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ENVIRONMENTAL,  
SOCIAL, AND CORPORATE  
GOVERNANCE REPORT

GCL System Integration Technology Co., Ltd.,



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## Board Statement

Facing the complex and volatile global environment in 2022, GCL SI remained committed to continuously improving the human living environment with collective efforts. We adhere to integrating environmental, social and governance responsibilities into daily operation and development of the company, to better cope with extreme weather, global warming, climate crisis, energy crisis and other issues and ultimately achieve high-quality sustainable development. Attaching importance to ESG, we implemented a series of ESG actions in 2022 to fulfill the global consensus of green and low carbon development.

### Leading green innovation and protecting ecological environment.

Driven by the carbon peaking and carbon neutrality goals, GCL SI regards "Focusing On Green Development and Continuously Improving Human Living Environment" as its mission. We are committed to leading technological innovation, achieving TOPCon technology upgrades, and promoting development of the photovoltaic industry. GCL SI has developed a series of products such as Xinfuding to promote green and low-carbon buildings. GCL SI has developed immersible and highly reliable sea surface floating modules to promote the world's first integrated project of Achieving Power Generation in the Same Field through wind power and photovoltaic power in deep sea to safeguard the blue ocean.

### Collaborating with partners and shouldering social

GCL SI continuously addresses the expectations and requirements of stakeholders and actively shoulders social responsibility. We respect and safeguard legitimate rights and interests of employees, and established a fair, diverse and inclusive working environment. GCL SI has established strategic cooperation with upstream and downstream of the value chain, to pursue mutual benefit and progress in the industry. GCL SI actively carries out social welfare activities, and vigorously supports rural revitalization, with the aim of building a green and sustainable society.

### Focusing on quality improvement and jointly stressing quality assurance.

GCL SI adheres to prioritizing the quality of products and services, and there was no product recall in 2022. The company focuses on technological innovation and development, and continuously increases R&D investment. GCL SI pays attention to customer needs and feedback, continuously improves quality management, and achieved customer satisfaction of 99%. GCL SI established a comprehensive mechanism for supplier admission, evaluation and elimination, and created a responsible supply chain.

### Optimizing corporate governance and strengthening governance responsibilities.

GCL SI is committed to improving corporate management efficiency and safeguarding legitimate rights and interests of shareholders. We implement measures including diversified board of directors, transparent information disclosure and investor relationship management to enhance the foundation of enterprise development. We emphasize management of compliant operations and business ethics, and continuously improve corporate governance. We deeply implement the spirit of the 20th National Congress of the Communist Party of China and adhere to the guidance of high-quality party building to ensure a sustainable growth of GCL SI.

ESG governance has a long and arduous journey for GCL SI, but we have been striving hard on the way forward. In 2022, GCL SI has successfully achieved several major breakthroughs and transformations. GCL SI Funing Branch was awarded the title of "National Green Factory"; and in addition, the company was awarded the "2022 China Good Photovoltaic Brand and Annual BIPV Technology Breakthrough Prize".

The Board of Directors is the highest decision-making body and takes full responsibility in GCL SI's ESG governance. The board of directors guides and formulates ESG vision, goals, strategies and structure, incorporates ESG risks into risk management and internal control for effective management. The group has established a management structure consisting of the Board, the management team and an execution working group for an effective ESG governance.

In the future, GCL SI will continue to collaborate with partners to achieve sustainable development, contribute to the realization of carbon peaking and carbon neutrality goals and shape a sustainable future for generations to come.



## About GCL SI

### About US

#### Company Overview

GCL System Integration Technology Co., Ltd.(002506. SZ) strives to be the world's leading integrator of comprehensive energy systems. The company closely follows the new stage of development in the 14th Five Year Plan and the new opportunities of the "Double Carbon Goals", actively seizes the historical opportunity period, and provides customers with high-quality clean energy one-stop services following the strategic guidance of technological, digital and green GSL SI.

We are primarily engaged in the R&D, design, production, sales, and one-stop services of high-efficiency batteries, modules, energy storage systems, energy engineering, and integrated energy systems. The company has established a number of manufacturing bases including those in Hefei, Wuhu, Yancheng, Xuzhou, and global sales offices. We adhere to the concept of technology leading and innovation driven, and continuously adopt the Technology roadmap of high-quality, efficient and differentiated products. GCL SI relies on the brand influence and resource integration ability to actively explore the global market, strengthen overseas channels and strategic cooperation between central and state-owned enterprises,

expand household, industrial and commercial distributed development business and equipment distribution network, and enhance core competitiveness and comprehensive strength. At the same time, the company actively layout the energy storage industry, independently develop energy storage BMS and EMS modules and control technologies, launch household energy storage systems and industrial and commercial energy storage systems, and connect the 5G comprehensive energy life-cycle management from raw materials to energy management.

As a global one-stop intelligent integrated energy system integrator, GCL SI continuously spared no effort to invest in product R&D in order to improve the efficiency of batteries and modules, as well as the professional level of system integration. It continues to provide customers with diversified comprehensive intelligent energy system integration solutions and high-quality and efficient services. The company always adheres to core concept of "bringing green energy into life" of GCL Group, dedicating sustainable green energy to ensure a cleaner and more beautiful environment for all.





## Key Milestones

**In 1990**

GCL Group was established.

**In 1996**

The establishment of Taicang GCL Zhifu Thermal Power Co., Ltd. marked the first strategic transformation of GCL Group.

**In 2006**

The establishment of Jiangsu Zhongneng Photovoltaic Technology Development Co., Ltd. was the second strategic transformation of GCL Group.

GCL-Poly Energy Holdings Co., Ltd. was established in Hong Kong.

**In 2007**

GCL-Poly Energy Holdings Co., Ltd. was successfully listed on the main board of the Stock Exchange of Hong Kong. It is the first publicly traded company under GCL Group.

GCL Group introduced the fourth generation brand identity and released *GCL Corporate Identity System Manual*.

**In 2013**

GCL-Poly Natural Gas Group Holdings Co., Ltd. has signed a petroleum product sharing agreement with the Ethiopian Ministry of Mines, officially launching overseas natural gas projects. From then on, the group began its third strategic transformation and officially stepped into its system integration business.

**In 2014**

GCL New Energy Holdings Co., Ltd. was listed on the main board of the Stock Exchange of Hong Kong. It is the second listed company under GCL Group.

GCL invested, merged and acquired Jiangsu Dongsheng Photovoltaic Technology Co., Ltd. and renamed it as "GCL-Jurong Integrated Technology Co., Ltd.". After partnering with the Chinese central State-owned enterprise-China Great Wall Asset Management Co. Ltd, GCL decided to take over \* ST Chaori and restructured and renamed it as "GCL System Integration Technology Co., Ltd.".

**In 2015**

GCL SI's stock has been approved to resume trading under the stock code 002506, with a stock price soaring up to 986% on the first day. Through significant asset restructuring, the overall production capacity has rapidly increased, reaching 3.7 GW by the end of 2015. The component shipment of that year ranked among the top 10 globally, and GCL SI quickly establishing a leading position in the industry.

**In 2016**

GCL SI has been ranked as a first-tier photovoltaic module manufacturer by Bloomberg New Energy Finance, and has been awarded multiple industry honors.

In the same year, GCL SI accelerated its globalization efforts by establishing branches in Japan, India, North America, Australia, Thailand, the Middle East, South Africa, and North Africa.

**In 2017**

The energy engineering business achieved leapfrog growth and won good reputation by taking photovoltaic poverty alleviation and demonstration projects as a breakthrough and the excellent quality of the work

GCL SI continuously promoted technological innovation, to apply the black silicon PERC high-efficiency batteries, MBB high-efficiency battery modules, high-efficiency dual chip modules, double-sided double-glass modules, array modular system integration, and high-efficiency tracking systems into different industries.

Zhangjiagang's "Intelligent Lights-out Factory" was founded, establishing a benchmark for intelligent manufacturing in the industry.

**In 2022**

GCL SI and the People's Government of Wanzhi District, Wuhu City reached a cooperation intention on investing in the construction of 20GW TOPCon (Tunnel Oxide Passivated Contact) photovoltaic battery and supporting industry production base project.

The first phase of Hefei GCL Module Base- 15GW project has been fully put into operation.

**In 2021**

GCL SI launched 182mm and 210mm series of large-sized modules, In particular, the 210mm large-sized bi-facial monocrystalline modules have a maximum power of 670W, with significantly low BOS costs, lower levelized cost of energy (LCOE) and high reliability.

**In 2020**

GCLSI continuously implemented the management guideline of "Adjusting Structure, Reducing Liabilities, Preventing Risks and Promoting Reform".

GCL SI signed the investment cooperation agreement with the People's Government of Feidong County, Hefei to invest in the GCL 60GW module and support the industrial base project, firmly promoting the construction of Hefei intelligent manufacturing base, optimizing capacity layout, and effectively reducing the manufacturing cost of photovoltaic modules.

**In 2019**

GCL SI has a strong research and development team and owns 5 high-tech enterprises, 1 national postdoctoral workstation, 1 provincial-level academician expert workstation, 5 provincial-level engineering technology research centers and 1 provincial-level intelligent factory, providing a solid foundation for the company's technological innovation and development.

GCL SI developed differentiated products and promoted upgrading of intelligent manufacturing. Xuzhou Xinyu 3GW High-efficiency Battery Project, Funing 1.2GW Large-Sized Multiple Main Grid Half-battery Project, and Jinzhai 700MW Laminated Tile Project have been successfully put into operation, and the first cell module in the 600MW high-efficiency component project of the Jurong Integration Intelligent Factory has been produced.

**In 2018**

The internationalization strategy proved to be very successful and the overseas business experienced explosive growth, with a year-on-year increase of 102%. The international sales accounts for over 50%, with a global market share of 5% and business presence in more than 40 countries and regions worldwide.

GCL SI partnered with Alibaba Cloud to build the first large-scale customized photovoltaic module workshop for Big data "Cloud Intelligence" platform in the industry, and integrated information technologies such as the Internet and the Internet of Things into the production process of photovoltaic cell modules.



## Corporate Culture

GCL SI integrates green development into its mission and continuously improves the living environment for human beings. The company pursues global development and is committed to becoming a respected new energy enterprise. With the core values of innovation driven and arduous, it strives to become a leader in the industry. GCL SI is committed to innovation, promoting green, low-carbon and circular development, integrating corporate culture with sustainable development, and making unremitting efforts to achieve a sustainable future.



## Social Responsibility Management

### Social Responsibility Management

GCL SI integrates sustainable development management concepts into its business operations while providing innovative products and services. The company has established a top-down ESG management structure to ensure efficient progress of ESG work. The board of directors of the company bears ultimate responsibility for ESG strategy and performance. The strategy committee regularly identifies ESG risks and opportunities of the company, and formulates environmental management strategic policies based on business conditions. The ESG task forces serve as responsible persons in various areas to ensure the efficient implementation and execution of ESG work.



GCL SI ESG Governance Structure

## Stakeholder communication

GCL SI is committed to establishing open, transparent, convenient, and two-way communication channels with stakeholders. We remain attentive and receptive to stakeholders' common concerns, opinions, and feedback, and understand and respond to their views, demands, and expectations on ESG risk issues. In the reporting period, GCL classified the stakeholders into eight groups: staff, customers, investors, suppliers and partners, government and regulatory agencies, media, cooperative institutions (public welfare organizations, scientific research institutions, etc.), communities, and the public based on the characteristics and industry trends.

Stakeholders	Major Expectations	Engagement Channels and Actions
<b>Staff</b>	<ul style="list-style-type: none"> <li>Equal Employment</li> <li>Open communication</li> <li>Protection of rights and interests</li> </ul>	<ul style="list-style-type: none"> <li>Competitive compensation package</li> <li>Training and career progression</li> <li>Rich employee activities</li> </ul>
<b>Customers</b>	<ul style="list-style-type: none"> <li>Product responsibility management</li> <li>R&amp;D and innovation</li> </ul>	<ul style="list-style-type: none"> <li>Trade union/workers' congress</li> <li>Employee training</li> <li>Employee activities</li> </ul>
<b>Investors</b>	<ul style="list-style-type: none"> <li>Customer satisfaction management</li> <li>Quality assurance</li> </ul>	<ul style="list-style-type: none"> <li>Daily operations and interactions</li> <li>Hotline service</li> <li>Satisfaction survey</li> </ul>
<b>Suppliers and Service Providers</b>	<ul style="list-style-type: none"> <li>R&amp;D innovation</li> <li>Transparent information disclosure</li> <li>Investor relations management</li> <li>Composition and operation of the board of directors</li> <li>Risk management Internal control</li> </ul>	<ul style="list-style-type: none"> <li>Shareholders' meeting</li> <li>Information disclosure</li> <li>Press releases and announcements</li> <li>Reasonable profit distribution</li> </ul>
<b>Government and Regulators</b>	<ul style="list-style-type: none"> <li>Supplier rights protection</li> <li>Sustainable development of supply chain</li> </ul>	<ul style="list-style-type: none"> <li>Investor interaction channels</li> <li>Intellectual property management</li> <li>Investor on-site meetings</li> </ul>
<b>Media</b>	<ul style="list-style-type: none"> <li>Supply chain management</li> <li>Win-win cooperation</li> </ul>	<ul style="list-style-type: none"> <li>Supplier assessment</li> <li>Supplier audit</li> <li>Green supply chain</li> </ul>
<b>Partners</b>	<ul style="list-style-type: none"> <li>Waste management</li> <li>Labor relations</li> <li>Product responsibility management</li> <li>Anti-corruption</li> <li>Contribute to society</li> </ul>	<ul style="list-style-type: none"> <li>Institutional review</li> <li>Filings</li> <li>Policy implementation</li> <li>information disclosure</li> <li>Compliance with laws and regulations</li> <li>License application</li> <li>Dealer conference</li> </ul>
<b>Community and the Public</b>	<ul style="list-style-type: none"> <li>Business presentation</li> <li>Industrial collaborative innovation</li> <li>Community contribution and public welfare charity</li> </ul>	<ul style="list-style-type: none"> <li>Press release and announcement</li> <li>Meetings</li> <li>Exhibition</li> <li>Lunch meeting</li> <li>Return banquet</li> <li>Exclusive interviews with management</li> </ul>
	<ul style="list-style-type: none"> <li>Technology and innovation</li> <li>Promotion of industry development</li> <li>Intellectual property right</li> </ul>	<ul style="list-style-type: none"> <li>On-site meetings</li> <li>Industry exhibitions</li> <li>Industry communication</li> </ul>
	<ul style="list-style-type: none"> <li>Environmental protection</li> <li>Resource usage management</li> <li>Common prosperity</li> </ul>	<ul style="list-style-type: none"> <li>Volunteer service</li> <li>Community activities</li> <li>Charitable donations</li> <li>Building poverty alleviation power stations</li> <li>Green energy technologies R&amp;D</li> </ul>

## Materiality Assessments

GCL SI conducts ESG materiality identification and assessments to address the exceptions and feedback of stakeholders factoring into the company's development strategy, industry characteristic, as well as global sustainable development trend and standards and guidelines. We conducted a systematic three-stage sustainable development problem substantive analysis including issue identification, issue evaluation and screening report.



The process of analyzing material issues



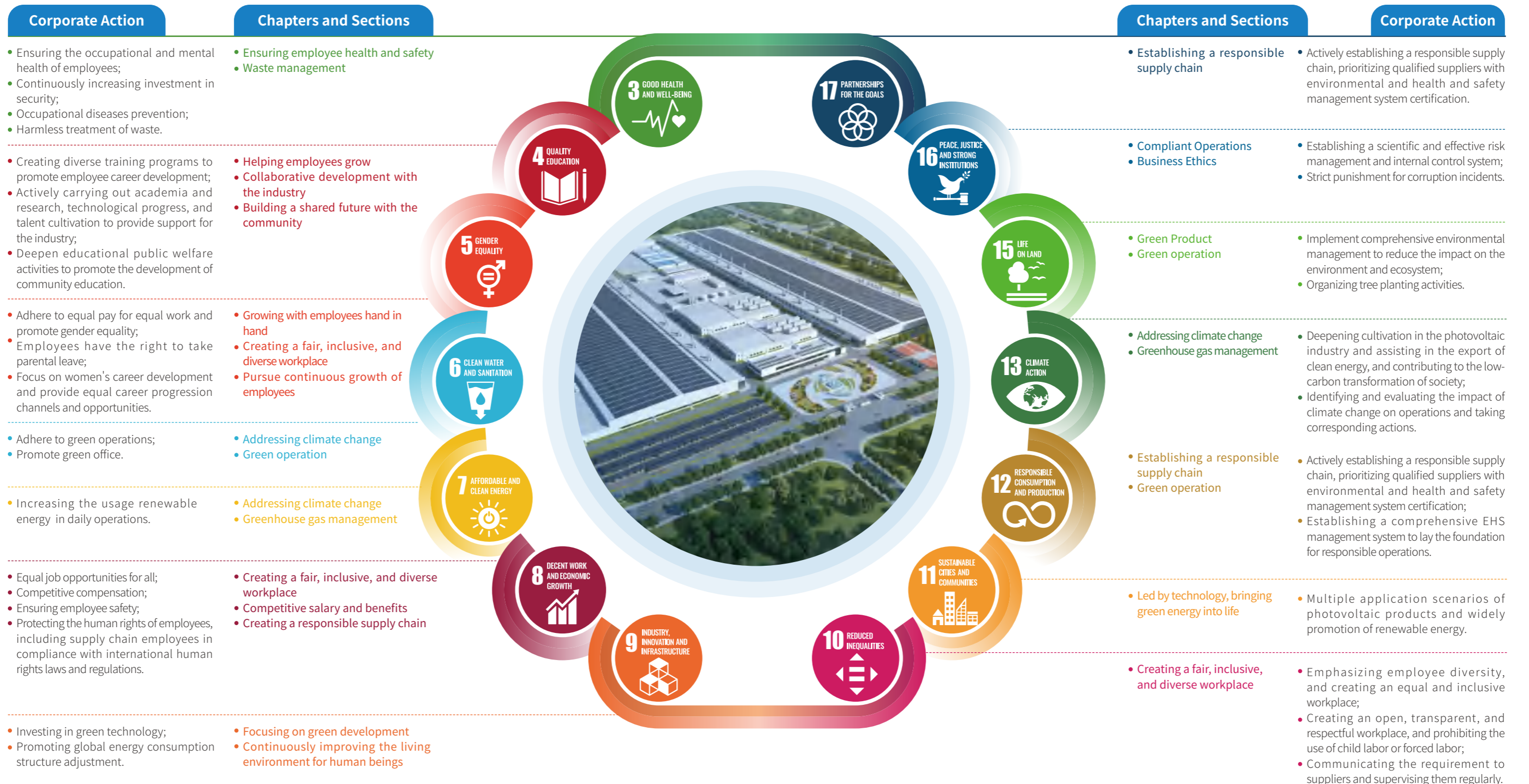
Substantive Issue Matrix

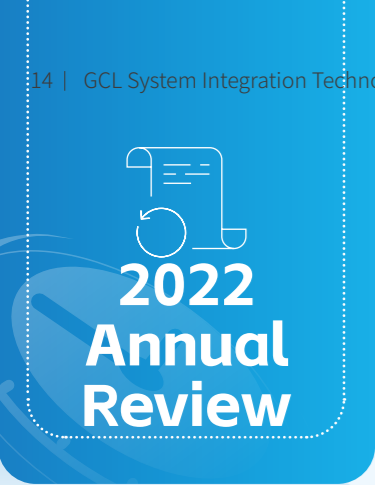
Types of Issues	Names of Issues
<b>Environmental Issues</b>	Compliant procurement, <b>pollution control</b> , resource management, energy management, waste disposal, <b>climate change and carbon emissions</b>
<b>Social Issues</b>	Community investment, diversity and inclusion, employment compliance, promoting industry development, responsible marketing, information security, career development and training, occupational health and safety, labor relations, <b>product services and quality</b>
<b>Governance issues</b>	<b>R&amp;D innovation, business performance improvement</b> , operating with integrity, <b>anti-corruption, risk management, corporate governance</b>

The ESG issues in bold are highly important for GCL SI in 2022

## Contribution of the United Nations Sustainable Development Goals

In order to promote the realization of the 17 Sustainable Development Goals (SDGs) of the United Nations, GCLSI identified 13 Sustainable Development Goals closely related to the company, comprehensively promoted responsible and sustainable corporate governance and business practices, and pursued harmony and win-win between commercial value and social value.





**2022  
Annual  
Review**

**Milestones in 2022**

Funning GCL SI has been awarded the title of "National Green Factory".



GCL SI successfully gained French carbon footprint certification, for its 182 series and 210 series of high-efficiency photovoltaic (PV) modules at the end of July 2022. The average Carbon footprint was 400 to 450 kg CO<sub>2</sub>/kW, about 10% to 20% lower than the average carbon emissions of the same model products in the industry, which has proven GCLSI's significant market advantages in low-carbon products.



Hefei GCL SI has signed a strategic cooperation agreement with China Construction Bank Hefei Branch with a 400 million yuan line of credit.



OSW, GCL SI subsidiary, planned to introduce strategic investment from Hillhouse to expand the overseas distributed optical storage market.



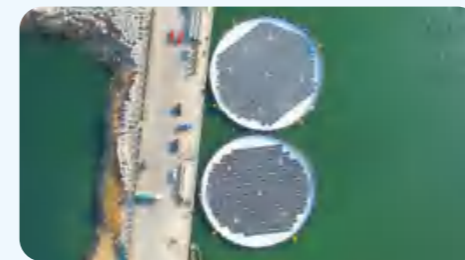
GCL SI announced that its 210mm and 182mm n-type TOPCon (tunnel oxide passivated contact) mono bifacial modules have successfully passed the TÜV Rheinland certification, with maximum power output of 685W for the 210 module and 575W for the 182 module.



GCL SI announced that it has reached an agreement with the People's Government of Wanzhi District of Wuhu City, Anhui Province of China, mainly on the construction of 20GW solar cell production base. The first phase has a production capacity of 10GW and a total investment of 3.5 billion yuan.



7. The world's first deep sea and offshore "Wind and Solar power in the same field" integration project using GCL SI immersible and highly reliable floating components was put into use for power generation in Haiyang City, Shandong Province, developed and constructed by the State Power Investment Corporation.



In October 2022, the 15GW photovoltaic module fundraising project of GCL SI Hefei Super Module Factory achieved full production capacity and produced 1.11GW that month, reaching a production rate of 113.27% and standing at a new historical high in a single month.



GCL SI Released 2021 Environmental, Social, and Governance (ESG) Report.



GCL SI has conducted a number of reforms in the reporting period. The energy engineering was renamed as "Green Energy System Technology", transforming and upgrading from a single photovoltaic wind power EPC general contracting to and Source-Network-Load-Storage integrated energy storage operation model. We also launched household energy storage products such as G-Home and industrial and commercial energy storage systems such as E-Bank energy storage cabinets and containers to seize the opportunity for integrated development of optical storage and charging.



## Honors and Awards in 2022



The company was awarded the "2022 Northeast Excellent Photovoltaic Module Brand"



The company won the "2022 · China Good Photovoltaic Annual BIPV Technology Breakthrough Prize Award"



The company won the "2021 Investor Relations Management Award"



The company won the "PVBL2022 Global Best Zero Carbon Case Award"



The company has been awarded the "Global Photovoltaic Brand Top 100 Value Certificate"



The company has been awarded the "Global Photovoltaic Brand Top 100 Value Certificate"



The company was awarded the "Annual Ultra Efficient Photovoltaic Module Award"



The company was awarded the "2022 Intelligent Photovoltaic Manufacturing Demonstration Enterprise"

## Key Performance in 2022

### Financial Performance

Revenue  
**835,360.92** RMB '000

Net profit attributable to shareholders of the listed company  
**5,931.80** RMB '000

Basic earnings per share  
**0.01** RMB/share

R&D expenses  
**8,095.98** RMB '000

### Environmental Performance

Environmental protection expenditure  
**9973.37** RMB '000

Total exhaust emissions of the company's main factories  
**307,476,003.73** m<sup>3</sup>

Total wastewater discharge  
**238,949** m<sup>3</sup>

Total waste discharge  
**13,325.26** Ton

Water consumption  
**267,280** Ton

Electricity consumption  
**150,893,426** kWh

Comprehensive energy consumption  
**12,011.42** Tons of standard coal

### Social Performance

Number of Employees  
**3,520** Number

Bachelor degree or above  
**669** Number

Bachelor degree or above  
**19%**

Minority employees  
**30** Number

Female employees  
**1137** Number

Proportion of female employees  
**32.3%**

Total annual training hours for employees  
**3,598** Hour

The total number of employees trained  
**87,578** Person

Occupational health and safety investment  
**335.8** RMB '000

# Implementing the Green Mission and Protecting the Planet

GCL SI has always regarded "focusing on green development and continuously improving the living environment for human beings" as its mission, and is fully committed to green technology innovation. By expanding the efficiency and application scenarios of clean energy, it contributes to adjusting the global energy consumption structure and promoting green and clean energy to thousands of households.

- Green innovation, continuously improve the living environment for human beings
- Led by technology, bringing green energy into daily life



## Focus on green development and continuously improve the living environment for human beings

With the continuous emergence of extreme weather, GCL SI deeply realizes its social responsibility as a company in the clean energy field. Therefore, GCL SI regards "focusing on green development and continuously improving the living environment for human beings" as its mission and continuously invests into green innovation, upgrades photovoltaic technology, makes technological breakthroughs in improving photovoltaic efficiency, rooftop photovoltaic installation, and offshore photovoltaic. GCL SI will shape a sustainable future for generations to come by increasing the proportion of green and clean energy and reducing greenhouse gas emissions.

### Case TOPCon Technology Upgrade, Promoting the Development of the Photovoltaic Industry

Currently N-type battery is generally considered as a next generation technology in the photovoltaic industry. In recent years, the company has continued to increase investment and gradually completed the elimination and upgrading of small format module production capacity such as 156 series and 158 series PV modules, as well as the systematic upgrade of large format module production capacity of 182 series and 210 series PV modules. In 2022, the large-size N-type high-efficiency TOPCon (tunnel oxide passivated contact) mono bifacial modules passed IEC standard testing and obtained TÜV Rheinland Certification. The maximum power of the 210mm series TOPCon module and 182mm series TOPCon module are 685W and 575W respectively. The full series of GCLSI n-type TOPCon PV modules have reached an efficiency of 22%, which is 4.5% higher than the original PERC technology, thus improving the power generation conversion rate of GCL SI's photovoltaic products and contributing to the protection of the planet.



GCLSI Receives TÜV Rheinland Certification for Its 210 TOPCon Mono Bifacial Module

### Case HJT module R&D to improve photovoltaic power generation efficiency

The company actively invests in the R&D of efficient hetero-junction solar cell modules (HJT modules), and further improves the efficiency of photovoltaic power generation. HJT bifacial dual module boasts high power output, high efficiency of double-sided power generation, lower power temperature coefficient and low attenuation rate. The HJT modules not only prolong the lifespan of the product, but also effectively improve the power generation and ROI of power stations. At present, the company has passed the third-party product certification for 210HJT (12BB) modules and obtained TÜV certification. In the future we will continue to improve the modules' R&D innovation and application to better serve more people with efficient and stable photovoltaic energy.



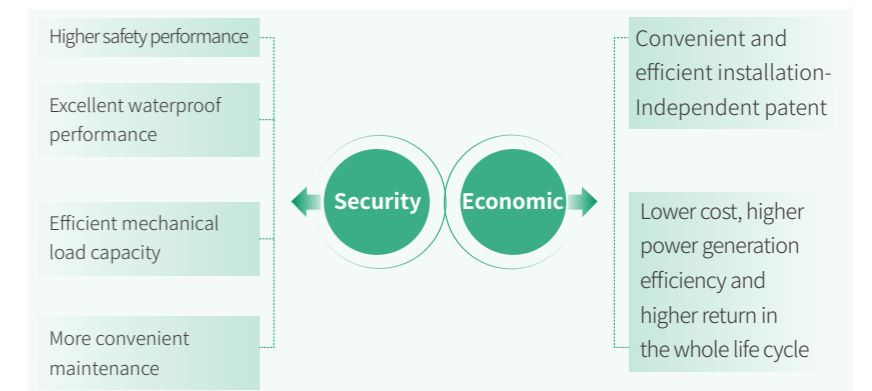
GCLSI Receives TÜV Rheinland Certification for Its HJT module

## Contributing to Green and Low Carbon Buildings

GCL SI provides comprehensive and integrated solutions to pain points such as urban roof photovoltaic drainage, stains, and ROI through the R&D of photovoltaic modules such as BIPV (Building Integrated Photovoltaic), "Lotus" modules, and hybrid module PTV (Photovoltaic/Thermal), contributing to reducing greenhouse gas emissions in construction and operation.

### Case "Xinfuding" provides protection for urban rooftop photovoltaics.

The company has developed a BIPV component product - Xinfuding series for industrial and commercial building roofing scenarios. One of the products uses a new type of frame, metal fixture, and pressure block, combined with colored steel tiles to form a solid barrier attached to the roof, with excellent wind resistance and convenient installation. Another BIPV product can be directly laid on the roof as a building material, combining the overlapping multiple water blocking design between components and the drainage design of the guide channel, completely solving the pain points such as roof water seepage, laying a technical foundation for the promotion of urban roof photovoltaic.



Advantages of Xinfuding products



BIPV Xinfuding series products



**Case The "Lotus" module reduces the impact of stains**

The surface of roof-mounted photovoltaic modules is prone to accumulation of dirt. Although it may be washed away by rainwater, there will still be some areas that cannot be washed away and accumulate in the square groove over time. This blocks the sunlight from reaching the solar cells, affecting power generation and even causing the hot spot effect, which can lead to module damage. Therefore, GCL SI developed the Lotus module adopting a precision simulation analysis and structural testing approach and considering appearance, performance, and customer ROI. The module features a raised-edge design and a fully unobstructed front screen, making it more attractive, cleaner, efficient and with lower heat spot risk. Compared to similar products, the power generation capacity can be increased by up to 10.32%.



Site of "Lotus" module in Hefei factory

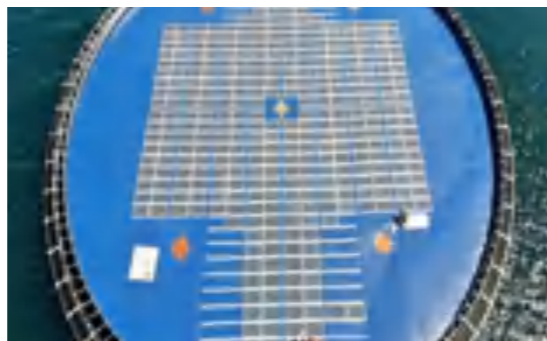
**Exploring the "Blue" Future**

Earth is our shared home, and the oceans cover 70% of its surface. The ocean not only acts as the cradle of life but also plays a vital role in protecting our environment and reducing carbon emissions. Offshore photovoltaics, as an innovative solution, fully utilizes ocean resources and overcomes the limitations of land-based photovoltaic power plant construction. Leveraging stable sunlight and natural advantages of water and wind cooling, offshore photovoltaics improves energy collection efficiency and extends product lifespan. Therefore, GCL SI has been committed to the development of offshore photovoltaics, sparing no efforts on offshore photovoltaic power plants construction and actively exploring opportunities related to the ocean, to create a more sustainable future for all.

**Case Seizing the Blue Opportunity and Protecting the Earth's Homeland**

With the continuous progress of the photovoltaic industry, the application of offshore photovoltaics is also constantly developing. In 2022, the innovation of GCL's immersible and highly reliable sea surface floating components in material optimization, high water resistance packaging, and multiple waterproofing of junction boxes ensured excellent performance of the components in terms of resistance to wave impact, salt spray corrosion, and reliability.

The company's sea surface floating module has been applied to the world's first offshore floating photovoltaic power plant with a distance of 30 kilometers and a water depth of 30 meters. After using the air-cooled module, the power generation temperature decreased by 17 degrees, and according to a power temperature coefficient of 0.39%, the power generation power of the module increased by 6.63%.



Offshore photovoltaic

**Led by technology, bringing green energy into life**

GCL SI actively responds to the national "14th Five Year Plan" for renewable energy development, fully follows the requirements of photovoltaic power generation, and accelerates the development of "photovoltaic+" products, and continuously expanding the field of photovoltaic applications. In the past year, the company has widely expand the application of photovoltaic products in scenarios such as floating photovoltaic, fishing industry, agriculture industry, industrial clusters, and residential communities. The company comprehensively promoting renewable energy and enable more people to benefit from the advantages of green and clean energy.

**Floating Photovoltaic Power Station**

West Lake Floating Distributed Photovoltaic Power Station - Expanding Utilization Of Natural Resource



**Roof-Mounted Distributed Photovoltaic Power Plants In Industrial Parks**

Roof-Mounted Distributed Photovoltaic Power Plant In Zhongchuang Industrial Park - Promoting Factory Energy Transformation



**Agriculture-Complementary Solar Power Station**

Jinxin Agriculture Complementary Photovoltaic Power Station - Promote The Integration Of Agriculture And Solar Energy



**Distributed PV Modules In Residential Communities**

Nanchang Sinopec Photovoltaic Power Station - Introducing Photovoltaic Products Into Community Life



**Fishing-Complementary Solar Power Station**

Donghai GCL Power Photovoltaic Power Station - Building a Three-Dimensional Marine Agriculture





# Striving for excellenc



Safeguarding green ecology

## Climate Actions

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GCL SI strictly complies with laws and regulations and always actively assumes social responsibility and builds a harmonious environment to ensure a green future for all. GCL SI established a comprehensive environment management system to prevent and control pollution and continuously improve it to achieve an effective environmental control system.





## Addressing Climate Change

Addressing climate change is an essential part of GCL SI's efforts to strengthen the ESG management. The company actively organizes internal campaigns to raise awareness of the importance of climate change, identifies related risks and opportunities, continuously advances its climate strategy, and comprehensively enhances its ability to respond to climate change.

## Climate Governance

GCL SI actively refers to the recommendations of the Task Force on Climate related Financial Disclosures (TCFD) and has established a climate change management system from three aspects: governance, strategy, and risk management. The company has deeply coupled climate risks and opportunities with its risk management system and improved its climate risk response capabilities through measures such as climate risk response and risk impact scenario analysis etc.



- The board of directors closely monitor the impact of climate change and factors in transition and physical risks resulting from climate change in major decision-making.
- The company has established an ESG committee, with reducing carbon emissions and addressing climate change as one of the top priorities in ESG efforts.



- The company continuously increase the usage of renewable resource by using green electricity, rooftop photovoltaic installation, photovoltaic distribution and storage, implementing equipment energy-saving upgrades, and reducing energy consumption.



- GCL SI strengthens climate risk identification and has established environmental and climate risk prevention and control measures, as well as emergency management systems in order to enhance the ability to respond to climate change.
- The company continuously monitor the impact of climate change on the supply chain and conduct trappings for suppliers on climate change and energy conservation and emission reduction.

Climate Governance System of GCL SI



## Climate Risk Assessment

In terms of risk management, GCL SI identifies potential climate risks and opportunities in operational activities referring to TCFD's risk analysis framework, and will continue to increase investment to deeply integrate climate change management in company risk management. The company has completed the identification of climate change related risks and opportunities through policy research and industry benchmarking.

Risk Type	Risk Factor	Financial Impact	Solutions
Physical Risk	Natural Disasters (such as typhoons, floods leading to safety accidents or disruption of operations)	Increasing freight costs and fluctuations in the value of fixed assets	<ul style="list-style-type: none"> <li>• Formulate emergency plans to cope with extreme weather delete</li> <li>• Conduct emergency drills</li> <li>• Increase the reserve of emergency supplies</li> </ul>
	Climate Change (such as abnormal power supply and increasing expenses caused by sustained high temperatures, unstable supply capacity and transportation, and the chance to relocate or change the structure of production bases located in coastal areas due to sea levels rise)	Increasing operating costs	<ul style="list-style-type: none"> <li>• Increase the proportion of local procurement</li> <li>• Improve energy efficiency in the factories</li> </ul>
Transition Risk	Policy and Legal Risks (such as increasing operating cost, procurement costs and financing costs due to rising carbon prices, implementation of carbon taxes and tightening green finance requirements respectively)	Increasing operating and financing costs	<ul style="list-style-type: none"> <li>• Closely monitor laws and regulations, and collect greenhouse gas emission data</li> </ul>
	Technological Risks (such as upgrading energy-saving equipment, investing in low-carbon products and services etc.)	Increasing operating costs	<ul style="list-style-type: none"> <li>• Improve equipment usage efficiency and improve product production efficiency</li> </ul>
Transition Opportunities	Market Preference Risk (such as increasing attention from capital markets, customers, and other stakeholders to corporate climate action. The company may suffer from bad reputation and negative performance due to inadequate climate actions)	Reduced access to financing due to poor reputation	<ul style="list-style-type: none"> <li>• Communicate with stakeholders through channels such as research and official account information disclosure</li> </ul>
	Technological Opportunities (early adoption of clean technology and clean energy to effectively address the risk of future energy price increase)	Reduce operating costs	<ul style="list-style-type: none"> <li>• Increase the proportion of green electricity usage by installing PV modules</li> <li>• Purchase green electricity</li> </ul>
Transition Opportunities	Market Preference Opportunities (enhancing the competitive position and increasing operating revenue by researching and developing clean energy related products and services to address the demand of the investors, customers, and other stakeholders)	Increasing business revenue and good reputation	<ul style="list-style-type: none"> <li>• Actively promote innovation, increase R&amp;D investment, and provide cleaner, low-carbon, and efficient products and services</li> </ul>

## Greenhouse gas management

### Greenhouse gas emissions

GCL SI has prioritized greenhouse gas inventory and carried out special management mainly following the ISO14064 standard and has been expanding its scope year by year. In 2022, GCL SI conducted carbon inventory in four production bases, namely Hefei GCL, Jurong GCL, Funing GCL, and Xuzhou Xinyu.

In the reporting period, GCL SI actively conducted greenhouse gas emission verification and took measures to reduce the emissions in the operation and production processes.

Indicator	Unit	2022
Scope 1 GHG emissions	tCO <sub>2</sub> e	325.87
Scope 2 GHG emissions	tCO <sub>2</sub> e	87,669.92
Total GHG emissions (Scope 1+Scope 2)	tCO <sub>2</sub> e	87,995.79
Greenhouse gas emission density	tCO <sub>2</sub> e /total revenue (RMB '000)	0.11

### Reducing greenhouse gas emissions

GCL SI actively responds to the national carbon peak and carbon neutrality policies, and is committed to formulating action plans to reduce greenhouse gas emission. The company timely responds to international organizations' initiatives, takes actions to reduce greenhouse gas emissions, improves information disclosure transparency and implements dynamic adjustment to responds to climate change requirements.

#### Resource Utilization Efficiency

- Promote technical renovation projects for condensate water recovery and water resource recycling, optimize wastewater treatment facilities, and improve water resource utilization efficiency
- Improve production equipment efficiency, reduce consumption, and reduce operating costs

#### Green Office

- Discontinuing the use of independent offices to reduce greenhouse gas emissions;
- Enhance employees' environmental awareness through screen casting, banners, WeChat official account and events;

#### Greenhouse Gas Emission Reduction Measures

#### Sources of Energy

- Use clean energy in operations and further expand photovoltaic power generation projects
- Attempt to introduce new energy into the existing energy structure and purchase green electricity
- Online meetings replace offline meetings;
- Set the ventilation system and air conditioners to timer mode

### Case Rooftop Photovoltaic Project Reduces Greenhouse Gas Emissions

In 2022, Hefei GCL implemented two projects: the rooftop photovoltaic power generation project and improvements to the motor shaft of the MAU and AHU units. A total of 247,900 kilowatt-hours of electricity was generated and saved and indirectly reduced greenhouse gas emissions. Based on relevant data, each kilowatt-hour of electricity generated from coal produces 1023 grams of carbon dioxide. Therefore, the electricity generation and energy-saving measures reduced carbon dioxide emissions by a total of 253.6 tons.



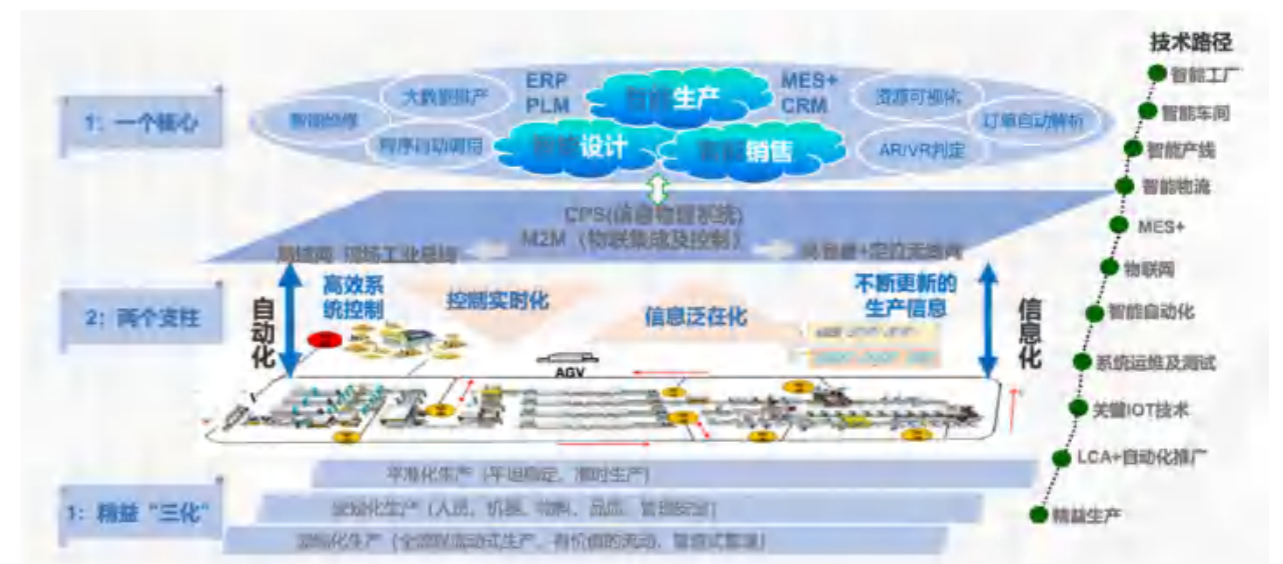
Rooftop Photovoltaic Installation



## Green Product

### Green Lean Production

GCL SI continuously improves the level of intelligence, promotes the construction of smart factories, and streamline the process of intelligence with digitization to build a world class intelligent manufacturing base. The company aims at simultaneously streamlining, stabilizing, and standardizing production in the factory following the lean production guidelines. Real time interaction between physical layer and IT system layer is achieved through automation and informatization. We established a cloud management model based on big data with "intelligence" as the core concept.



The Construction Concept of Digital Factory

In addition, GCL SI continuously improves production efficiency, process compatibility and reduces material usage and waste leveraging intelligent automation, big data, scale advantage, and specialization. We reduce the production cost and improve the quality of the products through big data collection and management.



Structure of Digital Factory Intelligent Platform

## Green Product Ecological Design

GCL SI has introduced the concept of ecological design in product design and production. The company conducts ecological design evaluation self-assessment and forms inspection reports in accordance with GB/T 24256 and GB/T 32161.

Green Design Cases	Design Highlights
<p>Promote the technological integration of mainstream product MBB+half cell</p>	<p>GCL SI promotes the integration of mainstream product MBB+half cell technology, reducing silver paste usage and waste. The circular welding wire is increased in reflectance, and the current collection path is shortened, resulting in lower production costs while achieving power enhancement and improved anti-crack ability and long-term reliability.</p>
<p>Aluminum casing increases power generation</p>	<p>In the product design, the back side of the double-sided cell is printed with aluminum paste in a similar fine grid pattern as the front side, and the entire aluminum layer on the back is changed to a partial aluminum layer. The incident light on the back can enter the cell through areas not blocked by the Al layer to achieve double-sided photovoltaic conversion, which increases the light-gathering area and thus the power generation of the cell.</p>
<p>Flexible installation improves power generation efficiency</p>	<p>The company designs the products according to the concept of full life-cycle and takes into account installation requirements. Under ideal installation angles, distances from the ground, and ground reflectance, double-sided power generation modules can fully utilize reflected and scattered light in the environment to generate electricity. Therefore, in addition to traditional installation methods, double-sided power generation modules can also be installed vertically, making them suitable for applications such as fences, solar walls, highway sound barriers, and light-harvesting agricultural greenhouses.</p>

## Product Carbon Footprint

GCL SI places great emphasis on carbon emission control at all stages of the entire life-cycle of modules. In the low-carbon design phase the company comprehensively considers the impact of raw material selection, production, circulation, use, recycling and treatment on resources and the environment, and strives to use fewer or no harmful materials as much as possible. It actively procures green raw materials such as granular silicon to achieve green and low-carbon development of the product chain. Since 2020, the company has commissioned SYNAPSUN from France to evaluate its carbon footprint and has successfully passed the evaluation of the French CRE Energy Agency and obtained a French carbon footprint evaluation certificate.

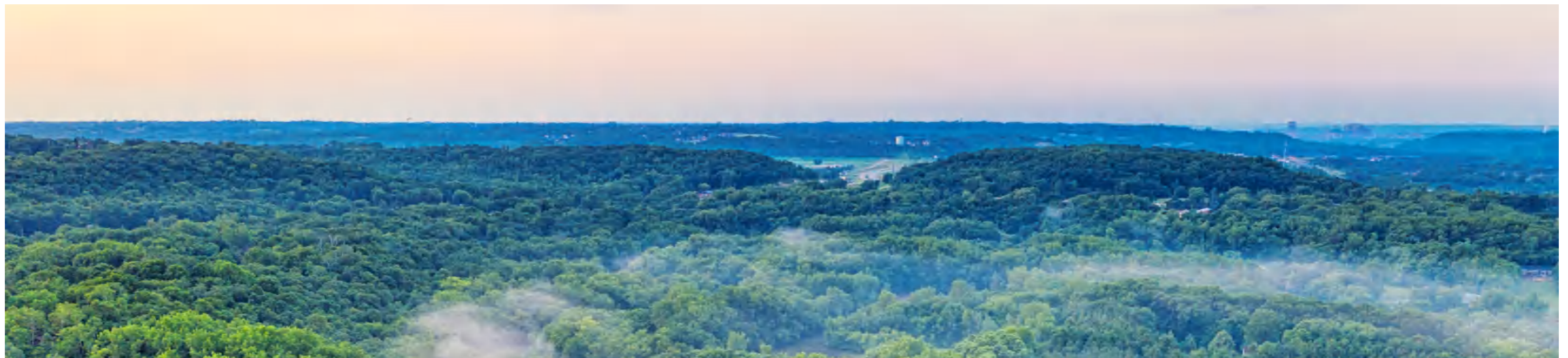
### Case The integrated large size series of modules won the French Carbon footprint certification, demonstrating significant low-carbon advantages

GCL SI successfully gained French carbon footprint certification, for its 182 series and 210 series of high-efficiency photovoltaic (PV) modules at the end of July 2022. The average Carbon footprint was 400 to 450 kg CO<sub>2</sub>/kW, about 10% to 20% lower than the average carbon emissions of the same model products in the industry, demonstrating GCL SI's significant low-carbon advantages.

The French carbon footprint certification is a certification issued by the French Energy Regulatory Committee for photovoltaic projects with a capacity of over 100 KWp to enter the French market. GCL SI's achievement of carbon footprint certification indicates that its efficient photovoltaic modules have been recognized for green and low-carbon characteristics, further improving the footprint in the French market. The highly competitive, efficient and clean PV modules will help us expand the French and even the entire European markets.

### Case Priority Selection of Green Raw Materials to Reduce Product Carbon Footprint

In the production process, the company has innovatively purchase silane fluidized bed method (FBR) produced granular silicon, which has a 30% lower overall production cost than that of rod-shaped silicon by modified Siemens method. 1GW of polycrystalline silicon material in the polycrystalline silicon process can reduce 130,000 tons of CO<sub>2</sub>, which is 74% lower than the Siemens method. In the entire photovoltaic industry chain, 1GW components can reduce CO<sub>2</sub> emissions by at least 47.7%, significantly helping to achieve carbon neutrality.



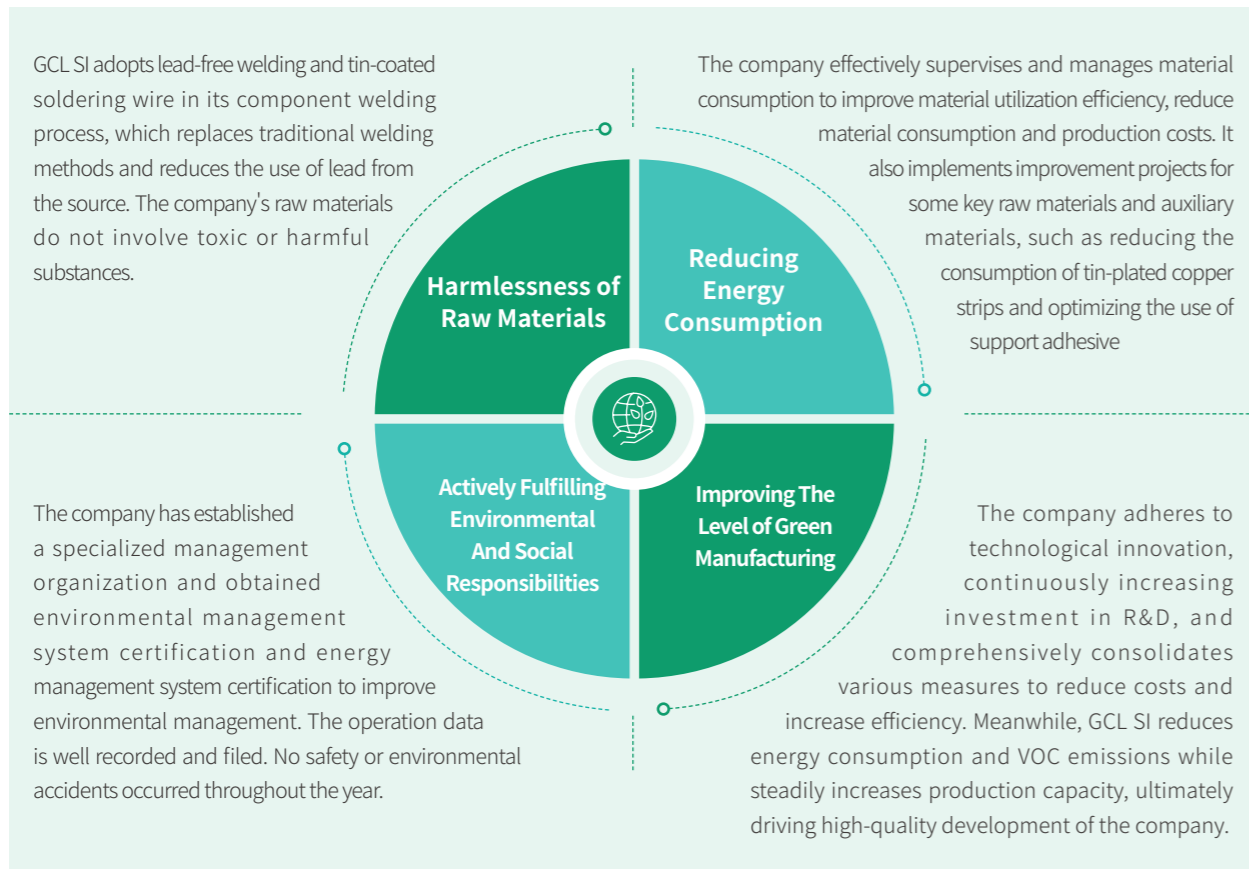
# Green operation

GCL SI adheres to the corporate mission of "Focusing on green development and continuously improving the living environment for human beings", and always integrates green concept into operation. The company is committed to becoming a resource-saving and environmentally friendly enterprise, with the goals of energy conservation, consumption reduction, emission reduction, and efficiency enhancement. While achieving robust economic results, we are also focused on high-tech and green technologies.

## Environmental Management

GCL SI strictly complies with the Environmental Protection Law of the People's Republic of China, the Energy Conservation Law of the People's Republic of China, and relevant local laws and regulations in overseas operating locations. It has formulated multiple regulations and guidelines, including the Environmental Factor Identification and Evaluation Control Procedure, the Waste Management Regulations, and the Noise Management Guidelines, to standardize the management and supervision of emissions, chemicals, and other pollutants. We also carry out environmental management system construction and improvement in accordance with ISO 14001 requirements.

GCL SI strictly complies with laws and regulations and always actively assumes social responsibility and builds a harmonious environment to ensure a green future for all. We have established and continuously improved a company wide environmental management system aiming to prevent pollution. It is responsible for promoting and implementing waste management and identifying environmental factors in accordance with laws and regulations.



Environmental Management Measures

In 2022, GCL SI completed the certification of the ISO14001 environmental management system and successfully obtained the certification. The company conducted 5 environmental inspections, mainly focusing on waste gas operation facilities and waste management. The company also organized a number of environmental drills and trainings, covering environmental knowledge popularization, chemical leakage, and hazardous waste treatment.



Hefei GCL ISO14001 Environmental Management Certification



Xuzhou Funing ISO14001 Environmental Management Certification



Emergency Drill for Chemical Leakage



Environmental Protection Training For Hazardous Waste Management

## Energy Management

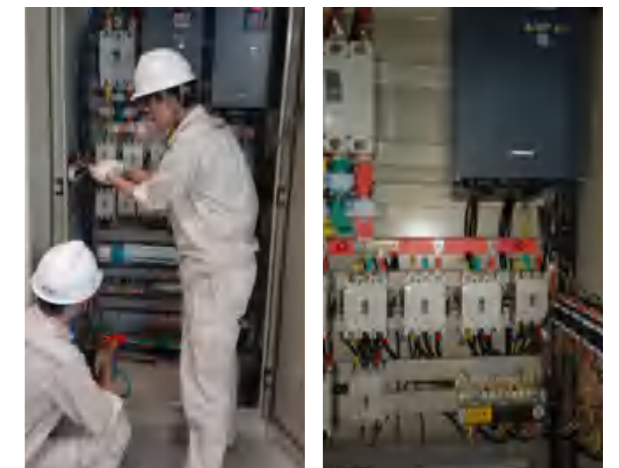
GCL SI uses purchased electricity and diesel and gasoline for vehicles as the main energy sources in its operations. The company actively advocates the concept of energy conservation and environmental protection, and reduces energy consumption through energy-saving technological renovations, environmental protection campaigns, and the installation of rooftop photovoltaics. In 2020, the company obtained energy management system certification and hired a professional consulting firm for guidance in conducting an initial energy review and testing general equipment to ensure that the energy management system of each factory meets the requirements of GB/T 23331.



Funing GCL Energy Management System Certification

### Case Energy Conservation And Technological Renovations To Reduce Energy Consumption

In 2022, GCL Integrated implemented improvements to the motor shaft of the MAU and AHU units, shutting down 25 MAU and AHU units in the factory 1 and factory 2. The renovation saved a total of 32400KW/year, with one cooling fan's power consumption of 150 W.



Energy Saving Technology Renovation

## Resource management

### Water Resource Management

In 2021, GCL SI conducted the company's first water conservation evaluation work and established a specialized team to compile a "Self Assessment Report on Water Resource Use". In 2022, the company set a goal to recover air-conditioning condensed water and use it to replenish the water supply for the rooftop ice machine. They successfully recycled 5760m<sup>3</sup> of condensed water, achieving a zero discharge of air-conditioning condensate outside the factory.

#### Management Structure Establishment

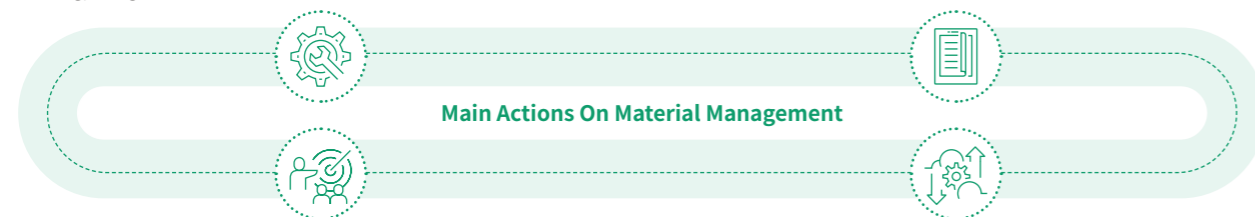
The company has established a Material Conservation Management Leadership Group, which is responsible for managing the overall conservation of materials. The group regularly conducts inspections and analyzes the conservation status of materials, as well as measures the company's internal consumption of energy-saving materials and summarizes the energy usage of each business lines.

### Material Management

GCL SI established a team to evaluate company-wide energy conservation and raw material conservation efforts in accordance with GB/T 29115.

#### Management System Construction

GCL SI has successively formulated a comprehensive conservation management system, including material conservation design, procurement, measurement, statistics, production process management, and quota assessment.



#### Management System Execution

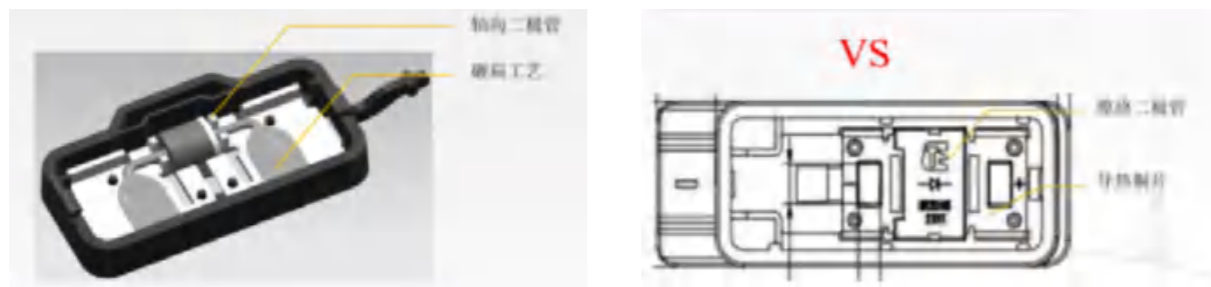
The company supervises and manages all energy-consuming equipment, monitors important parameters, performance, and technical and economic indicators, and conducts necessary supervision on the consumption of various raw materials involved in the production process.

#### Types of Materials

The main categories of materials involved in the company include raw and auxiliary materials such as glass, frames, and back panels. Based on the company's industrial structure characteristics and the annual consumption of energy-saving materials, the utilization rate of the raw materials is over 99%.

### Case Transformation of Junction Boxes To Reduce The Use of Copper Materials

In 2022, the company conducted optimization and cost reduction renovation for the junction box, reducing the potential risk of electrical connection failure by 33% by using axial diodes replacing modules with higher procurement convenience and production line compatibility. Meanwhile, the company greatly reduced the use of the copper materials adopting the innovative solutions of preferred suppliers which reduced the weight of the copper conductive sheets in the junction box from 3.93g/set to 2g/set.



## Waste Management

### Wastewater Management

GCL SI complies with the Law of the People's Republic of China on Prevention and Control of Water Pollution and other relevant laws and regulations. The factories of GCL SI don't produce production waste water, only consisting of domestic sewage and cooling tower water. After treatment, the domestic sewage meets the national standards. The cooling tower wastewater is discharged into the municipal storm sewer pipes and meets the total discharge control requirements in the region.

### Case Alkali Polishing Process Reduces Pollutant Discharge

In November 2022, the company upgraded the etching process by replacing the traditional phosphoric acid polishing process with an alkali polishing process. In the traditional process, the high consumption of nitric acid resulted in the emission of large amounts of nitrogen-containing exhaust gas, causing serious air pollution, and the high treatment cost for the nitrogen-containing wastewater. The alkali polishing process uses ordinary acids and alkalis for self-neutralization or neutralization with acids and alkalis from other cleaning processes, without requiring any special treatment. After the process adjustment, the wastewater treatment no longer needs high-efficiency denitrification treatment and biochemical activated sludge treatment. The electricity consumption per unit of wastewater treatment has been reduced from 6.23 (kwh/thousand pieces) to 3.85 (kwh/thousand pieces), with an expected annual reduction of 580,000 kwh of electricity. In addition, the treatment process no longer requires the use of methanol and sodium metabisulfite, resulting in a yearly reduction of the consumption of methanol, sodium bisulfite and nitric acid by 1650 tons, 340 tons and 669 tons respectively.



### Waste Gas Management

GCL SI firmly complies with the Law of the People's Republic of China on Environmental Protection, Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution related laws and regulations, and fulfills the social responsibility for environmental protection. During the production process of components, the exhaust gas is discharged until meeting the standard after being treated by an activated carbon adsorption device. In 2022, the testing result by third-party institutions showed that the VOC emission concentration (13 mg/m<sup>3</sup>) of each factory was far below the standard limit (50 mg/m<sup>3</sup>).

### Waste Management

GCL SI has established comprehensive system management regulations on hazardous wastes, including guidelines and tool such as the Hazardous Chemical Safety Management System, Hazardous Waste Management Registration Form, and Waste Material Management System for process management, electronic traceability, regular inspections, and compliant treatment. The company strictly supervises and manages the process of waste declaration, generation, collection, classification, storage, transfer, and disposal, to ensure that wastes are treated in accordance with regulations and to reduce environmental pollution in the production and operation process.

Waste Category	Treatment Method
Waste mineral oil	Collect waste mineral oil and submit it to qualified firms for treatment
Waste rubber bucket	After waste rubber buckets were recycled by the disposal company. 242.46 tons of waste was reduced throughout the year.
Hazardous chemicals	Label all temporary storage facilities with MSDS and chemical safety labels; focus on inspecting the explosion-proof cabinet; and conduct emergency drills for chemical spills.
Domestic garbage of employees and kitchen waste	Unified disposal by the environmental sanitation department.



# Pioneering

# 2

## Strong Social Responsibility

### Actions

- Growing Together with Employees 36
- Collaborative Development with the Industry 50
- Shared Future with the Community 51

GCL SI continues to stay attentive to employees' physical and mental health and career progression, and continuously propels industrial advancement and achieves win-win cooperation with partners. We vigorously support rural revitalization and social welfare and fulfill corporate social responsibilities, with the aim of building a green and sustainable society.



## Growing Together with Employees

The total number of employees

3,520

Labor contract signing rate

100%

Turnover rate

8%

Talents are essential for the stable and long-term sustainable development of the company. Holding the talent philosophy of growing together, achieving a shared future, loving GCL SI, and cherishing dreams, GCL SI provides a harmonious working environment for employees with open communication and provides multiple career growth channels and comprehensive compensation and benefits. In summary, GCL SI ensures employees' physical and mental health, enhances humanistic care, and creates harmonious, sunny, and positive working environment.

### Building a fair, inclusive, and diverse working environment

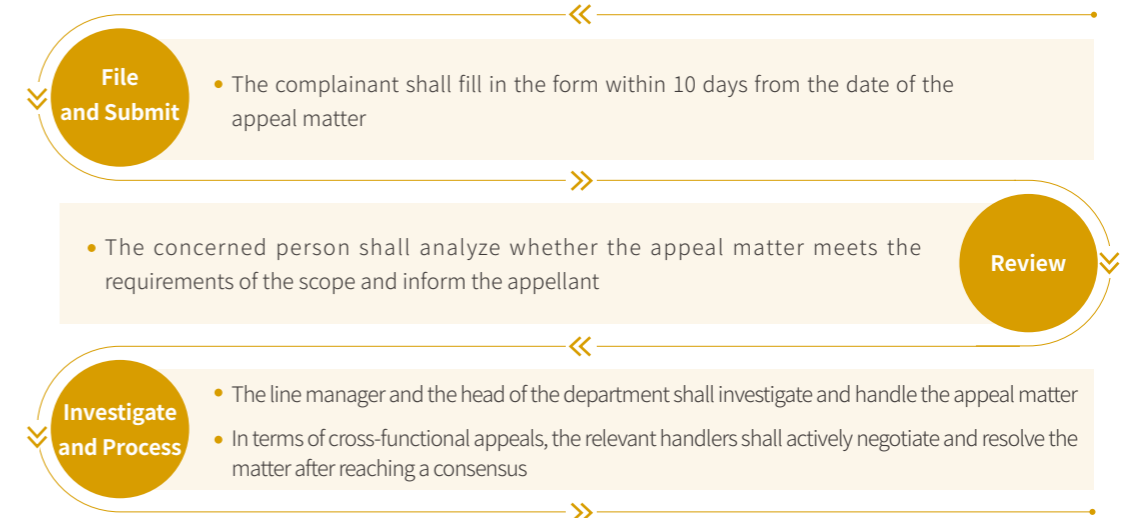
In accordance with the Civil Code of the People's Republic of China, the Labour Law of the People's Republic of China and other relevant laws and regulations, GCL SI respects and protects legitimate rights and interests of employees, and actively builds a fair, diverse and inclusive working environment. A diverse talent team is the driving force for innovation and plays a vital role in the company's long-term sustainable development. The company formulates and implements relevant human resource regulations such as Recruitment Management Standards, Human Resource Planning, Labor Employment Management Standards, and Labor Contract Management Standards. The company adheres to people-oriented, fairness and impartiality principles, strictly prohibits child labor and all other forms of forced and compulsory labor, and respects employees' rights to freely choose their careers.

GCL SI always upholds the employment principles of "fairness, justness, and openness" and safeguards the legitimate personal rights and interests of employees. The company strictly prohibits any form of sexual harassment, corporal punishment, mental or physical oppression, verbal abuse, and threats, and continuously improves labor relationship management. Meanwhile, the company provides fair and equal opportunities, and prohibits discrimination against employees in practices such as employment, compensation, rewards, training opportunities, promotion, dismissal, or retirement based on age, race, color, nationality, religion, disability, gender, ethnicity, social class, or political relationship.

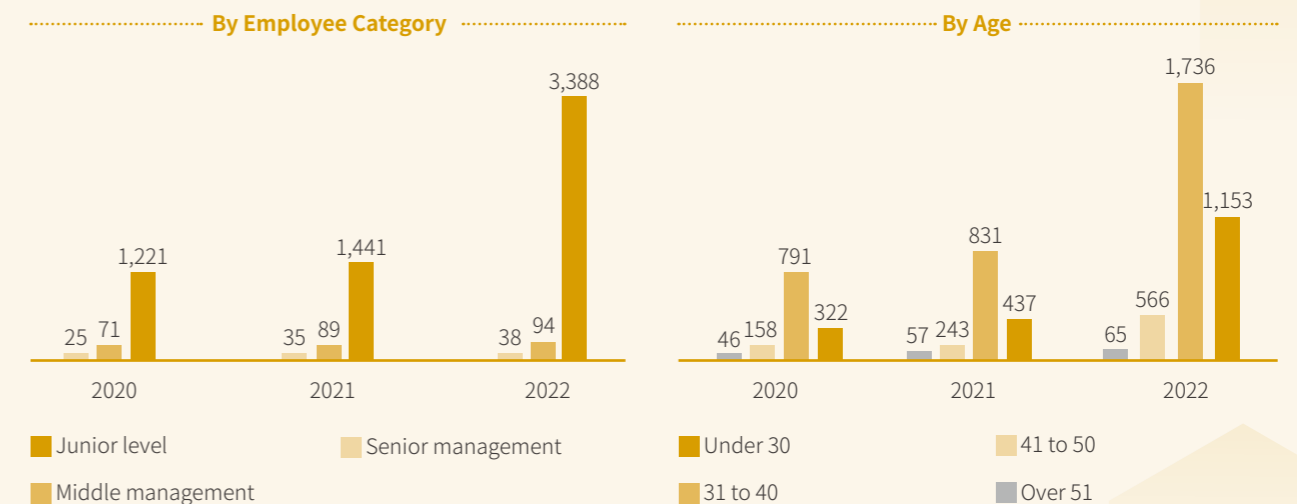
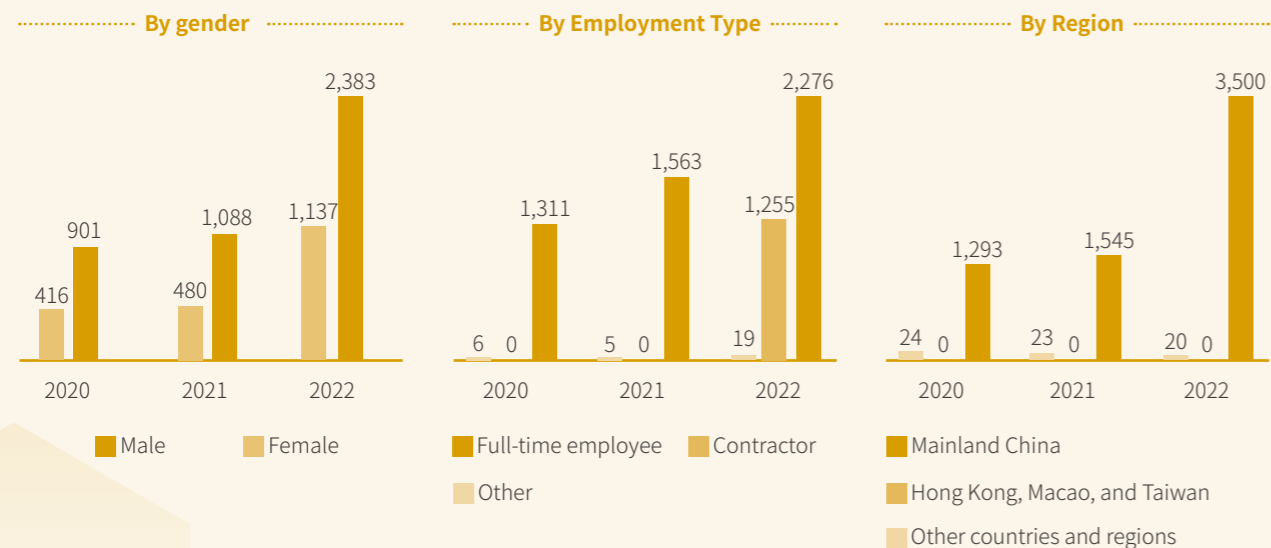
In 2022, GCL SI has improved the "Management Guidelines for Assigning Work of Personnel From Other Places" and compiled a new management guideline for assigning personnel from other places to GCL SI and its subsidiaries, ensuring the rights and interests of employees from other places.

## Rights and Interests Appeals

GCL SI has established and improved an appeal channel and compiled a "Employee Complaint Form". The employees are encouraged to make reasonable appeals in accordance with the provisions of this document. This provides employees with a channel to safeguard their legitimate rights and interests, alleviate their emotions, improve the working atmosphere, and prevent the improper use of management power.








📄 Appeal process



## Open Communication

GCL SI adheres to democratic management and engages in democratic and open communication with employees. The company fosters an open and transparent working environment through staff meetings, employee visits, feedback channels, proposal/supervision platforms and discussion salons. The employees are encouraged to express evolving needs and advice, thus inspiring the engagement rate, their enthusiasm and creativity.

 <h3>Staff meeting</h3> <ul style="list-style-type: none"> <li>Organize monthly staff meeting for on-site Q&amp;A</li> <li>Conduct quarterly satisfaction surveys to understand employees' sentiment</li> <li>Closely monitor and supervise the progress of issues raised by employees</li> </ul>	 <h3>Feedback Channels</h3> <ul style="list-style-type: none"> <li>Extensive promotion of feedback channel via email (the Chairman's email, the General Manager's email, whistle-blowing email) and suggestion phone number</li> <li>Mainly collect feedback via QR codes for subsidiaries, encourage employees to voice out in various channels</li> </ul>	 <h3>Business Affairs Proposal/ Supervision Platform</h3> <ul style="list-style-type: none"> <li>In terms of employees' personal life, working, and safety</li> <li>In the aspects of production management, material management, warehouse management, lean manufacturing, safety and environmental protection, energy conservation and consumption reduction, working process, management process, technical process, operation method, management method, inspection method, equipment and tools, marketing strategy pattern, development direction, improving corporate image, life improvement</li> <li>Suggestions and opinions that will be beneficial to the company's development</li> <li>Collect and compile ongoing employee feedback and proposals to put forward supervision items and action plans</li> </ul>
 <h3>Employee Visits</h3> <ul style="list-style-type: none"> <li>Conduct monthly interviews in dormitories to pay attention to employees' needs and dynamics in terms of accommodation, and provide timely feedback on opinions and suggestions to the administrative department and dormitory management office</li> <li>Organize weekly visits to the production line of the workshop to pay attention to the dynamics of employees in the workshop</li> </ul>	 <h3>Open Discussion Salon</h3> <ul style="list-style-type: none"> <li>Participants are encouraged to express their opinions on the topic independent of the title, business lines. The organizers rarely leads or determines the decision-making process, but mainly elaborate on the topic and take notes of the discussion topics and results.</li> </ul>	

### Case Hefei GCL SI Employee Representative Talks on a Successful Start in Q1 2022

On February 14, 2022, Hefei GCL held an employees' representatives seminar with the theme of "Sales kick-off and striving for success in Q1". This seminar aims at timely understanding needs and advice in their working and life and responding with appropriate caring and support. More than 20 employees' representatives from various departments expressed their opinions and suggestions on the company's cafeteria, dormitory, shuttle buses, and labor insurance supplies, which help create a good working atmosphere.

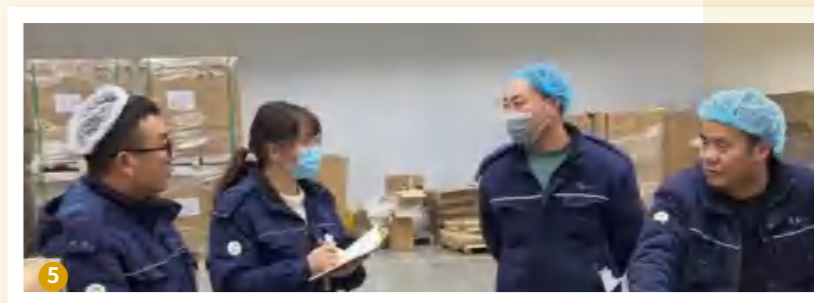
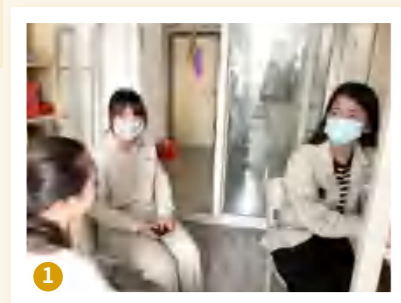


### Case New Employee On-boarding Meeting under the Theme of "GCL Day"

On October 28, 2022, the Management Center of GCL SI held a GCL Day-themed new employee on-boarding meeting, where 11 new employees from various departments and business systems gathered together to celebrate GCL's birthday and bless GCL.



During the enthusiastic communication, 11 new employees brought them closer and improved their understanding. At the activity, there was an award-winning competition for corporate culture, and a strategic introduction for the 14th Five-Year Plan period was also held. During this period, all employees cut cakes and took photos together to celebrate the 32nd birthday of GCL SI.



- 1 Regularly visit dormitories and conduct interviews
- 2 Set up the general manager's mailbox
- 3 Monthly conduct staff meeting
- 4 "Scan Code and Everyone Discuss" Online Discussion
- 5 Collect suggestions through production site visits
- 6 Open Discussion Salon
- 7 Collect employees' advice via QR code, email, and phone number

## Build the Workforce of the Future

GCL SI has always combined the personal development and career planning of the employees with the company's strategic development and attached great importance to employee training. The company formed comprehensive online and onsite training courses with five major topics and seven training modules, in alignment with strategic development goals and business demands. The company focuses on the training of key talents and professionals, strengthens employee on-the-job training and credit system management to build the workforce of the future.

In 2022, GCL SI updated the original dual series of career progression pathway to a new multi-channel career progression pathway, with five main corresponding routes namely management, profession, sales, technology, and operation. The entire fair, open, and transparent promotion mechanism fully improving employees' skill sets and competency, and stimulating the initiative and enthusiasm of all employees.



### Staff Training

GCL SI is committed to aligning the growth of the company with personal career development goals. We have launched diverse training and development programs that are tailored to meet the needs of different positions and levels of expertise and competency, providing talent reserve for the company's core business development. The company developed seven major course training modules and establishes a talent echelon construction project (GTSP), and retain talents by offering stock based compensation, internal transfer, and customized training.



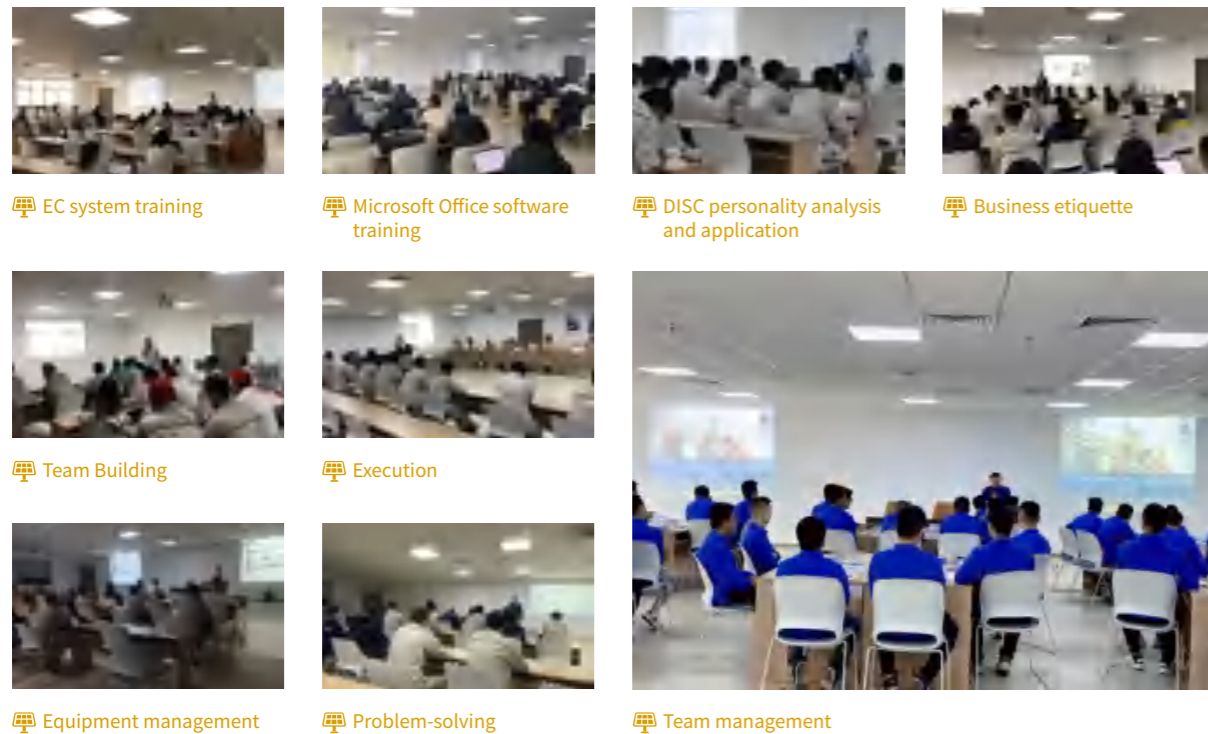
Curriculum Framework with Seven Training Modules

In 2022, the company has leveraged various resources to build teams that are capable of winning new business, injecting vitality into the company's sustainable growth.

Training Program	Objectives	Training Program Content
Dragon Nurturing Program	Develop outstanding front-line employees	Comprehensively improve the capability of employees and establish a talent pool and reserve outstanding junior managers based on factors such as seniority, performance, and values
Dragon Hidden Program	Enhance the comprehensive management capabilities	Enhance the basic qualities and management skills of frontline team leaders and cultivate excellent team leaders, injecting vitality into the company's growth
Dragon Leaping Program	Develop excellent employees in functional departments	Targeted at business managers and supervisors (engineers), provide individual growth opportunities and identify excellent candidates for partnership programs in combination with personal career plans
Dragon Flying Program	Mid-level development plan	Tailor advanced training for mid-level managers considering business expansion needs and personal capability, reserving talents for the company's development

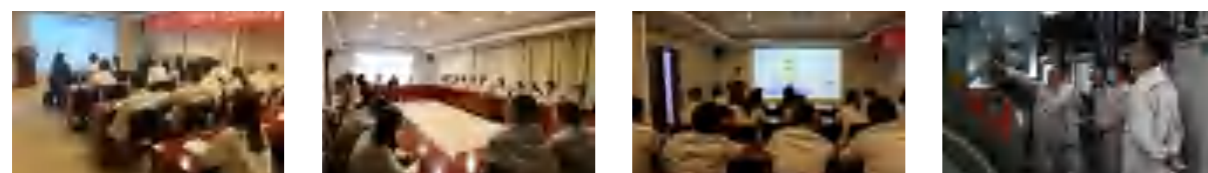
**Case Hefei GCL Base Training**

With the expansion of business scale, the total number of clients is increasing. To help employees stay competitive and maintain vitality and vigor, Hefei GCL conducted the "Hefei GCL SI Functional Position Specialized Training", which provided training for functional positions and team leaders. Employee productivity was improved and issues encountered in the work were addressed after the training.



**Case Training in Fu'ning GCL**

Fu'ning GCL held a number of training activities in different topics from May to July 2022, including "Execution and Influence," "Ten Chiefs Talent Pipeline," "Dream Pursuit Program," and "Everyone is a Lecturer, Everyone Has Topics." These training programs continuously enhanced employees' professional ability and successfully reserved talent into the company's development.



**During the reporting period**

The completion rate of the annual training plan

**104.5 %**

Total employee trained

**87,578**

Total training hours

**3,598**

**Competitive Compensation and Benefits**

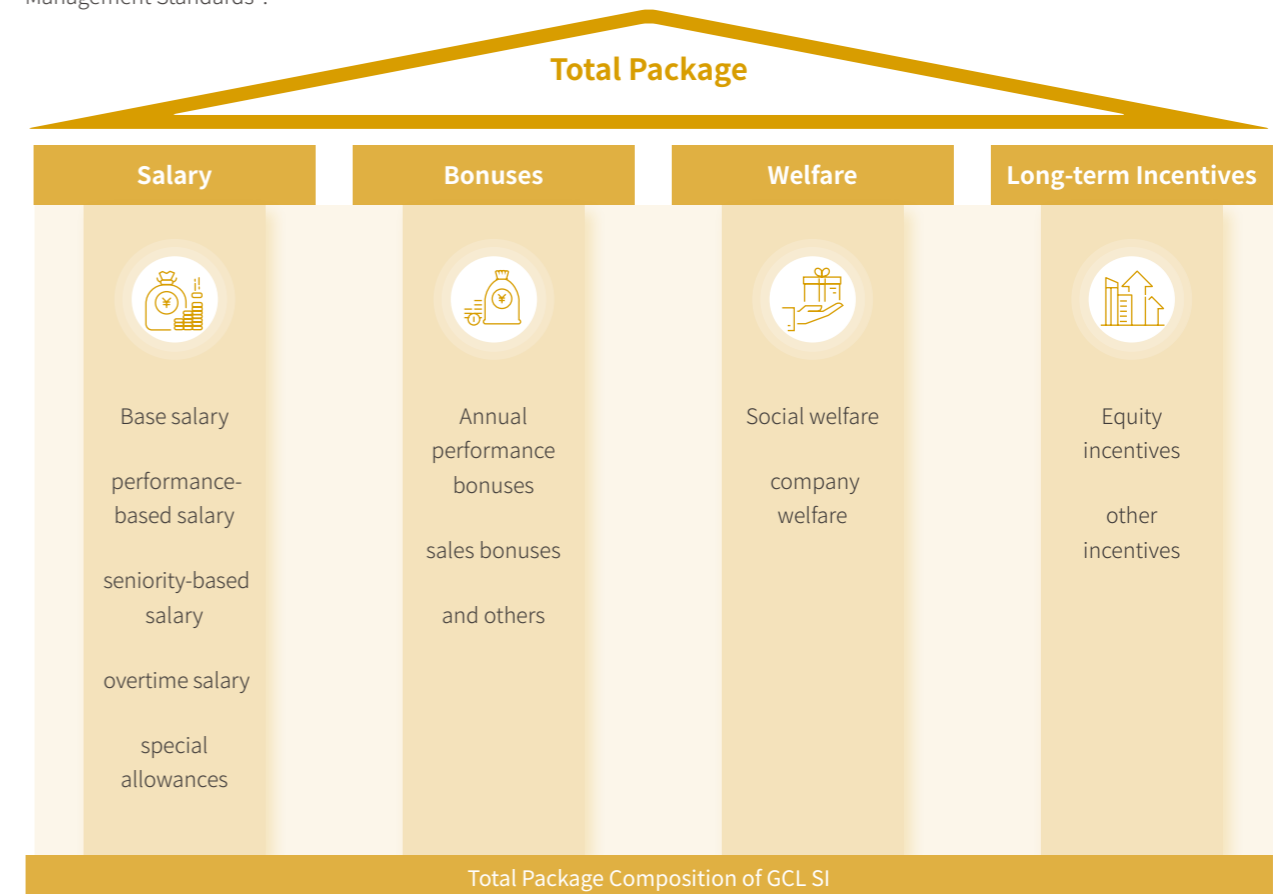
Based on the "Guidelines for Compensation Package Management" (Trial), the company further improved the employee compensation system. It yielded positive incentives by adhering to the principle of equal pay for equal work, balancing efficiency and fairness and combining motivation and constraints. The company increased the diversity of benefits to employees and enhanced their sense of happiness in accordance with the "Welfare Management Standards".

**Statutory Welfare**

Social insurance, housing provident fund, paid leave, maternity/paternity leave, wedding and funeral leaves leave etc.

**Special Benefits**

Holiday benefits, birthday benefits, meal allowances, physical checks, wedding gifts and other benefits



In 2022, the company modified and improved the Leave Management Standards and added new types of leave in accordance with the latest national laws and regulations, aiming at fully guaranteeing employees' right, labor productivity, and increasing employee happiness.

## Rich and Colorful Life

To promote cultural diversity and advocate the concept of work-life balance, the company actively organizes various recreational and sports events to enhance employees' sense of belonging and cohesion, creating a free platform to develop their hobbies and interests.

### Entertainment Activities



### Case Expressing Blessings and Wanfu GCL

On June 21, 2022, Hefei GCL held a cultural activity "Writing Fu (blessing) Characters" under the theme "Expressing Blessings and Wanfu GCL." The event included knowledge quizzes about the company culture, spreading the company culture and guiding employees to work with a positive attitude and full enthusiasm to strive for common goals.



### Case Overflowing Happiness in the Name of Love

On May 19, 2022, Hefei GCL held a baking experience activity and expressed "love" to all employees in advance with the "520" Confession Day approaching.

Most employees made the cakes for the first time. They actively interacted and discussed with the instructor, carefully designing shapes, and enjoyed themselves. Spreading cream, making decorative borders, and adding fruits, the beautifully designed cakes came into view. Through this activity, everyone enjoyed the pleasant afternoon and felt relaxed. Stress was relieved, the sense of achievement, belonging, and happiness was enhanced.



### Case Crafting Fans with Elegance, Spreading Beauty in the Cool Summer

On July 21, 2022, Hefei GCL invited employees to participate in a DIY activity with the theme "Crafting Fans with Elegance, Spreading Beauty in the Summer" in the training room. It brought a hint of coolness to the scorching summer, providing employees with an artistic experience. This activity not only deepened everyone's understanding of Chinese traditional culture but also enriched their spiritual and cultural life, enhanced teamwork and communication skills, and increased employees' sense of achievement, happiness, and security.



**Recreational and Sporting Events**



**Recreational and Sporting Events Care**



**Case Promoting Health through Sports, Demonstrating Spirit through Sports**

On April 28, 2022, Fu'ning GCL held the 2nd Badminton Friendship Tournament, gathering more than 30 badminton enthusiasts.

This competition not only provided an opportunity for employees to exchange ideas and improve their skills but also reflected the GCL SI employees' fearless and competitive spirit and team spirit. It was the first event organized by the labor union during the pandemic period in 2022, allowing employees to experience the charm of sports while promoting friendship among each other.



**Case Labor and Skills Competition**

On August 10, 2022, the Hefei GCL 2022 Labor and Skills Competition was completed successfully in the morning. The event lasted for more than 20 days, starting from July 19th. With strong support from management teams, the Industrial Engineering Department collaborated with other departments to arrange the competition schedule, venues and participants, ensuring that the competition took place without affecting normal production.

Taking this competition as an opportunity, the workshop aimed to enhance employees' competitiveness, learning ability, sense of urgency, cooperation, and competency. It aimed to cultivate a group of skilled technical experts, improve the management skill, and maintain strict control over product quality, laying a solid foundation for the company's growth.



**Case May your looks be as before, and the years be as usual - GCL SI warmly celebrated the International Women's Day**

On March 8, 2022, on International Women's Day, the labour union of GCL SI specially planned a unique theme activity for female employees with the theme "May your looks be as before, and the years be as usual". The activity aimed at breaking cross-functional barriers, strengthening team collaboration, and inspiring employee enthusiasm.

Female employees creatively shoot videos using actual footage of the company as the backdrop. The octagonal pavilion, energy museum, GCL Lake, and various corners of the office all portrayed the beauty and charm of professional women.



**Case Spinning Happiness, Music Comes from You**

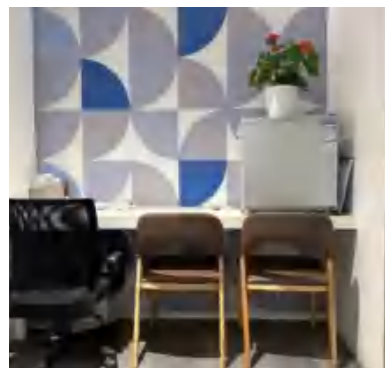
On August 18, 2022, Hefei GCL SI held a birthday party with the theme "Spinning Happiness, Music Comes from You". The employees felt the warmth derived from group and the group is better because of the employees.

Through a DIY cake music box, employees at Hefei GCL experienced the joy with the group. Deep affection is not enough for a long-time companion, and deep love needs no words. Every birthday party embodies the company's care for employees.



## Ensuring Employees Health and Safety

GCL SI strictly complies with laws and regulations and always actively assumes social responsibility and builds a harmonious environment to ensure a green future for all. We have established an occupational health and safety management system to ensure the health and safety of our employees, putting prevention first and combining prevention with control.



Baby Care Room



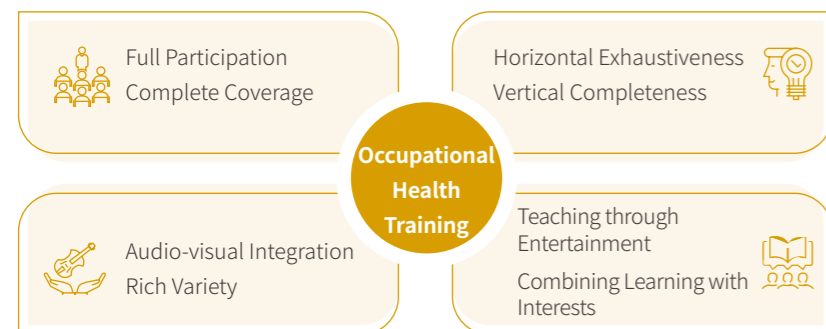
Psychological Counseling Room



Occupational Health and Safety Management Certification

### Occupational Health Training

The company actively complies with guidelines such as the "Occupational Disease Emergency Plan" and the "Occupational Health Management System," and actively conducts occupational health training and promotion in accordance with the "People's Republic of China Occupational Disease Prevention and Control Law"



### Occupational Health Training

- The company has enhanced and deepened employees', especially frontline employees', understanding of the hazards of occupational diseases and the importance of protective measures through a series of promotional activities. It has also raised awareness of occupational health protection among management teams and further improved the management of occupational health and safety.



Occupational Health Training

### Safety Production

The company attaches great importance to the safety of production. It has established management guidelines such as the "Safety Production Responsibility System," "Safety Production Responsibility Assessment System," and "Confined Space Operation Responsibility System" to ensure the safe and effective conduct of production activities. The company also carries out Safety Production Month activities.



Photos of Safety Production Month Activities

### Emergency Management System

GCL SI has formulated the "Emergency Programs for Production Safety Accidents" and obtained government filing certification to better respond to emergencies and improve the company's ability to respond to safety events, and ensure timely, orderly, and efficient organization of emergency rescue work after safety events occur. The emergency mechanism for safety events, aims at minimizing losses and social harm in accordance with the relevant documents of national and local safety emergency departments. The company organized a series of drills according to the requirements of the programs.

Furthermore, the company has also developed response programs and exercise programs, such as the "Emergency Disposal Programs for Chemical Leakage Accidents," "Emergency Exercise for Pressure Vessel," and "Flood Prevention and Flood Control Exercise".

### Case Emergency Drill for Chemical Leakage Accident

In order to enhance the emergency response capability for chemical leakage accidents, GCL SI has established a scientific, effective, and well-functioning emergency response system. A joint drill was conducted on March 9, 2022, by the Safety and Environmental Protection, Operations Planning Department - Warehouse, Plant Affairs, and Quality departments. The ability to quickly respond and cooperate in dealing with environmental accidents was improved, enhancing awareness of environmental protection.



### Case Flood Prevention and Flood Control Emergency Drills

On 25th July 2022, a sudden heavy rainstorm occurred in Feidong County. The rain was heavy, and the factory roads were extensively flooded. To ensure the safe passage of employees and operating vehicles, it was necessary to quickly drain the accumulated water on the factory roads.

We organized a training session after this event to enhance employees' accident rescue capabilities. The goal is for each employee to get familiar with the rescue procedures and improve their emergency response capabilities, minimizing injuries in the event of an accident.



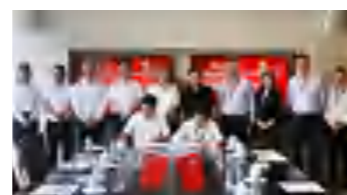
## Collaborative Development with the Industry

GCL SI strives to achieve a leading position in the industry over the past few years. We actively participate in industry activities and engage in exchanges with various sectors. We continuously explored the upstream and downstream of the industry and promote industry strategic cooperation, driving the sustainable development of the industry.

### Strategic Cooperation

#### Case Signing Strategic Cooperation with Linyuan Group

On 11<sup>th</sup> August, 2022, Gongshan Zhu, Chairman of GCL SI, met with Shengqian Jin, Chairman of Lin Yuan Group, witnessed the signing of a strategic cooperation agreement between GCL SI and Lin Yuan Group.



#### Case Signing Strategic Cooperation Agreement with China Construction Bank

On 12<sup>th</sup> August, 2022, Hefei GCL SI New Energy Technology signed strategic cooperation with China Construction Bank Hefei Branch. A credit line of 400 million was provided by China Construction Bank to support the achievement of full production and sales for Hefei GCL SI.



### Industry Associations

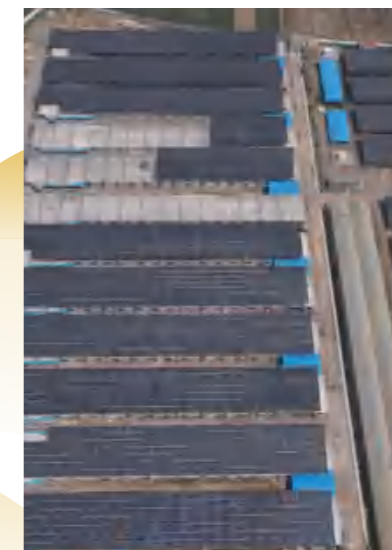
Association Name	Title
China Chamber of Commerce for Import and Export of Machinery and Electronic Products, PV Branch	Vice Chairman Unit
Jiangsu Chamber of International Commerce	Vice Chairman Unit
Shanghai Solar Energy Society	Vice Chairman Unit
China New Energy Overseas Development Alliance	Chairman Unit
China Photovoltaic Industry Association User Photovoltaic Professional Committee	President Unit
600W+ Photovoltaic Open Innovation Ecology Alliance	President Unit

## Shared Future with the Community

GCL SI is devoted to building a harmonious and beautiful community, integrating social responsibility into its corporate development strategy and management. We vigorously support rural revitalization and social welfare and fulfill corporate social responsibilities, with the aim of building a green and sustainable society.

### Case Agriculture-Complementary Solar Power Stations Support Rural Revitalization

In 2022, the company constructed a number of rural power stations, including the Qingdao Jiulian Chicken Breeding Base PV Demonstration Project, Shandong Lijin Meet Goat Breeding Base Animal Husbandry and Photovoltaic Complementary Project, and Guangxi Qinzhou Agricultural and Photovoltaic Complementary Demonstration Project. The company continuously supports rural revitalization by agriculture, photovoltaic, animal husbandry and fishing complementary projects and the distributed projects in the county.



Qingdao Jiulian Project



Shandong Lijin Standardized and Healthy Sheep Breeding Demonstration Base Project



Guangxi Qinzhou Agricultural and Photovoltaic Complementary Project

### Case PV Stations Consolidated the Poverty Alleviation Achievements

In 2022, the company provided professional and efficient intelligent operation and maintenance services to 257 village-level poverty alleviation photovoltaic power stations in Henan, Anhui, Inner Mongolia, and other provinces, totaling 123 MW. The power generation accumulated to 141.03 million kilowatt-hours throughout the year. The company also promoted and popularized fire safety and other firefighting knowledge to the surrounding villagers, actively contributing to rural revitalization efforts in the project areas.





# Leading

Strong Quality  
Responsibility



### Actions:

- Product Quality Assurance 54
- R&D Innovation Management 57
- Global Customer Service 59
- Building a Responsible Supply Chain 62

GCL SI firmly believes that creating industry-leading products is an essential part of the company's social responsibility. The company is committed to providing green and superior products, collaborating with partners in the value chain to ensure the full-cycle product quality. The products are designed and manufactured addressing customer needs, backing by a world-wide service support, and gained a good reputation.



# Product Quality Assurance

GCL SI always adheres to the quality management policy of "Company-wise Participation, Continuous Improvement, Value-added Services, and Customer Satisfaction." The company actively collects feedback on product quality, continuously invests in manpower and material resources, and utilizes automation tools to continuously improve the quality management system, enhance the company's product quality and provide customers with superior products.

## Quality Management System

GCL SI has developed internal *Quality Management Manual*, *Production and Service Process Control Procedure*, *Product Monitoring and Measurement Control Procedure*, and other quality management systems. These systems monitor and measure all products within the company, effectively control the production process, ensure product consistency, and satisfy both standards and customer requirements. As of the end of the reporting period, the major factories have obtained ISO 9001 and other international quality management system certifications.

Meanwhile, the company has established a comprehensive quality management system internally to ensure the quality from six dimensions: supplier material control, metrology management, reliability management, shipping management, process control and customer quality management. We established rigid product quality standards and a strict quality management process with 52 inspection processes to ensure 12-year limited product quality assurance and 25/30-year limited peak power quality assurance. Furthermore, the company's testing laboratory conducts tests regarding wet leakage current, hail, step-in aging equipment, spray, and dynamic loading on products. The products also undergo testing by globally renowned third-party certification organizations to ensure the objectivity of product quality.



ISO 9001 Quality Management System Certification of Hefei GCL SI



Six Dimensions of Comprehensive Quality Management



Global Certification Organizations for Third-Party Testing



Testing Lab

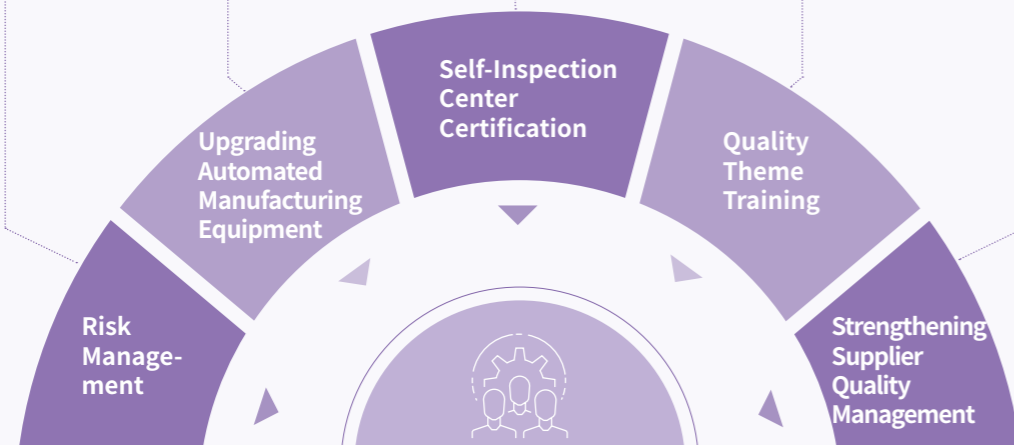
## Optimizing Quality Management

GCL SI actively collects the quality feedback from customers and establishes special teams to focus on addressing quality issues. In the event of non-conforming products, the company strictly follows the *Product Recall Control Procedures* and uses unique product certification QR codes to quickly recall defective or unsafe products from customers, minimizing or reducing harm to customers to the most extent.

In addition, GCL SI took various measures to comprehensively improve product quality and achieve the goal of customer quality satisfaction exceeding 90 points in 2022, including risk identification and optimization, upgrading of automated manufacturing equipment, upgrading of quality inspection centers, employee quality skills training, and strengthening supplier quality management.

As of the end of 2022, there was no product recall.	Purchased testing and production line detection equipment
-----	-----
The number of dedicated personnel for quality management, experimental testing, inspection analysis and quality control	<b>230</b>
-----	-----
<b>330</b>	Established high-standard R&D and quality testing laboratories in the industry
Compared to 2021 increased by	<b>2</b>
<b>80</b>	-----
The number of quality training sessions	<b>110</b>

Regularly identifying and evaluating internal and external risk factors related to quality and taking corresponding improvement measures	Building an advanced fully automated assembly line with a single-line capacity of 2200PCS per shift and the automation rate increased by 48% compared to traditional production lines.	The photovoltaic testing center has undergone CNAS national accreditation laboratory reassessment and annual audits by authoritative certification organizations such as TUV and CSA, laying a solid foundation for product quality assurance.	Utilizing training, internal promotional materials, and meetings to enhance employee skills, quality awareness, and professionalism.	Developing supplier quality system development plans and conducting monthly supply statistics to ensure the product quality from suppliers
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Measures to improve quality

**Case Establishment Of Special Teams To Improve Product Yield**

In early 2022, the product yield of company produced order modules was 99.50%, which is slightly below the target of 99.70%. The company established a QCC project team to tackle quality issues caused by defects, hidden cracks, and false welding. The special team developed improvement plans to improve the process product yield based on the indicators from equipment, processes, and production. Through training, pattern replacement, equipment optimization, and parameter adjustments, the quality issues were reduced by more than 50%, successfully improving the product yield.



On-Site Efforts For Improving Product Yield

## R&D Innovation Management

GCL SI upholds the values of "value-led, innovation-driven" and has been increasing the investment in research and development in the past few years. The company actively introduced advanced technology, established an international R&D team and built a high-level scientific R&D platform. By leveraging technology, it offers industry-leading innovative products to customers.

### R&D System

GCL SI adheres to the concept of "technology leading and innovation-driven," R&D System focuses on technological innovation and development, and continuously increases investment in R&D. In 2022, the R&D expenses increased by 24.41% compared to 2021. Moreover, the company has built a competitive salary structure and collaborated with national and provincial research platforms to create a favorable research environment, attracting outstanding global R&D talents. In 2022, the number of R&D personnel increased by 38.54% compared to 2021, forming a highly capable and creative team that lays a solid foundation for continuous R&D innovation.

The company has established comprehensive standards for R&D projects, which regulate critical control segments such as project initiation, process management, and project acceptance for new product R&D projects. This improves the efficiency of product R&D, and ensures product performance and reliability. Additionally, GCL SI has formulated the "Management Standards for Scientific and Technological Achievements" to reward achievements in technology, products, patents, and publications. Furthermore, the company holds annual scientific and technological conferences to evaluate and reward innovative scientific and technological personnel and projects, continuously inspiring employee's innovation enthusiasm.

R&D expenses amounted to <b>80.96</b> million yuan YoY growth <b>24.41%</b>	R&D personnel <b>133</b> YoY growth <b>38.54%</b>	Bachelor Degree <b>58</b> YoY growth <b>23.40%</b>
Master Degree <b>18</b> YoY growth <b>125%</b>	High-tech subsidiaries <b>3</b>	Provincial academician expert workstation <b>1</b>
Provincial enterprise technology centers <b>3</b>	National postdoctoral workstation <b>1</b>	Provincial and municipal engineering technology research centers <b>5</b>
	Provincial intelligent factory <b>1</b>	

## Intellectual Property Management

GCL SI has established the *Intellectual Property Management Standard* and developed separate standards for patent, trademark, and copyright management. These standards strengthen the company's intellectual property management. Concerned departments are required to track the registration and authorization of trademarks, patents, trade names, and other intellectual property rights. The intellectual property management department will make proactive measures in case of any potential infringement of the company's intellectual property rights. As of the end of 2022, the company has accumulated more than 400 authorized patents, including over 80 invention patents. In 2022, 40 new patents were authorized.

Additionally, the company conducts intellectual property training and awareness campaigns to prevent the company from infringing on the intellectual property rights, and strengthens the promotion of intellectual property rights protection. Furthermore, the company has established and implemented an intellectual property retrieval system, covering various aspects such as product and technology R&D, works creation, trademark usage, imports and exports, participation in exhibitions, and advertising, which helps avoid intellectual property disputes. Moreover, the contract must include provisions regarding infringement of third-party intellectual property rights to protect both parties' intellectual property rights when cooperating with suppliers or other partners.

Item	2021	2022
Number of patents held	438	445
Number of trademarks and text registration rights held	15	18
Number of software copyrights held	17	17
Number of new patent applications of the year	22	67
Number of new authorized patents of the year	31	40

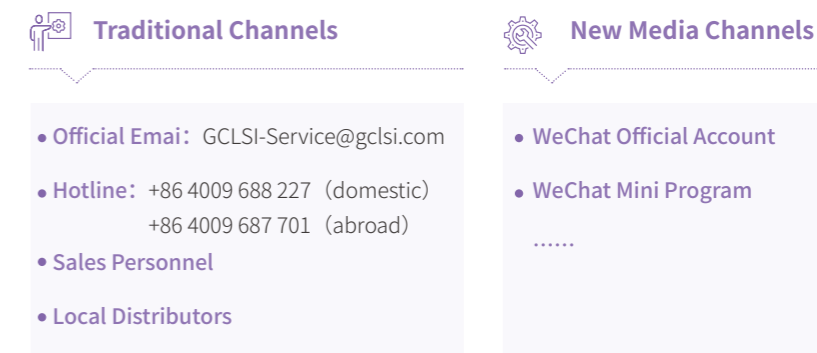
📊 Intellectual Property Key Indicators In The Past Two Years



GCL SI is committed to maximizing customer satisfaction. The company has provided professional, attentive, and satisfactory services to global customers by establishing multiple communication channels, strengthening connections with customers, actively collecting their feedback, and continuously optimizing its services.

## Customer Service Structure

As of the end of 2022, GCL SI has provided customer services to nearly 100 customers from 5 countries around the world. The company has established comprehensive online and offline customer communication channels leveraging the new media platforms. The company implemented a full-process service starting from analyzing customer needs to continuous improvement of products and services in the process of component selection, installation technical guidance, and other ranges.

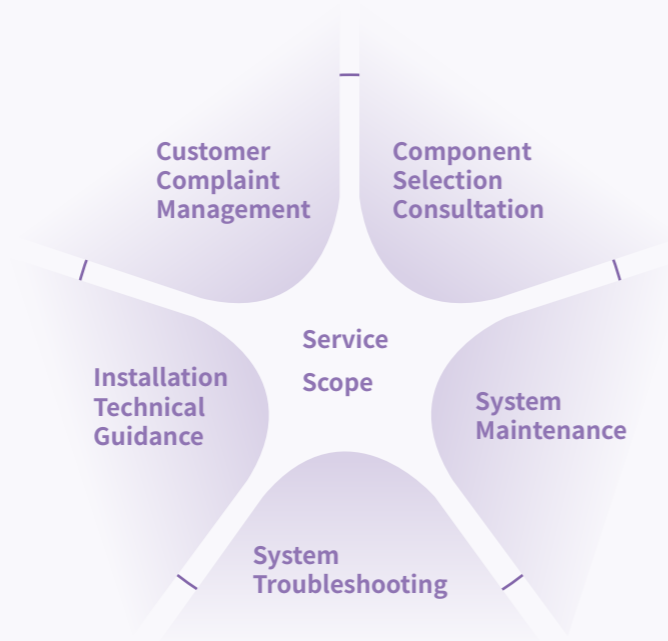


📞 Customer Feedback Channels



📊 Customer Service Program

Additionally, the company has compiled *Customer Complaint Management Mechanism*, to standardize the handling process for customer complaints and suggestions. Concerned departments shall respond to customer complaints within 1 working day, determine the complaint category within 2 working days, and provide a preliminary solution within 5 working days to ensure that customer feedback is addressed promptly, reasonably, and effectively. In 2022, GCL SI achieved a customer complaint resolution rate of over 90%.



## Customer Satisfaction Surveys

Business Service Scope

GCL SI conducts regular customer satisfaction surveys annually to better understand clients' evolving needs and feedback. In 2022, the company selected eight partners and evaluated them in 10 sub-projects across three dimensions: product, product delivery and after-sales. The average score stood at 99 points, exceeding the company's satisfaction target of 95 points. The company made improvements to product appearance and packaging, and reduced product delivery cycle to improve customer satisfaction.

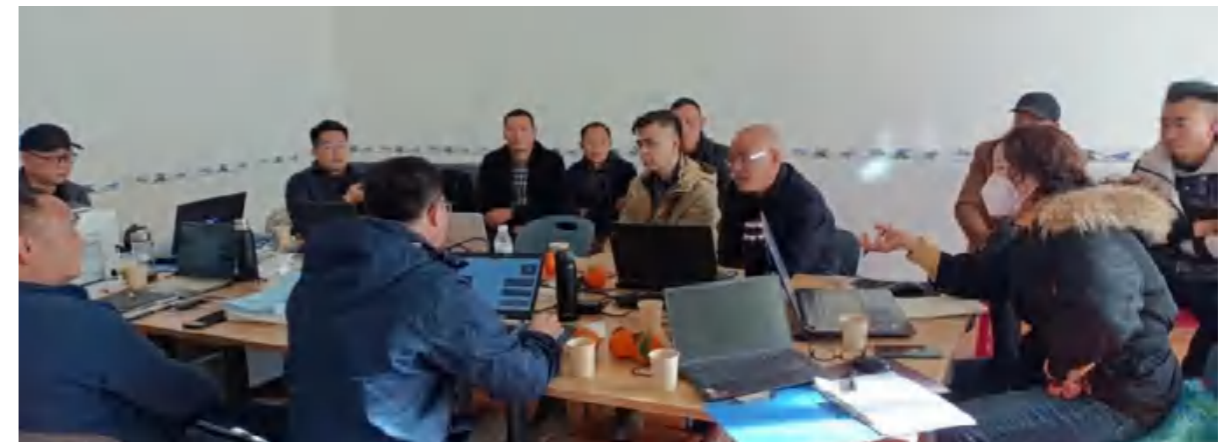
The company provides regular training to customer service personnel to enhance their service skills and continuously improve customer satisfaction. Additionally, the company continuously enhances customer satisfaction and obtains good reputation through on-site visits, troubleshooting diagnosis, timely provision of temporary repair measures, and offering scientifically effective long-term technical improvement plans.



Dimensions of Customer Satisfaction Surveys

## Case Implementing Product Quality Improvement and Enhance Customer User Experience

In 2022, the company carried out a 10MW distributed photovoltaic project at the Dairy Farm with 10,000 cows in Xiangyun County, Dali. The project involved the development and construction of BIPV distributed photovoltaics on the roofs of the cowsheds. It adopted the "Generating power for self-use, surplus power for sale" model, with an average annual power generation of 17,927.80 MWh over 25 years. To ensure the quality of the installation and the stability of subsequent power generation, the company dispatched a professional technical service team to provide technical guidance and support to the on-site construction and supervisory personnel. The company improved product quality assurance and the stability of photovoltaic power generation, make the customers feel safe and assured in their subsequent use.



Onsite Training

## Responsible Marketing

We always strive to promote Integrity as a foundation of our corporate culture and strictly comply with local laws and regulations such as *Advertisement Law of the People's Republic of China*, and conduct regular compliance audits of products and services. The company also holds compliance awareness training for employees to ensure the truthful and compliant disclosure of product information. The company also spared no efforts to effectively safeguard customers' rights to keep informed and to make independent choice, thus establishing a brand image of responsible marketing. As of the end of 2022, the company reported no product marketing violations.

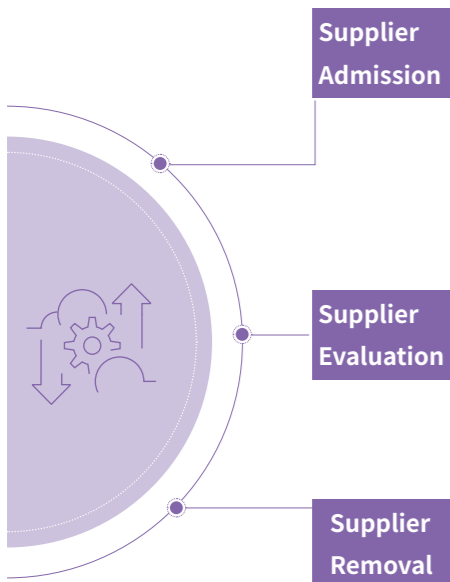


## Building a Responsible Supply Chain

GCL SI continues to optimize cooperation with suppliers, incorporating ESG concept into supplier management. The company actively engages in communication activities with suppliers, exchanging ideas and working together to build an industry-leading responsible supply chain.

### Supplier Management

The company has established Supplier Management Control Procedure, Procurement Process Control Procedure, and Outsourcing (OEM) Management Procedure to clearly specify the company's requirements for suppliers. Meanwhile, the company has improved the sound mechanism for supplier admission, evaluation, and removal. It maintains records for all suppliers, continuously monitors their management status, provides improvement suggestions for their weaknesses, and grows with suppliers.



#### Supplier Admission

Establish a supplier qualification management mechanism, requiring product quality to comply with national and industry production standards. Clear provisions are made for situations where it is not recommended for a supplier to be included in the system and additional approval is required from the Group's Supply Chain and Tendering Committee

#### Supplier Evaluation

Evaluate suppliers' performance and classify them into levels I, II, III, and IV based on their performance. For suppliers with a performance score of  $70 \leq X \leq 80$ , rectification measures are formulated and reported to the Group's Tendering Center.

#### Supplier Removal

Clarify the process for removing suppliers and impose punitive measures, including terminating procurement contracts, reporting to regulatory authorities, removing them from the qualified supplier database, and updating supplier qualifications, for suppliers with varying degrees of negative impact

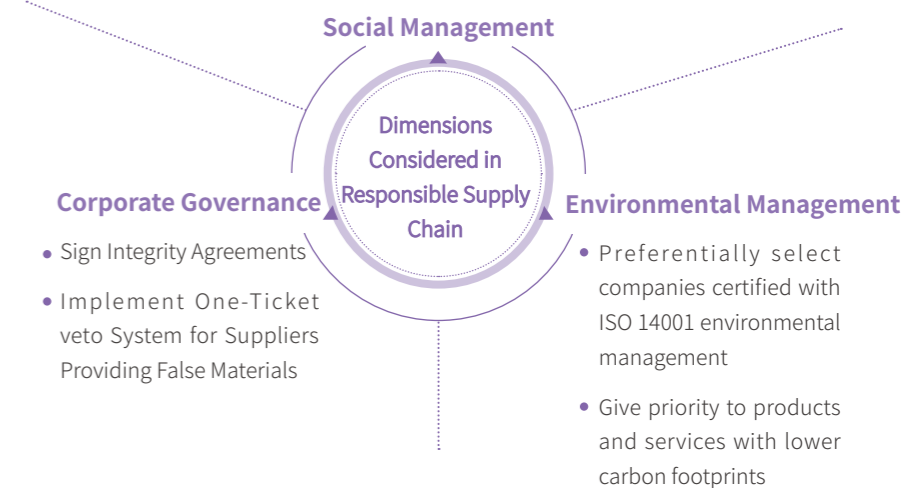
Supplier Admission, Evaluation, And Removal Mechanism



## Building Responsible Supply Chain

The company attaches great importance to supplier social responsibility management and incorporates ESG factors into the supplier screening and evaluation system. The company utilizes online procurement platforms and digital means to create a transparent and open supplier selection process. It signs integrity agreements with suppliers and provides regular integrity-theme training to internal purchasing personnel, to ensure a transparent procurement. Additionally, the company traces the origin of supplier raw materials to ensure they are not sourced from conflict minerals. Moreover, the company requires suppliers to sign safety and environmental protection agreements and provides relevant training for selected suppliers to enhance their environmental awareness, thereby helping to build an industry-leading responsible supply chain.

- Preferentially select companies certified with SIO 45001, ISO 9001, OHSAS18000, and other systems
- Require suppliers to comply with relevant laws and regulations, strictly prohibiting the use of child labor or forced labor
- Remove all suppliers from the database in case of significant safety accidents



Dimensions Considered in Responsible Supply Chain





# Fore-runner

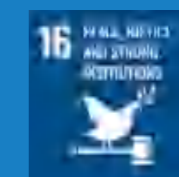
Robust Corporate Governance



## Our Actions

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Sound and compliant corporate governance is the cornerstone of sustainable development for enterprises. GCL SI continuously improves risk management mechanisms, enhances operational transparency and accountability, and strives to achieve the best practices in business ethics, creating long-term value for all stakeholders.



# Corporate Governance

GCL SI is committed to creating a diverse, effective, and professional governance structure, implementing comprehensive board structure and governance, and continuously enhancing the level of corporate governance to protect the interests of shareholders.

## Board Structure and Governance

In the reporting period, number of General Meetings of Shareholders held

10

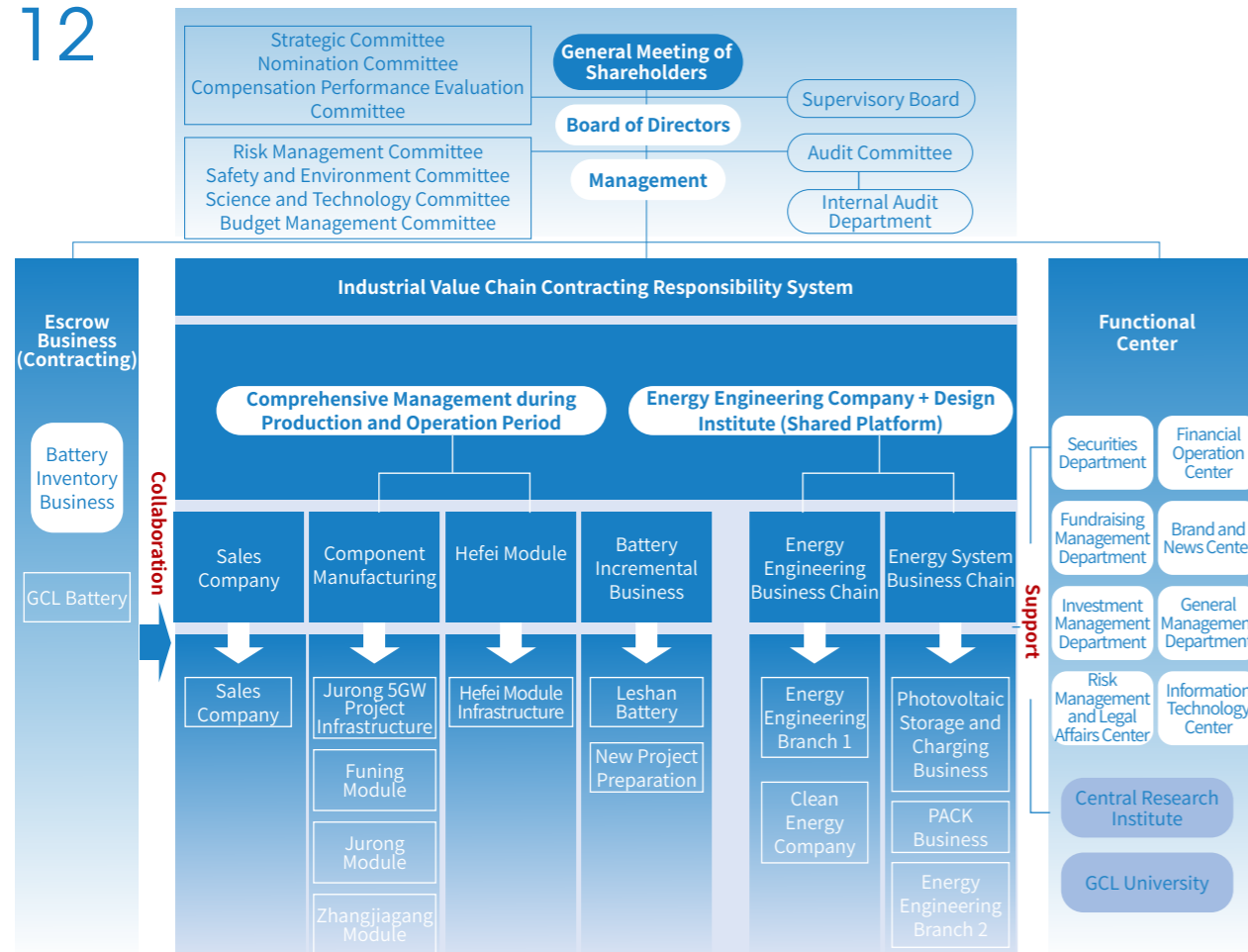
Number of Board Meetings

20

Supervisory Board Meetings

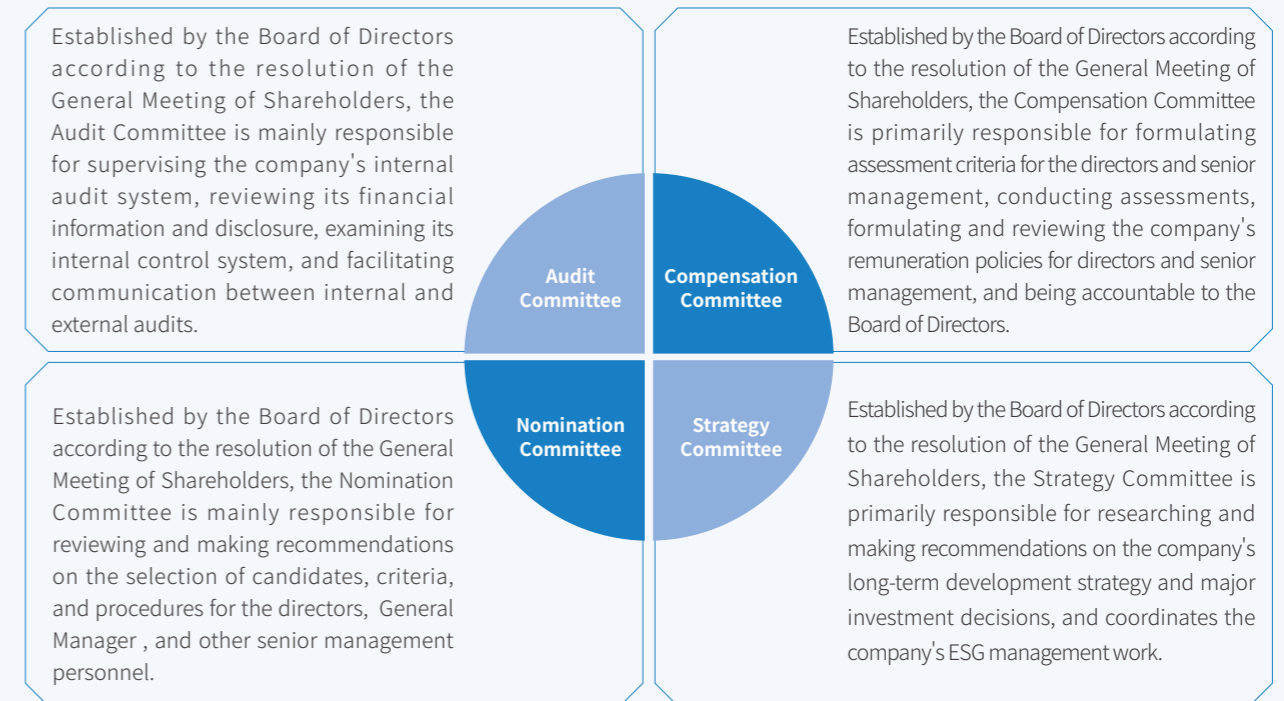
12

GCL SI strictly adheres to laws and regulations such as the *Company Law*, *Securities Law*, *Shenzhen Stock Exchange Listing Rules*, and the *Articles of Association of GCL System Integration Technology Co., Ltd.*, as well as regulatory rules. The company continuously improves internal standards and regulations, promotes standardized and procedural management, and has established a clear governance structure in accordance with the requirements of listed companies. The company adheres to a scientific decision-making mechanism and establishes a corporate governance structure comprising of the Shareholders' Meeting, the Board of Directors (the Board), and the Board of Supervisors in strict accordance with relevant procedures.



Corporate Governance Structure

The Board of Directors consists of four committees, namely the Audit Committee, the Strategy Committee, the Nomination Committee, and the Compensation Committee. These committees operate in accordance with the relevant laws, regulations, normative documents, and the working rules of each specialized committee since their establishment.



## Diverse Governance Structure

To ensure professional and efficient decision-making by the Board of Directors, the company attaches great importance to diversity in terms of gender, culture, and professional fields among members of the Board. During the reporting period, the Board of Directors consists of 10 directors, including 3 independent directors, and 1 female director. All directors have rich industry experience and a good educational background. The diverse composition helps promote efficient, scientific, and standardized operations of the company.

## Information Disclosure

We are committed to providing authentic, accurate, complete, timely and fair disclosure of information in strict compliance with the relevant laws and regulations, such as the *Articles of Association* and the *Measures for the Administration of Information Disclosure*. GCL SI continuously improves the level and quality of information disclosure and safeguards the interests of investors. The company strictly adheres to insider trading rules, has compiled an "Insider Information Informed Person Registration System" which strengthens the confidentiality of insider information and ensures fair information disclosure.

In the reporting period, the number of announcement disclosed

287

## Investor Relations Management

In accordance with the *Company Law*, *Securities Law*, *Guidelines for Listed Companies and Investor Relations Work*, *Guidelines for Investor Relations Management of Listed Companies on the Shenzhen Stock Exchange*, the *Articles of Association*, and other relevant laws, regulations, and normative documents, we have established the *Investor Relations Management Guideline* to ensure a timely and accurate communication and maintain a good relationship with investors. The company interacts with investors, address investor inquiries and strengthens communication via periodic reports and interim announcements, General Meetings of Shareholders, the official website, analyst presentations, earning release calls, one-on-one communication, regular meetings, telephone consultations, exchange interactive platforms, media, newspapers, promotional materials, on-site visits, roadshows etc.

### On-site Visits

- Regularly organize investor onsite visits for them to understand the company's production and operations.
- In 2022, a total of 11 on-site visits were organized.

### Investor Presentations

- Organize strategy meetings and roadshows, etc., to provide timely updates on the company's production and operations, strategic planning, investment and financing and others recent developments progress of the company.
- In 2022, a total of 25 online and offline communication meetings were organized.

### Earning Release Call

- Conduct regular earning release calls, focusing on interpreting the company's financial data, operational performance, progress of management objectives, as well as the business plan and outlook for the next year.
- In 2022, a total of 2 earning release calls were held.

### Exchange Interactive Platforms and other New Media Communication

- Regularly respond to inquiries raised by investors on public platforms, promoting information communication among listed companies, investors, and other market participants.
- In 2022, 220 investor inquiries were addressed.



## Compliant Operation

GCL SI always regards integrity and compliance as the foundation for long-term development. The company strictly complies with laws and regulations, continuously strengthens the risk management, promotes a culture of integrity and compliance which drives the company's steady and sustainable development.

During the reporting period, the number of onsite risk management training sessions organized

4

Number of Promotional Posters

26

## Risk Management

GCL SI has established a scientific and effective risk management and internal control system, formulated the *Comprehensive Risk Management Standards*, and conducts risk identification and assessment in alignment with the company's strategies and operational objectives. We involve in important project reviews and process approvals in early stage, proactive participate in core business activities to effectively prevent risks focusing on "Early Involvement, Indicator Tracking, and Risk Communication". We check quantitative risk indicators to dynamically monitor risks in key business processes, and flag risk timely. Risk management training and promotion across all employees is conducted to enhance risk management awareness and promote enterprise-wide risk control.

The company has established Risk Management Committee responsible for decision-making on comprehensive risk management of GCL SI and is accountable to the Board of Directors for the effectiveness of comprehensive risk management. The Risk Management Committee consists of one director, served by the company's Chairman or the CEO.

### Risk Management Committee

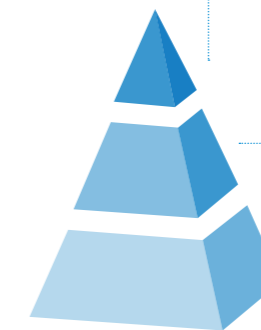
- Responsible for decision-making on overall risk management
- Determine the company's overall annual risk preferences and risk management strategies

### Responsible department for risk management

- Responsible for the construction of the company's risk control system
- Lead and promote the daily work of comprehensive risk management
- Accountable to the Risk Management Committee for the effectiveness of comprehensive risk management

### Functional departments and business units:

- The primary contact for risk management.
- Participate in risk management, formulate risk decisions, and promote the execution.
- Jointly undertake risk management functions and accept risks
- Manage the organization, coordination, guidance, and supervision by the responsible department



Internal Risk Management Promotional Poster

"Three Lines Of Defence" for GCL SI's Risk Management

## Compliance and Internal Control

GCL SI has established a compliance management system and internal control mechanisms, and formulated the *Principles and System of Internal Control Management*, ensuring the effective operation of compliance operations and internal control in various aspects.

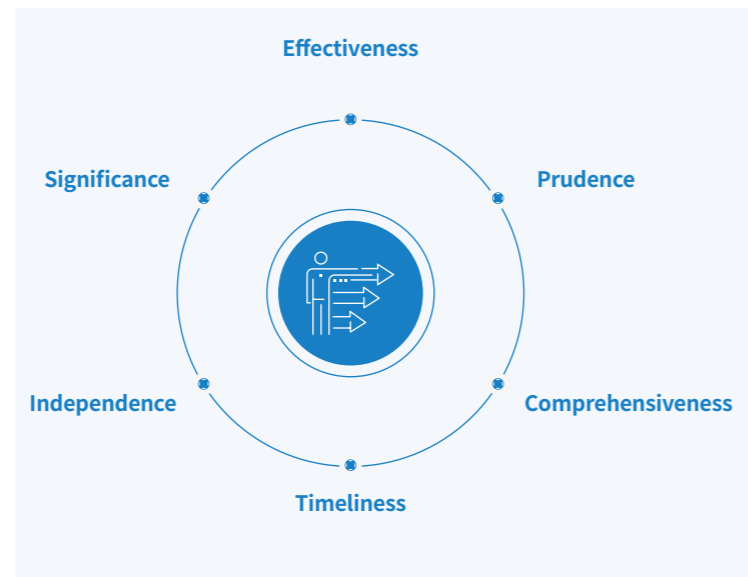
Responsible for guiding and supervising subsidiaries in establishing sound internal control and risk management systems, implementing various types of audits and investigations, and overseeing disciplinary actions to achieve supervision, evaluation, monitoring, and correction.



The Board of Directors and the Audit Committee are the highest leading bodies for internal control management, ultimately responsible for the effectiveness of internal control in GCL SI.

Referencing the responsibilities of GCL SI's Internal Control Department, establish internal control and risk management systems based on the requirements of subsidiary business management

In terms of the working approach to internal control, GCL SI implements a monthly risk control report system. At the end of each month, the internal control department tracks the results of previous internal control assessments, audit findings, and progress in rectification. The results will be reported to the internal control department of GCL SI's management team. Furthermore, GCL SI and the internal control departments at various levels of subsidiary companies establish and improve internal control cycle matrices that are tailored to the characteristics of the respective companies in accordance with the requirements of the "Basic Norms for Enterprise Internal Control" and its supporting guidelines. The internal control department also organizes annual evaluations of the effectiveness of internal control in subsidiary companies. Based on the results of internal control assessments and considering the company's rectification progress, the final evaluation conclusion on the effectiveness of internal control for the year is derived.



Principles of Internal Control Management



GCL SI adheres to the business philosophy of integrity and integrity and adopts a zero-tolerance policy towards corruption. At the same time, the company pays attention to data information protection and actively carries out activities related to information security and data security.

## Anti-Corruption

GCL SI has zero-tolerance towards acts that violate business ethics, fully establishes an internal management system and supervision and reporting mechanism, regularly conducts compliance training for all employees, vigorously promotes a culture of integrity, and strictly punishes corruption incidents that occur in various commercial activities. In the internal management, the company has formulated the Anti-fraud and Reporting Management Standards, Anti commercial Bribery and Integrity Agreement, etc., to clarify the management regulations on preventing corruption, bribery and unfair competition and conflict of interest.

### Case Actively Carrying Out Education And Training and Upholding The Concept of "Ten Commandments of GCL SI"

"Ten Commandments of GCL SI" clarify the most basic business moral principles for all employees and requires the employees to practice the core values of the company with integrity. During the reporting period, the employees actively studied the culture of integrity and the "Ten Commandments of GCL SI".



"Ten Commandments of GCL SI" Training

#### For Basic Data:

- No concealing:** no concealment, false reporting, or delayed reporting
- No falsifying:** don't tamper, fabricate, or forge

#### For Job Authorization:

- Not exceeding authority:** not exceeding authorization
- No abusing power:** not abusing authority

#### For Relevant Interests:

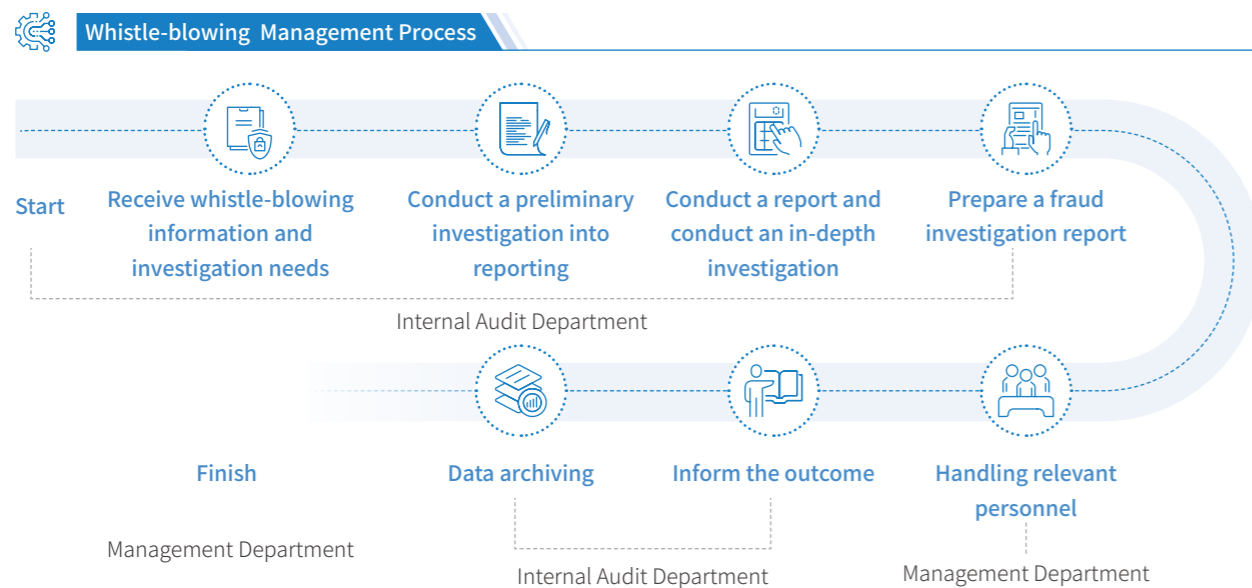
- No bribery:** no solicitation, acceptance, or offering of bribes
- No embezzling:** do not embezzle company assets

#### For the Company's Impact:

- Non disclosure:** do not disclose company secrets
- Non industry:** do not allowed to participate in unfair competition

#### For Employees:

- Non retaliation:** No retaliation allowed
- Do not undermine reputation:** do not damage the image of the company and employees



Whistle-blowing Management Process

## Whistle-blowing and Investigation

We take strict measures to the legitimate interests of the company and protect the information of whistle-blowers and prohibit retaliation for good faith reporting. The company has established open, transparent, and smooth reporting and investigation steps, management communication mechanisms, reward and punishment mechanisms to encourage employees, customers, suppliers, and other stakeholders to report potential misconduct. The clear reporting system and streamlined handling process ensure that the reporting process and outcomes are fair and just.

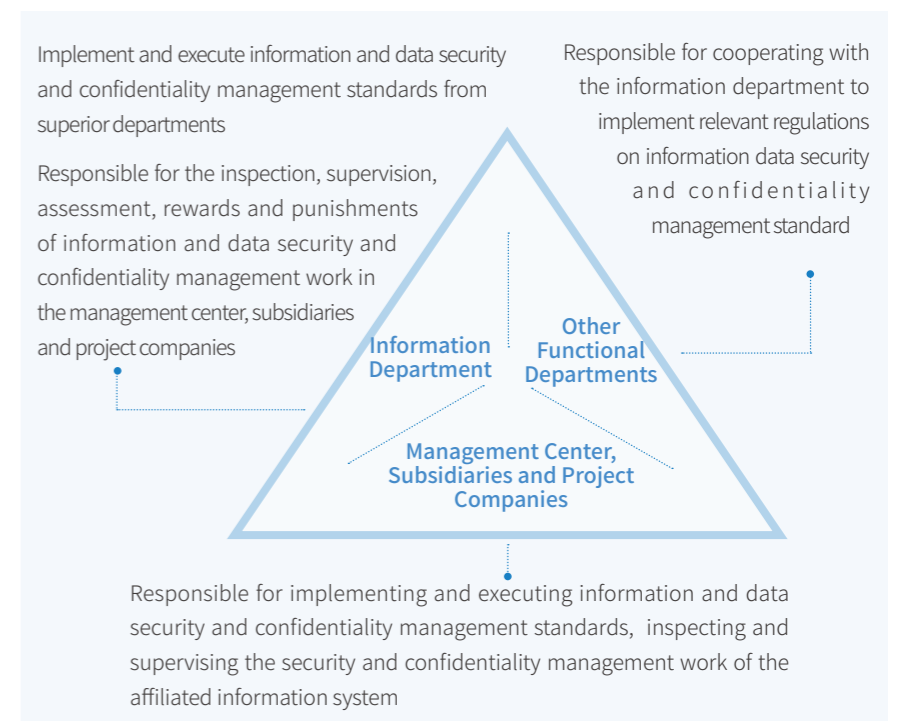
GCL SI has established a strict whistle-blower protection system to protect the personal rights, property rights, work rights, democratic rights, reputation rights, and other legitimate rights. The internal audit department shall assign a dedicated person to manage the whistle-blower's information, reporting clues, and reporting materials, and strictly prevent the leakage of reporting information and loss of whistle-blowing materials.

### Reporting Channels:

Employees at all levels of the company and related parties who comes across or suspects any unlawful activity must inform the company via letters, emails including but not limited to [jubao@gcl-power.com](mailto:jubao@gcl-power.com), phone calls, face-to-face interviews, and other means.

## Confidentiality and Information Security

GCL SI attaches great importance to information security and data protection. The company strictly follows the *Network Security Law of the Cybersecurity Law of the People's Republic of China* and the laws and regulations of other regions where it operates, and formulates internal management systems, including *Network System Management Standards, Database System Management Standards, Information Data Security and Mobile Media Confidentiality Management Standards*, with reference to the requirements of the information security management system.



Information Data Security Management of GCL SI

GCL SI has established a security and confidentiality system to enhance information security prevention and minimize potential information security risks. We have taken various measures to strengthen the security of network system including classified information and release review system, classified computer media and media security management, classified data maintenance and processing site management, and internet usage security management.

We regularly hold information security awareness training sessions to strengthen their information security awareness. Moreover, we carry out special training to ensure the safety and stability of our business operations.



## Party Building

In 2022, the company's party committee adhered to the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, deeply studied and implemented the spirit of the 20th National Congress of the Communist Party of China, and strictly fulfilled the main responsibility of comprehensively strengthening party governance. It continuously strengthened party building and adhered to high-quality party building to promote the high-quality development of the company.

### Welcoming the 20<sup>th</sup> National Congress, Studying and Implementing the Spirit of the 20<sup>th</sup> National Congress of the Communist Party of China

On 16<sup>th</sup> October, 2022, the 20<sup>th</sup> National Congress of the Chinese Communist Party solemnly opened in Great Hall of the People in Beijing. Funing GCL SI organized party members and the representatives of employees to watch the live broadcast of the opening ceremony and listened carefully to Jinping Xi's report on "Holding High the Great Banner of Socialism with Chinese characteristics and Uniting for the Comprehensive Construction of a Socialist Modernized Country". Learning and comprehending the spirit of the conference, the party members, cadres, and employees were deeply encouraged and excited. Among them, the report on promoting green development and promoting harmonious coexistence between humans and nature has pointed out the direction for the development of new energy. Everyone has expressed the need to study seriously, deeply understand the spirit of the 20<sup>th</sup> National Congress, and conduct in-depth thinking. The report spirit should be transformed into guidelines and encourage companies to take practical actions focusing on quality, safety, and development. It contributed to the steady promotion of the "dual carbon" goal with practical actions.



#### Case "Welcoming the 20<sup>th</sup> National Congress with Book Fragrance" Red Classic Reading Sharing Seminar

On the occasion of the upcoming victory of the 20<sup>th</sup> National Congress, Funing GCL SI held a red classic reading sharing seminar titled "Welcoming the 20<sup>th</sup> National Congress with Book Fragrance" on 14<sup>th</sup> October 2022. 20 readers from various departments participated in the activity and shared the thoughts about the books and articles they read. The enthusiasm of employees for reading and learning was fully mobilized, encouraging them to read more good books and exchange ideas. The company strives to create a good learning atmosphere both and take practical actions to welcome the successful convening of the 20<sup>th</sup> National Congress of the Communist Party of China.



#### Case Theme Party Day Activity of "The Heart of GCL SI Forever Towards the Party, Welcoming the 20<sup>th</sup> National Congress"

On 28<sup>th</sup> September, 2022, the Party Branch of Hefei GCL SI held the theme Party Day activity of "The Heart of GCL SI Forever Towards the Party, Welcoming the 20<sup>th</sup> National Congress", with all party members and some representatives of the masses participating. At the meeting, the secretary of the company's party branch first learned the fourth volume of "Xi Jinping: The Governance of China", which is on "creating a new development pattern and reshaping a new competitive advantage", and discussed the insights with all party members in depth. All party members expressed that they should work hard with the original intention and take practical actions to welcome the successful convening of the 20<sup>th</sup> National Congress of the Communist Party of China.



## Outlook

With the mission of "focusing on green development and continuously improving the living environment for human beings", GCL SI is primarily engaged in PV sector and further deepens integrating corporate culture with sustainable development. The company collaborates with internal and external stakeholders to support the global green and low-carbon transformation, and contribute to the realization of the United Nations Sustainable Development Goals by 2030.

In the future, the company will firmly promote the construction of intelligent manufacturing bases, collaborate with advantageous enterprises, and leverage the industrial, technological, and brand advantages to timely promote overseas production capacity layout, avoid trade barriers, and establish global regional competitive advantages. At the same time, we will continuously expand overseas market channels, carry out strategic customer management and strategic channel integration, accelerate the product update cycle, continuously improve the after-sales service system, and constantly improve market share in the overseas market to become a respected global leader in new energy and clean energy.

## Appendix

### About the Report

This report provides a detailed disclosure of the practices and performance of GCL System Integration Technology Co., Ltd. in the areas of economic, environmental, social, and corporate governance responsibilities in 2022. The purpose of the Report is to facilitate an effective dialogue between GCL SI and our stakeholders to address their expectations in a comprehensive and structured process.

#### • Reporting Period

This report is an annual report.

#### • Scope of Report

GCL System Integration Technology Co., Ltd. is the main body.

#### • Reporting Period

The reporting period is from January 1, 2022 to December 31, 2022. In order to enhance the comparability and forward-looking nature of the report, some contents were moderately extended to the previous and subsequent years.

#### • Compilation Basis

*Sustainable Development Goals (SDGs) Enterprise Action Guidance*

Global Sustainability Standards Committee  
*Sustainable Development Reporting Standards (GRI Standards)*

Chinese Academy of Social Sciences *Guidance on Compiling China's Corporate Social Responsibility Report (CASS-ESG 5.0)*

Chinese National Standards *Guidance on Compiling Social Responsibility Report (GB/T36001-2015)*

International Organization for Standardization *ISO 26000: Guidance on Social Responsibility (2010)*

Shenzhen Stock Exchange *Guidance on Standardized Operation of Companies Listed in Shenzhen Stock Exchange*

#### • Title Description

GCL System Integration Technology Co., Ltd. is the main body.

#### • Notes on data and currency

The data sources used in the Report include the original data of the company's actual operation, public data of government departments, annual financial data, internal related statistical statements, third-party questionnaires and third-party evaluation interviews, etc.

The financial data in the Report is in Renminbi (RMB). If there is any inconsistency with the financial report, the financial report shall prevail.

#### • Reporting Period

For the convenience of expression and reading, "GCL System Integration Technology Co., Ltd." in this report is also referred to as "GCL SI", "The Company" or "We".

#### • Report Preparation Process

Based on the practice of corporate social responsibility, this report follows the process of "project approval - material collection - preparation and revision - senior management review - board review - external disclosure". GCL SI actively communicates with relevant stakeholders in the process of project approval, preparation and revision and other links, and studies and demonstrates the framework structure and contents of the report.

#### • Report Reliability Assurance

The company promises that there are no false records, misleading statements, or significant omissions in the contents of this report, and is responsible for the authenticity, accuracy, and completeness of its contents.

#### • Report Acquisition

The electronic version of this report can be accessed from the official website of GCL System Integration Technology Co., Ltd. (<https://www.gclsi.com>) and the CNINFO website (<http://www.cninfo.com.cn>).

## Key Performance Table

Economic Indicator Performance				
Disclosure item	Unit	In 2021	In 2022	
Revenue	RMB '000	470,146.05	835,360.92	
Total assets	RMB '000	929,999.68	1,018,127.59	
Net profit	RMB '000	-198,288	5,931.80	
R&D investment	RMB '000	6,507.70	8,095.98	
Number of R&D technical personnel	People	96	133	
Proportion of the number of R&D technical personnel	%	3.67	3.78	

Employee Training Indicators					
Disclosure item	Unit	In 2020	In 2021	In 2022	
Total number of employees trained	People	31,470	29,469	87,578	
Total hours of training	hour	2,443	2,596	3,598	
Average hours for training	hour	30	29	37	
By gender	Total hours of training for male employees	hour	1,749	1,871	2,598
	Total hours of training for female employees	hour	694	683	1,001
By employee type	Total hours of training junior employees	hour	2,083	2,147	3,119
	Total hours of training for middle management employees	hour	252	278	299
	Total hours of training for senior management employees	hour	107	171	180

Employee Rights And Interests Performance				
Disclosure item	Unit	In 2020	In 2021	In 2022
Labor contract signing rate	%	100	100	100

Employee Employment Performance					
Disclosure item	Unit	In 2020	In 2021	In 2022	
Total number of employees	Number	1,317	1,568	3,520	
By gender	Male	Number	901	1,088	2,383
	Female	Number	416	480	1,137
By employment type	Full-time employee	Number	1,311	1,563	2,276
	Contractor	Number	0	0	1,225
	Others	Number	6	5	19
By race	Minority employees	Number	—	—	30
	51 years old and above	Number	46	57	65
	41-50 years old	Number	158	243	566
	31-40 years old	Number	791	831	1,736
By age	30 years old and below	Number	322	437	1,153
	Mainland China	Number	1,293	1,545	3,500
	Hong Kong, Macao, and Taiwan	Number	24	23	20
By educational background	Bachelor degree or above	Number	—	—	669
	Below bachelor degree	Number	—	—	2,851
By employee category	Middle management employees	Number	71	89	94
	Number of female employees in middle management	Number	14	19	15
	Senior management employees	Number	25	35	38
	Number of female employees in senior management	Number	2	4	4

Intellectual Property Management Indicator			
Disclosure item	Unit	In 2021	In 2022
Number of patents held	Number	438	445
Number of software copyrights held	Number	17	17

### Safety Accidents And Personnel

Disclosure item	Unit	In 2021	In 2022
Safety production investment	RMB '000	—	335.8

### Energy Consumption

Indicator	Unit	In 2021	In 2022
Natural gas	m <sup>3</sup>	79,312	150,729
Purchased electricity	kWh	126,600,000	150,893,426
Steam	m <sup>3</sup>	2,176.85	3,237.747
Gasoline	kg	101,698.18	0
Comprehensive energy consumption	Tons of standard coal	15,664.62	12,011.42
Direct greenhouse gas emissions (Scope1)	Ton	235.68	325.87
Indirect greenhouse gas emissions (Scope 2)	Ton	65,579.37	87,669.92
Total greenhouse gas emissions	Ton	65,815.05	87,995.79

### Exhaust Emissions

Indicator	Unit	In 2021	In 2022
Exhaust emissions	m <sup>3</sup>	786,793,843.00	307,476,003.73

### Water Consumption

Indicator	Unit	In 2021	In 2022
Water consumption	m <sup>3</sup>	68,769	267,280

### Total Wastewater Discharge

Indicator	Unit	In 2021	In 2022
Total wastewater discharge	m <sup>3</sup>	424,348	238,949

### Waste Discharge

Indicator	Unit	In 2021	In 2022
Total waste discharge	Ton	4,006.00	13,325.26
General solid waste	Ton	2,400.37	13,465.74
Hazardous waste	Ton	8.05	15.90
Total amount of incinerated hazardous waste	Ton	1.75	5.92



# Indicator index

## GRI content index

<b>Statement for use</b>	GCL SI reported the information cited in the GRI content index with reference to GRI standards from January 1, 2022 to December 31, 2022.
<b>Used GRI 1</b>	GRI 1: Foundation 2021

GRI standards	Disclosure item	Chapters and sections
<b>GRI 2 General Disclosure 2021</b>		
<b>Organization and its reporting practices</b>		
2-1	Details of the company	About US
2-2	Entities included in organizational sustainable development report	About US
2-3	Reporting period, reporting frequency, and contact person	About the Report
<b>Activities and Workers</b>		
2-6	Activities, value chain, and other business relationships	Building a Responsible Supply Chain
2-7	Employees	Growing Together with Employees
<b>Governance</b>		
2-9	Governance structure and composition	Solid Corporate Governance Corporate Governance
2-10	Nomination and selection of the supreme governing body	olid Corporate Governance Corporate Governance
2-11	Chairman of the supreme governing body	olid Corporate Governance Corporate Governance
2-12	The supervisory role of the supreme governing body in the management impact	olid Corporate Governance Corporate Governance
2-13	Authorize responsibility for management impact	olid Corporate Governance Corporate Governance
2-14	The role of the supreme governing body in sustainable development report	Social Responsibility
2-15	Conflict of interest	olid Corporate Governance Corporate Governance
2-16	Communication of key issues	Social Responsibility
2-17	Common knowledge of the supreme governing body	olid Corporate Governance Corporate Governance
2-18	Performance evaluation on the supreme governing body	olid Corporate Governance Corporate Governance
2-19	Compensation policy	Growing Together with Employees
2-20	Procedure for determining compensation	Growing Together with Employees
2-21	Annual total compensation ratio	Growing Together with Employees
<b>Strategy, policy, and practice</b>		
2-22	Statement on sustainable development strategy	Social Responsibility
2-23	Policy commitments	Focus on green development and continuously improve the living environment for human beings
2-24	Integrate policy commitments	Social Responsibility
2-25	Procedures for remedying negative effects	Social Responsibility
2-26	Mechanisms for seeking advice and raising concerns	Social Responsibility
2-27	Compliance with local laws and regulations	Social Responsibility
2-28	Membership of the Association	Social Responsibility
<b>Participation of stakeholders</b>		
2-29	Participation methods of stakeholders	Social Responsibility
2-30	Collective bargaining agreement	Growing Together with Employees
<b>GRI 3 Material Topics 2021</b>		
3-1	The process of determining material topics	Social Responsibility
3-2	List of material topics	Social Responsibility
3-3	Management of material topics	Social Responsibility

GRI standards	Disclosure item	Chapters and sections
<b>GRI 201 Economic Performance 2016</b>		
201-1	Directly produced and allocated economic value	Key Performance Indicators
201-2	Financial impacts and other risks and opportunities brought about by climate change	Addressing Climate Change
201-3	Defined benefit plan obligations and other retirement plans	—
201-4	Financial subsidies provided by the government	—
<b>GRI 202 Market Performance 2016</b>		
202-1	The ratio of salary at the starting salary level to local minimum wage based on gender standard	Growing Together with Employees
202-2	Proportion of executives hired from local communities	Growing Together with Employees
<b>GRI 203 Indirect Economic Performance 2016</b>		
203-1	Infrastructure investment and supporting services	Led by technology, bringing green energy into life
203-2	Significant indirect economic impacts	Led by technology, bringing green energy into life
<b>GRI 204 Procurement Practice 2016</b>		
204-1	Proportion of expenditure for procurement from local suppliers	Building a Responsible Supply Chain
<b>GRI205 Anti-corruption 2016</b>		
205-1	Operation points that have received corruption risk assessment	Business Ethics
205-2	Communication and training of anti-corruption policies and procedures	Business Ethics
205-3	Confirmed corruption events and actions taken	Business Ethics
<b>GRI 206 Anti-competitive Practice 2016</b>		
206-1	Legal proceedings against anti-competitive behaviors, anti-trust and anti-monopoly practices	—
<b>GRI207 Tax Revenue 2019</b>		
207-1	Taxation policy	—
207-2	Taxation governance, control and risk management	—
207-3	Participation and management of stakeholders related to tax concerns	—
207-4	Country-based report	—
<b>GRI 301 Material 2016</b>		
301-1	The weight or volume of the material used	Green Products
301-2	Recycled feed used	Green Products
301-3	Recycled products and their packaging materials	Green Products
<b>GRI 302 Energy 2016</b>		
302-1	Energy consumption inside the organization	Green Operations
302-2	Energy consumption outside the organization	Green Operations
302-3	Energy intensity	Green Operations
302-4	Reduce energy consumption	Green Operations
302-5	Reduce energy demand for products and services	Green Operations
<b>GRI 303 Energy 2018</b>		
303-1	The mutual impacts of organization and water as shared resources	Green Operations
303-2	Management of drainage related impacts	Green Operations
303-3	Water taking	Green Operations
303-4	Water drainage	Green Operations
303-5	Water consumption	Green Operations

GRI standards	Disclosure item	Chapters and sections
<b>GRI 304 Biodiversity 2016</b>		
304-1	Operation points owned, leased, and managed by organizations in or adjacent to protected areas and areas with rich biodiversity outside protected areas	Green Operations
304-2	The significant impact of activities, products, and services on biodiversity	—
304-3	Protected or restored habitats	—
304-4	Species listed on the Red List of International Union for Conservation of Nature (IUCN) and National Conservation Register in habitats affected by operations	—
<b>GRI 305 Emission 2016</b>		
305-1	Direct (scope1) greenhouse gas emissions	Greenhouse Gas Management
305-2	Energy indirect (scope 2) greenhouse gas emissions	Greenhouse Gas Management
305-3	Other indirect (scope 3) greenhouse gas emissions	Greenhouse Gas Management
305-4	Greenhouse gas emission intensity	Greenhouse Gas Management
305-5	Amount of greenhouse gas emission reduction	Greenhouse Gas Management
305-6	Emissions of ozone depleting substances (ODS)	Greenhouse Gas Management
305-7	Emissions of nitrogen oxides (NOX), sulfur oxides (SOX), and other major gas	Greenhouse Gas Management
<b>GRI 306 Waste 2020</b>		
306-1	Production of waste and waste-related significant impacts	Green Operations
306-2	Management of waste-related significant impacts	Green Operations
306-3	Waste produced	Green Operations
306-4	Waste transferred from disposal	Green Operations
306-5	Waste under disposal	Green Operations
<b>GRI 308 Environmental Assessment On Suppliers 2016</b>		
308-1	New suppliers screened out with environmental assessment dimensions	Building a Responsible Supply Chain
308-2	Negative environmental impacts of supply chain and actions taken	Building a Responsible Supply Chain
<b>GRI 401 Employment 2016</b>		
401-1	Employment rate and turnover rate of new employees	Growing Together with Employees
401-2	Benefits for full-time employees (excluding temporary or part-time employees)	Growing Together with Employees
401-3	Childcare leave	Growing Together with Employees
<b>GRI 402 Employment Relationship 2016</b>		
402-1	Minimum notification period for operation changes	Growing Together with Employees
<b>GRI 403 Occupational Health And Safety 2018</b>		
403-1	Occupational health and safety	Growing Together with Employees
403-2	Hazard identification, risk assessment, and accident investigation	Growing Together with Employees
403-3	Occupational health service	Growing Together with Employees
403-4	Occupational health and safety affairs: participation, consultation and communication of workers	Growing Together with Employees
403-5	Occupational health and safety training for workers	Growing Together with Employees
403-6	Promoting the health of workers	Growing Together with Employees
403-7	Preventing and mitigating occupational health and safety impacts directly related to business relationships	Growing Together with Employees
403-8	Workers covered by occupational health and safety management system	Growing Together with Employees
403-9	Occupational injury	Growing Together with Employees
403-10	Work-related health issues	Growing Together with Employees

GRI standards	Disclosure item	Chapters and sections
<b>GRI 404 Training And Education 2016</b>		
404-1	Average training hours per employee per year	Growing Together with Employees
404-2	Skill improvement scheme and transition assistance scheme for employees	Growing Together with Employees
404-3	Proportion of employees that receive regular performance and career development assessments	Growing Together with Employees
<b>GRI 405 Diversity And Equal Opportunities 2016</b>		
405-1	The diversity of governing bodies and employees	Growing Together with Employees
405-2	Ratio of basic salary and compensation between men and women	Growing Together with Employees
<b>GRI 406 Anti-discrimination 2016</b>		
406-1	Discrimination events and corrective actions taken	Growing Together with Employees
<b>GRI 407 Freedom Of Association And Collective Bargaining 2016</b>		
407-1	Operation points and suppliers who may face risks in terms of freedom of association and collective bargaining rights	Growing Together with Employees
<b>GRI 408 Child Labor 2016</b>		
408-1	Operation points and suppliers with significant risk of child labor events	Growing Together with Employees
<b>GRI 409 Forced Or Compulsory Labor 2016</b>		
409-1	Operation points and suppliers with significant risk of forced or compulsory labor events	Growing Together with Employees
<b>GRI 410 Security Practice 2016</b>		
410-1	Security personnel who have received training in human rights policies or procedures	Growing Together with Employees
<b>GRI 411 Indigenous Rights 2016</b>		
411-1	Events involving infringement of indigenous rights	—
<b>GRI 413 Local Communities 2016</b>		
413-1	Having operation points where local communities can participate in or influence the evaluation and development plans	Shared Future with the Community
413-2	Having operation points actual or potential significant negative impacts on local communities	—
<b>GRI 414 Social Assessment On Suppliers 2016</b>		
414-1	New suppliers screened out with social assessment dimensions	Building a Responsible Supply Chain
414-2	Negative social impacts of supply chain and actions taken	Building a Responsible Supply Chain
<b>GRI 415 Public Policy 2016</b>		
415-1	Political donations	—
<b>GRI 416 Health And Safety Of Customers 2016</b>		
416-1	Assess the health and safety impacts of product and service categories	Product Quality Assurance
416-2	Violations involving the health and safety impacts of products and services	Product Quality Assurance
<b>GRI 417 Marketing And Identity 2016</b>		
417-1	Requirements for product and service information and identification	Product Quality Assurance
417-2	Violations involving product and service information and identification	Product Quality Assurance
417-3	Violations involving marketing communication	Product Quality Assurance
<b>GRI 418 Customer Privacy 2016</b>		
418-1	Proven complaints about invasion of customer privacy or loss of customer materials	Business Ethics

## Feedback and Suggestions

Dear Reader:

Thank you for reading this "2022 Environmental, Social, and Governance Report of GCL SI Technology Co., Ltd.". In order to provide you and other stakeholders with more professional and valuable corporate social responsibility information, please assist us in completing the relevant questions in the feedback form to help us further enhance social responsibility and sustainable development management in the future.

Please score the following questions on a scale of 1 to 5 (1 being the lowest score and 5 being the highest score).

1. What's your overall comment on the Report?

1     2     3     4     5

2. Do you think the report can reflect the Company's significant economic influences?

1     2     3     4     5

3. Do you think the report can reflect the Company's significant environmental influences?

1     2     3     4     5

4. Do you think the report can reflect the Company's significant social influences?

1     2     3     4     5

5. Do you think the report can reflect the Company's corporate governance?

1     2     3     4     5

6. What's your overall comment of information disclosure in the Report?

1     2     3     4     5

7. What's your overall comment of literal expression quality in the Report?

1     2     3     4     5

8. What's your overall comment of design style in the Report?

1     2     3     4     5

9. Which issues in the Report are you most interested in?

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10. Do you have any other advice and suggestions about the Report?

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Name: \_\_\_\_\_ You can contact us via phone call, e-mail, or by post. The contact  
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