



GCL New Energy Holdings Limited

協鑫新能源控股有限公司

(Incorporated in Bermuda with limited liability) (Stock Code: 451)

2022

**ENVIRONMENTAL, SOCIAL
AND GOVERNANCE REPORT**

ABOUT THE REPORT

This report is the eighth environmental, social and governance report (the "Report" or the "ESG Report") of GCL New Energy Holdings Limited ("GCL New Energy", the "Company" or the "Holding company") and its subsidiaries (collectively, the "Group" or "We", "Our" or "Us"), which provides a detailed view of the management, practices, performance and highlights of GCL New Energy in the environmental, social and governance areas in 2022, systematically responds to stakeholders' concerns and demonstrates its sustainable development capabilities.

Basis of Preparation

The Report covers GCL New Energy Holdings Limited and its subsidiaries for the period from 1 January 2022 to 31 December 2022 (the "Year" or the "Reporting Period"). Some content goes beyond the scope as needed, which is not specified in the Report.

Basis for Report Preparation

The Report was prepared pursuant to the Environmental, Social and Governance Reporting Guide (the "ESG Reporting Guide") set out in Appendix 27 to the Main Board Listing Rules of The Stock Exchange of Hong Kong Limited (the "Stock Exchange"). The Report complies with the disclosure requirements of the "comply or explain" provisions set out in the ESG Reporting Guide and adheres to the Reporting Principles of Materiality, Quantitative, Balance and Consistency.

In recent years, the concept of sustainable development with ESG at its core has become a global consensus. The Report was prepared with reference to the GRI Standards published by the Global Sustainability Standards Board (GSSB), the United Nations Sustainable Development Goals (SDGs) and the disclosure framework recommended by the Task Force on Climate-Related Financial Disclosure (TCFD), as a proactive move to align with the international concept of sustainable development.

Description of Company Names

For ease of expression, "GCL New Energy" in the Report refers to the brand operated by the Group. GCL (Group) Holdings Co., Ltd. is referred to as "GCL Group" and Suzhou GCL New Energy Operation Technology Co., Ltd. is referred to as "Operation Technology Company" in the Report.

Sources of Data and Approval of Report

The information and content of the Report are mainly derived from the Group's statistical reports and relevant documents. The Group undertakes that the Report does not contain any false records or misleading statements, and accepts liability for the authenticity, accuracy and completeness of its content.

The Report was approved by the Board of Directors on 19 April 2023 after confirmation by the management.

Reporting Principles	Definitions	Application of Reporting Principles
Materiality	The Report should focus on environmental, social and governance issues of relevance and importance to the Group and its stakeholders.	Based on diverse and ongoing stakeholder engagement, the Group combined policy analysis, industry development analysis and peer benchmarking to identify material ESG issues for the Year according to the actual operations, and made responses in the Report.
Quantitative	KPIs need to be measurable and, where appropriate, comparable.	Quantitative information was disclosed in accordance with the Stock Exchange's guide, accompanied by detailed explanation on the statistical scope, calculation standards, calculation methods, parameters and other information.
Balance	The Report should provide an unbiased picture of the performance of the Group and avoid selections or omissions.	The Group provides an objective and factual explanation of ESG and sustainability issues that have a significant impact on its business, including its work outcomes and the challenges it faces.
Consistency	Consistent methodologies should be used in the Report to allow for meaningful comparisons of KPIs, so as to inform stakeholders of business performance.	Whenever feasible, the Group strives to use the same statistical methods and calculation methods to ensure comparability of information. For changes in information or statistical methods due to strategic transformation, we will add notes at the corresponding places in the Report.

Access and Feedback to the Report

The Report is available in both traditional Chinese and English for readers' reference. The electronic version of the Report will be available from the "ESG Information" of GCL New Energy on the HKEXnews website and our website (www.gclnewenergy.com). If you have any comments or suggestions on the content of the Report and our sustainability performance, you are welcome to contact us through the following methods:

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CONTRIBUTION TO UN SUSTAINABLE DEVELOPMENT GOALS

In September 2015, President Xi Jinping attended the United States("UN") Sustainable Development Summit, where leaders unanimously adopted Transforming Our World: The 2030 Agenda for Sustainable Development "Sustainable Development Goals, or SDGs" which includes 17 sustainable development goals and 169 targets covering social, economic and environmental issues, constituting an important element of sustainable development for human society. GCL New Energy actively responded to the SDGs and integrated the key SDGs closely related to the Company into ESG management, contributing to the achievement of the SDGs.

SDGs	Our actions	Corresponding sections
	<ul style="list-style-type: none"> Strictly regulating the management of production safety to ensure the occupational health and safety of employees; Providing annual medical checkups and supplemental medical insurance for employees. 	<p>Building a Safety Culture</p> <p>Ensuring Health and Safety</p>
	<ul style="list-style-type: none"> Providing a wealth of educational and training resources for employees; Supporting youth education through the "5G+new energy" project; Cooperating with multiple universities to focus on youth vocational education. 	<p>Shared Growth with Employees</p> <p>Supporting Education</p>
	<ul style="list-style-type: none"> Insisting on equal pay for equal work and eliminating gender discrimination. 	<p>Shared Growth with Employees</p>
	<ul style="list-style-type: none"> Taking actions to protect domestic water for operation and maintenance staff of power stations; Prioritising the use of water-saving equipment and promoting the concept of water conservation. 	<p>Committed to Green Operation</p> <p>Promoting a Green Workplace</p>

SDGs	Our actions	Corresponding sections
	<ul style="list-style-type: none"> Increasing the proportion of renewable energy use in daily operations through regional microgrids. 	<p>Committed to Green Operation</p>
	<ul style="list-style-type: none"> Providing competitive compensation and benefits for employees; Establishing occupational development paths to support employees' continuous growth. 	<p>Shared Growth with Employees</p>
	<ul style="list-style-type: none"> Creating a diverse, inclusive and equal working environment, establishing and carrying out a fair evaluation mechanism. 	<p>Shared Growth with Employees</p>
	<ul style="list-style-type: none"> Building a responsible supply chain proactively and giving priority to suppliers who have obtained the environment, health and safety management system certification; Establishing a sound EHS management system to lay the foundation for responsible operation. 	<p>Supply Chain Management</p> <p>Building a Safety Culture</p>
	<ul style="list-style-type: none"> Continuing to increase presence in the photovoltaic industry, boosting clean energy exports and serving the low-carbon transformation of society; Identifying and assessing the impact of climate change on operations and establishing corresponding measures. 	<p>Standing Fast to PV Business</p> <p>Tackling Climate Change</p>
	<ul style="list-style-type: none"> Implementing comprehensive environmental management, focusing on biodiversity protection, and reducing the impact on the environment and organisms during production and operation. 	<p>Committed to Green Operation</p>

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STATEMENT FROM THE BOARD

"Building a green GCL requires our continued efforts towards ESG management improvements, sustainable value creation, higher shareholder value, and eventually, the coordination of economic, social, and ecological benefits."

Zhu Gongshan, Chairman of the Board, GCL New Energy

In the complex macro environment in 2022, the increasingly frequent extreme weather events, global warming and climate crisis, global water scarcity, energy crisis and other phenomena undoubtedly posed multiple challenges to the sustainable development of enterprises, while ESG is the best solution to support their steady and long-term development. Through years of efforts in ESG and social responsibility, GCL New Energy has deepened the application of ESG concept and integrated environmental, social and governance responsibilities with corporate development and daily business operations, committed to returning ESG concept to its essence, serving corporate sustainable development and facilitating the creation of long-term value.

Optimising Governance and Pursuing Greater Success with Resilience. With the high enterprise resilience brought by strategic transformation, the Group has continuously promoted changes in management, operation and organisation under the guidance of the strategy triad of "Technology GCL, Digital GCL, Green GCL", and has solidly pushed forward with the integration of "business, finance and human resources" and introduced the management tool of "modeling in strategic goal, business value and processes & systems, and digitisation in business operations", allowing all business activities to be digitalised and management efficiency to be practically improved. Continuous efforts were made to improve the risk management system, strengthen internal control and compliance management, and cement the foundation of stable development. Good results were achieved in the transition to an asset-light model, and successful changes were observed. We focus on long-term development and are committed to integrating ESG concept into all areas to build the resilience for our sustainable development.

Green Development, Continuously Deepened Presence. As a green enterprise focusing on development of clean energy business, the Group makes E in ESG part of its gene. The Group sticks firmly to the development strategy with two principal businesses: "photovoltaic + natural gas", and relies on scientific and technological innovation to step up its presence in the green business. Continuous investment was made in research and development to accelerate technology upgrading, so as to continuously improve the level of intelligent operation and maintenance management. The Group's agent operation and maintenance projects had a total contracted installed capacity of approximately 4GW during the Reporting Period. The Group grasped the opportunities from natural gas business development, made precise efforts and moved ahead steadily. In the future, we will, as always, contribute to the realisation of the national goals of "carbon peak" and "carbon neutrality".

Giving back to Society and Demonstrating Commitment. We pay active attention to the expectations and demands of internal and external stakeholders, striving to bring more positive values to society. Relying on profound industry experience and intelligent operation and maintenance advantages, we render professional services to clients. Guided by the core value of "collaboration grounded", we create a fair, just, warm and broad development platform for our employees. We actively participate in charity activities, industry exchanges and other interactions to give full play to our strengths to create lasting influence.

We understand that ESG takes time and perseverance. Our Group has appointed the Board of Directors as the highest decision-making body for ESG management, which takes full responsibility for ESG strategies. In specific, the Board of Directors decides and supervises ESG-related issues such as the formulation of guidelines, strategies, and goals, as well as risk management. To ensure the effective execution of ESG activities, the Group has constructed a top-down ESG governance framework with clear division of labor, constantly optimizing the ESG risk control procedure and refining our ESG management practices. The Board of Directors holds regular meetings to discuss ESG policies, goals, and significance analyses, evaluates our ESG performance and progress towards goals, and reviews and approves the company's public disclosure of ESG issues.

We believe that through the Report, you will better understand GCL New Energy's efforts in ESG and our commitment to achieving sustainable development. We will hold firm to the concept of sustainable development in the future and are determined to work with our partners from all industries towards a better future.

01

CONFIDENCE

DERIVES FROM STEADY PERSEVERANCE

In recent years, GCL New Energy has demonstrated excellent resilience and steady growth. In the process of strategic transformation, we always remain rational and prudent, seeking to modify our thoughts, make progress in adjustment, and turn a new leaf. With effort and endeavour, we mull over a new round of profound changes in discreet.

Seeking to improve our competitiveness, we have been optimising our management, adhering to the systematic management philosophy of "modeling strategic goal, business value, processes and systems ; digitalizing business operations", solidly promoting the integration of "business, finance and human resources", implementing the digitisation strategy of GCL Group, and boosting our management efficiency to gain confidence through stability. We continuously enhanced risk management and strengthened internal control and lowered the gearing ratio to a more stable level in 2022, in order to solidify confidence with results.

Advancements in
"Economic, finance, and human resources " integration

Adopted
"3M+1D" theory (3M: mode, model, and module; 1D: digitization)

Launched
Mobile Application Platform and Electronic Signature Program

Lawsuits/complaints regarding corruption
ZERO

Asset-light transformation
Effective

Software Copyrights

23

Patents Certificates

13



CORPORATE GOVERNANCE

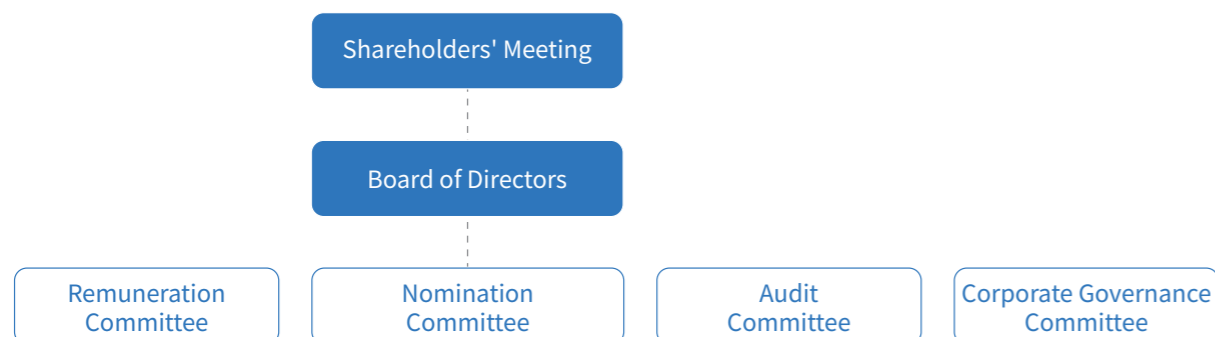
GCL New energy believes in the vital importance of sound, wise corporate governance to our sustainable growth and ability to create value for our customers. The Group makes continuous improvements in corporate governance and lays the proper groundwork for corporate development by optimizing the governance structure, diversifying the Board of Directors, enhancing risk management, holding forth on business ethics, and maintaining good investor relations. Details of our corporate governance information have been disclosed in the 2022 Annual Report. It is advised that this report be read together with the "Corporate Governance Report" included in the 2022 Annual Report.

GOVERNANCE FRAMEWORK

In strict accordance with laws and regulations, such as the Company Law of the People's Republic of China, Securities Law of the People's Republic of China, and the Appendix 14 of Corporate Governance Code by HKEX, the Group has developed internal rules and policies including the Articles of Association. We seek to enhance our level of standardization through constant adjustments on our governance framework, and a well-functioning, effective check-and-balance governance mechanism with clearly defined powers and responsibilities.

The Board of Directors is authorized to manage, direct and supervise the entire business of the company. Meanwhile, the directors assume collective responsibility for overseeing corporate affairs and the execution of strategic plans to maximize shareholder value and lead the Group to long-term success.

Under the Board, we have established a Remuneration Committee, a Nomination Committee, an Audit Committee and a Corporate Governance Committee. Each committee has clear powers and responsibilities. They perform their respective duties conscientiously in accordance with the Rules of Procedure and play an effective role in decision-making, improving the efficiency and level of corporate governance. Independent non-executive directors contribute significantly to corporate governance. More than half of the members of each of the Audit Committee, Remuneration Committee, and Nomination Committee are independent non-executive directors, allowing independent opinions on issues of strategy, governance, and accountability to be expressed at committee and board meetings. In addition, the Group has established the Board of Directors as the highest decision-making body to ensure the effective implementation of ESG activities.



Board Diversity

The Group recognizes that a diverse and independent Board of Directors contributes significantly to the sustainable development of the Company by reducing operational risks and improving decision-making. The Group has developed and implemented a diversity policy. All appointments are made according to merit and fitness, and the Group seeks to select the most appropriate candidates on the basis of diversity, taking into account gender, age, cultural and educational background, race, professional experience, skills, knowledge and length of service.

As of December 31, 2022, the Board of Directors consists of 11 members, including four executive directors, 3 non-executive directors, 4 independent non-executive directors, and 3 female directors. The Group has a diverse Board of Directors, whose knowledge structure and area of specialization are professional and complementary. The members of the Board of Directors possess in-depth experience in financial management, risk management, business administration, corporate governance or other fields, three of whom hold a doctoral degree. The diversity and independence of the board allows it to function effectively, supporting the execution of corporate strategies, governance, and other affairs.

GCL New Energy Board Composition



4

Executive Directors



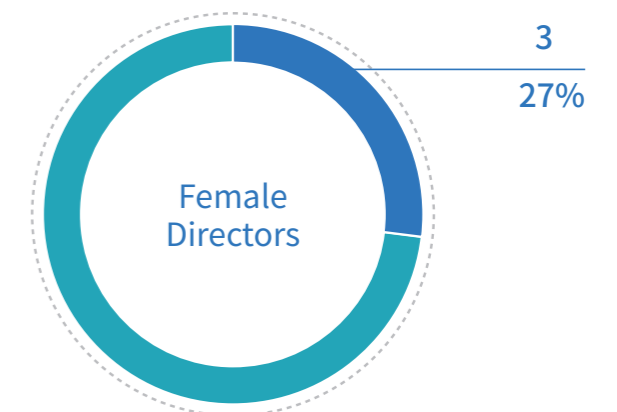
3

Non-Executive Directors



4

Independent Non-Executive Directors



RISK MANAGEMENT

The Group continuously standardised internal control evaluation and risk assessment procedures, identified and systematically analyzed risks related to operating activities and the achievement of internal control objectives and to develop risk response strategies in a timely manner and ensure the smooth operation of the Company.

Risk Management Mechanism

GCL New Energy upholds the principle of managing risks for all businesses throughout their entire process, with all employees involved. That is to say, risk management covers all whole process of all businesses, and involves businesses of the Company, is carried out in the every single employee of the Company. Accordingly three lines of defense were formed: business departments, functional line management departments and internal control and audit departments, to realise effective risk management of the Company.



We fully identified risks based on our business and management status, and established and maintained a set of key risk indicators covering the entire process, involving the holding company, subordinate business units and company specific risk issues, which were brought into attention, tracked and managed in the whole process and at different levels.

During the Reporting Period, the Group exercised strict control over the risks in the photovoltaic field and altered the risk management standards in a timely manner in conjunction with the Company's new business planning and organisational structure to ensure that risks were fully identified, responsibilities were fulfilled and workflow was clear and efficient. In 2022, the Group achieved remarkable results in asset-light transformation, with a significant reduction in overall debt, a significant improvement in liquidity and financing pressure, and a continuous decline in gearing ratio to a more robust level.

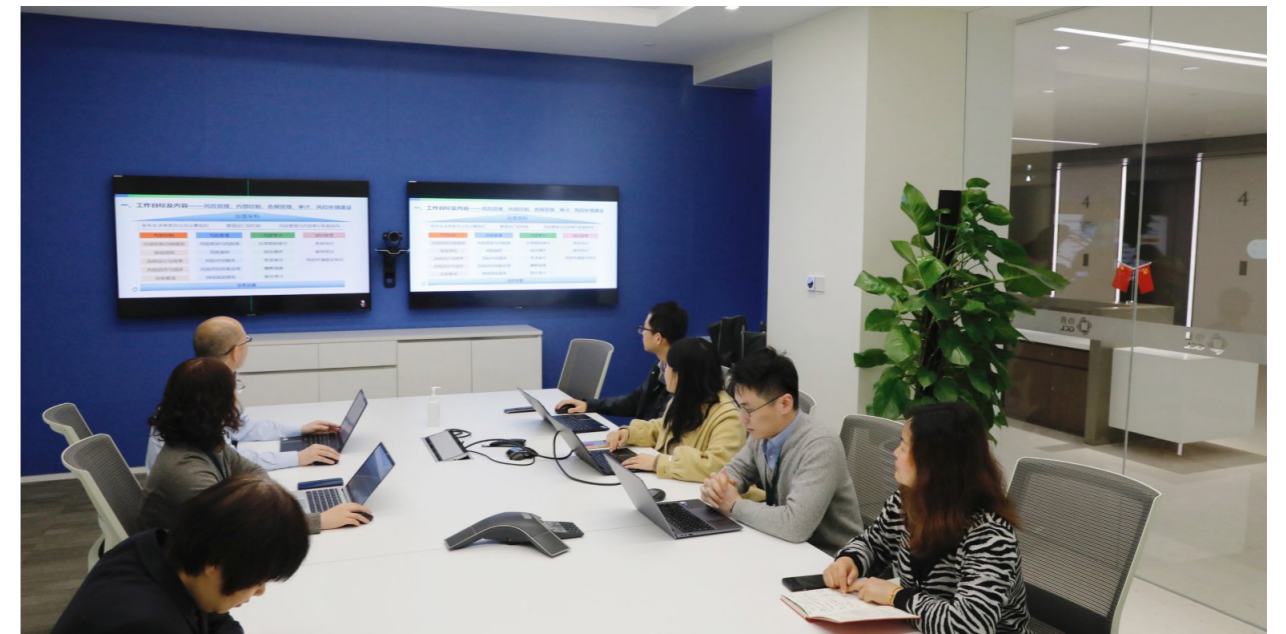
Internal Control

During the Reporting Period, the Group optimised and updated the authorisation management process and review and approval management process in accordance with the business adjustment, and revised a total of 17 types of management standards on new energy in 2022. It strengthened compliance checks and internal control audits, and conducted process controls from time to time.

Digital means were used to carry out early controls to achieve prevent and during event monitoring. In addition, continuous internal control training activities were held to enhance the awareness of internal control and improve the quality and efficiency of internal controls.

Case | Collaborative Office "EC" Procedures and Compliance Management Training

In December 2022, the company organized training sessions on Collaborative Office "EC" procedures and compliance management, educating employees about compliance management by explaining the standards and analyzing high-profile cases to enable them to prevent and cope with risks.



BUSINESS ETHICS

Anti-fraud

The Group strictly complies with relevant laws and regulations, including the Company Law of the People's Republic of China and the Anti-unfair Competition Law of the People's Republic of China, and attaches importance to and improves the anti-fraud mechanism. We established a clear and effective anti-fraud management structure, standardised management processes and responsibilities at all levels, clarified requirements for fraud prevention and control, whistleblowing and handling, and whistleblower protection, etc., advocated a corporate culture of honesty and integrity, and showed zero tolerance for fraudulent or corrupt practices. During the Reporting Period, we updated our Management Standards for Anti-Fraud and Whistleblowing to further support our anti-fraud work.

Anti-fraud Management Framework

Audit Committee

- It is the highest anti-fraud leading body that reviews the anti-fraud procedures and control measures of the holding company.
- It monitored the proper functioning of the reporting and complaint mechanism for employees and ensured its effectiveness.
- It examined and approved investigation reports and handling solutions to frauds committed by senior management members.
- It listened to reports and suggestions from internal control departments at all levels on anti-fraud work of the Company.

Internal Control Departments at All Levels

- The departments are standing anti-fraud bodies responsible for supervising the daily anti-fraud measures implemented within the holding company and subsidiaries.
- They organise investigations into fraud cases and conduct anti-fraud promotion activities.
- They review and approve investigation reports and solutions to frauds committed by some senior management members.
- They guide subsidiaries to develop anti-fraud control systems and optimise the control environment.

Management at All Levels

- The management at all levels is responsible for establishing sound internal control mechanisms, implementing control measures to reduce the chance of fraud, and taking appropriate and effective remedial measures to reduce damage caused by fraud.
- The management guided internal control departments at all levels to carry out investigations, implement solutions to fraud incidents, hold relevant persons accountable for fraud, and give feedback to the internal control department of the holding company.
- It guided subsidiaries to develop anti-fraud control systems and improve and optimise the control environment.

Whistleblowing and Handling

The Company's employees at all levels and social parties with direct or indirect economic relationships with the Company can report wrongdoings by letter, e-mail, telephone, face-to-face interview, etc. Meanwhile, when internal audits are carried out, a notice is posted on site to explicitly encourage employee feedback. After a report is accepted, an investigation into fraud will be carried out, an investigation report will be issued, and the process and system will be improved in time to achieve management enhancement in a closed loop.

We regulate the whistleblower protection mechanism to protect the legitimate rights and interests of whistleblowers. The information of whistleblowers is kept strictly confidential and any unlawful discrimination or retaliation is prohibited. Those who leak information of whistleblowers in violation of rules and regulations or retaliate against whistleblowers will be disciplined, removed from office or even dismissed with termination of their labour contracts.

Culture Building

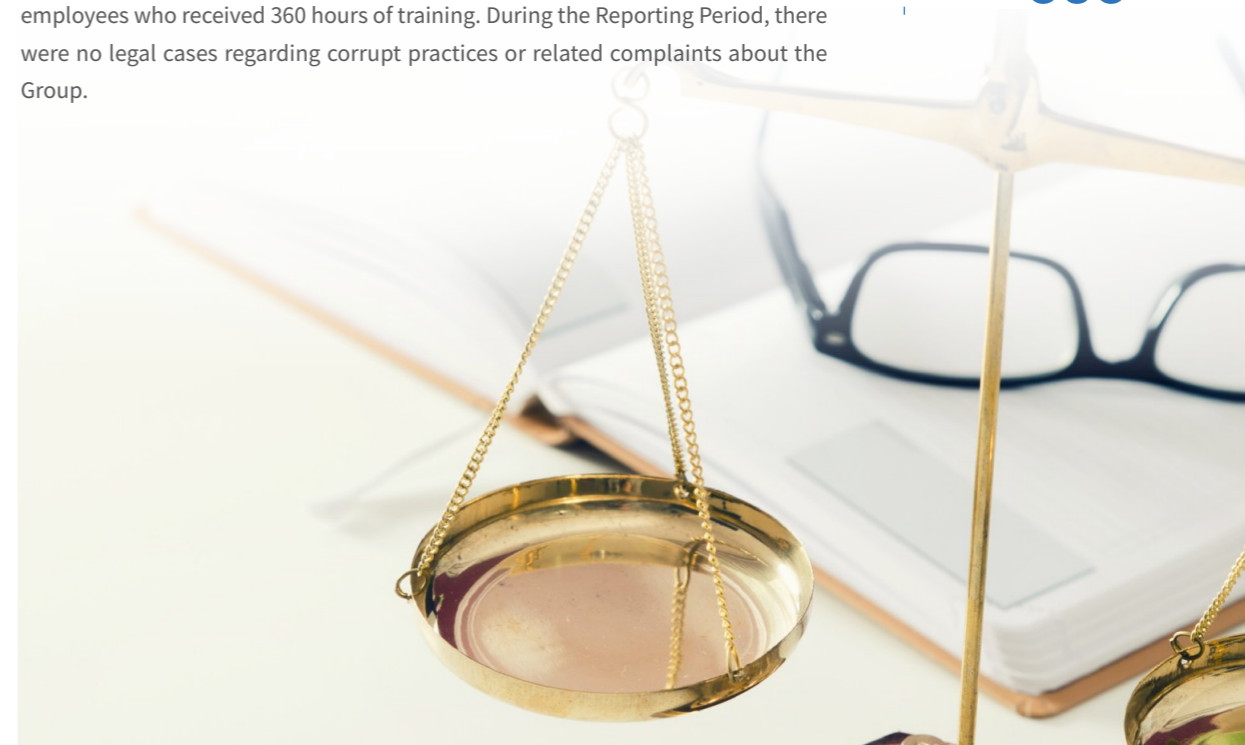
GCL New Energy advocates a corporate culture of honesty and integrity and creates an anti-fraud working environment. The Directors, Supervisors and management insist on leading by example and abide by laws, regulations and rules and regulations of the Company. The Company popularises or holds training activities on anti-fraud policies, procedures and relevant measures through employee handbook, publication and publicity of its rules and regulations, online ways and so forth to ensure that the code of conduct is clearly understood. In 2022, we conducted integrity education and training sessions via in-person attendance, video conferencing and online classes, covering a total of 514 employees who received 360 hours of training. During the Reporting Period, there were no legal cases regarding corrupt practices or related complaints about the Group.

Cumulative coverage of trained employees

514

Training hours

360

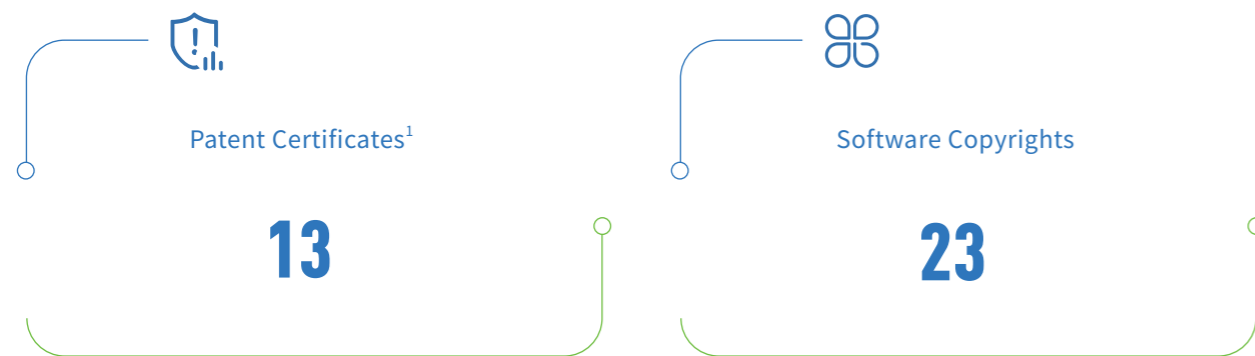


Intellectual Property Protection

With great importance attached to the protection of intellectual property rights, the Group complies with laws and regulations or documents, including the Patent Law of the People's Republic of China, the National Plan for the Protection and Application of Intellectual Property Rights during the 14th Five-Year Plan Period, the Outline of Building an Intellectual Property Rights Powerhouse (2021-2035) and the 14th Five-Year Plan for the Development of Intellectual Property Rights in Jiangsu Province. It improves the management of intellectual property rights through software copyright registration, patent application, etc.

We actively study incentive policies for intellectual property, such as software copyrights and invention patents, in order to mobilise employees' enthusiasm for innovation. We enhance employees' awareness and ability of intellectual property protection via training and other ways to create a sound cultural atmosphere toward intellectual property protection.

During the Reporting Period, Operation Technology Company obtained 6 software copyrights and 2 utility model patents (authorised but certificates have not yet been issued). As at the end of 2022, the Group received a total of:



Case | Training on intellectual property rights

In 2022, Operation Technology Company assigned employees in all regions to participate in IPR training, and invited a patent writer to explain patent application-related work and share IPR protection-related knowledge and cases to enhance employees' IPR protection awareness.

¹ Due to business adjustment, we changed the statistical scope of this year's patent certificate and software copyright data and collected data of GCL New Energy Operation Technology Co., Ltd., in order to more clearly demonstrate the operational performance.

MANAGEMENT OPTIMISATION

In recent years, GCL New Energy has taken many measures to continuously optimise its management. The Company has been adhering to the systematic management philosophy of "modeling in strategic goal, business value and processes & systems, and digitisation in business operations", promoting the integration of "business, finance and human resources", implementing the digitisation strategy of GCL Group and continuously improving our management efficiency, aiming to serve its transformation and development.

"Modeling in Strategic Goal, Business Value and Processes & Systems, and Digitisation in Business Operations"

Chairman Zhu Gongshan formally proposed the goals of "Technology GCL, Digital GCL, Green GCL", and put forward the systematic management philosophy of "modeling in strategic goal, business value and processes & systems, and digitisation in business operations". Models were set under the guidance of strategies. The Company determines business and financial values through sound and well-demonstrated business and financial models. Modular system standards, work systems, and reward and punishment assessment measures, have been established to ensure that strategies are executable, visible and achievable. All management is digital, so that figures can objectively and truly reflect the effectiveness of operation, management and transformation.

Integration of "Business, Finance and Human Resources"

In order to precisely match and integrate the finance, business and human capital, GCL New Energy continuously integrates "business, finance and human resources" to promote the communication and joint efforts of all departments to realise a positive business management cycle. It matches human capital with business development and operating strategies in the specific implementation process. Financial control is incorporated in the process of business development, which penetrates into the front end, process and back end of businesses to promote business refinement. Through periodic performance appraisals, the Company reviews information in an efficient, all-round and timely manner, and strengthens cohesion to promote value creation.



In the process of the integration of "business, finance and human resources", the Company organises strategic decoding and decomposition and importing of targets according to strategic planning and the annual business plan to draw a clear strategic performance map, which is sent to all subordinate bodies and all employees. At the beginning of 2022, business objectives were broken down into manageable goals, with key indicators and nodes apportioned to each month. Regular assessment was conducted to promote manual efficiency. Accordingly, in-depth studies were carried out on input-output efficiency and value growth to display changes with figures, reveal trends with data, and determine organizational diagnosis and management improvement through backward induction. In 2022, a total of 177 managers and 1,355 employees were assessed.

A total of evaluation management cadres

177




A total of assessed employees

1,355

Informatisation

Guided by GCL Group's digitisation strategy and based on our business development needs, we promoted digital transformation from human resources, finance, internal control and other dimensions during the Reporting Period. All business review and approval processes were set up according to the organisational restructuring. We adjust the nodes in the upgrade system according to organisational empowerment, and fully cater to our development and actual management needs. In addition, the mobile business travel platform and electronic seal module were launched, which significantly improve the review and approval efficiency and reduce control risks.

During the Reporting Period, the results in informatisation:

 <p>Launch of mobile business travel platform</p>	<p>Improving the efficiency of booking/reimbursement for business trips; Realising the functions of invoice viewing and intelligent data collection; Reducing financial review and approval risks.</p>
 <p>Collaborative Office Upgrades</p>	<p>Optimising process review and approval; Carrying out closed-loop management of contract payments through the NC system; Improving the accessibility of the flow chart.</p>
 <p>Launch of electronic seal module</p>	<p>Streamlining the process to use the seal; Strengthening control over risks associated with the seal; Improving the efficiency of using the seal.</p>



INVESTOR RELATIONS

GCL New Energy attaches importance to investor relations management and shareholder engagement. Information disclosure has been standardised to enhance the transparency of information, so as to protect investors' right to stay informed. We maintain open and smooth communication and timely update them with our progress, promoting the sustainable and healthy development of investor relations.

INFORMATION DISCLOSURE

The Group fulfills the information disclosure obligations in strict compliance with relevant laws and regulations, including the Hong Kong Listing Rules and the Securities and Futures Ordinance. Annual and interim financial reports, announcements, circulars and other documents are released to ensure that all Shareholders have equal and timely access to important information about the Group. During the Reporting Period, it completed a total of 88 annual reports, interim reports, announcements and circulars of listed companies.

INVESTOR COMMUNICATION

We endeavors to diversify the channels of communication with investors. Exchanges with investors are carried out through different channels, including results conferences, roadshows, seminars, phone calls, and emails, with a view to achieving two-way communication with investors. During the Reporting Period, some of the major online roadshows and investor summits the Group was invited to are listed below:

The Group participates in the "Sustainable development for a better future" roadshow at the 19th Scaling New Heights Asia Investment Forum 2022

On 11 January 2022, the Group was invited to the online "Sustainable development for a better future" roadshow of the 19th Scaling New Heights Asia Investment Forum 2022. The attendees were a wide range of institutional investors, including publicly offered funds and insurance companies. Through extensive and efficient communication, the Group conveyed corporate information to investors and enhanced mutual understanding.

The Group participates in an event called Future of Investor Relations: Innovation, ESG and Impact

On 7 July 2022, the Group was invited to attend the event called "the Future of Investor Relations: Innovation, ESG and Impact" organised by the Hong Kong Exchange and Clearing Limited. During the event, GCL New Energy introduced the Company's development dynamics, ESG management and actions to investors, showcasing its unique advantages and development potential in the green energy field.

PARTY LEADS THE DEVELOPMENT

GCL New Energy always insists on the Party building concept of "Red leadership, green development", strengthens the development of Party-masses organisations, and drives the development of labour unions and the Communist Youth League (CYL) with Party building to enable the work of the Party, labour unions and CYL to be highly integrated with the operation and development and corporate culture, fully stimulating the vitality and potential of the Company. In 2022, we optimised and innovated the Party building

system and mechanism, advanced digital Party building, and carried out activities such as education on the history of the Party, learning for the 20th National Congress and the centenary of the Communist Youth League of China, so as to integrate the "red gene" into green development and insist on "red leadership".

GCL New Energy follows the Party and keeps an eye on 20th National Congress



Photo: On 16 October 2022, Operation Technology Company's headquarters, regional operation and maintenance companies, and power stations arranged employees to listen to and watch the opening session of the 20th National People's Congress of China.

"Party building +" as the red gene gives strength to struggle



Photo: In July 2022, the Party branch of GCL New Energy's southwest company organised a visit to the memorial hall of Long March in Xishui for all Party members.



Photo: In September 2022, the Party branch and the labour union of Operation Technology Company jointly launched a charity tour to support the application for the City Wall of Nanjing as a World Heritage Site.

Honour: GCL Group's CYL committee was awarded the title of "Suzhou May Fourth Red Flag CYL committee"

Under the leadership of the Group's Party committee, the Communist Young League committee of GCL New Energy has been exploring innovative working mechanisms, regularly conducting exchanges, sharing resources and working with the Communist Young League committee of the Group to carry out various tasks in a solid and steady manner. On 9 May 2022, the Suzhou municipal committee of the Communist Youth League issued a circular on "Red Flag CYL committees, Red Flag CYL branches, outstanding CYL members and outstanding CYL cadres" in Suzhou. The Communist Young League committee of GCL Group was awarded the title of "Suzhou May Fourth Red Flag CYL committee", which is another recognition by the Suzhou municipal committee of the Communist Youth League this year after being honoured as an "advanced unit of Suzhou municipal committee of the Communist Youth League in 2021".

ESG GOVERNANCE

GCL New Energy embraces ESG principles, which serve as one of the bulwarks of our sustainable growth. We are committed to constructing a proper and sound ESG management system and governance framework to ensure the effective roll-out of ESG strategies. We highly value exchanges with stakeholders, timely identify ESG issues and evaluate their importance, incorporate ESG principles into every process of corporate operations, and strive to achieve sustainable development with our stakeholders.

ESG GOVERNANCE STRUCTURE

It is the board's constant endeavors to refine the ESG framework and management system. As a result, a top-down ESG framework has been constructed with power and responsibility clearly defined. Under the hierarchy of "the Board of Directors—ESG Management Committee—ESG working groups", we have established an ESG working mechanism that combines the board's supervision, horizontal synergy, and vertical linkage to address ESG issues in practical operations. We constantly align the ESG strategy with our developmental needs by adjusting responsibility attribution within the framework, in order to guarantee the steady and systematic execution of ESG management.



"ESG is the source of low-carbon competitiveness. ESG practices offer the best solution to an enterprise's sustainable success."

—Zhu Yufeng, Vice-chairman of the Board, GCL New Energy

The Board, the highest decision-making body in the Company's ESG governance, has overall responsibility for the Company's ESG strategy and reporting, which includes:

- Making decisions and overseeing material ESG issues;
- Integrating ESG risks into risk management and internal control systems and implementing effective management;
- Overseeing the identification, evaluation and management of ESG management-related issues, and the progress made against ESG-related goals and targets, etc;
- Approval of ESG related policies, ESG reports.

It comprises persons-in-charge of the management function centres and business units. The main role is to assist the Board in strengthening ESG management:

- Identifying material ESG risks and opportunities and monitoring the effectiveness of ESG risk management measures;
- Reviewing the Company's ESG-related policies, reports and disclosures;
- Coordinating, overseeing and guiding the implementation of ESG work plans;
- Set ESG-related goals;
- Conducting preliminary review and reporting to the Board on ESG-related proposals and decisions;
- Carrying out ESG-related activities assigned by the Board.

It is comprised of ESG liaisons designated in management function centres and business units.

- Managing ESG-related issues and risks in the routine operations of departments and business units;
- Communicating with departments and business units and coordinating the implementation of ESG-related issues;
- Reporting to the ESG Management Committee on ESG-related risks and changes;
- Assigning professionals to collect and sort out ESG information, and supporting information disclosures like the preparation of ESG reports.

STAKEHOLDER ENGAGEMENT

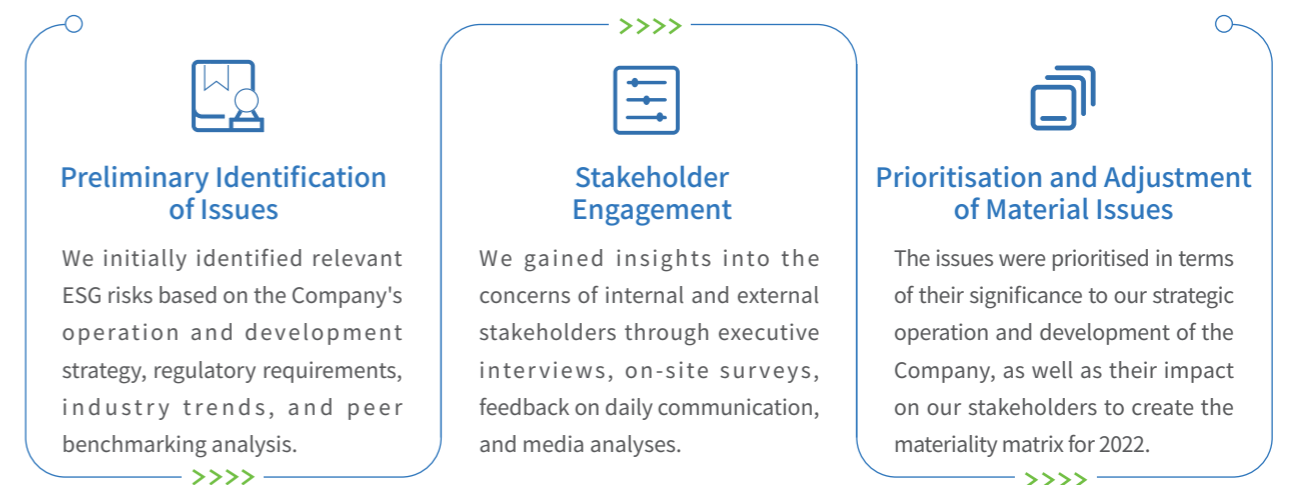
The Group has established a variety of channels to stay in communication with its stakeholders, understand and respond to their expectations and demands in a timely manner, and which serve as important references for the Company's ESG management, striving to achieve sustainable development together with all stakeholders. The Group's major stakeholders, issues of concern and communication channels are as follows:

Stakeholders	 Government and regulators	 Shareholders/investors	 Clients	 Employees	 Suppliers and partners	 Media	 Industry associations	 Community
Issues of concern of stakeholders	Legal and compliance operations Corporate governance and business ethics Driving regional development Production safety Environmental protection	Corporate governance Corporate operations Strategic development Risk management Sustainable development management	Stable power supply Production safety management Service quality and operational efficiency Climate risks and actions to address them	Protection of employee rights and interests Compensation and benefits Development and training Occupational health and safety	Fair and equitable procurement Supply chain sustainability and risk management Industry development and technology advancement Guaranteeing the quality of products and services	Corporate operation and development Technology and product innovation Social responsibility fulfillment and performance	Technology and innovation Promoting industry development Intellectual property rights	Charity and philanthropy Integration into surrounding communities Promoting employment Environmental friendliness
Major communication channels and response methods	Information reporting and submission Field inspection Correspondences Phone calls/meetings	Announcements/circulars Periodic reports/interim announcements Results announcements Investor conferences/roadshows Field survey Phone/Email/websites	Contracts/agreements On-site survey CRM management system	Employee performance appraisal Department/Group meetings Training/employee activities Labour union	Interviews and investigations Telephone/email Forum, seminar, etc.	Press releases Announcements Interviews and investigations Interviews with management	On-site meetings/exchanges Industry fairs Industry exchanges	On-site survey/meetings Participation in charity and philanthropy Party committee/youth league committee communication

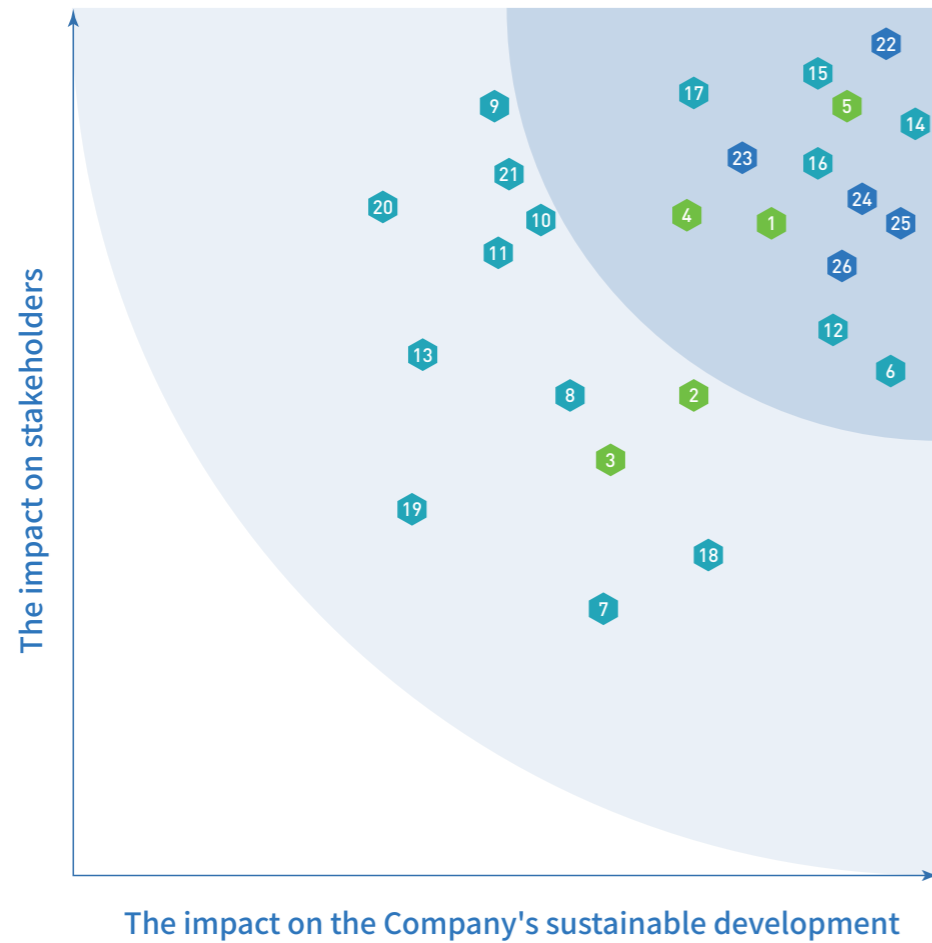
ANALYSIS OF MATERIAL ISSUES

Process Used to Identify and Evaluate Material Issues

In order to fully identify and evaluate ESG risks and opportunities associated with GCL New Energy, we comprehensively sorted out stakeholders' views and expectations on environmental, social and governance issues and prioritised the issues to determine the scope of ESG information disclosure for the Year and to lay the foundation for enhancing ESG management in the future. The main steps we took to conduct the materiality assessment were:



Materiality Matrix and Material Issues



Environmental issues

- 1 Environmental management
- 2 Energy management
- 3 Waste management
- 4 Greenhouse gas emissions
- 5 Tackling climate change



Social issues

- 6 Supply chain management
- 7 Responsible procurement
- 8 Diversity and equal employment
- 9 Protection of employee rights and interests
- 10 Compensation and benefits
- 11 Occupational development
- 12 Talent training
- 13 Health and safety
- 14 Safe operation
- 15 R&D and innovation
- 16 Intelligent operation and maintenance management
- 17 Network and information security
- 18 Industry exchange
- 19 Social welfare
- 20 Guaranteeing service quality
- 21 Client communication



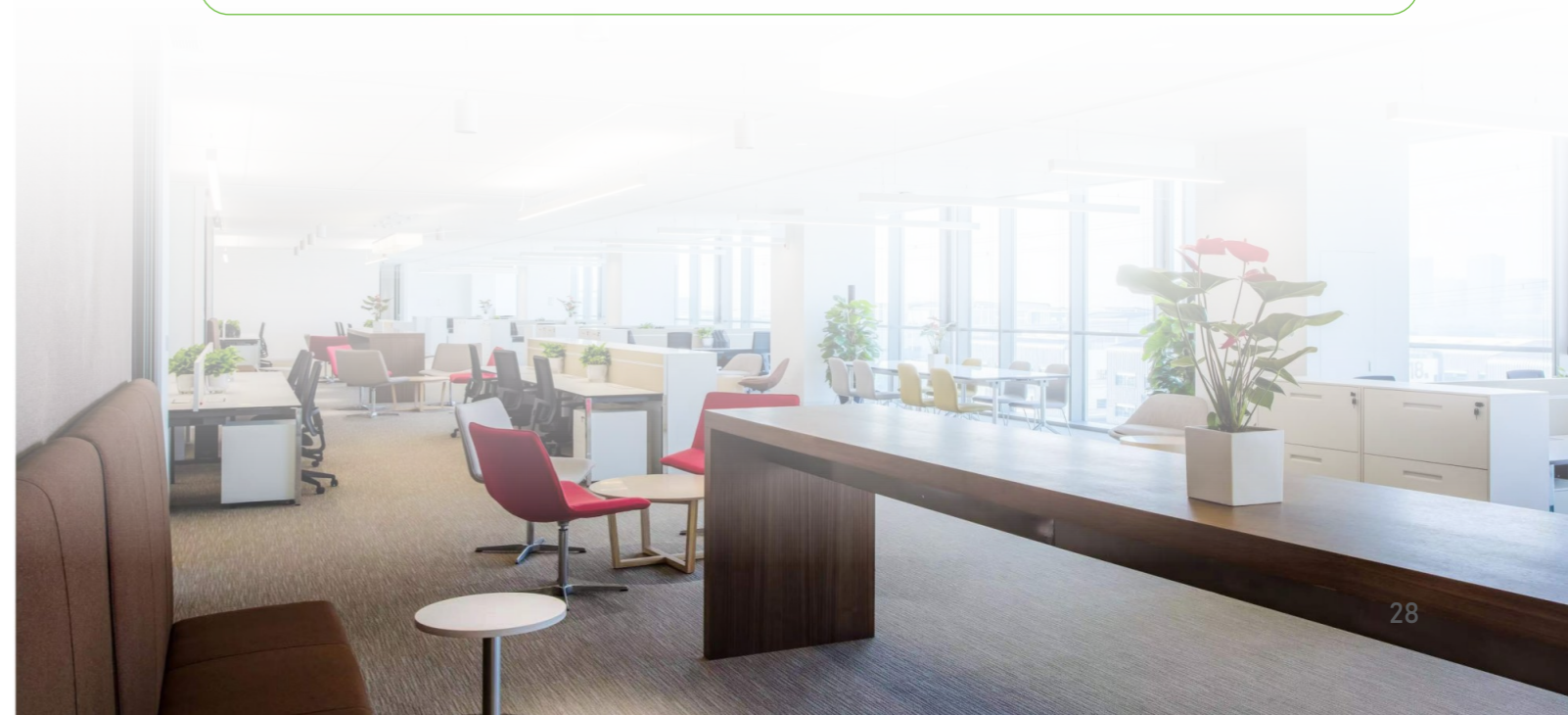
Governance issues

- 22 Corporate governance
- 23 Risk and internal control compliance
- 24 Anti-fraud
- 25 Intellectual property protection
- 26 ESG management

GCL New Energy honoured as Best Energy and Resources Company

On 19 December 2022, at the "Seventh Zhitong Finance and Economics Listed Company Selection" event, GCL New Energy was honoured as one of the Best Energy and Resources Companies at the 7th Zhitongcaijing Listed Company Awards for its responsible performance in carbon neutrality, corporate governance, environmental protection and fulfillment of social responsibilities. This is GCL New Energy's second award in green governance and development following the Best ESG Award it received in January 2022.

The selection took two months and attracted over 1,000 companies listed in Hong Kong and the US to apply for the awards. The selection is a process in which a panel of experts scored applicants based on multiple factors, with corresponding public voting, to select the final list of winners. The award highlights the attention and recognition of the industry and investors to the Group, and is also a great affirmation and encouragement for GCL New Energy.



02

PERSEVERANCE

DERIVES FROM MISSION AND DREAM

The GCL Basic Law starts with the statement that, it is GCL's mission to pursue green growth and improve the living environment for all. We have only one Earth. It is the unceasing endeavour of all GCL staff to work intensively to care for the Earth. GCL will continue to provide clean and efficient renewable energy and services, contributing to ecological civilization, the improvement of people's lives, and a better home planet. In 2022, GCL has officially declared "Green GCL " as one of its three development strategies, which underlines our determination to deepen our presence in green energy and strive for carbon neutrality.

Greenness is part of GCL New Energy's gene. Since its inception, GCL New Energy has spared no effort and persevered in the photovoltaic industry, focusing on clean energy and practicing green development. The perseverance derives from the mission of "Bringing Green Power to Life" and in the determination to devote itself to green and clean energy and to achieve sustainable development.

Cumulative new energy service projects

300 +

Cumulative installed gross capacity

10 GW

Provincial-level administrative areas

27

Per-capita operation and maintenance capacity at the power station

8.6 MW

Annual turnover of self-sustaining power station

1,216 million kWh

Carbon reduction²

1,006,800 tons

Launched

"Xinyilian" intelligent operation and maintenance platform, Cloud service APP

Annual R&D expenses in 2022

RMB **7.5** million

Won the title of

"National High-Tech Enterprise"

SDGs Link



² The calculation for coefficient measuring performance in carbon emission reduction comes from "Annual Development Report of China Electric Power Industry 2022", issued by China Electric Power Enterprise Association.

STANDING FAST TO PV BUSINESS



GCL New Energy is committed to providing clean, safe, efficient and affordable energy to society. As at the end of 2022, the Group had 39 photovoltaic power stations with a grid-connected capacity of 840 MW, located in 14 Chinese provinces, municipalities and autonomous regions, including Jiangsu, Shanghai and Henan, as well as overseas. With vast and profound experience in operational management, and relying on the small area operation and maintenance management model, its self-sustaining powerstations have achieved excellent operational results: exceeding the power target, reducing the operation and maintenance cost per kilowatt year by year, and stepwise increase of capacity managed per capita.

By virtue of its rich experience in PV station operation and maintenance, scale advantage and massive data accumulation, GCL New Energy Operation Technology Co., Ltd., a subsidiary of GCL New Energy, is accelerating the development of operation and maintenance management services. The Company relies on the "Internet of Things + Big Data" technology, and takes management services as the foundation and data service as the new engine to create the most professional, promising and competitive "data+ management" technology service provider in the field of integrated energy.

"ONE-STOP" SERVICE CAPABILITY

In the context of carbon neutrality, it is expected that the average annual PV installations in China will reach over 70 GW during the 14th Five-Year Plan period. It indicates that a series of hot and tricky issues like quality control, operation and maintenance management and efficiency improvement facing the industry of PV power generation need to be solved. In view of the rapid growth of power stations capacity, it is a trend to establish a refined and intelligent operation and maintenance model, intelligent operation and maintenance services are bound to become scarce resources.

Intelligent operation and maintenance forms the core competence of inventory asset management for PV companies and an indispensable path for the development of the industry. In early 2017, GCL New Energy as a pioneer launched the "GCL smart maintenance", a one-stop intelligent operation module for photovoltaic powerstations. Operation Technology Company, a wholly owned subsidiary of the Group, provides one-stop service solutions, including data-driven equipment warning, intelligent diagnosis, maintenance decision making, field operation and maintenance, technical improvement and optimisation, and spare parts supply, serving clients in the fields of new energy and in tegrated energy such as distributed photovoltaic energy, centralised photovoltaic energy, wind power, stored energy and mobile energy.

Services Provided

Integrated Energy Services

- Providing various types of new energy station operation and maintenance and custody services;
- Providing power operation and maintenance system and energy efficiency management system in SIP;
- Offering transmission and distribution operation and maintenance services for power system.

Data Platform Services

- Providing one-stop solutions for establishment, operation and management of data platform system according to user needs;
- Providing station-end data access and platform-related function sharing services;
- Providing cloud data analysis management, model building, expert system and other services.

Supply Chain Services

- Leveraging its own procurement advantages to select quality suppliers for the online mall;
- Providing one-stop procurement solutions for standard components and special-purpose equipment in the integrated energy field;
- Management of after-sales service rating.

Equipment Diagnosis and Maintenance Services

- Providing primary and secondary equipment experiments and specialized maintenance services;
- Providing equipment technical improvement and system upgrade services;
- Providing power prediction system, AGS/AVC, primary frequency control, and other technical services.

Consultancy Services

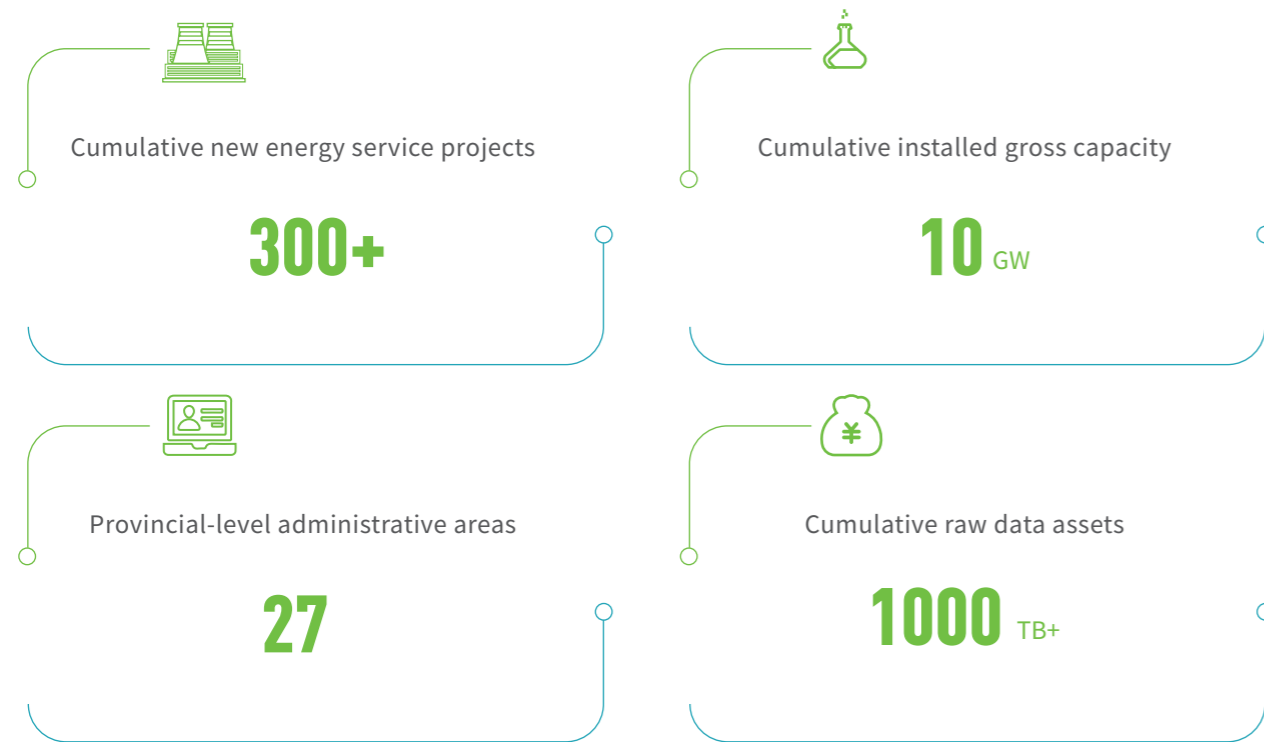
- Providing the latest industry trends and interpreting policy directions;
- Providing a platform for technical exchange and analysis;
- Providing the latest product information related to the industry chain;
- Providing financing and insurance services.

Online Education Services

- Designing professional training courseware according to the needs of the Company and its users;
- Jointly offering courses and holding forums for major clients and partners;
- Jointly carrying out job skills examination training and certification services.

Scope of Services

Operation Technology Company has built a three-tier management mode of "headquarters + regional companies + power stations". Its business covers 27 provinces, cities and autonomous regions in China. With headquarters in Nanjing, Jiangsu Province, it has six regional companies in East China, South China, Central China, Southwest China, North China and Northwest China.



LEADING COMPETITIVE EDGE

Drawing on more than 30 years of management experience in the power industry and 13 years in the investment, construction and operation of new energy stations, the Group provides clients with professional and intelligent operation and maintenance services to maximise client's asset value.

Innovative Operation Model

Since 2016, the Group has been exploring an efficient operation model for integrated energy. We adopted the "regional operation model" and developed a real-time production management platform based on our rich experience in operation and maintenance. We pioneered in regional intensive intelligent operation and maintenance through the combination of "regional operation center + PV intelligent operation platform", allowing intelligent, professional and digital operation for power stations that features centralised monitoring, regional maintenance, unattended operation, or operation with a fewer people on duty.



A panoramic view of the operation and maintenance of power stations: Behind the "regional operation centers" is the well-equipped PV operation cloud platform, which includes AGC/AVC, dis-patching phone, video surveillance, wireless handheld terminal, drone inspection and other subsystems to ensure the fusion of data and management in several power stations.



Photo: Shaanxi Yulin regional operation center

The real-time production management platform was upgraded again in 2022:

- Existing functions: Remote centralised control, faultdiagnosis, operation and management, production reporting, equipment performance analysis, power station evaluation, and large screen display;
- Additional functions: Internet of Things smart knowledge base, 3D intelligent monitoring, intelligent fault warning, intelligent real-time expert consultation, and comprehensive value evaluation system, etc.



Photo: Real-time display of power station operation and maintenance

Strengthening Technology Support

Directed by the "tech-oriented GCL" strategy, GCL New energy drives technology upgrades through significant R&D investment, keeps enhancing our operation and maintenance and power stations efficiency, and leverages technological innovation to create value for our customers and explores new routes for industry development. We seek to build up our differentiated competitive advantages with the aid of technology. During the Reporting Period, the Group's R&D investment on technology reached RMB 7.5 million, accounting for nearly 5% of our operation management revenue.

Intelligent Operation and Maintenance Based on "IoT+Digitisation"

In the field of intelligent operation and maintenance, we have established two major brands, namely "Xinyilian" intelligent operation and maintenance platform and cloud service APP. The trial operation of the "Xinyilian" platform in December 2022 signaled that the Company's intelligent operation of photovoltaic power stations based on "Internet of Things + digitisation" has officially entered the market competition. The platform enables online dispatching analysis and offline repair and defect elimination, which breaks spatial constraints and creates a new business form of intelligent and efficient operation.

"Xinyilian" Platform

In line with the "Xinyilian" platform base, which is established upon the energy IoT platform with independent intellectual property rights, a scalable "Xinyunwei" middle platform was built, to customise the operation and maintenance service subsystem according to user needs. At present, the platform has more than ten business subsystems, including the centralised control subsystem, dispatching subsystem, production subsystem and analysis subsystem. The platform crystallizes GCL Group's years of professional experience in power operation and maintenance, which has faithfully carried out "fine management" for power stations advocated by GCL, innovatively integrates the "regional operation model", and possesses great conceptual and experience advantages.

By incorporating isolate power stations into one network, the "Xinyilian" platform has realized the openness of the once sealed new energy stations, revolutionized the traditional operating pattern of new energy stations, and created a new business model featuring smart, efficient operations.

The "Xinyilian" platform is an ideal combination of industrial electric monitoring technology (SCADA) and big data technology (Hadoop), as well as the fusion of operation management concepts and IT thinking. It utilizes IoT to realize the interconnection of electrical equipment, and build analytical models with big data. By comprehensively analyzing the production data from different dimensions, it determines if an electrical device is functioning, along with fault finding and troubleshooting, which forms a closed-loop control system and achieves data-driven smart management. The "Xinyilian" intelligent operation and maintenance platform has been in use for one year, playing a significant role in standardizing management processes, facilitating intelligent analytics, reducing the cost per kWh, and increasing the generating capacity.

"Xinyilian" series intellectual property rights include:



"Xinyilian" Cloud Service App

Recognising the status quo and core needs of the operations and maintenance market, GCL New Energy launched the Cloud Service APP. The practice leverages cloud platform technologies to shape Operation Technology Company as an integrator of the new energy industry chain and a provider of basic development, establishment and operation services, hence addressing persisting issues in the energy industry, such as information asymmetry and low procurement efficiency.

Cloud Service APP is a comprehensive, multi-function app that provides additional customised value-added services on the basis of increasing client stickiness. Its functional design includes:

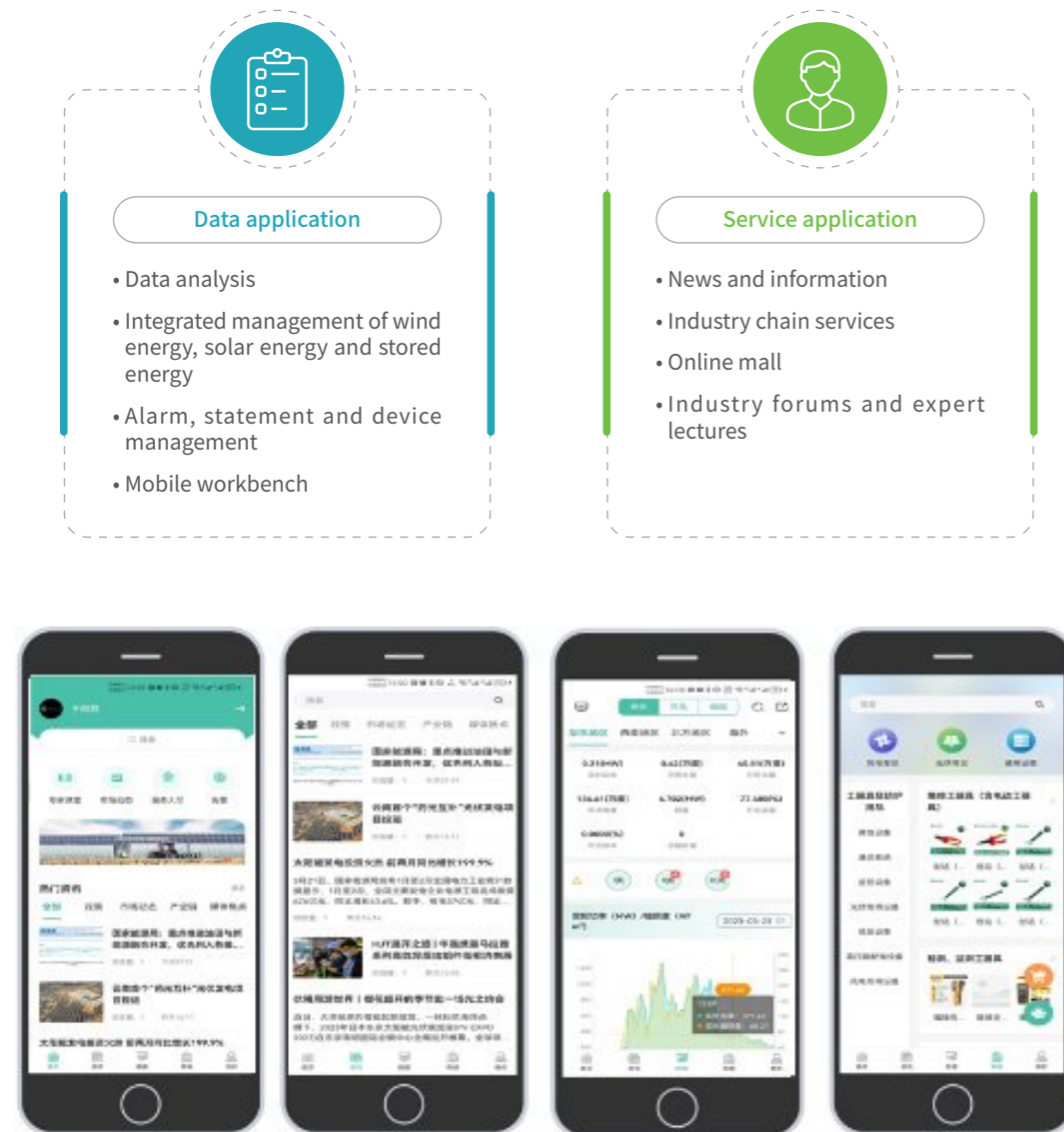


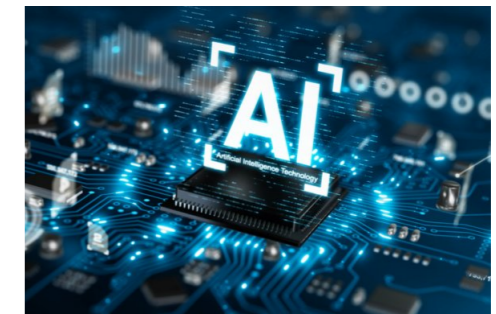
Photo: Cloud service APP interface

Technologies Enhance Operation and Maintenance Efficiency

By virtue of strong technical reserves, we pioneered the wide use of module cleaning robots, that can solve major problems afflicting the PV industry, such as potential-induced degradation (PID), intelligent alarm under all weather conditions. Meanwhile, we are continuing our efforts in exploring technology-empowered efficiency improvement in operation and maintenance. Thanks to our relentless efforts, a number of technologies have been applied to PV operation and maintenance:

Application of AI Technology

- We have developed an AI model based on petabyte data that integrates the Internet of Things, a knowledge base, and real-time expert diagnostics to provide AI diagnostics and issue early warnings for equipment failures, help field engineers discover faults and performing overhauls, offer troubleshooting solutions, and offer real-time intelligent remote expert advice for serious faults so as to support timely troubleshooting.

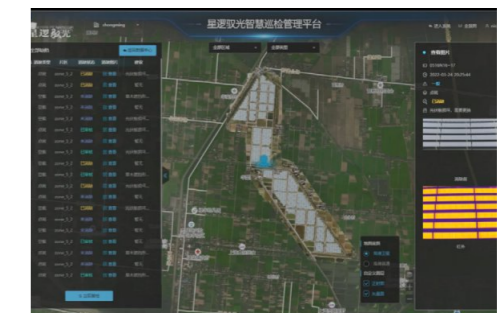


Intelligent Cleaning Robots

- Industry leader in the extensive use of intelligent cleaning robots in China.
- Significant improvement in operation and maintenance efficiency through intelligent module cleaning.

"Xinyilian" UAV Inspection and Analysis System

- To meet the routine PV inspection, operation and maintenance needs, the Group has utilized efficient patrol techniques that allow one-click flying, one-click imaging, intelligent defect identification, inspection report output, etc. It supports dual identification technology for visible light images and thermal infrared images, capable of identifying defects in range less than 2cm, accurately locating defective modules, and detecting heat spots, shading, dust and other hidden dangers on PV modules.





In 2022, we maintained a stable production safety situation, and no ordinary production safety accidents or major incidents occurred.

Capacity Expansion

As a player that deepens its presence in the PV industry, we constantly improve and refine our service capabilities and quality. In 2022, Operation Technology Company established a repair and testing center with professional inspectors and testing equipment, which has obtained CMA accreditation certificate and CNAS authorisation. It set up an AAA-class mobile module testing laboratory that provides professional module/string, infrared (IR), electroluminescence (EL), and power quality testing services, covering the whole life cycle of equipment at PV power stations.

The repair and testing center not only carries out preventive testing independently, but also actively expands module testing business and emergency repair business, with the establishment of an emergency repair mechanism covering all aspects: "horizontal and vertical, internal and external, and three-level response". It conducts comprehensive emergency drills in a normal manner and organises special drills and special actions regularly, ensuring that emergency repairs can be completed efficiently in the shortest possible time under unexpected circumstances to minimise losses and impacts, making emergency repair professional and efficient, and guaranteeing the safe and reliable operation of PV power stations.



BUILDING A STRONG SECURITY LINE

Ensuring the safe operation of power stations and preventing power safety incidents is essential to the stable supply of electricity and the operating benefits of power stations. In compliance with relevant laws and regulations, including the Production Safety Law of the People's Republic of China (revised in 2021) and the Electric Power Law of the People's Republic of China, GCL New Energy thoroughly implements the production safety policy of "safety as priority, prevention first and comprehensive management", firmly establishes the production safety management concept of "equipment as the foundation, system as the safeguard and people as the root", fulfills production safety responsibilities through the efforts of all employees, strengthens safety education and training, and conducts safety inspections and safety activities, etc., so as to comprehensively consolidate safety management and ensure smooth operation of power stations.

Improving Safety Management

We have established the EHS (environment, health and safety) Management Committee and formulated the EHS Management Standards, the EHS Emergency Management Standards and other systems to conduct coordinated management on safety, environmental and occupational health issues in the operation process. Following the EHS management requirements, we implement the production safety accountability system, clarify the production safety responsibilities of Operation Technology Company's headquarters, regional operation and maintenance companies and power stations, ensure investment in production safety, and continuously upgrade our production safety management.

In the process of day-to-day operations, we follow the principle of "station-specific policy" and formulate an operation plan and 18 production plans for power stations. In the operation plan, major tasks (including regular inspection, safety hazard detection, regular maintenance, etc.) are specified each month, and the routine tasks are clarified on an annual, quarterly and monthly basis. The people in charge are clearly designated and the areas for which they are responsible. The routine tasks and special tasks (EHS management, equipment management, operation management, training management) are clearly defined in the operation plan.

Building a Safety Culture

Safety Education and Training Management

Safety training is an important way to raise safety awareness, improve production safety skills and enhance incident prevention capabilities. The Group specifies the requirements for safety training at all levels and devises safety education and training programs. The three-level safety education is strictly implemented to equip all employees with necessary safety skills for their positions and instill in them the awareness of safe and standardized operations, which will continue to increase.

During the Reporting Period, the Group organised a total of 860 hours of safety training with a total enrolment of 3,528, including daily training and special training, in the forms of tele conferencing, centralised face-to-face instruction, on-site practical operation, multimedia video teaching, job rotation and apprenticeship, etc. The training effectiveness was evaluated through assessment.

Duration of Safety Training Organized

860 HOURS

Total Sessions of Training

3,528



- EHS management training
- Equipment safety management training
- Additional training on production safety



- Training on Safety Regulations, on laws and regulations on production safety, and trainings on typical cases
- Production safety work deployment (Safety Committee meetings) and learning
- Thematic training on the dual prevention mechanism of safety risk classification and control, and hidden danger investigation and control

Safety Inspections and Safety Activities

Safety inspection is an important part of production safety management, and is an important way to eliminate hidden dangers and implement corrective measures. We carry out regular and irregular production safety inspections according to the operation situation, such as spring production safety inspection, autumn production safety inspection, production safety month, special day activities and other special safety inspections. Inspections are strengthened in case of extreme or bad weather, laying the foundation for safe and stable production in a long period.

The Group organized safety training, testing, and emergency drills during Reporting Period:



Photo: The "Safe Winter Driving" training session was held at Operation Technology Company's headquarters, including weather forecast for winter 2022, road traffic analysis, safe driving on snow- and ice-covered roads and in foggy weather, as well as defrosting and anti-freezing methods.



Photo: Spring & Autumn Production Safety Overhauls: identified and addressed safety risks, and inspected emergency management practices to reinforce the dual-prevention mechanism and avoid seasonal security risks.

Focus on Emergency Management

In accordance with national emergency management regulations, the Group has formulated the EHS Emergency Management Standards, Production Safety Incident Contingency Plan and other systems to regulate the management of various emergencies, classify and manage incidents, devise emergency plans and carry out emergency drills.

During the Reporting Period, the Group revised the Environmental Protection Management Standards and the Site Disposal Scheme for Photovoltaic Power Stations, formulated emergency plans, including the Emergency Disposal Plan for Environmental Pollution, the On-site Disposal Plan for Earthquake Accidents, the On-site Disposal Plan for Flood Prevention and Control, and the On-site Disposal Plan for Battery Fire and Explosion Accidents, prepared sufficient emergency supplies, established emergency rescue teams, launched emergency training, signed emergency mutual aid agreements and set up emergency linkage mechanisms with nearby enterprises and government agencies. During the Reporting Period, 302 production safety emergency drills were conducted.



Case | In response to bad weather, safety inspections are carried out timely to ensure safe production

Hot Weather



Photo: A staff on duty of a power station in Hewai, Yuanmou, Yunnan inspected the combiner box in PV array area.

Strong Gusts



Photo: Carry out safety inspections after bad weather, comprehensively investigate equipment failures to avoid safety risks.

Case | Disaster Emergency Drill

During the Reporting Period, our power stations carried out emergency drills for floods, geological disasters, thunder and lightning, and snowstorms according to the site conditions, in order to enhance employees' ability to respond to emergencies.



Photo: Emergency drill on geological disasters at Taoyuan PV power station.



Photo: Emergency drill for extreme weather at Jingpu PV power station.

QUALIFICATION AND RECOGNITION

Supported by cutting-edge operation and maintenance technologies, we have been highly recognised by relevant regulatory authorities and industry associations for our professionalism in operation and maintenance services and sound safety management, and our influence in the industry continues to increase.

Authoritative Qualification

After being honoured as China's first AAAAA integrated operation and maintenance service provider by China Electricity Council in 2019, Operation Technology Company was named a national high-tech enterprise in 2021. It successively obtained all the qualification certificates required for the new energy operation and maintenance business, making every effort to enhance its core competitiveness.

December 2019

China's first AAAAA integrated operation and maintenance service provider certified by China Electricity Council



November 2021

National high-tech enterprise



September 2022

Production safety license for construction enterprises



July 2022

Level-3 license for installation, maintenance, testing of electric power facilities, allowing it to carry out maintenance, testing and value-added business of power facilities at 110 kV and below.



Industry Recognition

With our multiple competitive advantages in the field of intelligent operation and maintenance, we constantly contribute to the innovation and sustainable development of the PV industry. Therefore, we have been recognized as one of the most influential industry players:

"GW New Energy Power Station Operation & Maintenance Milestone Award"



July 2022

6th New Energy Power Generation Operation and Post-Service Seminar

"2022 Most influential PV operation and maintenance Firm"



December 2022

"Photovoltaic Cup" New Year's Eve Sharing Conference cum 2022 10th PV Industry Awards Ceremony

PRACTICING GREEN AND LOW CARBON

As a company specializing in clean energy and renewable energy, GCL New Energy carries the gene of green growth. It is our doctrine to practice greenness and low carbon. Facing the pressing issue of climate change, we make active attempts to identify climate-related risks and opportunities and incorporate solutions into our routine operations. By strengthening environmental management, boosting the percentage of renewable energy in energy consumption, and spreading green knowledge, we go all out to reduce our impact on the environment. Playing to our strength in smart operation and maintenance, we constantly improve energy and resource efficiency and implement the development strategy of "Green GCL" with practical actions.

TACKLING CLIMATE CHANGE

GCL New Energy identified climate change risks and opportunities during the Reporting Period to effectively mitigate the financial impact of climate change and formulate positive action plans to address these changes. In accordance with the Task Force on Climate-related Financial Disclosure (TCFD) framework guidelines, we identified the relevance to our operations based on our own business conditions.

Climate-related Risks

Type of Risks	Climate-related Risks	Risk Description	Potential Business Impact
Physical Risks	Urgent Risks	Typhoons, rainstorms and floods caused by torrential rain, or other extreme weather events	<ul style="list-style-type: none"> • Typhoon, torrential rain and floods can damage modules or other devices, thus affecting electricity generation efficiency; • Step up operation and maintenance efforts, take preventive action prior to extreme weather events, and perform inspections and clean-up after the events; • Extreme weather events can cause accidents that threaten the safety of employees and nearby communities; • Insurance premiums may rise due to extreme weather.
	Chronic Risks	Secular changes of the weather pattern (such as persistent heat waves), rise in average temperature	<ul style="list-style-type: none"> • High temperature affects the performance of modules, as well as the service life and output of inverters, thus affecting electricity generation efficiency; • Cause safety hazards and expose frontline operators to higher risks.
Transition Risks	Policy and Legal Risks	Existing requirements, laws, and policies	Existing laws and industry standards: "Environmental Protection Law of the People's Republic of China" and "National Energy Conservation Law of China". New regulations include government proposed carbon neutrality and carbon peak goals. Failure to follow the continually updated laws and regulations may result in fines, warnings, loss of business, and other negative consequences.
Transition Risks	Technology Risks	Front-end cost for low-carbon transition	Higher R&D expenses and upfront project costs related to photovoltaic technology innovation and low carbon technology transition.
	Reputation Risks	Stakeholders' growing concern about negative feedback	The growing concern of stakeholders (regulators, investors, customers, etc.) about low carbon and climate change motivates firms to practice green operations, energy conservation, and emission reduction for positive corporate image and sustainable competitiveness.
	Market Risks	Changes in customer behavior	The photovoltaic industry is typically environmental. Naturally, customers pay increasing attention to the application and innovation of environmental protection technologies.

Climate-related Opportunities



Market

Guided by the "dual-carbon" goals, renewable energy is flourishing in China, and the installed Photovoltaic capacity is expected to further increase.

Operational efficiency directly affects the stability and generating capacity of photovoltaic plants. The photovoltaic industry is increasingly demanding operational capabilities. With a wealth of photovoltaic plant management experience and technology reserves, the Group has formed significant competitive advantages that grant us to a wider range of market opportunities to increase our operating revenue.



Products & Services

Transition from the scattered, extensive traditional operations to intensive and efficient smart operations

We pioneered the "three-level management model", independently developed the "Xinyilian" platform and Cloud Service App, and established the "IoT+digitization" model to realize the smart management of photovoltaic plants, reduce the cost per kWh, and boost our competitiveness.

COMMITTED TO GREEN OPERATION

The Group has applied the principle of "holistic planning, rational design, prevention as a priority, integrated prevention and control, and comprehensive treatment" to improve the environmental management system. Moreover, drawing on our advantages in intelligent operation and maintenance, we continuously increases the efficiency of resource utilisation, reduces pollutants and enhances environmental friendliness.

Strengthening Environmental Management

We strictly follow relevant laws and regulations, including the Environmental Protection Law of the People's Republic of China and the Energy Conservation Law of the People's Republic of China, to carry out compliance operations, and formulate the Environmental Protection Management Standards to standardise management. In 2022, we upgraded the organisational structure and core members of our EHS Management Committee to further ensure the implementation of EHS work. During the Reporting Period, GCL New Energy did not have any incidents in violation of applicable environmental protection laws and regulations and relevant regulatory requirements, nor did it receive any complaints against its environmental management.

Goals	Actions
<p>Energy Efficiency Increase energy efficiency and reduce energy consumption intensity</p>	<ul style="list-style-type: none"> • Refine operational technologies and minimize energy use • Highlight the use of renewable energy in office areas, advocate green office, and reduce energy consumption in operations
<p>Water Efficiency Optimize water resource management and reduce water consumption intensity</p>	<ul style="list-style-type: none"> • Minimize water consumption during operations through smart operation technologies • Ensure wise management of water, establish the water circulation system, and reuse reclaimed water • Raise employee awareness to save water
<p>Waste Disposal Produce less waste and achieve 100% compliance in waste disposal</p>	<ul style="list-style-type: none"> • Enhance green management performance and produce less waste • Strengthen waste management and ensure compliance in waste disposal
<p>GHG Reduction Reduce operational carbon emissions by improving energy efficiency; facilitate the output of renewable energy, and contribute to the society's carbon emission reduction</p>	<ul style="list-style-type: none"> • Improve energy efficiency • Enhance operational capabilities and electricity generation efficiency

Resource and Energy Consumption

Our operational energy consumption mainly includes outsourced electricity and vehicle fuel (diesel and gasoline), while office water use, and water for cleaning and production at the power station operations constitute our water consumption. We advocate saving energy and protecting the environment to minimize energy consumption at work and in life. Meanwhile, the increasingly intelligent operations and maintenance is also a contributor to green operations.

Intelligent operation and maintenance helps reduce resource and energy consumption:



Reduction in vehicle fuel use

Power stations are monitored and managed in real time through the intelligent operations and maintenance platform, which increases patrol efficiency and vehicle use, thus reducing fuel consumption.



Reduction in purchased electricity

Intelligent operations and maintenance, in combination with big data analysis, helps realize early identification, accurate positioning, and timely troubleshooting to lessen the impact on the generating capacity, hence reducing the amount of outsourced electricity.



Reduction in water consumption

Operational water consumption at power stations has been significantly reduced through the adoption of intelligent robots for operations and maintenance, the use of solar power, and all-around cleaning without water.



Photo: The Group's robot adoption in the operation and maintenance process has greatly reduced water consumption.

During the Reporting Period, the Group's energy and resource consumption³ was as follows:

	Indicator type	Unit	2022
Energy type ⁴	Purchased electricity	kWh	12,181,038.41
	Diesel consumption	TCE	22.84
	Gasoline consumption	TCE	86.04
	Natural Gas consumption	TCE	1.85
	Comprehensive energy consumption	TCE	1,607.79
	Comprehensive energy consumption per million kWh of sales of electricity	TCE/million kWh	1.32
Resource consumption	Water consumption	Tonne	11,921.80
	Water consumption per million kWh of sales of electricity	Tonne/million kWh	9.80

Management of Emissions and Discharges

Emissions and discharges generated in the course of the Group's operations include: greenhouse gas emissions from purchased electricity and vehicle fuel emissions of air pollutants; domestic wastewater and wastewater from cleaning, as well as solid waste such as household waste and battery waste. Wastewater from cleaning is discharged to the bottom of the PV panels for greening. Domestic wastewater treated to standard is used for greening. Household waste is collected in bins and transported to the local refuse collection point regularly for uniform disposal. Waste electrical components are centrally processed by recycling professionals.

	Indicator type	Unit	2022
Greenhouse gas emissions ⁵	Scope 1: Direct greenhouse gas emissions	tCO ₂ e	272.32
	Scope 2: Indirect greenhouse gas emissions	tCO ₂ e	6,946.85
	Total greenhouse gas emissions	tCO ₂ e	7,219.17
	Greenhouse gas emissions per million kWh of sales of electricity	tCO ₂ e/million kWh	5.94

³ During the Reporting Period, we modified the scope of environmental data collection to suit our business change and to strengthen our management of environmental data. Therefore, no comparisons are made with the previous year's environmental data. Data collection this year includes: GCL New Energy's office areas at GCL Energy Center (Suzhou), Operation Technology Company's head office and regional offices, and self-sustaining power plants as of the end of 2022.

⁴ Comprehensive energy consumption is calculated based on conversion factors provided in "General Principles for Calculating Comprehensive Energy Consumption (GB/T 2589-2020)", including outsourced electricity, vehicle oil (diesel and gasoline), and natural gas.

⁵ The sources of GHG emissions are gasoline, diesel, natural gas and purchased electricity. Scope 1 emission factors are calculated with reference to the HKE's Guidelines for Reporting Environmental Key Performance Indicators and Greenhouse Gas Protocol (GHG protocol); Scope 2 emission factors are calculated with reference to the HKE's Guidelines for Reporting Environmental Key Performance Indicators.

Promoting a Green Workplace

In line with the concept of "low carbon and green workplace", we play to our strengths as a new energy company to leverage on the regional microgrids to increase the proportion of green energy use, and developed a number of initiatives to improve energy and resource utilisation efficiency to reduce operational carbon emissions.

"Base" of our green operation

Headquarters

The Group's headquarters is located in GCL Energy Center, where 100% green electricity is used in daily operations.

GCL Energy Center's "Six-in-One" new energy microgrid is one of the first new energy microgrid demonstration projects approved by the National Energy Administration ("NEA"). Its core technology is the organic combination of six energy systems, namely photovoltaic, natural gas CCHP, wind energy, ground source heat pump, LED and stored energy, to form a microgrid.

Operation Technology Company

To make full use of green energy to reduce carbon emissions in the offices of the Nanjing headquarters and six regional companies through regional microgrids.

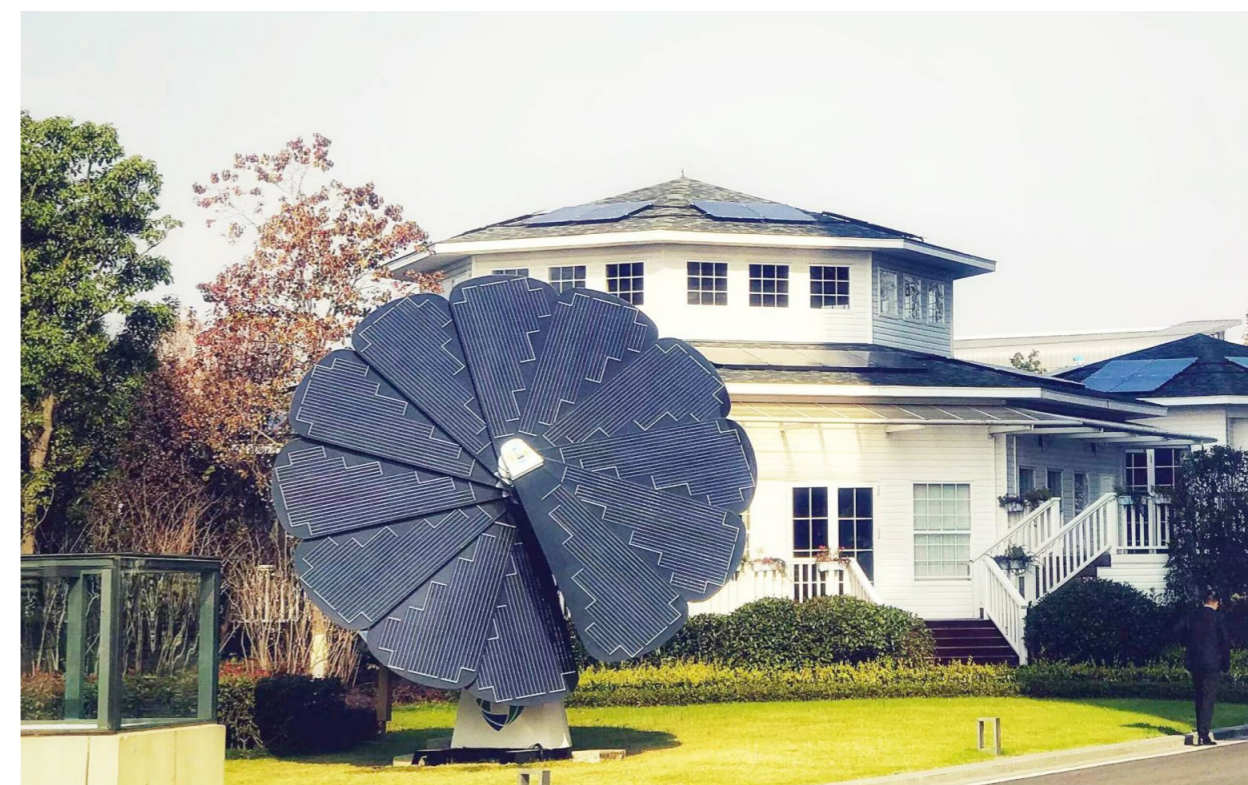


Photo: PV panels laid in GCL Energy Center (one of its part)

Creative Measures

We keep up with innovative ideas for sustainable operations, and seek to maximize work environment and resource efficiency. During the Reporting Period, we adopted the practice of sharing workspace, with 43.2% office space for shared use, digitally managed through a standard process. On one hand, the practice leads to better space efficiency and reduces the waste of office resources. On the other hand, it improves productivity by increasing interactions between employees and different business segments.

Office space for shared use

43.2%

Water Conservation

- Continuous efforts were made to strengthen the publicity of water conservation and environmental protection information for employees to enhance their awareness of water conservation;
- Hoses, faucets and other equipment were inspected on a regular basis. Repairs will be arranged immediately if any leakage is found.



Energy Conservation

- Natural light was made full use of and relevant equipment was powered off during lunch break to reduce the use of lights;
- Shortened power and sleep shifting in computer and turned off the computer when not in use;
- The air conditioner temperature was set according to the season (the air conditioner temperature was set at no less than 26 degrees centigrade in summer), and doors and windows were not left open when the air conditioner was turned on.



Green office initiatives include



Reduction of Material Consumption

- We advocated paperless offices and electronic filing;
- We did not print if unnecessary, advocated double-sided printing, and put waste paper into recycling bins to make full use of paper resources;
- Employees were encouraged to bring their own drinking glasses/cups instead of using disposable ones;
- We tried to make the best use of everything to reduce the waste of office supplies.



Green Mobility

- Efforts were made to strengthen the management of company cars;
- Green mobility was advocated and employees were encouraged to take public transportation and carpool to go out.

Promoting Green Living

Green homes need to be built together by everyone. To raise employees' environmental awareness, during the Reporting Period, GCL New Energy organized a series of training sessions on environmental protection that totaled 1,176 hours. We actively carried out activities related to energy conservation and carbon reduction, popularised knowledge of green energy and green electricity, and spread the concept of green living, in a bid to drive more people to practice the concepts of green living and low carbon and jointly promote the harmonious development of the ecology and environment.



Case | Activity themed on "get N ways to live a low-carbon life"

During the 32nd National Energy Conservation Publicity Week, GCL New Energy and the Group's league committee organised an activity themed on "get N ways to live a low-carbon life" in June 2022. Closely aligning the goals to "achieve CO₂ emissions peak before 2030 and achieve carbon neutrality before 2060", the Group carried out publicity and education on energy conservation and carbon reduction, and advocated a green and low-carbon production mode and lifestyle.

Case | Makes contributions via "green mobility"

In March 2022, the labour union of Operation Technology Company's Henan branch encouraged employees to participate in the 2022 Green Mobility Subsidy Campaign and the "Green Mobility" Quiz Challenge organised by the Zhengzhou Federation of Trade Unions. It practiced the concept of green and low-carbon mobility, contributing to environmental protection and air pollution prevention and control.

Case | Visit to the Qinghai Meteorological Bureau

The theme of the 62nd World Meteorological Day on 23 March 2022 is "Early Warning and Early Action: Hydrometeorological and Climate Information for Disaster Risk Reduction". The Party branch committee of Qinghai GCL New Energy Co., Ltd. organised a visit to the Qinghai Meteorological Bureau for all Party members, where a professional docent guided them to the meteorological warning command platform, the meteorological observation field, and the cloud seeding rocket launcher to learn about the observation and production process of weather forecast, improve their understanding of climate knowledge and raise awareness of climate risk prevention.

FOCUSING ON DEVELOPMENT OPPORTUNITIES

Global demand for natural gas is exploding. As a major energy consumer, China has further accelerated the pace of energy transformation after the announcement of the dual carbon goals, and the country's natural gas consumption has grown even more rapidly. The National Energy Administration estimates that domestic natural gas consumption will reach 430-450 billion cubic metres in 2025, doubling the 220.1 billion cubic metres in 2022. Changes give rise to new opportunities. The Group keeps a close eye on the development opportunities in the natural gas industry, keeps up with the development trends of clean energy, pools its own strengths to create synergies with GCL Group's strengths and footprints in the energy field, with a view to building a new growth engine.

BUSINESS OPPORTUNITIES

On 18 July 2022, the Group entered into a memorandum of understanding with POLY-GCL Petroleum Group Holdings Limited ("POLY-GCL Group") to invest in POLY-GCL Group Ethiopia-Djibouti natural gas project located in the Ethiopian gas field in Africa by holding minority interests at lower and controllable risks.

Project Description

In active response to the Belt and Road Initiative of China, GCL Group collaborated with Poly Group to participate in the Lighting Africa program. In November 2013, GCL Group decided to invest in the construction of the "Ethiopia-Djibouti natural gas project" in East Africa, which has received strong support from the governments of China, Ethiopia and Djibouti.

On 16 November 2013, POLY-GCL Group, an integrated oil and gas company jointly established by GCL Group and Poly Group, signed five petroleum production sharing agreements (PPSAs) with Ethiopia's Ministry of Mines on two development blocks and eight exploration blocks, with a total contracted area of approximately 117,000 sq. km. The blocks are located in the Ogaden basin of East Africa. The contract term for the development blocks is 39 years and the contract term for the exploration blocks is 45 years. Based on study and evaluation, the project has huge oil and gas reserves, and fully meets the conditions for large-scale commercial development.

The Ethiopia-Djibouti natural gas project consists of four major components: oil and gas exploration and development, long-distance pipeline, LNG plant and terminal construction, which is an integrated upstream, midstream and downstream project. The upstream oil and gas drilling project commenced in September 2015. The midstream and downstream projects are located in the Djibouti Free Trade Zone and the foundation stone was officially laid in March 2016. On 28 June 2018, POLY-GCL produced the first barrel of crude oil for Ethiopia in the Ogaden basin, marking a milestone in the history of oil and gas development in Ethiopia.



Natural gas resources

5 trillion cubic metres

Gas fields discovered

3

Oil resources

4.0 billion tonnes

Natural gas geological reserves actuated

190.7 billion cubic metres

Photo: "Ethiopia-Djibouti natural gas project"

Significance

The Ethiopia-Djibouti natural gas project has received considerable attention and support from the Chinese government. In July 2015, the project was listed by the Chinese government as a key "Belt and Road" project. On 4 September 2015, then Premier Li Keqiang and Hailemariam Desalegn, Prime Minister of the Democratic Federal Republic of Ethiopia, witnessed the signing of the Framework Agreement on Pipeline Development between POLY-GCL Petroleum Group Holdings Limited and the Ministry of Mines of Ethiopia at the Great Hall of the People. The project was included in the list of "Belt and Road 2016 major energy planning projects" in October 2016.

Due to the huge oil and gas reserves, the project has been listed as a "Class-A large project under China-Africa Production Capacity Cooperation". As Ethiopia's largest foreign cooperation project in the energy field, The Ethiopia-Djibouti natural gas project is a component of the troika for economic take-off, along with the Grand Ethiopian Renaissance Dam and the Addis Ababa Djibouti Railway. It is also of great significance to regional development.

Promoting Economic Development

Ethiopia depends entirely on energy imports. Once the gas project is put into production, it will bring hundreds of millions of U.S. dollars in tax revenue for its government and become the largest project to generate foreign exchange earnings in Ethiopia, which will effectively alleviate the foreign exchange shortage and promote economic development in the country.

Driving Industry Development

China's advanced operating techniques and standards on oil and gas, management systems and talents were introduced into Ethiopia, promoting the development and technological upgrading of the local oil and gas industry.

Promoting Employment

Once the gas field comes on stream in Ethiopia, a large local workforce will be needed for on-site production management, logistical support, LNG storage and transportation, etc., more than 2,000 people at peak times. The project will train a large number of local professionals in natural gas exploration, processing, liquefaction, storage and transportation, production management and other areas.

Boosting Energy Transition

Once in production, it will supply Ethiopia with natural gas, helping to phase out diesel, gasoline, and coal, and setting a new starting point for the country's transition towards clean energy.

Coordinative Advantages

Based on the upstream natural gas resources in Ethiopia, supported by its domestic LNG terminals in Rudong and Maoming, GCL Group will strive to build a whole-industry chain that integrates gas development, storage, transportation, processing, trading, and terminal utilization, which complements those industries in China, hence maximizing resource utilization.

GCL Huidong Jiangsu Rudong LNG Terminal Foundation Stone Laying Ceremony

On 6 September 2022, a foundation stone laying ceremony was held in Yangguang Island, Nantong to officially announce the commencement of Rudong LNG. As a major achievement in GCL Group's vigorous implementation of the gas-electricity integration strategy under the Belt and Road Energy Partnership, the project will connect with the Ethiopia-Djibouti oil and gas project—GCL's largest project in Africa under the Belt and Road Initiative and China's overseas project covering the largest land area, with the largest recoverable reserves at high exploitation costs. The project has established a complete industry chain covering exploration, exploitation, pipeline transportation, liquefaction, transportation, receiving, storage and end-user utilisation, which is of great significance to the advancement of natural gas business.



PROACTIVE PREPARATION

The Group capitalises on natural gas development opportunities, but upholds scientific and prudent principles in making each decision. Internally, it improves business capabilities, accelerates organisational restructuring and increases efforts on natural gas talent reserve. Externally, it carries out extensive exchanges and communication, actively gains an insight into the market and pays attention to the development of the industry. The Group hopes that through investment in natural gas projects, it will be able to quickly lock in natural gas supply and technology when the time is ripe to develop hydrogen energy, consolidate its first-mover advantage and enhance its core competitiveness.

Internal Capacity Building

In order to strengthen its ability to undertake natural gas business, the Group has taken actions in various aspects such as organisational restructuring, human resources, financial support, risk management and improvement of internal control. We adjusted our organisational structure according to business needs, strengthened internal coordination, identified and sorted out possible risk points in the natural gas business, and optimised the necessary business processes accordingly. Efforts were also made to strengthen talent reserves and actively carry out internal exchange and learning. In August 2022, the Group raised around HK\$310 million through a placement, of which 90% of the proceeds is planned for the natural gas business.

Case | Internal sharing session on PPSA

In November 2022, GCL New Energy held an internal sharing session on the petroleum production sharing agreement (PPSA) and elaborated on the Introduction to the Petroleum Production Sharing Contract and Exploration and Development in Ethiopia and the Analysis of Commercial Terms of the Natural Gas Production Sharing Agreement in Ethiopia, with a targeted analysis of the 25 core terms. The session helped improve employees' professional knowledge of natural gas projects and laid a foundation for the Group's future business growth in the natural gas industry.

External Communication

With GCL Group's presence in the entire natural gas industry chain, we visited upstream and downstream companies in the natural gas industry chain, had professional exchanges with our domestic and foreign counterparts, and assigned persons to Ethiopia to understand the project situation, conduct market research, and gauge local market feedback and cooperation intentions, in order to make appropriate arrangements for our future entry into the natural gas business.



Photo: Business exchange with Shandong Port International Trading Group



Photo: Technical exchange meeting with GTT

DEDICATION

DERIVES FROM RESPONSIBILITY

GCL New Energy is dedicated to interpreting responsibility and commitment in the process of operation. We leverage our strengths to deliver superior services to our customers. We treat our employees with respect and care, to ensure people who create value for us feel they belong and stay motivated. We approach all business partners with sincerity, willing to share and pursuing mutual benefits through earnest cooperation. We actively participate in community development and remain committed to responsible practices, gain the respect and support of our stakeholders and achieve high-quality and sustainable development.

Employees in total

792

Contract signing and social insurance coverage

100 %

Contribute to education

" 5G+ new energy" education

Industry-university-research collaboration

University Partnerships

Employee training hours in total

26,800 hours

Average training hours

33.84 hours

Service quality and safety

Zero complaints

Customer privacy leaks

Zero cases

New

"Professional and Technical Competency Appraisal" system

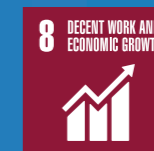
Advancement of the

Succession Programme

Suppliers in total

211

SDGs link



PURSuing WIN-WIN COOPERATION

In the era of economic globalisation, win-win cooperation is the only way for companies to develop. GCL New Energy gives full play to its strengths to provide excellent services to its clients. We are committed to sharing development opportunities with industry players through a fair and standardised supplier management process.

EXCELLENT SERVICES FOR CLIENTS

The Group has been adhering to the tenet of "increasing efficiency for power stations, ensuring safe production and reassuring clients". Relying on the intelligent operation and maintenance platform and technological advantages, it provides professional and comprehensive services to clients. In the meantime, we improved our client service system, increased service efficiency with advantages in science and technology, and strengthened the professional skills of our employees to protect the client service level in all aspects and improve client satisfaction. During the Reporting Period, the Group did not receive any client complaints regarding the quality and safety of its products and services.

In August 2022, China Electricity Council released a list of 2021 Outstanding Photovoltaic Plants according to the operating indicators of photovoltaic power generation in 2021. With 18 power stations rated as "Outstanding Photovoltaic Plants", Operation Technology Company ranked highly in the list.

Major Initiatives to Improve Client Service Level




Improving Client Relationship Management (CRM) System

- Six regional operation and maintenance service centers have been set up nationwide, with more than 600 professional operation and maintenance employees offering on-site services, technical support and complaint handling;
- The centers provide "one-stop services" including complaint service, business consultation and technical support;
- The relevant systems have been improved and the operating procedures have been standardised.



Rendering Convenient Services with Advantages in Technology

- The whole process is followed through the "Xinyilian" platform to ensure prompt response to client requests;
- The centers continuously promote the connection with office network, business system, SAP, WeChat and other platforms to achieve omni-channel service management.



Continuously Enhancing Employees' Vocational Skills

- On-site training: Training focusing on operational skills and safety;
- Online training: Training on process and industry knowledge via GCL University's "Xinzhihai" platform or teleconferencing system.

SYSTEM AND INFORMATION SECURITY

GCL New Energy attaches great importance to the security of the monitoring system and information security, to ensure the quality of operation and maintenance services. We strictly comply with applicable laws, regulations and standards, establish a sound system of security protection and information security management system, and take various measures to consolidate the foundation for stable business operations.

System Security Protection

Safe, reliable and stable operation of the power plant monitoring system is a mainstay for business development. The principles of "safe partitioning, dedicated networks, horizontal isolation and vertical certification" guide our construction of the headquarters, regional operations and maintenance centers, and intelligent analysis platforms and regional centralized control systems for our photovoltaic, wind, energy storage power plants, as well as our practices of data interaction. We have adopted the "defence in depth" strategy and "moderate security" strategy, and implemented the Regulations on Power Monitoring Systems Security, the General Plan for Power Monitoring Systems Security, and the technical requirements for dispatching automation of centralised new energy monitoring systems in different provinces. We focus on strengthening boundary protection for network-based production control systems, improve our capabilities in internal security protection, to ensure the security of power generation control systems and critical data.

Measures to ensure the security of systems of the regional centralised control centers

All the equipment were **purchased for special use**. Each photovoltaic, wind, storage power station has been added with a gateway for data forwarding. Power system certification equipment has been used in all systems that are physically independent from the dispatching automation system, which does not affect the normal operation of the original dispatching automation equipment.

Partitioning according to the principles, including:

Area I Telecontrol System

Via the cluster server, the real-time monitoring and control data from the centralised control station are aggregated and processed according to the IEC 104 protocol, demonstrating the monitoring function.

Area III Operation and Maintenance System

Through the centrally deployed blade server, the data of regional centers' power stations are analysed and stored, with production management and intelligent analysis functions provided.

Information Security Management

Information security management is an important part of daily operation management. In compliance with the applicable policies and regulations, including the Civil Code of the People's Republic of China, the Personal Information Protection Law of the People's Republic of China, and the Cybersecurity Law of the People's Republic of China, we have formulated standards, including the Information Security Management Standards, the Management Standards on Data Security of Management Platforms, and related management manuals to clarify information security management responsibilities and standardise the entire data management process such as access modes and access rights.

During the Reporting Period, no client privacy leaks occurred in GCL New Energy.

Information security management measures:

Data Access Rights Management

- The data of the production platform is graded according to importance, application needs, etc;
- The production platform has a perfect authority management policy, supporting the principle of least privilege and reasonable authorisation. Data access is managed with a three-level authorisation system to avoid unauthorised access;
- Unified management is applied to the access rights of production platform data through a list of user permissions;
- A dedicated person was designated to take charge of a high-value databases, and critical data shall not be used without approval.

Confidentiality Management System

- Comprehensive security and confidentiality management requirements were put forward for partners of the real-time production management platform, including the signing of confidentiality management agreements to guarantee that the details of project advances and collaboration processes will be kept strictly confidential.

Establishment of information security management system

In order to carry out information security management in a more scientific and standardised manner, Operation Technology Company has established an information security management system in accordance with the national standard Information Security Management Systems (GB/T 22080-2008) (equivalent to ISO 27001: 2013 Information Technology - Security Techniques-Information Security Management Systems-Requirements) and obtained the information security management system certificate after getting certified by an external authoritative body in 2021.



Photo: Information security management system certificate obtained by Operation Technology Company

Case | Launch of information security training on New Security System Practice based on Multi-Level Protection Scheme 2.0

In May 2022, Operation Technology Company launched the information security training on New Security System Practice based on Multi-Level Protection Scheme 2.0 (MLPS 2.0), covering network security innovation under MLPS 2.0, new security ideas, and innovative security system practices based on MLPS 2.0, laying the foundation for continuous optimisation of information security work.



Photo: Training Content

SUPPLY CHAIN MANAGEMENT

Good supply chain management plays an important role in the stable operation and sustainable development of a company. In accordance with the Supplier Management Standards and other internal management systems, we classified and graded suppliers and clarified the requirements of the total process management covering supplier selection management, audit process, supplier performance evaluation and supplier exit, and continuously promoted the systematisation and intelligence of supplier management based on GCL Group Supplier Portal website. As at the end of the Reporting Period, the Group had a total of 211 suppliers, all of which were located in the PRC.

Total number of suppliers

211

Standardisation of Total Process Management



- Suppliers that meet the corresponding selection qualifications can be included into the supplier base;
- The Group conducts audits, including legal audit, financial audit and technical audit;
- Suppliers are inspected, either onsite or offsite;
- The final approval comments are made on the final approval node to request authorisation. Suppliers that are approved to be included in the supplier base must synchronously sign the Letter of Commitment.



- According to the principle of "quality, cost, delivery and service", all procurement operations are subject to supplier performance evaluation, which shall be jointly scored by the demand, quality, technology, supply chain and other related departments. According to the performance evaluation results, suppliers are classified as Class I, Class II, Class III and Class IV suppliers;
- If the performance score is $70 \leq X \leq 80$ (i.e., Class III), corrective measures are required.



- Periodically, suppliers with performance scores below 70 (i.e., Class IV) will be dropped from the supplier base citing the performance evaluation results;
- If a supplier still fails to meet the standards after rectification, the supplier exit mechanism will be activated.

Promoting Responsible Procurement

Under the background of global "decarbonisation", ESG management of the supply chain has become a part of competitiveness of a company. In this context, we have actively taken actions to take ESG factors such as environmental management, social responsibility performance and safety management level of suppliers as important considerations, and give priority to suppliers who have passed ISO 9001 quality management system certification, ISO 14001 environmental management system certification and ISO45001 occupational health and safety management system certification under the same conditions, so as to convey the concept of sustainable development and drive suppliers to practice low-carbon and responsible operation. As of 31 December 2022, GCL has completed the review of supplier qualifications and capacity during the Reporting Period, with 100% of its suppliers validly reviewed.



SHARED GROWTH WITH EMPLOYEES

GCL New Energy insists that talent is the most valuable asset that determines the Company's present and future. Guided by our human-oriented philosophy, we highly value employee well-being. Our efforts in this respect include: constructing a diverse and equal workplace, and offering a sound and competitive compensation system for talent attraction and retention; building a clear path for career development, nurturing a pool of young talents, and providing a sound and comprehensive training system to help employees achieve their career goals; creating a friendly and caring work environment and treating employees with respect and dignity to give them a sense of belonging and keep them motivated.

PROTECTING EMPLOYEE RIGHTS AND INTERESTS

Holding firm to employment equity, we safeguard employees' rights, continue to optimize our compensation system, value employee engagement and democratic management, and work to build positive and stable labor relations.

Equity and Diversity

GCL New Energy has developed a series of policies including Staff Recruitment and Employment Management Standards and Employee Code of Conduct, in strict accordance with the Labor Law of the People's Republic of China and other laws, aiming to standardize the employment and management of talents. Upholding the principles of equity, fairness, and transparency, we are determined to eradicate the use of child labor and force labor. We respect individual differences related to nationality, ethnicity, gender, age, religion belief, and cultural background, fight against any forms of discrimination and unfair competition, and commit ourselves to improving equity and inclusiveness in the workplace. During the Reporting Period, no use of child labor or forced labor has occurred in GCL New Energy. The

Company has signed the employment contract with and offered social insurance to 100% of its employees.

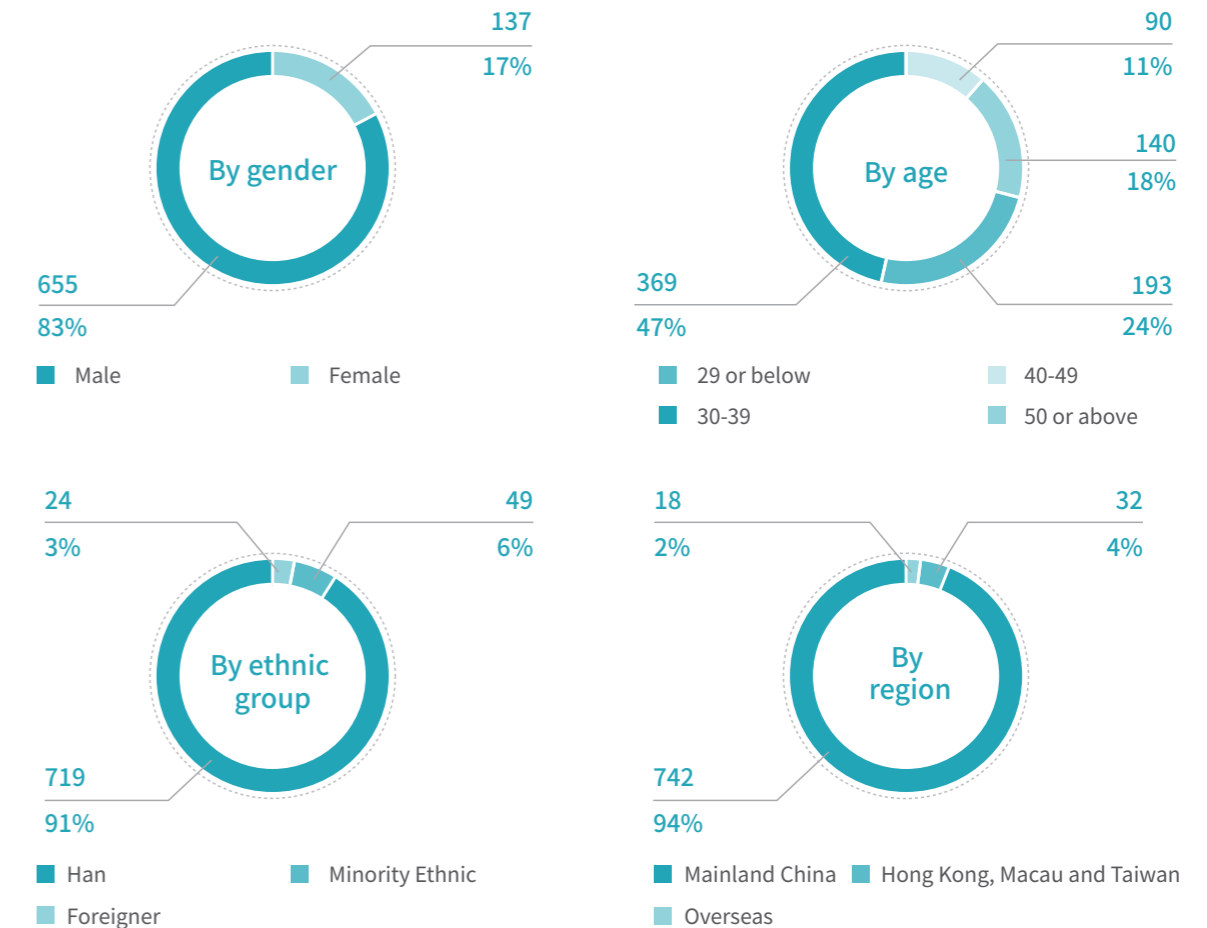
In 2022, as part of the updated corporate strategy, we built an effective talent pool through social recruitment and internal recruitment to fuel the Company's growth. Every professional is cherished here. Since GCL Group operates in different fields and industries, we provide a diverse range of career options for outstanding individuals. Under the "two-way matching" framework, we match candidates to their right roles based on the demands of positions and personal strengths, thus achieving high employee retention rates.

Case | Campus Recruitment and University-Industry Cooperation

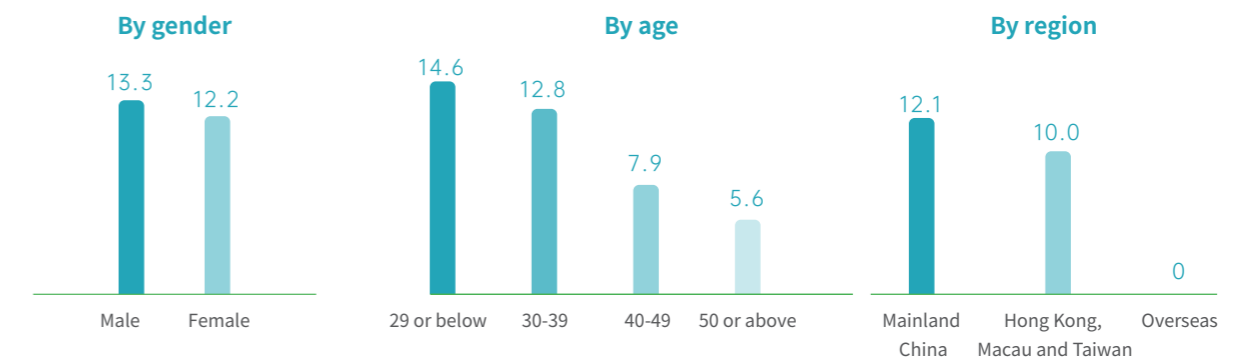
In 2022, Operation Technology Company held information sessions at colleges and universities such as Wuhan Electric Power Technical College and Hunan Polytechnic of Water Resources and Electric Power, negotiating details of university-industry cooperation, educating students on new energy, and attracting the right talent; its campus recruitment efforts resulted in the submission of over 100 resumes.

As of 31 December 2022, a total number of 792 employees are working with us around the world, all of whom are formal employees.

Number/Percentage of Employees by Gender, Age, Ethnic Group, and Region (unit: in person, %):



Employee turnover rate (unit: %):



Compensation and Benefits

GCL New Energy has developed a series of compensation standards including Salary Management Standards and Employee Benefits Management Standards, in strict accordance with the Social Insurance Law of the People's Republic of China and other laws in places where we operate, striving to improve our compensation system. We have constructed a competitive compensation system that is aligned to the conditions of a specific industry and region. Our employees enjoy the five social insurances and one housing fund, paid leave, as well as a diverse range of benefits such as corporate benefits and non-cash benefits. We are committed to giving full consideration to all employees in all respects.

Table: GCL New Energy's Employee Benefit Structure

Statutory benefits	Corporate benefits	Non-cash benefits
<ul style="list-style-type: none"> • Five social insurances and one housing provident fund • Paid leave 	<ul style="list-style-type: none"> • Meal allowance and high temperature subsidy • Festival allowance • Special day allowance • Communication allowance • Transportation allowance • Rental/accommodation allowance • Plateau allowance • Construction site allowance • Night shift allowance • Seniority allowance, etc. 	<ul style="list-style-type: none"> • Supplementary commercial insurance (including critical illness insurance and commercial health insurance) • Onboarding physical examination/annual regular health checkup examination • Employee training

Case | School Placement for Employees' Children

We have entered into strategic partnerships with several kindergartens and primary and middle schools in Suzhou Industrial Park, to place employees' children into appropriate schools. By the end of 2022, 10 children of our employees have been enrolled.

Communication Enhancement

Business growth relies on the intelligence and effort of every single employee. We respect the opinions of our employees, with multiple channels and platforms for gathering employee feedback, which contributes to their sense of belonging.



"Forging Ahead with Solidarity"— In October 2022, GCL New Energy organized a celebration party for senior employees who have been with the Company for over 20 years.



New Year Team Meeting at Operation Technology Company— The general manager and department managers outlined new strategical goals and collected advice from attendees. The Company has built effective channels of communication and a positive environment to maximize employee voice, which enhances our workforce's concentration and cohesiveness.

DEVELOPMENT PLATFORM CONSTRUCTION

Talent is the cornerstone for a company's future. We are committed to developing clear career paths and improving our system of talent cultivation and appraisal, striving to catalyze employee growth and grow with our employees.

Career Paths

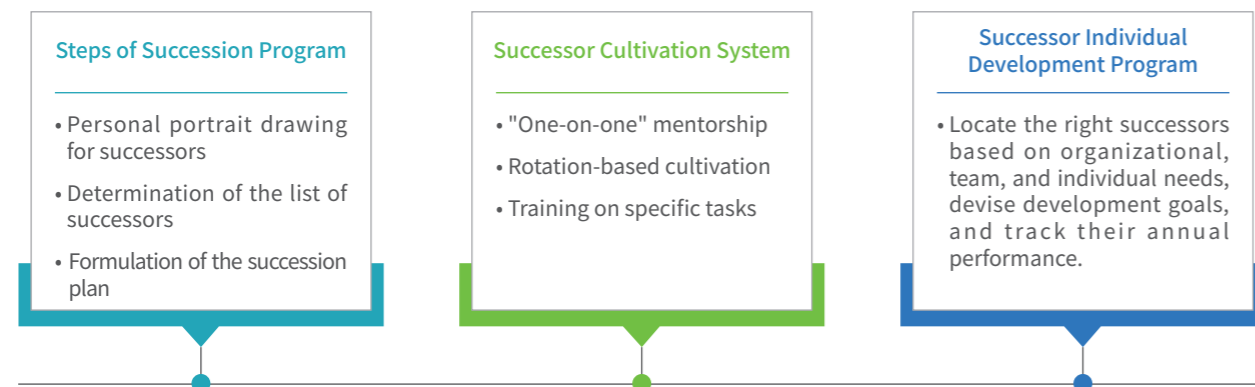
GCL New Energy has been implementing the dual-path rank management system, namely, encouraging career advancement in both management and professional positions, which expands the possibilities for moving up, enables employees to play to their strengths, provides more fertile soil for employee development, and strengthens team dynamics.

We constantly align the rank system with our business goals. During the Reporting Period, we experimented with the new "professional and technical competency appraisal" system and constructed the four-dimension rank system, including the management sequence (M), professional sequence (P), technical sequence (T), and skill sequence (O). According to the new system, the very top rank in the P or T sequence is equivalent to the president. This lengthens the career development path for professional employees, shows greater respect for professional employees and teams, and recognizes their contributions, thus laying a solid foundation for building a high-calibre professional and technical talents. At present, the initial appraisal has been completed in Operation Technology Company.

Talent Reservoir

We ensure our talent reservoir through continued efforts, aiming to improve the comprehensive qualities of employees, build clear career paths, and support our sustainable success with strong human capital. Guided by the Talent Reservoir Construction and Management Standards, we clearly define positions related to the reserve of talent, as well as the mechanisms for talent selection, training, promotion and screening to facilitate employee development and realized shared growth between the Company and its employees.

During the Reporting Period, Operation Technology Company has implemented the succession program, which prepares successors for key technical and management posts. According to their readiness levels, potential successors are divided into three types: RN, R1 and RF (RN indicates employees who are already ready for target posts, and the other two refer to those who will be ready upon 1-3 years' training). Based on the successor cultivation system and successors' individual development program, training and assessment activities are delivered periodically.



Training Support

With a multilayered, targeted and inclusive staff training system, GCL New Energy works to meet employees' developmental needs and empower them to achieve their development goals. Meanwhile, every business change is accompanied by employee training. Utilizing internal and external resources, we develop the annual training plan and provide financial support for training sessions to ensure employee growth. Thanks to the rich resources offered by GCL University, our employees have access to training courses they are in need of. Adhering to the principle of "Training for Everyone", the Company runs the credit management system, which links credits obtained from training with career development. All employees are required to earn a certain number of credits that serve as a criterion of annual performance appraisal, as a means to ensure the effectiveness of training.

Division of Training Programs

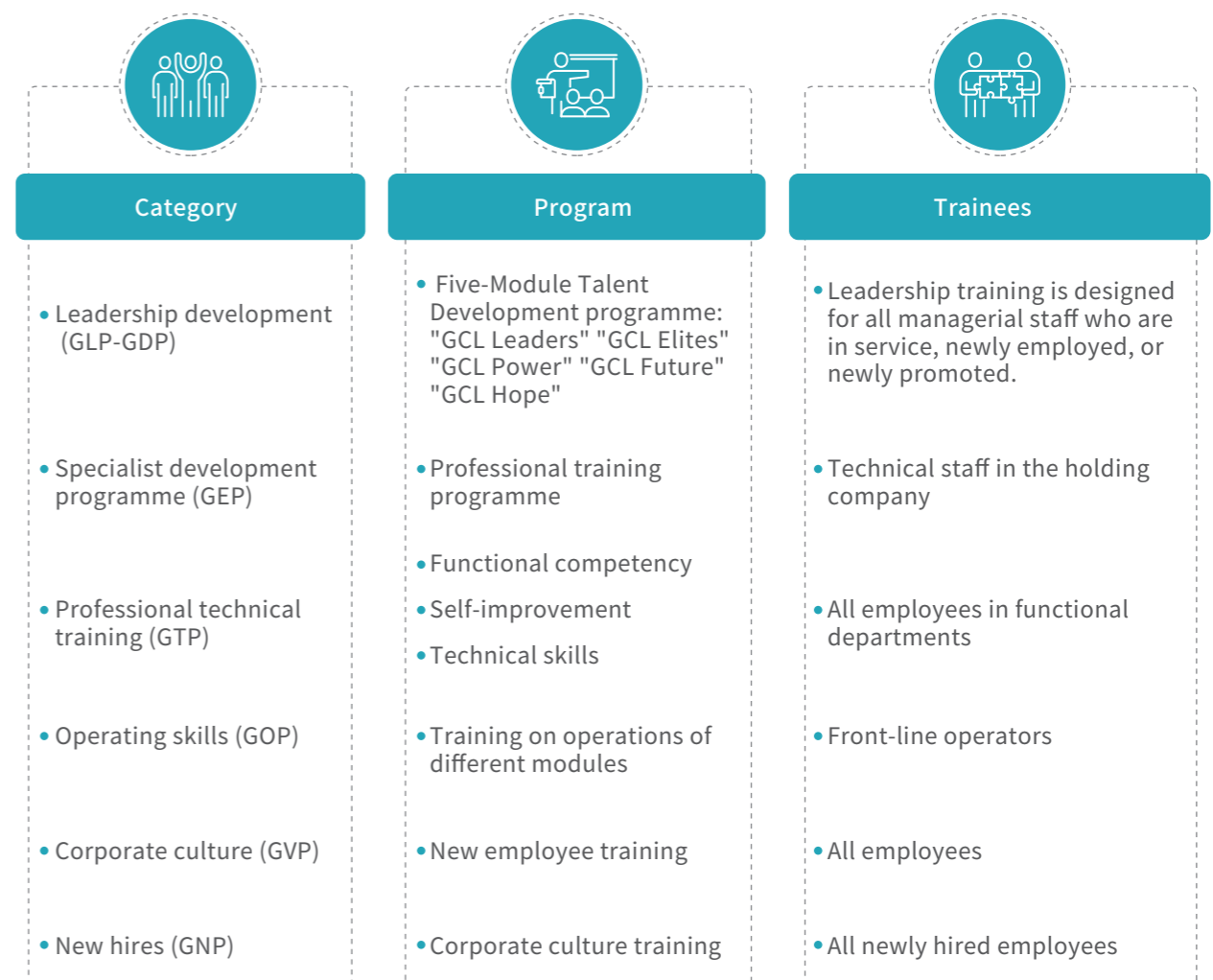




Photo: Employees participated in GCL Group's GCL corporate culture mentor training camp



Photo: Leadership Program (DDI) Lecturer Certification



Photo: "GCL Hope" Successor Class



Photo: "GCL Future" Successor Class



Photo: "GCL Power" Successor Class



Photo: "GCL Elites" Successor Class

In addition to the training system and resources constructed by the head office, we encourage the training planning in various business modules to reinforce regular training and facilitate knowledge and experience sharing. For example, our Operation Technology Company completed 191 training sessions in 2022, covering professional skills, work ethic, corporate culture, etc. The training efforts have led to significant improvements in team efficiency and employee professionalism.

During the Reporting Period, GCL New Energy trained a total number of 35,420 employees, with 26,800 hours devoted to training (33.84 hours per employee) and every single employee included (100% coverage).

Training completed by employees

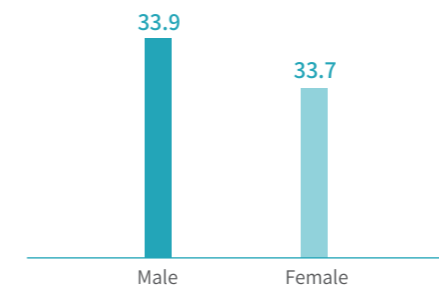
35,420

Training hours in total

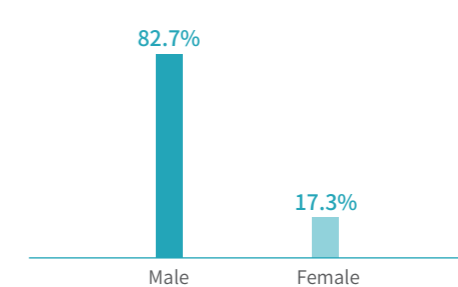
26,800

Average Annual Training Hours	Classification	Unit	2021	2022
By gender	Male	Hour	27.5	33.9
	Female	Hour	22.6	33.7
By rank	Senior Management	Hour	13.4	13.2
	Middle Management & Engineers	Hour	21.5	20.1
	Ordinary & Technical staff	Hour	34.6	35.5

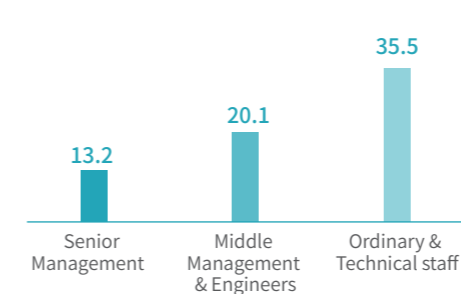
Average Annual Training Hours by Gender



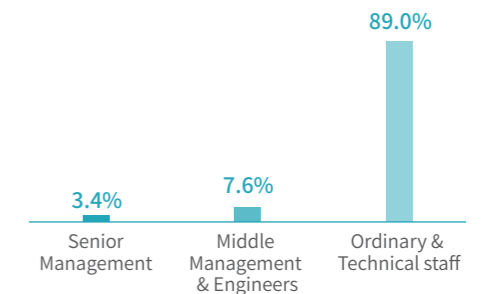
Annual Training Proportion by Gender



Average Training Hours by Rank



Average Training Proportion by Rank



CARING FOR EMPLOYEES

GCL New Energy practices its core value of "Company as Family", fostering corporate culture, caring for its staff practically, and supporting employees in need. We endeavor to build a warm family to which every single employee feels connected.

A Wide Range of Activities

We offer a variety of engaging activities to create a warm and joyful work environment. We believe in work-life balance and make continued efforts to improve our employees' wellbeing and sense of belonging.



"New Year Greetings"— Invited a calligrapher from Suzhou Industrial Park's Public Culture Center to write new year scrolls and the Chinese character "Fu" for employees.



"Dragon Boat Festival Celebration"— Organized employees to DIY scented sachets, promoting the art of scented sachets and Chinese traditional culture.



"Fitness For All" Campaign— We assembled sports teams on basketball, badminton, etc. and jointly-held sports events with Suzhou-based companies in different industries, such as finance, electricity, publicity, and internet. The number of internal and external sports events totaled over 100.



Employee Care

Caring for Female Employees

GCL New Energy protects the rights of female employees in accordance with the law, providing maternity leave and breastfeeding leave to female workers and paternity leave to male workers. Meanwhile, festival benefits and childbirth allowance are offered to female workers. We encourage female employees to return to their job after maternity leave and promise their career development opportunities and salaries will not be affected in any way.

Indicator	Gender	Unit	2021	2022
Number of employees taking maternity/paternity leave	Male	ppl	2	21
	Female	ppl	18	6
Number/percentage of employees returning to work after maternity/paternity leave	Male	ppl%	2/100%	21/100%
	Female	ppl/%	18/100%	6/100%
Number/percentage of employees returning from maternity/paternity leave and continuing to work for the Group for at least 12 months	Male	ppl/%	2/100%	21/100%
	Female	ppl/%	18/100%	6/100%

Employee Supporting

We visit employees who are financially strained or suffering from an illness, and offer financial assistance through the "GCL Employee Care Fund". The fund was set up in January 2016 by GCL Sun Charity Foundation, dedicated to supporting GCL employees in poverty due to illnesses or disasters. Under the supervision of GCL Fund Management Committee, the foundation manages the money raised with transparency and efficiency. During the Reporting Period, a total of 11 employees in the Group have received financial assistance from the foundation.

Case | "To the Sparkling YOU"— International Women's Day Theme Event



Photo: GCL women's tour (headquarters)



Photo: Meihua Mountain Outing (Operation Technology Company)



Photo: Flowers and chocolates for "Half the Sky" (South China Office, Operation Technology Company)

HEALTH AND SAFETY GUARANTEE

An essential component of our safe operation is to ensure the occupational safety and health of our employees. Based on the Work Safety Law of PRC, and Occupational Disease Prevention and Control Act of PRC, our Occupational Health Management Standards were devised and certified by a third party. Meanwhile, we have adopted a series of measures, such as regular physical check-ups, identifying and warning employees against potential occupational hazards, providing protective work clothing, and educating employees on occupational health, striving to prevent occupational hazards, raise employees' awareness of self-protection, and ensure their safety and health. During the Reporting Period, our occupational health file coverage has reached 100%. As of 31 December 2022, no case of workplace injury or fatality has occurred in GCL New Energy in three years. During the Reporting Period, zero days were lost due to work injury.



Case | "Occupational Disease Prevention and Control Act" Education Campaign

From April 25, 2022 to May 1, 2022, GCL New Energy integrated online and offline activities to educate all employees on the Occupational Disease Prevention and Control Act, popularizing knowledge of occupational disease prevention and control, improving employee awareness and ability of self-protection, and ensuring their rights to occupational health.

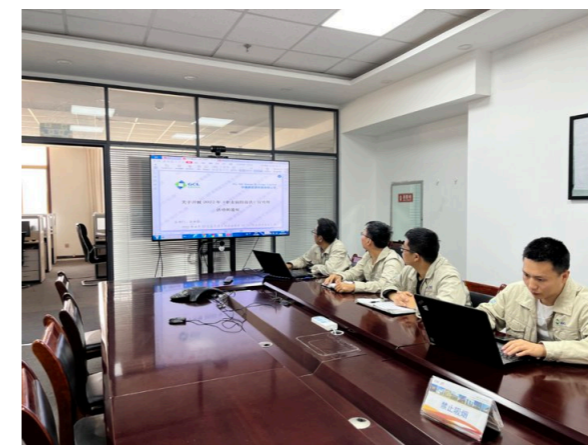


Photo: "Occupational Disease Prevention and Control Act" Education



Photo: Occupational Health Protection Signature at the Power Station



Photo: Operation Technology Company obtained ISO 45001 occupational health and safety management system certification.

INTEGRATING INTO SOCIAL DEVELOPMENT

GCL New Energy focuses on being compatible with and complementary to the society. We actively participate in community charity work, give play to our strengths to support education and support the development of new energy education. We participate in industry exchanges and integrate and share industry experience to create a good situation of mutual complementarity and win-win cooperation, and promote the high-quality development of the industry. During the Reporting Period, the Group made direct charitable donations of RMB98,600 and donated new energy science popularisation demonstration models worth approximately RMB600,000 to some primary schools.

SUPPORTING EDUCATION

On 7 May 2022, the Ministry of Education released the Work Plan on Strengthening the Construction of a Higher Education Talent Cultivation System for Carbon Peak and Carbon Neutrality, which states that achieving carbon peak and carbon neutrality is an extensive and profound systemic change in the economy and society, which has put forward new requirements for strengthening the cultivation of various talents in the new era. It proposed to further strengthen the talent training in the photovoltaic, wind power and other fields. GCL New Energy has actively participated in the new energy education by taking multiple measures to help cultivate and develop talents in the new energy industry via multiple channels.

Supporting "5G + New Energy" Education

During the Reporting Period, GCL New Energy cooperated with several schools under the SIP Education Bureau, such as Jinji Lake School and Xingzhou Primary School, to participate in the customisation of the "5G+new energy" curriculum for education and science popularisation and education programmes concerning energy transition in the "dual carbon" era, such as an activity about wind power, photovoltaic power, stored energy and hydrogen energy for young people, so as to expose young people to professional and authoritative new energy knowledge and contribute to the high-quality development of regional education.



GCL New Energy, with its profound accumulation in the photovoltaic industry and GCL Group's advantages as a global leader in the new energy industry, offers the most advanced "dual carbon" courses in the new energy industry, and the Future Energy Pavilion acts as a demonstration base for education and science popularisation.

Case | GCL New Energy cooperates with Xingzhou Primary School in SIP to launch STEM innovative practice project

The Group cooperated with Xingzhou Primary School to carry out an innovative practice project on science, technology, engineering, and mathematics (STEM). It participated in the courseware building, donated moulds for new energy application scenarios, and directly taught students, etc. to increase their understanding of the principles of new energy such as solar energy and wind energy, as well as the application scenarios. Meanwhile, due to the implementation of the project, Xingzhou Primary School was honoured as an advanced collective of "5G+smart education" application.



Photo: "5G+new energy" courseware built with the participation of GCL New Energy



Photo: Employees teaching students



Photo: New energy science popularisation demonstration model donated to Xingzhou Primary School

Industry-University-Research Integration Focuses on Development of Young People

With focus on core competitiveness, GCL New Energy has established long-term cooperative relationships with Renmin University of China, Nanjing Tech University, Soochow University and other higher educational institutions to promote the in-depth integration of industry, academia and research through school-enterprise cooperation, targeted cultivation, and the construction of training bases, among others. Moreover, we have established a stable exclusive channel for building a talent system based on our human resources needs and teamed up with higher educational institutions to cultivate a number of key staffers for GCL's industrial development, covering management, R&D, science & technology, production, culture, etc.

Case | GCL New Energy and Renmin University of China carry out in-depth integration of industry, academia and research

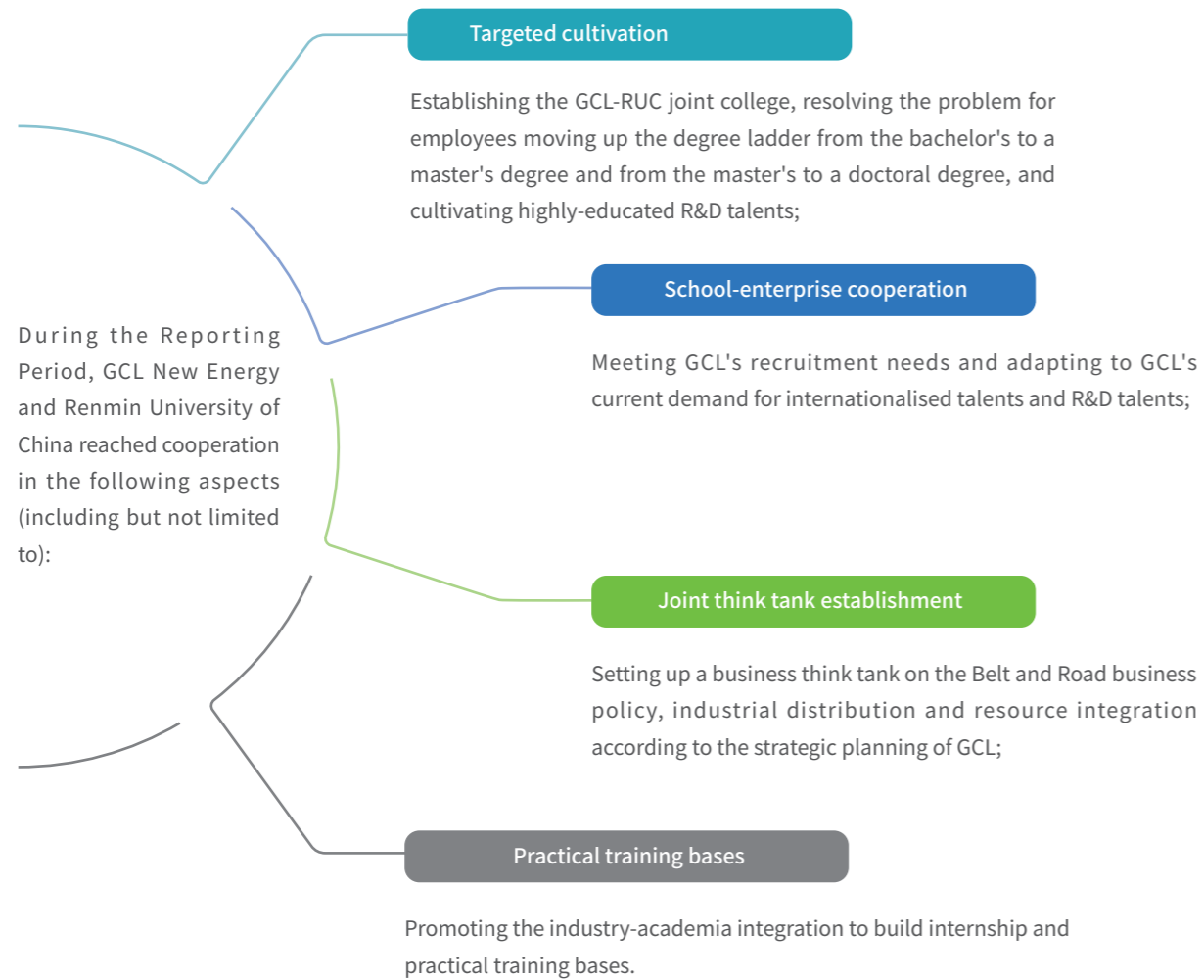


Photo: Communication with Silk Road School of Renmin University of China at Suzhou campus



Photo: Communication with Nanjing Tech University.

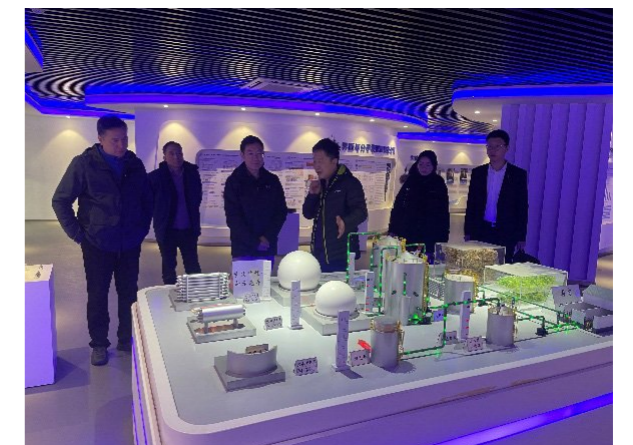


Photo: Technical exchange with School of Energy, Soochow University

CONTRIBUTION TO INDUSTRY DEVELOPMENT

GCL New Energy adheres to openness, sharing and win-win mentality, keeps abreast of the development trends of the industry, and actively participates in industry exchanges and communication. It participates in project research and industry standard setting, and shares and discusses development experience, aiming to promote sustainable development of the industry.

Participation in Industry Exchanges

Case | Operation Technology Company showcases core competitiveness at the International Standardization (Chilin) Forum 2022

In August 2022, Operation Technology Company made a wonderful appearance at the International Standardization (Chilin) Forum 2022 and the inauguration ceremony of IEC International Standards Promotion Center (Nanjing), showcasing its competitiveness in qualification, big data analysis, intelligent operation and maintenance, repair and testing, and integrated management, among others.



Case | Operation Technology Company attends 6th New Energy Power Generation Operation and Post-Service Seminar

In July 2022, Mr. Zheng Wenge, Chief Technology Officer of Operation Technology Company, delivered a speech on Intelligent Analysis and Application of Solar Farm Operation Data at the seminar, proposing the "theory of relativity" of PV production data analysis and describing the relative data analysis in GCL New Energy's operations management, which gathers data on relative time and space, evaluates the dynamic power generation through comprehensive factors, improves accurate analysis and adjustment of power generation equipment, and keeps the equipment system running at its best to improve quality and efficiency of digital operation.



Participation in Industry Research



Photo: On 29 December 2022, China Electricity Council released the list of winners of 2022 China Power Innovation Award. The Company won the second prize of 2022 China Power Innovation Award for its Research on Integrated Energy Operation Model based on Industrial Internet of Things + Digitisation.

APPENDIX

List of Significant Laws, Regulations and Internal Policies to Follow

Responses	Laws and regulations	Internal policies
Corporate Governance Business Ethics	Company Law of the People's Republic of China	Anti-corruption Regulation
	General Principles of the Civil Law of the People's Republic of China	Management Standards for Anti-Fraud and Whistleblowing
	Criminal Law of the People's Republic of China	GCL Ten Prohibitions
	Anti-unfair Competition Law of the People's Republic of China	Anti-commercial Bribery Agreement
Environmental: Energy Use	Renewable Energy Law of the People's Republic of China	Environmental Protection Management Standards
	Energy Conservation Law of the People's Republic of China	
	Water Law of the People's Republic of China	
	Electric Power Law of the People's Republic of China	
Environmental: Environmental Protection	Regulations on the Supply and Use of Electricity of the People's Republic of China	Environmental Protection Management Standards
	Environmental Protection Law of the People's Republic of China	
	Environmental Impact Assessment Law of the People's Republic of China	
	Environmental Protection Tax Law of the People's Republic of China	
	Measures on Environmental Administrative Penalties of the People's Republic of China	
Measures on Administration of Environmental Protection Standards of the People's Republic of China		
Law of the People's Republic of China on Prevention and Control of Water Pollution		

Responses	Laws and regulations	Internal policies	
Social: Remuneration, Employment, and Training	Labour Law of the People's Republic of China	Code of Conduct for Employees	
	Labour Contract Law of the People's Republic of China	Management Standards on Staff Recruitment and Employment	
	Law on the Protection of Minors of the People's Republic of China	Welfare Management Standards	
	Provisions on the Prohibition of Using Child Labour	Remuneration Management Standards	
Social: Health and Safety	Law on Prevention and Treatment of Occupational Diseases of the People's Republic of China	Employment Ordinance	
		Management Standards on Talent Echelon Construction	
		Training Management Standards	
		Employee Performance Management Standards	
Social: Supply Chain Management	Law of the People's Republic of China on Bid Invitation and Bidding	Measures on Evaluation for Professional Titles and Recruitment of Engineering Technicians (Trial)	
		Regulations on Human Resources Administration	
		EHS Emergency Management Standards	
Social: Product Responsibility	Production Safety Law of the People's Republic of China	EHS Accident Investigation Management Standards	
		Cybersecurity Law of the People's Republic of China	EHS Reward and Punishment Management Standards
		Personal Information Protection Law of the People's Republic of China	EHS Management Standards
		Trademark Law of the People's Republic of China	Emergency Plan for Production Safety Incidents
		Patent Law of the People's Republic of China	Supplier Management Standards
Social: Product Responsibility	Production Safety Law of the People's Republic of China	Operation Safety Management Standards	
		Management Standards on Reliability of Equipment of Power Stations	
		Management Standards on Overhaul of Equipment of Power Stations	
		Information Security Management Standards	
		Management Standards on Data Security of Management Platforms	
		Management Standards on Incident Handling of Management Platforms	
		Information Security Management Manual	
Site Disposal Scheme for Photovoltaic Power Stations			
Management Standards on Production Preparation of Photovoltaic Power Stations			
Management Standards on Equipment of Photovoltaic Power Stations			
Management Standards on Training of Operators of Photovoltaic Power Stations			

HKEX ESG Reporting Guide Content Index

Subject Areas, Aspects, General Disclosures and KPIs		Corresponding Sections
A. Environmental		
Aspect A1: Emissions	<p>General Disclosure</p> <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 air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.</p> <p>Note: Air emissions include NOx, SOx, and other pollutants regulated under national laws and regulations.</p> <p>Greenhouse gases include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride.</p> <p>Hazardous wastes are those defined by national regulations.</p>	Practicing Green and Low Carbon
	KPI A1.1 The types of emissions and respective emissions data.	Management of Emissions and Discharges
	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).	Management of Emissions and Discharges
	KPI A1.3 Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Management of Emissions and Discharges
	KPI A1.4 Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Management of Emissions and Discharges
	KPI A1.5 Description of emission target(s) set and steps taken to achieve them.	Committed to Green Operation
	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.	Management of Emissions and Discharges

Subject Areas, Aspects, General Disclosures and KPIs		Corresponding Sections
Aspect A2: Use of Resources	<p>General Disclosure</p> <p>Policies on the efficient use of resources, including energy, water and other raw materials.</p> <p>Note: Resources may be used in production, in storage, transportation, in buildings, electronic equipment, etc.</p>	Committed to Green Operation
	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).	Resource and Energy Consumption
	KPI A2.2 Water consumption in total and intensity (e.g. per unit of production volume, per facility).	Resource and Energy Consumption
	KPI A2.3 Description of energy use efficiency target(s) set and steps taken to achieve them.	Committed to Green Operation
	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.	Committed to Green Operation
KPI A2.5 Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	N/A	
Aspect A3: The Environment and Natural Resources	<p>General Disclosure</p> <p>Policies on minimising the issuer's significant impacts on the environment and natural resources.</p>	Committed to Green Operation
	KPI A3.1 Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Committed to Green Operation
Aspect A4: Climate Change	<p>General Disclosure</p> <p>Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.</p>	Tackling 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.	Tackling Climate Change

Subject Areas, Aspects, General Disclosures and KPIs		Corresponding Sections
B. Social		
Employment and Labour Practices		
Aspect B1: Employment	<p>General Disclosure</p> <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</p> <p>relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.</p>	Protecting Employee Rights and Interests
	KPI B1.1 Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region.	Protecting Employee Rights and Interests
	KPI B1.2 Employee turnover rate by gender, age group and geographical region.	Protecting Employee Rights and Interests
	<p>General Disclosure</p> <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</p> <p>relating to providing a safe working environment and protecting employees from occupational hazards.</p>	Ensuring Health and Safety
Aspect B2: 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.	Ensuring Health and Safety
	KPI B2.2 Lost days due to work injury.	Ensuring Health and Safety
	KPI B2.3 Description of occupational health and safety measures adopted, and how they are implemented and monitored.	Ensuring Health and Safety

Subject Areas, Aspects, General Disclosures and KPIs		Corresponding Sections
Aspect B3: Development and Training	<p>General Disclosure</p> <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>	Building a Platform for Development
	KPI B3.1 The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	Building a Platform for Development
	KPI B3.2 The average training hours completed per employee by gender and employee category.	Building a Platform for Development
	<p>General Disclosure</p> <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</p> <p>relating to preventing child and forced labour.</p>	Protecting Employee Rights and Interests
Aspect B4: Labour Standards	KPI B4.1 Description of measures to review employment practices to avoid child and forced labour.	Protecting Employee Rights and Interests
	KPI B4.2 Description of steps taken to eliminate such practices when discovered.	Protecting Employee Rights and Interests
Aspect B5: Supply Chain Management	<p>General Disclosure</p> <p>Policies on managing environmental and social risks of the supply chain.</p>	Supply Chain Management
	KPI B5.1 Number of suppliers by geographical region.	Supply Chain Management
	KPI B5.2 Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	Supply Chain Management
	KPI B5.3 Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	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.	Supply Chain Management

Subject Areas, Aspects, General Disclosures and KPIs		Corresponding Sections
Aspect B6: Product Responsibility	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 health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	Excellent Services for Clients
	KPI B6.1 Percentage of total products sold or shipped subject to recalls for safety and health reasons.	N/A
	KPI B6.2 Number of products and service related complaints received and how they are dealt with.	Excellent Services for Clients
	KPI B6.3 Description of practices relating to observing and protecting intellectual property rights.	Business Ethics
	KPI B6.4 Description of quality assurance process and recall procedures.	N/A
	KPI B6.5 Description of consumer data protection and privacy policies, and how they are implemented and monitored.	System and Information Security
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.	Business Ethics
	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.	Business Ethics
	KPI B7.2 Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	Business Ethics
	KPI B7.3 Description of anti-corruption training provided to directors and staff.	Business Ethics
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.	Integrating into Social Development
	KPI B8.1 Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	Integrating into Social Development
	KPI B8.2 Resources contributed (e.g. money or time) to the focus area.	Integrating into Social Development

GRI Content Index

Corresponding Chapter	GRI Standards Index	
About the Report	GRI 2-2/GRI 2-3	
Statement from the Board	GRI 2-14/GRI 2-22	
Confidence Derives from Steady Perseverance		
Corporate Governance	Risk Management	GRI 2-24
	Business Ethics	GRI 205-2/ GRI 205-3
	Management Optimisation	GRI 2-24
Investor Relations	Information Disclosure	GRI 2-29
	Investor Communication	GRI 2-29
	Party Leads the Development	-
	ESG Governance	GRI 2-29/GRI 3-1/GRI 3-2
Perseverance Derives from Mission and Dream		
Standing Fast to PV Business	"One-stop" Service Capability	GRI 2-6
	Leading Competitive Edge	GRI 2-6
	Building a Strong Security Line	GRI 416-1
	Qualification and Recognition	GRI 2-6
Practicing Green and Low Carbon	Tackling Climate Change	GRI 201-2
	Committed to Green Operation	GRI 302-1/GRI 302-3/GRI 303-5/GRI 305-1/GRI 305-2/GRI 305-4/GRI 306-2/GRI 306-4
	Promoting a Green Workplace	-
Promoting Green Living	-	
Focusing on Development Opportunities	GRI 203-1/ GRI 203-2	
Dedication Derives from Responsibility		
Pursuing Win-Win Cooperation	Excellent Services for Clients	GRI 418
	System and Information Security	GRI 418
	Supply Chain Management	GRI 414-2
Shared Growth with Employees	Protecting Employee Rights and Interests	GRI 2-7/GRI 401-1/GRI 405-1/GRI 406-1/GRI 409-1
	Building a Platform for Development	GRI 404-1/GRI 404-2
	Caring for Employees	GRI 401-2
Integrating into Social Development	Ensuring Health and Safety	GRI 403-1/GRI 403-2/ GRI 403-3
	Supporting Education	GRI 413-1
Contribution to Industry Development	GRI 203-2	



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