage of ethnic minority employees	%	2.81	2.79	3.03
	Employee turnover	%	9.20	8.99	9.10
	Coverage of medical check-up	%	100.00	100.00	100.00
	Coverage of social insurance	%	100.00	100.00	100.00
	Employee satisfaction	Scores	96.70	96.70	96.70
Governance	Total charitable donations	‘RMB 0,000	3,676.60	3,276.06	2,602.70
	Total amount of consumption-based assistance funding	‘RMB 0,000	1,088.00	1,191.00	1,207.60
	Spending in non-reimbursable assistance	‘RMB 0,000	/	2,250.00	2,300.00
	Spending in reimbursable assistance	‘RMB 0,000	/	5,086.00	18,737.90
	Number of directors	Directors	9	9	9
	External directors	Directors	5	5	5
	Worker’s director	Directors	1	1	1
	Integrity-themed Party member’s lecture	Lectures	/	2,677	7,799

Benchmark Index Table

Disclosure Item	Location
Basic information on the company and report	About the Report, About CECEP
ESG management	ESG Governance
ESG risks and opportunities	Unleashing Infinite Possibilities/Advancing the Carbon Peaking and Neutrality Strategy to Address Climate Change
Stakeholder communication	Assessment of ESG Issue
Assessment of material issues	Assessment of ESG Issue

Environmental Indicator

Level 1 indicator	Level 2 indicator	Level 3 indicator	Location
E.1 Energy consumption	E1.1 Water resources	E1.1.1 Use of freshwater	Water Use
	E1.3 Energy	E1.3.1 Use of fossil energy	Energy Management
E.2 Pollution control	E.2.1 Wastewater	E2.1.2 Wastewater management and discharge reduction measures	Wastewater Treatment
		E2.3.1 Compliance with solid waste disposal regulations	Solid Waste Management
	E.2.3 Solid wastes	E2.3.2 Management of general industrial solid waste	Solid Waste Management
		E2.3.4 Hazardous waste management	Solid Waste Management
	E3.1 Greenhouse gas emission	E3.1.2 Greenhouse gas emissions management	Leading by Green Development/Creating a Low-Carbon Future Together
		E3.2.1 Greenhouse gas emissions reduction management	Leading by Green Development/Creating a Low-Carbon Future Together
E.3 Climate change	E3.2 Emission reduction management	E3.2.2 Greenhouse gas emissions reduction	Leading by Green Development/Creating a Low-Carbon Future Together
		E3.3.1 Participation in carbon emission trading markets	Carbon Emissions Trading
	E3.3 Environmental equity trading	E3.3.3 Participation in green electricity trading	Green Energy
E4 Biodiversity	E4.1 Impacts of production, services and products on biodiversity	E4.1.1 Impacts of production, services and products on biodiversity	Ecological and Environmental Management
E5 Resource and environmental management system and measures	E5.1 Low-carbon development goals and strategic measures	E5.1.1 Low-carbon development goals and strategic measures	Leading by Green Development/Creating a Low-Carbon Future Together

Environmental Indicator

Level 1 indicator	Level 2 indicator	Level 3 indicator	Location
E5 Resource and environmental management system and measures	E5.2 Resource management practices	E5.2.1 Management of water resource usage	Water Use
		E5.2.3 Energy use and conservation Management	Energy Management
	E5.3 Statistical monitoring of energy conservation and carbon reduction and assessment reward and punishment system	E5.3.1 Energy conservation and carbon reduction monitoring, statistical reporting, and assessment system	Energy Management
		E5.4.1 Cleaner production	Ingraining an Eco-Conscious Culture
		E5.4.2 Green technological upgrades and recycling	Energy Management
	E5.4 Green actions and measures	E5.4.3 Green building renovation	Green Building
		E5.4.4 Green office practices and operations	Ingraining an Eco-Conscious Culture
		E5.4.5 Green procurement and green supply chain management	Sustainable Supply Chain
		E5.4.6 Charitable environmental activities	Contributing to a Better Society
	E5.5 Green low-carbon certification	E5.5.1 Environmental management system certification	Devotion to Core Green Business
	E5.6 Environmental compliance	E5.6.1 Emergency response plan for sudden environmental incidents	Leading by Green Development/Creating a Low-Carbon Future Together

Social Indicator

Level 1 indicator	Level 2 indicator	Level 3 indicator	Location
S1 Employee rights and interests	S1.1 Employee recruitment and employment	S1.1.1 Corporate recruitment policies and Implementation	Diversity and Equality in the Workplace
		S1.1.2 Employee structure	Key ESG Performance
		S1.1.3 Avoidance of child labor or forced labor	Safeguarding Employee Rights
	S1.2 Employee remuneration and benefits	S1.2.1 Compensation philosophy and policies	Safeguarding Employee Rights
		S1.2.3 Compensation and benefits protection	Safeguarding Employee Rights
		S1.2.4 Employee democratic management	Safeguarding Employee Rights
	S1.3 Employee health and safety	S1.3.1 Employee occupational health and safety management	Fortifying Security Line of Defense
			Fortifying Security Line of Defense
		S1.3.2 Employee safety risk control	Fortifying Security Line of Defense
		S1.3.3 Response to safety incidents and work-related injuries	Fortifying Security Line of Defense
			Fortifying Security Line of Defense
		S1.3.4 Employee care and support	Prioritizing Employee Well-being

Social Indicator

Level 1 indicator	Level 2 indicator	Level 3 indicator	Location
S1 Employee rights and interests	S1.4 Employee development and training	S1.4.1 Employee incentives and promotion policies	Streamlining Channels for Employee Development
		S1.4.2 Employee education and training	Streamlining Channels for Employee Development
			Key ESG Performance
			S1.4.3 Employee career planning and job change support
	S1.5 Employee satisfaction	S1.5.1 Employee satisfaction survey	Safeguarding Employee Rights
		S1.5.2 Labor dispute	Safeguarding Employee Rights
S2 Product and service management	S2.1 Product safety and quality	S2.1.1 Production standard management policies and measures	Fortifying Security Line of Defense
		S2.1.2 Quality management	Protecting Customer Rights
	S2.2 Customer service and rights	S2.2.1 Customer satisfaction	Protecting Customer Rights
		S2.3 Innovative development	S2.3.1 R&D and innovation management system
	S2.3.2 R&D investment		Innovation-Driven Development
			Key ESG Performance
	S2.3.3 Innovation outcomes		Innovation-Driven Development
			Key ESG Performance
S3 Supply chain safety and management	S3.1 Supplier management		S3.1.1 Supplier selection and management
		S3.1.2 Number and distribution of suppliers	Sustainable Supply Chain
	S3.2 Supply chain link management	S3.2.1 Supply chain management policy and measures	Sustainable Supply Chain
		S3.2.2 Supply chain security assurance and contingency plans	Sustainable Supply Chain
		S3.2.3 Significant risks and impacts (supply chain)	Sustainable Supply Chain
S4 Social contribution	S4.1 Tax payment	S4.1.1 Tax payment	Key ESG Performance
	S4.2 Community co-building	S4.2.1 Policies and measures for participating in local community development	Contributing to a Better Society
		S4.2.2 Contributions and impact on local communities	Contributing to a Better Society
	S4.3 Social pro bono activities	S4.3.1 Policies and measures for participating in social pro bono activities	Contributing to a Better Society
		S4.3.2 Investment in pro bono activities and outcomes	Contributing to a Better Society
	S4.4 Response to National Strategies	S4.4.1 Industrial transformation	Supporting Rural Revitalization
		S4.4.2 Rural revitalization and regional collaborative development	Supporting Rural Revitalization
		S4.4.3 Responsibility fulfillment for Belt&Road initiative and overseas activities	Supporting Rural Revitalization
		S4.4.4 Industry-specific initiatives and other social responsibility practices	Supporting Rural Revitalization

Governance Indicator

Level 1 indicator	Level 2 indicator	Level 3 indicator	Location
G1 Governance strategy and organizational structure	G1.1 Governance policies and processes	G1.1.1 Governance strategy development	Boosting Governance Effectiveness
		G1.1.2 Governance strategy oversight process	Boosting Governance Effectiveness
		G1.1.3 Governance strategy approval and review process	Boosting Governance Effectiveness
		G1.1.4 Leadership by party building	Strengthening Leadership by Party Building
	G1.2 Organizational structure and functions	G1.2.2 Organizational structure and functions of board and management	Boosting Governance Effectiveness
		G1.2.3 Board and management appointment procedures and composition	Boosting Governance Effectiveness
	G1.3 Remuneration anagement	G1.3.3 Rationality of management compensation	Boosting Governance Effectiveness
G2 Standardized Governance	G2.1 Internal control	G2.1.1 Internal audit	Boosting Governance Effectiveness
		G2.1.2 Internal control structure, mechanisms, and processes	Boosting Governance Effectiveness
	G2.2 Integrity	G2.2.1 Integrity development system standards	Upholding Business Ethics
		G2.2.2 Effectiveness of integrity development measures	Upholding Business Ethics
	G2.3 Fair competition	G2.3.1 Fair competition system and standards	Safeguarding Employee Rights
		G2.3.2 Effectiveness of fair competition measures	Safeguarding Employee Rights
G3 Investor relations management and shareholder equity	G3.1 Investor relations management	G3.1.1 Investor relations management strategy	Stakeholder Communication
		G3.1.2 Investor communication	Stakeholder Communication
		G3.1.3 Investor relations department development	Stakeholder Communication
	G3.2 Shareholders' equity	G3.2.2 Shareholder communication	Stakeholder Communication
G4 Transparency of information disclosure	G4.2 Quality of information disclosure	G3.2.3 Shareholder right to information and participation in decision-making	Stakeholder Communication
		G4.2.1 Regular monitoring, auditing, and evaluation of all disclosures	Stakeholder Communication
G5 Compliant operation and risk management	G5.1 Compliant operation	G5.1.1 Compliance management system	Compliant and Stable Operations
		G5.1.2 Compliance system development	Compliant and Stable Operations
		G5.1.3 Specific compliance review processes	Compliant and Stable Operations
	G5.2 Risk management	G5.2.1 Risk identification and early warning	Intensifying Risk Prevention
		G5.2.2 Risk control and tracking	Intensifying Risk Prevention
		G5.2.3 Risk reporting and management	Intensifying Risk Prevention

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