

中广核  CGN

中國廣核新能源控股有限公司
CGN New Energy Holdings Co., Ltd.

(Incorporated in Bermuda with limited liability) (於百慕達註冊成立的有限公司)

Stock Code 股份代號 : 1811.HK



Environmental, Social
and Governance
Report 2022

The cover features a central illustration of a white wind turbine with three blades, positioned above a blue solar panel. A vibrant green plant with large, curved leaves grows from the solar panel. The entire scene is set against a light blue sky with soft white clouds. A thick, wavy green ribbon curves around the base of the solar panel and plant, while a blue circular ring floats in the upper right. The overall aesthetic is clean, modern, and eco-friendly.

善用自然的能量
Natural Energy Powering Nature

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01 Definition

In the Report, unless the context otherwise requires, the following terms shall have the meanings set out below:

“CGN”	refers to	China General Nuclear Power Corporation, a state-owned enterprise established in China and the controlling shareholder of the Company
“China”	refers to	the People’s Republic of China
“ECP”	refers to	e-Commerce Platform
“EHS”	refers to	Environmental Health and Safety
“ESG”	refers to	Environmental, Social and Governance
“Hong Kong”	refers to	the Hong Kong Special Administrative Region of the People’s Republic of China
“Insurances and Housing Fund”	refers to	the social endowment insurance, urban employee medical insurance, work-related injury insurance, maternity insurance, and unemployment insurance in China
“Korea”	refers to	the Republic of Korea
“Listing Rules”	refers to	the Rules Governing the Listing of Securities on the Stock Exchange (as amended from time to time)
“Mainland China”	refers to	the mainland of the People’s Republic of China
“MPF”	refers to	the Mandatory Provident Fund in Hong Kong
“National Pension”	refers to	the National Pension in Korea
“OHS”	refers to	Occupational Health and Safety
“Party”	refers to	the Chinese Communist Party
“Report”	refers to	2022 ESG report of the Company
“Reporting Period”	refers to	the period from 1 January, 2022 to 31 December, 2022
“RMB”	refers to	Renminbi, the lawful currency of the People’s Republic of China
“Safety Committee”	refers to	the Safety, Quality and Environmental Management Committee
“Stock Exchange”	refers to	The Stock Exchange of Hong Kong Limited
“TCFD”	refers to	the Task Force on Climate-Related Financial Disclosures
“the 14th Five-Year Plan”	refers to	the 14th Five-Year Plan for Economic and Social Development of the People’s Republic of China and the Long-Range Objectives Through the Year 2035
“the Board”	refers to	the board of directors of the Company
“the Company”, “CGN New Energy”, “our”, “us”, “we”	refers to	CGN New Energy Holdings Co., Ltd.
“the Group”	refers to	the Company and its subsidiaries from time to time
“US\$”	refers to	the United States dollar, the lawful currency of the United States of America
“20th National Congress”	refers to	the 20th National Congress of the Chinese Communist Party
“%”	refers to	per cent

02 About the Report

The Company is delighted to publish its 7th ESG report. The Report aims to present the ESG issues related to the sustainable development of the Group to its key stakeholders to better inform them about the Group's concept, actions and related performance of sustainable development.

REPORTING PERIOD AND BOUNDARY

Unless otherwise specified, the Report mainly describes the specific policies and performance of the Group's efforts in sustainable development during the period from 1 January, 2022 to 31 December, 2022. For the sake of continuity and comparability of the Report, some data and contents in the Report have been extended as needed. For details on data, please refer to the "Comprehensive Performance" in the Report.

The main contents of the Report cover the Group's wind, solar, gas-fired, coal-fired, oil-fired, hydro, cogeneration, fuel cell and biomass projects in China and Korea. Contents of the Report are mainly based on and determined through the materiality assessment. Please refer to the chapter headed "Stakeholder Engagement and Materiality Assessment" for details of the process.

REPORTING STANDARD

The Report is prepared in accordance with the *ESG Reporting Guide* under Appendix 27 to the Listing Rules and *GRI Sustainability Reporting Standards*. It is written on the basis of the four reporting principles of the *ESG Reporting Guide*, namely, materiality, quantitative, balance and consistency, and eight reporting principles in *GRI Sustainability Reporting Standards*: accuracy, balance, clarity, comparability, completeness, sustainability context, timeliness, and verifiability.

Four reporting principles in the *ESG Reporting Guide* is applied as follows:

- **Materiality:** The Group identifies material issues related to the Group through materiality assessment, and focuses on the material issues checked by the Group's management and the Board in this Report. The Group uses the materiality assessment to identify the key stakeholders of the Group, invites the Board and key stakeholders to prioritize sustainable development issues, carries out an analysis of material issues, etc. Please refer to the chapter headed "Materiality Assessment" for details of the materiality assessment.
- **Quantitative:** To comprehensively evaluate the ESG performance of the Group during the Reporting Period, the Group disclosed the KPIs applicable in the *ESG Reporting Guide* under Appendix 27 to the Listing Rules, and listed the standards, approaches, assumptions and reference basis for calculation of quantitative KPIs, including the sources of main conversion factors.
- **Balance:** The Report provides an unbiased picture of the Group's performance and avoids selections, omissions, or presentation formats that may inappropriately influence a decision or judgment by the report reader.
- **Consistency:** The Report uses consistent methodologies to allow for meaningful comparisons of the ESG information in respect of the Reporting Period.

CONFIRMATION AND APPROVAL

The contents disclosed in the Report are in compliance with the ESG disclosure requirements of mandatory disclosure and "Comply or Explain" provisions in the *ESG Reporting Guide* under Appendix 27 to the Listing Rules. The Report was approved by the Board in March 2023. The Board and all the directors of the Company warrant that there are no false records, misleading statements, or material omissions in the Report, and they shall individually and collectively accept full responsibility for the truthfulness, accuracy and completeness of its contents.

REPORT ACQUISITION AND FEEDBACK

The online version of the Report is published on the Stock Exchange's website (www.hkexnews.hk) and the Company's website (www.cgnne.com).

If you have any enquiries, comments, or feedback on the Report, please feel free to send an email to cgnne@wstg.hk.

03 Chairman's Statement

CGN New Energy is committed to providing clean and renewable energy. While providing stable electricity supplies, we integrate the concept of sustainability into the development of the electricity industry and create value for society. As an annual summary of the Group's sustainability, the ESG report fully demonstrates how CGN New Energy attaches great importance to sustainability, discloses the Group's sustainable performance in all aspects, and manifests the vision and commitment to sustainability. Also, the report enables us to understand our key stakeholders' expectations and demands regarding the Group's sustainability. In the future, we will continue to publish the ESG report and further enrich the ESG report's content according to the expectations and demands of our key stakeholders. We will continue to disclose our current situation, plans and achievements in respect of the governance system, environmental protection, employee relations and contributions to the community to the key stakeholders.

In June 2022, the National Development and Reform Commission of China, the National Energy Administration of China, the Ministry of Finance and other nine ministries and commissions issued the *14th Five-Year Plan for Renewable Energy Development*. The Plan sets out specific targets: by 2025, the share of non-fossil fuels in total energy consumption will reach around 20%; by 2025, the consumption of renewable energy will be about one billion tons of standard coal, accounting for about 18% of primary energy consumption; the annual power generation by renewable energy stands at nearly 3,300 TWh. As of 31 December, 2022, China has approximately 1,213 GW of installed renewable energy power capacity. Among them, the cumulative grid-connected capacity of wind power reached 365.4 GW, and the cumulative grid-connected capacity of solar power was 392.6 GW, up 11.2% and 28.1% respectively year-on-year. China's electricity structure remained green and low-carbon and more electricity was generated from non-fossil fuels.



Zhang Zhiwu

Secretary of the Communist Party Committee,
Chairman, President and Executive Director

03 Chairman's Statement

The Company continues to stay abreast of the national "30.60" dual-carbon goals and the latest policy trends to respond to the national target. The Company leverages its advantage in the industry to double its efforts in new energy and expand the national new energy landscape. As of 31 December, 2022, the attributable installed capacity of the Group's power generation projects reached 8,987 MW, representing a 6.9% increase from 8,405 MW of the previous year; generating approximately 19,190 GWh, representing a 5.7% increase from 18,162 GWh of the previous year. During the Reporting Period, CGN New Energy made breakthroughs in clean energy that 619.7 MW attributable installed capacity is newly added, including 569.7 MW of newly added attributable installed capacity of wind power and 50 MW of newly added attributable installed capacity of solar power. The Group actively develops new energy projects while adhering to the principle of environmental protection first, complying with environmental standards in site selection, construction and operation, and incorporating green construction elements in project design.

During the development process, the Group has always insisted on taking General Secretary Xi Jinping's important statement on safety production and the thought of ecological civilization as the fundamental guidelines and fully implementing laws and regulations on workplace safety. The Group fully recognizes that safety is our top priority, insists that the people and life be paramount, adheres to the basic principles of "Safety First, Quality Foremost and Pursuing Excellence" and implements the working culture of "Stringency, Prudence, Meticulosity and Pragmatism". The Group's overall safety, quality and environmental control was stable but progressive, the safe production trend was generally under control.

As a central government-owned enterprise, the Group has been taking corporate social responsibility while planning its development. Since 2022, the Group has further broadened its political perspective, promoted rural revitalization with high quality, continued to practice the concept of green development, and pushed forward environmental and water saving during project construction and operation in an effort to build "Beautiful China". Meanwhile, the Group actively carries out public service and charitable activities to welcome the 20th National Congress of the Chinese Communist Party. The Group striving implements the code of conduct featuring "Integrity and Transparency, Professional, Standard, Effective Implementation, and Teamwork" while striving to create an atmosphere that pursues excellence and vitalizes the organization by building learning-based teams to build up core competencies and share technical strength to the Group's high-quality development.

2023 is the first year to fully implement the spirit of the 20th National Congress of the Chinese Communist Party and an important year to enforce the Group's 14th Five-Year Plan. The Group will continue to uphold the mission of "Developing Clean Energy and Building a Beautiful China" to meet the challenges with a new outlook, a high spirit and a vigorous attitude. At the same time, the Group will continue the concept of sustainability, explore the mode of "Clean Energy and Green Development", and build more examples of ecological and environmental projects, contributing to the national dual-carbon goal.

Zhang Zhiwu

*Secretary of the Communist Party Committee,
Chairman, President and Executive Director*

21 March, 2023



04 Distribution of Projects



Henan, China

Total Installed Capacity



663.6 MW



5.7 MW

Gansu, China

Total Installed Capacity



1,043 MW



101 MW

Qinghai, China

Total Installed Capacity



200 MW



160 MW

Sichuan, China

Total Installed Capacity



51 MW

Hunan, China

Total Installed Capacity



245.2 MW



18.3 MW

Guizhou, China

Total Installed Capacity



170 MW

Guangxi, China

Total Installed Capacity



192.2 MW



18 MW

Jiangxi, China

Total Installed Capacity



177.8 MW

Inner Mongolia, China

Total Installed Capacity



10 MW



193 MW

Shaanxi, China

Total Installed Capacity



0.7 MW

Heilongjiang, China

Total Installed Capacity



100 MW

04 Distribution of Projects



Guangdong, China

Total Installed Capacity



16.4 MW

Hainan, China

Total Installed Capacity



24.3 MW

Shanxi, China

Total Installed Capacity



199 MW

Hebei, China

Total Installed Capacity



89.6 MW

Shandong, China

Total Installed Capacity



567.6 MW



35 MW

Jiangsu, China

Total Installed Capacity



554 MW



31 MW



63 MW

Shanghai, China

Total Installed Capacity



4.5 MW

Anhui, China

Total Installed Capacity



66.2 MW



344.6 MW

Zhejiang, China

Total Installed Capacity



404.2 MW



10.6 MW

Hubei, China

Total Installed Capacity



24 MW



100 MW



176.5 MW



(associates 49%)

2,020 MW

Fujian, China

Total Installed Capacity



8.9 MW

Korea

Total Installed Capacity



507 MW



1,549.1 MW



109.5 MW

05 About CGN New Energy

COMPANY OVERVIEW

CGN New Energy, listed on the Main Board of the Stock Exchange, is an independent power producer with diverse fuel types and geographical coverage. CGN is our controlling shareholder, which owns approximately 72.33% of the issued share capital of the Company through its indirectly wholly-owned subsidiary and CGN Energy International Holdings Co., Limited (an indirect wholly-owned subsidiary of CGN).

Currently, CGN New Energy's portfolio of assets comprises wind, solar, gas-fired, coal-fired, oil-fired, hydro, cogen, fuel cell and biomass projects, which are in operation in the PRC and Korea power markets. CGN New Energy's business in the PRC covers 19 provinces, two autonomous regions and a municipality. In terms of the overseas market, we have 2 gas-fired projects and 1 fuel cell project in Yulchon, Korea, as well as 1 oil-fired project and 1 biomass project in Daesan. As of 31 December, 2022, projects in China and Korea accounted for approximately 75.9% and 24.1%, respectively, of the Group's gross attributable installed capacity of 8,986.5 MW.

CORPORATE VALUE

CGN New Energy's corporate mission: Developing clean energy and building a beautiful China

Corporate basic values	Accountable	Being willing to do things, capable of doing things and getting things done
	Rigorous and pragmatic	Being practical, performance-based and result-oriented
	Innovative and enterprising	Pursuing enterprise, innovation and excellence
	Client-oriented	Viewing clients' needs as our own
	Value-adding	Everyone is a value creator

BRAND STANDARDS

"Natural Energy Powering Nature" is the brand slogan that every CGN personnel takes pride in. CGN New Energy views safe, clean and sustainable energy as its brand positioning, while stressing and practicing it all the time. In terms of the design, construction, operation and energy resources utilization of power generation projects, the Group holds future-oriented attitudes and insists on minimizing the environmental and social impacts of various production activities. The Group adheres to CGN's consistent personnel management principles and strives to become the industry benchmark in new energy.

INTERNAL CODE OF CONDUCT

1. Four principles for CGN employees: Integrity and transparency, professionalism, efficient execution and teamwork
2. Four principles for management team: Being a good example, capable operation, caring for employees, fairness and integrity

05 About CGN New Energy

HONORS AND AWARDS OF THE GROUP IN 2022

February 2022



CGN Dangtu Taibai Photovoltaic Power Station was awarded “Research Base for High-quality Development of Photovoltaic Industry” by China Energy News. In more than 300 application cases, CGN Dangtu Taibai Photovoltaic Power Station has been unanimously recognized by industry associations and experts by virtue of its strong advantages such as large size, strong efficiency and high influence

June 2022



Gansu Minqin Wind Power Project and Hongshagang Wind Power Project won:

The second-class prize of the “Fifth National Equipment Management and Technological Innovation Achievements” of the China Equipment Management Association

05 About CGN New Energy

August 2022



China Electricity Council announced the results:

- Qingyun Shangtang Wind Farm in Shandong Province, Leling Zhuji Wind Farm in Shandong Province, Liangshui Tangji Wind Farm in Jiangsu Province and Longnan Yangcun Wind Farm in Jiangxi Province of the Company won the honorary title of “AAAA-level Unit in the Benchmarking of Production and Operation Statistical Indicators for National Wind Farms in China”, respectively;
- Xitieshan Photovoltaic Power Station in Qinghai Province of the Company won the honorary title of “AAAA-level Unit in the Benchmarking of Production and Operation Statistical Indicators for National Solar Photovoltaic Power Stations in China”

05 About CGN New Energy

September 2022



Won six awards of the 8th Investor Relations Awards (HKIRA):

- The Company won the “Best IR Company”;
- The Company won the “Best ESG (Environment)”;
- Mr. Zhang Zhiwu, Chairman, President and Executive Director of the Company, won the “Best IR (Chairman/CEO)”;
- Mr. Liu Chao, the Chief Accountant of the Company, was awarded the “Best IR by CFO”;
- Mr. Lee Kin, Assistant President and Company Secretary of the Company, was awarded the “Best IRO”;
- The Company’s investor relations team won the “Best IR Team”

06 Highlights of 2022

FINANCIAL AND OPERATING HIGHLIGHTS

Revenue	US\$2,430.1 million, a year-on-year increase of 36.9% (2021 (Restated): US\$1,775.3 million)
EBITDA	US\$930.6 million, a year-on-year increase of 23.6% (2021 (Restated): US\$753.1 million)
Profit attributable to equity shareholders of the Company	US\$195.1 million, a year-on-year decrease of 20.1% (2021 (Restated): US\$244.3 million)
Earnings per share (EPS)	4.55 US cents, a year-on-year decrease of 20.1% (2021 (Restated): 5.69 cents)
Attributable installed capacity	8,987 MW, up a year-on-year increase of 6.9% (2021: 8,405 MW)
Electricity generation	19,190 GWh, a year-on-year increase of 5.7% (2021: 18,162 GWh)

Clean and renewable energy portfolio	Attributable installed capacity	Year	Attributable installed capacity	Conventional energy portfolio
Solar, Wind, Hydro, Gas-fired, Fuel cell and Biomass	7,426.7 MW (82.6%)	2022	1,559.8 MW (17.4%)	Coal-fired, Oil-fired, Cogeneration
	6,844.8 MW (81.4%)	2021	1,559.8 MW (18.6%)	
	5,842.0 MW (77.4%)	2020	1,708.6 MW (22.6%)	

The Report presents the basic financial and business status of CGN New Energy in 2022. For details, please refer to our *Annual Report 2022*.

06 Highlights of 2022

PERFORMANCE IN ENVIRONMENTAL PROTECTION

Facing increasingly serious environmental challenges, CGN New Energy has continuously implemented the ecological and environmental protection concept of “Lucid Waters and Lush Mountains are Invaluable Assets”. It incorporates green and environmental considerations in the entire process from site selection, deliberation, and construction to the operation and maintenance of projects. CGN New Energy also proactively develops a clean energy business. We adopt the “Three Balances” approach focusing on environmental protection in preliminary design, construction progress and environment protection are well balanced, and environmental considerations are incorporated in the production. We roll out a variety of initiatives on ecological and landscape protection, atmospheric protection, water protection, and energy and resources conservation.

In 2022, the Group generated 11,551.6 GWh of electricity through the solar, wind and hydro power portfolio, helping the electricity industry to address global climate change, reduce air pollution and mitigate environmental impacts.

In 2022, we helped reduce the emission of the following pollutants¹:

Carbon dioxide (CO ₂)	9,564,724.80 tonnes
Nitrogen oxides (NO _x)	1,755.84 tonnes
Sulfur dioxide (SO ₂)	1,166.71 tonnes
Smoke and dust	254.14 tonnes
Wastewater	623,786.40 tonnes

EMPLOYEES’ CAREER DEVELOPMENT AND OCCUPATIONAL HEALTH & SAFETY

A good employee team brings a steady stream of development impetus for CGN New Energy. Based on our business features and the actual needs of the Group and employees, we design and customize high-quality training programs and invite experienced part-time lecturers to give content-rich and practical lectures. In addition, we stick to the basic operating principle of “Safety First”, standardize the occupational health rules, provide employees with personal protective equipment, arrange occupational health examinations, and provide diversified safety training.

Data of employee health and safety in 2022:

Number of work-related fatalities	0
Number of reportable injuries ²	0
Loss of work accident rate (per 200,000 working hours)	0%
Severe injury rate (per 200,000 working hours)	0%
Lost days due to work injury	0 day

COMMUNITY CONTRIBUTION

CGN New Energy embraces the operational philosophy of “Being a Good Neighbor, a Good Friend and a Good Partner” to continuously contribute to society. On the basis of economic development, the Group upholds the principle of harmonious growth, and launches a wide range of charity projects including poverty alleviation by industrial revitalization, assistance in education development, public science education and disaster relief, etc. We strive to integrate our operation into the development of the local community so as to achieve win-win results.

The Group’s contribution to charity in 2022:

Amount contributed to community/charity ³ (RMB)	2,740,400
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¹ The data were calculated according to the emission and discharge volume of carbon dioxide, nitrogen oxides, sulfur dioxide, soot and wastewater per unit of electricity generated by thermal power plant stated in the *Annual Development Report 2022 of Electricity Industry in China*, and by referring to the Group’s power generation data of solar, wind and hydro portfolio during the Reporting Period.

² Refers to inability of employees to work normally for 3 days or more due to work-related accidents.

³ Includes monetary value of input fund and resources for industrial revitalization and public charity.

07 Feature Article

CGN New Energy is committed to developing clean and renewable energy. Our unwavering mission is to “Provide Clean Energy to the Benefit of Human Society”. While adhering to this mission, we continue to move towards a sustainable future and push forward the country towards a green and low-carbon one.

STRIVING FOR EXCELLENCE IN TECHNOLOGICAL INNOVATION

Scientific and technological innovation is a major pillar of CGN New Energy’s sustainable development strategy. In exploring the path of new energy, we not only have to face the instability of the market regulatory requirements, but also need to maintain the core competitiveness of our business. We attach great importance to technological innovation and overcome various challenges, such as long R&D cycles and short-term cost-effectiveness, to continuously improve the operation and power generation efficiency of each power station. In order to explore and improve our development strategy, we actively communicate with stakeholders on technological research and innovation, including long-term strategic partners, industrial policy makers, the China Electricity Council, and the technical expert pool within the Energy Industry Technology Alliance. We will focus on the information and digital transformation, promote the innovation-driven strategic project, and prioritize technological innovation and information-based support to continue achieving sustainable development of high quality.

Based on the principle of “Science and Education First”, CGN New Energy formulates the *Science and Technology Management System* to encourage each project company to undertake internal and external scientific research projects independently. We collect the research needs from each project company through the Science and Technology Innovation Center annually. Project companies will start their scientific research after their application for the research is applied successfully. At the same time, according to the actual situation of each project company, we also include scientific research as one of the annual key performance indicators from three dimensions, which are based on execution, technology and quality. Project companies set indicators by stages and levels in terms of the completion rate of the progress plan, the urgency, scientificity and difficulty of the topic, and the technical and economic value of the achievements. In addition, project companies regularly report the project advancement, progress report and contract implementation to the Science and Technology Innovation Center to ensure annual scientific research projects and objectives are completed on time.

In terms of economy, the improved capability of technological innovation can effectively reduce the cost of electricity generation. The results of scientific research topics have been popularized and applied in engineering projects, and the deployment of predictive health management system for key equipment has exceeded 50 early warning models, avoiding 172 major safety accidents. In terms of environment, scientific research and innovation helped accelerate the development of green transformation, actively and steadily promoted carbon peak and neutrality, promoted ecological environment construction, and contributed to the development of new power system.

Our business covers both China and Korea, involving more than hundreds of new energy projects. Among them, Anhui Dangtu Taibai Photovoltaic Power Station and Zhejiang Shengsi 5# 6# Offshore Wind Power Project fully embody the spirit of “Striving for Excellence in Technological Innovation”.

07 Feature Article

BUILDING A PHOTOVOLTAIC SCIENCE POPULARIZATION EDUCATION BASE



Dangtu Taibai Photovoltaic Power Station

Dangtu Taibai Photovoltaic Power Station is a floating solar power station in Shuangtan Lake, Dalong Town, Dangtu County, Ma'anshan City, Anhui Province. The project utilizes a total of 400 hectares water surface and consists of 72 photovoltaic arrays with a total installed capacity of 260 MW. As the first batch of affordable photovoltaic demonstration projects operated in Anhui Province in 2019. At the same time, it is currently the largest affordable photovoltaic project in East China, with a total investment of RMB971 million. Since its commissioning, the project has generated approximately 330 million kWh of electricity annually.

In addition, Dangtu Taibai Photovoltaic Power Station actively implements the concept of "Lucid Waters and Lush Mountains are Invaluable Assets" and creates seven ecological landscapes, such as the "Green Spring Dyke". During the construction and operation, the development concept of green, ecological and environmentally-friendly has been seen throughout the full process of site selection, demonstration, construction, operation and maintenance, and environmental monitoring and greening have been carried out continuously, which effectively protects the production environment along the project site. Compared with traditional coal-fired stations, the project can save about 100,000 tons of standard coal and reduce about 300,000 tons of carbon dioxide emissions per year, which continues to help achieve the "dual-carbon" goal.

Dangtu Taibai Photovoltaic Power Station is a typical fishery photovoltaic plant. Through piling and elevating the supports, the photovoltaic panels can receive sunlight above the water surface and generate electricity. This also provides more possibilities for using the space below the components. Hence, the vast water surface can be used for aquacultures, such as fish and shrimp farming, or aquaculture crops growing. The advantages of "Photovoltaic+Agriculture" complements each other, with photovoltaic power generation on the panels and fishery farming under the panels, greatly increasing the output value per unit area. Besides, it has also created more job opportunities for the locals. In addition, the combination of ecological environment and agricultural tourism further integrates primary, secondary and tertiary industries. The project also cooperates with the Nanjing University of Aeronautics and Astronautics to build an industry-university-research base and a science popularization base. In this way, Dangtu Taibai Photovoltaic Power Station becomes a distinctive demonstration project for the developmental integration of local fisheries, agriculture, cultural tourism, and new energy industries.

07 Feature Article



"Green Spring Dyke" seven eco-friendly landscapes



Dangtu Taibai Photovoltaic Power Station has won many big honors, such as "Safety, Quality and Environmental Model Team of CGN" and the "National Quality Engineering Award" issued by the China Association of Construction Enterprise Management

Since its operation, Dangtu Taibai Photovoltaic Power Station has always adhered to the principle of "Leading by Scientific Innovation, Aiming at Scientific Popularization". By using unique photovoltaic technology, Dangtu Taibai Photovoltaic Power Station actively built a photovoltaic science popularization education base, which was awarded "Ma'anshan Science Popularization Education Base". This project innovatively adopts the design of high pile and large platforms. During the construction, it won the 2020 Science and Technology Progress Award for Power Construction by optimizing the design of the grounding grid of the photovoltaic area. At the same time, the project led to the first innovative design of the operation and maintenance ship and photovoltaic component installation tools specifically for the topographical features, which were then granted with relevant practical patents. The project also conducted research on harmonic source location technology at new energy stations and adopted intelligent operation and maintenance system. It also carried out research on cold-proof surface photovoltaic power stations and comprehensively used oil-immersed cold-resistant power transformers, which was granted utility patents too. The project encourages all staff to carry out comprehensive and thorough research on quality control and patents analysis. Its staff has researched and used the optimized alternating current (AC) and direct current (DC) capacity distribution in photovoltaic power station projects, including a self-powered transformer secondary circuit detection device, and an operation and maintenance ship balancer and operation and maintenance ship, which were all patented. During the Reporting Period, 25 patents and 9 quality control research results have been obtained.

07 Feature Article



Utility model patent certificate: a self-powered inductor secondary circuit detection device

Technology and innovation have brought tremendous benefits to Dangtu Taibai Photovoltaic Power Station. As the power station frame is elevated above the water surface, the lake's depth frequently fluctuates and water grass in shallow water areas blocks components. These cause difficulty in uniformly controlling the standard of equipment maintenance, and the operation and maintenance ship cannot enter the interior to carry out equipment maintenance, which increases the difficulty in maintenance. In view of this, the project innovatively transformed three operation and maintenance ships on the site into two elevating platform ships and one mower ship by installing a ship lifting platform balancer, anti-collision rubber ring and mower. Through this overall transformation, the project has fully improved the ship's operation and maintenance, significantly reduced the maintenance cycle, lowered the operation and maintenance costs, and greatly increased the power generation efficiency. During the Reporting Period, the photovoltaic power generation efficiency has increased by 5% compared to the same period in 2021. At the same time, the project continues to research the electronic component automatic cleaning technology by combining the inspection of unmanned aerial vehicle regular infrared thermal imaging and patrol robot in the station, and opening the directional automatic spraying system of components, which fully realizes the automatic cleaning function of electronic components.



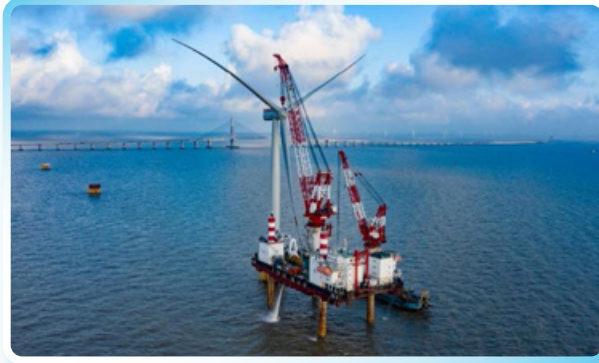
Patrol robot



Unmanned Aerial Vehicle

07 Feature Article

CREATING A NEW ERA OF OFFSHORE WIND POWER



Shengsi 5# 6# Offshore Wind Power

The Shengsi 5# 6# Offshore Wind Power projects are located in the east side sea area of Donghai Bridge, Shengsi County, Zhoushan City, Zhejiang Province, with a total installed capacity of 281.25 MW. A total of 45 6.25MW wind turbines are installed and a 220-kilovolt offshore booster station is built synchronously, with 10 sets of 35-kilovolt submarine cables and a 220-kilovolt submarine cable are laid on the site. After the wind turbine is connected to the booster station and linked to the onshore centralized control center in Yushan Island, the power grid system is finally wired up with a voltage level of 220-kilovolt.

The project utilizes 296 hectares of sea area. The annual on-grid power reached 828 GWh. Compared with the coal-fired station of the same scale, it can save 259,000 tons of standard coal per year, and reduce the emission of hazardous gases and smoke and dust by approximately 690,000 tons annually, producing significant environmental benefits. The development and construction of wind power projects can help adjust the local industrial structure and drive local economic development, which is socially and economically helpful.

The project was put into use at full capacity in 2021, becoming the first offshore wind power project achieve full field operation among the approved offshore wind power projects in the same period, marking it CGN New Energy's first shot at offshore wind power during the 14th Five-Year Plan.



Company's Safety, Quality and Environment Model Team 2022

07 Feature Article

Shengsi 5# 6# Offshore Wind Power projects have stood out since put into operation. It is the first one to use China-made D6/7MW fully rotating offshore single-blade sling, which has won several honors. In April 2022, the project was awarded “Zhejiang Pioneer Worker” issued by the Zhejiang Federation of Trade Unions. In addition, in 2022, the project secured many awards from the Group, including the “First Prize for Hazard Detection and Handling” and the “Company’s Safety, Quality and Environment Model Team”. The project organized the site staff to set the goal of creating an international benchmark level 3 station. Strongly supported by the Operation and Maintenance Business Department and branches, it won the International Benchmark Level 3 Offshore Wind Power Station at the end of September 2022.

Shengsi 5# 6# Offshore Wind Power projects have studied several research topics, improved the overall operating efficiency and solved the operating difficulties:

1. The combined lifting scheme of “floating crane boat and wind turbine installation boat” is applied to shift from “processed construction” by single operation plane to “parallel construction” by multiple operation planes. This technology makes the best use of the short effective period at sea by reducing such period from “5 to 7” days to “1 to 2” days, which greatly improves the wind turbine installation progress, and provides a technical demonstration and technical experience for other domestic offshore wind power projects in China;
2. Innovative application of the directional drilling construction scheme for submarine cable pipelines has solved the problem of crossing submarine cable pipelines;
3. Innovatively proposed to use the geological prospecting outrigger ship as the submarine cable joint production platform, and addressed the disadvantage that the submarine cable laying ship cannot make the submarine cable joint during strong winds and extreme weather;
4. *The Key Technology for the Installation of Offshore Wind Turbine Generator Units in Strong Tidal and Deep Mud Geological Conditions* systematically summarizes the failure mode and calculation method of the jack-up spud leg penetration process, and forms a complete method to predict the depth through jack-up spud leg penetration, which is the first one in China to penetrate more than 35 meters into deep clay foundation. In order to make the foundation’s bearing capacity the control factor for the stable foundation of the bottom-mounted platform on the soft seabed, the project research adopted a complete set of control measures such as the submersing against the current, and the unloading of the overbalanced water, to provide the stable foundation for the bottom-mounted fan installation under the soft geological conditions;
5. *The Analysis, Research and Control of Hoisting Deformation of Segmental Module on Offshore Booster Station* can improve the safety and quality of the lifting segmented module, reduce the lifting deformation, increase the pass rate of construction, and ensure quality construction on the offshore booster station;
6. *The Key Technologies for the Joint Development of Tidal Energy and Offshore Wind Energy* can integrate offshore wind energy and tidal energy to make use of ocean resources in three-dimensional layers, and develop a new mode of power generation operation through multiple offshore new energy.

Shengsi 5# 6# Offshore Wind Power projects continue to study and pursue progress on research topics. Due to the long span of the submarine cable of the wind farm, it is more necessary to protect the submarine cable through technical innovation, reduce the risk of being anchored, and ensure the safety of the submarine cable.



08 Stakeholder Engagement and Materiality Assessment

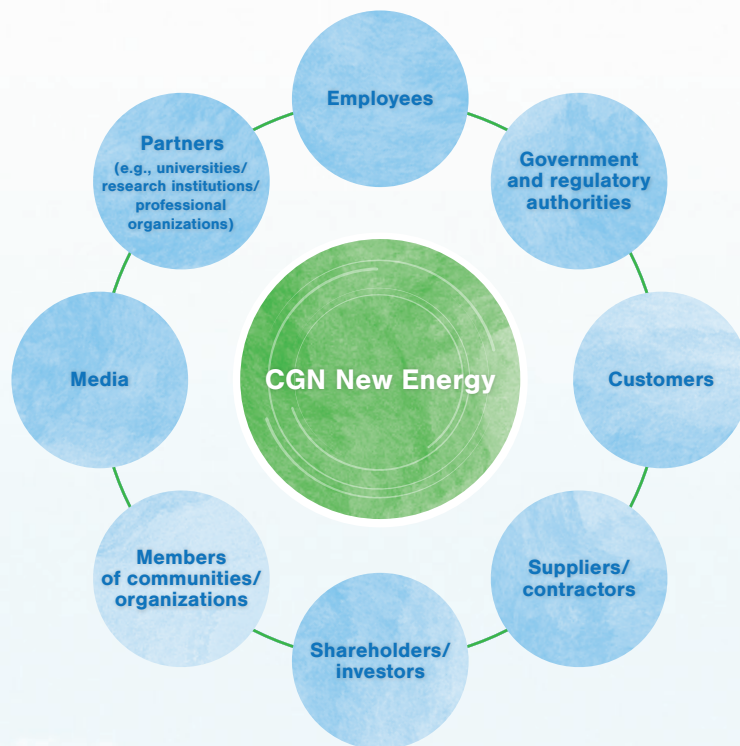
COMMUNICATION WITH STAKEHOLDERS

Maintaining good communication with stakeholders is an important part of CGN New Energy's long-term development management. The Group accurately identifies the key stakeholders related to our operation, and communicates with them through meetings, regular visits, satisfaction surveys and other channels, so as to understand their expectations and interests in the Group's development process and future developments. The Group will take measures in an endeavor to respond to and meet the demands of key stakeholders according to its production and operation.

CGN New Energy determines whether the individuals or groups are our key stakeholders mainly through the following three aspects:

- Whether they have invested or will invest in CGN New Energy
- Whether they have an influence on the business operation of CGN New Energy
- Whether they have interests in or are affected, potentially or otherwise, by the business, products, services and relationships of CGN New Energy

We have identified the following eight types of individuals and groups as our key stakeholders:



In developing, designing, constructing and operating power projects, CGN New Energy attaches great importance to the valuable opinions of key stakeholders. In the preliminary design of power projects, we will conduct open consultation and extensively collect the opinions from surrounding residents on the development of the projects, and deeply understand their concerns. We also appoint professional environmental assessment agencies to conduct comprehensive environmental impact assessments of the projects and formulate impact mitigation plans, so as to minimize the potential impact of the project on the surrounding environment and communities.

08 Stakeholder Engagement and Materiality Assessment

The channels and frequency of our communication with key stakeholders are as follows:

Key stakeholders	Main Communication channel	Frequency
Employees	Employee meetings/seminars Employee performance appraisal/ interview Employee satisfaction survey On-site investigation and research Employees' recreational and volunteering activities	Annually
Government/regulatory authorities	Telephone/e-mail Meeting and interview	From time to time
Clients	Telephone/e-mail Interview	From time to time
Suppliers/contractors	Issue invitation for bids on procurement of products/ services Inspection and supervision of work Supplier conference Telephone/e-mail Interview	From time to time
Shareholders/investors	Shareholders' meetings Investor conferences Press releases/announcements Visits Telephone meetings	During the Reporting Period, the Company communicated with investment banks, securities firms and different types of investors. During the Reporting Period, the Company held its 2022 Annual General Meeting in Hong Kong.
Members of communities/ organizations	Telephone/e-mail Interview	From time to time
Media	Press releases/announcements Media special interview	Media interviews are conducted from time to time based on actual needs. During the Reporting Period, the Company constantly updated the latest development of CGN New Energy to the media and the public through press releases/ announcements.
Business partners (e.g. universities/research institutions/professional organizations or individuals)	Inspection and supervision of work Telephone/e-mail Interview	From time to time

08 Stakeholder Engagement and Materiality Assessment

MATERIALITY ASSESSMENT

In order to reflect CGN New Energy's ESG impacts to the most extent in the Report, and considering the ESG information on the Group requested by key stakeholders, this materiality assessment follows the approaches in *GRI Sustainability Reporting Standards*, considers the impact on the stakeholders and the sustainable development of CGN New Energy, and identifies the material issues to be disclosed in the 2022 ESG Report through the following materiality assessment processes.

Processes for identifying material issues	Step 1	Update the ESG issue repository of CGN New Energy and identify potential material issues
	Step 2	Identify key stakeholders participating in the survey
	Step 3	Conduct materiality assessment survey
	Step 4	Create the materiality matrix according to the survey result and identify the priority of issues
	Step 5	Review and confirm the materiality of identified issues

We adopt the compliance disclosure requirements of the *ESG Report Guidelines* of the Stock Exchange and *GRI Sustainability Reporting Standard* as the benchmark to update the CGN New Energy's ESG issue repository. Meanwhile, based on CGN New Energy's 2021 materiality assessment result, the preliminary updated ESG issue repository in 2022 was formed by referring to the Materiality Map of the Sustainability Accounting Standards Board (SASB) and the MSCI ESG rating for the issues of concern to the electricity industry. Compared with the ESG issue repository in 2021, two new issues are added, which are "Employee Diversity and Equal Opportunities" and "Technological R&D and Innovation". The ESG issue repository was screened and finally confirmed by CGN New Energy's management.

The Group conducts a comprehensive materiality assessment every year to determine the issues of the Report that are most concerned by CGN New Energy's key stakeholders, and to confirm the information that needs to be highlighted in the Report. During the Reporting Period, the Group conducted a survey on material issues with the assistance of a professional consultancy.

Through an anonymous questionnaire survey, the Group widely collected and solicited opinions from part of the Group's key stakeholders. The survey collected a total of 1,264 valid questionnaires from the Board, staff (including the management⁴ and employees), shareholders/investors as well as suppliers/contractors. The material issues of the 2022 ESG Report were finally determined on the basis of the feedback from stakeholders and confirmation from the Group's management and the Board.

⁴ Refers to the highest decision maker over the operation of the Company or the related affairs of departments.

08 Stakeholder Engagement and Materiality Assessment

Matrix of CGN New Energy 2022 Materiality Assessment



Environmental issues	Social issues	Governance issues
1 Renewable energy opportunities	11 Occupational health and safety of employees	21 Social and economic compliance
2 Project-related protection of the ecological environment and natural resources	12 Employee remuneration and promotion mechanism	22 Anti-corruption
3 Energy use and efficiency	13 Career development and training for employees	23 Corporate risk management
4 Project environmental impact assessment and related mitigation measures	14 Employment and employee benefit	24 Financial performance and investor interests
5 Addressing climate change	15 Compliance with labor legislation	25 Compliance information disclosure
6 Solid waste disposal and management	16 Labor standards	26 Anti-competitive behavior
7 Greenhouse gases emission and management	17 Service quality assurance	27 Technological R&D and innovation
8 Water use and efficiency	18 Community investment and participation	
9 Effluent discharge and management	19 Supply chain management	
10 Exhaust emission and management	20 Employee diversity and equal opportunities	

08 Stakeholder Engagement and Materiality Assessment

Through a comprehensive analysis of the data and information collected in the survey, CGN New Energy determined the issues with more than half of the scores in both dimensions as material issues from the perspective of “Impacts on assessment and decision making of part of key stakeholders” and “Impact of CGN New Energy on the economy, environment and human (including human rights)”. The Group finally prioritized the materiality of each issue and created a materiality matrix. Twelve material issues that are most concerned by stakeholders are identified (items 1, 2, 3, 4, 11, 12, 13, 17, 21, 23, 24 and 27 above). Compared with 2021, issues 4, 17 and 27 were newly included in 2022. Issue 27 Technological R&D and innovation is added to the Group’s ESG issues repository in 2022. This issue was also ranked as relatively material by internal and external stakeholders because Technological R&D and innovation has been one of the important pillars to support the Group’s sustainable operation. Excellent technological research and development will not only affect the external stakeholders’ assessment and decision making of the Group but also drive the operational efficiency of projects and improve the environment.

The results of the analysis have been reviewed by the Group’s management and the Board in terms of impacts on the economy, environment and humans (including human rights) brought by ESG issues. The Report will focus on these material issues and report their contents to address the needs of stakeholders in compliance with the Listing Rules.

09 Corporate Governance

CGN New Energy pursues a practical, robust and prudent corporate governance concept, by formulating rules and regulations, to strengthen internal control and improve operational risk management.

GOVERNANCE STRUCTURE

Maintaining an efficient, orderly, transparent, and robust corporate governance mechanism is the foundation of CGN New Energy's sustainable development. Since going public, CGN New Energy has strictly abided by the Listing Rules and the *Corporate Governance Code* under Appendix 14 to the Listing Rules, as well as other relevant laws and regulations. The Company reviews its business management policy from time to time, implements efficient corporate governance, and strives to enhance the corporate value to ensure the sustainable and steady development of the Group.

CGN New Energy believes that good corporate governance is essential to the Company's internal governance and the interests of shareholders. We have a corporate governance structure, which consists of the Board and board committees, internal auditor, shareholders/investors, management and staff. The participation by multiple parties further reinforced the comprehensive coverage of the Company's governance policy and the effectiveness of its implementation. At the same time, we continue to improve the corporate governance system. All relevant departments of the Company work on ESG matters in accordance with the decisions issued by the Board to ensure that ESG affairs can be fully integrated into the operation.

The Board incorporates ESG matters into the Company's governance structure. As the highest level of decision-makers with the right to oversee the Company, the Board is responsible for formulating and approving policy matters, improving strategic guidelines, formulate and review the targets on a regular basis, maintaining risk management and internal control systems in respect of the business and the ESG matters of the Company, and supervising the performance and professional development of senior management. The Board continues to enhance its supervision over the ESG governance of the Group, including the monitoring and review of progress made against the ESG-related targets on a regular basis. Meanwhile, the Board will evaluate, prioritize and manage material ESG-related issues (including ESG risks). As of the end of the Reporting Period, the Board committees of the Company include the Audit Committee, Remuneration Committee, Nomination Committee and Investment and Risk Management Committee. The corporate governance team is committed to upholding CGN New Energy's interests and making fair and defined decisions on major operational issues of the Company, so as to promote the Group's evergreen development and create value for our key stakeholders.

The corporate governance structure of CGN New Energy:



09 Corporate Governance

Governance structure of CGN New Energy:



The Report basically presents the corporate governance system and work of CGN New Energy in 2022. For details, please refer to the "Corporate Governance Report" contained in our *Annual Report 2022*.

09 Corporate Governance

ANTI-CORRUPTION

CGN New Energy strictly complies with the laws and regulations relating to prevention of bribery, extortion, fraud and money laundering in the regions where we operate, including Mainland China, Hong Kong and Korea. The laws and regulations that we have complied with during the Reporting Period, as well as how the Group has complied with them are listed in "Appendix I" of the Report. The Group makes and strictly implements internal management policies on the prevention of bribery, extortion, fraud and money laundering in the course of operation.

With the integrity value of "Integrity is the New Energy" and the integrity vision of "Illuminating Happiness with the Sunshine of Integrity", we uphold the culture of high integrity in the corporate governance structure and pursue better corporate governance while being compliant with the law. We have also incorporated the culture of integrity into the development of every employee of CGN New Energy who is committed to acting with high integrity and ethical standards. We strictly require all business units to closely follow the anti-corruption principle, and hence we have formulated the *Management System of Discipline Inspection*, the *Provisional Administrative Measures for Gifts Accepting and Offering* and the *Regulations on Supervision and Disciplinary Action* to set up standards of employee behavior and raise awareness of honest business practices. The Secretary of the Discipline Inspection Commission of the Group is immediately responsible for supervising the overall strict Party governance and comprehensively leading the work of the Discipline Inspection Commission. He also supervises the clean governance, Party integrity and exercise of the power of the Group's leading group and its members, gives timely reminders at the initial emergence of problems discovered, interviews leading cadres, and reports any clues of major problems, if any, to the Group's Party Committee and the Company's Discipline Inspection Commission in time. The employees who violate Party rules, Party discipline and the Group's discipline will be liable in accordance with the regulations of the *Regulation of the Communist Party of China on Disciplinary Actions and Penalties for Breach of Discipline and Regulations by Employees of CGN*.

Meanwhile, the Group has developed the *Whistleblowing Policy* based on the Listing Rules, which encourages employees to raise concerns in confidence for any misconduct, malpractice and corruption relating to our business. This has established correct values, fostered a culture of honest and righteous business practices, and improved the Group's corporate governance effectiveness. The Group regularly organizes new mid-level and basic-level management for training on integrity. During the Reporting Period, the Group organized the activity – the month of disciplinary education and learning – for all employees, and conducted professional integrity and warning education for the new mid-level and basic-level management and employees. Meanwhile, the Group held a meeting to ensure safety, maintain stability, strengthen supply assurance, safeguard the integrity and welcome the 20th National Congress of the Chinese Communist Party, in which the Discipline and Inspection Department conveyed the work plan for discipline education and professional integrity to engage directors in that plan.

In addition, we continue to improve anti-corruption-related policies and the *Anti-Corruption Policy* in order to further standardize internal anti-corruption behavior and culture. The policy sets out different situations that employees need to avoid and the code of conduct that they need to pay attention to, regulates employees' whistleblowing and investigation procedures and specifies that the Group needs to deliver the message of zero tolerance towards bribery and corruption to its suppliers and other business partners where appropriate.

Providing Confidential Ways for Whistleblowing

CGN New Energy has established a special whistleblowing system and ensured the independence and confidentiality of the complaint reporting process to provide safe and unblocked channels for employees to make complaints and whistleblowing. The system allows employees to submit internal complaints or opinions about the Group. We have, in accordance with the *Constitution of the Communist Party of China* and the *Regulation of the Communist Party of China on Disciplinary Actions*, formulated the *Penalties for Breach of Discipline and Regulations by Employees of CGN* and *Regulation on Company Supervision and Disciplinary Work*, in order to encourage employees to report any irregularities, uphold integrity in the Group, and create a clean working culture. Employees can submit complaints anonymously, while the whistleblowing system will keep all submitted information confidential. Employees can report to the Company's Discipline Inspection Commission by mail or e-mail. The Company's Discipline Inspection Commission will maintain the confidentiality of the employee submitting the report to the maximum extent permitted by law.

Policy for Prohibiting Illegal Retaliation and Discrimination

CGN New Energy has also formulated protection policies in accordance with the laws to protect whistleblowers and ensure they will not be subject to unlawful retaliation or discrimination due to their lawful reporting or participation in investigations. If an employee believes that he/she has been subjected to any of the aforesaid unlawful retaliation or discrimination, he/she may file a complaint through the aforesaid reporting procedure, and the Group will deal with the issue seriously or even immediately dismiss any person who retaliates or discriminates against him/her.

09 Corporate Governance

Examining the Code of Ethics

CGN New Energy continues to strengthen the building of cadre and talent teams and carries out full-cycle management on cadres and employees' morals, ability, diligence and integrity. For the induction management, the Group comprehensively evaluates the overall quality, professional competence and work experience of candidates through structured interviews and semi-structured interviews, with strict background investigations. Employees are required to provide proof of a clean criminal record when they are inducted. For promotion management, the Group comprehensively considers the ability and quality of candidates through public competitions, organization nomination and other ways to fully review professional integrity. Before the appointment of cadres, the Company will strictly conduct the democratic evaluation and inspection for "Morality, Ability, Diligence and Integrity". For the assessment management, the Group strictly carries out the annual performance assessment and tenure assessment of cadres, which centers on ability, performance, contribution, etc., and also assesses dedication to work and professional integrity.

RISK PREVENTION

The Board leads and makes the final decision on risk management. The Investment and Risk Management Committee directly under the Board is responsible for the centralized deliberation of major risk management affairs; The President is responsible for the overall risk control. The Company has a designated department responsible for matters relating to risk management.

During the Reporting Period, the Company continued to promote the *Double Ten Risk Management Rules* for risk assessment. The risk is assessed in combination with the Company's business objectives, strategic focus, plan, budget, performance-based assessment (PBA) and the operation of each unit. The dedicated department comprehensively scanned all kinds of risks faced by the Company, graded and ranked them on the basis of the consequences, probability and urgency, and then the department collected opinions from various departments and scores by the leaders of the General Manager's Office to produce the "Double Ten Risks" assessment results in 2022, which then were deliberated and approved on the meeting of the General Manager Office. The assessment identified the top 20 risk events that will have significant impacts on the Company's operation and development if timely actions are absent in the current period. The top 10 risks are "main control" risks, while the top 11 to 20 risks are "main concern" risks.

The Company establishes a "Double Ten Risk" management group and regularly held routine meetings and special meetings to monitor risk information and timely transmit major risk information. The department for risk management shall regularly report to the General Manager's Office on the control of "Double Ten Risks", including the addition/removal of the "Double Ten Risks", and also report to the Board for the control of major risks that interest them most. The Company sets up a sound major risk control mechanism to enhance the capability to prevent and resolve major risks. Also, the Company issues the *Notice on Further Standardizing the Reporting Mechanism of Major Risk Events to the Party Committee of the Company*, which defines the requirements, scope, and procedures of reporting to the Party Committee of the Company.

The Company also continues to establish a comprehensive risk management system at branch office level. The risk management function of the Group's branch offices supervises and inspects the major risks identified during the risk assessment, and checks how the system develops, performs and monitors risks at the branch offices. The branch offices should disclose any problem found at the planning and business department meeting and further specifies the requirements for follow-up procedures. In addition, the Company also strengthens the analysis and early warning of its business risks and resolves problems through monthly meetings, quarterly risk monitoring reports and risk deviation lists. To speed up the informatization of risk management and integrate risk management into the operation and management system, we have successfully established and launched the review process for investment project risks on the enterprise performance management system.

In addition, each functional department of the Company also set major risk control targets, continuously follows up on the implementation progress and takes actions to minimize the risk. The Company completed the development of a major project risk assessment system. The Company will continue to double efforts in this system to improve the efficiency of the assessment and help improve the Company's core intelligent capability.

09 Corporate Governance

ESG Risk Assessment and Management

The Board has incorporated ESG risk management into the current risk management and internal control system to effectively identify, evaluate, prioritize, and manage ESG risks related to the Group's business. During the Reporting Period, the Company conducted an ESG risk assessment by functional departments and reviewed by the Board, which thus identified the following major ESG risks:

Major ESG risk	Management measures
Risk of declining competitiveness in project resources acquisition	<ul style="list-style-type: none"> The Market Development Department regularly reported the market development report, reviewed the policies that have a significant impact on the new energy industry, and analyzed the market situation, market development and market strategies; Strengthened the responsibility of regional territorial entities, deeply constructed the three major alliances of "Strategy, Industry and Technology", established a win-win cooperation relationship, improved market competitiveness, focused on large bases and projects, and actively launched UHV facility bases; Actively developed rooftop distributed photovoltaic businesses and distributed wind power businesses throughout the county; Accelerated the development of extended businesses such as energy storage and cultivated new momentum for the Company's development.
Natural disasters	<ul style="list-style-type: none"> Formulated the <i>Emergency Plan Drill</i> to effectively control safety risks; Regularly held different emergency drills to familiarize employees with emergency plans; Prepared production contingency plans for relevant emergency situations, such as material reserves, personnel emergency plans, and activation of emergency production processes; The natural disaster risk warnings issued by the government department was communicated to the Company promptly, and we took swift and decisive measures, such as cutting off water and power supplies, in response to the actual situation.
Policy change	<ul style="list-style-type: none"> Closely monitored policy developments in various provinces and worked hand-in-hand with our subsidiaries to strategize application procedures and proactively drafted bidding review plans, allowing us to remain agile and responsive to changing circumstances while also expanding our market share.
Development of digital technology	<ul style="list-style-type: none"> The focus on information and digital transformation was driven by scientific planning, collaborative effort, and optimized resource allocation, as we remained committed to adhering to a well-defined and comprehensive work plan; The continued promotion of innovation-driven strategies, with a particular emphasis on technological innovation and information-based support, enabled us to achieve sustainable development of the highest quality.

09 Corporate Governance

Major ESG risk	Management measures
Power grid	<ul style="list-style-type: none"> Launched research on the application of “energy storage” technology in spot trading and auxiliary service scenarios, piloted the implementation of projects, and provided technological innovations to ensure safe and stable operation of the power grid; Established a virtual power plant operation platform and deeply explored adjustable resources on the user side, leveraging demand-side response policies in Hunan, Shandong, Shanghai, and other regions.
Network security	<ul style="list-style-type: none"> Ensured the network security of internal data by deploying external intrusion monitoring systems, firewalls, and other security measures; Regulated employees’ internet behavior to prevent them from accessing non-compliant or potentially hazardous network sites; Installed or updated the antivirus software on the internal system regularly, and scanned and filtered the network access ports.
Climate change and extreme weather	<ul style="list-style-type: none"> Identified opportunities and risks related to climate change and carried out climate risk assessment; Developed the <i>Carbon Asset Management Procedure</i> to promote emissions reduction trading and ensure the smooth progress of carbon trading; Formulated the <i>Implementation Rules for Environmental Management (Second Edition)</i>, implemented multiple energy- and water-saving measures, established emergency flood prevention plans, prepared flood control materials in advance, organized the dredging of drainage pipes, added waterproof sandbags, etc.; Paid attention to and actively responded to the market power system reform and regional policy changes, and strengthened the research on power sales strategies; Carried out all kinds of power transactions as a whole, firmly maintained the strategic determination to develop new energy, took the opportunities of wind power and photovoltaic industries, and actively participated in industry exchanges; Carried out a number of key energy-saving and technological transformation projects, and continued to enlarge the proportion of investment in clean and renewable energy projects.

09 Corporate Governance

Major ESG risk	Management measures
Supply chain management	<ul style="list-style-type: none"> Formulated strict management measures for supplier performance evaluation, which covered at least seven dimensions, including technology, quality, cost, delivery, service response, environmental protection and social responsibility; Incorporated environmental and social risks evaluation into the <i>Supplier Management Measures</i>; Signed the <i>Supplier (Outsourcing Project) Environment and Safety Control Agreement</i> with all suppliers to monitor their performance in ESG and reduce pollution and safety accidents in the production processes; Provided safety training and guidance for part of suppliers to reduce potential risks in their operation; Comprehensively reviewed the production and transportation of equipment from the manufacturers, identified potential supply chain risks in advance and formulated response plans to ensure that the equipment supply is in line with the construction schedule for each project.
Negative public opinion	<ul style="list-style-type: none"> The Party Group Work Department is responsible for managing negative public opinion and has identified this risk as a key management risk for regular monitoring.
Fire, explosion and other disasters	<ul style="list-style-type: none"> Organized fire protection knowledge training for employees every year to improve their ability to cope with emergencies; The Safety, Quality and Environmental Department regularly provided training courses on laws and regulations related to safety production and safety management system to employees, so that employees could fully have the knowledge of safety production; Monthly activities of workplace safety were carried out every year, including drills and lectures; Regularly provided occupational health and safety training activities.

Internal Management and Control

CGN New Energy has gained comprehensive management experience through years of operation practice in new energy projects. While maintaining stable production and operation, CGN New Energy can timely adjust the Group's operation and development plan with the changes in the industry and market. The Group continues to actively improve the internal control management model, vigorously promote the construction of internal digitalization and informatization, and improve operation and management efficiency.

Financial Supervision

We continuously strengthen the financial inspection of each project company, focusing on their internal control management, financial accounting audit, and capital and asset file management. Regional project companies are actively subject to regular financial inspection and financial internal control and other special supervision. During the Reporting Period, the Group's financial supervision works went smoothly, and no financial problems were found to have a significant adverse impact on the Group's operation.

09 Corporate Governance

Information Security Management

To ensure the information system security of the Group's operation process, we deploy security measures such as intrusion monitoring systems and firewalls to ensure the network security of internal data. In addition, the Group also regulates the online behavior of employees by improving the internal Internet behavior management system, so as to prevent employees from accessing websites with irregularities or potential safety hazards. The Group regularly installs or updates the internal system antivirus software to carry out the virus scanning on the network access port filter and maintain the Group's internal computer safety.

Complaint Mechanism

The Group attaches importance to the opinions of all stakeholders and establishes a sound complaint mechanism to allow all stakeholders to express their opinions through this channel. The Group has established a complaint accountability system and held relevant personnel accountable for the negligence of duty and dereliction of duty in strict accordance with laws, administrative regulations and relevant provisions of the Group. Meanwhile, in order to protect the stakeholders' right to know and supervise the maintenance and appreciation of the Group's state-owned capital, the Group implements an information disclosure mechanism and discloses information in light of the actual situation of the Group.

The informants can submit the complaint letters through information networks, letters, fax and other written forms. Each stakeholder can make a request for information disclosure through the contact and feedback methods published on the official website. According to the content and nature of the complaints accepted by the Group, the authorized units directly involved in the complaints accept and handle those complaints within the scope of legal authority according to the procedures and time limit specified in the *Regulation on Complaint Letters and Visits*, and responding to them in writing according to the *Opinions on the Handling of Complaints*. According to the responsibilities and the nature of complaints, the Complaint Department shall handle the complaints assigned by the superior units directly by category, and transfer those within the responsibility scope of the business departments and branches to each department and branch. The procedures for handling complaints include registration, acceptance, submission, handling, urging, reporting, review, rechecking, filing and other procedures. The Group will also open a public information column on its official website and regularly disclose information.

If the informant further disagrees with the reply, he or she can submit a review application to the review department designated in the *Opinions on the Handling of Complaints* within 30 days from the date of receiving the handling results. After receiving the application, the review department will issue the *Letter of Acceptance for the Review of Complaints* to the informant and issue the *Letter of Review of Complaints* to him and her within 30 days from the date of application. The Group will regularly review the effectiveness of the Regulation on Complaint Letters and Visits and make adjustments every three years according to the actual situation and feedback. During the Reporting Period, the Group received and closed one complaint.

10 Green Operation

As a firm advocate and practitioner of new energy, CGN New Energy provides society with safe, reliable, environmentally friendly, land affordable electricity, and strives for a bluer sky, greener hills, and cleaner water. CGN New Energy continuously carries out environmental protection management from multiple aspects, actively cooperates with the national policy of "Comprehensively Strengthen Ecological and Environmental Protection and Promote the Tough Fight for Prevention and Control of Pollution", and strives to reduce the environmental impact of the Group in the process of business development and establish a green operation model. We hope that we can promote green and sustainable development in China with our features of the green energy business, as well as the continuously improved environmental management system.

GREEN MANAGEMENT SYSTEM

CGN New Energy has established a complete environmental management system to support and standardize the Group's environmental management under the operational principle of "To Use Resources Wisely and Maintain a Continuing Development". The Group set up an environmental protection leadership group, which comprehensively leads the Group's environmental protection efforts. The Group's significant impacts on the environment and natural resources from its operation activities include disturbance of soil, water and vegetation during the construction of new power plants, as well as fuel consumption and emissions during the operation of some conventional energy projects. The Group has formulated the *Environmental Management System (Third Edition)* to regulate the environmental protection matters in the early planning, engineering construction, production and operation of the project. The Group has strictly enforced management regulations on emissions, wastewater and waste, as well as management policies to reduce the adverse impact of its operations on the ecological environment.

Main environmental duties of the Safety Committee under the Company, led by the President, include:

- Holding meetings on a regular basis and approving major environmental projects of the Group
- Providing solutions to significant environmental protection issues in projects' daily operation
- Making decisions on short-term objectives and long-term planning in the environmental protection of the Group

Besides, we have set up the Safety, Quality and Environment Monitoring Department in all regional branches and independent project companies to supervise and manage the environmental protection issues of each project. We also assign EHS management personnel for the management and maintenance of environmental protection facilities in each project. Other departments of project companies play their roles under the guidance of the Safety, Quality and Environmental Department, so as to smoothly implement environmental protection policies in the Group. The close cooperation among all departments effectively achieves sustainability in our operation.

10 Green Operation

For environmental efforts, we have set short-term (1-2 years), medium-term (3-5 years) and long-term (5-10 years) environmental targets according to the actual situation, and the action plan was implemented in accordance with the progress made during the Reporting Period:

Category of objectives	Environmental objectives	Indicators	Timeframe	Action plan and results	Actions taken during the Reporting Period
Air pollutant emission	Improve the efficiency of air pollution control facilities	Increase investment in environmental technology	Short and medium-term	For Nantong Cogeneration Project: In short term: 1. Replace or supplement denitration catalyst. 2. Increase the maintenance of desulfurization facilities. 3. Build a new emergency pool for sudden environmental accidents. In medium-term: 1. Technically transform deslagging system from a wet slag machine to a dry slag machine. 2. Overhaul and transform the electric duster and replacement of bag-type dust collector. 3. Maintain and replace bag-type dust collectors for ash silo.	In short term: 1. Replace the denitration catalyst according to the replacement plan. 2. Carry out patrol inspection and inspection of desulfurization facilities according to the patrol plan. 3. Improve the emergency plan and disposal of sudden environmental accidents. In medium-term: 1. The technical transformation project has been included in the technical transformation plan.
			Short-term	For Zhejiang Ninghai Wind Power Project, Inner Mongolia Wuhai Photovoltaic Project "Leader" Base, Wuhan Hanneng Gas Project, Mianyang Sanjiang Hydropower Project and Nantong Cogeneration Project: 1. Gain the latest information on environmental technology from the government's official website and participate in the academic training, forum or exchange meeting on environmental technology organized by the government or association. 2. Engage in regular exchange activities with the Chinese Research Academy of Environmental Sciences.	Regularly collect environmental technology information from the government's official website.
			Long-term	For Zhejiang Ninghai Wind Power Project, Inner Mongolia Wuhai Photovoltaic Project "Leader" Base and Mianyang Sanjiang Hydropower Project: 1. Increase the share of attributable installed capacity of wind power, photovoltaic, hydropower and other renewable energy operations.	During the Reporting Period, the new grid-connected capacity of wind power and solar power was 619.7 MW.

10 Green Operation

Category of objectives	Environmental objectives	Indicators	Timeframe	Action plan and results	Actions taken during the Reporting Period
Greenhouse gas (GHG) emission	Trade in the carbon market	Sign cooperation agreements with enterprises/institutions to reach strategic cooperation	Short-term	For Zhejiang Ninghai Wind Power Project, Wuhan Hanneng Gas Project, Nantong Cogeneration Project: 1. Sign a cooperation agreement with a carbon asset management company. 2. Meet the need for GHG verification and participate in the trade in the Carbon Assets Market.	Wuhan Hanneng Gas and Nantong Cogeneration Project completed regular carbon verification in April 2022, while the Group has been carrying out voluntary emission reduction transactions.
	Assist in reaching peak carbon emissions and carbon neutrality	Improve the standard of carbon emission management	Short-term	For Zhejiang Ninghai Wind Power Project, Wuhan Hanneng Gas Project, Nantong Cogeneration Project: 1. Improve its professional management of carbon emissions, performance and trading through standardized carbon asset verification and management.	1. For coal-fired units, the energy consumption per unit product has been significantly reduced by shutting down the condensing unit, optimizing the operation mode, and replacing the electric pump with the steam pump. 2. The peak-shaving gas unit will integrate energy management into the quality, environment, occupational health and safety to form a four-standard system, and constantly tap the energy saving potential.
		Research and develop GHG emission reduction technology	Medium-term	For Wuhan Hanneng Gas Project and Nantong Cogeneration Project: 1. Actively follow up the development route and scenario-based application of CCUS technology, and timely transform relevant equipment.	Actively research and explore applications in scenarios.
		Formulate carbon reduction roadmap planning and carbon neutrality scheme	Short-term	For Zhejiang Ninghai Wind Power Project, Inner Mongolia Wuhai Photovoltaic Project "Leader" Base, Wuhan Hanneng Gas Project, Mianyang Sanjiang Hydropower Project and Nantong Cogeneration Project: 1. Actively explore zero-carbon technology solutions with emission reduction capacity, scalability, innovation level, economy and social benefits as main KPIs.	Actively develop strategic customers externally to promote the use of green power certificates, and internally promote the use of green power certificates in all units of the Group.

10 Green Operation

Category of objectives	Environmental objectives	Indicators	Timeframe	Action plan and results	Actions taken during the Reporting Period
Waste generation	Increase resources recycling	Increase waste recycling rate	Short and long-term	<p>For Zhejiang Ninghai Wind Power Project, Inner Mongolia Wuhai Photovoltaic Project “Leader” Base, Wuhan Hanneng Gas Project, Mianyang Sanjiang Hydropower Project and Nantong Cogeneration Project:</p> <p>In short term:</p> <ol style="list-style-type: none"> 1. Improve the waste sorting and recycling signs and facilities in the plant and office. <p>In long-term:</p> <ol style="list-style-type: none"> 1. Strengthen the capacity to sort out and dispose of wastes, and accelerate the recycling and disposal of photovoltaic modules and fan blades. 2. Encourage employees to actively repair and recycle facilities, and set up and issue incentive bonuses for repairing and recycling. 	<p>In short term:</p> <ol style="list-style-type: none"> 1. Improve the waste classification and recycling identification and facilities in the plant and office areas through the major inspection of safety production, the garrison of the top 20 power supply guarantee, and the inspection of safety, quality and environmental protection projects. <p>In long-term:</p> <ol style="list-style-type: none"> 1. Each station carries out the disposal by signing the agreement (contract) on the disposal of photovoltaic components and fan blades with the unit with solid waste disposal qualification. 2. The Operation and Maintenance Business Department regularly carries out the incentive selection for renovation, recycling and waste saving.
	Reduce waste production	Strengthen the maintenance and repairment of equipment	Short, medium and long-term	<p>For Zhejiang Ninghai Wind Power Project, Inner Mongolia Wuhai Photovoltaic Project “Leader” Base, Wuhan Hanneng Gas Project, Mianyang Sanjiang Hydropower Project and Nantong Cogeneration Project:</p> <ol style="list-style-type: none"> 1. Strengthen equipment maintenance and extend the service life of the equipment. 	<p>According to the equipment maintenance cycle, the Group’s subordinate stations regularly carry out equipment maintenance activities such as pre-test and regular inspection, semi-annual inspection and annual inspection</p>
Energy efficiency	Promote the development of green energy	Increase investment in renewable energy	Long-term	<p>For Zhejiang Ninghai Wind Power Project, Inner Mongolia Wuhai Photovoltaic Project “Leader” Base and Mianyang Sanjiang Hydropower Project:</p> <ol style="list-style-type: none"> 1. Accelerate the development and construction of wind power, photovoltaic, hydropower and other renewable energy fields. 	<p>During the reporting period, the new grid-connected capacity of wind power and solar power was 619.7 MW.</p>
	Increase energy efficiency	Transform energy-saving technology in the workplace	Short, medium and long-term	<p>For Zhejiang Ninghai Wind Power Project, Inner Mongolia Wuhai Photovoltaic Project “Leader” Base, Wuhan Hanneng Gas Project, Mianyang Sanjiang Hydropower Project and Nantong Cogeneration Project:</p> <ol style="list-style-type: none"> 1. Replace and eliminate old water pumps and motors to improve equipment efficiency. 2. Reduce the auxiliary power consumption rate. 3. Recover and utilize waste heat in the cogeneration project. 4. Increase the photovoltaic conversion efficiency by strengthening the management of photovoltaic modules in the photovoltaic project. 	<ol style="list-style-type: none"> 1. The Group formulates and arranges energy-consuming equipment according to the catalogue of obsolete energy-consuming mechanical and electrical equipment (products) (batches 1-4) every year, so as to eliminate or replace corresponding energy-consuming equipment. 2. The Operation and Maintenance Business Department formulates the availability target to improve the conversion efficiency of photovoltaic components through daily equipment maintenance and other activities.

10 Green Operation

Category of objectives	Environmental objectives	Indicators	Timeframe	Action plan and results	Actions taken during the Reporting Period
Water efficiency	Increase investment in water-saving facilities	Regularly check and maintain water pipes and water supply systems	Short, medium and long-term	For Zhejiang Ninghai Wind Power Project, Inner Mongolia Wuhai Photovoltaic Project "Leader" Base, Wuhan Hanneng Gas Project, Mianyang Sanjiang Hydropower Project and Nantong Cogeneration Project: 1. Regularly inspect and maintain the water supply equipment and facilities in stations/projects.	Each station (plant)/project shall carry out inspection and maintenance of water supply equipment and facilities according to the inspection plan and maintenance cycle.
		Water-saving project at the project site	Short, medium and long term	For Zhejiang Ninghai Wind Power Project, Inner Mongolia Wuhai Photovoltaic Project "Leader" Base, Wuhan Hanneng Gas Project, Mianyang Sanjiang Hydropower Project and Nantong Cogeneration Project: 1. Maintain the sewage treatment system in the power plant/project to process and reuse sewage.	Regular maintenance of the wastewater system is carried out to ensure the normal operation of more than 290 wastewater treatment systems.
	Reduce average water consumption	Improve employees' awareness of water-saving	Short and medium-term	For Zhejiang Ninghai Wind Power Project, Inner Mongolia Wuhai Photovoltaic Project "Leader" Base, Wuhan Hanneng Gas Project, Mianyang Sanjiang Hydropower Project and Nantong Cogeneration Project: 1. Maintain the sewage treatment system in the power plant/project to process and reuse sewage.	The Group carried out water-saving activities through 5 June, 2022 World Environment Day, Energy Conservation Week and Low-Carbon Publicity Day.

To fulfill the objectives, we will organize environmental supervision or inspection, and collect the monthly energy-saving index data required by the State-owned Assets Supervision and Administration Commission of the State Council, so as to effectively monitor and review the progress of the objectives.

Currently, all power projects in operation are certificated by ISO 14001 and GB/T 24001-2016 Environmental Management System. The Group requires all newly acquired or completed power projects to be certified within two years after their acquisition or completion, so as to strengthen the environmental compliance of project operation.

10 Green Operation

MONITORING AND MANAGEMENT MECHANISM FOR EMISSION AND DISCHARGE

CGN New Energy strictly complies with the laws and regulations on air and greenhouse gas emissions, discharges into water and land generation of hazardous and non-hazardous waste in the regions where we operate, including Mainland China, Hong Kong and Korea. The laws and regulations that we have complied with during the Reporting Period, as well as how the Group complies with them are listed in "Appendix I" of the Report.

Atmospheric Emissions

The main atmospheric pollutants produced by the Group, including smoke and dust, sulfur oxides and nitrogen oxides, are mainly from fuel combustion during the operation of coal-fired, cogeneration, gas-fired and biomass projects. In order to mitigate the impact of atmospheric pollutants from fuel combustion on the environment, the relevant projects of the Group have set up and operated exhaust gas treatment devices. In addition, we monitor our air and greenhouse gas emissions effectively through a comprehensive emissions monitoring system and daily management mechanism to ensure that all project companies comply with local laws and regulations on atmospheric pollutants. We formulate a strict management system to specify appropriate environmental facilities for flue gas and fume of cooking fires generated in boilers, canteen and domestic logistics, control measures for vehicle exhaust pollution, the operation and maintenance of air and greenhouse gas emission treatment facilities, and the rules for personnel operating, to ensure the emissions is up to the standards by means of internal governance.

We actively increased the proportion of investment in clean and renewable energy projects during the Reporting Period, and continued to expand the share of clean and renewable energy projects in the Group's attributable installed capacity.

We check and maintain the exhaust gas emission system regularly to ensure the normal operation of the emission system. In case of failure of the exhaust gas treatment system, we will immediately stop the system for maintenance and apply for suspension from the environmental protection department to minimize the impact on the environment.

Our operation of the coal-fired power plant in Mainland China has been strictly in compliance with the *Emission Standard of Air Pollutants for Coal-fired Power Plants* to ensure the emissions of smoke and dust, sulfur oxides and nitrogen oxides are below the concentration level of 20, 50 and 100 mg, respectively. We continuously reduce emissions from electricity production through measures such as improving technology and upgrading equipment to realize ultra-low emissions.

10 Green Operation

Daily management of atmospheric pollutants:

- Install boilers that comply with environmental protection requirements and implement the “Three Simultaneous” green system to meet the emission standards for boilers
- The production departments of project companies carry out regular inspection and maintenance on the exhaust gas emission system, exhaust gas treatment facilities and Continuous Emission Monitoring Systems (CEMS) online monitoring system to ensure all systems normally operate and record the inspection results
- Arrange the annual inspection of traffic vehicles to make sure the exhaust emission meet the specified standard, and take effective prevention and control measures for vehicles exceeding the standard as required
- Necessary control over the fuel used by motor vehicles, and purchase of unleaded gasoline or fuel matching mechanical properties
- Use the mechanical equipment in strict accordance with the operating instructions and relevant operating procedures of the mechanical equipment, and carry out routine maintenance

Treating atmospheric pollutants:

- Gas from boilers is emitted at height after being treated in the gas duster system
- Magnesium oxide and limestone is used to treat desulfurization
- Satisfy the NO₂ emission standard through low nitrogen burning and Selective Catalytic Reduction (SCR) desulfurization

Monitoring atmospheric pollutants:

- Each project company hires a third-party monitoring agency to monitor the atmospheric emissions and keep records

During the Reporting Period, the emissions of the projects' atmospheric pollutants were as follows:

Nitrogen Oxide (NOx)	687.66 tonnes, a year-on-year decrease of 8.6% (2021: 752.43 tonnes)
Sulfur Oxide (SOx)	47.78 tonnes, a year-on-year increase of 0.6% (2021: 47.52 tonnes)
Smoke and dust in the exhaust gas	50.63 tonnes, a year-on-year increase of 37.8% (2021: 36.73 tonnes)

During the Reporting Period, the emissions of the projects' greenhouse gas were as follows:

Total GHG emissions (Scope 1 and 2) ⁵	16,575,179.39 tonnes of carbon dioxide equivalent, a year-on-year decrease of 2.4% (2021: 16,976,244.14 tons of carbon dioxide equivalent)
GHG emissions per MWh of electricity generated	0.86 tonnes of carbon dioxide equivalent, a year-on-year decrease of 7.6% (2021: 0.93 tons of carbon dioxide equivalent)

Based on the nature of the Group's business, during the Reporting Period, the Group's major greenhouse gas emissions mainly came from fuel combustion and the use of purchased electricity in the operation of some projects. This Report, therefore, focuses on the disclosure of the Group's Scope 1 (direct emissions) and Scope 2 (indirect emissions from energy use) greenhouse gas emissions for the Reporting Period. The Group will consider disclosing Scope 3 (other indirect emissions) greenhouse gas emissions in future reporting periods. In the future, we will further improve our capacity structure and optimize the respective shares of clean and renewable energy projects and conventional energy projects in our electricity production, so as steadily reduce atmospheric pollutant and greenhouse gas emissions and contribute to the battle for ecology and environmental protection and the mitigation of global greenhouse effects.

⁵ Include greenhouse gas emissions in Scope 1 (direct emissions) and Scope 2 (indirect emissions caused by energy use).

10 Green Operation

Wastewater Produced

CGN New Energy also manages the major wastewater produced in its operations through an established environmental management system to ensure its compliance with national and regional laws and regulations. The main wastewater produced during the operation of the Group includes wastewater from chemical treatment, sewage from the slag removal system and the sewage and coal transport system, periodic discharge of boilers as well as domestic wastewater, etc.

We will not build domestic and construction sewage outlets in domestic and drinking water sources, important fishery water and other water bodies or protected areas of special economic and cultural significance. We strive to meet the regulations of the places where we operate through active efforts in daily management, such as sewage management and treatment undertaken by the Production Management Department, and require each site to prepare and update the *Waste Gas Disposal Diary* along with various measures and supervision initiatives. Where there is a canteen in the station (plant), the domestic sewage treatment system should have the function of oil-water separation; otherwise, it should be upgraded or the oil-water separation device will be added at the water outlet of the canteen.

Daily management of wastewater discharge:

- The Production Management Department of each project company manages and treats the wastewater as well as makes records accordingly
- For project construction that involves wastewater discharge, the department-in-charge signs the environmental protection agreement with the contractors while the Safety, Quality and Environmental Department should ensure that wastewater is discharged in compliance with the standard

Treatment methods of wastewater:

- In the wastewater treatment system, wastewater is segmented and neutralized until it meets the standards and is discharged to wastewater treatment plants

Monitoring methods of wastewater:

- The Safety Supervision Department of each project company engages third-party inspectors to monitor wastewater discharged by project companies and maintains inspection record

During the Reporting Period, the discharge of wastewater was as follows:

Wastewater 983,730.12 tonnes, a year-on-year increase of 56.0% (2021: 630,703.75 tonnes)

10 Green Operation

Hazardous and Non-hazardous Waste

CGN New Energy carries out comprehensive management of major wastes produced in the operation process through the established environmental management system, so as to reduce the adverse impact on the projects' surrounding environment and people's health. The main wastes generated by the Group in the process of power production include fly ash, slag, waste oil, waste paint, desulfurized gypsum, denitration catalyst, etc.

The Group treated hazardous waste produced in strict accordance with the *Implementation Rules for Environmental Management (Second Edition)*. The responsible department collects and stores the waste at designated warehouses. We place and store the waste at designated spots within the factory area and the keepers, trained for professional waste disposal, shall register and deliver the waste to qualified third-party institutions for further treatment and file the "five copies of the transit manifest". All sites must also establish and regularly update the *Solid and Hazardous Wastes Disposal Ledger*, recycle the hazardous wastes, and keep the recycling and disposal records.

We hire professional resource recovery companies to recover reusable by-products of fuel combustion and waste gas treatment process such as fly ash and desulfurized gypsum. This approach not only reduces the impact of the waste on the environment but also lowers the Group's operating costs.

All business units of the Group are committed to the principle of "Repair and Reuse, Proper Storage, Full Utilization, Revenue-generating and Expenses Cutting" to reduce waste production during operation. The procurement departments of project companies collect waste and obsolete materials while the production management departments recycle them. Based on the principles of "Economic Reasonableness, Quality Assurance, Centralized Management and Prioritized Utilization", the Group necessarily repairs components and parts dissembled at the sites, so as to recover their functions. This substantially reduces waste production and lowers operating costs.

We internally grant "Repair and Reuse" awards to individuals and business units which have outstanding performance on repairing and reusing work to raise green awareness of employees. The value of repaired and reused materials is determined by the Production Management Department of each project company while the award by the original value of the materials before repair. The Production Management Department regularly summarizes the finished repair and reuse projects and makes a recommendation on award granting.

CASE: WORLD ENVIRONMENT DAY

On 5 June, 2022, the eve of World Environment Day, Anhui Dangtu Taibai Photovoltaic Power Station actively organized a team for the "Clean Shuangtan" activity in which they cleaned the plastic bottles, foam boards, garbage bags, cardboard and other garbage scattered on the lake in the photovoltaic field area and the dikes around Shuangtan Lake. This activity helped clean six bags of garbage, producing positive significance for protecting the ecological environment of the site and building a landscaped Taibai.



10 Green Operation

During the Reporting Period, the hazardous waste produced in the course of operation was as follows:

Total hazardous waste produced	102,974.10 tonnes, a year-on-year increase of 4.2% (2021: 98,803.31 tonnes)
Hazardous waste produced per MWh of electricity generated	0.00537 tonnes, a year-on-year decrease of 1.4% (2021: 0.00544 tonnes)

During the Reporting Period, the non-hazardous waste produced in the course of operation was as follows:

Total non-hazardous waste produced	44,410.52 tonnes, a year-on-year increase of 9.7% (2021: 40,466.81 tons)
Non-hazardous waste produced per MWh of electricity generated	0.0023 tonnes, a year-on-year increase of 3.9% (2021: 0.0022 tons)

During the Reporting Period, the waste recycled in the course of operation was as follows:

Total amount of fly ash recycled	102,852.80 tonnes, a year-on-year increase of 4.2% (2021: 98,710.53 tonnes)
Recycling rate of fly ash	100%, remained unchanged year-on-year (2021: 100%)
Total amount of desulfurized gypsum recycled	5,545.00 tonnes, a year-on-year increase of 28.4% (2021: 4,317.00 tonnes)
Recycling rate of desulfurized gypsum	100%, remained unchanged year-on-year (2021: 100%)

In the future, the Group will further reduce the hazardous and non-hazardous wastes generated in the operation process through technical process transformation and production equipment upgrading.

USE OF NATURAL RESOURCES

CGN New Energy adopts the “Three Balances” approach where “Environmental Protection First in Preliminary Design, Striking a Balance Between Construction Progress and Environmental Protection, and Incorporating Environmental Considerations in Production”. It not only rolls out a variety of initiatives on ecological and landscape protection, atmospheric environment protection and water environment protection but also emphasizes energy and resource-saving in the operation. The Group formulates and strictly implements various internal management policies on the use of energy and water resources.

Energy Utilization

CGN New Energy adheres to the principle of efficient use of energy. During the Reporting Period, we have successfully conducted many key energy conservation technology renovation projects and continued to increase the proportion of investment in clean and renewable energy projects. Those practices have not only improved the overall energy efficiency of the Group, reduced greenhouse gas emissions, but also reduced the Group's operating costs.

During the Reporting Period, the major energy consumption in projects was as follows:

Total energy consumption	18,920,680.75 MWh, a year-on-year decrease of 7.3% (2021: 20,406,574.39 MWh)
Energy consumed per MWh of electricity generated	0.99 MWh, a year-on-year decrease of 12.2% (2021: 1.12 MWh)

During the Reporting Period, the Group continued to promote the development of green energy, and its clean energy projects were steadily progressing and operating. Currently, the wind power business features comprehensive and professional services offshore and onshore. We are the industry leader in standard, systematic, and large-scale wind power development, operation and maintenance. With the increasing investment in renewable energy in the future, the energy consumption intensity of the Group is expected to decline further.

10 Green Operation

In the future, CGN New Energy will focus on the following aspects to better seize the opportunities for new energy development:

- Continuously consolidate the safety foundation, mainly enhance the refined management in production, and further improve the safe operation and overall management efficiency of the project;
- Focus on and respond to the market electricity system reform and regional policy changes, strengthen the study on electricity sales strategy, and carry out power transactions on the basis of efficiency;
- In terms of project construction, with improving project construction quality management as the benchmark, controlling construction cost as the goal, improve project construction process management, so as to fully promote the efficient and high-quality production of the projects;
- Keep close track of the industry trend, seize the opportunities of new energy development, increase the reserve of quality resources, persist in exploring and promoting the innovation of development model, and accelerate the completion of high-quality projects.

Water Resource Management

Better water efficiency is a matter of concern for CGN New Energy in its day-to-day operation. The water consumption in the daily operation of the Group mainly comes from water for boilers in thermal power plants, equipment cooling, equipment cleaning, domestic water for on-site employees, office activities and fire-fighting activities, etc. The Group attaches great importance to the best use of water resources and reduces water consumption by using circulating water and rainwater instead of freshwater in the project, applying water-saving appliances and inspecting and maintaining the water supply system to avoid water leakage. The Group actively prevents the waste of water resources through water-saving measures. Each project company strictly monitors water meters and other facilities in the production area to prevent water leakage. At the same time, we advocate the proper use of recycled water, and rainwater and conduct other water-saving measures.

Solar photovoltaic panel components must be cleaned regularly to improve the power efficiency of solar projects. By using rainwater for washing and using intelligent robots for non-hydrated cleaning, we have met the standard for cleaning components while reducing the consumption of additional water resources.

During the Reporting Period, the water consumption in projects was as follows:

Total water used	7,111,258,855.96 m ³
Surface water (from rivers, lakes and seas) used	7,109,213,662.28 m ³
Municipal water (from tap water) used	2,030,391.00 m ³
Groundwater (from wells and springs) used	14,802.68 m ³
Water discharged back to the rivers, lakes, seas and lands after self-pretreatment and reaching standards	7,090,354,842.28 m ³
Total water consumed ⁶	20,904,013.68 m ³
Water consumed per MWh of electricity generated	1.09 m ³
Circulating water used	17,567,461.11 m ³

Water consumed per MWh of electricity generated as compared with 2021

Increased by 11.3%

In addition, since 2013 and 2014, when the eastern and middle routes of the South-North Water Transfer Project started operation, water shortage in parts of northern and eastern China has been mitigated. During the Reporting Period, most of the water-intensive projects in the operation⁷ of the Group were located in regions near rivers, lakes and seas, including Jiangsu Province, Hubei Province of China and Jeollanam-do and Chungcheongnam-do of Korea, and therefore, the Group did not suffer from any issues in sourcing water that is fit for purpose.

⁶ The data excludes the water discharged back to the rivers, lakes, seas and lands after self-pretreatment and reaching standards and the circulating water used.

⁷ Includes coal-fired, cogeneration, gas-fired, and oil-fired projects in China and Korea.

10 Green Operation

Protection of Ecological Environment and Natural Resources

We value natural resources with a commitment to maintaining biodiversity in project development and business operation. The Group has formulated the *Implementation Rules for Environmental Management (Second Edition)* and the *Environmental Management System (Third Edition)* to standardize the environmental impact assessment process of project development and construction. The Group engages a qualified third party in preparing environmental impact assessment documents and water and soil conservation plans in strict accordance with the national and local *Classified Management Directory of Environmental Impact Assessment of Construction Projects* and the *Administrative Regulations on the Preparation and Approval of Water and Soil Conservation Plans for Development and Construction Projects* and will approve or record and conduct environmental impact assessment accordingly.

During the project construction, the Group takes effective measures to reduce the impact on the ecological environment and implement the "Three Simultaneities" system of environmental protection for the construction project, that is, the environmental facilities needed for the construction project must be designed, constructed and put into operation spontaneously with the main project. Meanwhile, the Group protects the environment at the site in accordance with laws and regulations, and formulates and implements water and soil conservation plans, selects the eco-friendly construction period, area and approaches favorable, protects biodiversity, and completes acceptance within the specified period.

The Group will carry out pre-launch after the main works of the construction project are completed, and supporting environmental facilities will also be put into trial operation at the same time. During the pre-launch, the Group monitors the operation of those facilities and the impact of the project on the environment. After preparing the environmental impact report, the Group will check and accept the supporting environmental facilities, which can be put into use only after being accepted as qualified. The Group requires that the construction project must be designed and constructed in strict accordance with the water and soil conservation plan approved by the water administration department. The water and soil conservation facilities should be accepted before the project operates. Those that have not been accepted or fail to pass the acceptance will not be put into use.

The Group attaches great importance to ecological restoration following project development, and thus, we hire independent external professionals to assess the restoration of all habitats and analyze the impact of the project construction on the environment. For example, when building offshore wind power projects, we assess the effects on fishery resources, including tracking and monitoring how effective ecological restoration is through sample calculation, soil monitoring and water quality monitoring.

CASE: CGN NEW ENERGY AND BEIJING NORMAL UNIVERSITY JOINTLY APPLIED FOR THE NATIONAL KEY R&D PLAN AND INITIATED THE PROJECT

During the Reporting Period, the Group and Beijing Normal University jointly applied for the project of "technology integration and demonstration of ecological protection, restoration and utilization during wind power and photovoltaic resource development", which was selected for the special-purpose project of 2022 by the Ministry of Science and Technology on "protection and restoration of typical fragile ecosystems". The Group undertakes the theme "collaborative application demonstration of wind power and photovoltaic resources development and agroforestry".

The project aims to find the development potential of wind power and photovoltaic resources, explore the environmental impact and action mechanism, and carry out ecological performance assessment and scenario simulation by studying 6 to 8 typical wind and solar power stations, and finally form a typical application demonstration of ecological protection, restoration and utilization during wind power and photovoltaic resource development. The implementation will provide strong support for the country's ecological environment protection and intensive development of new energy, and the results will also become an important boost for the country's new power system.

10 Green Operation

CASE: WUHAI PHOTOVOLTAIC PIONEER PROJECT CARRIED OUT ECOLOGICAL RESTORATION AND TREATMENT OF MINING SUBSIDENCE MOUNTAIN AREAS

The Wuhai Photovoltaic Pioneer Project is located in the mining subsidence mountain area in Wuhai with poor environments. The project levels the support installation, increases water in the mountain area, sets up fences, blocks the access of livestock, and sows grass seeds in the rainy season to restore the environment, which is recognized by the Wuhai Municipal Bureau of Natural Resources which has set up a national four-wood (second-level wild plant) zone on the access road, fully acknowledging the efforts in ecological restoration by the power station.



ADDRESSING CLIMATE CHANGE

General Secretary Xi Jinping delivered a speech at the 75th United Nations General Assembly on 22 September, 2020, emphasizing that strong policies and measures will be adopted to reach the carbon peak by 2030 and achieve carbon neutrality by 2060. In order to achieve the goal of carbon neutrality, and reduce air pollutant emissions, China will adjust its energy structure and actively develop a clean and renewable energy industry.

To practice the national directives on reaching a carbon peak by 2030 and carbon neutrality by 2060, and to assume the responsibilities of a centrally administrated state-owned enterprise, CGN New Energy is committed to its strategies of propelling the new energy business with the hope to secure any opportunities in the wind power industry and photovoltaic power industry. The Company also actively engaged in exchange among the industry. With reference to the framework and recommendations of the TCFD, the Group disclosed related climate risks and opportunities, as well as management and planning in four core categories of “governance”, “strategy”, “risk management” and “indicators and objectives”.

Governance

The Safety Committee under the Board is the leading body for safety, quality and environmental protection. It leads the safety, quality and environmental protection work of the Group, including the management of climate-related risks and opportunities, and formulates the medium and long-term safety, quality and environmental plan. The Safety Committee is composed of the members of the General Manager Department, the heads of each unit, the safety directors of each branch/project company, the module directors of the Safety and Quality Department, the directors of the Safety, Quality and Environment Center from each business unit, the heads of the Safety and Quality Department from each unit and the staff representatives. The Safety Committee convenes a meeting of all members every quarter and reports to the Board on a regular basis.

10 Green Operation

Strategy and Risk Management

Climate-related risks and opportunities

CGN New Energy incorporates climate-related issues into its operational risk assessment and management. With the assistance of professional consulting agencies, the Company assessed, identified and confirmed the climate-related risks that may have a significant impact on the Group. The assessment results indicated no high climate risk currently. The Company has no major climate risks now, but it has medium and low-level climate risks. The medium-level climate risks identified and our countermeasures to mitigate such risks are as follows:

Climate-Related Risks	Risk Description	Countermeasures
Acute risk	The severity of extreme weather events such as typhoons and floods has increased	<ul style="list-style-type: none"> Formulated <i>Emergency Plan Drill</i> to effectively control safety risks; Held different emergency drills regularly to familiarize employees with the emergency plan; Prepared production contingency plans for relevant emergencies, such as material reserves, personnel emergency plans, and activation of emergency production processes etc.; The natural disaster risk warnings issued by the government department were communicated to the Company promptly, and we took swift and decisive measures, such as cutting off water and power supplies, in response to the actual situation.
Chronic risk	Rainfall variability and extreme fluctuations in weather patterns	<ul style="list-style-type: none"> Established the <i>Implementation Rules for Environmental Management (Second Edition)</i>, took several energy-saving and water-saving measures, formulated emergency plans for flood prevention, prepared flood control materials in advance, dredged sewer pipes, added waterproof sandbags, etc.
Market risk	Changes in customer's (electricity purchaser) demand	<ul style="list-style-type: none"> Paid attention on and responded to the market electricity system reform and regional policy changes, strengthened the study on electricity sales strategy, and carried out power transactions on the basis of efficiency; Conducted various electricity trading in an overall way, and firmly maintained the strategies of propelling the new energy business with the hope to secure any opportunities in the wind power industry and photovoltaic power industry; and participated in industry exchanges, and continued to promote the development of clean and renewable energy with our technical build-ups and operation experience.
Policy and legal risk	The rise of greenhouse gas emission pricing	<ul style="list-style-type: none"> Carried out many key energy-saving technological transformation projects and continued to increase the proportion of investment in clean and renewable energy projects. The relevant practices not only improved the overall energy efficiency, reduced greenhouse gas emissions and continued to develop the clean energy market, but also improved core competence to operate and maintain wind power and photovoltaic power business so as to provide safe, environmentally-friendly, affordable clean energy for society.

10 Green Operation

CASE: STABLE ELECTRICITY SUPPLY AT SUMMER PEAK

On 12 August, 2022, the Chinese Central Meteorological Station issued the first high-temperature warning this year, and the country was at its peak in electricity use. The Group took various measures to guarantee the power supply with no effort spared. Jiangsu Rudong Green Valley Offshore Wind Farm strictly implemented the *Work Plan for Summer Peak* to supply power in 2022, set up the organization and operation mechanism, and continued safety inspections. The project provided stable electricity during summer peak through eight major measures, such as increased patrol frequency during abnormal weather, high-risk operation process control, increased efforts to identify and eliminate hidden hazards, strengthened operation parameter monitoring, improved equipment quality, storage of anti-heatstroke supplies, normalized management of pandemic control, ensured network and information security. Jiangsu branch acted in stages and implemented measures for a stable electricity supply, preventing the risk to workplace safety and putting an end to workplace accidents.



10 Green Operation

CGN New Energy is well aware that climate change brings various risks to the business, and at the same time, it also explores more new opportunities for the business. We will continue to pay close attention to related matters and deal with potential risks, seize opportunities and timely disclose information in. CGN New Energy will continue to promote the development of clean and renewable energy by virtue of its own technical build-ups and operating experience. In addition, it will continue to strengthen its efforts in energy conservation and emission reduction and work together with other parties to make contributions to the effective response to global climate change.

In addition, the Group identifies and confirms significant climate-related opportunities that may have an impact on the Group from the perspective of “potential financial impact on the Group”, as shown below

Climate-related opportunities	Opportunities Description
Resource efficiency opportunities	More efficient production and distribution processes Reduce water usage and water consumption
Energy source opportunities	Use renewable energy and low-emission technologies Participate in the carbon trading market Supportive policy incentives
Product and service opportunities	Develop and expand low-emission and renewable energy projects R&D and innovation Diversified business activities Shift of market preference
Market opportunities	New market access Gain government subsidies
Adaptability opportunities	Energy substitution and diversification

The Group makes its overall strategy based on the “dual-carbon” goal to fully serve the national low-carbon transformation and continue to significantly increase the utilization of renewable energy. We continue to reinforce business development and promote technological innovation to explore more possibilities for renewable energy development. In addition, we have been reducing the overall carbon emissions in the operation by maintaining good carbon asset management. In order to more effectively regulate the management of carbon assets, the Group has developed the *Carbon Asset Management Procedure* to promote emissions reduction trading and ensure smooth carbon trading. The Group, guided by user needs and based on meeting users’ needs for clean, low-carbon, safe and efficient energy use, continues to provide high-quality green energy for power users, actively participates in green power trading, practices the concept of green development with actions, and firmly contributes to the accomplishment of the carbon peaking and neutrality goal. During the Reporting Period, the Group seized the opportunity to further standardize the process of green power trading and formulated the *Management Measures for Green Power and Green Card Trading (Trial)*.

10 Green Operation

CASE: CGN NEW ENERGY AND DAQING VOLVO REACHED GREEN POWER PURCHASE AGREEMENT

In 2022, Mingshui projects in Heilongjiang succeeded to participate in the 2022 green power transaction organized by Beijing Power Exchange Center. It is acknowledged that this green power transaction is the first and the only one green power transaction for the year of 2022 in Heilongjiang province. CGN New Energy actively implements its social responsibility as a state enterprise, becoming one of the first green power suppliers in the carbon neutrality enterprises site in Heilongjiang, and closely works with grid companies in Heilongjiang to improve the electricity supply plan together and to help Daqing Volvo Car Manufacturing Co., Limited to use green power.

Indicators and Objectives

During the Reporting Period, the Group's power generation reached 19,189.7 GWh, and the new operating capacity of wind power and solar power was 619.7 MW. In 2023, it is expected to continue its increase steadily of the new operating capacity. The Group sets climate-related performance targets every year and monitors 100% of energy conservation and emission reduction indicators (which are focused on by SASAC). The Group organizes and carries out special inspections on environmental protection according to the indicators, and monthly collects energy-saving data required by the SASAC. The Group also counts and discloses greenhouse gas emissions, direct and indirect energy consumption, etc. in Scope 1 and 2 each year to more effectively assess and manage climate risk. See more in the "Comprehensive Performance – Green Operation" section of this report.

11 Caring for Employees

CGN New Energy's ongoing success depends on the Group's sustainability growth through talent recruitment and retention. We focus on increasing employees' professional skills and improving physical and mental health at work. We are committed to maintaining a quality working environment that values integrity, diversity, cooperation and communication.

EMPLOYMENT MANAGEMENT

CGN New Energy strictly complies with the laws and regulations on compensation and dismissal, recruitment and promotion, working hours, holidays and leaves, equal opportunity, diversity, anti-discrimination and other benefits, as well as laws and regulations related to the prevention of child labor and forced labor in the regions where we operate, including Mainland China, Hong Kong and Korea. The laws and regulations that we have complied with during the Reporting Period, as well as how the Group complied with them are listed in "Appendix I" of the Report. The Group has formulated the *Employee Handbook* and strictly abided by the internal management policies on compensation and dismissal, recruitment and promotion, working hours, holidays and leaves, equal opportunity, diversity, anti-discrimination and other benefits, and those related to the prevention of child labor and forced labor.

CGN New Energy implements the internal *Recruitment and Deployment Management Process* and arranges standardized interviews and assessments for employees during recruitment in accordance with the management system to make appointments based on merits. The Group pledges to fairly and justly treat job applicants and employees of different gender, skin color, nationality, ethnicity, cultural background, religious belief, family background and sexual orientation during arrangements for recruitment, hiring, training, rewards, promotion and development, and strictly prohibits differential treatment and discrimination in any forms. The Group provides employees with a package of benefits, including enterprise annuity, supplementary medical insurance, annual physical check, and subsidies for communication and commuting. The Group also attaches great importance to effective two-way communication, and therefore it has established a feedback mechanism including disciplinary inspection, patrol inspection, functional supervision, proposals of workers' congress, proposals of trade union representatives, etc., which is implemented in accordance with confidentiality provisions in various fields. Employees can feedback on matters related to human resources through the mechanism. As of the end of the Reporting Period, the total number of employees of the Group was 1,936 (4.8% year-over-year decrease), with 72 of them being ethnic minorities (1.4% year-over-year increase), representing 3.7% of total employees.

When recruiting new employees, the Group checks the applicant's identity card, academic certificates and other documents. Those who are aged 16 or under are not allowed to be employed as per laws and regulations, and whose health check results issued by recognized hospitals are disqualified to the employment standard of the Group. The Group strictly prohibits any use of child labor and forced labor. All employees are also required to fill in the *Employee's Basic Information Form for CGN* during onboard registration, and ensure the information filled in is true, legal and effective. At the same time, the Group signs labor contracts with employees to ensure that both parties reach harmonious and stable labor relations. Should any violation of regulations be discovered, the Group will timely repair the loopholes and hold the employees involved accountable to avoid the same situation in the future.

During the probation period, the employee may propose to terminate the labor contract, but a written report should be filed at least three days beforehand. The Group may unilaterally terminate the labor contract if any employee is found to be non-compliant with the employment conditions, in violation of laws and regulations, in violation of the Company's rules and regulations or in violation of labor discipline during the probation period.

In addition, we formulate *Employee Performance Management Rules*, conduct annual performance appraisals and assessments for all employees and arrange salary adjustments and promotions based on the competence, performance and other factors of each employee. The Group will demote or transfer the employee with unsatisfactory appraisal results in succession and will negotiate with the employee to terminate the labor contract and lawfully pay appropriate severance if such employee's further assessment is still not up to standard. The Group uniformly implements the salary management system, and all employees are entitled to performance bonuses.

II Caring for Employees

We ensure a sound career advancement mechanism is in place for employees by implementing the labor contract, annual salary adjustment mechanism, appointment by selection, etc. In order to manage the promotion mechanism of employees more effectively, we carried out a systematic reform of the human resources management mechanism, and comprehensively promoted the reform of cadre and talent team building, so as to effectively solve the problem of employee incentive and development, and allow talents to stand out. Our human resources manager supervises and continuously tracks the effectiveness of the mechanism and collect employees' opinions through the labor union and workers' congress. The evaluation mechanism includes indicators such as the completeness of the system, the implementation of the reform measures, the integrity of the archives account, and the effectiveness of key data indicators. In the future, we will continue to gradually explore and establish a professional talent team system in professional fields, specify the career development path for employees, train a reserve talent team with excellent business skills, technical expertise and strong capabilities, and realize the full utilization of talents. We will create a relaxed environment for senior talents to work and act as a supporting channel for them. We strive to create an atmosphere where knowledge, talents and creation are all respected. Furthermore, we encourage talents to pursue their career success and break out the institutional mechanisms unfavorable to employees' innovation and development of abilities to empower them to challenge higher goals.

CGN New Energy provides all full-time employees with:

- Reasonable salary and considerate benefits
- Detailed job responsibilities in line with the position
- Working hours that meet the requirements of national and local laws and regulations
- Annual leave, personal leave, sick leave, marriage leave, maternity leave, etc
- Regular performance appraisal and assessment, and comprehensive arrangement of salary adjustment and promotion
- Timely paid Insurances and Housing Fund, MPF and National Pension in accordance with relevant laws and regulations of Mainland China, Hong Kong and Korea respectively

In terms of expanding recruitment channels, we have developed diversified talent recruitment approaches to attract outstanding talents, such as online recruitment, employee referrals, talent exchange sessions and school promotions. CGN New Energy hopes to retain the best available personnel including the management while attracting potential talents through continuous improvement of its human resources management system, so as to secure the Group's sustainable development in terms of human resources.

Meanwhile, the Group has also expanded the management to after retirement to assist employees in transitioning to retirement life smoothly. For employees suffering from serious or long-term illnesses, the Group will implement internal retirement policies for employees in accordance with relevant national laws and regulations and in light of actual conditions. The Group also regularly organizes retirement care work, such as special lectures on supplementary medical insurance policies, condolences on seven traditional festivals throughout the year, health checkups, and regular mailing of pandemic prevention materials.

11 Caring for Employees

OCCUPATIONAL HEALTH AND SAFETY

CGN New Energy combines occupational health with daily health management, which shares the same service resources and different management, to ensure employees have a continuous and smooth service experience. Under the principle of "Overall Planning and Standard, Hierarchical Management and Early Prevention", we have established and improved the post-health check intervention and optimized the medical services for serious diseases on the basis of the employee health check and with the focus of disease prevention. The Group guided employees in remote areas to seek medical treatment online, customized special health improvement schemes for engineering/production personnel and encouraged all units to set up health centers to provide basic medicines and first-aid devices for health security.

During the Reporting Period, facing the complex and volatile pandemic, the Group set up a special leading group for pandemic control in the Shenzhen office area to deal with the infection of employees in the Shenzhen office area and the Hong Kong office area on March 5 and issued the Company's *Graded Control Plan for Pandemic Control*. Since the country issued the "New Ten" rules, the Group has actively optimized the measures to cope with the new cases, and smoothly overcome the pandemic by successively issuing the *Proposal for Further Improving the Pandemic Control* and the *Guidelines for Personal Protection During Pandemic*. The Group also purchased sufficient anti-epidemic materials, such as antigen reagents, N95 masks, and Lianhua Qingwen medicines to ensure the health of employees and reduce infection, avoid clustered pandemic, strengthen the defense line against the pandemic, and help the country step into a stable anti-pandemic period.

Operational Risk Management

CGN New Energy strictly abides by the laws and regulations on providing a safe workplace and protecting employees from occupational hazards in the regions where we operated, including Mainland China, Hong Kong and Korea. The laws and regulations that we have complied with during the Reporting Period, as well as how we comply with them are listed in "Appendix I" of the Report. The Group has made and strictly implemented internal management policies on preventing employees from occupational injuries.

Electricity production and sales, the largest business segment of CGN New Energy, contribute to the largest portion of the Group's revenue. The Group adopts different approaches to producing electricity, including solar power, wind power, gas-fired, etc., which involve a wide variety of processes and techniques for instrument operation. The safety performance assessment for each project operation has always been the top priority of the inspection and acceptance. In order to reduce the risks relating to the technical requirements of our business and sudden accidents, we always adhere to the basic operating principle of "Safety First" and ensure the safety of our employees by implementing occupational health and safety policies. During the Reporting Period, we had no record of any work-related injuries and casualties and successfully achieved the goal of workplace safety.

To strengthen the effectiveness of the Group's occupational health and safety management, we established a Safety Committee, a Safety Production and Labor Protection Committee in accordance with the *Democratic Management System* to coordinate and monitor all matters related to occupational safety and health of the Group. The Safety Committee meets quarterly, while the Safety Production and Labor Protection Committee meets semi-annually, and all workers have been represented. In addition, we have also developed a series of occupational safety and health management systems, including the *Occupational Health and Safety Management Rules*, the *Potential Safety Risks Investigations and Treatment System*, the *Hazards Sources Management Rules* and the *Safety Management System*, etc. Those policies identify workplace safety risks and potential hazards for employees and provide clear guidance to ensure the safe operation of each production process.

We actively engage employees in the development, implementation and evaluation process of the occupational health and safety system. The Group organizes the internal audit in each department to audit the occupational health and safety management system through the "three-standard audit" and identify problems in a timely manner. The Group establishes a Safety Production and Labor Protection Committee through the *Democratic Management System*, supervises the implementation of the suggestions and opinions reflected and proposed by the employee representatives on the inspection of workplace safety and labor protection, and reviews relevant items. If front-line employees and departments identify safety risks in the working environment, they can feed back through workers' congress, system audits, on-site safety, quality and environmental inspection, special meetings and other channels.

II Caring for Employees

During the Reporting Period, the occupational health and safety management at each project region was as follows:

Project region	Whether OHS management the system has been established	Whether the OHS system has been certificated	Number of accidents during the Reporting Period
China	Established	ISO 45001 certificated	0
Korea	Established	ISO 45001 certificated KOSHA 18001 certificated	0

We adhere to the occupational health and safety management policy of "Prevention is Better Than Cure". The Group implements the *Department Setting and Main Responsibilities Management System*, which specifies that the Safety, Quality and Environmental Department shall perform responsibilities according to the safety, quality and environment management requirements of the Group. The Group requires all project companies and departments to identify all production and management hazards in a bid to develop and implement safety risk management measures before the construction starts. The Group conducts regular safety overhauls to oversee the effectiveness of those measures, such as whether the working equipment is sound and whether the front stand used for work-at-height is up to the standard.

In order to enable employees to report work-related hazards more effectively, the Group has set up a safety, quality and environmental mailbox on the home page of the intranet, publicized the hotline and mailbox, and the Safety, Quality and Environmental Department assigns personnel to answer the calls and read the email during working hours and required all branches, the Integrated Energy Management Department, the Pumped Storage Business Department, and the Engineering Business Department to post their hotline on the construction site, the preparation area, the entrance and exit of access control and staff passage, the rest room, the project department, the canteen and other eye-catching positions. All units are required to include safety knowledge during induction training for new employees and contractor training. The Group has set up an anonymous reporting channel to protect whistleblowers. As stated in the *Regulations on the Administration of Rewards and Punishments for Safety, Quality and Environment*, the information of whistleblowers is required to be kept confidential to ensure they are not subject to reprisal. Any information about the whistleblower shall not be disclosed without the consent of the whistleblower and the approval of the leaders. Any information leaked due to a violation of confidentiality will be seriously treated depending on the severity of the case according to the provisions of the Group and how serious the cases are.

The Group has stipulated in the *Safety Management System* that employees have the right to refuse orders against rules and forced risky operations and that the trade unions at all levels of the Group shall safeguard the legitimate rights and interests of the practitioners in the area of safety production in accordance with the law, conduct democratic supervision on workplace safety and provide reasonable suggestions. In the unfortunate event of an accident, the Group will set up an investigation team to analyze the current impact of the accident and determine the nature of the accident and adhere to zero defect, process-based approach, continuous improvement, and suppression of responsibility in the investigation of the accident. Also, the Group analyzes in depth the management problems, root causes, and four responsibilities of the accident, and formulates remedies and improvements to prevent the recurrence of the accident.

In addition, the Group also equips relevant employees with personal protective equipment under the national electricity industry-related standards and distributed post-specific safety tools, such as safety helmets, gloves, safety belts for work-at-height, shoes of labor protection, etc. to prevent employees from falling, being electrocuted, being injured by falling objects or being injured by other toxic substances. Safety officers from all departments supervise employees to use the tools properly and provide employees with sufficient equipment to reduce workplace safety risks.

In addition, in order to further reinforce the results of occupational health and safety management and ensure the absence of work-related casualties, CGN New Energy also develops and implements internal policies such as the *Life Red Lines of Production, Operation, and Maintenance*, the *Management Red Lines of Production, Operation and Maintenance*, the *STAR Self-check Card*, etc., for all employees in projects to learn.

The *STAR Self-check Card* is the main tool to prevent human-induced failures before conducting major operation activities:

Stop	Pause or stop for a while before work
Think	Think about the task-related risks, whether the Life Red Lines have been practiced
Act	Start working
Review	Check and review whether there are omissions upon completion of tasks

II Caring for Employees

CASE: “SALUTE TO LABOR, SEND COOLNESS IN SUMMER” CONSOLATION ACTIVITIES

In July 2022, various units of the Group successively launched the “Salute to Labor, Send Coolness in Summer” consolation activities, sending coolness and care to frontline workers, and expressing concern and respect for frontline fighters through practical actions. The activities covered more than 200 stations. The weather service issued many orange warnings due to the continuous high temperature and unbearable heat in many areas of Anhui. The labor union of CGN New Energy Anhui Branch was concerned about the health of the front-line employees at stations, and sent summer relief supplies such as watermelons and drinks to the site employees and construction contractors to ensure adequate outdoor hydration for workers. In addition, the Branch’s labor union also provided safety knowledge to frontline workers through a safety knowledge lecture hall, held discussions on workers’ life needs, and effectively implemented the “Sending Coolness” consolation work.



CASE: 18TH LEADING GROUP’S MEETING ON THE COVID-19 CONTROL PROJECT

On 13 December, 2022, the Group held the 18th leading group meeting on the COVID-19 control project. The meeting interpreted the *State Council’s Notice on Further Optimizing the Implementation of the COVID-19 Control Measures*, studied and analyzed the pandemic situation and infection risks in China and the capital, listened to the report of the pandemic control work, and arranged the follow-up anti-pandemic work. As of the day of the meeting, the Group had no cluster infection and distributed more than 20,000 antigen detection reagents, more than 12,000 N95 masks, and more than 2,000 boxes of Lianhua Qingwen medicine and anti-fever drugs to employees, providing adequate supplies for them.



II Caring for Employees

Physical and Mental Health of Employees

CGN New Energy actively responds to national policies and the Group's call, implements the requirement of the "Healthy China" action, and attaches great importance to healthy enterprise construction. Adhering to the people-oriented concept, CGN New Energy takes some actions under the overall guidance of the Group's Health Management Working Committee: in terms of physical health, the annual physical check-up is organized for employees, with designated specialist tracks employees' physical check-up progress, with the exception for those who were physically unsuitable for check-ups, the annual check-up is ensured to cover all employees; in terms of mental health, a two-week "5.25" mental health care activity is held in late May every year, which is organized by the headquarters and jointly participated by branches, combining online and offline activities. The activity reaches the front-line stations to help employees enrich their knowledge, regulate their emotions and release pressure; in terms of publicity and promotion, during the Reporting Period, based on an in-depth analysis of employee physical and mental health status and actual demands, the Group organized 90 health care theme activities that employees enjoyed, achieving full coverage of the company.

CASE: CGN NEW ENERGY ATTAINED NATIONAL AND INDUSTRIAL RECOGNITION AS A HEALTHY ENTERPRISE

During the Reporting Period, the Group's healthy enterprise cases underwent a thorough selection process and were ultimately honored with national and industry recognition. The Group was selected as one of 100 nationwide for the National Health Commission's "Outstanding Cases of Healthy Business Construction" and one of 129 nationwide for the China Enterprise Confederation's "Featured Case of Healthy Business Construction in 2021."

National Health Commission's Outstanding Cases of Healthy Business Construction (100 nationwide) 國家衛健委「健康企業建設優秀案例」(全國共100家)

健康企业建设优秀案例名单-企业建设篇 (按企业名称拼音字母顺序)

69	中国广核新能源控股有限公司健康企业建设优秀案例
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China Enterprise Confederation's Featured Case of Healthy Business Construction in 2021 (129 nationwide) 中國企聯「2021全國健康企業建設特色案例」(全國共129家)

2021 全国健康企业建设特色案例名单

序号	案例名称	实施企业	案例类型	推荐单位
18	新能源电力企业健康企业创建	中国广核新能源控股有限公司	健康管理	企业申报

11 Caring for Employees

Health and Safety Training

CGN New Energy not only continuously improves the risk management system but also organizes and provides a variety of occupational health and safety training for employees. Through training, employees can be more familiar with the standard working procedures and respond to unexpected work-related accidents in a timely and proper manner. All our new production personnel must accept 3-level safety education and test in terms of branch company, project company and post. All new production personnel must pass the test before entering the production and construction sites. Moreover, we also arrange occupational health and safety training activities for in service personnel, including targeted on-site assessment, accident-avoiding study, technical questions and answers, accident forecast and other on-site training and safety activities. Similarly, other related employees are required to complete a safe production knowledge test, to ensure their safety awareness can meet the requirements of the Group.

In terms of improving the ability of employees to cope with emergencies, the Group organizes training on fire safety knowledge for employees every year. We require all employees involved in the training to be equipped with "Four Understanding and Four Abilities", including understanding the danger of fire and being able to call the firefighters; understanding fire prevention measures and being able to use fire-fighting devices; understanding firefighting approaches and being able to deal with the accident; knowing the ways to escape and being able to escape. At the same time, the Group's Safety, Quality and Environmental Department regularly provides employees with training courses related to workplace safety laws and regulations, safety management systems and other systematic courses, so that employees can fully master that knowledge. We set up a workplace safety month every year, and each project company holds workplace safety activities, including lectures and safety drills, etc., to improve the safety awareness of all employees.

During the Reporting Period, OHS training activities organized by project companies are as follows:

Daily maintenance	Three-tier safety education program for new employees Occupational hazard and occupational health training Training on road safety Safety training for external contractors Safety training for external construction contractors and workers Safety management training for managers Continuous training for safety engineers	Responding to emergencies	On-site first aid training Fire safety training Accident handling Training on the emergency response plan for production employees
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II Caring for Employees

CASE: CGN NEW ENERGY HEADQUARTERS ORGANIZED AND CARRIED OUT FIRE DRILLS

On the afternoon of 9 September, 2022, to comprehensively enhance the Group's employees' awareness of fire safety and emergency response and ensure fire safety in the Group's office building, the General Manager's Office and the Safety, Quality and Environmental Department jointly conduct a fire drill in the office building. Through this drill, the Group's fire emergency handling capabilities were effectively improved, the feasibility of the fire emergency plan was tested, and the fire awareness and the ability to respond were enhanced. The exercise enables us to constantly maintain a high level of vigilance and strict implementation of safety measures, and effectively guarantees the safety of the Group's employees' lives and property.



11 Caring for Employees

TALENT NURTURING

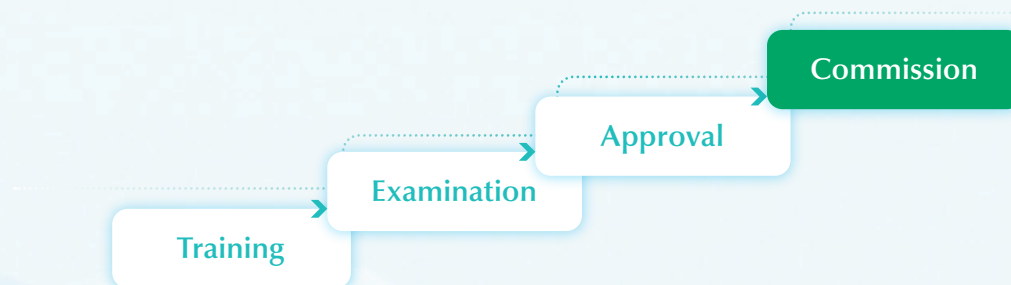
Providing comprehensive occupational training for employees is vital for achieving mutual benefits for both employees and the corporate. CGN New Energy attaches great importance to improving the professional skills of employees and adheres to its strategy of building a strong company with talents. Upholding its talent concept of "Make the Best of One's Talent and Create a Future Together", the Group combines CGN's talent training management system and the business characteristics of CGN New Energy, and regularly provides free and diversified professional skills training and clear career development path for employees based on the skills requirements of each position at different energy power projects. The Group has made and strictly implemented internal management policies to improve the professional skills of its employees.

The Group set up the business department for employee training and talent nurturing-professional company-training company, which is responsible for the overall management and implementation of training in new energy. The skill-focused training aims to improve employees' daily job skills. The Group hopes to improve employees' productivity and enhance their professional skills through such training so that employees can create value for CGN New Energy as well as secure opportunities to enhance their professional competitiveness. Besides, we also actively provide a full range of vocational skill advancement opportunities for other employees to enable every employee to make use of their talents, expand their vocational skills and enrich their self-value through diversified training courses.

Nurturing management talents:



Nurturing technical talents:



The project companies implement the Group's plan to train professional technicians and operation, maintenance and repair personnel. They form a training system for clean energy talents, including the training organization and management system, training authorization system and training support system, so as to help employees master professional skills in an all-around way.

II Caring for Employees

In addition to internal training, the Group sponsors external training for employees. The *Training Management System* explicitly supports all employees to obtain professional degrees or skill certifications. As long as the training is approved by the departments, employees' training costs will be reimbursed. The Group also works with external educational institutions to offer different training for employees. During the Reporting Period, the Group and other institutions such as Dezhou Vocational and Technical College jointly built a college for the new energy industry, hoping to gather quality resources and further improve the quality of talent training in the industry.

CASE: EGRET HATCHING SCHEME FOR NEW EMPLOYEES IN 2022

During the Reporting Period, affected by the pandemic, the Group held three online training sessions for new employees hired through the 2022 school campus with a total of 133 participants. The training covered topics including mental health, such as *Mental Resilience in the Workplace*, and *Employee Follow-up: The Application of Psychological Capital and Positive Emotion in Organization Management*, as well as training on regular business process, career planning and workplace safety.



11 Caring for Employees

CASE: EGRET RUN-UP SCHEME

During the Reporting Period, the Group conducted the Egret Run-up Scheme for the 106th, 110th, 111th, 113th, and 115th sessions, with a total of 299 newly appointed grassroots managers participating in the training. The training was conducted in three forms, including online learning, class lesson and on-the-job practice. The training topics covered learning to serve as a grass-roots manager, interaction skills, task management, and safety culture.



12 Business Operation

Adhering to the concept of win-win cooperation, CGN New Energy has engaged in a wide range of partnerships with many enterprises and research institutions specializing in non-nuclear clean energy and stays updated on industry trends. The Group works together with business partners to jointly overcome challenges and continuously promote the win-win development of the new energy industry and make contributions to social progress. In addition, we strive to select business partners who mirror our values and our commitment to sustainability.

CGN New Energy strictly abides by the laws and regulations on privacy matters relating to products and services provided and methods of redress in the places where we operate, including Mainland China, Hong Kong and Korea. The laws and regulations that we have complied with during the Reporting Period, as well as how the Group has complied with them are listed in "Appendix I" of the Report. The Group has established and strictly implemented internal management policies on the protection of customer privacy and environmental and social risks in the supply chain. Due to the business nature of the Group, health and safety, advertising and labeling issues concerning the supplied electricity are not applicable to the Group.

SUPPLY CHAIN MANAGEMENT

As an essential part of the quality assurance during the operation, suppliers play an important role in supporting our business development. CGN New Energy takes "Safety First, Quality Foremost, Pursuing Excellence" as the basic principles of corporate operation and development and "Precise Enacting, Orderly Execution and Efficient Monitoring" as the system philosophy. We are committed to maintaining a good collaborative relationship with our suppliers and have formulated and implemented relevant systems based on the policy of "mutual benefit, common development, environmental protection, benefits to people" to standardize the performance of both sides and achieve the goal of harmonious development featuring mutual benefit and win-win.

During the Reporting Period, we worked with 3,157 suppliers from Mainland China, Hong Kong and Korea, and we have implemented practices for 1,651 suppliers, mainly covering three types of suppliers including fuel projects, engineering projects and general equipment services. In order to standardize the procurement process, we have developed stringent management measures to assess suppliers' performances. We regularly conduct comprehensive supplier performance assessments from at least seven dimensions including technology, quality, cost, delivery, responsive service, environmental protection and social responsibility. For suppliers whose contracts are being enforced, performance assessments are arranged at least once a year by each major subsidiary company. The assessment results will be used as the basis for supplier qualification and the subsequent procurement review. We give priority to suppliers with an outstanding performance, vice versa, we consider discontinuing cooperation with suppliers with poor performance.

We have been promoting the green supply chain, requiring suppliers to comply with the relevant laws and regulations on environmental protection and fulfill their contractual obligations on environmental protection, and be responsible for the environmental damage, personal injury and property loss caused by violating the laws and obligations agreed in the contract. Suppliers shall prepare environmental protection measures and plans according to the environmental protection work content agreed upon in the contract. This practice mainly covers suppliers during the construction period. At the same time, we stipulated in the *Implementation Rules for Environmental Management (Second Edition)* that when formulating corporate development strategies and selecting suppliers, all units should fully consider the factors of energy conservation and environmental protection, timely release guidelines on the implementation of green industrial chain, and try to implement the green design, green procurement, green construction, and green operation and maintenance strategies. We actively implement green procurement and do not purchase products that are listed in the "high pollution and high environmental risk" product list in the *Comprehensive Catalogue for Environmental Protection* formulated by the Ministry of Ecology and Environment, as well as products or the production processes and equipment that are listed in the *Guidance Catalogue for Some Industrial Industries to Eliminate Backward Production Technology Equipment and Products* published by the Ministry of Industry and Information Technology.

For environmental and social risks, we have incorporated these risk considerations into the *Supplier Management Measures*. When conducting supplier assessment management and dealing with misconduct, we will identify the environmental and social risks of suppliers, including whether the suppliers have violated major environmental accidents, their ability to perform the contract, and whether there are statements or behaviors that are detrimental to the major interests of the country. We conduct regular post-evaluation for our suppliers every year and classify suppliers according to the evaluation results. Therefore, the environmental and social risks of suppliers identified in the assessment will be one of the factors affecting the classification of suppliers. In case of serious circumstances, we may even consider terminating the partnership with them.

12 Business Operation

In order to improve the environmental awareness of our suppliers, we have signed the *Supplier (Outsourcing Project) Environmental and Safety Control Agreement* with each supplier to monitor their ESG performance, reduce pollution and avoid safety accidents during production processes. The aforesaid agreement has stipulated the Group's requirements regarding environmental protection and OHS. We lawfully deal with the serious pollution caused by suppliers and terminate the contract accordingly. In the process of construction, we will standardize the production and operation behavior of employees from each constructor in accordance with our *Management and Assessment Measures on Outsourcing Safety Production* and clarify the assessment rules and the handling of all kinds of workplace safety violations and misconduct.

Approaches adopted by CGN New Energy to review the qualifications of suppliers:

Document Review	On-site Review	Other Review
Send documents on qualification review to suppliers, and identify their tendering qualifications and ability to fulfill the contract according to the documents returned by suppliers. The major assessment criteria include suppliers' basic qualifications, relevant performance, safety, quality and environmental conditions, technical skills and financial status.	For suppliers that require on-site review, such review will be carried out after passing the document review, and according to needs of the suppliers' safety, quality, environment, technology and business at their operating location. Suppliers are classified according to the type of products to be supplied, a corresponding review strategy will be implemented and independently written comments will be issued accordingly.	Due to the difference in business nature, each subsidiary may refer to the by-laws and entrust external organizations to carry out the review, streamline the review process, be exempt from review, or adopt other special review approaches.

Suppliers are classified as "potential suppliers", "qualified suppliers" and "restricted suppliers" for management. "Potential supplier" refers to the ECP members who have not passed the qualification review or whose qualification review has expired, while "qualified supplier" refers to the suppliers who have passed the qualification review or re-assessment in the right product category, "Restricted supplier" refers to those who have been suspended from assessment or banned from use due to restrictive measures such as blacklisting, debarment, bid restriction, and temporary freeze, including those involved in improper bidding, bribery, a serious breach of contract, serious liability incident, serious negative social review, and other undesirable behaviors. We manage that misbehavior and integrate anti-corruption into the supplier code of conduct, so the supplier's integrity is one of the important factors. When we made contracts with all suppliers, it was stipulated that the suppliers should sign a commitment to integrity for construction projects, to ensure that the suppliers promised to prevent any illegal and disciplinary behaviors of seeking improper interests in the process of cooperation. In the process of bidding or contract dispute resolution, we will also assess whether suppliers have engaged in dishonest practices such as bribery, threats or intimidation against employees or their stakeholders. If a supplier is listed as a Restricted Supplier, we may prohibit or restrict business dealings with our affiliates.

The "qualification review status" of suppliers is marked on the ECP system based on the aforesaid principles. We only signed contracts and orders with qualified suppliers that have passed the qualification review. At the same time, we further subdivide the qualified suppliers into three categories, so we purchased projects, goods, and services from suppliers within the qualified level and category.

In addition, we also especially provide safety training and guidance for some suppliers to reduce their potential risks during operation and then to guarantee our long-term stable operation. We continuously carry out supplier training and encourage our partners to seize new opportunities and face new challenges together with the Group to achieve continuous improvement in energy safety. By promoting experiences and resource sharing, the Group works with suppliers to drive the sustainable development of the electricity supply chain.

12 Business Operation

CASE: CGN NEW ENERGY HELD THE SUPPLIER CONFERENCE 2022

The conference was held on 18 August, 2022, with the theme of “Gathering Strength for A Bright Future”, focusing on the new energy industry entering a new development path, how to cope with opportunities and challenges, and working closely with the upstream and downstream of the industry chain to win the future of the new energy industry. The meeting adopted three chapters of “Industrial Synergy, Innovative Development, and Safety Compliance” to introduce the cooperation concepts and requirements of CGN New Energy in all aspects of the business to suppliers, released the list of CGN New Energy’s star suppliers in 2021 and commended the four-starred and five-starred suppliers.



OPERATIONAL QUALITY ASSURANCE

We are committed to maintaining the quality of business operations, regularly reporting to the Board on the operation and market, and striving to continuously optimize the operation strategy and maintain the security and stability of the power grid. The Group fully embodies its market awareness in three aspects by strengthening its business strategy, seizing market opportunities, and enriching marketing means and practically improving its ability to adapt to and serve the market.

In terms of system, the Group takes the first-level system of the *Electric Power Marketing Management System* as the guiding principle, guided by market users, has developed a sound guarantee system for electric power trading and market-oriented service business, which ensures compliant business development.

In terms of trading core capacity, the Group has now built an integrated power forecasting platform and auxiliary decision-making system, which is coordinated with more accurate power forecasting capability through continuous optimization of algorithms. The output reporting curve is optimized in the day-ahead and intraday market to ensure better service for external power supply and market users in the future.

In terms of technological innovation, the Group has carried out research on the application of “energy storage” technology in spot trading and auxiliary service scenarios in view of the intermittent characteristics of new energy output. The pilot project has been put into operation to provide technological innovation for the safe and stable operation of the power grid. In addition, to alleviate the pressure of power grid regulation, the Group is building a virtual power plant operation platform, based on demand-side response policies in Hunan, Shandong, Shanghai and other places, to deeply explore user-side adjustable resources and make positive contributions to the construction of China’s new power system.

12 Business Operation

INTELLECTUAL PROPERTY RIGHTS AND PRIVACY

We attach great importance to the protection and management of intellectual property rights. All employees of CGN New Energy should protect the Group's intellectual property rights, abide by all relevant laws and regulations and respect other institutions and individuals' intellectual property rights. The Group strictly implements the internally-made *Employee Handbook and Employee Code of Conduct* to practice internal intellectual property rights management measures. During the Reporting Period, the Group applied for 96 new patents, including 38 invention patents, 49 utility model patents, design patents, and 9 new software copyrights

CASE: PATENT APPLICATION – WIND TURBINE DRIVE CHAIN HEALTH MONITORING AND EVALUATION APPROACH AND DEVICE

In the existing technology, the wind turbine drive chain health monitoring and evaluation approach can only leverage one displacement or indirect measurement to reflect the health condition of the wind turbine transmission chain, which neither achieves real-time monitoring nor ensures the accuracy of detection, with a less reliable detection approach. In order to solve this problem, the invention is equipped with the approach and device for monitoring and evaluating the health of the drive chain of wind turbines. By monitoring the main shaft, main bearing and gearbox of the drive chain of wind turbines, a mathematical evaluation model is established to systematically evaluate that health with high real-time, high accuracy and high reliability as the criteria.

CASE: PATENT APPLICATION – CONFIGURATION AND DEVICE OF PHOTOVOLTAIC ENERGY STORAGE POWER AND CAPACITY

Impacted by the fluctuating solar radiation, there exists several problems in photovoltaic power generation, unstable power generation and grid connection, as well as grid absorption and power abandonment, etc. The configuration method of photovoltaic energy storage power and capacity can establish a revenue-cost model by obtaining the historical data of the photovoltaic power station, the cost of the energy storage power equipment, the cost of the energy storage capacity equipment and other information, and then determine the energy storage power and energy storage capacity when the benefits of the energy storage power generation are maximum, thus optimizing the configuration parameters of the photovoltaic power station to maximize the benefits.

In addition, we strictly manage clients' information and encrypt business data. The clients' information is under the charge of specific personnel. Other employees shall not solicit clients' information except for special conditions approved by the Group. When cooperating with electricity users, the Group will also sign a confidentiality agreement or a confidentiality clause to carry out relevant business cooperation on such a basis and fully guarantee the privacy and security of both parties. During the Reporting Period, there was no breach of client privacy or loss of clients' data or any substantiated complaint.

13 Giving Back to the Society

As a socially responsible corporate citizen, CGN New Energy is committed to creating shared benefits for the communities which relate to our business operation. In addition to our corporate charity, we also strengthen our ties with the local communities through project operations, proactively understand their needs for development and build a harmonious society.

At present, CGN New Energy's community investment focuses on industrial revitalization, supporting education development, scientific competency of the general public and emergency relief. We expect to help people in the vicinity of project sites and those people in need to improve their living conditions through our operation in project sites and charity donations. At the same time, we can also bring hope to the next generations in the local communities and give an impetus for sustainable development in the communities in the future. The Group makes and strictly implements internal management policies on community communication related to the operation.

RURAL REVITALIZATION

As China's economy continues to grow, CGN New Energy hopes that people can share the fruits of development. While the country is actively promoting the revitalization work, we are also aware in line with the country's policies that some townships and counties still lag in development and require more resources to sustain their livelihoods. We hope that people will be satisfied, and their lives will gradually improve.

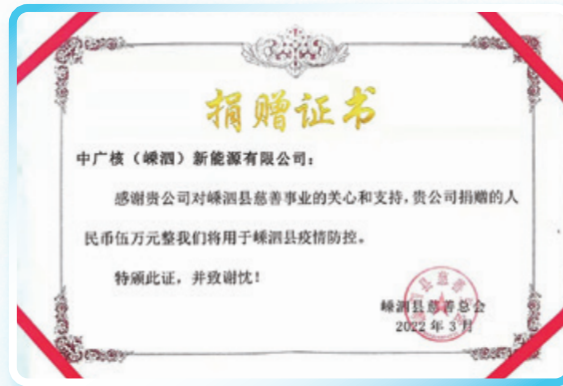
CGN New Energy actively fulfills its social responsibility as a centrally administrated state-owned enterprise while rapidly developing high-quality new energy businesses. CGN New Energy makes targeted efforts in revitalization, upholds its distinctive ideas –“Do Things and Take Responsibilities” and contributes to industrial revitalization. Under the concept of “Build a Project to Benefit People”, CGN New Energy has drawn a charity map for its work on industrial revitalization nationwide. For years, CGN New Energy has shouldered the national mission of industrial revitalization through industrial development and made contributions with personnel support and donations, etc.

13 Giving Back to the Society

CASE: “GREEN + HELP”, INJECT NEW ENERGY TO THE HIGH-QUALITY DEVELOPMENT IN THE AREA WHERE THE PROJECT LOCATED



To assist the environmental protection work in Huaniao town in Shengsi county and improve the living standards of the local residents, as well as demonstrate the social commitments as state-owned enterprise, on 30 November, 2022, CGN New Energy donated RMB350,000 as donating funds to Huaniao town in Shengsi county, so as to inject new energy to the modernization with full electricity in the island.



In recent year, CGN New Energy has been donating precisely and effectively to help local governments to implement a series of industry projects, education projects and people's livelihood security project, etc, benefit vulnerable groups in the city, contribute to common prosperity among farmers, and enhance people's acquisition, happiness and satisfactory. In March 2022, CGN New Energy donated RMB50,000 in emergency to Shengsi country to purchase supplies, so as to help the prevention and control of the epidemics during the sudden epidemics.

This “Hello to Island” donation will be fully used to promote the green development works of the residents in huaniao country by guiding residents to save energy and reduce emissions, create revenue and increase efficient, so as to empower of the CGN into the high quality development of the island.

13 Giving Back to the Society

CASE: FOCUS ON WATER AND SOIL CONSERVATION AND MAKE CONTRIBUTIONS TO BUILD BEAUTIFUL CHINA



CGN New Energy adheres to its corporate mission of “Developing Clean Energy and Building a Beautiful China”, uphold the “green developments” concept throughout the full life cycle of the project construction. The Cenxi Dalong Wind Farm of CGN in Guangxi has been implementing the “Three Simultaneous” for environmental protection, soil and water conservation strictly in compliance with environment-protection requirements since its early construction by conducting vegetation restoration on upper and lower slope timely, preventing and governing the surface soil, and reusing the muck. In 2022, Dalong Wind Farm won the prize of “2022 Environment-friendly Practical Technologies and Demonstration Projects” issued by the China Association of Environmental Protection Industry.

CASE: PROPAGATION AND RELEASE ACTIVITY AND BIODIVERSITY PROTECTION



On 29 May, 2022, CGN Jiangsu Rudong H8 offshore wind power project launched the first marine organisms propagation and release activity in Rudong Liubu Pier. This activity released total 7,246,000 portunus trituberculatus into the sea. Expert panel oversaw and inspected various indicators such as the size and quantity, pestilence residue and the surrounding environment, and the personnel of Nantong Notary Office notarized for the release on site, to ensure the quality and avoid blind release. This marine organisms propagation and release activity facilitated a faster renovation of portunus trituberculatus resources in the sea areas around the wind farm, and generated significant ecological benefits, social benefits and economic benefits.

13 Giving Back to the Society

COMBATING AGAINST THE PANDEMIC

As the pandemic recurred during the Reporting Period, CGN New Energy, acting as a centrally administrated state-owned corporation, cooperated with government measures and provided donations and aid to local governments, surrounding communities, and villages in the place where our projects operate, to help the country implement the “New Ten” rules and further optimize pandemic control. The Group simultaneously carried out multiple measures to ensure electricity generation. The Group proactively cooperated with local governments to transfer resources to satisfy the anti-pandemic needs and ensure electricity supply, effectively managed and operated facilities and conducted data analysis to ensure the facilities were operating steadily.

CASE: SUPPORTED QINGHAI TO FIGHT THE PANDEMIC

In August 2022, severe confirmed cases of COVID-19 were reported in cities (prefectures) and counties in Qinghai. In order to fulfill social responsibilities, the Group immediately donated anti-pandemic materials to Haixi Prefecture, Hainan Prefecture, Huangnan Prefecture and Dulan County, including protective suits, masks, disinfectant, latex gloves, etc., which effectively supplied the materials in those areas. In order to deliver the materials timely, the Party members and cadres of the Group, youth members of the league and all departments worked together to raise materials and arrange transportation, which ensured the delivery of anti-pandemic materials.



During the Reporting Period, the Group's Investment in the community:

Investment in community/public charity

RMB2,740,400

14 Comprehensive Performance

In terms of performance data statistics and presentation, the Group adopts the “operational control” approach to defining organizational boundaries. The statistical and calculation methodology used in the Report are appropriately indicated. Past data and information on some indicators have been sorted out and presented. As the scope of the projects where ESG-related data are collected in the Group’s 2022 expanded on the basis of 2021, data for some indicators were changed from previous years. The “N/A” in each list indicates that the relevant data are not in accordance with *GRI Sustainability Reporting Standards* or disclosed or not counted in the year or that the data are not applicable for comparison. Unless otherwise stated, the data provided in this section are the aggregate data in the corresponding year or the data as of 31 December in the corresponding year in relation to the Group’s projects with operational control and offices in Mainland China, Korea and Hong Kong.

CORPORATE GOVERNANCE

Economy and Governance

Economic performance:

Indicator	2022	2021 (Restated) (Note)	2020
Revenue (US\$'000)	2,430,056	1,775,305	1,149,892
Operating profit (US\$'000)	589,652	479,596	287,467
Net assets (US\$'000)	1,499,859	1,495,211	1,297,381
Earnings per share (US cents) ⁸	4.55	5.69	3.78
Income tax (US\$'000) ⁹	58,573	34,066	37,533

Preventing bribery and anti-corruption:

Indicator	2022	2021	2020
Number of cases involving bribery, extortion, fraud and money laundering	0	0	0

BUSINESS OPERATION

Product and Service Quality

Operational performance:

Indicator	2022	2021	2020
Number of cases in which operations are suspected of infringing intellectual property rights	0	0	0

Note: The Group has initially applied the amendments to IAS 16 at 1 January, 2022. Under the amendments, the comparative information is restated.

⁸ Refers to basic and diluted earnings per share of the Company.

⁹ Refers to the Company’s income tax expense for the year.

14 Comprehensive Performance

Number of suppliers and regions where they operate:

Indicator	2022	2021	2020
Total number of suppliers	3,157	2,067	956
Mainland China	2,771	1,704	681
Hong Kong	0	0	0
Korea	386	363	275
Other countries and regions	0	0	0
Total number of suppliers where the practices are being implemented	1,651	1,449	N/A

GREEN OPERATION

Emissions and Discharge

Atmospheric pollutant emissions:

Indicator	2022	2021	2020
NO _x (tonne)	687.66	752.43	966.05
SO _x (tonne)	47.78	47.52	97.70
Smoke and dust in exhaust gas (tonne)	50.63	36.73	55.42

Greenhouse gas emissions:

Indicator	2022	2021	2020
Total greenhouse gas emissions (Scope 1 and 2) ¹⁰ (tonne CO ₂ eq)	16,575,179.39	16,976,244.14	16,703,425.33
Scope 1			
CO ₂ (tonne)	3,653,959.88	4,018,559.49	3,823,608.83
CH ₄ (tonne)	1,073.45	1,129.17	894.58
N ₂ O (tonne)	1,329.04	1,469.27	1,325.74
SF ₆ (tonne)	532.03	532.03	531.40
Reduction of trees' emissions ¹¹ (tonne CO ₂ eq)	53.71	91.13	80.85
Scope 2			
CO ₂ (tonne)	36,240.23	34,023.57	15,721.36
Intensity			
Greenhouse gas emissions in total per MWh of electricity generated (tonne CO ₂ eq)	0.86	0.93	1.21

¹⁰ Scope 1 greenhouse gas emissions are calculated based on the global warming potential values of the IPCC Fifth Assessment Report, and are presented in carbon dioxide equivalent. Scope 2 greenhouse gas emissions are calculated based on relevant conversion factors provided by the international environmental group *China Power Industry Development Report 2022 and Guidelines for Accounting Methodology and Reporting of Greenhouse Gas Emissions by Enterprises – Power Facilities (Revised in 2022)*.

¹¹ The tree emission reduction data are calculated based on the conversion factors provided by the Hong Kong Environmental Protection Department and the Hong Kong Electrical and Mechanical Services Department.

14 Comprehensive Performance

Amount of non-hazardous waste generated:

Indicator	2022	2021	2020
Total non-hazardous waste produced (tonne)	44,415.32	40,466.81	31,376.03
Boiler slag (tonne)	38,395.25	35,733.19	22,681.87
Desulfurized gypsum (tonne)	5,545.00	4,317.00	8,158.67
Waste/domestic waste (tonne)	361.28	381.82	359.32
Waste paper (tonne)	10.49	8.29	2.92
Iron scrap (tonne)	98.50 ¹²	26.51	173.25
Intensity			
Non-hazardous waste produced per MWh of electricity generated (tonne)	0.0023	0.0022	0.0023

Amount of hazardous waste generated:

Indicator	2022	2021	2020
Total hazardous waste produced (tonne)	102,974.10	98,803.32	90,907.59
Waste battery (tonne)	15.37	6.66	1.01
Waste oil (tonne)	68.06	77.84	178.75
Waste paint (tonne)	0.35	0.92	0.37
Waste insulation materials (tonne)	37.62 ¹³	7.37	0
Fly ash (pulverized fuel ash) (tonne)	102,852.80	98,710.53	90,727.46
Intensity			
Hazardous waste produced per MWh of electricity generated (tonne)	0.0054	0.0054	0.0066

Wastewater discharge:

Indicator	2022	2021	2020
Wastewater (tonne)	983,730.12 ¹⁴	630,703.75	482,337.80
Intensity			
Wastewater discharged per MWh of electricity generated (tonne)	0.051	0.035	0.035

Compliance with emission and discharge:

Indicator	2022	2021	2020
Number of cases involving illegal emissions and discharge of pollutants into the environment	0	0	0

¹² The generation of waste iron increased due to equipment maintenance in 2022.

¹³ The generation of waste thermal insulation materials increased due to equipment maintenance in 2022.

¹⁴ Since the air pollution control in 2022 led to an increase in more chemicals used in the treatment facilities and more industrial water consumption, a large amount of water was needed in chemical treatment of wastewater, and the circulating cooling water tank was cleaned and descaled, which led to an increase in the amount of wastewater discharge.

14 Comprehensive Performance

Use of Energy and Resources

Energy consumption¹⁵:

Indicator	2022	2021	2020
Total energy consumption (direct and indirect energy) (MWh)	18,920,684.86	20,406,574.39	17,865,538.78
Direct energy			
Coal (MWh)	4,896,799.13	5,313,148.06	5,333,417.96
Natural gas (MWh)	11,738,916.34	13,303,576.23	12,484,843.84
Total direct energy (MWh)	16,635,715.47	18,616,724.29	17,818,261.80
Indirect energy			
Coal gas (MWh)	20.43	25.12	43.02
Gasoline (MWh)	3,035.49	3,594.89	2,612.21
Diesel (MWh)	453.16	214.79	240.22
Fuel oil (MWh)	76,942.00	82,595.25	16,768.74
Liquefied petroleum gas (LPG) (MWh)	174.03	171.12	51.91
Wood pellets (MWh)	2,139,122.51	1,643,680.62	N/A
Purchased electricity (MWh)	65,221.77	59,568.31	27,560.87
Total indirect energy (MWh)	2,284,969.39	1,789,850.10	47,276.97

Intensity	2022	2021	2020
Energy consumed per MWh of electricity generated (MWh)	0.99	1.12	1.29

Water consumption:

Indicator	2022	2021	2020
Total water intake (m ³) ¹⁶	7,111,258,855.96	7,949,734,723.60	7,187,011,278.60
Surface water(m ³)	7,109,213,662.28	7,947,906,553.00	7,186,278,329.40
Municipal water (m ³)	2,030,391.00	1,805,468.60	715,284.20
Ground water (m ³)	14,802.68	22,702.00	17,665.00
Amount of water discharged into the natural environment after pre-treatment (m ³)	7,090,354,842.28	7,931,959,714.40	7,156,997,877.40
Total water consumption (m ³) ¹⁷	20,904,013.68	17,775,009.20	30,013,401.20

Intensity	2022	2021	2020
Water consumed per MWh of electricity generated (m ³)	1.09	0.98	2.17

Other	2022	2021	2020
Circulating water (m ³)	17,567,461.11	20,186,259	24,272,621.50

¹⁵ Energy consumption data were calculated based on the amount of purchased electricity and fuels consumed and relevant conversion factors provided by the International Energy Agency.

¹⁶ Includes surface water, municipal water and ground water.

¹⁷ Water discharged into the rivers, the ocean and land after pre-treatment, as well as circulating water, are not included in the water consumption.

14 Comprehensive Performance

Mitigating Impact on Natural Environment

Amount of waste recycled during the operation:

Indicator	2022	2021	2020
Fly ash (pulverized fuel ash) (tonne)	102,852.80	98,710.53	90,727.46
Desulfurized gypsum (tonne)	5,545.00	4,317.00	8,158.67
Paper (tonne)	1.36	2.45	0.69

Environmental conservation:

Indicator	2022	2021	2020
Special funds for environmental protection invested by the projects in Mainland China (RMB)	38,476,158.17	34,077,048.40	37,943,585.28
Number of trees held as high as 5 meters or above	2,335	3,962	3,515

Compliance with environmental protection rules:

Indicator	2022	2021	2020
Number of cases involving damage to the natural environment	0	0	0

CARING FOR EMPLOYEES

Employment

Cost of employee benefits:

Indicator	2022	2021 (Restated)	2020
Salaries and allowances (US\$'000)	93,503	89,614	74,794
Retirement benefits scheme contributions, including directors' emoluments (US\$'000)	15,892	13,240	11,041

14 Comprehensive Performance

Employee composition:

Indicator	2022	2021	2020
Total number of employees	1,936	2,033	1,837
Number of employees of ethnic minorities	72	71	103
Percentage ratio of employees of ethnic minorities	3.72%	3.49%	5.61%
By gender			
Male employees	1,706	1,764	1,528
Female employees	230	269	309
By age group			
Age under 30	521	531	516
Age between 30 and 50	1,271	1,354	1,178
Age above 50	144	148	143
By employment type			
Full-time	1,936	2,033	1,837
Part-time	0	0	0
By job-based region			
Mainland China	1,694	1,815	1,619
Hong Kong	18	20	22
Korea	224	198	196
Other countries and regions	0	0	0
Permanent employees: divided by gender and job-based region			
Male employees	773	N/A	N/A
Female employees	119	N/A	N/A
Mainland China	659	N/A	N/A
Hong Kong	18	N/A	N/A
Korea	215	N/A	N/A
Other countries and regions	0	N/A	N/A
Temporary employees: divided by gender and job-based region			
Male employees	933	N/A	N/A
Female employees	111	N/A	N/A
Mainland China	1,035	N/A	N/A
Hong Kong	0	N/A	N/A
Korea	9	N/A	N/A
Other countries and regions	0	N/A	N/A
Non-guaranteed hours employees: divided by gender and job-based region			
Male employees	0	N/A	N/A
Female employees	0	N/A	N/A
Mainland China	0	N/A	N/A
Hong Kong	0	N/A	N/A
Korea	0	N/A	N/A
Other countries and regions	0	N/A	N/A

14 Comprehensive Performance

Indicator	2022	2021	2020
Full-time employees: divided by gender and job-based region			
Male employees	1,706	N/A	N/A
Female employees	230	N/A	N/A
Mainland China	1,694	N/A	N/A
Hong Kong	18	N/A	N/A
Korea	224	N/A	N/A
Other countries and regions	0	N/A	N/A
Part-time employees: divided by gender and job-based region			
Male employees	0	N/A	N/A
Female employees	0	N/A	N/A
Mainland China	0	N/A	N/A
Hong Kong	0	N/A	N/A
Korea	0	N/A	N/A
Other countries and regions	0	N/A	N/A

New employees¹⁸:

Indicator	2022	2021	2020
By gender			
Male employees	14.83%	N/A	N/A
Female employees	10.43%	N/A	N/A
By age group			
Age under 30	28.41%	N/A	N/A
Age between 30 and 50	9.91%	N/A	N/A
Age above 50	2.08%	N/A	N/A
By job-based region			
Mainland China	13.46%	N/A	N/A
Hong Kong	0%	N/A	N/A
Korea	21.88%	N/A	N/A
Other countries and regions	0%	N/A	N/A

¹⁸ The new employee rate is calculated as per the "number of new employees in this category/total number of employees in this category".

14 Comprehensive Performance

Employee turnover¹⁹:

Indicator	2022	2021	2020
By gender			
Male employees	3.18%	3.92%	0.87%
Female employees	2.13%	2.18%	0.44%
By age group			
Age under 30	2.62%	4.15%	0.54%
Age between 30 and 50	2.75%	3.29%	0.71%
Age above 50	7.10%	5.73%	0.05%
By job-based region			
Mainland China	1.80%	3.30%	0.01%
Hong Kong	0%	4.76%	0%
Korea	11.81%	7.04%	0%
Other countries and regions	0%	0%	0%

Remuneration and diversity:

Indicator	2022	2021	2020
Ratio of remuneration of female employees to male employees			
Management	1.0	1.0	1.0
General employees	1.0	1.0	1.0
Percentage of female management			
Senior management ²⁰	0%	0%	0%
Middle-level management ²¹	15.74%	10.78%	9.36%

¹⁹ The employee turnover rate is calculated according to the "(number of employees leave in this category/current employees in this category+total number of employees leave) x 100%".

²⁰ Refers to the position of assistant president or above at the Group's headquarters, and members of the Board.

²¹ Refers to the positions of director and senior manager at the head office and department director and above at each branch level of the Group.

14 Comprehensive Performance

Occupational health and safety

Employees' health and safety:

Indicator	2022	2021	2020
By all employees			
Number of work-related fatalities	0 (0%)	0 (0%)	0 (0%)
Number of serious work-related injuries (excluding fatalities)	0	N/A	N/A
Number of recordable injuries ²²	0	0	1
Loss of work accident rate (per 200,000 working hours)	0	0	0.05
Severe injury rate (per 200,000 working hours)	0	0	0.81
Lost days due to work injury	0	0	15
Total working hours	3,859,664	4,067,424	3,690,632
Workers who are not employees but whose work and/or workplace are controlled by the organization			
Number of work-related fatalities	0 (0%)	N/A	N/A
Number of serious work-related injuries (excluding fatalities)	0	N/A	N/A
Number of recordable injuries	0	N/A	N/A
Total working hours	154,096	N/A	N/A

Work-related health problems:

Indicator	2022	2021	2020
By all employees			
Number of fatalities due to work-related health problems	0	N/A	N/A
Number of recordable cases of work-related health problems	0	N/A	N/A
Workers who are not employees but whose job and/or workplace are controlled by the organization			
Number of fatalities due to work-related health problems	0	N/A	N/A
Number of recordable cases of work-related health problems	0	N/A	N/A

²² Refers to inability of employees to work normally for 3 days or more due to work-related accidents.

14 Comprehensive Performance

Workers covered by the occupational health and safety management system:

Indicator	2022	2021	2020
By employee			
Number of staff covered by occupational health and safety management body (percentage)	1,936 (100%)	N/A	N/A
Number of staff covered by the internal audit management system (percentage)	1,936 (100%)	N/A	N/A
Number of staff covered by external audit or certified management system (percentage)	0 (0%)	N/A	N/A
Workers who are not employees but whose jobs and/or workplaces are controlled by the organization			
Number of staff covered by occupational health and safety management body (percentage)	0 (0%)	N/A	N/A
Number of staff covered by the internal audit management system (percentage)	0 (0%)	N/A	N/A
Number of staff covered by external audit or certified management system (percentage)	0 (0%)	N/A	N/A

Development and training

Employee training:

Indicator	2022	2021	2020
Percentage of employees who received vocational development training²³			
Male employees (percentage)	87.53%	84.86%	80.31%
Female employees (percentage)	12.47%	15.14%	19.69%
Senior management (percentage)	0.57%	0.50%	0.35%
Middle-level management (percentage)	6.84%	6.38%	2.43%
General employees (percentage)	92.59%	93.12%	97.22%
Average hours of vocational development training received per employee²⁴			
Male employees (hour)	74.24	82.82	51.66
Female employees (hour)	74.06	92.00	57.17
Senior management (hour)	105.75	115.70	115.70
Middle-level management (hour)	86.94	96.56	40.49
General employees (hour)	73.26	83.20	48.78
Employees receiving regular performance and career development reviews (percentage)			
Male employees (percentage)	1,706 (100%)	N/A	N/A
Female employees (percentage)	230 (100%)	N/A	N/A
Senior management (percentage)	8 (100%)	N/A	N/A
Middle-level management (percentage)	108 (100%)	N/A	N/A
General employees (percentage)	1,820 (100%)	N/A	N/A

²³ The data scope of the percentage of employees receiving vocational development training includes employees at Mainland China and Hong Kong, and is calculated based on "Total number of trained employee of the category/total number of trained employee".

²⁴ The data scope of the average hours of employees receiving vocational development training per employee includes employees at Mainland China and Hong Kong, and is calculated based on "Total number of training hours of the category/total number of employee of the category". Due to the update of the calculation method of average hours of training, the data of 2020 and 2021 have been recalculated.

14 Comprehensive Performance

CONTRIBUTION TO SOCIETY

Community investment

Public charity:

Indicator	2022	2021	2020
Money contributed to community/charity issues ²⁵ (RMB)	2,740,400	3,461,418	1,885,000

²⁵ Includes monetary value of input fund and resources for poverty relief and public charity.

15 Prospects in 2023

2023 will be a critical year for China's 14th Five-Year Plan. The *14th Five-Year Plan for Renewable Energy Development* calls for the need to achieve high-quality and sustained progress in energy transformation and technological advancement. The Group will continue to respond to national goals, fully implement the spirit of the 20th National Congress of the Communist Party of China, and promote the country's green and low-carbon development. Offshore wind power has entered the era of parity, and it is expected to achieve comprehensive parity by the end of the 14th Five-Year Plan, realizing the popularization of new energy. At the same time, Korea's electricity market is also undergoing an energy structural transformation, with an expected increase in renewable energy and natural gas power plants. The Group will continue to develop towards low-carbonization, explore more new opportunities, deeply cultivate the clean energy market, and steadily move towards high-quality and sustainable development no matter in China or Korean markets. The Group is committed to shouldering the responsibility of providing safe, environmentally friendly, and economical clean energy for social development, actively responding to the national call, and striving to become a leader in the industry.

Currently, the Group's wind power business has formed a comprehensive development pattern, with wind power generation and professional services in full development. Our standardized, serialized, and scaled wind power construction and operation and maintenance levels are in a leading position in the industry. Our investment, construction, and operation and maintenance of solar power plants and other new energy, as well as solar energy-related technology research and development, also have strong project operation and maintenance capabilities and leading technology research and development capabilities.

Facing the future macroeconomic environment and the development trend of the power industry, the Group will continue to uphold the mission of "Developing Clean Energy and Building a Beautiful China", and adhere to the concept of sustainable development in all environmental and social aspects. While focusing on acquiring clean and renewable energy power generation projects, we will continue to promote the development of its own greenfield and brownfield projects to bring strong return, enhance the core competence of operation and maintenance in wind power and solar power businesses, and strive to improve the Group's competitiveness and market position in the non-nuclear clean energy industry and create value for its shareholders.

16 Independent Assurance Statement

To the Board of Directors of CGN New Energy Holdings Co., Ltd.:

CECEP (HK) Advisory Company Limited (“**CECEPAC (HK)**” or “**We**”) has been engaged by CGN New Energy Holdings Co., Ltd. (“**CGN New Energy**”) to conduct an independent limited assurance engagement (the “**Assurance Engagement**”) on the information and data related to sustainable development in the 2022 Environmental, Social and Governance Report (the “**ESG Report**”) of CGN New Energy.

CECEPAC (HK) has conducted the Assurance Engagement on the ESG Report of CGN New Energy in accordance with the AA1000 Assurance Standard v3 (the “**AA1000AS v3**”). Moreover, CECEPAC (HK) has also been engaged to conduct limited Assurance Engagement on the reliability and quality of specified performance information disclosed in the ESG Report that have been selected in accordance with the Environmental, Social and Governance Reporting Guide (the “**ESG Reporting Guide**”) published by the Stock Exchange of Hong Kong Limited (the “**SEHK**”).

This independent assurance statement has been prepared in Chinese and English versions. Should there be any discrepancies between these versions, the Chinese version shall prevail.

I. INDEPENDENCE AND COMPETENCE

CECEPAC (HK) was not involved in collecting and calculating data disclosed in the ESG Report, or in the development of the ESG Report. CECEPAC (HK)'s activities of Assurance Engagement are independent from CGN New Energy. There is no relationship between CECEPAC (HK) and CGN New Energy beyond the contractual agreement for providing proper assurance service.

The assurance team of CECEPAC (HK) is composed of experienced professionals in the industry who have received professional training on the standards related to sustainable development, including GRI Sustainability Reporting Standards issued by Global Reporting Initiative, AA1000AS v3, ESG Reporting Guide issued by SEHK, ISO 14064, ISO 9001, etc.

The assurance team of CECEPAC (HK) has extensive experience in conducting the Assurance Engagement and has sufficient understanding and capabilities of implementation of AA1000AS v3. Moreover, the Assurance Engagement related to sustainable development issues is carried out in line with CECEPAC (HK)'s internal assurance protocol.

II. CGN NEW ENERGY'S RESPONSIBILITIES

CGN New Energy is responsible for the preparation and presentation of the ESG Report in accordance with the ESG Reporting Guide published by SEHK. CGN New Energy is also responsible for implementing relevant internal control procedures to ensure that the contents of the ESG Report are free from material misstatement, whether due to fraud or error.

III. ASSURANCE PROVIDER'S RESPONSIBILITIES

CECEPAC (HK) is responsible for issuing an independent assurance statement in accordance with AA1000AS v3 and the ESG Reporting Guide published by SEHK to the Board of Directors of CGN New Energy. This independent assurance statement applies solely to the ESG Report of CGN New Energy in the specified scope, expresses a conclusion on the assurance work, and does not serve any other intents or purposes.

CECEPAC (HK) ensures that all personnel involved in the Assurance Engagement meet professional qualification, training, and experience requirements, and are demonstrably competent in conducting Assurance Engagements. All results of assurance are internally reviewed by senior staff to ensure that methodologies used in the process are sufficiently stringent and transparent.

16 Independent Assurance Statement

IV. ASSURANCE SCOPE

- The scope of the Assurance Engagement is limited to information and data in the ESG Report that relates to CGN New Energy and its subsidiaries only and does not include CGN New Energy's suppliers, contractors, and information or data provided by other third parties;
- AA1000AS v3 Type 2 Moderate Level of Assurance was adopted to evaluate the nature and extent of CGN New Energy's adherence to the four principles (Inclusivity, Materiality, Responsiveness and Impact) in accordance with AA1000AS v3;
- Specified performance information disclosed in the ESG Report was selected and agreed upon between CGN New Energy and CECEPAC (HK) for assurance. The selected specified performance information is as follows:
 - Development and training – Employee training – Average hours of vocational development training received per employee – Female employees
 - Use of Energy and resources – Energy consumption – Direct energy – Natural gas
 - Emissions and discharge – Amount of hazardous waste generated – Waste oil
- CECEPAC (HK)'s assurance work was with respect to information disclosed from 1 January, 2022 to 31 December, 2022. Any information disclosed in the ESG Report that falls outside this period is not included within the scope of the Assurance Engagement. Therefore, we do not express any conclusions on this information; and
- The scope of the Assurance Engagement is confined to the information provided by CGN New Energy only. Any queries regarding the content or related matters within this independent assurance statement should be addressed to CGN New Energy only.

V. METHODOLOGY

CECEPAC (HK) conducted Assurance Engagement only within the scope of Anhui Dangtu Taibai Photovoltaic Power Station (安徽當塗太白光伏電站) and Zhejiang Shengsi 5# 6# Offshore Wind Power Project (浙江嵊泗5#6#海上風電項目) of CGN New Energy, and the assurance work included:

- Evaluating the appropriateness of CGN New Energy's stakeholder engagement process;
- Conducting online interviews with personnel involved with sustainability management, the preparation of the ESG Report and the provision of relevant information and data;
- Assessing whether the reporting and management approach for the ESG Report responded to the principles of Inclusivity, Materiality, Responsiveness and Impact as defined in the AA1000AS v3;
- Conducting sampling of evidence pertaining to data reliability and quality for selected specified performance information;
- Recalculating and verifying selected specified performance information;
- Assessing the degree of conformity of the ESG Report with the ESG Reporting Guide; and
- Performing other procedures we deemed necessary.

Assurance Engagement was performed and the conclusions within were based upon information and data provided by CGN New Energy to CECEPAC (HK), and on assumptions that the information provided was complete and accurate.

16 Independent Assurance Statement

VI. LIMITATIONS

The absence of a significant body of established practice on which to draw to evaluate and measure non-financial information allows for different, but acceptable, measures and measurement techniques and can affect comparability between entities.

VII. CONCLUSIONS

In accordance with the principles of Inclusivity, Materiality, Responsiveness and Impact in the AA1000AS v3, and the conformity of the ESG Report with the ESG Reporting Guide, our findings and conclusions are as follows:

Inclusivity

CGN New Energy has identified key stakeholders, and continuously understood the expectations and concerns of key stakeholders in various ways of communication. In our professional opinion, CGN New Energy adheres to the Principle of Inclusivity.

Materiality

CGN New Energy has conducted materiality assessment for its ESG Report and collected opinions of some key stakeholders. Appropriate methods were used to identify material topics, and the materiality assessment process was disclosed in the ESG Report with the materiality of the topics presented in a matrix. In our professional opinion, CGN New Energy adheres to the Principle of Materiality.

Responsiveness

CGN New Energy has established routine communication channels for its key stakeholders to understand their expectations and concerns, and has relevant mechanisms in place to respond to concerns raised by key stakeholders. Moreover, CGN New Energy has identified material topics for disclosure to respond to stakeholders' requests for information. In our professional opinion, CGN New Energy adheres to the Principle of Responsiveness.

Impact

CGN New Energy has included "influence on part of the key stakeholders' assessments and decisions" and "significance of the Group's economic, environmental, and social Impacts (including human rights)" as two dimensions into its materiality assessment, so that the content of the ESG Report can reflect its impacts on economy, environment, and society to the maximum extent. In our professional opinion, CGN New Energy adheres to the Principle of Impact.

Specified Performance Information

Based on the assurance procedures that CECEPAC (HK) has performed and the evidence we have obtained, no specific issue has come to our attention that causes us to believe that the disclosures of selected specified performance information of the ESG report is unreliable or unqualified.

SEHK's ESG Reporting Guide

The general disclosure and key performance indicators of the environmental and social aspects in the ESG Report, in all material respects, have been disclosed in accordance with the "Comply or Explain" Provisions of the ESG Reporting Guide issued by SEHK. The governance structure, reporting principles and reporting boundary have also been disclosed in accordance with the mandatory disclosure requirements in alignment with the ESG Reporting Guide. CGN New Energy has disclosed the process and the result of the materiality assessment; has described objectively the impact of its business; and has calculated and disclosed relevant environmental and social data. Our assurance findings and comments on the ESG Report have been either adopted or explained by CGN New Energy prior to the issuance of this independent assurance statement.

16 Independent Assurance Statement

VIII. RECOMMENDATIONS

We recommend that CGN New Energy considers strengthening the following work in the future:

- Improving policies or measures of monitoring, managing and measuring the impacts on stakeholders or the ecosystem.



17 April, 2023
Hong Kong SAR, China

Appendix I Laws and Regulations with Significant Impact on the Group which the Group has Complied with during the Reporting Period

The laws and regulations ²⁶ corresponding to the contents of ESG Reporting Guide		Compliance by the Group
A. Environmental		
Aspect A1: Emissions		
Mainland China	Environmental Protection Law of the People's Republic of China Atmospheric Pollution Prevention and Control Law of the People's Republic of China Environmental Protection Tax Law of the People's Republic of China Regulation on the Implementation of the Environmental Protection Tax Law of the People's Republic of China Law of the People's Republic of China on Prevention and Control of Water Pollution Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes	During the Reporting Period, the Group did not violate any laws and regulations related to atmospheric emissions, discharges into water and land, generation of hazardous and non-hazardous waste, and mitigation of noise listed in "Appendix I" of the Report.
Hong Kong	Water Pollution Control Ordinance Waste Disposal Ordinance	
Korea	Clean Air Conservation Act Noise and Vibration Control Act Water Quality and Aquatic Ecosystem Conservation Act Wastes Control Act Act on the Promotion of Saving and Recycling of Resources Environmental Impact Assessment Act	

²⁶ The operation of the Group is in compliance with laws and regulations, including but not limited to those listed in Appendix I.

Appendix I Laws and Regulations with Significant Impact on the Group which the Group has Complied with during the Reporting Period

The laws and regulations ²⁶ corresponding to the contents of ESG Reporting Guide		Compliance by the Group
B. Social		
Aspect B1: Employment		
Mainland China	Labor Law of the People's Republic of China ²⁷ Labor Contract Law of the People's Republic of China Regulation on the Implementation of the Employment Contract Law of the People's Republic of China Social Insurance Law of the People's Republic of China Regulation on Paid Annual Leave for Employees Law of the People's Republic of China on the Protection of Women's Rights and Interests ²⁸ Law of the People's Republic of China on the Protection of Minors ²⁹ Labor Dispute Mediation and Arbitration Law of the People's Republic of China Regulation on the Administration of Foreign Labor Cooperation Law of the People's Republic of China on the Protection of Disabled Persons Regulation on the Employment of the Disabled	During the Reporting Period, the Group did not violate any laws and regulations related to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunities, diversity, anti-discrimination, and other benefits and welfare listed in "Appendix I" of the Report.
Hong Kong	Employment Ordinance ³⁰ Employees' Compensation Ordinance Minimum Wage Ordinance	
Korea	Labor Standard Act Fair Hiring Procedure Act Employment Insurance Act Employment Security Act Framework Act on Employment Policy	

²⁷ To avoid repetitive statement, the laws and regulations also apply to "Aspect B2" and "Aspect B4" in this appendix.

²⁸ To avoid repetitive statement, the laws and regulations also apply to "Aspect B4" in this appendix.

²⁹ To avoid repetitive statement, the laws and regulations also apply to "Aspect B4" in this appendix.

³⁰ To avoid repetitive statement, the laws and regulations also apply to "Aspect B4" in this appendix.

Appendix I Laws and Regulations with Significant Impact on the Group which the Group has Complied with during the Reporting Period

The laws and regulations ²⁶ corresponding to the contents of ESG Reporting Guide		Compliance by the Group
Aspect B2: Health and Safety		
Mainland China	Workplace Safety Law of the People's Republic of China Provisions on the Supervision and Administration of Occupational Health at Workplace Fire Protection Law of the People's Republic of China Law of the People's Republic of China on the Prevention and Control of Occupational Diseases Regulation on Work-Related Injury Insurances Labor Insurance Regulations of the People's Republic of China	During the Reporting Period, the Group did not violate any laws and regulations related to providing a safe working environment and protecting employees from occupational hazards listed in "Appendix I" of the Report.
Hong Kong	Occupational Safety and Health Ordinance	
Korea	Occupational Safety and Health Act Act on Fire Prevention and Installation, Maintenance, and Safety Control of Fire-Fighting Systems Industrial Accident Compensation Insurance Act	
Aspect B4: Labour Standards		
Mainland China	Provisions on the Prohibition of Using Child Labor	During the Reporting Period, the Group did not violate any laws and regulations related to preventing child labor and forced labor listed in "Appendix I" of the Report.
Korea	Child Welfare Act	
Aspect B6: Product Responsibility		
Mainland China	Trademark Law of the People's Republic of China Standardisation Law of the People's Republic of China Regulations for the Implementation of the Standardisation Law of the People's Republic of China Tort Law of the People's Republic of China Patent Law of the People's Republic of China	During the Reporting Period, the Group did not violate any laws and regulations related to privacy matters relating to products and services and methods of redress listed in "Appendix I" of the Report. Due to the business nature of the Group, issues relating to health and safety, advertising and labelling concerning the supplied electricity are not applicable to the Group
Korea	Electric Utility Act	
Aspect B7: Anti-corruption		
Mainland China	Criminal Law of the People's Republic of China Anti-Unfair Competition Law of the People's Republic of China Law of the People's Republic of China on Bid Invitation and Bidding Anti-Money Laundering Law of the People's Republic of China	During the Reporting Period, the Group did not violate any laws and regulations related to bribery, extortion, fraud and money laundering listed in "Appendix I" of the Report.
Hong Kong	Prevention of Bribery Ordinance	
Korea	Unfair Competition Prevention and Trade Secret Protection Act	

Appendix II Content Index of the ESG Reporting Guide of the Stock Exchange

Mandatory disclosure requirements set out by the ESG Reporting Guide of the Stock Exchange		Location of Disclosure or Remarks
Governance Structure	<p>A statement from the board containing the following elements:</p> <ul style="list-style-type: none"> (i) a disclosure of the board's oversight of ESG issues; (ii) the board's ESG management approach and strategy, including the process used to evaluate, prioritize and manage material ESG-related issues (including risks to the issuer's businesses); and (iii) how the board reviews progress made against ESG-related goals and targets with an explanation of how they relate to the issuer's businesses. 	<p>Corporate Governance – Governance Structure</p> <p>Corporate Governance – Risk Prevention</p>
Reporting Principles	A description of, or an explanation on, the application of the following Reporting Principles in the preparation of the ESG report.	About the Report – Reporting Standard
Reporting Boundary	A narrative explaining the reporting boundaries of the ESG report and describing the process used to identify which entities or operations are included in the ESG report. If there is a change in the scope, the issuer should explain the difference and reason for the change.	About the Report – Reporting Period and Boundary

Appendix II Content Index of the ESG Reporting Guide of the Stock Exchange

Subject Areas, Aspects, General Disclosures and Key Performance Indicators (KPIs)		Location of Disclosure or Remarks
A. Environment Aspect		
Aspect A1: Emissions		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	Green Operation – Green Management System, Monitoring and Management Mechanism for Emission and Discharge
KPI A1.1	The types of emissions and respective emissions data.	Comprehensive Performance
KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Green Operation – Monitoring and Management Mechanism for Emission and Discharge; Comprehensive Performance
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Green Operation – Monitoring and Management Mechanism for Emission and Discharge; Comprehensive Performance
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Green Operation – Monitoring and Management Mechanism for Emission and Discharge; Comprehensive Performance
KPI A1.5	Description of emissions target(s) set and steps taken to achieve them.	Green operation – Green Management System, Monitoring and Management Mechanism for Emission and Discharge
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	Green operation – Green Management System, Monitoring and Management Mechanism for Emission and Discharge

Appendix II Content Index of the ESG Reporting Guide of the Stock Exchange

Subject Areas, Aspects, General Disclosures and Key Performance Indicators (KPIs)		Location of Disclosure or Remarks
Aspect A2: Use of Resources		
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	Use of Natural Resources – Energy Utilization, Water Resource Management
KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	Comprehensive Performance
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	Comprehensive Performance
KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	Green Operation – Green Management System, Energy Utilization
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	Green Operation –Green Management System, Water Resource Management
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	This indicator is not applicable to the Group due to the Group's business nature.
Aspect A3: The Environmental and Natural Resources		
General Disclosure	Policies on minimising the issuer's significant impact on the environment and natural resources.	Use of Natural Resources – Protection of Ecological Environment and Natural Resources
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Use of Natural Resources – Protection of Ecological Environment and Natural Resources
Aspect A4: Climate Change		
General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	Green Operation – Addressing Climate Change
KPI A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	Green Operation – Addressing Climate Change

Appendix II Content Index of the ESG Reporting Guide of the Stock Exchange

Subject Areas, Aspects, General Disclosures and Key Performance Indicators (KPIs)		Location of Disclosure or Remarks
B. Social		
Employment and Labour Practices		
Aspect B1: Employment		
General Disclosure	Information on: <ul style="list-style-type: none"> (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare. 	Caring for Employees – Employment Management
KPI B1.1	Total workforce by gender, employment type (for example, full-or part-time), age group and geographical region.	Caring for Employees – Employment Management; Comprehensive Performance
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	Comprehensive Performance
Aspect B2: Health and Safety		
General Disclosure	Information on: <ul style="list-style-type: none"> (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards. 	Caring for Employees – Occupational Health and Safety
KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	Comprehensive Performance
KPI B2.2	Lost days due to work injury.	Comprehensive Performance
KPI B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	Caring for Employees – Occupational Health and Safety

Appendix II Content Index of the ESG Reporting Guide of the Stock Exchange

Subject Areas, Aspects, General Disclosures and Key Performance Indicators (KPIs)		Location of Disclosure or Remarks
Aspect B3: Development and Training		
General Disclosure	<p>Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.</p> <p>Note: Training refers to vocational training. It may include internal and external courses paid by the employer.</p>	Caring for Employees – Occupational Health and Safety, Talent Nurturing
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	Comprehensive Performance
KPI B3.2	The average training hours completed per employee by gender and employee category.	Comprehensive Performance
Aspect B4: Labour Standards		
General Disclosure	<p>Information on:</p> <p>(a) the policies; and</p> <p>(b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.</p>	Caring for Employees – Employment Management
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	Caring for Employees – Employment Management
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	Caring for Employees – Employment Management
Operating Practices		
Aspect B5: Supply Chain Management		
General Disclosure	Policies on managing environmental and social risks of the supply chain.	Business Operation – Supply Chain Management
KPI B5.1	Number of suppliers by geographical region.	Business Operation – Supply Chain Management; Comprehensive Performance
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	Business Operation – Supply Chain Management; Comprehensive Performance
KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	Business Operation – Supply Chain Management
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	Business Operation – Supply Chain Management

Appendix II Content Index of the ESG Reporting Guide of the Stock Exchange

Subject Areas, Aspects, General Disclosures and Key Performance Indicators (KPIs)		Location of Disclosure or Remarks
Aspect B6: Product Responsibility		
General Disclosure	Information on: <ul style="list-style-type: none"> (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress. 	Business operation; Appendix I – The Group has complied with laws and regulations that have a significant impact on the Group during the Reporting Period; Due to the nature of the Group's business, the health and safety, advertising and labeling of electricity provided are not applicable to the Group.
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	This indicator is not applicable to the Group due to the Group's business nature.
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	The principal business of the Group is mainly power generation and does not involve direct contact with end-users of the electricity, thus this indicator is not applicable to the Group.
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	Business Operation – Intellectual Property Rights and Privacy
KPI B6.4	Description of quality assurance process and recall procedures.	Business Operation-Operational Quality Assurance; These recall procedures are not applicable to the Group due to the Group's business nature.
KPI B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	Business Operation – Intellectual Property Rights and Privacy

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Subject Areas, Aspects, General Disclosures and Key Performance Indicators (KPIs)		Location of Disclosure or Remarks
Aspect B7: Anti-corruption		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	Corporate Governance – Anti-corruption
KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	Comprehensive Performance
KPI B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	Corporate Governance – Anti-corruption
KPI B7.3	Description of anti-corruption training provided to directors and staff.	Corporate Governance – Anti-corruption
Community		
Aspect B8: Community Investment		
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	Giving Back to the Society
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	Giving Back to the Society
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	Giving Back to the Society – Rural Revitalization, Combating Against the Pandemic

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Sustainability reporting standards	General Disclosure	Reference/explanation/reasons for omission	Page	
GRI 2: General Disclosures 2021	The organization and its reporting practices			
	2-1	Organizational details	About CGN New Energy; 2022 Annual Report – Corporate Information	8
	2-2	Entities included in the organization's sustainability reporting	About this Report	3
	2-3	Reporting period, frequency and contact point	About this Report; The ESG report of the Group is issued every year, the Reporting Period is consistent with the financial report, and the report is issued in April, 2023	3
	2-4	Restatements of information	Comprehensive Performance	69-79
	2-5	External assurance	Independent Assurance Report	81-84
	Activities and workers			
	2-6	Activities, value chain and other business relationships	About CGN New Energy; Supply Chain Management; There is no major change in the location of the supplier, the supply chain structure or the relationship with the supplier	8; 61-63
	2-7	Employees	Comprehensive Performance – Caring for Employees	73-76
2-8	Workers who are not employees	This information is lacking because the number of workers other than employees has not been recorded; The most common type of worker is the third-party contractor who works in the place designated by the Group. The type of work is the most basic engineering construction or system operation and maintenance	–	

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Sustainability reporting standards	General Disclosure	Reference/explanation/reasons for omission	Page
Governance			
2-9	Governance structure and composition	Corporate Governance – Governance Structure; 2022 Annual Report – Corporate Governance Report	25-26
2-10	Nomination and selection of the highest governance body	2022 Annual Report – Corporate Governance Report	–
2-11	Chair of the highest governance body	2022 Annual Report – Corporate Governance Report	–
2-12	Role of the highest governance body in overseeing the management of impacts	2022 Annual Report – Corporate Governance Report – Risk Management and Internal Control	–
2-13	Delegation of responsibility for managing impacts	The Board of the Company is directly responsible for the ESG report, the Safety, Quality and Environmental Department is responsible for the environmental impact, the Human Resource Department is responsible for the human impact, and the Planning and Operation Department is responsible for the economic impact. Each department has a leader who leads under senior management; The Company has quarterly business analysis meetings and annual work meetings	–
2-14	Role of the highest governance body in sustainability reporting	The Board of the Company is responsible for reviewing and approving the information through the <i>Temporary Information Disclosure Management Measures</i> , <i>Inside Information Policy System</i> , <i>Policy for Notifiable Transactions</i> and Connected Transactions Management Procedures and Systems.	–

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Sustainability reporting standards	General Disclosure	Reference/explanation/reasons for omission	Page
2-15	Conflicts of interest	The Board of the Company signs a confirmation letter every six months to disclose whether there is any interest in the competitive business; 2022 Annual Report – Corporate Information/ Management Discussion and Analysis/Report of the Directors	–
2-16	Communication of critical concerns	The Group communicates important concerns to the directors through the <i>Whistleblowing Policy</i> . They turn material problems into issues for discussion by the Board. During the Reporting Period, two major concerns have been communicated to the Board	–
2-17	Collective knowledge of the highest governance body	Corporate Governance – Governance Structure; The Board has engaged a third party for ESG training	25-26
2-18	Evaluation of the performance of the highest governance body	2022 Annual Report – Corporate Governance Report	–
2-19	Remuneration policies	The remuneration structure of the members of the Board and senior executives of the Company includes a basic annual salary, annual performance-based bonus, the incentive for service terms, etc. The annual performance-based bonus and incentive for service term shall be paid according to the performance assessment results; Unified performance and salary mechanism is implemented for those impacts of salary policy and management on the economy, environment and people	–

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Sustainability reporting standards	General Disclosure	Reference/explanation/reasons for omission	Page	
	2-20	Process to determine remuneration	The remuneration committee of the Company supervises the remuneration policy and determines that the shareholders perform the decision-making function on the remuneration policy through the Board. After the approval of the Board, the management personnel signs the agreement through the tenure contract. Employees are subject to overall performance management and are paid according to the assessment results	–
	2-21	Annual total compensation ratio	2022 Annual Report – Notes to the Consolidated Financial Statements – Individuals with highest emoluments	–
	Strategy, policies and practices			
	2-22	Statement on sustainable development strategy	Chairman's Statement	4-5
	2-23	Policy commitments	Not applicable, the Group has no policy commitment to responsible business conduct	–
	2-24	Embedding policy commitments	Not applicable. The Group has no policy commitment to responsible business conduct	–
	2-25	Process to remediate negative impacts	Corporate Governance – Risk Prevention	28
	2-26	Mechanisms for seeking advice and raising concerns	Corporate Governance – Anti-Corruption	27-28
	2-27	Compliance with laws and regulations	During the Reporting Period, the Group was not imposed with large fines or non-monetary sanctions for violating relevant laws or regulations	–
	2-28	Membership associations	CGN New Energy Jiangsu branch office is a member of the Jiangsu Renewable Energy Industry Association; CGN New Energy Anhui branch office is a member of the Anhui Electric Power Association	–

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Sustainability reporting standards	General Disclosure	Reference/explanation/reasons for omission	Page	
	Stakeholder engagement			
	2-29	Approach to stakeholder engagement	Stakeholder Engagement and Materiality Assessment	22-24
	2-30	Collective bargaining agreements	100% of employees are covered by the collective bargaining agreement of the Group	–
GRI 3: Material Topics 2021	3-1	Process to determine material topics	Stakeholder Engagement and Materiality Assessment	22-24
	3-2	List of material topics		
	Technological R&D and innovation			
GRI 3: Material Topics 2021	3-3	Management of material topics	Feature Article	14-19
	Corporate risk management			
GRI 3: Material Topics 2021	3-3	Management of material topics	Corporate Governance – Risk Prevention	28
	Socio-economic compliance			
GRI 3: Material Topics 2021	3-3	Management of material topics	Corporate Governance – Governance Structure	25-26
	Renewable energy opportunities			
GRI 3: Material Topics 2021	3-3	Management of material topics	Addressing Climate Change	45-49
	Financial performance and investor interests			
GRI 3: Material Topics 2021	3-3	Management of material topics	Corporate Governance – Risk Prevention – Financial Supervision	31
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	2022 Annual Report – Notes to the Consolidated Financial Statements – Note 4 Revenue and Segment Information	–
	201-2	Financial implications and other risks and opportunities due to climate change	Addressing Climate Change; 2022 Annual Report – Management Discussion and Analysis– Risks Relating to the Industry	45-49
	201-3	Defined benefit plan obligations and other retirement plans	The Group has implemented the enterprise annuity plan – “Group Enterprise Annuity Management Measures”	–
	201-4	Financial assistance received from government	2022 Annual Report – Notes to the Consolidated Financial Statements– Note 33 Government grants	–

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Energy use and efficiency				
GRI 3: Material Topics 2021	3-3	Management of material topics	Green Management System	33-37
GRI 302: Energy 2016	302-1	Energy consumption within the organization	Comprehensive Performance	72
	302-2	Energy consumption outside of the organization	Comprehensive Performance	72
	302-3	Energy intensity	Comprehensive Performance	72
	302-4	Reduction of energy consumption	Comprehensive Performance	72
	302-5	Reductions in energy requirements of products and services	The Group's business is mainly renewable energy power generation, this item is not applicable	-
Project-related protection of the ecological environment and natural resources				
GRI 3: Material Topics 2021	3-3	Management of material topics	Green Management System; Use of Natural Resources – Protection of Ecological Environment and Natural Resources	33-37; 44-45
Project environmental impact assessment and related mitigation measures				
GRI 3: Material Topics 2021	3-3	Management of material topics	Green Management System; Use of Natural Resources – Protection of Ecological Environment and Natural Resources	33-37; 44-45
GRI 304: Biodiversity 2016	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Use of Natural Resources – Protection of Ecological Environment and Natural Resources	44-45
	304-2	Significant impacts of activities, products and services on biodiversity	Use of Natural Resources – Protection of Ecological Environment and Natural Resources	44-45

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Sustainability reporting standards	General Disclosure	Reference/explanation/reasons for omission	Page
	304-3 Habitats protected or restored	The Group has implemented ecological and environmental protection under the concept of "Lucid Waters and Lush Mountains are Invaluable Assets". In addition to following the national direction, the Group also offered internal guidance to monitor the environment and manage projects in the early, middle and later stages, as well as during the trial and use. The Group also cooperates with researchers to balance development and the environment.	-
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	This item is not applicable because it has no significant relationship with material issues	-
Employee remuneration and promotion mechanism			
GRI 3: Material Topics 2021	3-3 Management of material topics	Caring for Employee – Employment Management	50-51
GRI 401:Employment 2016	401-1 New employee hires and employee turnover	Comprehensive Performance	75-76
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	Full-time employees in China have endowment insurance, medical insurance (including maternity insurance), unemployment insurance, industrial injury insurance, etc. in the scope of social insurance, as well as supplementary medical insurance of the Group	-
	401-3 Parental leave	In the Group, only a few employees apply for parental leave, so this data has no significant impact temporarily	-

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Sustainability reporting standards	General Disclosure	Reference/explanation/reasons for omission	Page
Occupational health and safety of employees			
GRI 3: Material Topics 2021	3-3	Management of material topics	Occupational Health and Safety 52
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	Occupational Health and Safety – Operational Risk Management; The occupational safety management system covers all workers, activities and workplaces
	403-2	Hazard identification, risk assessment, and incident investigation	Occupational Health and Safety – Operational Risk Management
	403-3	Occupational health services	Occupational Health and Safety – Physical and Mental Health of Employees
	403-4	Worker participation, consultation, and communication on occupational health and safety	Occupational Health and Safety – Operational Risk Management
	403-5	Worker training on occupational health and safety	Occupational Health and Safety – Health and Safety Training
	403-6	Promotion of worker health	Occupational Health and Safety – Physical and Mental Health of Employees
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Occupational Health and Safety – Operational Risk Management
	403-8	Workers covered by an occupational health and safety management system	Comprehensive Performance 78
	403-9	Work-related injuries	Comprehensive Performance 77
	403-10	Work-related ill health	Comprehensive Performance 77

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Career development and training for employees				
GRI 3: Material Topics 2021	3-3	Management of material topics	Caring for Employee – Talent Nurturing	58-60
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	Comprehensive Performance	78
	404-2	Programs for upgrading employee skills and transition assistance programs	Caring for Employee – Employment Management	51
	404-3	Percentage of employees receiving regular performance and career development reviews	Comprehensive Performance	78
Service quality assurance				
GRI 3: Material Topics 2021	3-3	Management of material topics	Business operation	61-64
GRI 416: Customer Health and Safety 2016	416-1	Assessment of the health and safety impacts of product and service categories	The business of the Group is mainly electricity generation, and there is no direct contact with the power user, so this item is not applicable to the Group	–
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	During the Reporting Period, the Group has no violations involving the health and safety impact of products and services	–
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	During the Reporting Period, the Group has not received any proven complaints (involving the violation of customer privacy), as well as confirmed cases of leakage, theft, or loss of customer information	–



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