



2024

SUSTAINABILITY REPORT



GCL System Integration Technology Co., Ltd.

Stock Code: 002506.sz

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About the Report

Introduction

2024 Sustainability Report (hereinafter referred to as "the Report") constitutes the fourth Sustainability/ Environmental, Social, and Governance (ESG) report issued by GCL System Integration Technology Co., Ltd. (hereinafter referred to as "GCL SI", "the Company", or "we"), aiming to disclose and showcase the Company's progress in sustainable development to our stakeholders.

The Report is published on an annual basis, aligning with the fiscal year. The Reporting Period is from January 1, 2024, to December 31, 2024 (hereinafter referred to as the "Reporting Period") and provides a detailed account of GCL SI's commitments, actions, and performance in economic and ESG domains during this timeframe. To reflect consistency, comparability and completeness, contents of the Report refer back to previous years or cover the year 2025 as appropriate.

Scope of the Report

The organizational scope of the Report encompasses the listed entity of GCL SI. In cases where the specific data scope deviates from the Reporting scope, such distinctions will be explicitly stated in the text.

Reporting Standards and Guidelines

The Report complies with the requirements of Shenzhen Stock Exchange Self-Regulatory Guidelines No. 17 for Listed Companies of Shenzhen Stock Exchange - Sustainability Report (Pilot). In addition, the Report refers to the latest Global Sustainability Standards Committee Sustainable Development Reporting Standards (GRI Standards, hereinafter referred to as "GRI") of Global Sustainability Standards Board, the Reporting disclosure requirements of Sustainable Development Goals (SDGs) Enterprise Action Guidance, and the rating standards such as EcoVadis and CDP.

Data Sources

The data utilized in the Report originates from various sources, including raw operational data from the Company, internal statistical reports, annual financial data, publicly available data from government agencies, third-party questionnaire surveys, or interviews. Financial data presented in the Report is denominated in RMB. In instances where discrepancies arise between financial data in the Report and that in our financial statements, the latter shall prevail.

Description Guidelines

For ease of reference and readability, the following table presents the full names and corresponding abbreviations of affiliated companies in the Report:

Full Name of Affiliated Company	Abbreviation
Hefei GCL SI New Energy Technology Co., Ltd.	Hefei GCL SI
Funing GCL SI Technology Co., Ltd.	Funing GCL SI
Wuhu GCL SI New Energy Technology Co., Ltd.	Wuhu GCL SI
GCL Green Energy System Technology Co., Ltd.	GCL Green Energy
GCL Energy Storage Technology (Suzhou) Co., Ltd.	GCL Energy Storage

Report Reliability Assurance

The Company and the Board of Directors of GCL SI Technology Co., Ltd. jointly commit that there are no false records, misleading statements, or material omissions in the content of the Report. We are fully responsible for the authenticity, accuracy, and completeness of the information contained herein.

Format of Report Release

The online version of the Report is accessible on the official website of GCL SI Technology Co., Ltd. (<https://www.gclsi.com>) and the CNINFO website (<http://www.cninfo.com.cn>).

Chairman's Message



The industry in which GCL SI operates and the endeavors we pursue are vital to the national economy and people's livelihoods, continuously contributing to improving the living environment of humanity. GCL SI is not only addressing immediate challenges but is also driven by a future full of promise and aspiration that inspires and motivates us to move forward.

Zhu Yufeng
Chairman of GCL SI

GCL SI has adopted 'sustainable development' as the core philosophy guiding our operations and strategic decision-making.

As a key player in the global renewable energy industry, GCL SI upholds the goals and principles of the *United Nations Framework Convention on Climate Change* (UNFCCC) and the *Paris Agreement*. We actively respond to the national 'Dual Carbon' goals, driving emission reduction efforts within our operations and across the industrial chain. To demonstrate our long-term commitment as a responsible enterprise, we are dedicated to building a resilient sustainability governance framework that listens to the voices of internal and external stakeholders. We implement the action plan of technology-driven carbon management, leveraging digital power and innovation to enable deep decarbonization, thereby reshaping the harmonious coexistence of the economy, society, and the environment.

GCL SI places innovation-driven development as the primary principle for operational improvement and strategic implementation.

Innovation is the foremost productive force. Under the guidance of our three core strategies—technological, digital and green GCL SI—we firmly believe that only innovation can conquer challenges and adapt to an ever-evolving world. We strive not only to advance technological breakthroughs but also to reimagine management practices, smart manufacturing, and talent development. Faced with historical opportunities and industry challenges, we remain unwavering in our innovation-driven approach, embracing change with innovative thinking and vision, proactively transforming, and continuously pursuing higher-quality development and growth.

GCL SI regards shared identity as the core of our corporate culture development.

Only through continuous renewal can an organization truly flourish. Guided by the belief that 'a company without progressive culture is soulless,' our management at all levels practices GCL SI's culture and values with deep awareness and conviction. They serve as role models and advocates for our corporate culture. GCL SI has established a cultural ecosystem that combines shared values with distinct characteristics across different business segments. We integrate corporate culture into the development of systems, processes, and employee behavior standards, achieving a harmonious unity between systems and culture, as well as between ideas and operations. This ensures that employees are guided by values while adhering to standardized practices.

GCL SI views responsibility as the essence of our ultimate pursuit.

Truth, goodness, and beauty require responsibility as their cornerstone. GCL SI is committed to the responsibility of driving economic and social progress, as well as to our responsibilities to customers, employees, and shareholders. At the same time, our employees are also expected to uphold their responsibilities to the Company and their roles. This mutual commitment forges the enduring brilliance of both the enterprise and individual lives; our collective promises create incremental value for the economy and society.

GCL SI has positioned deep integration as a driving force for high-quality development.

Rooted in the "NEXT" sustainable development strategy, the Company embeds this vision across its entire ecosystem. By integrating sustainability into its management framework, GCL SI optimizes resource allocation and accelerates green operations. Simultaneously, it fosters a culture of responsibility by empowering every employee to become an active advocate for sustainable practices. Through partnerships with clients, the Company not only delivers innovative solutions but also collaborates to amplify shared values of environmental and social stewardship. Looking ahead, GCL SI will continue to weave sustainability into every project and decision, ensuring that economic success harmonizes with its commitment to a greener, more harmonious future.

About GCL SI

| Company Overview

GCL SI Technology Co., Ltd. (002506. SZ), as one of the four listed companies under the GCL Group, is committed to becoming a global leader in providing energy system solutions. Adhering to the concept of "bringing green power to life", we fully integrate low-carbon development into business operations in the renewable energy sector which we are devoted to. We are primarily engaged in the R&D, design, production, sales and one-stop services of high-efficiency photovoltaic (PV) cells and differentiated components, Engineering Procurement Construction (EPC), integrated energy storage systems and related products. The Company adheres to the concept of "technology leading and innovation-driven," consistently pursuing a strategic path of high-quality, efficient, and differentiated product technologies. Building on GCL Group's global brand influence, we actively expand global market presence to achieve long-term sustainable growth.

Looking ahead, GCL SI will uphold its "combat spirit", steadfastly pursue the path of sustainable development, and advance under the strategic guidance of Technological, Digital, and Green GCL SI. By deeply integrating the defining trend of green and low-carbon development with its long-standing expertise in the renewable energy sector, the Company will pursue its goals with tenacity and relentless effort.



| Corporate Culture



Mission

Empower green development and continuously create values



Vision

Become a respected leader in global energy system solution provider



Value

Lead with Values, Power with Innovation, Excel through Dedication, Unite as One



Culture

Concise, Efficient, Disciplined, Dynamic



Corporate Spirit

Entrepreneurship, Innovation, Competition, Transcendence

| 2024 Milestones

January

Wuhu GCL SI was awarded the "Outstanding Digital Transformation Enterprise" in the 2023 China Intelligent Manufacturing Cornerstone and the China Intelligent Enterprise Directory.

February

GCL SI first displayed the "Carbon Chain Modules" at the Japan PV EXPO.

March

GCL SI attended the China (Jinan) International Solar Energy Expo, winning three awards: "Top 10 Influential Module Brands," "2023 Quality Household and Commercial & Industrial PV Module Brand Award," and "Outstanding Distributed Energy Award."

April

GCL SI was invited to the "2024 3rd Xiamen International Energy Storage and Charging Industry Expo & 9th South China Energy Storage and Charging Conference," discussing the latest market, policy, and technological trends with industry partners.

May

Six star products of the TOPCon series modules successfully passed the strict audit of TÜV Rheinland and were awarded the ISO 14067 Product Carbon Footprint Certificate.

The Kunshan factory of GCL Energy Storage officially started production, achieving an annual capacity of 2.5 GWh for household, commercial & industrial, and large-scale energy storage systems.

June

The world's first photovoltaic carbon chain—GCL Carbon Chain—was officially launched in Shanghai and Germany, continuously and efficiently amplifying the carbon control and reduction effects across the entire photovoltaic industry chain.

The first 0BB production line module of Hefei GCL SI was officially launched, marking a successful breakthrough in 0BB technology by GCL SI.

December

GCL SI successfully hosted the "GCL Companion, Carbon Road Future" 2024 Eco-Partner Annual Gala.

November

Hefei GCL SI successfully developed and deployed the first photovoltaic module process robot based on a private large language model, achieving an in-depth integration of AI technology and traditional manufacturing, and pioneering a new chapter in intelligent manufacturing.

October

The average efficiency of N-type TOPCon batteries at Wuhu GCL SI reached 25.4%, ranking first in the industry.

The first piece of GPC (Graphitized Precision Doping Passivated Back Contact Technology) Lotus Module was successfully launched at Hefei GCL SI.

September

GCL SI won two honors: the "Quality Victory China" PV Module High-Temperature Performance Award and the "Quality Victory China" GCL Carbon Chain Innovation Award in 2024.

August

The first piece of the 2GW expansion and battery R&D pilot line project at Wuhu GCL SI was successfully launched.

July

GCL SI was awarded the "ESG New Benchmark Enterprise Award" by StockStar in 2024.



2024 Sustainability Performance

| Honors



EcoVadis Sustainability

Silver Medal

(Top 15% globally, Top 7% in industry)

EcoVadis

2024 Wind ESG Rating

A Grade

Wind

2024 Annual Excellence in Sustainable Development Practice Case

China Listed Companies Association

2024 Annual Excellence in Corporate Culture Practice Case

China Listed Companies Association

2024 Global Climate Disclosure Platform (CDP) Climate Change Questionnaire

B Grade

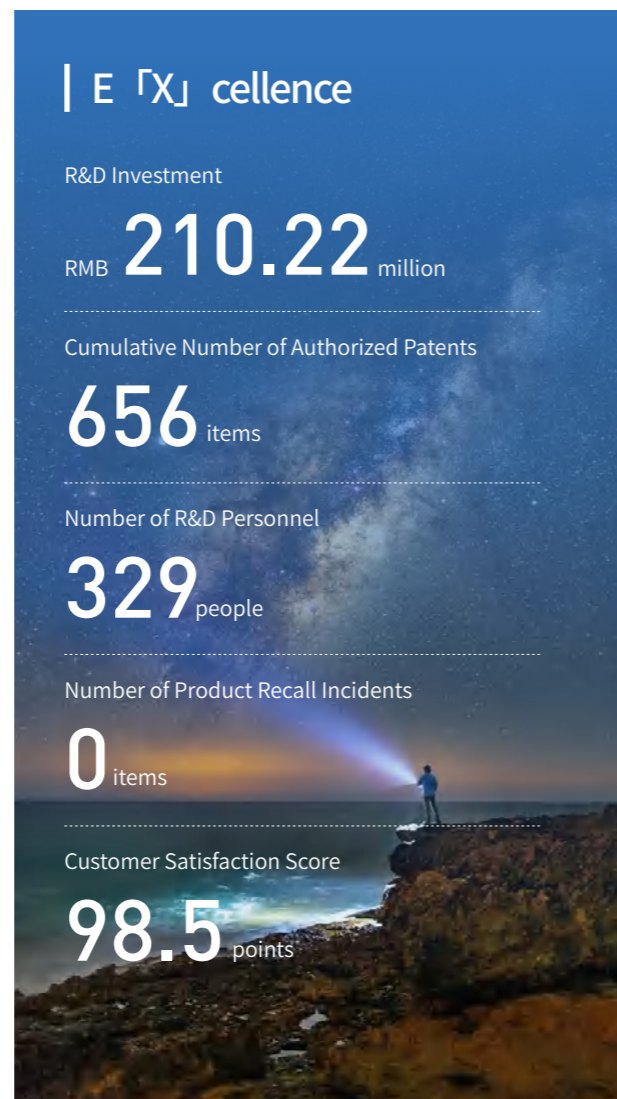
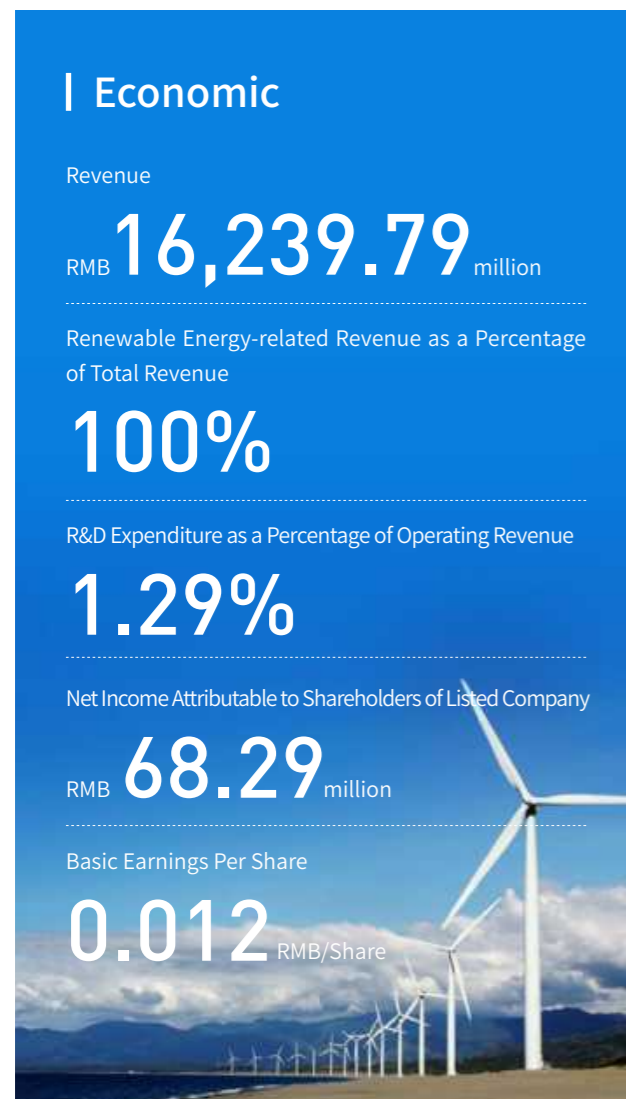
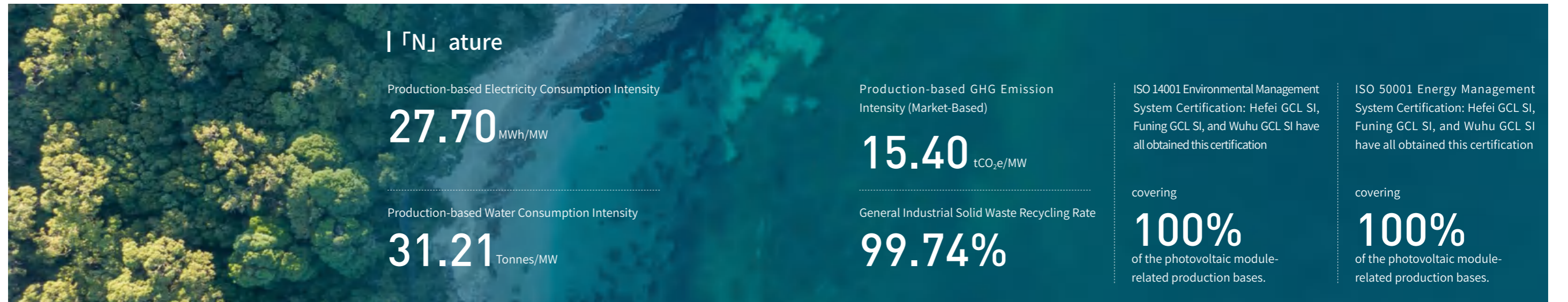
(Management level)

Global Climate Disclosure Platform (CDP)

"Annual Carbon Peak and Neutrality Pioneer" Award

NetEase Finance





Sustainability Strategy and Governance

Sustainability Strategy

GCL SI not only injects powerful impetus into the global energy transition but also attaches great importance to the clean energy transition of the Company's own manufacturing and operational processes, striving to minimize the environmental footprint across the Company's operations and value chain. We utilize the power of digital technology to implement the guiding principle of "Carbon Emissions Reduction with Technologies", leveraging innovation to drive deep decarbonization and reshape the harmonious coexistence between society, economy, and environment. Meanwhile, the PV industry evolves rapidly, necessitating that we cultivate an aptitude for "Responses to Changes," agilely responding to shifting market demands and vigorously promoting high-quality upgrades in our production capacity structure to enhance the Company's core competitiveness.

In 2023, GCL SI developed the NEXT sustainable development strategy framework. With a vision of "building a PV ecosystem with

adhering to sustainability in both business development and social development". We actively collaborate with all stakeholders to build a harmonious solar ecosystem. GCL SI joined the United Nations Global Compact (UNGC) in 2023, committing to uphold its Ten Principles covering human rights, labor, environment, and anti-corruption. Following its UNGC membership, the Company has actively deepened sustainable development practices, strengthened its competitiveness in the global market, and contributed to advancing clean energy and supporting the global transition to net-zero emissions.

In 2024, building on our four strategic pillars: Nature, Equity, EXcellence, and Trust, we have clarified our commitments and strategic goals for 25 key issues. Guided by these goals, we are driving our sustainability efforts forward and building a low-carbon and sustainable future that transitions from "foresight" to "realization."





Nature



Key Issue



Our Commitments and Targets

Responding to Climate Change	<ul style="list-style-type: none"> We actively respond to the national Carbon Peak and Neutrality targets, initiate our own "zero-carbon" strategy, and commit to reducing carbon emissions across internal operations and the value chain. We commit to actively conduct carbon chain traceability and carbon footprint evaluation certification for our products, completing full-chain carbon footprint tracing. Scope 1 & 2: Reduce absolute emissions by 64.7% by 2035 compared to 2024. Scope 3: Reduce carbon emissions from purchased goods and services per unit of output by 66.3% by 2035 compared to 2024. Reduce average product carbon footprint by 5% year-on-year from 2024 to 2030. By 2030 at least, use the GCL Carbon Chain platform to provide customers with all required product carbon footprint information.
Energy Management and Renewable Energy Utilization	<ul style="list-style-type: none"> Reduce electricity consumption per unit of product by 5% year-on-year from 2024 to 2030.
Environmental Compliance Management	<ul style="list-style-type: none"> We commit to strictly comply with local environmental protection laws and regulations, actively implement environmental protection measures, and reduce the impact of our operations on the environment.
Ecosystem and Biodiversity Conservation	<ul style="list-style-type: none"> We commit to reducing direct pressure on biodiversity and promoting sustainable use of natural resources.
Water Stewardship	<ul style="list-style-type: none"> We commit to maximizing water-saving strategies and enhancing water recycling throughout the production process. Reduce water consumption per unit of output by 8% by 2030 compared to 2024.
Waste Management	<ul style="list-style-type: none"> We commit to strictly comply with relevant laws and regulations, implement full-process supervision of general solid and hazardous waste, and increase the comprehensive utilization rate of waste. Reduce waste generation per unit of output by 30% by 2030 compared to 2023.
Circular Economy	<ul style="list-style-type: none"> We commit to vigorously developing a circular economy, exploring high-value recycling pathways for "retired" photovoltaic modules, and promoting the implementation of reutilization and recycling projects for waste modules. Achieve a 100% recycling rate for solar cell packaging materials by 2030.
Pollutant & Emissions Management	<ul style="list-style-type: none"> We commit to strictly implementing national and local air pollution prevention and control standards, using advanced treatment processes, facilities, and optimized production technologies to reduce emissions.



Equity



Key Issue



Our Commitments and Targets

Labor Rights Protection	<ul style="list-style-type: none"> We commit to establishing constructive relationships with employees and trade union representatives, respecting employees' rights to engage in or refrain from collective bargaining in accordance with local laws. We commit to ensuring all employees receive adequate wages, reasonable working hours, and benefits, providing them with good working conditions. We commit to not using or tolerating child labor, forced labor, debt bondage, contract slavery, involuntary prison labor, slave labor, or human trafficking in our business and supply chain operations. We commit to respecting the land rights of local communities in our areas of operation. We commit to protecting employee rights and strive to improve employee satisfaction. Achieve 100% of employees covered by collective bargaining agreements by 2025. Maintain 100% of full-time employees in Mainland China with medical insurance at least until 2030. Maintain competitive salaries for all employees at least until 2030. Achieve external audits covering all production bases for child labor and forced labor issues by 2028.
Diversity, Equity and Inclusion	<ul style="list-style-type: none"> We commit to treating all employees equally, fairly, and with respect. We commit to respecting and caring for female employees, valuing their development, and eliminating all forms of discrimination and harassment. Maintain diversity, anti-discrimination, and anti-harassment awareness training covering all employees annually until 2030.
Occupational Health and Safety	<ul style="list-style-type: none"> We commit to providing a safe and healthy working environment for all employees, contractors, and partners, and to continuously improving safety management levels. Maintain zero incidents of fire, explosion, personal injury, and occupational diseases at least until 2030.
Employee Training and Development	<ul style="list-style-type: none"> We commit to supporting employee career development through sufficient training. Increase average training hours per employee by 20% by 2030, based on 2024 levels.
Responsible Supply Chain	<ul style="list-style-type: none"> We commit to prioritizing suppliers with robust environmental and labor and human rights management systems, under equal conditions. We commit to not intentionally purchasing or supplying products containing conflict minerals. Maintain 100% of procurement team members trained on supply chain environmental, labor, and human rights issues at least until 2030. Achieve 100% conflict minerals audit for suppliers of 3TG materials by 2025. Achieve 100% signing rate of the Code of Conduct for Business Partners and integrity commitment clauses by suppliers by 2025. Achieve 100% ESG audit coverage for core suppliers by 2026. Achieve 100% third-party ESG audit coverage for core suppliers by 2028. Maintain 100% participation of core suppliers in ESG capacity-building at least until 2030.
Fair Treatment of SMEs	<ul style="list-style-type: none"> We commit to adhering to the principles of fairness and justice, providing equal cooperation opportunities for all partners, especially SMEs.
Social Contribution	<ul style="list-style-type: none"> Conduct at least four employee volunteer services annually at least until 2030.
Rural Revitalization	<ul style="list-style-type: none"> We commit to actively responding to the national call for rural revitalization, consolidating and expanding the results of poverty alleviation, providing clean energy to impoverished areas, and promoting local green economic development and rural revitalization.



EXcellence



Key Issue



Our Commitments and Targets

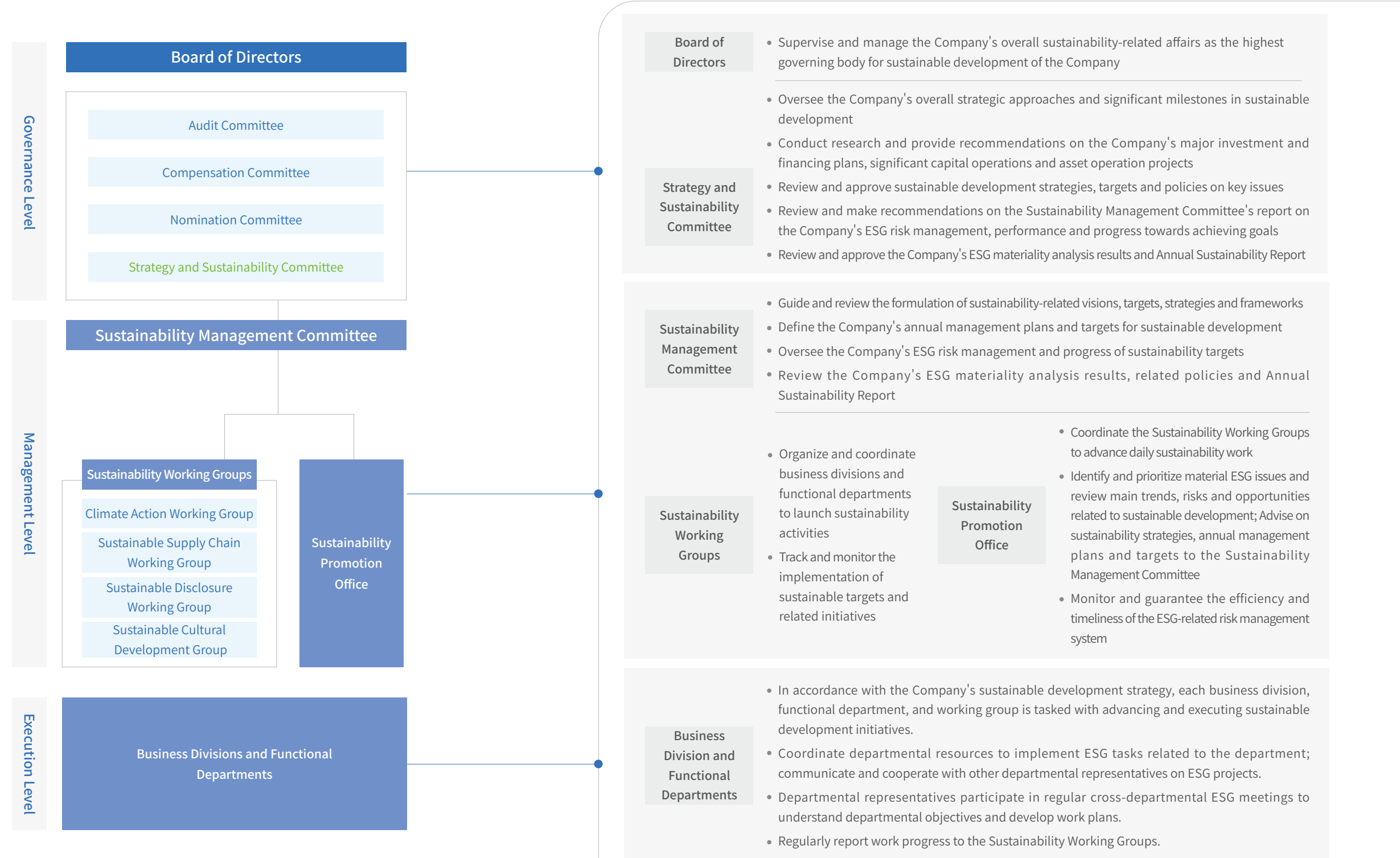
Innovation-Driven	<ul style="list-style-type: none"> Increase R&D investment by 20% by 2028, based on 2024 levels.
Customer Service	<ul style="list-style-type: none"> Maintain customer satisfaction above 97 points annually at least until 2030. We commit to continuously improving product quality and providing outstanding products to customers. We commit to strengthening the control of hazardous substances in the design and production of photovoltaic modules. Maintain zero product recalls annually at least until 2030.
Product Safety and Quality	<ul style="list-style-type: none"> We commit to actively engaging in various industry collaborations and exchanges, leveraging our strengths to work with upstream and downstream partners in the industrial chain to jointly promote innovation and global energy transition in the photovoltaic industry.
Industry Collaboration and Exchange	<ul style="list-style-type: none"> We commit to responsibly managing confidential information and reducing information security risks for the Company. Conduct IT security risk assessments across all operations by 2030. Achieve ISO 27001 certification for all IT infrastructure and information systems by 2027.
Data Security and Privacy Protection	<ul style="list-style-type: none"> We commit to responsibly managing confidential information and reducing information security risks for the Company. Conduct IT security risk assessments across all operations by 2030. Achieve ISO 27001 certification for all IT infrastructure and information systems by 2027.

Trust

Corporate Governance	<ul style="list-style-type: none"> We commit to continuously optimizing the corporate governance structure and improving governance levels based on the principles of integrity, transparency, and standardization. We commit to establishing a comprehensive compliance management system and internal control mechanisms to ensure the standardized operation of all business activities. Maintain 100% internal audit coverage for all business entities and subsidiaries every two years, at least until 2030. Maintain a problem rectification completion rate of over 95% at internal audits, at least until 2030. Ensure that annual training on conflicts of interest, anti-fraud, anti-money laundering, and anti-unfair competition topics covers all employees, at least until 2030.
Compliance and Risk Management	<ul style="list-style-type: none"> We commit to fully implementing principles of integrity in business operations, respecting rules of fair competition, and condemning any actions that seek illegal profits.
Anti-Unfair Competition	<ul style="list-style-type: none"> We commit to firmly opposing corrupt practices, strictly complying with all anti-corruption laws and regulations applicable to our company, and regularly conducting internal anti-corruption audits and inspections. Conduct at least one corruption risk assessment covering all locations annually at least until 2030. Maintain all employees signing the Integrity Commitment Letter at least until 2030.

Sustainability Governance

Integrating sustainability concepts into corporate governance, GCL SI has established a three-tiered governance structure- "governance - management - execution". The Company has established a "Strategy and Sustainability Committee" under the Board of Directors, which is responsible for overseeing the Company's overall sustainable and climate strategies, objectives, and related significant matters. Under the Committee, the Company had also established the Sustainability Management Committee, the Sustainability Promotion Office and the Sustainability Working Groups at the management level. The Company's business divisions and functional departments operate at the executive level, holding responsibility for the precise execution of ESG matters and the attainment of associated goal.



- Board of Directors**
 - Supervise and manage the Company's overall sustainability-related affairs as the highest governing body for sustainable development of the Company
 - Oversee the Company's overall strategic approaches and significant milestones in sustainable development
 - Conduct research and provide recommendations on the Company's major investment and financing plans, significant capital operations and asset operation projects
- Strategy and Sustainability Committee**
 - Review and approve sustainable development strategies, targets and policies on key issues
 - Review and make recommendations on the Sustainability Management Committee's report on the Company's ESG risk management, performance and progress towards achieving goals
 - Review and approve the Company's ESG materiality analysis results and Annual Sustainability Report
- Sustainability Management Committee**
 - Guide and review the formulation of sustainability-related visions, targets, strategies and frameworks
 - Define the Company's annual management plans and targets for sustainable development
 - Oversee the Company's ESG risk management and progress of sustainability targets
 - Review the Company's ESG materiality analysis results, related policies and Annual Sustainability Report
- Sustainability Working Groups**
 - Organize and coordinate business divisions and functional departments to launch sustainability activities
 - Track and monitor the implementation of sustainable targets and related initiatives
- Sustainability Promotion Office**
 - Coordinate the Sustainability Working Groups to advance daily sustainability work
 - Identify and prioritize material ESG issues and review main trends, risks and opportunities related to sustainable development; Advise on sustainability strategies, annual management plans and targets to the Sustainability Management Committee
 - Monitor and guarantee the efficiency and timeliness of the ESG-related risk management system
- Business Division and Functional Departments**
 - In accordance with the Company's sustainable development strategy, each business division, functional department, and working group is tasked with advancing and executing sustainable development initiatives.
 - Coordinate departmental resources to implement ESG tasks related to the department; communicate and cooperate with other departmental representatives on ESG projects.
 - Departmental representatives participate in regular cross-departmental ESG meetings to understand departmental objectives and develop work plans.
 - Regularly report work progress to the Sustainability Working Groups.

Regarding potential negative impacts or risks related to sustainability, the Company has established a robust due diligence mechanism to identify, assess, and effectively address potential sustainability-related impacts or risks in its business operations. The ESG risk due diligence is led by the Board of Directors, coordinated by the Strategy and Sustainability Committee, and executed by the Risk Control Department and relevant functional departments. The scope covers core areas of sustainability, including environmental compliance, carbon emission management, product quality, employee rights, and business ethics. The results of the due diligence are reported to the Board of Directors, the Strategy and Sustainability Committee, and relevant stakeholders. Based on these findings, we continuously optimize our ESG management system and develop corresponding measures to ensure the Company's stable operations and sustainable, high-quality development.

Stakeholder Communication

GCL SI maintains ongoing communication with stakeholders in order to stay updated with their expectations and regularly exchange opinions on fulfilling such expectations. GCL SI identified 11 types of stakeholders considering the Company's characteristics and industry trends, including employees, shareholders, investors, suppliers, customers, partners, non-government organizations, governments and regulators, communities, media and financial institutions. Among them, employees, customers, suppliers, shareholders, investors, governments and regulators constituted our key stakeholders.

Key Stakeholders	Issues of Concern	Responses and Actions
Employees	<ul style="list-style-type: none"> Anti-bribery and Corruption Innovation-driven Development Labor Rights Protection Diversity, Equity and Inclusion Occupational Health and Safety 	<ul style="list-style-type: none"> Employees Training and Development Energy Management and Renewable Energy Utilization Waste Management Water Stewardship Pollutant & Emissions Management Trade union/Workers' congress Employee training Employee activities Contracts Employee benefits
Customers	<ul style="list-style-type: none"> Product Safety and Quality Innovation-Driven 	<ul style="list-style-type: none"> Customer Service Information Security and Privacy Protection Daily operations and interactions Hotline service Customer satisfaction surveys Quality complaint management
Suppliers	<ul style="list-style-type: none"> Responsible Supply Chain Compliance and Risk Management Innovation-Driven 	<ul style="list-style-type: none"> Fair Treatment of SMEs Circular Economy Supplier empowerment Green supply chain Supplier assessment
Shareholders and investors	<ul style="list-style-type: none"> Product Safety and Quality Innovation-Driven Corporate Governance Compliance and Risk Management Customer Service 	<ul style="list-style-type: none"> Industrial Cooperation and Exchange Community Contribution Responding to Climate Change Ecosystem and Biodiversity Conservation Shareholders' meeting Information disclosure Press releases and announcements Reasonable profit distribution Investor interaction channels Intellectual property management system Investor on-site interviews
Governments and regulators	<ul style="list-style-type: none"> Corporate Governance Compliance and Risk Management Anti-bribery and Corruption Anti-Unfair Competition 	<ul style="list-style-type: none"> Responding to Climate Change Environmental Compliance Management Rural Revitalization Institutional review Official correspondence Policy implementation Information disclosure Compliance with laws and regulations

In 2024, in accordance with the requirements of the Shenzhen Stock Exchange's "Guidelines for Sustainability Reporting," the Company conducted a dual materiality assessment, evaluating the importance of issues from both impact materiality and financial materiality perspectives. Our dual materiality assessment process is as follows:

- ◆ **Identification**
 Aligned with the 21 issues specified in the Shenzhen Stock Exchange's "Guidelines for Sustainability Reporting," we assessed and formed a list of 25 ESG issues. This was based on global sustainability standards and frameworks (such as GRI and the UN Sustainable Development Goals), international rating industry-related issues, stakeholder views and insights, peer benchmarking of sustainability performance, and analysis of current ESG trends and industry developments, while also considering the Company's business model.
- ◆ **Survey**
 Impact materiality survey questionnaires were distributed to stakeholder groups, including employees, customers, suppliers, and government regulatory authorities. Financial materiality survey questionnaires were distributed to Company management personnel and conducted group discussions with senior management and the sustainability working group to assess the financial impact of each issue.
- ◆ **Prioritization**
 Conducted data analysis and statistics on the survey results, ranking the importance of each ESG issue from both impact materiality and financial materiality dimensions.
- ◆ **Validation**
 The survey results were reviewed and validated by the Company's Board of Directors' Strategy and Sustainability Committee and external experts, ultimately forming the GCL SI Dual-material Issues Matrix.

Upon assessment, we have identified a total of five material issues that possess financial significance, namely product safety and quality, responding to climate change, innovation-driven, energy management and renewable energy utilization, and responsible supply chain. Three of these issues are deemed to have both impact significance and financial significance: product safety and quality, responding to climate change, and innovation-driven. All material issues identified as significant are addressed in this Report.



GCL SI Dual-material Issues Matrix

Board Statement

The Board of GCL SI regards sustainable development as the core philosophy for operational and strategic decision-making. We look forward to shaping a sustainability governance structure that is resilient to change and attentive to key external and internal stakeholders. In doing so, we demonstrate GCL SI's long-lasting commitment as a responsible enterprise.

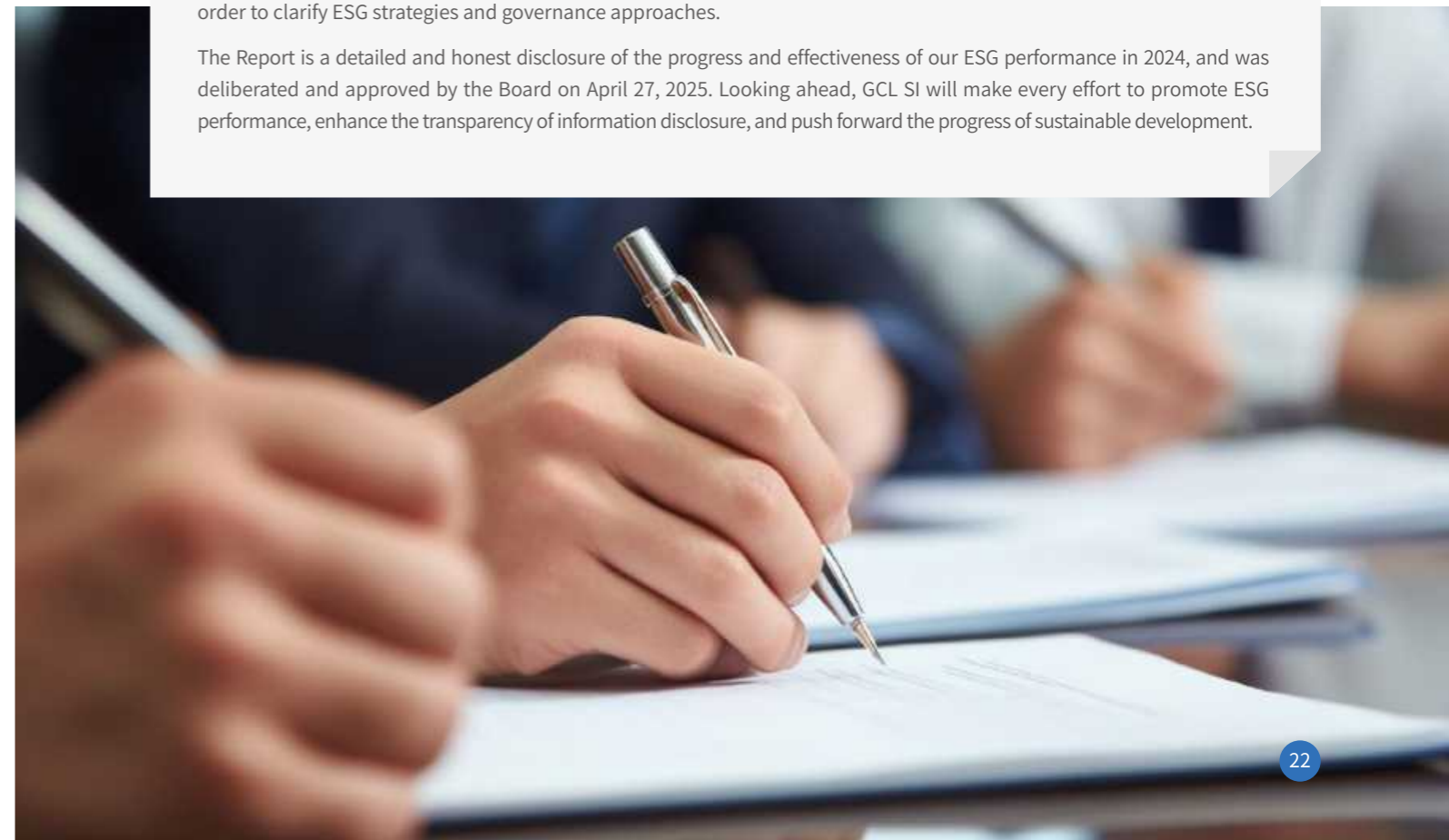
The Board is the highest decision-making body responsible for supervising ESG-related affairs. The Board of Directors has established a Strategy and Sustainability Committee, which reviews and approves ESG and sustainability-related strategies, policies, and targets, taking into account industry insights, corporate operational practices, and the demands of stakeholders. The Board is also actively involved in ESG training to enhance ESG governance and trend-setting capabilities, so as to undertake responsibilities for sustainable development more effectively.

We continue to optimize our ESG governance and regularly review our ESG performance. Moreover, we monitor the progress of ESG targets and the implementation of initiatives in key areas such as climate change and carbon emissions management, water management, human capital development, occupational health and safety, anti-corruption and business ethics, and sustainable supply chain. We phase in the integration of key ESG performance indicators into remuneration assessment, thus motivating the management and employees to advance ESG efforts.

Additionally, the Company has established the Sustainability Management Committee and the Sustainability Promotion Office. The Committee oversees the implementation of sustainability strategies, regularly reviews the progress of ESG-related events, and enhances the Company's performance on this front. The Sustainability Promotion Office is tasked with coordinating and advancing sustainability initiatives, identifying and prioritizing ESG issues, proposing suggestions for ESG strategies and plans, and supervising the effectiveness and timeliness of the ESG risk management system.

The Board is committed to maintaining transparent, open, timely and efficient communication with stakeholders. After identifying material ESG issues, the Company has conducted a materiality assessment based on stakeholder surveys and interviews. The Board has also discussed and approved the result of issue prioritization and the materiality matrix in order to clarify ESG strategies and governance approaches.

The Report is a detailed and honest disclosure of the progress and effectiveness of our ESG performance in 2024, and was deliberated and approved by the Board on April 27, 2025. Looking ahead, GCL SI will make every effort to promote ESG performance, enhance the transparency of information disclosure, and push forward the progress of sustainable development.



Annual Feature

GCL Carbon Chain 2.0

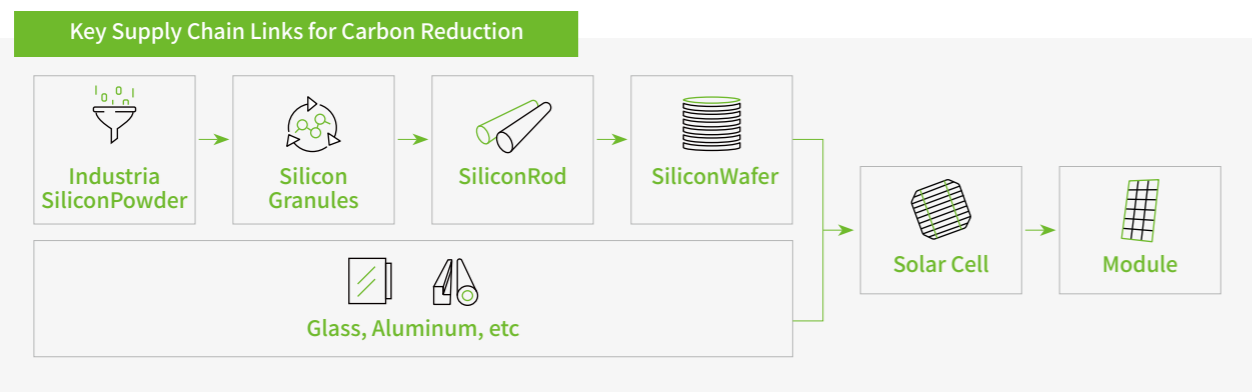
An Industry First, Injecting New Momentum into Low-Carbon Development

In 2024, GCL SI redefined its brand philosophy as "Low-Carbon, Technology, and Vitality," positioning "Low-Carbon" as the core brand gene, "Technology" as the driver for sustainable development, and "Vitality" as the concrete manifestation of the Company's philosophy. "GCL SI, Born Low-Carbon" is not only our brand slogan but also a long-term pursuit on the path to sustainable, high-quality development.

World's First Photovoltaic Carbon Chain Launched

On June 12, 2024, the world's first photovoltaic carbon chain — GCL Carbon Chain — was officially unveiled in Shanghai. This GCL Carbon Chain management platform, jointly developed by GCL SI, GCL Technology, and Ant Group, integrates blockchain digital technology with low-carbon polysilicon technology to continuously and efficiently amplify the carbon control and reduction effects across the entire photovoltaic industry chain.

GCL Carbon Chain is the world's first photovoltaic industry carbon chain management platform based on polysilicon technology + blockchain technology + digital intelligence. Leveraging the digital foundation of blockchain, the platform discloses and certifies the carbon values, performance, and qualifications of its on-chain products, ensuring that product information is traceable, verifiable, trustworthy, and tamper-proof. This fully realizes supply chain traceability, product carbon footprint tracking, and organizational carbon management.



At the launch event, GCL SI unveiled its on-chain product based on the GCL Carbon Chain — the "SiRo" Carbon Chain Digital Intelligent Module. The key difference between "Carbon Chain Modules" and similar products is that by simply scanning the module's QR code, users can directly access critical information such as product details, carbon footprint reports, manufacturing plants, raw material traceability, and ESG reports. This marks the first time in the industry that blockchain technology has been used to dynamically trace the carbon footprint of photovoltaic modules.



GCL SI Launches "SiRo" Carbon Chain Digital Intelligent Module

According to data released at the event, with the support of the GCL Carbon Chain, the minimum carbon value of the carbon chain module is 21.3% lower than the industry's technical carbon value, and it is expected to achieve a 13.5% reduction in carbon value within 1-2 years. GCL's "Gemini" high-tech polysilicon and the low-carbon modules manufactured from polysilicon obtained the world's first lowest carbon footprint certification from the French Environment and Energy Control Agency in October 2021 and May 2024, respectively.

The establishment of the GCL Carbon Chain platform resonates with the national emphasis on carbon footprint management, providing valuable experience for China in creating a domestic photovoltaic industry green carbon factor database and exploring the formulation of carbon footprint accounting standards for the photovoltaic industry.

Product Carbon Footprint Management

The Company effectively monitors and manages carbon emissions throughout the lifecycle of cells and modules via the "Carbon Chain Module" platform.



Low-carbon design and raw material procurement

The Company comprehensively considers the impact on resources and the environment caused by the selection of raw materials, production, transport, recycling and disposal, as well as corresponding potential carbon emissions. By minimizing hazardous raw materials, we are active in procuring green raw materials such as FBR polysilicon, for a green, low-carbon and circular product chain.



Product manufacturing

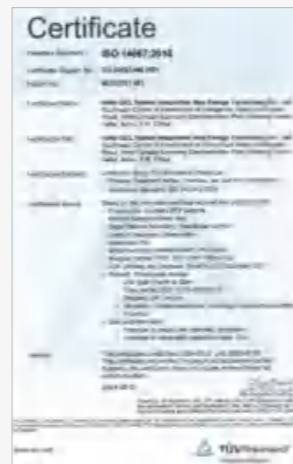
GCL SI phases in automation and intelligence projects to reduce product costs and raise efficiency, thus trimming product carbon emissions.



Case

Six TOPCon Star Products Awarded ISO 14067 Carbon Footprint Certification

In May 2024, six star products from GCL SI's TOPCon series modules successfully passed the rigorous audit of TÜV Rheinland and were awarded the ISO 14067 Carbon Footprint Certification. This signifies that the GCL Carbon Chain platform, utilizing blockchain technology, has fully integrated raw material traceability with product carbon footprint certification. Certified by the international standards of TÜV Rheinland, the carbon footprint of GCL's module products is now aligned with and recognized internationally. This achievement not only consolidates GCL SI's pioneering position in the global photovoltaic industry's green transformation but also injects significant momentum into the industry's journey toward carbon neutrality.



ISO 14067 Product Carbon Footprint Certificate



Case

Reducing Raw Material Consumption and Carbon Emissions Through Product Design

By leveraging the precise identification of raw material usage and carbon emissions enabled by the GCL Carbon Chain, GCL SI has implemented various design strategies in the product design phase to reduce raw material consumption and lower product carbon emissions. In battery design, GCL SI has adopted the LECO process and optimized screen parameters, achieving a reduction in silver paste consumption by over 30% by the end of 2024 compared to the beginning of the year. In module design, the Company has introduced composite material frames to reduce the use of aluminum, thinned glass panels, and reduced encapsulant film usage. Additionally, GCL has developed flexible modules without glass to minimize the use of frames and glass, thereby comprehensively lowering the carbon emissions of module products.

Expanding Carbon Chain Applications

GCL SI continues to expand the breadth and depth of applications for the GCL Carbon Chain, launching the second phase of the project in September 2024. Focusing on dynamic carbon accounting on-chain, employee carbon incentive platform development, creating a comprehensive carbon management dashboard, and supply chain collaboration for carbon reduction, the project aims to enhance GCL's carbon management capabilities across products, operations, data visualization, and employee engagement through technological innovation and management optimization. This drives the implementation of carbon accounting in operational entities, firmly executing carbon reduction plans and exploring the most effective pathways for carbon reduction.

Organizational Carbon Management

GCL SI has achieved comprehensive coverage and dynamic on-chain management of organizational carbon accounting, covering all operational sites and emission categories. This builds a solid data foundation, enabling refined carbon management and scientifically planning carbon reduction routes and management measures.

Creating a Carbon Dashboard

GCL SI has developed a carbon dashboard to display the Company's comprehensive data performance in carbon assets, organizational carbon, product carbon, and employee carbon footprints. By presenting intuitive and quantified data, the dashboard enhances the entire workforce's awareness of energy-saving and carbon reduction goals, pathways, and actions, promoting a deep-rooted low-carbon consciousness.



Carbon Dashboard

Value Chain Collaboration for Carbon Reduction

While advancing operational decarbonization, GCL SI is committed to reducing carbon emissions across its value chain. This includes strengthening supplier greenhouse gas (GHG) management, empowering partners and customers in their green transition, and steering the entire ecosystem toward a low-carbon, sustainable future.

Aligned with its sustainability vision, GCL SI is accelerating the low-carbon transformation of its photovoltaic supply chain. Through the "GCL Carbon Chain 2.0" platform, the Company has identified four glass and aluminum material suppliers with high carbon footprints for targeted emission reduction. By conducting in-depth carbon audits, the Company has pinpointed efficiency improvement opportunities and supported these suppliers in implementing

energy-saving upgrades and low-carbon operations. Additionally, GCL SI has established collaborative agreements with suppliers to promote the recycling of packaging materials, such as wooden pallets, paper tubes, and lining boards, effectively reducing carbon emissions in logistics and packaging processes.

Moving forward, GCL SI will deepen collaboration with suppliers by integrating advanced green technologies and management tools, such as AI-driven carbon accounting systems and green financing solutions. These efforts aim to enhance supply chain transparency, drive continuous improvement in sustainability performance, and provide robust support for the green development of the photovoltaic industry.



Case GCL SI Enhances Supplier Carbon Management Capabilities Through Targeted Training

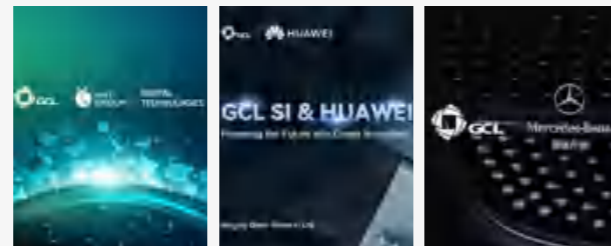
In February 2025, GCL SI conducted a carbon management training program for 10 glass and aluminum suppliers, focusing on Life Cycle Assessment (LCA) methodologies for product carbon footprinting. The training provided a comprehensive breakdown of carbon emission accounting across the entire lifecycle—from raw material procurement and production processes to product usage and end-of-life disposal—with an emphasis on critical aspects of carbon data collection and calculation. Through this training, suppliers have effectively mastered carbon accounting skills, enabling them to accurately calculate the carbon emissions of their products throughout the entire life cycle. This allows them to identify opportunities for carbon reduction and provides a solid basis for subsequent carbon reduction actions. This not only helps GCL SI and its suppliers to stay in sync on the path of green transformation but also facilitates effective management of suppliers by GCL SI, promoting in-depth cooperation between both parties in the field of sustainable development. For details on GCL SI's supplier management, please refer to the "Responsible Supply Chain" section of this Report.

At the client level, GCL SI delivers comprehensive decarbonization support through high-quality products and industry-leading solutions. By offering differentiated, customized, and digitally intelligent "One-Stop Smart Green Energy System Integration Services", the Company enables clients to optimize energy structures, improve energy utilization efficiency, and accelerate their green transition, fostering collaborative progress toward a low-carbon, sustainable future.



Case Launching the "Zero-Carbon Partner" Series, expanding the partnership

In 2024, GCL SI partnered with global leading companies such as Mercedes-Benz, Huawei, and Budweiser to create the "Zero-Carbon Partner" video series, centered around the concept of low-carbon development. This series tells stories of how GCL SI's products drive green transformations for customers, bringing the vision of "bringing green energy into life" to reality. It highlights GCL SI's brand philosophy of "Low-Carbon, Technology, and Vitality." By the end of 2024, the "Zero-Carbon Partner" series had released 11 episodes, covering industries such as automotive, telecommunications, food and beverage, and construction.



"Zero-Carbon Partner" Branding Series

Low-Carbon Culture Building

GCL SI is committed to building a corporate low-carbon culture and carbon ecosystem, creating an employee carbon incentive platform called Carbon Planet. On January 18, 2025, Carbon Planet was officially launched. This platform, following the world's first photovoltaic industry carbon footprint management platform, marks another exemplary practice in sustainable development by GCL SI.

The employee carbon incentive platform establishes a mechanism for voluntary carbon reduction that is "recordable, measurable, rewarding, and recognized". It quantifies and assigns value to individual employees' energy-saving and carbon-reducing behaviors, creating a positive guidance mechanism that combines commercial incentives and policy encouragement to build a consensus on carbon reduction among all employees.

Our Carbon Planet platform features four low-carbon scenarios — "Green Office," "Green Life," "Green Learning," and "Green Travel" — with multiple specific reduction actions. Employees can check in and earn carbon points for participating in these actions. These points can be redeemed for gifts and membership benefits, further motivating employees and fostering good habits of low-carbon behavior in daily life and work.

Low-Carbon Scenarios and Reduction Actions on "Carbon Planet"



Save paper
Travel & transportation
Travel & accommodation



Eco-friendly coffee
Clean plate campaign
Fitness check-in



Online learning
Green knowledge training



Subway
Cycling

Beyond helping employees adopt low-carbon lifestyles, the "Carbon Planet" platform leverages the real-time data collection capabilities of the GCL Carbon Chain to accurately record the carbon reduction from each low-carbon action and generate transparent and credible data records. These data not only provide personalized feedback on low-carbon behaviors for employees but can also be aggregated into a comprehensive corporate carbon management report, offering accurate data support and a scientific basis for the Company's green development strategy.

The launch of the employee carbon incentive platform "Carbon Planet" has not only driven profound changes in green management and corporate culture within GCL SI but also demonstrated the Company's leadership in technological innovation and low-carbon practices. The Company will continue to deepen the integration of digitalization and green low-carbon development, centered around the GCL Carbon Chain and the employee carbon incentive platform, to build a more robust low-carbon ecosystem and further solidify the Company's leadership in sustainable development.



GCL SI Employee Carbon Incentive Platform "Carbon Planet"

Annual Feature

Innovation in Action

Redefining Efficiency Limits, Powering Global Green Transition with High-Performance PV System Integration

GCL SI is dedicated to providing global clients with a diversified product portfolio for the pursuit of high-efficiency, reliable, and innovative photovoltaic solutions. Building on our robust capabilities in R&D, product development, technological innovation, and capital resources across the photovoltaic industry chain and the renewable energy sector, GCL SI focuses on delivering full lifecycle green energy solutions. We specialize in continuous innovation across key areas including high-efficiency PV module R&D, system integration design, and technical consulting. We supply global clients with photovoltaic systems based on TOPCon, GPC2.0, and other high-efficiency cells and modules, delivering higher power density, better system compatibility, and stronger resilience across diverse scenarios. Additionally, we provide differentiated, customized, and digitally intelligent "One-Stop Intelligent Green Energy System Integration Services", delivering industry-leading comprehensive renewable energy solutions. Through these efforts, GCL SI remains steadfast in advancing its mission to contribute to the global transition toward green energy.

Advancing BC Technology, Powering Smarter PV Efficiency

As the PV industry accelerates toward high-efficiency and scenario-specific applications, GCL SI officially launched its GPC2.0 module on December 26, 2024. Built on back-contact (BC) technology, this product delivers more efficient and reliable solutions for distributed PV markets, meeting core customer needs for higher returns, stronger adaptability, and stable performance.



GCL SI unveils groundbreaking GPC2.0 high-efficiency PV module

Driven by GCL SI's technological innovation, the GPC2.0 high-efficiency module continuously breaks through traditional limitations. Through the application of cutting-edge technologies, it significantly improves module efficiency and reliability, enhances stability and durability in complex environments, and delivers greater power generation value and broader application scenarios for customers.

4 Key Tech Advantages of GCL SI's GPC2.0 High-Efficiency PV Module

Enhanced Light Absorption: Multi-layer Gradient Dielectric Film Technology

The GCL SI GPC2.0 high-efficiency module applies multi-layer gradient dielectric film technology, which optimizes the film layer ratio to reduce parasitic absorption losses. Combined with a high light-trapping pyramid texture, it achieves a reflectivity below 0.8%, significantly enhancing light absorption efficiency.

Improved Photoelectric Conversion: Fluidized Bed Reactor (FBR) Granular Silicon

Leveraging GCL SI's integrated supply chain, the GPC2.0 module utilizes in-house developed high-purity, low-impurity FBR granular silicon. This innovation continuously improves the minority carrier lifetime of base materials, boosting photoelectric conversion efficiency while effectively lowering the module's carbon footprint, aligning with GCL SI's low-carbon DNA to drive lifecycle carbon reduction across the PV industry.



Reduced Recombination Losses: Advanced Passivation Technology

The GPC2.0 module employs composite tunnel passivation contact technology and proprietary high-efficiency passivation film processes, achieving comprehensive passivation enhancement. By refining the pyramid texture and integrating ultra-low-temperature amorphous silicon deposition technology, the module forms high-quality passivation layers for increased power generation. Non-damaging laser patterning passivation technology further minimizes passivation layer damage, effectively reducing recombination losses.

Enhanced Current Collection: GPC Metallization Technology

The GPC2.0 module adopts micron-level metallization patterning and the industry-first Selective Laser-Induced Fluorescence (LIF) technology. Combined with busbar-free (0BB) technology and innovative fine grid design, it optimizes current transport structures to maximize current collection efficiency.

These technological breakthroughs have significantly enhanced the performance of GCL SI's GPC2.0 high-efficiency PV module, strengthening its competitiveness in the distributed PV market. The module effectively addresses customers' core demands for high returns, strong compatibility, and stable operation, providing reliable assurance for the efficient power generation and long-term stable performance of distributed PV projects.

Performance Advantages of GPC2.0 High-Efficiency Module



Low Degradation Rate

First-year degradation rate below 1%, linear power degradation rate under 0.35%, ensuring high-efficiency power generation throughout the module's lifecycle.



Higher Energy Yield

As of February 2025, the GPC2.0 cell conversion efficiency exceeds 27.5%, maximizing light utilization to enhance power output.



Pure Aesthetics

Busbar-free front design achieves minimalist aesthetics, improving visual appeal.



Green & Low-Carbon

Integrated with GCL Carbon Chain System Platform for precise carbon tracking, supporting sustainable PV industry development.

GPC2.0 technology not only empowers GCL SI's product upgrades but also delivers significant value to the entire PV industry. Through three-dimensional innovation in capacity, revenue, and reliability, GCL SI has achieved breakthroughs:

Capacity Dimension

GPC2.0 modules increase power output by 30W compared to conventional technologies, achieving a 4.8% capacity gain under the same installation area, unlocking greater spatial value for commercial and industrial rooftop applications.



Revenue Enhancement

With equivalent levelized cost of energy (LCOE) over the lifecycle, the system cost advantage reaches approximately 10%, creating added value for partners.



Reliability

The innovative linear ribbon design reduces cell microcrack risks. Combined with anti-shading technology, it lowers module temperature by 20°C, enhances material durability, and minimizes hot spot risks, ensuring robust performance in harsh environments.

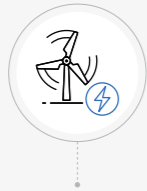


With its outstanding technological innovation and superior product performance, the GPC2.0 high-efficiency module of GCL SI has gained widespread recognition globally. Going forward, GCL SI will continue to prioritize technological innovation as its core driver, constantly advancing through innovation to extend high-efficiency benefits to every ecosystem partner. By empowering users to reduce the levelized cost of energy (LCOE) in PV systems, GCL SI will contribute more "GCL Intelligence" to global energy transition efforts.

Creating Innovative Solutions

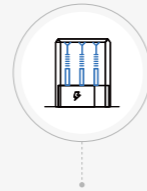
GCL SI has developed comprehensive renewable energy solution capabilities and has accumulated rich project experience in integrated photovoltaic (PV), wind, energy storage, and hydrogen solutions, source-grid-load-storage integration, distributed PV, rural energy supply and intelligent energy storage integrated solutions.

GCL SI Solution Capacity



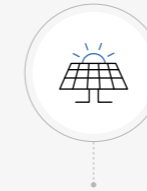
Integrated PV-Wind-Energy Storage-Hydrogen

Optimizes the conversion and storage of new energy sources to fully utilize renewable energy supply. This not only helps to absorb more abandoned wind and solar resources on the power generation side but also enhances the stability, reliability, and capacity of renewable energy grids to accommodate distributed power sources.



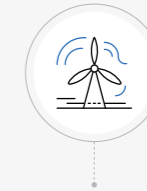
Source-Grid-Load-Storage Integration

An operational model that provides an integrated solution of "power source, grid, load, and energy storage," addressing issues such as grid fluctuations during the integration of clean energy.



Distributed Photovoltaics

Constructed sites near users, these PV facilities operate on a self-generation and self-use basis, with surplus electricity fed into the grid, characterized by balancing and regulating the distribution system.



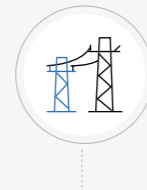
Wind Power Bases

Large-scale wind power bases and distributed wind turbines are established in areas with favorable wind conditions, such as coastal islands, grassland pastures, Gobi deserts, and mountainous regions, tailored to local conditions.



User-Side Energy Storage

User-side energy storage systems provide efficient energy management services by leveraging business models such as peak shaving, demand response, and load optimization to significantly reduce lifecycle electricity costs. These systems also extend to innovative applications including backup power for communication base stations, solar-storage-EV charging integration, and virtual power plant (VPP) participation, enhancing power supply reliability and driving the rapid transformation of modern power systems through decentralized, flexible energy solutions.



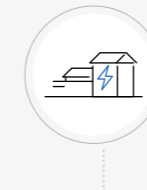
Grid-Side Energy Storage

Grid-side energy storage systems enable intelligent load management by performing peak shaving and frequency regulation based on real-time grid conditions. They ensure stable operation of transmission and distribution infrastructure while maximizing the integration of renewable energy sources. This critical support facilitates the development of next-generation power systems capable of handling high shares of variable renewables.



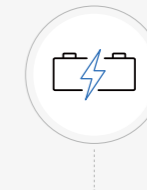
Generation-Side Energy Storage

Energy storage systems on the generation side provide energy storage and output management capabilities. They optimize power generation profiles, reduce curtailment of wind and solar power, and increase the proportion of renewable energy in the grid. Additionally, these systems deliver inertia control, peak shaving, and frequency regulation, thereby enhancing grid stability and accelerating the transition to cleaner energy structures.



Comprehensive Energy Services

In areas surrounding cities such as logistics parks, industrial parks, holiday resorts, and transportation hubs, integrated energy services are provided, including charging, swapping, hydrogen refueling, after-sales service, experience, and trading for cars and trucks, combined with PV, energy storage, and hydrogen refueling.



Rural Energy Supply

Designs rural new energy solutions, including smart agriculture, household new energy systems, and smart transportation, empowering the construction of zero-carbon beautiful rural areas.



Concentrated PV Power Plant Projects



Agrivoltaic Projects



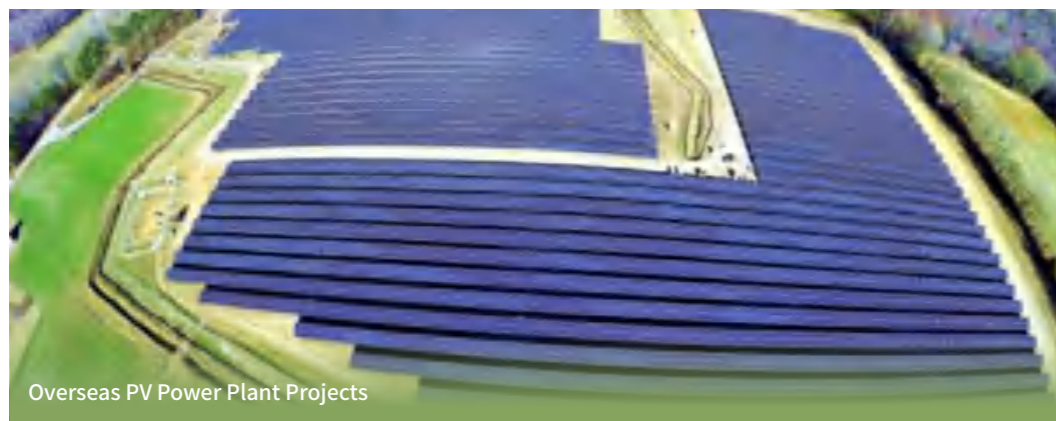
Pastoral PV Projects



Mountainous Power Plant Projects



Fishery-PV Projects



Overseas PV Power Plant Projects



Distributed PV Projects



Jinchang, Gansu, Energy Storage Power Station Project



Jiangning, Nanjing, Energy Storage Power Station Project



Baiyang Lake Integrated Solar-Storage-EV Charging Station Project



Case

Achieving Key Technologies to Support Integrated Source-Grid-Load-Storage Wind Power Projects

With the continuous advancement of large-scale wind power base construction in Northeast, North, and Northwest China region, the siting conditions for wind farms have become increasingly stringent, leading to a growing number of complex mountainous wind power projects. This presents more complex and variable challenges for design and construction. In response to this situation, the GCL Green Energy project team conducted in-depth research on key technologies in the field of complex mountainous wind power generation for an integrated source-grid-load-storage wind power project. A dedicated research group was established to visit the site multiple times, optimize the technical solutions across multiple iterations, and propose location-specific solutions in wind resource optimization and energy control management system construction. Based on the research findings, the construction plan was timely adjusted and optimized, effectively improving the wind power generation efficiency of the project and reducing construction costs. This demonstrates the Company's strong design and technical capabilities in large-megawatt wind power and complex onshore (mountainous) wind power projects. Once completed, the project is expected to generate over 970 million kWh of electricity annually.

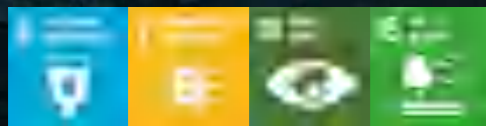


「N」ature

Continuously enhance the environment for human survival
— let green become both a lifestyle and a state of being.

GCL SI takes a forward-looking approach to green and sustainable development, anticipating greater potential for ecological protection. The Company, in alignment with the Paris Agreement and the disclosure framework of the Task Force on Climate-related Financial Disclosures (TCFD), actively assesses and addresses climate risks by formulating climate risk response strategies. We have implemented multiple measures in energy management, pollutant management, water resource management, biodiversity protection, circular economy, and waste management to mitigate the negative impact of our production and operations on the environment.

Contribution to the United Nations Sustainable Development Goals



Strategic Targets and Annual Performance

Strategic Goals	Indicator	Unit	2024 Performance
Based on 2024, reduce absolute Scope 1 and Scope 2 emissions by 64.7% by 2035.	Scope 1 & Scope 2 Emissions	Tonnes of CO ₂ equivalent	520,487.27
Based on 2024, reduce carbon emissions from purchased goods and services per unit of production in Scope 3 by 66.3% by 2035.	Scope 3 Emissions from Purchased Goods and Services per Unit of Production	Tonnes of CO ₂ equivalent/MW	623.31
Based on 2024, achieve an average annual 5% year-on-year reduction in product carbon footprint by 2030.	Average Product Carbon Footprint	kgCO ₂ e/kW	394.85
Provide all required product carbon footprint information to customers using the GCL Carbon Chain platform at least until 2030.	Product Carbon Footprint Coverage	%	71.43
Based on 2024, maintain an annual 5% reduction in electricity consumption per unit of product compared to the previous year at least until 2030.	Electricity Consumption per Unit of Product	MWh/MW	27.70
Based on 2023, reduce waste generation per unit of output by 30% by 2030.	Waste Generation per Unit of Output	Tonnes/MW	1.45
Based on 2024, reduce water consumption per unit of output by 8% by 2030.	Water Consumption per Unit of Output	Tonnes/MW	175.52
Achieve a 100% recycling rate for solar cell packaging materials by 2030.	Recycling Rate of Solar Cell Packaging Materials	%	76.41

Responding to Climate Change

GCL SI views climate action as an essential support for the Company's sustainable development. With reference to the TCFD disclosure framework, we have constructed a climate change management system around four dimensions: governance, strategy, risk management, and metrics and targets. In actively responding to international initiatives and domestic policies, GCL SI conducts GHG emission audits, and sets emission reduction targets, aiming to demonstrate the Company's determination and commitment to emission reduction. We have adopted various energy-saving measures to achieve our emission reduction targets on schedule. In addition, GCL SI actively promotes comprehensive energy lifecycle management of products, and creates green and low-carbon products to minimize resource consumption.



Climate Governance

GCL SI continuously improves the climate governance structure, with the Board of Directors serving as the central body responsible for climate issues, and regularly reviewing and assessing climate-related risks and opportunities. The Strategy and Sustainability Committee is responsible for overseeing the Company's overall climate strategy, goals, and related major issues. Under this committee, the Company has established a Sustainability Management Committee and a Sustainability Promotion Office, which are responsible for managing specific climate governance issues. There is a Climate Action Working Group within the Sustainability Management Committee and the working group is responsible for managing climate risks and opportunities.

GCL SI Climate Governance Structure

Level	Positioning	Responsibility
Strategy and Sustainability Committee	The highest decision maker and governance body for the Company's climate action	<ul style="list-style-type: none"> Oversee the overall sustainable development strategy and related major issues of the Company. Study and propose recommendations for the Company's major investment and financing plans, major capital operations, and asset management projects. Review the Company's sustainable development (including climate) strategy, goals, issues and policies, and risk management situation.
Sustainability Management Committee	The decision-making body and management of the Company's climate action	<ul style="list-style-type: none"> Guide and develop climate strategy and structure Formulate annual climate management plan and targets Approve significant climate-related risk issues and corresponding policies
Sustainability Promotion Office		<ul style="list-style-type: none"> Identify and prioritize climate-related risks and opportunities of the Company Review climate-related disclosure Establish an appropriate and effective climate risk management framework
Climate Action Working Group	The coordinating body of the Company's climate action	<ul style="list-style-type: none"> Organize, implement, coordinate, execute, and validate the Company's climate projects Manage climate-related matters and risks in the daily operations of various departments and business units Responsible for climate-related campaigns and external engagement activities

Climate Strategy

With reference to the TCFD risk analysis framework, and taking full consideration of domestic and international trends and the concerns of various stakeholders, GCL SI has identified transition risks and physical risks related to the Company's operations, and has formulated corresponding measures for related risks and opportunities.

GCL SI has incorporated climate risk into the corporate risk management process



Climate risk identification and assessment mechanism

In accordance with domestic and international sustainability standards and trends, as well as our business development and factory layout, GCL SI identifies and assesses climate-related risks and opportunities and makes materiality assessments to form a list of climate change risks for annual review by the Board of Directors.



Climate risk response mechanism

GCL SI matches each climate-related risk and opportunity with the respective functional departments and business units. At the same time, the Sustainability Promotion Office coordinates the establishment of a resilient climate risk management system.

Climate Risk and Opportunity Management

Climate Risk Matrix				
Risk Type	Risk Factor	Potential Financial Impact	Description of Potential Financial Impact	Solutions
Physical Risk	Climate disasters (short-term)	Affect production, transportation, the value of fixed assets, and increase operating costs	<ul style="list-style-type: none"> Typhoons, floods, and other natural disasters can lead to safety accidents, forced production shutdowns, and increased transportation costs Impairment of Fixed Assets 	<ul style="list-style-type: none"> Optimize transportation modes Formulate emergency plans for extreme weather events, conduct emergency drills and increase the reserve of emergency supplies
	Climate change (long-term)	Impact production and increase operating costs	<ul style="list-style-type: none"> Sustained high temperatures cause abnormal power supply and increase high temperature expenses Sea level rise increases the likelihood of relocation or structural changes of production bases located in coastal areas 	<ul style="list-style-type: none"> Increase local procurement Improve energy efficiency in the factories
Transition Risk	Laws and regulations (short-term)	Increase operating and financing costs	<ul style="list-style-type: none"> The increase in carbon market prices and the implementation of carbon taxes lead to higher operational and procurement costs Violating laws and regulations can bring penalties 	<ul style="list-style-type: none"> Strictly comply with the regulations of the country where we operate and where products are sold, and regularly monitor changes in relevant policies and regulations Establish a comprehensive compliance system and safeguard mechanism
	Technological changes (medium-term)	Increase operating costs, and increase investment in R&D	<ul style="list-style-type: none"> Upgrade energy-saving equipment Costs associated with outdated technology 	<ul style="list-style-type: none"> Improve energy usage efficiency and improve product production efficiency Pursue independent innovation and attract technical talents
	Market changes (medium-term)	Increase operating costs and affect the Company's reputation	<ul style="list-style-type: none"> Reduction in market subsidies leads to an increase in direct costs The Company may suffer from poor reputation and negative performance due to inadequate 	<ul style="list-style-type: none"> Actively communicate with stakeholders, respond to market and customer expectations for sustainability, and enhance corporate performance in this area

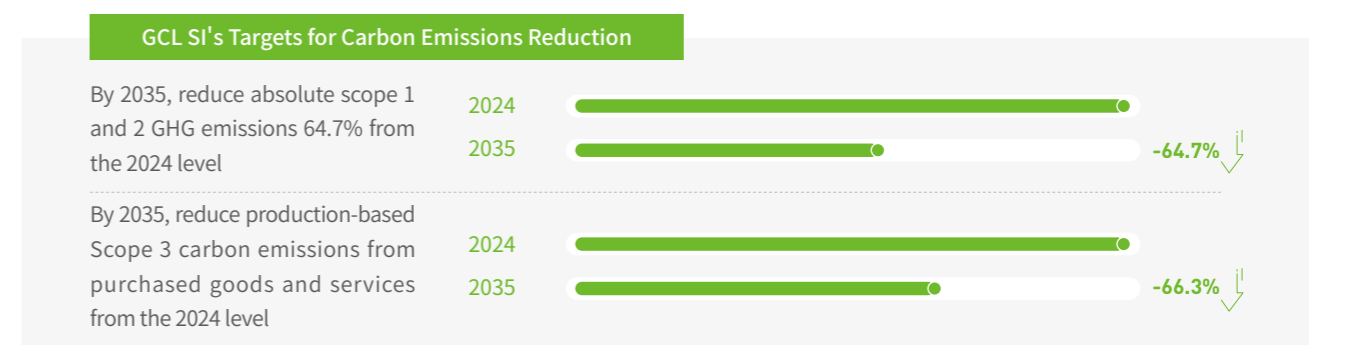
Climate Opportunity Matrix			
Opportunity Type	Potential Financial Impact	Description of Potential Financial Impact	Solutions
Policy	Increase operating income	<ul style="list-style-type: none"> The country has introduced policies to promote energy structure transformation and encourage the use of new energy, bringing broad development opportunities for photovoltaic enterprises 	<ul style="list-style-type: none"> Increase investment in R & D to improve product performance and provide customers with cleaner and more efficient products and services
Market	Enhance the corporate reputation, increase financing opportunities, and boost the operating revenue	<ul style="list-style-type: none"> Capital markets and rating agencies emphasize the level of corporate climate management, and companies with excellent management are more likely to have access to financing opportunities Increased demand for low-carbon products and services leads to growth in company revenues and profits 	<ul style="list-style-type: none"> Establish a comprehensive climate management framework to enhance climate governance and rating performance Rely on the "GCL Carbon Chain", realize efficient product carbon footprint management and enhance product competitiveness
Technology	Reduce operating costs	<ul style="list-style-type: none"> Accelerate the application of cleaner technologies and the use of cleaner energy to reduce the cost of energy use 	<ul style="list-style-type: none"> Promote the construction of photovoltaic power station in the plant, and increase the proportion of clean energy use Implement of energy-saving technological reforms to improve energy efficiency

For the identified climate risks, GCL SI has established targeted 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.


We continue to monitor the potential impact of climate change on our business and the upstream and downstream of the industrial chain. Based on this, we conduct training on climate change and emission reduction issues for suppliers to enhance the climate resilience of the supply chain. In 2024, GCL SI Carbon Chain Module system is implemented to track the end-to-end lifecycle product "carbon footprint" from production to transportation, sales, and use. Relying on the Carbon Chain, the Company has also achieved online management of organizational carbon. For details, please refer to the annual special feature in this report "GCL Carbon Chain 2.0 — An Industry First, Injecting New Momentum into Low-Carbon Development".

GHG Management

Based on the SBTi methodology, and our own strategy and operational planning, the Company has set GHG emission reduction targets and established the GHG emission reduction roadmap.




GCL SI's Carbon Reduction Pathway



Scope 1 & Scope 2

- **Energy Efficiency Improvement:** Lighting optimization, air conditioning optimization, equipment parameter optimization, thermal insulation retrofitting, etc.
- **Energy Optimization:** Installation of on-site photovoltaic power stations.
- **Procurement of Renewable Energy:** Actively purchasing and using renewable energy electricity.



Scope 3

- **Replacement of Granular Silicon:** Increasing the utilization rate of granular silicon as a raw material.
- **Replacement of Primary and Secondary Materials:** Continuously optimizing the procurement of raw materials, reduce the carbon emission per unit of purchased raw materials and reduce the quantity of raw materials purchased.
- **Supplier Advocacy:** Setting overall carbon reduction targets for upstream suppliers and raising the entry standard; encouraging leading suppliers to establish and implement SBTi targets.

GCL SI has prioritized GHG inventory and management. In 2024, GCL SI engaged a third-party agency to conduct a GHG emissions inventory in accordance with the GHG Protocol, covering GHG emissions from both operations and the upstream and downstream chains. Relying on the "GCL Carbon Chain," the Company has achieved dynamic and precise online management of organizational carbon data, further enhancing its carbon emission management capabilities. The Company will continue to advance carbon reduction in its operations and supply chain in a phased and focused manner to achieve its greenhouse gas emission targets.

GCL SI Scope 1 and 2 GHG Emission Performance in 2022-2024^{1,2}

Disclosure item	Unit	2022	2023	2024
Scope 1 GHG emissions	tCO ₂ e	325.87	1,309.95	1,295.60
Scope 2 GHG emissions (location-based)	tCO ₂ e	87,669.92	250,992.40	475,748.90
Scope 2 GHG emissions (market-based)	tCO ₂ e	-	248,867.51	519,191.67
Total Scope1 and Scope 2 GHG emissions (location-based)	tCO ₂ e	87,995.79	252,302.35	477,044.50
Total Scope1 and Scope 2 GHG emissions (market-based)	tCO ₂ e	-	250,177.45	520,487.27
Revenue-based Scope 1 and Scope 2 GHG emission intensity (location-based)	tCO ₂ e/RMB 10,000	-	0.16	0.29
Revenue-based Scope 1 and Scope 2 GHG emission intensity (market-based)	tCO ₂ e/RMB 10,000	-	0.16	0.32
Production-based Scope 1 and Scope 2 GHG emission intensity (location-based)	tCO ₂ e/MW	-	13.53	14.12
Production-based Scope 1 and Scope 2 GHG emission intensity (market-based)	tCO ₂ e/MW	-	13.41	15.40

In 2024

GCL SI Scope 3 total GHG Emission

21,949,731.60

tCO₂e

Emissions from purchased goods and services

21,060,374.19

tCO₂e

Percentage of emissions from purchased goods and services in the total Scope 3 emissions

95.95%

GCL SI Scope 3 GHG Emission Performance in 2024³

Disclosure item	Unit	2023	2024
Scope 3 GHG Emissions	tCO ₂ e	14,408,777.62	21,949,731.60
Upstream Scope 3 GHG Emissions	tCO ₂ e	13,838,679.66	21,204,325.38
-Purchased Goods and Services	tCO ₂ e	13,789,146.15	21,060,374.19
-Capital Goods	tCO ₂ e	19,678.53	37,792.35
-Fuel and Energy-Related Activities	tCO ₂ e	7,956.28	19,919.88
-Upstream Transportation and Distribution	tCO ₂ e	13,190.46	79,683.47
-Waste Generated from Operations	tCO ₂ e	1,862.56	3,731.24
-Business Travel	tCO ₂ e	3,986.41	1,319.45
-Employee Commuting	tCO ₂ e	1,110.01	531.81
-Upstream Leased Assets	tCO ₂ e	1,749.26	972.99
Total Scope 3 Greenhouse Gas Emissions Downstream	tCO ₂ e	570,097.97	745,406.22
-End-of-Life Treatment of Sold Products	tCO ₂ e	570,097.97	745,406.22

¹ In 2024, GCL SI calculated greenhouse gas emissions data based on operational control during the Reporting Period. The scope includes the Suzhou Management Center, three production bases (Hefei GCL, Wuhu GCL, Funing GCL), GCL Energy Storage, GCL Green Energy, and GCL SI offices in Beijing, Japan, and Munich. Scope 1 and Scope 2 GHG emissions data for 2024 have been validated by a third-party organization.

² Due to GCL SI's significant production capacity expansion in 2024, greenhouse gas emissions increased notably. The Company will continue to explore and implement diversified emission reduction measures to fully achieve its emission reduction targets.

³ Sourced from the inventory data, the Scope 3 emission categories related to GCL SI include purchased goods and services, capital goods, fuel and energy-related activities, upstream transportation and distribution, waste generated from operations, business travel, employee commuting, upstream leased assets, and disposal of sold products at end-of-life.

Product Lifecycle Management

Adhering to the principles of sustainable development, GCL SI fosters green management throughout the product lifecycle, proactively developing eco-friendly products, minimizing resource use, and advancing the circular economy and sustainable practices.

Green Design

Introduce the ecological concept in product design, carry out self-evaluation of ecological design in accordance with GB/T 24256 "General Rules for Product Ecological Design" and GB/T 32161 "General Principles for Eco-design Product Assessment", and form audit reports.



Case

Continuous Implementation of Green Product Design

In 2024, without compromising product performance, the Company continued to reduce resource consumption per unit of product, such as silver paste, HF, HCl, and hydrogen peroxide in battery products, and aluminum frames, glass, and encapsulant films in module products. Additionally, the Company introduced water-based flux to reduce the use of toxic and harmful substances. Water-based flux is an environmentally friendly flux that does not contain volatile organic solvents. It uses deionized water as the main solvent and is free from halogens, rosin, and resins, offering significant ecological and environmental benefits.

Green Procurement

Select suppliers who have obtained product carbon footprint certification or whose products have a lower carbon footprint, and require all procurement parties to sign the *Letter of Commitment on Safety and Environmental Protection*.



Case

Actively Carrying Out the Green Procurement of Main and Auxiliary Materials

In addition to increasing the procurement ratio of silicon granules with lower carbon emissions, the Company also actively empowers its auxiliary material suppliers to reduce carbon emissions. In 2024, the Company selected 4 glass and aluminum suppliers for inclusion in its carbon reduction program, empowering suppliers to improve their ESG performance while promoting the development and innovation of a green and transparent supply chain.



Green Production

Emphasize green lean production and enhance energy efficiency in the manufacturing process through technological upgrades.



Case

Developing Low-Temperature Amorphous Silicon Deposition Technology to Reduce Energy Consumption

To reduce carbon emissions in the production process, the Company optimized its manufacturing processes. In 2024, it adopted low-temperature amorphous silicon deposition technology in battery production, successfully reducing the deposition temperature from the traditional 610° C to 550° C. Test results showed that while maintaining high levels of photovoltaic conversion efficiency, energy consumption in the production process was reduced by 30%, and carbon emissions were lowered by 25%.

Green Logistics

Rationally plan the layout of the factory area, implement intermodal transportation, optimize transport routes, and take other measures to continuously improve the resource utilization efficiency of logistics links such as containerization, storage, and transportation, and accelerate the construction of a digital and low-carbon logistics industry chain.



Case

Decarbonization in Domestic and International Logistics

The Company continuously optimizes logistics operations to reduce energy consumption and carbon emissions. In international logistics, for short-sea routes, it prioritizes direct shipments from nearby ports to reduce transportation distances. For long-haul routes, it uses a combination of sea-rail, inland barge, and road-to-water transportation to replace road-only transport. In 2024, the Company adopted multimodal transportation for over 95% of its domestic segments in international logistics operations.

In domestic logistics, especially for long-distance transport, the Company adopts road-rail intermodal transport to reduce the frequency of diesel truck usage. By the end of 2024, the proportion of road-rail intermodal transport had increased to 34%, up 11% from the previous year, reaching an industry-leading level.

Green Recycling

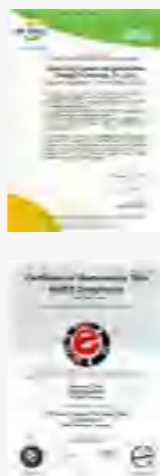
Maximize the recycling and reuse of discarded modules and product packaging materials, promote the circular economy, and enhance the resource output rate and recycling utilization rate.



Case

Driving Component Recycling and Obtaining PV CYCLE and WEEE Certifications

Recycling and environmentally friendly disposal of waste photovoltaic modules are key to achieving a green closed-loop in the photovoltaic industry. GCL SI is committed to developing a circular economy by exploring recycling and high-value regeneration pathways for "retired" photovoltaic modules. It actively engages in module recycling projects, strictly adhering to the European Union's Waste Electrical and Electronic Equipment (WEEE) directive for proper disposal of waste photovoltaic modules and obtaining organizational certification. Additionally, the Company has joined the PV CYCLE organization as a member, working with external partners to drive effective recycling and utilization of waste modules.



Low-Carbon Promotion

To enhance employees' understanding of key issues such as climate change and energy conservation, the Company actively conducts ESG training for its workforce. In 2024, the coverage rate of low-carbon related training among employees reached 100%.



Case

Conducting Company-Wide ESG Training

On December 31, 2024, Tu Jianbang, Deputy Director of the Sustainability Promotion Office at GCL SI, delivered a special training session titled "GCL SI's ESG Practices and Strategies" to all employees. Department heads attended in person, while other staff participated online.

Starting with global ESG trends, Tu provided an in-depth analysis of international policy dynamics and industry best practices, then systematically elaborated on the Company's ESG core initiatives and achievements aligned with its strategic roadmap. The training aimed to enhance cross-functional understanding of ESG principles, strengthen accountability awareness, and establish the groundwork for deepening ESG practices and advancing green transformation at GCL SI.



Environmental Compliance Management

GCL SI strictly complies with the requirements of laws and regulations such as the *Environmental Protection Law of the People's Republic of China*, *Air Pollution Prevention and Control Law of the People's Republic of China*, *Water Pollution Prevention and Control Law of the People's Republic of China*, and *Solid Waste Pollution Environment Prevention and Control Law of the People's Republic of China*. The Company continuously improves its environmental management system to ensure compliance. In 2024, Hefei GCL SI formulated and released the Environmental Management System Regulations, which standardize the management of wastewater, exhaust gas, and solid waste (the "three wastes") generated by the module business unit's production bases. This ensures that the discharge and disposal of the "three wastes" meet legal requirements and comply with relevant environmental standards. Funing GCL SI formulated and released the *Emergency Response Plan for Sudden Environmental Incidents*, which enhances personnel emergency response capabilities and controls the impact of environmental incidents. Wuhu GCL SI revised the *Solid Waste Management Regulations*, further detailing the types of solid waste and supplementing and improving hazardous waste disposal methods to ensure compliant disposal of solid waste.

GCL SI has publicly disclosed the Environmental Management Policy on its official website, outlining its commitment to environmental management. The core content of the policy includes:

Mission and Commitment	<ul style="list-style-type: none"> The Company is committed to improving the proportion of green and clean energy in the energy structure and reducing greenhouse gas emissions through green innovation and photovoltaic technology upgrading.
Scope of Environmental Management Policy	<ul style="list-style-type: none"> The policy covers all business areas of the Company, including production operations, products and services, distribution logistics, waste management, suppliers, and partners.
Implementation Guidelines	<ul style="list-style-type: none"> Environmental Management System: Comply with relevant laws and regulations and establish an environmental and energy management system in accordance with ISO 14001 and ISO 50001 standards. Greenhouse Gas Emission Management: Set emission reduction targets and strategies, conduct carbon audits, and promote carbon reduction in internal operations and the supply chain. Energy Management: Improve energy efficiency, explore green energy optimization, and respond to energy-saving and carbon reduction initiatives. Water Resource Management: Optimize water-saving technologies, implement recycling water systems, and reduce the demand for new water sources. Pollution and Waste Management: Manage solid and hazardous waste in compliance with regulations and increase the comprehensive utilization rate of harmless waste. Ecological Environment Management: Strictly adhere to laws and regulations for the protection of the ecological environment and engage in ecological protection actions.

GCL SI has established environmental management departments at all production bases, responsible for managing environmental affairs across their respective factories. As of the end of the Reporting Period, the Hefei GCL SI, Funing GCL SI, and Wuhu GCL SI factories have all obtained ISO 14001 Environmental Management System Certification and successfully passed their annual reviews, with a coverage rate of 100% of the photovoltaic module-related production bases.

GCL SI also actively conducts risk assessments for potential environmental incidents and formulates corresponding preventive measures. We regularly review production facilities to ensure compliance with the latest environmental standards and provide environmental awareness and emergency response training for employees. In addition, we have developed comprehensive emergency response plans to deal with possible sudden environmental incidents, ensuring rapid and effective handling of any unexpected situations. During the Reporting Period, GCL SI did not experience any significant environmental incidents and no major environmental administrative penalties or criminal liabilities were incurred.

Energy Management and Renewable Energy Utilization

GCL SI adheres to the energy management policy of "low consumption and high efficiency, energy conservation and emission reduction, standardized operation and technological innovation", and takes multiple measures to strengthen energy management. We have established a comprehensive energy management system, promoted energy-saving projects, and increased the use of renewable energy to support the green energy transition.

Energy Management System

As of the end of the Reporting Period

the Hefei GCL SI, Funing GCL SI, and Wuhu GCL SI factories have all obtained ISO 50001 Energy Management System Certification, with a coverage rate of

100% across GCL SI photovoltaic module-related production bases.

GCL SI strictly abides by laws and regulations such as the *Energy Conservation Law of the People's Republic of China* and the *Energy Management Guidelines for Industrial Enterprises*, and systematically monitors, controls, and optimizes energy consumption in production. The Company continues to advance energy management system, and has developed and implemented the Energy Management Manual, the Energy and Resources Management System, and the Energy Management System Procedures. These documents clearly outline the Company's principles and specific requirements for the rational utilization of various energies and resources. In 2024, to further advance energy-saving retrofitting efforts, Wuhu GCL formulated a total of 13 new energy-related system documents, including the Energy Management Planning and Control Procedure and the Energy Performance Indicators and Energy Baseline Control Procedure.

Wuhu GCL SI actively promotes the construction of intelligent energy management platforms. The intelligent energy management platform can achieve real-time data collection of electricity consumption for each electrical circuit and air compressor flow within the plant area. It also provides comparative analysis functions for data across different time periods and regions, enabling precise identification of energy consumption anomalies in equipment and achieving intelligent and digital energy management.



Energy-Saving Retrofitting

In 2024, GCL SI's production bases conducted energy usage analysis, identified energy-saving retrofitting potential in production processes, and implemented multiple energy-saving and efficiency-improving technical retrofitting projects to comprehensively enhance energy efficiency and continuously promote energy conservation.

Energy-Saving Retrofitting Measures at GCL SI Bases



- **Centralized Air Conditioning Control:** Proposes to install a centralized air conditioning control system that automatically optimizes the operating mode, frequency, and temperature of the air conditioning system based on collected parameters and operating status, reducing energy consumption for air conditioning use.



- **Cooling Tower Process Water Cooling Retrofit:** In response to the current energy waste in using ice machine chilled water to cool process water, the Company has launched a technical retrofit to use cooling towers for process water cooling, with an estimated annual electricity savings of 1.29 million kWh.
- **Pump System Energy Savings:** Focusing on the high electricity consumption of the pump system, the Company has initiated a pump performance study project to fully utilize the variable frequency performance of the pumps, reducing pump system electricity consumption by approximately 50% compared to before the retrofit.



- **Efficient Machine Room Retrofit:** Implemented an efficient machine room retrofit project, replacing 19 control cabinets from constant speed to variable frequency. The use of variable frequency drives helps reduce the electrical consumption of water pumps. Additionally, an upgraded efficient machine room automation system was installed, leveraging AI algorithms to optimize equipment operating conditions. The retrofit achieved an energy-saving rate of 20%.

GCL SI Energy Management Performance in 2022-2024⁴

Disclosure item	Unit	2022	2023	2024
Natural Gas	m ³	150,729	315,951	306,464
Total Electricity	kWh	150,893,426	473,387,732	935,976,903
- Self-generated Renewable Electricity	kWh	-	37,403,487	49,376,053
- Purchased Municipal Electricity	kWh	150,893,426	432,258,316	211,759,306
- Purchased Renewable Electricity	kWh	-	3,725,929	-
- Contracted Purchased Electricity	kWh	-	-	674,841,544
Steam ⁵	m ³	3,238	6,640	-
Gasoline	kg	-	59,974	40,858
Electricity Consumption per Unit of Output	MWh/MW	-	25.38	27.70
Natural Gas Consumption per Unit of Output	m ³ /MW	-	16.94	9.07

⁴ The scope of GCL SI 2024 energy management performance includes the Suzhou Management Center, three production bases (Hefei GCL, Wuhu GCL, Funing GCL), GCL Energy Storage, GCL Green Energy, and GCL SI offices in Beijing, Japan, and Munich.

⁵ GCL SI did not use steam in 2024.

Renewable Energy Utilization

GCL SI continuously optimizes its energy structure, actively promotes the use of renewable energy electricity in manufacturing, and maintains a strong investment in clean energy utilization. During the Reporting Period, the Company's battery and module production bases constructed their own photovoltaic (PV) systems to provide clean energy for the plants, increasing the consumption of renewable energy.



Case Accelerating PV Power Station Construction at Production Bases

To build green factories, GCL SI fully utilized available resources such as building rooftops and other spaces, adopting a "self-generation and self-use, surplus power to the grid" model to develop PV power generation facilities on a large scale.

In 2024, Hefei GCL SI built a new PV power station on the roof of its Phase II factory with an installed capacity of 17.6 MW, which was officially connected to the grid in September 2024, with an estimated annual power generation of about 17.61 million kWh. Funing GCL SI is constructing a 14.5-MW distributed PV power station, which is expected to generate approximately 16 million kWh annually once completed. Wuhu GCL SI has already built and connected a PV power station with an installed capacity of about 15.73 MW, generating about 16 million kWh annually. Additionally, Wuhu GCL SI is developing a 2.3-MW PV Phase III project, with all generated electricity to be used within the factory premises.



In 2024

GCL SI utilized self-built photovoltaic systems to generate and consume

49.38

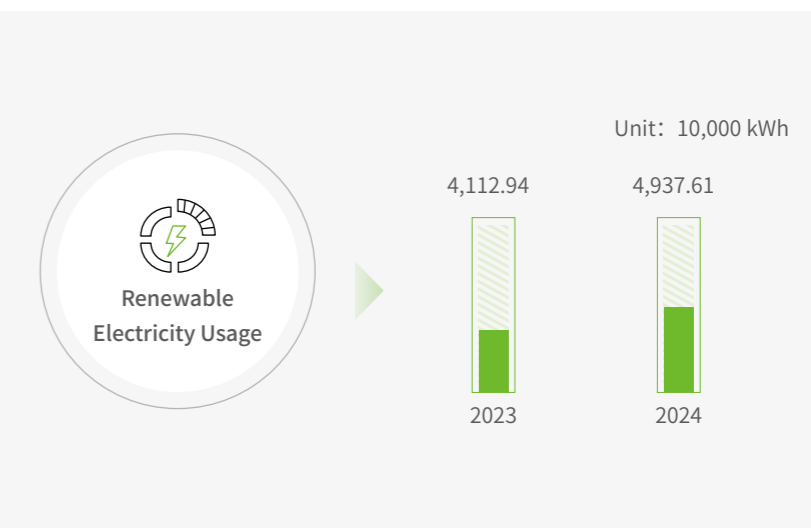
million kWh of renewable electricity

and procured

335.09

million kWh equivalent of green power certificates.

GCL SI Renewable Energy Utilization Performance (2023-2024)



Water Stewardship

GCL SI strictly follows the *Water Law of the People's Republic of China*, the *Water Pollution Prevention and Control Law of the People's Republic of China* and other laws and regulations. We continuously improve the water resources management system, and enhance the efficiency of water resources management through multiple initiatives. Meanwhile, the Company has formulated and enforced the Self-Assessment Report on Water Use since 2021, and has established a water conservation evaluation team to assess water conservation each year.



Responding to Water Risks

GCL SI is keenly aware of the importance of water risk to global sustainability and sound business operations. The Company has evaluated the water stress of all plants in continuous operation, adopting the *Aqueduct Water Risk Atlas of the World Resources Institute (WRI)*. The results of the evaluation are as follows:

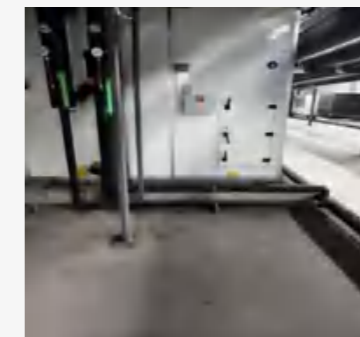
Plant	WRI Water Risk Level
Hefei GCL SI	High (3-4)
Funing GCL SI	High (3-4)
Wuhu GCL SI	Medium-High (2-3)

GCL SI prioritizes the exploration of local alternative water sources for our production and operations. At the end of 2024, the Company's sources of water included municipal water supply, rainwater collection and condensate collection.



Case Retrofitting Condensate Piping to Reduce Fresh Water Consumption

In 2024, Hefei GCL SI actively carried out air-conditioning condensate recovery to reduce the use of fresh water and lower wastewater discharge. After the implementation of the project, the Company saves approximately 5,760 tonnes of water consumption annually, amounting to RMB 12,000 in fresh water costs and RMB 35,000 in wastewater discharge fees annually.



Water Conservation Measures

GCL SI regards water conservation as a crucial aspect of green production and integrates it into the entire production and operation process. During the Reporting Period, we established a water-saving evaluation team, enhanced water usage analysis, upgraded water-saving facilities, and optimized wastewater treatment and reuse systems. We also set water-saving targets and regularly tracked progress towards these goals to continuously advance the lean management of water resources.



Case

Comprehensive Water-Saving Measures Lead to Significant Reduction in Water Consumption

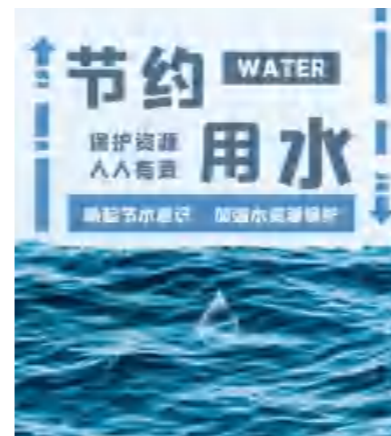
In 2024, Wuhu GCL SI implemented comprehensive water-saving measures, including: Regular inspections to prevent water leakage and wastage; Reporting equipment not under water usage monitoring to relevant departments for rectification; Reducing overflow volumes in overflow tanks while ensuring product quality in the production process; Enhancing the reuse of water from the pure water station's instruments. After implementing these measures, Wuhu GCL SI achieved a significant reduction in water consumption per unit of product, with a 39% decrease compared to 2023.



Case

Night-Time Water Cooling for Water Conservation and Reducing Chiller Water Evaporation

To ensure continuous production, chillers are used to provide cooled water for the workshop air conditioning system. In 2024, Funing GCL SI addressed the issue of daytime cooling water evaporation from chillers by implementing night-time water cooling measures. This reduced the daytime operating time of chillers and effectively minimized the evaporation of cooling water, saving approximately 2,880 m³ of water annually.



GCL SI actively promotes water conservation awareness among its employees

GCL SI Water Consumption Performance in 2023 and 2024⁶

Disclosure Item	Unit	2023	2024
Total water withdrawals	Tonnes	3,732,935	5,930,366
Total water consumption ⁷	Tonnes	1,647,653	1,054,675
Water recycling and reuse volume	Tonnes	202,569	884,961
Water consumption intensity	Tonnes/MW	88.35	31.21

⁶ The scope of GCL SI 2024 water management performance includes three production bases: Hefei GCL, Wuhu GCL, and Funing GCL.

⁷ GCL SI's total water consumption in 2024 refers to total water withdrawal minus total wastewater discharge.



Pollutant & Emissions Management

Wastewater Control

GCL SI continuously intensifies its efforts in pollution prevention and control, committing to reducing the emission of pollutants such as waste gases and wastewater, thereby minimizing the negative environmental impact of its operations.

The Company always complies with the requirements of national and local laws and regulations, and has established and executed the Wastewater Discharge Control Management System. We develop and implement sound wastewater collection, treatment and discharge programs for various wastewater following the principle of wastewater diversion and treatment. In addition, according to the regulatory requirements, we install online monitors at the main outlets of production wastewater to monitor the quality of wastewater in real time and ensure compliance with the discharge standards.

The cell manufacturing base Wuhu GCL SI strictly enforces the *Emission Standards of Pollutants for Cell Industry*, the *Wastewater Quality Standards for Discharge to Municipal Sewers*, and the *Environmental Quality Standards for Surface Water* from the industrial wastewater treatment plant of the Xinwu Economic Development Zone in Anhui Province. Based on the standards, we monitor the discharge data of chemical oxygen demand (COD), fluoride, total phosphorus (TP), total nitrogen (TN), and chloride. The wastewater treatment is based on a "primary physical and chemical reaction tank + primary physical and chemical sedimentation tank + secondary physical and chemical reaction tank + secondary physical and chemical sedimentation tank and A/O biochemical tank + secondary sedimentation tank" process to ensure compliant discharge.

During 2024

The Company had no incidents of excessive discharge.



Case

GPC Battery Process Upgrade to Reduce Wastewater Ammonia-Nitrogen Treatment Pressure

In the photovoltaic (PV) cell manufacturing process, traditional acid etching processes use high-concentration HF/HNO₃ mixtures, which, while effective for etching, generate significant nitrogen- and fluoride-containing wastewater, posing challenges for wastewater treatment. In contrast, alkaline etching processes using KOH/NaOH solutions can effectively reduce ammonia-nitrogen levels in wastewater, minimizing environmental pollution. In 2024, GCL SI upgraded the acid etching process to an alkaline etching process in its GPC battery production. This not only enhanced battery performance but also significantly reduced wastewater ammonia-nitrogen emissions.

GCL SI Wastewater Discharge Performance in 2023 and 2024

Disclosure Item	Unit	2023	2024
Total wastewater discharge	Tonnes	2,085,281.91	4,875,691.00
Suspended solids discharge	Tonnes	21.79	67.65
COD discharge	Tonnes	76.54	263.96
Ammonia discharge	Tonnes	11.71	41.27
Phosphorus discharge	Tonnes	0.29	0.30
Fluoride discharge	Tonnes	9.71	22.58

Waste Gas Management

GCL SI firmly complies with the *Law of the People's Republic of China on Environmental Protection*, the *Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution* and other related laws and regulations, and fulfills the social responsibility for environmental protection. We have formulated the Waste Gas Emission Control Management System for production bases to ensure that air pollutants are emitted after treatment to satisfy the requirements of the Integrated Emission Standard of Air Pollutants and the Emission Control Standard of Volatile Organic Compounds for Industrial Enterprises.

GCL SI has formulated a detailed exhaust gas treatment process for module production bases to adsorb the harmful substances in the waste gas by means of activated carbon adsorption. The battery cell production bases employ technologies such as alkaline liquid spraying and activated carbon adsorption to classify and treat the exhaust gases generated from the main production processes of the projects. To ensure compliance with emission standards, GCL SI regularly entrusts third-party testing institutions to conduct exhaust gas emission tests at all its production bases.

During 2024

GCL SI reported none of incidents of excessive waste gas emission.



Case

Thinned Polysilicon Design Reduces Exhaust Emissions

In 2024, GCL SI initiated efforts in product design to reduce exhaust emissions. In battery R&D, we adopted a thinned polysilicon design, reducing the thickness of the polysilicon film from 180 nm to 120 nm. Test results showed that with the thinned polysilicon design, while maintaining a high level of photovoltaic conversion efficiency, the usage of chemicals such as silane and phosphorous trichloride decreased. Additionally, the end-of-pipe emissions were reduced, yielding significant environmental benefits.

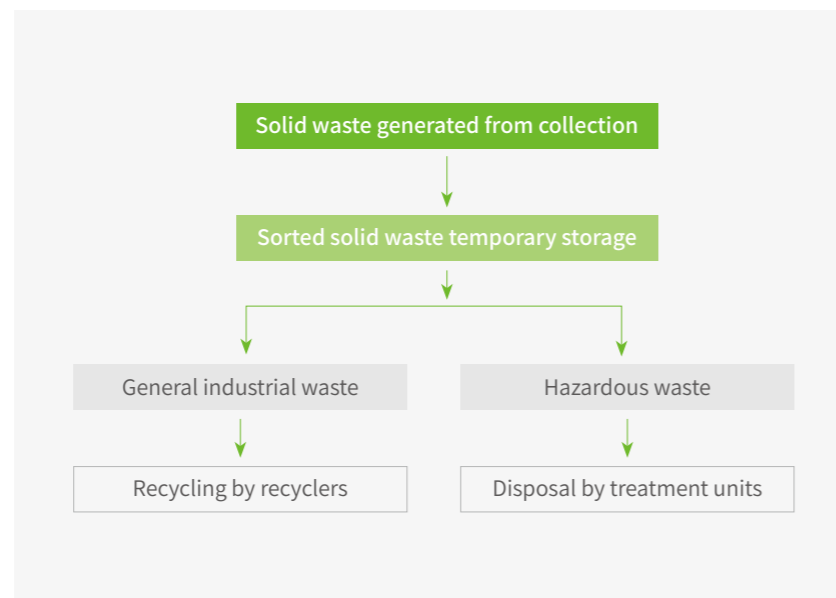
GCL SI Waste Gas Management Performance in 2023 and 2024

Disclosure Item	Unit	2023	2024
Total waste gas emissions	m ³	5,839,417,312.00	14,506,850,032.00
Nitrogen oxides (NOx) emissions	Tonnes	1.43	3.32
Sulfur oxides (SOx) emissions	Tonnes	0.25	0.80
Non-methane hydrocarbon (NMHC) emissions	Tonnes	5.26	12.57
Particulate Matter emissions	Tonnes	2.46	0.20



Waste Management

In terms of waste management, GCL SI has established guidelines and management tools such as the Waste Management Regulations, the Solid Waste Management System, the Hazardous Chemical Safety Management System, the Hazardous Waste Management Registration Form, and the Hazardous Waste Transfer Note. We strictly regulate the collection and disposal process of general industrial solid and hazardous wastes, ensure that waste treatment and discharge comply with the relevant environmental standards, and minimize the harm to the environment and health.



GCL SI Waste Treatment Process Flow

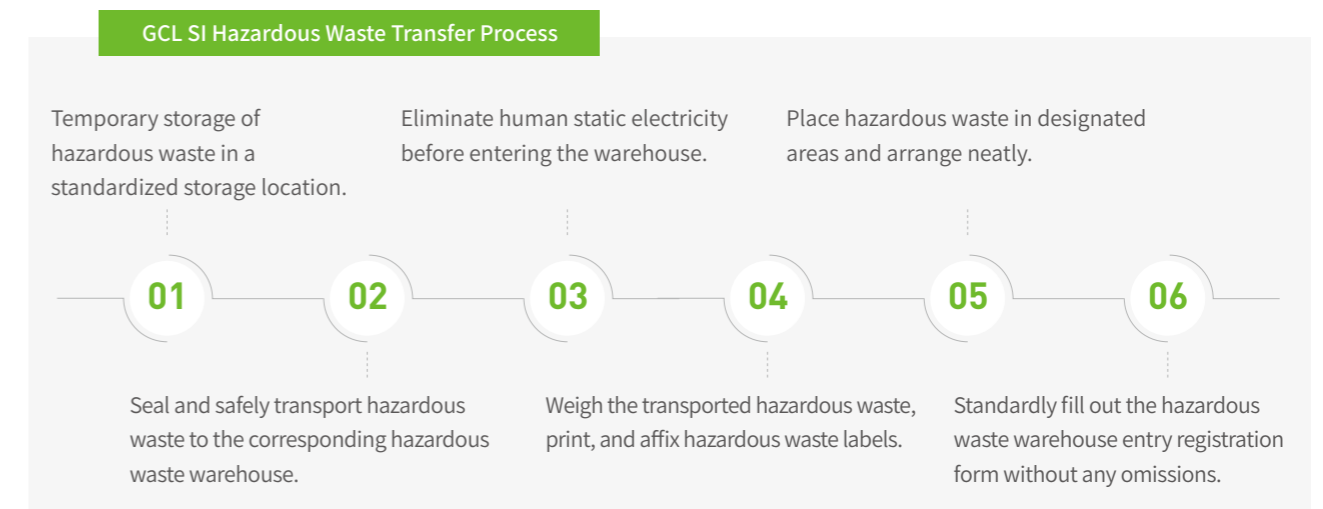
During the Reporting Period

The Company's general industrial solid waste recycling rate reached

99.74%

For general industrial solid waste such as used cells, waste packages and scraps, the Company practices recycling and decontamination management, and adopts disposal methods such as sale for comprehensive utilization and recycling by suppliers, so as to achieve resource conservation and contribute to the circular economy.

For hazardous waste, the Company has constructed hazardous waste storage facilities in accordance with relevant regulatory requirements. These facilities are designed to store various types of hazardous waste in a classified manner, ensuring standardized storage. The Company also maintains hazardous waste ledgers and transfer manifests based on the actual generation of hazardous waste, as required by law. These documents are then handed over to a qualified third-party company for compliant disposal, so as to prevent or reduce harm to the environment.

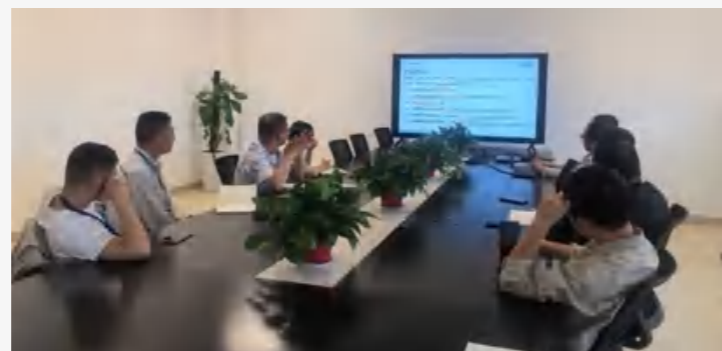




Case

Conducting Specialized Hazardous Waste Management Training

The Company places high importance on hazardous waste management and provides specialized hazardous waste management training for employees annually. The training covers various aspects of hazardous waste management, including definitions, types, storage, ledger filling, and emergency handling of leaks. It also uses vivid case studies to illustrate the severe consequences of improper hazardous waste management, effectively enhancing employees' awareness and capabilities in hazardous waste management.



During the Reporting Period

GCL SI reported none of significant violations of emissions or leaks.

GCL SI Solid Waste Management Performance in 2022-2024

Disclosure Item	Unit	2022	2023	2024
Total waste generated	Tonnes	13,325.26	52,238.60	49,005.45
Total general industrial solid waste generated	Tonnes	13,465.74	52,218.69	48,830.28
-Non-hazardous recycled	Tonnes	-	52,184.85	48,703.35
-Non-hazardous incinerated	Tonnes	-	33.84	126.93
Total hazardous waste generated	Tonnes	15.90	19.91	175.17
Hazardous waste disposed ⁸	Tonnes	-	17.82	172.17

⁸The inconsistency between the total volume of hazardous waste generated by GCL SI in 2024 and the total volume of disposal is attributable to the fact that some of the hazardous wastes were processed in early 2025 under a single disposal.

Circular Economy

GCL SI adheres to the concept of circular economy development, continuously improving resource utilization efficiency to achieve a win-win situation for economic and environmental benefits. On the product side, the Company optimizes packaging design and actively promotes the recycling of packaging materials. In 2024, Hefei GCL SI optimized the structure of its packaging boards, reducing the use of wood pulp raw materials by approximately 30% without compromising the burst strength index. Wuhu GCL SI collaborated with upstream and downstream partners, recycling the cartons used for component shipments.

In addition to focusing on the recycling of materials in the production process, the Company also emphasizes the refurbishment and remanufacturing of office electronic devices such as laptops in its office operations. Regular inventory checks of in-stock electronic devices are conducted, and the hard drives and casings of old laptops are refurbished to extend their service life and improve the utilization rate of relevant electronic devices.

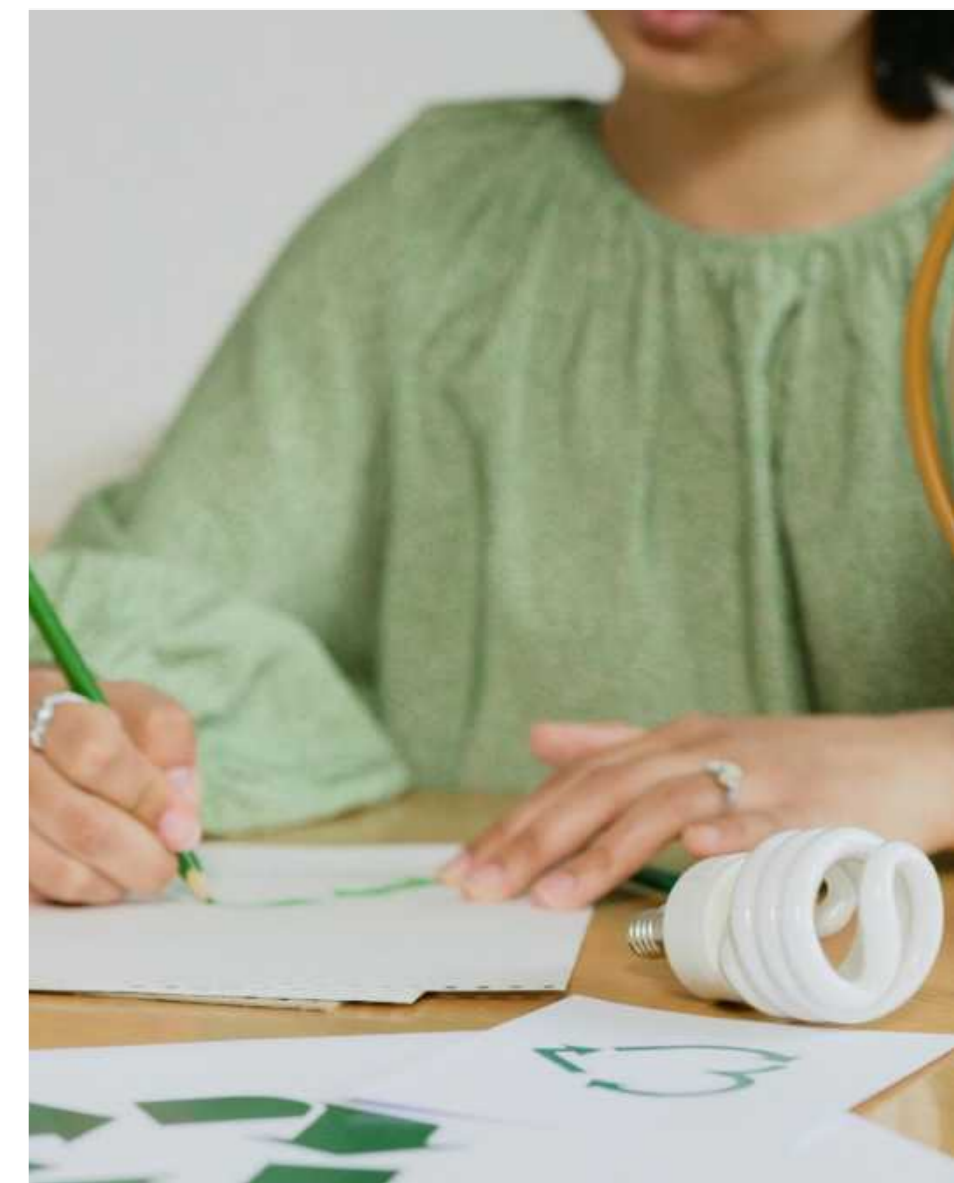
In 2024

The total recovery of product packaging and logistics pallets of Wuhu GCL SI exceeded

611,400 sets

With a recovery rate of over

76.41%



Ecosystem and Biodiversity Conservation

GCL SI places great importance on the protection of ecological resources and regards biodiversity as the foundation for sustainable development. The Company continuously innovates and strengthens its biodiversity conservation measures. GCL SI has developed a biodiversity conservation strategy based on the principles outlined in the Convention on Biological Diversity and in reference to the EU's Biodiversity Strategy for 2030.

GCL SI Biodiversity Conservation Strategy

Strategic Goal

- 01 Enhance awareness of the importance and value of biodiversity
- 02 Reduce direct pressure on biodiversity and promote sustainable use of natural resources
- 03 Improve biodiversity status through the protection of ecosystems, species, and genetic diversity

Mission

GCL SI will raise awareness of biodiversity through internal and external training, publications, sponsorships, and internal and external communication of the impact of organizational activities in this area, integrating it into educational dialogues.

GCL SI commits to reducing direct pressure on biodiversity and working with consumers and the circular economy industry to promote sustainable resource use and end-of-life product management.

GCL SI will work with external partners to enhance biodiversity through sustainable land management, genetic diversity promotion, and habitat fragmentation reduction.



Case Desert Reclamation through Photovoltaic Projects to Improve Desert Ecosystems

GCL SI has launched photovoltaic desert reclamation projects, integrating desert reclamation projects of equal land area with photovoltaic projects to focus on the synergy between photovoltaic projects and ecological protection. By constructing photovoltaic power stations in desert areas, the photovoltaic panels form a shading barrier that effectively reduces surface wind speed, minimizes wind erosion, prevents dune movement, and reduces surface water evaporation. This creates favorable conditions for the growth of desert vegetation and enhances the ecological stability of desert regions.



Wutumeiren Project



Ningxia Jingneng Project

GCL SI strictly adheres to national regulations on ecological red lines, with all construction projects undergoing rigorous environmental impact assessment approval processes. No production facilities are located within ecological red line areas.

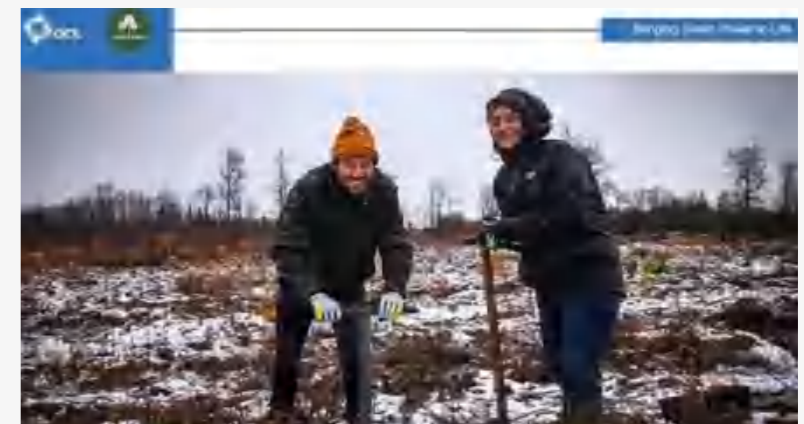
To implement our biodiversity conservation strategy, GCL SI is committed to building a network with companies and organizations that share similar biodiversity goals and exchanging and sharing our biodiversity-related policies and activities with local organizations. The Company also selects biodiversity research and conservation projects based on the biodiversity strategy framework and provides financial support. Additionally, we actively share this strategy and subsequent action plans with employees, suppliers, and other stakeholders to enhance societal awareness and understanding of our biodiversity strategy and encourage all parties to address issues related to natural resource use in a positive manner.

Our biodiversity strategy is a dynamic framework that will continue to evolve with the emergence of new projects and potential cooperation opportunities. The Company will continue to disclose progress on biodiversity work in accordance with GRI and TNFD (Taskforce on Nature-related Financial Disclosures) requirements to ensure transparent disclosure of biodiversity actions and impacts.



Case Strategic Cooperation Agreement Signed with EcoTree

During the Intersolar Europe 2024 in Munich, Germany, GCL SI signed a strategic cooperation agreement with EcoTree, an international environmental pioneer. Both parties will jointly conduct strategic planning, communication, research, and evaluation, committed to biodiversity conservation and sustainable development. In November of the same year, GCL SI and the EcoTree delegation planted over 2,000 saplings together in Germany. In the future, GCL SI will engage in more cooperation with various partners in the field of biodiversity conservation, fulfilling the Company's firm commitment to building a green future.



「E」 equity

United by shared values, bridging teams and partners; energized by vitality, boosting passion and innovation.

GCL SI proactively fulfills social responsibilities, envisioning a sustainable future where employees, the Company, and society grow together. We prioritize talent development, regarding our employees as valuable and reliable growth partners, and strive to create a vibrant and inclusive workplace for them. We are committed to providing fair and reasonable compensation and benefits, establishing communication channels for employees, and fostering harmonious and stable labor relations. Furthermore, we are committed to building mutually beneficial relationships with partners such as suppliers and customers, and actively engage in community building, achieving harmonious coexistence between business value and social benefits.

Contribution to the United Nations Sustainable Development Goals



Strategic Targets and Annual Performance

Strategic Goals	Indicators	Unit	2024 Performance
By 2030 at the latest, maintain a 100% medical insurance coverage rate for full-time employees in Mainland China	Medical Insurance Coverage Rate for full-time employees in Mainland China	%	100
By 2025, achieve a 100% coverage rate of collective bargaining agreements.	Collective Bargaining Agreement Coverage Rate	%	90.69
By 2028, achieve external audits for child labor and forced labor issues covering all production bases.	External Audit Coverage Rate for Child Labor and Forced Labor Issues at Production Bases	%	66.67
By 2030 at the latest, maintain competitive compensation for all employees.	Competitive Compensation Analysis Coverage Rate	%	100
By 2030 at the latest, maintain annual diversity, anti-discrimination, and anti-harassment awareness training covering all employees.	Diversity, Anti-Discrimination, and Anti-Harassment Awareness Training Coverage Rate	%	100
Based on 2024, by 2030, achieve a 20% increase in average training hours per employee.	Employee Training Hours	Hour	18.95
By 2030 at the latest, maintain zero incidents of fire, explosion, personal injury, and occupational disease accidents.	Number of Accidents ⁹	Incidents	5
By 2025, achieve a 100% signing rate of the Business Partner Code of Conduct and the Integrity Commitment Clause.	Supplier Code of Conduct and Integrity Commitment Clause Signing Rate	%	89.04
By 2026, achieve a 100% ESG audit coverage rate for core suppliers.	ESG Audit Coverage for Core Suppliers	%	92.71
By 2028, achieve a 100% third-party ESG audit coverage rate for core suppliers.	Third-Party ESG Audit Coverage for Core Suppliers	%	17.71
By 2030 at the latest, maintain 100% participation of core suppliers in ESG capacity building.	Core Supplier Participation Rate in ESG Capacity Building	%	100
By 2025, achieve a 100% conflict minerals audit coverage rate for suppliers of 3TG materials.	Conflict Minerals Audit Coverage Rate for Suppliers of 3TG Materials	%	100
By 2030 at the latest, conduct at least four employee volunteer services annually.	Number of Employee Volunteer Services Conducted	Time	9

⁹ Among these incidents, four employees were injured while performing equipment maintenance, and one employee was injured after falling on stairs. Moving forward, GCL SI will implement more comprehensive measures to ensure workplace safety and provide a solid safeguard for the health and safety of its employees.

Labor Rights Protection

Compliant Employment

In 2024

GCL SI had no incidents of employing child labor, forced labor, employment discrimination, harassment or other labor human rights violations.

Labor rights protection is crucial to GCL SI. For our value chain, respect for labor rights promotes harmonious cooperation among our partners to enhance the sustainable development capacity of the entire chain. We firmly believe that "people-oriented" management philosophy is the cornerstone of long-term stable growth and sustainable development.

GCL SI is determined to safeguard the rights and interests of our employees, strictly abides by the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China*, the *Provisions on the Prohibition of Using Child Labor*, and other applicable laws and regulations at our operational locations.

The Company has formulated and implemented regulations and standards such as the Labor Contract Management Regulations, Labor Employment Management Standards, Prohibition of Forced Labor Management Procedures, and Child Labor and Underage Worker Management Measures to further standardize labor employment management. The Company has also developed and publicly disclosed the Code of Business Conduct and Human Rights Policy, clearly committing to protecting employees' legal rights and interests, respecting employees' freedom of association and collective bargaining rights, and strictly prohibiting the use of child labor and forced labor.

Recognizing that the SA8000 Standard is a global social responsibility standard with significant implications for corporate labor conditions and human rights protection, Funing GCL SI and Hefei GCL SI have both obtained SA8000 Management System Certification.



Funing GCL SI and Hefei GCL SI SA8000 Certifications



Case Conduct SA8000 Training, emphasizing sense of social responsibility

In 2024, GCL SI conducted specialized training on SA8000 for all management and grassroots employees, in line with the requirements of the SA8000 standard. The training content included the background, standards, requirements, and best practice case studies of SA8000. The Company is committed to enhancing its capabilities in human rights protection, labor management, and social responsibility through a systematic and multi-level training program, ensuring that operations comply with international best practices.

GCL SI Employment Performance in 2024

Total Number of Employees

6,074 Persons

Percentage of Female Employees

27.81%

Number of New Employees

2,309 Persons

The Voluntary Turnover Rate of Full-time Employees

Retained for Over 1 Year **4.90%**

Percentage of New Female Employees

24.51%



Talent Attraction

In 2024

the Company employed

1,689 female employees



and employed

121 ethnic minority employees.



GCL SI is committed to attracting diverse personnel to empower the Company's development. The Company has formulated and implemented the Recruitment Management Standards, the Human Resources Planning Management Standards and other systems, adhering to the employment principles of "fairness, impartiality and openness", and providing equal opportunities to all employees and candidates in accordance with the law. The Human Resources Department is responsible for setting measurable objectives related to diversity, and discussing and agreeing on strategies to enhance diversity among employees of the Company (including senior management) on an annual basis.

The Company has established a talent reserve database to gradually set up a systematic, scientific human resources and talent development system. Meanwhile, the Company attaches great importance to the cultivation of management trainees, selecting outstanding fresh graduates to groom as future leaders through a variety of training initiatives. In this way, the Company achieves the strategy of reserving and developing talents. In addition, the Company provides internal recruitment and transfer opportunities to help employees develop and utilize their talents in positions that better suit their strengths.

To enhance the Company's attractiveness to high-caliber talent, GCL SI actively engages with local governments to secure various talent incentive policies. This ensures that high-caliber talent can enjoy favorable benefits, thereby boosting the Company's talent competitiveness. The Company applies for individual income tax refunds on behalf of eligible high-caliber talent to reduce their tax burden and increase their actual income levels. It also assists talent in applying for multiple government subsidies, including living allowances, housing subsidies, and talent attraction subsidies, to alleviate their living and housing costs and enhance their sense of belonging. In the future, GCL SI will continue to optimize its high-caliber talent recruitment mechanism, explore more talent incentive policies, and continuously improve the talent welfare system to build a solid talent foundation for the Company's sustainable development.



GCL SI Awarded "Top Human Resources Management Awards" by 51Job in 2024



Case

"GCL Star Program" for Global Campus Recruitment Conducted to Recruit Outstanding Personnel

In 2024, GCL SI launched the "GCL Star Program" for global campus recruitment, GCL SI has participated in campus recruitment events at well-known domestic universities such as Xi'an Jiaotong-Liverpool University, China University of Mining and Technology, and Soochow University. The Company recruited talent in multiple fields, including technology research and development, internationalization, engineering development, and production operations. GCL SI provides a range of training methods for campus recruits, including centralized training, professional guidance from senior mentors, and rotational practice in frontline and departmental positions. The Company actively incubates and reserves core technology and management talent for the future, driving continuous innovation and development in the field of intelligent integrated energy.



Compensation and Benefits System

Based on the Compensation Management Standards, GCL SI aims to provide employees with competitive compensation. Upholding the principle of equal pay for equal work, we strive to build a fair, just and reasonable compensation management system. The Company conducts a survey on compensation and benefits in the industry every year and improves the Company's compensation system based on the results of the survey. These efforts ensured a fair and scientific compensation system and further enhanced our market competitiveness. Full-time employees' compensation includes fixed compensation (i.e., base salary) and variable remuneration (including monthly performance-based salary and bonuses). Additionally, based on a comprehensive evaluation of factors such as the achievement of corporate profit targets, work completion, team performance, departmental importance, and individual work performance, the Company awards project construction incentives, monthly bonuses, and annual bonuses to its employees.

In 2024, to further enhance its talent management capabilities, GCL SI conducted a comprehensive optimization and improvement of its compensation, performance evaluation, and incentive systems. The Company revised its compensation standards based on the MPTO framework (Management (M), Professional (P), Technical (T), and Operational (O) tracks). This revision aimed to make the salary structure more scientifically sound and rational, ensuring that compensation levels are aligned with market competitiveness and effectively motivate talent development. GCL SI updated its Performance Management Standards, which now cover the standards and regulations for the Comprehensive Management Center and its affiliated business units and bases. By standardizing talent evaluation criteria, the Company aims to enhance the fairness and accuracy of performance evaluations. Additionally, the Company introduced new clauses in the goal-setting phase to focus on ESG-related performance, guiding employees to integrate sustainable development concepts into their business activities. Based on market conditions, employee needs, and the Company's strategic objectives, GCL SI has designed customized compensation and incentive plans for different types of business. These

During the Reporting Period

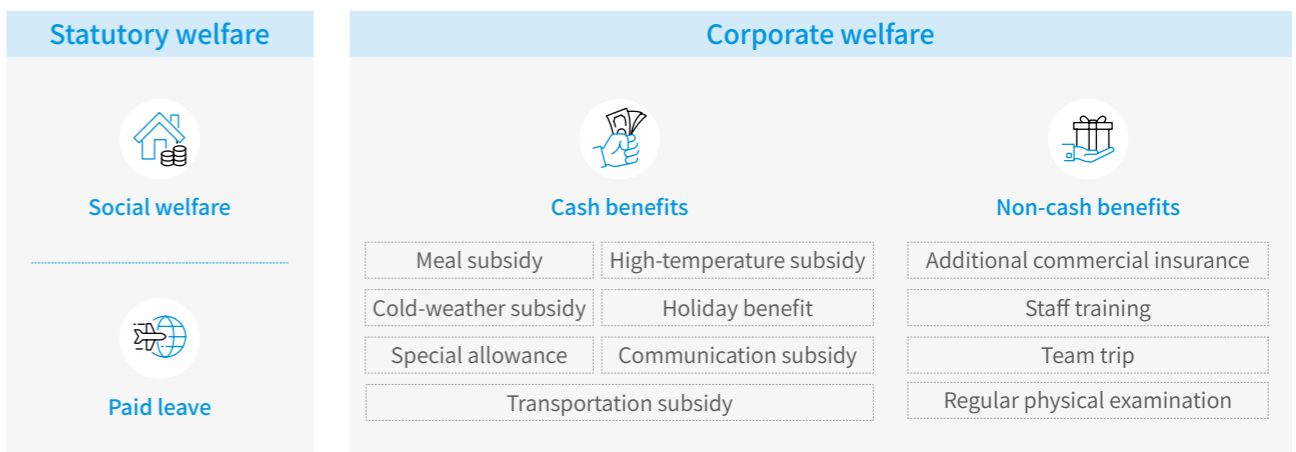
the medical insurance coverage rate for full-time employees in Mainland China was

100%

plans are tailored to match the specific characteristics of each business segment, thereby further enhancing employee motivation and organizational efficiency.

GCL SI has formulated welfare management policies such as the Welfare Management Standards and the Leave Management Standards, so as to standardize the Company's welfare subjects and payment standards, further enhance the sense of belonging and cohesion among employees, and ensure the Company's advantages in talent attraction and market competition. In addition to statutory welfare such as social welfare and paid leave, the Company also provides employees with cash benefits such as meal allowance, high-temperature and cold-weather subsidies, holiday benefits, communication subsidies, transportation subsidies, and non-cash benefits such as medical examinations and team trips.

Welfare structure



Employee Care

To promote and improve our corporate culture and strengthen employee cohesion and harmonious staff relations, GCL SI has organized various employee caring activities based on the principles of "united culture" and "harmonious win-win results" to enrich the spare time of the employees.

Healthy Life

Exploring Green and Low-Carbon Living: The Charm of Leave-No-Trace Camping — The Official Launch of the Camping Club

In October 2024, GCL SI held its first "Embrace the Wind, Discover a New World with GCL SI" themed low-carbon, leave-no-trace camping event and officially established the Camping Club, marking a new chapter in standardized and regular camping cultural activities. The event featured a variety of rich and interesting activities, including a moonlight concert, bonfire dinner, starry-sky outdoor cinema, family games, and lawn barbecue. These activities aimed to help employees fully release stress and get closer to nature through the slow lifestyle of camping. Additionally, the camping event consistently adhered to the concept of sustainable development by using photovoltaic power generation equipment for lighting and encouraging all participants to join in litter-picking actions, leading employees to practice a green and low-carbon lifestyle. With the establishment of the Camping Club, the Company will host more low-carbon, green-themed camping activities in the future, creating a unique camping cultural IP for GCL SI and further spreading the "happy working, happy living" family-like cultural atmosphere.



"Swing for Glory: The Badminton Showdown" — Wuhu GCL SI Badminton Tournament

In August 2024, Wuhu GCL SI held "Swing for Glory: The Badminton Showdown", inviting employees from government agencies and regional units to join, further strengthening cooperation and communication between the Company and local government and regional units. The tournament not only provided a platform for employees to relax and showcase their badminton skills but also transformed the spirit of sports into a powerful driving force for stimulating employees' work enthusiasm and promoting the Company's high-quality development. The Company will continue to focus on employee happiness and actively explore new forms of corporate culture and regional exchanges.



Taste the Sweetness of Winter and Rekindle the Fun of Childhood—Hefei GCL SI

In November 2024, Hefei GCL SI organized the "Taste the Sweetness of Winter and Rekindle the Fun of Childhood" traditional candy hawthorn making activity. This event aimed to evoke employees' fond childhood memories through the craft of making traditional snacks while enhancing interaction and emotional connections among colleagues. Under the guidance of staff, employees worked in groups to complete steps such as heating syrup, stringing fruits, and coating them with sugar, experiencing first-hand the joy of making candy hawthorns. The activity combined folk culture with corporate culture, allowing employees to relax, strengthen emotional bonds, and foster team cooperation. It also conveyed the Company care to its employees.



Celebrating Festivals Together

Wishing Peace and Weaving Joy—Lantern Festival Themed Employee Group Birthday Party

During the Lantern Festival in February 2024, the Company held a "Wishing Peace and Weaving Joy" Lantern Festival themed employee group birthday party. Over 20 birthday celebrants gathered to celebrate the festival together. The birthday party activities centered around the "intangible cultural heritage" - bamboo weaving paintings. Employees experienced the charm of traditional handicrafts through the traditional bamboo weaving technique of "one pick, one press," understanding the resilient character symbolized by bamboo, which stands for unyielding perseverance in the face of difficulties. The event also included a paper-cutting art experience, allowing employees to enjoy the fun and cultural significance of traditional art through hands-on practice. This activity promoted the organic integration of Chinese traditional culture and corporate culture, further uniting the employees.



A Letter Home Conveys Nostalgia — Hefei GCL SI's Double Ninth Festival Themed Activity

In October 2024, Hefei GCL SI held a "A Letter Home Conveys Nostalgia" Double Ninth Festival themed activity, encouraging employees to express their longing and gratitude through letters. The event created a warm corporate cultural atmosphere by using letters as a medium to convey emotions. At the event, employees wrote heartfelt letters to their loved ones, turning their gratitude and longing into words. An on-site mailing process was set up to help employees send their letters, adding another layer of emotional significance to them. Through this activity, the Company care and support on this special day are conveyed to both the employees and their families.



Case

Launch Non-Profit Children's Summer Camp to Relieve Employees of Concerns

To further improve the stability of our current workforce and alleviate their personal concerns, in July 2024, Hefei GCL SI launched its first non-profit Summer Camp in the employee dormitory area. The inaugural session welcomed 30 energetic children of the Company's employees. The Company designed a diverse range of activities for the summer camp, including academic tutoring, outdoor team-building exercises, intellectual games, and parent-child interaction sessions. These activities aimed to help children learn new knowledge in a relaxed atmosphere and enhance emotional communication between parents and children. By organizing such summer camps for children, the Company effectively alleviated the family caregiving burden of its employees, fully embodying the Company's humanistic care, which centers on the employees' needs and emotions.



Case

Conducting Psychological Health Assessments and Counseling to Care for Employees' Mental Well-being

To gain a deeper understanding of employees' psychological states and create a more harmonious and healthier working environment, in March 2024, Hefei GCL SI initiated a comprehensive psychological health assessment for all employees, collecting 1,819 valid questionnaires. Based on the data from these questionnaires, the Company analyzed the psychological states of its employees and regularly conducted related counseling activities. These initiatives aimed to actively address employees' mental health needs and provide strong support for creating a more harmonious and healthy work environment. Additionally, the Company established a dedicated "Mindfulness Stop", where employees could seek support for mental health issues via emails and contact channels, helping them better manage emotions and relieve stress.



Case

Forging Bonds Through Strategy: 2024 Fencing-Themed Annual Gathering

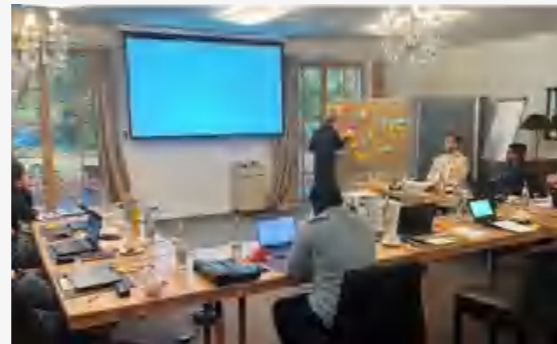
The 2024 Annual Gathering of GCL SI's Global Marketing Center innovatively integrated fencing to foster immersive team cohesion. Professional coaches guided employees through foundational techniques and strategic thinking, while team-based challenges in offense/defense scenarios strengthened trust and synergy. Cross-regional teams bridged communication gaps through friendly sparring and laughter, unlocking collaborative potential. This unique initiative highlighted the company's commitment to holistic employee well-being, reinvigorating high-performance teams with renewed energy and a shared "dare to conquer" spirit.





Case Fostering Innovative Consensus, Embarking on a Green Journey: EU Team Building Retreat in Bavari

In 2024, GCL SI's EU team held a two-day inspiring offsite in the Bavarian countryside, centered on accelerating the energy transition. Day one focused on 2025 strategy alignment, dissecting market opportunities and innovation pathways. Day two emphasized outdoor collaboration, through the nature setting to spark creativity and strengthen trust among team members. This retreat solidified strategic priorities while reigniting collective purpose, proving that in-person connections remain vital to driving impactful energy solutions.



Case Employee Roundtable Discussion to Hear Employees' Voice

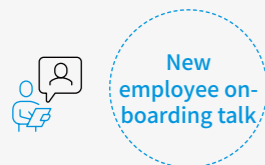
On May 23, 2024, Hefei GCL SI organized an employee roundtable discussion, attended by Sun Guoliang, General Manager of Hefei GCL SI, and over 40 representatives of new employees. The purpose of this roundtable was to enhance communication between employees and management, foster mutual understanding and trust, and gain a deeper insight into the thoughts, work, and life of new employees. It aimed to address their concerns and help them integrate into the new environment more quickly. The discussion focused on key topics such as career development paths, promotion opportunities, and the optimization of welfare policies for new employees. The management team listened carefully and recorded the issues raised, responding positively to the employees' questions and suggestions. The management is committed to following up on the issues discussed and to implementing tangible improvements. This commitment is aimed at improving working conditions and growth opportunities for employees.



Employee Communication

To ensure a harmonious and open communication environment, GCL SI has established internal systems such as the Democratic Governance Communication Management Policy, the Consultation and Communication Control Procedures and the Employee Relationship Management Standards. These systems continuously optimize communication channels between the Company and its employees, ensuring smooth two-way interaction. The Company places great importance on building a robust communication framework and improving feedback and protection mechanisms. This ensures that employees are "empowered and willing to communicate without concerns" when facing difficulties, thereby enhancing their sense of trust and belonging. Additionally, GCL SI has signed collective agreements with employees on various aspects, including health and safety, working conditions, training and development, and the protection of female employees. These agreements cover all GCL SI bases, ensuring that employees' fundamental rights are fully protected. Looking ahead, GCL SI will continue to refine its communication mechanisms, strengthen the protection of employee rights, and foster a more open and equitable corporate cultural environment.

Channel Construction



We follow new employees for a period of three to six months, helping them become familiar with the environment, policies and culture of the Company. Besides, the Human Resources Department carries out regular interviews with these new employees to help them quickly adapt to the Company



the Company organizes at least one Staff Forum per month, and carries out interviews with core employees from time to time. The Staff Forums are organized by the Human Resources Department and attended by the labor union and employee representatives. Staff Forums are also held for representatives of various employee groups. The Company takes into full consideration the proposals proposed by employee representative and publicizes the excellent proposals actually adopted.



The Company has set up a "General manager's mailbox" in high-traffic areas. The mailbox is managed by the person in charge of employee relations, who collects the letters once a day and deals with the employee opinion letters in a timely manner. Employees who propose suggestions that are beneficial for development of the Company will be rewarded.



The General Manager's Mailbox at Hefei GCL SI



The Company regularly conducts visits to employee dormitories, engaging in face-to-face communication to collect improvement suggestions from frontline employees. These visits ensure that employee concerns are effectively addressed through timely feedback and implementation of improvements. Staff members also patiently address employees' questions, explain welfare policies and dormitory management regulations, allowing employees to truly feel the Company's care and enhancing their sense of belonging and work enthusiasm.



The Company has established and improved the Workers' Congress system, an important platform for employee democratic management. Regular meetings are held to widely listen to employee opinions and ensure their active participation in company governance and decision-making. The Workers' Congress focuses on key issues such as compensation and benefits, career development, work environment, and workplace safety, forming specific improvement measures to advance the implementation of employee demands and continuously optimize the employee rights protection mechanism.



Case

The Second Workers' Congress to Enhance Democratic Decision-making

To further enhance the Company's democratic decision-making and management capabilities, protect the legal rights and interests of employees, and build harmonious labor relations, Wuhu GCL SI convened its second Workers' Congress in July 2024. A total of 72 worker representatives attended the meeting, which approved adjustments to the Company's human resources system documents. In accordance with labor laws and regulations, the meeting also deliberated and signed the Collective Contract, further standardizing labor relations and effectively safeguarding the legal rights and interests of the Company's employees.



Employee satisfaction survey

The Company conducts an annual organizational capacity and employee satisfaction survey. The survey covers 6 core dimensions of logistics support, basic training, department atmosphere, leadership and management, security and welfare, and comprehensively reflects the challenges that employees may encounter in their daily work and life. The Company prepares an analysis report on the results of the satisfaction survey and an improvement plan for employee satisfaction, and follows up on the implementation of the plan. Through this management approach, the Company's employees' sense of belonging and on-the-job happiness have significantly increased, laying the foundation for a more cohesive and favorable working environment for the enterprise.

2024 GCL SI Employee Satisfaction Survey Score

92.4



Case

Organizational Capability Research and Analysis to Ensure Employee Satisfaction

In April 2024, the Module Business Unit of GCL SI organized a special meeting on "Organizational Capability and Employee Satisfaction Improvement." A total of 48 participants attended the meeting, including the General Manager of the business unit, management members, and department heads, and key employee representatives. The meeting aimed to address the issues identified in the 2024 Organizational Capability Survey Report, conduct in-depth analysis and research, and develop improvement plans to optimize organizational management efficiency. Data showed that the overall employee satisfaction for 2024 remained above 90%, with particularly strong performances in departmental communication (96%), training and learning (95%), and safety assurance (96%). Participants thoroughly reviewed the survey data and, through focused discussions, collectively identified pain points and proposed improvement suggestions. More than 40 specific action plans for improvement were formulated to further focus on employee needs and enhance employee satisfaction.

Reporting System

At GCL SI, every employee has the full right to freely raise questions, express concerns and complain about any treatment that is deemed unfair, unreasonable, unethical, harassing or discriminatory.

We encourage all employees to take the initiative to report any violations of employee rights and interests. Employees can report through the labor union of GCL SI, the official complaint and reporting platform (<http://www.gcl-power.com/en/contact/lzxx.html>), or other channels. The Company will treat whistleblower information in strict confidence and firmly protect employees from any form of retaliation for exercising such rights. The Company will take a zero-tolerance attitude towards attempt to retaliate against whistleblowers through threats, intimidation, or personal attacks and will deal with it strictly.

序号	职能部门	组织发展部-人事	组织发展部-行政	工业数字化-IT	安环部	厂务部
1	薪酬福利	人力资源部 组织发展部 考勤、工时、工资、薪资等 员工意见与建议反馈	人力资源部 组织发展部 考勤、工时、工资、薪资等 员工意见与建议反馈	工业数字化-IT 桌面及网络运维、MES及 企业数据管理	安环部 安全生产、职业健康、环境 卫生、工作场所、应急管理、 EHS管理标准咨询等	厂务部 能源管理、物资管理、设备 维护、特种设备管理、 消防管理、日常工 具管理
2	联系人及 电话	联系人: 张磊 13075591900	联系人: 王君 18715070005	联系人: 张磊 17355193165	联系人: 15779736095	联系人: 12115215910
3	联系人及 邮箱	联系人: 张磊 18758994962	联系人: 王君 18100596729	联系人: 张磊 13360163538		
4	反馈渠道 二维码	HRXXLZY@gcl-power.com	WANGHAI@GCLSI.COM JHANGJIE@GCLSI.COM	GCLHIT@GCLSI.COM	ZHUQINGH@GCLSI.COM	HUWANG@GCLSI.COM

Hefei GCL SI Establishes Feedback Channels for Employee Opinions and Suggestions

Diversity, Equity and Inclusion

In 2024

GCL SI did not receive any employee complaints related to discrimination, harassment or human rights issues.

Diverse talent matrix is the driving force for the Company's sustainable development. GCL SI advocates for a Company culture of diversity, equity and inclusion. We respect individual differences, and support employees with different backgrounds and experiences to exert their talents and fulfill their self-worth at GCL SI.

GCL SI has established and implemented systems such as the Management Standards on the Rights and Interests and Labor Protection of Female Employees and the Management System on Prohibition of Discrimination and Disciplinary Measures to ensure that employees are treated fairly and equally in the Company. During the Reporting Period, the Company reviewed, updated and disclosed the Equality and Diversity Policy, and committed to decisively eliminating any form of discrimination and harassment due to factors such as gender, age, ethnicity, race, nationality, religious beliefs, disability and marital status.

To enhance employees' awareness of anti-discrimination, anti-harassment and diversity issues, the Company provides training and communication on these topics to employees. It is worth mentioning that we emphasize the importance of diversity in our sustainability campaigns for senior executives.



Case

Caring for People with Disabilities and Creating Employment Opportunities

Hefei GCL SI actively fulfills its corporate social responsibility by focusing on the lives and employment of people with disabilities, striving to provide them with equal employment opportunities and helping them integrate into society. The Company has specifically set up the position of physiotherapist for visually impaired individuals with relevant skills to provide health therapy services for employees.



GCL SI values the development of female employees and ensures career opportunities for them. In 2024, female employees accounted for 27.81% of GCL SI's workforce, with 17.95% representation in middle management and 15.79% in senior leadership, demonstrating our strong commitment to gender equality and diversity.



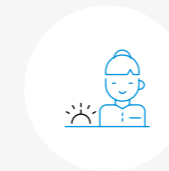
Case

Conducting various care activities for female employees to celebrate she-power

GCL SI respects and cares for female employees, and has launched various activities on International Women's Day.

Hefei GCL SI Celebrates International Women's Day

On March 8, 2024, Hefei GCL SI held a celebration themed "Her Power - Xin Style" to extend festival greetings to female employees and provide them with opportunities to showcase themselves and relax, fostering a harmonious and warm corporate cultural atmosphere. The Company specially invited a professional florist to conduct a flower arrangement workshop for female employees and organized a city walk event for them to relax in the sunshine and spring breeze, enhancing interaction and communication among staff.



Blooming Flowers and Passionate Hearts



GCL SI Management Center Welcomes Women's Day

To celebrate International Women's Day and express gratitude for the wisdom, strength, and contributions of female employees in their positions, the Management Center of GCL SI organized a "Fragrance on Fingertips, Just for You" event on the afternoon of March 7, 2024. The event invited six professional manicure artists to provide full manicure services for female employees. The event also featured a hands-on fragrance blending experience guided by a professional instructor, who provided detailed instructions on the process, precautions, and blending techniques of perfume. Female employees were free to participate and create their own unique perfume scents, enjoying the pleasure and sense of achievement from making something by hand.



Fragrance on Fingertips, Just for You



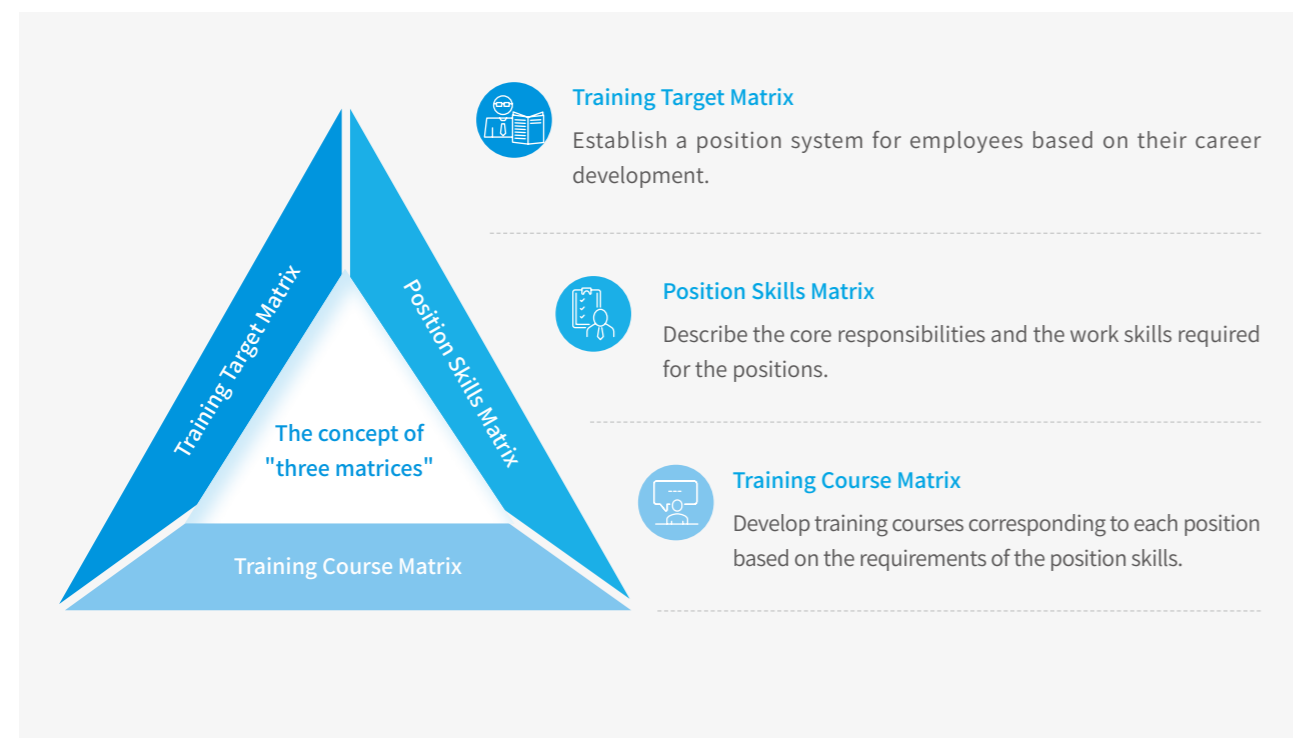
Employee Training and Development

Talent Training

GCL SI continuously improves the promotion mechanism and performance appraisal standards to inspire the initiative of employees. Meanwhile, supported by a multi-level and all-round training system, the Company provides employees with abundant learning resources, which helps employees grow with the Company.

GCL SI highly values the growth and career development of employees, and provides rich and diversified training opportunities for all full-time and part-time employees. During the Reporting Period, the Company further optimized the Training Management Standards and Management Standards for Training Curriculum, and added ESG training, aiming to comprehensively enhance employees' sustainability awareness and ability.

The Company follows the concept of "three matrices" and designs the training curriculum based on employees' abilities and career development paths. The Company has fine-tuned the talent training system and carried out training programs aimed at capacity building for employees at different levels, and has established seven training modules based on four major career routes. As evidence of employee performance evaluation and promotion, employees at all levels are required to complete the corresponding courses. We provide all employees with support for training and certification of academic and vocational skills. We have proactively collaborated with Shanghai Jiaotong University, Jinan University, Tianjin University of Technology, Hohai University and other colleges and universities to develop and provide joint training programs for our employees. The Company always encourages employees to acquire more skills and improve their personal qualifications.



Case Digital Learning Platform to Provide Extensive Learning Materials

To enhance employee learning efficiency and professional skills, GCL SI has introduced a digital learning platform, committed to providing flexible and efficient online learning resources for employees, promoting knowledge sharing and capability enhancement, and providing solid talent support for the Company's digital transformation and sustainable development. The platform has launched over 2,000 classic courses, covering multiple fields such as GCL culture, marketing and internationalization, crystalline silicon manufacturing, management, and leadership. It can also generate personalized learning profiles for employees as their career develops. Employees can log in to the platform through the corporate portal or a dedicated entry point to participate in learning tasks anytime, anywhere. In the future, the Company will continue to optimize the digital learning platform, continuously improve the course system and functional design, and create a more efficient and convenient learning experience for more employees.





In 2024, GCL SI initiated the development of Individual Development Plans (IDPs) for management trainees, aimed at helping new recruits clarify their career directions, build personalized growth paths, and achieve common development between individuals and the Company. Management trainees, through personal SWOT analysis and career planning, combined with the Company's strategic needs and their own development goals, work with business mentors to set career development goals and action plans, covering key aspects such as skill enhancement, job rotation, and training. This initiative not only provides systematic growth guidance for management trainees but also promotes in-depth interaction between employees and business mentors, ensuring that career development paths are highly aligned with the Company's talent strategy.



Case

New Employee Training — "GCL Eagle" New Employee Training Camp

To help new employees quickly understand and identify with GCL culture and empower the "new GCL force," the 98th "GCL Eagle" New Employee Training Camp of GCL University was held at Hefei GCL SI from April 11 to 13, 2024. The three-day training camp, totaling 24 class hours, was attended by 31 employees from the Hefei GCL SI and Funing GCL SI. The training camp aims to help new employees quickly adapt to job requirements through systematic course training and practical activities, enhance their sense of belonging and identification with the Company, and support the common growth of the Company and new employees.



Case

Frontline Employee Technical Capability Training — "Hexagonal Warrior" Series Training Program

To enhance the comprehensive skill level of team leaders and build a high-quality, high-skilled grassroots management team, Hefei GCL SI officially launched the "Hexagonal Warrior" series training program on April 3, 2024, with 65 team leaders participating in the training. The training adopts a combination of "theory + practice," holding six theoretical training sessions covering the working principles and operating standards of core production line equipment such as string welding machines, lamination machines, and pressing machines. The training also includes a practical exercise segment of "mentor-apprentice pairing, learning through practice," with 30 hands-on mentors providing one-on-one guidance to trainee team leaders. By consolidating theoretical knowledge through actual equipment operation, the training ensures practical application, preparing a group of "Hexagonal Warriors" with solid technical skills and outstanding management capabilities, laying a solid talent foundation for the Company's long-term development.



Case

Middle and Senior Management Training — Talent Journey Plan "GCL SI Premier Training Series" Capability Development Project

To identify and reserve outstanding key talents, optimize the talent structure, and avoid talent gaps, GCL SI launched its annual talent team building work in 2024. The Company defined key positions through four assessment dimensions: strategic impact, job scarcity, unique skills, and job influence, and divided the talent team into three levels based on management hierarchy: top management, department heads, and middle management. Based on the assessment results, the Company developed a detailed implementation plan for talent team building, including four premier training series: "GCL Leading Edge," "GCL Navigating Paths," "GCL Sailing Horizons," "GCL Setting Sail" – Four Premier Training Initiatives. The Company also established strict dynamic management rules for the talent pool, using "performance, key experience, and capabilities" as the main assessment criteria to regularly evaluate personnel included in the talent pool, ensuring the vitality and sustainability of the talent pool.

GCL SI Talent Training Performance in 2024

Total number of employees trained	Total training hours	Average training hours per employee	
6,074 Persons	115,130 Hours	18.95 Hours/person	
Average training hours per male employee	Average training hours per female employee	Average training hours for senior management level	
18.29 Hours/person	20.68 Hours/person	13.47 Hours/person	
Average training hours for middle management level	Average training hours for junior employees	Total employee training investment	Fulfillment rate of training plan
75.15 Hours/person	17.88 Hours/person	760 RMB 10,000	100%

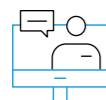


Talent Development

In 2024

The coverage rate of full-time employee performance appraisal and feedback was

100%



To establish and improve the talent cultivation mechanism of GCL SI and meet the Company's demand for management talents at different levels during its development, GCL SI conducts the annual work of selecting and reporting echelon talents. Through three steps, namely the sorting of key positions, talent inventory, as well as the selection and reporting of echelon talents, and talent cultivation, a systematic and scientific human resources echelon and development system is gradually set up.

GCL SI has formulated internal management policies such as the Management Measures for Employee Career Development, Management Standards for Promotion and Demotion and Management Measures for Position Competition to facilitate the career development of talents. In 2024, the Company revised the Professional Technical Capability Assessment and Application Management Measures to deepen the human resources reform system of GCL SI. Based on the principles of "separate evaluation from appointment, match people to positions," the Company strengthened the review of professional technical capability levels and the hiring process, thereby unblocking career development pathways for employees. The Company is committed to building a fair, just and open promotion mechanism, gradually improving the promotion path for employees, and building an innovative multi-channel path for employee promotion. We have divided employee growth into four promotion paths, i.e., management, professional, technology and operation, and set up promotion paths for position levels and individual levels for each category. We believe that a reasonable and orderly promotion system will fully motivate all employees.

The Company has established the Management Standards for Performance Evaluation to clarify the performance evaluation and assessment mechanism. The performance assessment of all employees is based on monthly, quarterly and annual assessments. We prepare different assessment contents for employees of different functions and levels to ensure the fairness and integrity of the performance assessment system. In 2024, the Company further optimized the assessment system of the Comprehensive Management Center and its affiliated business units and bases. It strengthened the identification mechanism for underperforming employees to more accurately meet the Company's talent management needs to ensure the stability of the evaluation system and the continuity of its implementation. The results of employee performance assessment are leveraged as the basis for merit recognition and commendation, job appointment, training and development, bonus allocation and salary adjustment. Depending on the assessment cycle, the employees will receive at least one face-to-face

performance feedback and coaching per month or quarter. Such feedback and coaching help employees summarize shortfalls, clarify goals, enhance skills and improve performance.

To optimize the human resources allocation and enhance the efficiency and professionalism of the performance management of the Company, GCL SI carries out management inspections of all business divisions and functional departments at irregular intervals and requires them to make timely rectifications. The inspections include performance management policies, target decomposition and coverage, assessment and policy implementation, face-to-face interview feedback, and result application, with the aim of ensuring our performance management system is fair and sound.

GCL SI's 2024 Performance Management Improvement Measures



Completed a special inspection and feedback rectification for performance management, covering 14 inspection items across all business units, and organized three face-to-face communications and feedback sessions with senior executives to ensure the effective implementation of rectification measures.



Established a performance management evaluation and ranking mechanism, targeting subordinate departments and business units, covering six performance management scenarios, implementing quarterly work rankings, and providing feedback and rectification on evaluation results to enhance the transparency and precision of performance management.



Completed the compilation and application of the Integrated Business Indicator Library KPIs, covering over 900 indicators across all businesses, improving the uniformity of evaluation standards, and promoting the sedimentation and optimization of the performance evaluation indicator system.



Completed the compilation of the Performance Management Guidance Manual and conducted empowerment training for managers, covering over 200 managers in the Company, helping the management team to deeply understand and efficiently implement the performance management system, and driving the overall performance improvement of the Company.



Case

Professional Technical Capability Level Assessment Held to Build High-level Professional Teams

To enhance employees' professional technical level and career capabilities, the Module Business Unit of GCL SI launched a professional technical capability level assessment activity in August 2024, covering 396 core employees across multiple fields such as production technology, R&D of science and technology products, digitalization, and supply chain. The assessment was conducted through a "self-presentation + Q&A interaction + panel discussion" model, combining real work scenarios to comprehensively evaluate participants' theoretical knowledge, skill operation, and problem-solving abilities, thoroughly examining their overall quality and business capabilities. The activity effectively promoted the improvement of employees' technical levels, stimulated their professional capabilities and development potential, and helped the Company build a high-level talent pool.



Case

Target Employee Performance Management Special Inspection to Ensure Performance Evaluation Standards and Transparency

In May 2024, GCL SI President Jiang Weipeng and his team visited the Hefei GCL SI and Funing GCL SI to hold meetings on target decomposition and performance management special inspection communication, as well as job level system reform promotion. The meetings thoroughly reviewed the special inspection reports on organizational and employee performance of the Module Business Unit, analyzed the strengths and weaknesses identified in the inspection thoroughly, and discussed existing performance management issues with department heads and employee representatives, sharing opinions and suggestions and providing rectification advice. The Company's management also emphasized the importance of performance management and job level system reform, requiring the HR department to establish performance management improvement teams at the business unit level to drive the in-depth implementation of special improvement work. The meetings responded to the Company's ongoing job level system reform, effectively promoting the standardization and transparency of performance management, and ensuring that employee performance management effectively supports the Company's strategy and operations.

Occupational Health and Safety

Management System

In 2024

The Hefei GCL SI, Funing GCL SI, and Wuhu GCL SI factories have all obtained the ISO 45001 Occupational Health and Safety Management System certification, covering

100%

of the GCL SI photovoltaic module-related production bases.

GCL SI insists on the health and safety guideline of "comply with laws and regulations, actively assume social responsibility and build a harmonious environment to ensure a green future for all". We strictly adhere to the relevant laws and regulations, including the *Work Safety Law of the People's Republic of China* and the *Law of the People's Republic of China on the Prevention and Control of Occupational Diseases*, and establish and improve the occupational health and safety management system to ensure that the company's work safety and employees' health rights and interests are effectively protected. On this basis, we have formulated a series of policies, including the Occupational Health Management System, the Work Safety Responsibility Assessment System, the Education and Training System for Work Safety, and the Responsibility System for the Prevention and Control of Occupational Diseases. In 2024, the Company further introduced 12 new management systems, including the Production Safety Expense Investment and Utilization Management System, Equipment and Facilities Safety Management System, Lockout-Tagout Management System, and Occupational Health Management System. Additionally, it revised 13 existing systems, such as the Production Safety Responsibility System, Special Equipment Safety Management System, and Labor Protective Equipment Management System. These measures continuously optimize the safety management system and reinforce the implementation of production safety responsibilities. The Company will continue to refine its Occupational Health and Safety Management System, strengthen employee safety awareness, to drive high-quality and safe development.

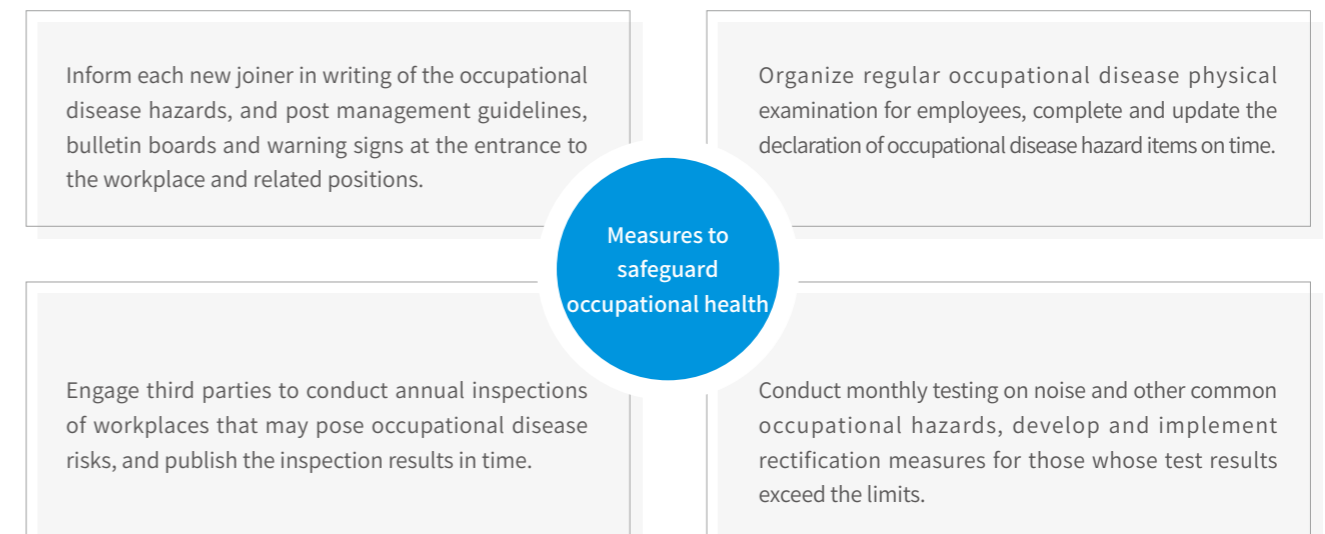
The Company has set up work safety committees at all factories and requires employees at all levels and in all positions to strictly implement the responsibility system for safe production according to the "Three Musts" principle, i.e., industry development, business growth, and production and operations must be based on work safety. We organize employees at all levels and in all positions to sign the Environment, Health and Safety (EHS) Target Management Responsibility Statement to implement the responsibility for safe production. This move has effectively formed a responsibility system for safe production integrating territorial management and line management, and raised the level of independent management.



GCL SI's ISO 45001 Occupational Health and Safety Management System Certification

Occupational Health

GCL SI's ISO 45001 Occupational Health and Safety Management System Certification complies with the relevant provisions of the *Law of the People's Republic of China on the Prevention and Control of Occupational Diseases* and has established regulations such as the Occupational Disease Emergency Response Plan and the Occupational Health Management System to ensure that employees' health rights are effectively protected. In 2024, the Company set the safety goal of "zero safety accidents, zero excess emissions, and zero occupational diseases." Through strict occupational health risk control, regular safety inspections, occupational disease prevention measures, and employee training, the Company has comprehensively promoted occupational health and safety management. As a result, the Company achieved a 100% success rate in meeting its safety goals, further consolidating its foundation for safe production.





In 2024, GCL SI further optimized various specific safety management measures. The Company promoted the upgrade of forklift safety driving systems at all production bases, requiring the forklifts to be equipped with AI safety identification radars, which can automatically detect surrounding personnel and decelerate, effectively reducing the safety risks associated with forklift operations. The Company also continued to strengthen the safety responsibility system for all employees, establishing a safety points management system to encourage active participation in safety governance. Through points incentives, the Company enhanced employees' safety awareness and promoted the implementation of safety responsibilities. In addition, GCL SI implemented a monthly safety performance and assessment management system. Each department and production base is required to compile a safety performance checklist, collect and summarize materials monthly, and implement safety performance scoring to ensure the effective implementation and continuous optimization of safety management work.

GCL SI Occupational Health and Safety Performance in 2024

Disclosure item	Unit	2024	
Number of individuals with work-related health problems	Full-time employee	Persons	0
	Contractor	Persons	0
Number of individuals with work-related injuries	Full-time employee ¹⁰	Persons	5
	Contractor	Persons	0
Number of work-related fatalities	Full-time employee	Persons	0
	Contractor	Persons	0
Number of major work-related injuries (excluding fatalities)	Full-time employee	Persons	0
	Contractor	Persons	0
Days of absence due to work-related injuries	Full-time employee	Days	486
	Contractor	Days	0
Total recordable incident rate (TRIR)	-		0.07

¹⁰ Among these incidents, four employees were injured while performing equipment maintenance, and one employee was injured after falling on stairs. Moving forward, GCL SI will implement more comprehensive measures to ensure workplace safety and provide a solid safeguard for the health and safety of its employees.

Emergency Management

In 2024

GCL SI conducted

150 drills in total

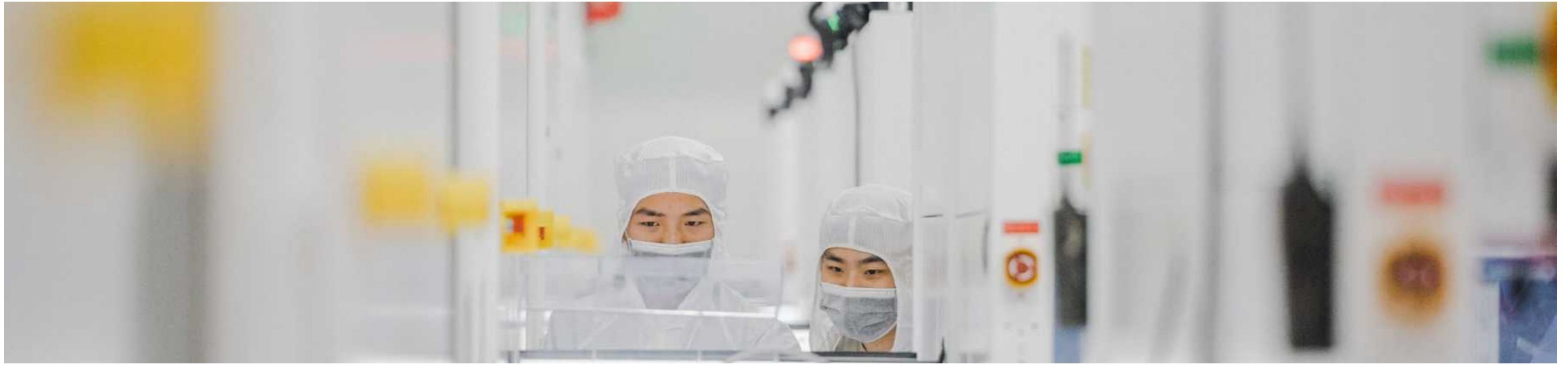


To standardize the Company's emergency management and improve factories' ability to cope with risks from hazards and prevent accidents, the Company has set up a special group to formulate the Emergency Programs for Production Safety Accidents. Besides, we have organized an expert review committee to revise and improve the emergency programs and have completed the filing and registration with local emergency management agencies.

Case

"Building Defense through Drills and Preparing for Emergencies through Exercises" — Wuhu GCL SI Conducts Fire Emergency Response Drills

To enhance the Company's emergency management capabilities and test the practicality of fire emergency response plans and the emergency response levels of various departments, Wuhu GCL SI organized a large-scale fire emergency response drill on July 4, 2024, with over 400 participants. The drill included multiple segments such as sudden fire outbreak, smoke-filled escape, rescue operations, and on-site first aid, involving coordinated efforts from the emergency response team, rescue team, and evacuation guidance team. The local fire rescue brigade also participated in the drill to provide guidance, enhancing the expertise and effectiveness of the exercise. Additionally, the drill aimed to educate employees on the use of fire extinguishers, protective suits, and positive pressure air respirators, as well as safety operation standards for related fire emergency equipment. This drill was designed to strengthen employees' fire safety awareness and emergency skills, ensuring rapid response and effective handling in emergencies to safeguard company production and employee safety.



Safety Promotion

In 2024

the Company conducted a total of **3,079** training sessions related to employee occupational health and safety

totaling **20,452.50** hours

and covering **75,599** participants

GCL SI actively engages in safety production publicity, education, and the dissemination of occupational health knowledge to continuously improve employees' safety awareness and occupational health protection capabilities. For newly hired employees, the Company strictly enforces a three-level safety training program to ensure they possess the necessary safety knowledge and emergency response skills. In 2024, the Company organized 90 new employee safety training sessions, each lasting 24 hours, with a total of 1,955 participants, achieving a 100% coverage rate for new employee safety training. This ensures that all new employees fully understand safety production requirements before starting their positions. Additionally, the Company organized 19 specialized safety training sessions, including hazard identification and grading control training, job risk training, and forklift operation safety training, with a total training duration of 28 hours and covering 3,686 participants, achieving comprehensive safety training coverage for all employees.



Case

Middle and Senior Management Safety Training and Assessment to Raise Safety Management Level

To reinforce the safety responsibility awareness and knowledge base of middle and senior management personnel and enhance the Company's safety management level, Hefei GCL SI conducted safety training and capability assessments for middle and senior management through the Safety Committee platform. In 2024, a total of 11 training sessions were organized, with 127 participants from middle and senior management. The training themes were diverse, covering multiple dimensions such as legal and regulatory learning, accident prevention, emergency management, and safety production standards. The training utilized case sharing and legal interpretation to make the content more relevant to actual work scenarios, increasing its practicality and engagement. Through systematic training and assessment, the Company further strengthened the management's understanding and emphasis on the Company's safety production responsibilities, ensuring their leadership role in the Company's safety production and providing a solid guarantee for the implementation of safety production.



Case

"Everyone Talks about Safety, and Everyone Knows How to Respond"—Wuhu GCL SI's "Safety Production Month" Expert Knowledge-sharing Lecture

To enhance employee safety awareness and strengthen corporate safety production management, Wuhu GCL SI held a special knowledge lecture activity during the "Safety Production Month" on June 27, 2024. The lecture focused on three main topics: the current state of safety production, enterprise safety risk management, and the establishment of a comprehensive safety responsibility system for all employees. Experts provided detailed explanations on the importance of safety production, analyzed actual accident cases, and delved into how the Company can conduct risk identification and control, establish a comprehensive safety production responsibility system, and improve the safety education and training system. This lecture aimed to popularize safety production knowledge and emergency skills, enhance the safety responsibility awareness of all employees, and further promote the Company's safety production culture.



Responsible Supply Chain

GCL SI views the supply chain as a crucial part of its operations and believes that effective supply chain management is a key factor for sustainable corporate development. The Company has established and strictly implemented control measures and procedural systems such as the Supplier Management Procedure and Procurement Process Control to systematically manage the procurement process and ensure the robust operation and development of the supply chain. GCL SI has also formulated and publicly disclosed the Code of Conduct for Partners, which includes the following important principles:

- Adherence to the Universal Declaration of Human Rights, ILO Conventions No. 1, 14, 132, 138, and similar standards (unless superseded by local laws) to ensure that human rights and personal dignity are respected at all times.
- Strict prohibition of child labor and forced labor as defined by the ILO, ensuring employees' freedom of movement and association.
- Prohibition of any form of discrimination, harassment, or retaliatory behavior.
- Ensuring employees have access to safe and healthy working conditions.
- Adherence to local laws regarding minimum wages, compensation, working hours, and benefits.



- Implementation of a consistent environmental management plan and compliance with environmental standards to continuously minimize resource consumption and environmental impact.
- Specific efforts in reducing emissions (including greenhouse gases), waste, and water usage, as well as implementing sustainable resource recycling and management.
- Adherence to local competition laws and anti-corruption laws.
- Truthful and accurate disclosure of suppliers' manufacturing, production, and sales information; conducting appropriate due diligence on suppliers.
- Absolute prohibition of the use or trade of "conflict minerals" in the procurement, production, and delivery of GCL SI's products.

- Ensuring all overtime work is voluntary and compensated according to applicable laws.

GCL SI makes it clear that suppliers who violate the Code of Conduct for Partners will face penalties, including suspension of cooperation and termination of business relationships.

Supplier Management

As the end of the Reporting Period

GCL SI had a total of **146** suppliers in its database

of which **56** were Level I suppliers

A total of **130** suppliers had signed anti-bribery agreements/integrity agreements

During the Reporting Period —

There were **38** new suppliers

of which **9** were Level I suppliers

and **31** had signed anti-bribery agreements/integrity agreements

cooperation with **22** suppliers was terminated

GCL SI conducts daily supplier management in accordance with the Supplier Management Standard and Procurement Process Control Procedure. Through a system of supplier classification and grading management, supplier performance evaluation, and supplier audits, the Company ensures that supplier management is scientific and fair. The Company has established a comprehensive Supplier Management Control Procedure and developed supplier training content to deepen suppliers' understanding and mastery of the Company's policies on the Code of Conduct for Partners, anti-corruption policies, human rights policies, conflict minerals policies, and social responsibility. Additionally, the Company has updated the Procurement Process Control Procedure to further clarify specific requirements regarding the frequency of inquiries for main materials, procurement processes, and documentation archiving, enhancing the standardization and transparency of procurement management.

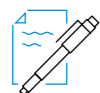
GCL SI Supplier Management System

Supplier Management Phase	Key Points of Supplier Management
Supplier Classification Management	Suppliers are categorized into strategic suppliers, preferred suppliers, general suppliers, and suppliers under rectification. For suppliers under rectification, if they still fail to meet standards after rectification, the supplier exit mechanism will be initiated.
Supplier Grading Management	Suppliers are graded into Level 1, Level 2, and Level 3 based on product quality, technological advancement, importance of use, and supply capability.
Supplier Performance Evaluation Grading	Following the principles of "quality, cost, delivery, and service," all procurement activities are subject to supplier performance evaluation, jointly scored by the requesting department, quality, technology, and supply chain departments. Based on the evaluation results, suppliers are divided into Level I, Level II, Level III, and Level IV. Our performance evaluation criteria include delivery time, quality, service, price, and other factors. Looking ahead, we will progressively incorporate suppliers' ESG performance into our scoring system. Scores ranging from $90 < X \leq 100$ are Level I, $80 < X \leq 90$ are Level II, $70 \leq X \leq 80$ are Level III, and $X < 70$ are Level IV.
Supplier Audits	GCL SI conducts both on-site and off-site audits. We periodically revisit and audit strategic suppliers and suppliers with significant business relationships to understand their operational production status, quality assurance systems, production costs, and financial conditions, and to discuss issues and suggestions in the cooperation process.
Supply Chain Risk Management	In supply chain risk management, GCL SI has formulated specific management plans and implementation measures, including regular monthly reporting of demand and arrival plans to assess potential risks in advance and develop response strategies. Additionally, the Company has explicitly stipulated force majeure clauses in procurement contracts to further mitigate and reduce risks brought by supply chain disruptions or uncontrollable factors, ensuring the stable operation of the supply chain.

Supply Chain ESG Management

GCL SI recognizes that ESG impacts and risks within the supply chain may differ from those related to its own operations. To better manage these risks, the Company has integrated ESG control measures into the procurement process, ensuring orderly and efficient supply chain ESG management through the EHS Assessment Method in conjunction with the Supplier Management Control Procedure.

100%



of core suppliers for Hefei GCL SI and Funing GCL SI have signed safety and environmental protection agreements.

Supplier Selection

- Prioritize suppliers certified with ISO 9001 Quality Management System, ISO 14001 Environmental Management System, and ISO 45001 Occupational Health and Safety Management System, under equal conditions.
- Preferentially partner with suppliers that have obtained carbon footprint certification or offer products with lower carbon footprints.
- Implement a veto system for suppliers providing false materials.

Supplier Collaboration

- Sign integrity agreements.
- Require suppliers to comply with laws and regulations and the Code of Conduct for Partners.
- Eliminate suppliers that experience major safety accidents.
- Conduct on-site audits for suppliers' environmental or social issues.

GCL SI Supplier Management Performance in 2024

Disclosure Item	2024	
Total Number of Suppliers in Inventory	Percentage of Suppliers in Inventory	
Total Number	146	100%
Number of Suppliers Signed EHS Agreements	121	82.88%
Number of Suppliers Certified with ISO 14001 Environmental Management System	124	84.93%
Number of Suppliers Certified with ISO 9001 Quality Management System	140	95.89%
Number of Suppliers Certified with ISO 45001 / OHSAS 18000 Occupational Health and Safety System	119	81.51%
Number of Suppliers Certified with Product Carbon Footprint Certification	23	15.75%
Total Number of New Suppliers	Percentage of New Suppliers	
Total Number	38	100%
Number of Suppliers Certified with ISO 14001 Environmental Management System	28	73.68%
Number of Suppliers Certified with ISO 9001 Quality Management System	37	97.37%
Number of Suppliers Certified with ISO 45001 / OHSAS 18000 Occupational Health and Safety System	28	73.68%



Conflict Minerals Management

Conflict minerals management is crucial for photovoltaic companies, especially battery module manufacturers, as it concerns corporate social responsibility, brand image, and supply chain stability. GCL SI has publicly released the Conflict Minerals Commitment Statement and strictly implemented conflict minerals control policies to ensure that raw material procurement complies with ethical standards, avoiding the indirect exacerbation of regional conflicts and human rights violations due to the use of minerals from conflict-affected areas. We believe this helps maintain supply chain transparency, align with international regulatory requirements, enhance the Company's reputation and competitiveness in the global market, and is a key measure for promoting a fair transition in the supply chain and achieving sustainable development goals.

When we use these materials (especially tin and copper) to manufacture photovoltaic modules, we require suppliers to trace the mineral sources and sign and provide a Conflict-Free Minerals Declaration along with supporting documentation for the traceability results. We require all suppliers to comply with GCL SI's Conflict Minerals Commitment Statement; we also commit to never using or selling conflict minerals. Suppliers involving conflict minerals risks have 100% signed the Conflict-Free Minerals Declaration.

Conflict Minerals Management Performance in 2024

Number of Suppliers Involving "Conflict Minerals" Risks

4



Percentage of Suppliers Signed Conflict-Free Minerals Declaration

100%



Hazardous Substances Management

Adhering to the concept of sustainable development, the Company strictly implements hazardous substances control and practices the principle of equal treatment for suppliers. Regarding hazardous substances, we require all raw material suppliers to provide Material Safety Data Sheets (MSDS) and RoHS Directive compliance declarations, and to sign a legally binding Commitment to Non-Use of Hazardous Substances, ensuring that raw material procurement meets environmental and safety standards and eliminates risks to health and the ecological environment.

Equal Treatment of SMEs

In the procurement process, we adhere to the principle of equal treatment for enterprises of all sizes, safeguard the rights and interests of SMEs, strictly enforce contract terms, and eliminate the practice of overdue payments, building a fair and transparent business ecosystem.

Community Contribution

Committed to spreading positive energy in society, GCL SI actively engages in public welfare undertakings to contribute to a better community. We give back to society with practical actions to make more people feel the warmth and kindness of the Company.

Nurturing on Future Talent

GCL SI is concerned about youth education and understands the importance of nurturing future talents. During the Reporting Period, we established industry-academia-research collaborative education bases and launched educational programs on new energy and environmental protection, so as to give young people greater chances for learning and growth.



Case

Strategic Cooperation Agreement Signed with University to Promote In-depth Industry-academia-research Collaboration

In May 2024, Funing GCL SI and Nanjing Tech University, School of Energy Science and Engineering held a signing and plaque presentation ceremony for strategic cooperation, further deepening industry-academia collaboration to drive talent development and technological innovation in the new energy sector. The two parties engaged in in-depth exchanges on talent education and research cooperation in the new energy industry and reached several consensuses. Funing GCL SI aims to leverage the university's research resources and talent pool to supply high-quality professionals and enhance its technological innovation capabilities. The School of Energy Science and Engineering of Nanjing Tech University will also utilize its research team and innovation advantages to share resources with Funing GCL SI, jointly expand cooperation areas, and cultivate interdisciplinary talents in the new energy field.



Case

Social Practice Opportunities for University Students as Potential Talent Recruitment Channel



In August 2024, the Organization Department of Funing County led a summer social practice team of college students to visit Funing GCL SI for an observation and research visit. During the visit, Funing GCL SI introduced the Company's development history, technological innovation, and industry prospects to the team and guided them through the fully automated production lines at the base, showcasing the cutting-edge dynamics of the new energy industry. Team members engaged in discussions on employment prospects and research applications, and the Company patiently answered their questions and provided career development advice, sparking the students' interest and enthusiasm for new energy technologies.

Volunteering Activities

At GCL SI, we are deeply invested in the development of the communities where we operate and are dedicated to fostering a culture of volunteerism. During the Reporting Period, our volunteers took an active part in various activities, aimed at providing convenience to the public, spreading the green low-carbon concept, and helping the disadvantaged groups, making great efforts to promote social harmonious development. In the future, the Company will continue to deepen its volunteer service system, expand public welfare projects, and grow together with the community.



Case

"Spring Warmth Passed On by GCL" — Wuhu GCL SI's "Lei Feng Month" Initiative to Care for Children with Special Needs



On March 6, 2024, more than ten employee volunteers from Wuhu GCL SI visited the Qizhi School in Wanzhi District to conduct teaching assistance activities, bringing love and care to the world of children with special needs. Volunteers accompanied the children in recognizing characters, paper-cutting, and painting, completing lively handicrafts together. They also enhanced the children's physical coordination and social skills through sports, games, and reading interactions, allowing them to feel care and warmth in joy. This "Lei Feng Month" public welfare activity not only brought warmth to special children but also showcased the Company's kind actions in caring for special groups and conveying positive social energy.



Case

"Passing Love through Mooncakes" — Hefei GCL SI Visits Yuhe Community to Care for the Elderly

On September 14, 2024, ahead of the Mid-Autumn Festival, the trade union chairman of Hefei GCL SI, party member representatives, and some employees formed a volunteer service team to visit Yuhe Community in Feidong County Circular Economy Demonstration Park to care for the elderly living alone. The volunteer service team had a warm exchange with



the elderly, learned about their difficulties in life, and presented them with 300 mooncakes made by the Company, bringing them the warmth of the festival. Additionally, the volunteer service team visited the Yuhe Community Party Mass Service Center to learn from its experience in party building and serving the people. This event, as the first stop of the "Hefei GCL SI Production Three-Year Anniversary Public Welfare Tour," not only brought warmth to the elderly but also highlighted the Company's commitment to caring for the community and actively fulfilling its social responsibilities.



Case

Pay Tributes to Firefighters Through Visits

On August 1, 2024, representatives from the Safety and Environmental Department and Plant Affairs Department of Hefei GCL SI visited the Feidong County Fire Rescue Brigade and the Feidong County Circular Economy Demonstration Park Fire Station, sending festival greetings to firefighters who were on duty in the scorching heat. During the event, company representatives presented summer heat-relief items and daily necessities to the firefighters, exchanged warmly with them, and expressed gratitude for their significant contributions in firefighting, rescue operations, and social assistance. The Company also hoped that this visit would enhance public attention and support for firefighting work, facilitating the smooth progress of fire rescue missions. Both sides also discussed the Company's fire safety education and emergency responses, reaching a consensus for long-term cooperation. This event further deepened the interaction between Hefei GCL SI and the local fire brigade, building a joint platform for fire safety work and strengthening the safety line of defense.



Case

Book Donation for Love and Greenery—Hefei GCL SI's Used Book Donation Campaign

On March 12, 2024, Tree Planting Day, Hefei GCL SI organized a "Green Recycling, Love in Circulation" used book donation campaign, calling on all employees to donate books in exchange for green plants they like, guiding employees to establish a sustainable development concept of saving resources and low-carbon environmental protection. A total of over 600 used books were collected during the event and will be sent to impoverished areas to promote knowledge-sharing and achieve the full use of resources. The activity not only extended the life value of books but also advocated a green and environmentally friendly concept.



Rural Revitalization

GCL SI has actively responded to the national call for rural revitalization and continues the efforts to consolidate and expand the achievements of poverty alleviation. GCL Green Energy goes deep into villages in Henan, Anhui, Ningxia, Hunan and other provinces to provide professional and efficient intelligent operation and maintenance services for village-level poverty alleviation PV power stations. Such projects supply clean energy to the local areas, reduce the dependence on traditional energy sources, and drive the economic development of the regions and the improvement of social welfare.

In 2024

The project's cumulative annual power generation totaled

14,150

ten thousand kWh



Case

Actively Engages in Poverty Alleviation Through Photovoltaic Projects, Contributing to Rural Revitalization

In 2024, GCL SI demonstrated significant contributions to photovoltaic poverty alleviation. The Company provided professional and efficient intelligent operation and maintenance services for 160 village-level photovoltaic poverty alleviation power stations across provinces such as Henan, Anhui, and Inner Mongolia, with a total capacity of 78 MW. These projects generated 141.5 million kWh of electricity annually, delivering clean energy to impoverished regions and injecting robust momentum into rural revitalization.



Village Power Station in Hualong



Village Power Station in Fuyang

Additionally, GCL SI actively carried out pairing assistance work. The Company provided financial support, technical assistance, and talent delivery to help improve local infrastructure and promote industrial upgrading, actively driving local employment and economic development.



Case

"100 Enterprises, 100 Villages: Paired for Development" — Wuhu GCL SI Partners with Henggang Community for Joint Development

In November 2024, Wuhu GCL SI was invited to participate in the "Hundred Enterprises Revitalize Hundred Villages" conference in Wanzhi District, Wuhu City, and paired with Henggang Community for joint development, promoting rural revitalization and economic growth. Wuhu GCL SI will provide comprehensive support in multiple areas, including agricultural product procurement, homestay construction, and public welfare activities, to drive the community's comprehensive development and accelerate its economic transformation and upgrading through practical actions. This partnership not only brings new development opportunities to Henggang Community but also provides a platform for Wuhu GCL SI to actively respond to the call for rural revitalization and explore new pathways for its implementation.

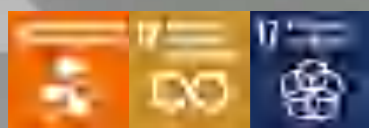


「X」cellence

At GCL SI, innovation starts with customer needs and thrives through open collaboration.

With the mission of "focusing on green development and continuously improving the living environment for humanity", GCL SI foresees the infinite possibilities led by innovation. By strengthening our R&D capabilities and improving product quality and customer satisfaction, we persist in providing robust momentum to the global energy transition.

Contribution to the United Nations Sustainable Development Goals



Strategic Goals and Annual Performance

Strategic Goals	Indicators	Unit	2024 Performance
Based on 2024, increase R&D investment by 20% by 2028.	R&D Investment	RMB 10,000	21,021.69
By 2030 at the latest, maintain zero product recalls annually.	Number of Product Recall Incidents	Cases	0
By 2030 at the latest, maintain an annual customer satisfaction score above 97 points.	Customer Satisfaction Score	Points	98.5
By 2030, achieve 100% coverage of IT security risk assessments across all operations.	IT Security Risk Assessment Coverage Rate	%	0
By 2027, ensure that all IT infrastructure and information systems of the Company are certified under the ISO 27001 system.	ISO 27001 System Certification Coverage Rate ¹¹	%	0

¹¹ GCL SI will conduct IT security risk assessments and pursue ISO 27001 certification starting in 2025, actively safeguarding data and privacy security.

Innovation-driven

R&D Management

Adhering to the concept of "technology leading and innovation-driven", GCL SI optimizes the R&D management, promotes product innovation, enhances industrial cooperation and communication, and leads technological breakthroughs in the field of clean energy, thus contributing to the development of the industry.

To ensure the efficiency and systematic approach of our R&D efforts, in 2024 GCL SI restructured its R&D management organization by reorganizing the Crystalline Silicon Research Institute. The R&D functions for batteries and modules were integrated into this institute. Additionally, the Company established functions such as product management, intellectual property management, and technology management to further refine its R&D management system.

GCL SI has established an R&D management standard system, and formulated and implemented internal policies, including the Management Standards for Scientific and Technological Work, the Management Standards for Scientific Research Projects, the Design and Development Control Procedures and the Management Standards for Scientific and Technological Achievements. These policies standardize the management process of the Company, including technological strategy management, technological incentive management, R&D project management, technical standard management, intellectual property management, and scientific research workstation management. In 2024, the Company formulated new regulations such as the Product Incentive Management Measures and the Management Measures for the Implementation and Incentives of Scientific Research Projects, and revised the Management Measures for Postdoctoral Workstations. These actions were taken to establish and improve a comprehensive R&D management system.

R&D Platform

With strong R&D capabilities, GCL SI has undertaken

11 national science and technology projects

By the end of the Reporting Period, the Company had a total of

329 R&D personnel



26 provincial and municipal-level key science and technology projects

our R&D expenses were **210.22** RMB million

an increase of **43.59%** over the previous year

GCL SI owns **5** high-tech enterprises

1 national postdoctoral workstation

3 provincial and municipal-level engineering technology research centers

4 provincial and municipal-level enterprise technology centers

1 national green factory

2 provincial-level intelligent factory



Case

Participation in the National Key R&D Program "Key Technologies and Core Components Development and Engineering Demonstration for Near-Offshore Floating Photovoltaic Power Generation"

GCL SI, leveraging its robust technical capabilities accumulated in photovoltaic module R&D and system implementation, has joined forces with multiple universities and enterprises to undertake the "14th Five-Year Plan" National Key R&D Program under the "Key Technologies and Core Components Development and Engineering Demonstration for Near-Offshore Floating Photovoltaic Power Generation" project. This project aims to develop independent intellectual property rights, core commonalities, key technologies, and complete sets of equipment for near-offshore floating photovoltaic power generation. The outcomes of this project will establish China's world-leading position in the field of near-offshore photovoltaic development technology.

GCL SI R&D Expense Performance in 2022 to 2024

Disclosure item	Unit	2022	2023	2024
R&D expenses	RMB 10,000	8,095.98	14,640.12	21,021.69
R&D expenses as a percentage of total revenue	%	0.97	0.92	1.29
Number of R&D personnel	Persons	133	240	329
R&D Efficiency ¹²	Items per Person	0.50	0.38	0.24

¹² R&D Efficiency = Number of New Patent Applications Filed Annually / Number of R&D Personnel





Leading Innovation

In 2024, GCL SI continued to advance the transformation and implementation of innovative R&D results in product development, with several products reaching industry-leading levels.

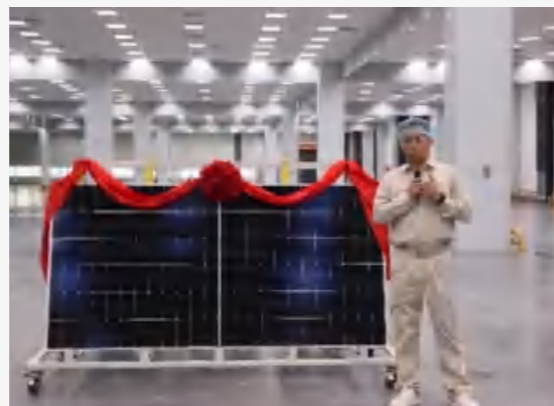


Case Launch of the First 0BB Mass Production Line Module

In June 2024, the first 0BB mass production line module of GCL SI was officially launched at Hefei GCL SI, marking a successful breakthrough in 0BB technology.

The 0BB technology, also known as zero busbar technology, is an upgrade from multi-busbar (MBB/SMBB) technology and is currently a key focus in the R&D of N-type modules. This technology eliminates the main busbars, retaining only the fine grid lines, with interconnect ribbons directly connected to the fine grid lines to conduct electricity, significantly reducing the cost of silver paste used in module production.

Through technological breakthroughs in the manufacturing process, the Company increased the light absorption area of the 0BB modules, reduced internal resistance losses and incidence angle modifier (IAM) losses, achieving a module power output of 650W and a conversion efficiency of over 23.2%. The production process of these modules also employs low-temperature soldering, reducing thermal stress on the cells during soldering, effectively minimizing microcracks and ensuring high reliability of the modules. Additionally, the 0BB mass production line modules integrate Lotus anti-dust technology, further enhancing product competitiveness.



Case N-Type TOPCon Battery Average Warehouse Efficiency Reaches 25.4%, Leading the Industry

In October 2024, the average warehouse efficiency of GCL SI's N-type TOPCon batteries reached 25.4%, 0.2% higher than that of mainstream industry manufacturers, placing it at the top of the industry.

The average warehouse efficiency of photovoltaic batteries refers to the average conversion efficiency of the batteries upon final storage after production, inspection, and validation over a certain period. It is an important indicator of the actual performance of photovoltaic batteries, reflecting their true energy conversion capabilities during mass production and storage. The Company's N-type TOPCon batteries achieving the industry's top position in average warehouse efficiency reflects the technical advancement and industry leadership of its battery products, setting a new benchmark for the photovoltaic battery industry.



Case Launch of the First GPC Lotus Module

In October 2024, the first GPC Lotus module of GCL SI was officially launched at Hefei GCL SI. The GPC Lotus module integrates GPC technology and Lotus self-cleaning technology, representing the Company's first generation of back-contact products with four core advantages: high efficiency, aesthetics, added value, and reliability.

In terms of efficiency, the GPC technology, with no front-side busbars, further enhances the optical and electrical performance of the modules. The single-glass and double-glass GPC Lotus modules, packaged on the 182×210 cell size platform, achieve maximum efficiencies of 680W (25%) and 670W (24.6%) respectively, effectively increasing power generation by 7% compared to TOPCon technology. In terms of appearance, the GPC Lotus module has no A-side on the front, featuring a lifting design for installation that replaces traditional clamps, truly realizing a "full-screen" effect. In terms of added value, the GPC Lotus module offers higher installation capacity per unit area, less energy loss for cells in high-temperature environments, excellent low-light response for all-day power generation, and superior anti-hotspot performance. In terms of reliability, the "I"-shaped soldering of the GPC Lotus module reduces the risk of microcracks and power degradation, ensuring high product reliability. According to empirical testing, the power generation of GPC Lotus modules can be effectively increased by 7.5-12%.

The GPC Lotus single-glass and double-glass modules can be applied in various scenarios, including commercial and industrial, residential distributed, and ground-mounted power stations, continuously meeting the needs of users in different scenarios for high-efficiency and reliable photovoltaic products and supporting the low-carbon transition of society.



Intellectual Property Protection

To protect the Company's innovation capability, GCL SI strictly abides by laws and regulations such as the *Trademark Law of the People's Republic of China* and the *Patent Law of the People's Republic of China*. Besides, the Company has formulated and strictly follows internal policies such as the Intellectual Property Management Standard, the Patent Management Standard, the Trademark Management Standard and the Copyright Management Standard to comprehensively regulate the protection of intellectual property rights.

By the end of 2024

GCL SI had a total of
656 patents

an increase of
21%
from the previous Reporting Period



Protecting our own rights and interests

GCL SI attaches great importance to the protection of intellectual property rights and actively engages in registration, filing and application of intellectual property rights. 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 take proactive measures in case of any potential infringement of the Company's intellectual property rights. The Company also conducts intellectual property awareness campaigns and training.

Respecting the rights of others

To prevent the Company from infringing on the intellectual property rights, the Company has established an intellectual property retrieval system, covering various aspects such as product and technology R&D, creation of the work, the use of trademark, 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.

In 2024

The Company did not engage in any acts of intellectual property infringement.



Case Comprehensive Intellectual Property Management Training

The Company places great emphasis on intellectual property (IP) management and has established a comprehensive IP training system. IP training is divided into two main sections: basic training and specialized training. Basic training is aimed at technical personnel, including those in battery and module development, covering positions and departments in R&D, process, and equipment. In 2024, the Company conducted two basic training sessions focusing on the fundamental knowledge and skills of intellectual property. Specialized training, tailored to different technologies and product types, involves 4 to 5 training sessions and exchanges with relevant R&D and technical personnel each month, focusing on solving complex IP issues.

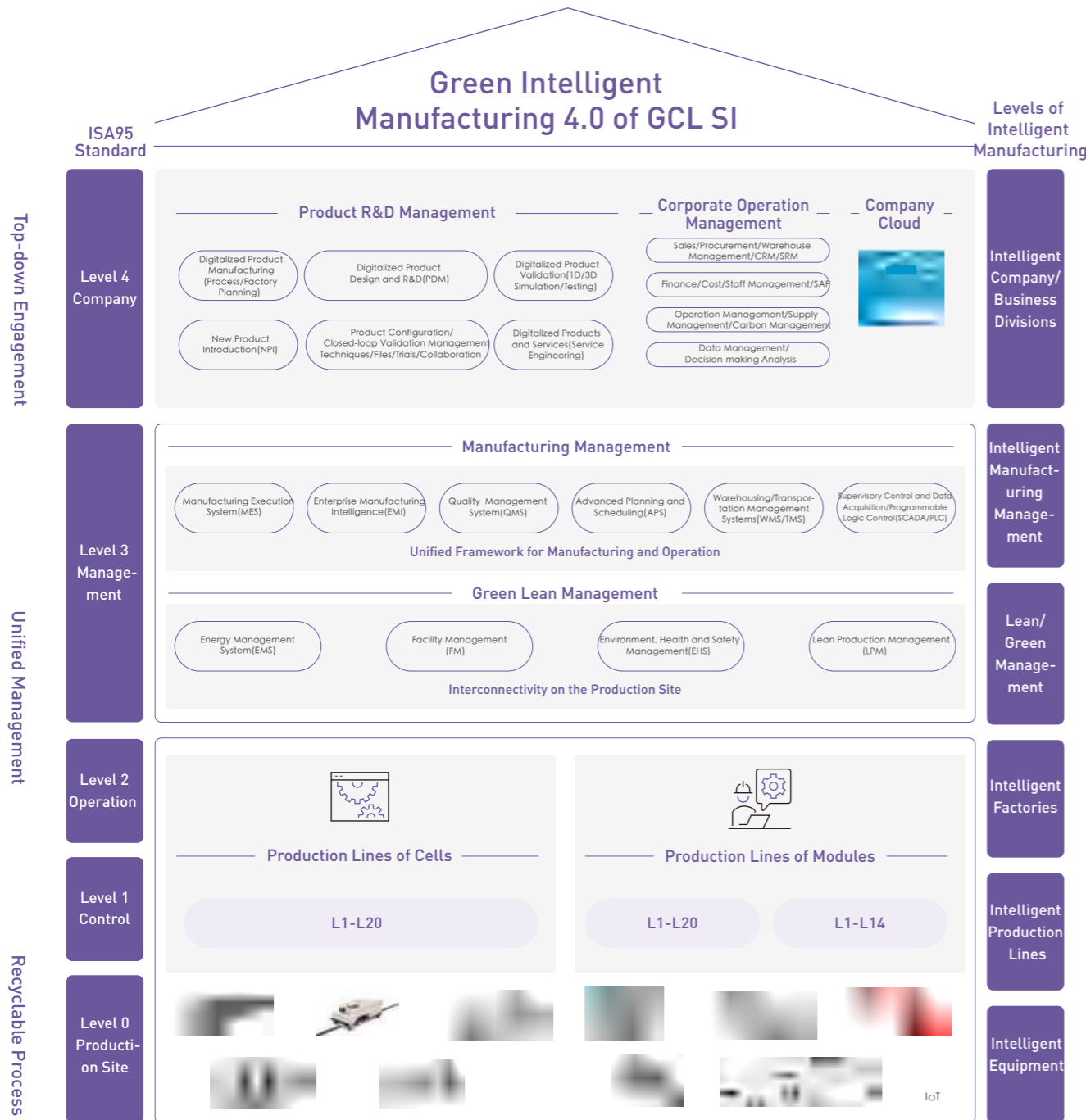
GCL SI Performance for Intellectual Property Protection in 2024

Disclosure item	Unit	2024
Cumulative number of patents authorized	Items	656
Cumulative number of invention patents authorized	Items	97
Cumulative number of trademarks and copyrights held	Items	28
Cumulative number of software copyrights held	Items	35
Number of new patent applications of the year	Items	80
Number of new authorized patents of the year	Items	68



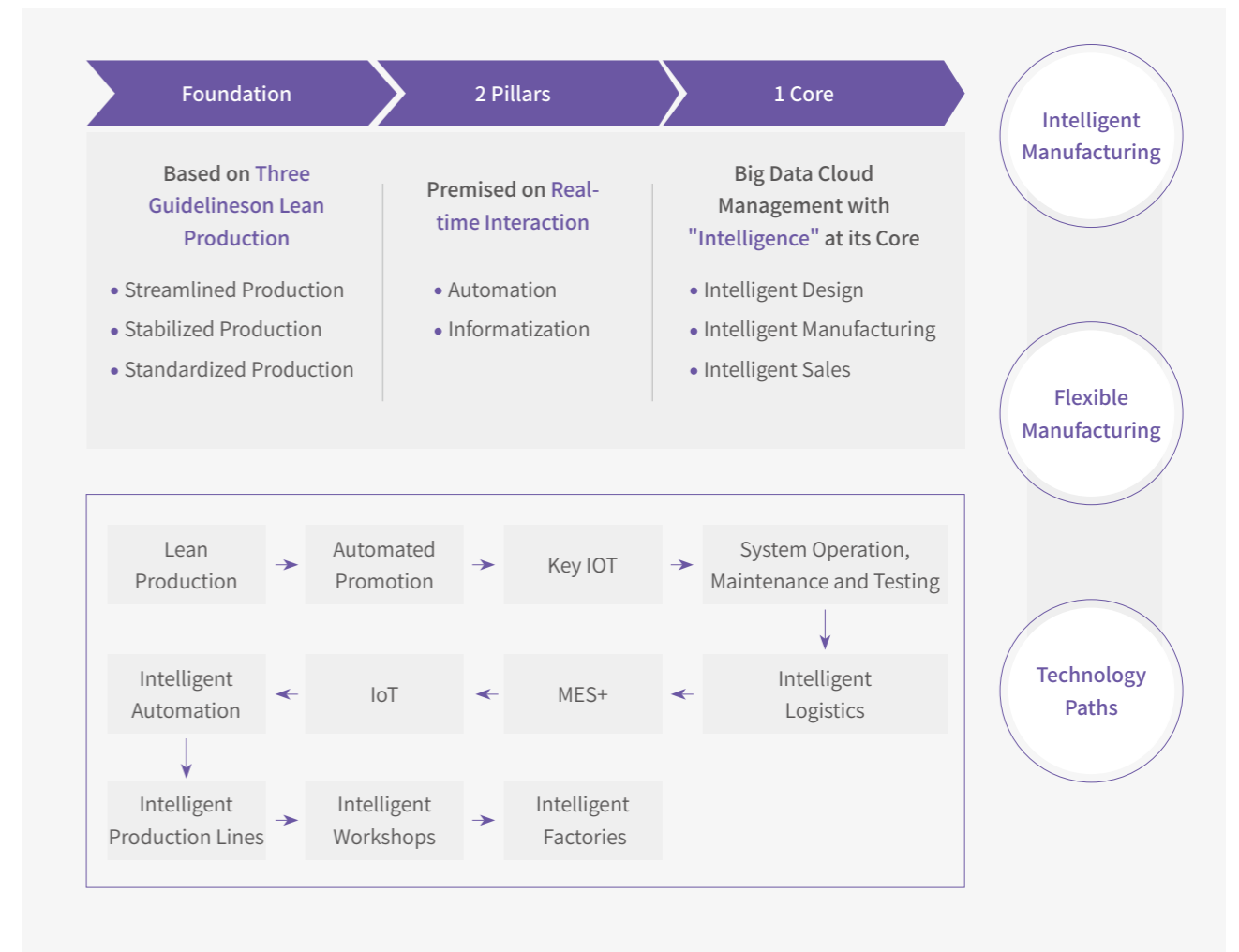
Intelligent Manufacturing

GCL SI, guided by the strategic orientation of "Industry 4.0 Intelligent Manufacturing + Green and Low-Carbon," has established the "GCL SI Green Intelligent Manufacturing 4.0" blueprint. Following the principle of "overall planning, gradual implementation, solid foundation, and value-driven," the Company continuously enhances its intelligent manufacturing level, aiming to create a global hub for intelligent manufacturing in the photovoltaic industry.



GCL SI follows the development trends of digitization and intelligence, and continuously explores the methods and paths to empower business development with digitization and intelligence. On the one hand, by deploying 5G network, AI image recognition and other intelligent technological equipment in the production workshop, the number of frontline employees and their labor intensity have been greatly reduced, and the labor efficiency of employees and product quality have been improved; on the other hand, by building a production management system covering all production links and integrating it comprehensively with the core business systems, it has achieved full interconnection of data and business processes among various business departments, including production, equipment, technology, quality, warehousing, operation, and industrial engineering (IE). Additionally, it has realized the visual management of the production execution process, providing effective digital support for the manufacturing base to gradually achieve real-time management decision-making, quality improvement, cost reduction and efficiency increase.

In terms of production and manufacturing, GCL SI takes the Manufacturing Execution System (MES) as the core to integrate the entire production process and build a big data platform for production. The Company focuses on lean management as the handle and intelligent manufacturing as the goal, constructing a systematic framework around "one foundation," "two pillars," and "one core" to achieve intelligent manufacturing.





GCL SI has developed an intelligent control platform to coordinate flexible manufacturing, empowering multi-order product manufacturing and enhancing production efficiency. The Company's intelligent control platform is capable of obtaining data from multiple sources, storing and processing data related to people, machines, materials, methods, and environment, and rapidly applying and developing new solutions. This platform features rapid data visualization, multi-dimensional analysis, and machine learning algorithm development capabilities, supporting process innovation, process optimization, intelligent production, and achieving digital enterprise management.

In the research and application of artificial intelligence (AI) technology, the Company always adheres to the principle of technology for good, follows and actively practices ethical norms in technology, and provides employees with training and dissemination on technology ethics to ensure the safety and reliability of AI applications.

Industrial Dashboards for Flexible and Automated Production Lines				
Intelligence + Human-machine Collaboration	AR Remote Assistance in Maintenance	EL Man-less Review	Facial Recognition at Key Stations	Packaging Robots
	Gear Distribution Forecasts	Material Mix Recommendations	Cell Supply Analysis	Production Anomaly Prediction
	AGV Logistics Scheduling	Energy Consumption Optimization for Air Compressors	Intelligent Production Scheduling	Factory-wide Work Safety Management

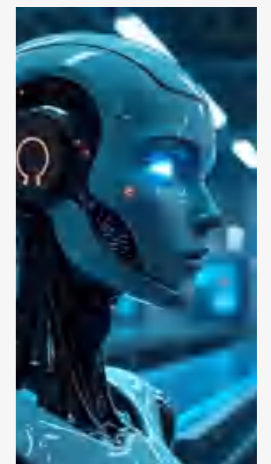


Case **Successful Deployment of the First Private Large Language Model-Based Process Robot**

In November 2024, Hefei GCL SI successfully developed and deployed the first photovoltaic module process robot based on a private large language model, achieving an in-depth integration of AI technology and traditional manufacturing.

The core highlight of this project is the adoption of a private deployment solution. Under the premise of ensuring data security, the new generation of large language model technology has been successfully applied to the photovoltaic manufacturing field. It features offline operation without reliance on external networks, closed-loop management of core data, and complete self-control of the process knowledge system.

The process robot is equipped with accumulated process data and expert experience. Based on the technological advantages of the large language model, the robot has the ability to continuously learn, enrich its knowledge base, optimize problem-solving strategies, enhance reasoning and analysis capabilities, and adapt to new processes and equipment. It offers significant advantages in technological innovation, efficiency improvement, and cost reduction.



GCL SI's achievements in intelligent manufacturing have been widely recognized. In 2024, Funing GCL SI was listed on the "Jiangsu Province Intelligent Manufacturing Factory" list for the year 2024, receiving the honor of "High-Efficiency Photovoltaic Module Intelligent Manufacturing Factory." Funing GCL SI also made it to the first batch of "Jiangsu Province Five-Star Cloud-Connected Enterprises" in 2024. Wuhu GCL SI was included in the "2023 China Intelligent Manufacturing Cornerstone and China Intelligent Enterprise Directory," receiving the honor of "Outstanding Achievements Enterprises in Digital Transformation."

Industrial Cooperation and Exchange

GCL SI has been actively engaged in various kinds of industry cooperation and exchanges. We collaborate with partners across the supply chain to jointly advance innovation and progress in the photovoltaic industry and global energy transformation, aiming to establish a new framework of mutual benefit and sustainable development.



| Industrial Cooperation and Exchange

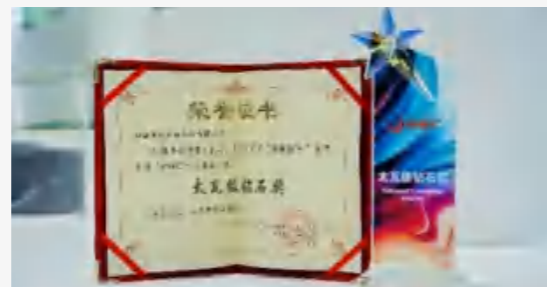
Through international industry exhibitions, GCL SI showcases cutting-edge photovoltaic solutions to global energy consumers. By collaborating with industry leaders, the Company shares breakthroughs in advanced technologies and scientific achievements, driving collective progress toward industry-wide upgrades and iterations.



Case

Participation in the 17th SNEC PV Power Expo (Shanghai) Exhibition and Winning the Highest Terawatt Diamond Award

In June 2024, GCL SI participated in the 17th International Solar Energy and Smart Energy (Shanghai) Exhibition (SNEC). At the "Top Ten Highlights" award ceremony of the exhibition, the Company won the highest Terawatt Diamond Award for its carbon chain platform and carbon chain module products. This award signifies GCL SI's comprehensive strength in the low-carbon field and recognition from authoritative industry institutions.



Case

Participation in the Intersolar Europe 2024 in Munich, Germany

In June 2024, GCL SI participated in the Intersolar Europe 2024 in Munich, Germany. The Company's carbon chain module SiRo, with its pioneering blockchain-based photovoltaic carbon footprint management, became a focal point of the exhibition, showcasing low-carbon innovation solutions.



Case

Attendance at the Large Scale Solar CEE Summit

In November 2024, GCL SI was invited to the Large Scale Solar CEE and delivered a keynote speech on "Innovating the Future: Efficiency, Carbon Reduction, and Traceability." The Company engaged with attendees to explore the latest breakthroughs and future trends in solar technology, aiming to inject more momentum into the green energy development of the Central and Eastern European region.





Case Technology Synergy at Energyyear Mexico 2024

GCL SI strengthened its engagement in Latin America's renewable sector as a Silver Sponsor at Energyyear Mexico 2024. Hosted in Mexico City, the event convened industry leaders to discuss pathways toward a fully renewable energy grid. We shared insights on GCL's innovative technologies and their alignment with Mexico's decarbonization goals. By showcasing our low-carbon modules and grid integration solutions, we highlighted the role of scalable solar infrastructure in complementing existing energy systems. The forum also facilitated partnerships with local utilities, reinforcing trust through transparent dialogue on equitable energy access and technology deployment.



Case Active Participation in Global ESG Initiatives: Keynote Address at the Global Solar Council

As a cornerstone of our global ESG engagement, GCL SI reinforced its commitment to multilateral cooperation by sponsoring and speaking at the Global Solar Council (GSC) brand release ceremony. Our Vice President delivered a keynote speech emphasizing the mutual vision between GCL SI and the GSC: accelerating the clean energy transition through innovation and inclusive partnerships. By advocating for unified industry standards and sharing our expertise in sustainable manufacturing, we reaffirmed our role as a global advocate for solar energy adoption.



Case Empowering Thailand's Renewable Transition through Co-Creation

GCL SI's "Be With GCL in Thailand" event epitomized our commitment to aligning global expertise with local needs. In collaboration with Thailand's Provincial Electricity Authority (PEA), we convened 100+ industry leaders to address challenges in the distributed PV market. The Company announced ambitious targets for regional expansion, while PEA outlined strategies to accelerate Thailand's renewable adoption. The launch of our NT10/72GDF Pro module—a high-efficiency product tailored to Thailand's climate—showcased our dedication to co-developing solutions that meet specific market demands. By building partnerships grounded in mutual learning and cultural respect, we are driving inclusive progress toward Southeast Asia's green energy goals.



Case Hosting the "GCL Partner, Carbon Road to the Future" 2024 Annual Eco-Partner Gala

In December 2024, GCL SI hosted the "GCL Partner, Carbon Road to the Future" 2024 Annual Eco-Partner Gala. The event invited nearly 100 experts and partner representatives from the photovoltaic industry to focus on the development trends of the distributed market and exchange views on the opportunities and challenges facing photovoltaic enterprises.



Industry Cooperation

GCL SI, with its top-tier product strength and solution capabilities, has established strategic partnerships with numerous domestic and international partners.

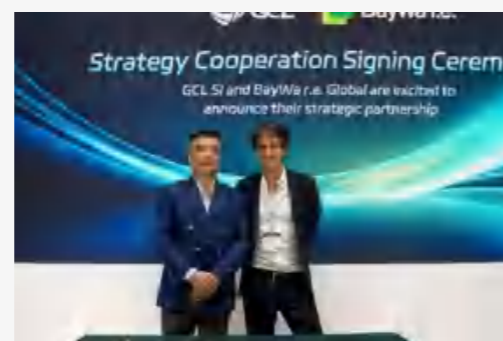


Case

Strategic Partnership with Energy Giant BayWa r.e. for Carbon Chain and Green Supply Chain Collaboration

At the Intersolar Europe 2024 in Munich, Germany, GCL SI signed a strategic cooperation agreement with international energy giant BayWa r.e. Solar Projects GmbH (referred to as "BayWa r.e."). The collaboration aims to deepen cooperation in corporate digital carbon footprint management and green supply chain development.

This partnership not only consolidates both parties' leading positions in the global energy transition but also demonstrates GCL SI's commitment to expanding into international markets and enhancing brand competitiveness. BayWa r.e. emphasized that "in terms of photovoltaic technology, market development, and international experience, the Company's criteria for selecting partners align closely with GCL SI." Both parties will leverage their respective strengths to explore the vast potential of the green energy market and drive the transformation and upgrading of the global energy structure.



Standard Setting

Relying on its strong technical capabilities, GCL SI actively participates in the formulation of national standards, continuously enhancing its industry influence. In 2024, the Company participated in the development of two national standards: the Test Methods and Performance Evaluation for Photovoltaic Glass Exposed to Extremely Cold Atmospheric Environments (GB Planned No.: 20241933-T-609) and Test Methods and Performance Evaluation for Photovoltaic Glass Exposed to Marine Environments (GB Planned No.: 20241938-T-609).

Industry Association

GCL SI maintains close communication with mainstream industry associations, jointly promoting the high-quality development of the green energy industry.

Organization Name	Role of GCL SI
China Chamber of Commerce for Import and Export of Machinery and Electronic Products, PV Branch	Vice Chairman Unit
Jiangsu International Chamber of Commerce	Vice Chairman Unit
Shanghai Solar Energy Society	Vice Chairman Unit
China New Energy Overseas Development Alliance	Chairman Unit
China Photovoltaic Industry Association, Household PV Professional Committee	President Unit
China Photovoltaic Industry Association, Intellectual Property Professional Committee	Standing Committee Member Unit
600W+ PV Open Innovation Ecosystem Alliance	President Unit



Case

GCL SI Signed Gigawatt-Level Module Supply Contract with India's State-Owned Power Giant NTPC

In 2024, GCL SI officially signed a 1.1GW high-efficiency module supply order contract with NTPCREL (NTPC Renewable Energy Limited), a subsidiary of India's state-owned power giant NTPC, in India.

NTPCREL is a wholly-owned subsidiary of India's state-owned power giant NTPC, focusing on solar, wind, and hybrid projects across India. This collaboration will drive mutual development for both enterprises. While expanding into global markets, GCL SI will contribute to China-India economic growth and the achievement of "dual-carbon" goals with renewed competitiveness.



Product Safety and Quality

GCL SI always adheres to the quality management policy of "Full Participation, Continuous Improvement, Value-added Services, and Customer Satisfaction" and sticks to the concept of "Quality Awareness in Heart, Product Quality on Hand". Through the digital quality management system, quality training and other initiatives, the Company has created a corporate culture focused on "company-wide quality", intending to keep enhancing product quality and provide superior products for customers.

Quality Management System

GCL SI strictly abides by the *Product Quality Law of the People's Republic of China* and the *Standardization Law of the People's Republic of China*, and complies with the internationally recognized standards for quality management systems. Hefei GCL SI, Funing GCL SI, and Wuhu GCL SI all obtained the ISO 9001 Quality Management System Certificate, meaning 100% of GCL SI photovoltaic module-related production bases have been covered, while Hefei GCL SI and Funing GCL SI also obtained the IEC 62941 Quality Management System for PV module manufacturing.

The Company is actively working on the development of a quality management system by establishing and enforcing a series of management regulations, including the Integrated Management Manual, the Product Monitoring and Measurement Control Procedure and the Non-Conforming Product Control Procedure. In 2024, the Company revised dozens of systems, including the Product Certification Consistency and Change Control Procedure, Monitoring and Measuring Equipment Control Procedure, and Corrective and Preventive Action Control Procedure. These revisions further refined and perfected the quality management policies, standardized the quality management processes, and effectively mitigated product quality risks.

In addition, GCL SI has independently developed whole-process quality management information systems, including the "GCL Smart Chain", Warehouse Management System (WMS), and Manufacturing Execution System (MES). These digital systems enable us to real-time collect and analyze data from the entire product production process and achieve digital quality lifecycle management. This has significantly improved production efficiency and product quality, and will further enhance our market competitiveness.

Optimizing Quality Process

In 2024

The Company had not recalled any product.

GCL SI continues to upgrade its quality management technology, adopting advanced digital techniques for quality inspection to replace traditional manual experience-based processing methods. This has significantly enhanced inspection efficiency and quality levels. The Company has established industry-leading fully automated production lines with an automation rate exceeding 80%. GCL SI's photovoltaic testing center has obtained certifications and annual reviews from authoritative international certification bodies such as the China National Accreditation Service for Conformity Assessment (CNAS) and TÜV Rheinland. This provides a reliable guarantee for product quality.

In addition, the Company assigns a unique barcode to each product, enabling full-process traceability of quality control. For every identified or potential defect, cross-functional teams from manufacturing engineering, R&D, and quality assurance conduct root cause analysis, develop targeted corrective/preventive actions (CAPA), implement solutions, and validate effectiveness through closed-loop verification protocols.



Case Using AI-Assisted Inspection to Improve Efficiency

Using AI technology to inspect products can optimize workforce allocation and reduce production costs with high efficiency and accuracy. GCL SI attaches great importance on the application of AI technology in production. Hefei GCL SI introduced AI-assisted judgment in the electroluminescence (EL) testing process, which automatically identifies defective areas, followed by employee review. After the introduction of AI-assisted judgment, employee inspection time was reduced by approximately 20%, and the rate of missed detections was significantly lowered.



Case Improving Light and Dark Patches to Ensure PV Cell Reliability

Light and dark patches in photovoltaic (PV) cells refer to the noticeable differences in brightness observed during EL testing of PV modules, indicating inconsistencies in photoelectric conversion efficiency and current transmission, which significantly impact cell performance. In 2024, Wuhu GCL SI implemented multiple process improvements to address this issue, achieving significant enhancements in the light and dark patch metrics, reaching an industry-leading level.



Case Conducting Supplier Quality Exchange Meetings to Improve Product Quality

GCL SI regularly engages in quality discussions and training with suppliers to collaboratively enhance product quality. In 2024, Hefei GCL SI and a film supplier conducted an in-depth analysis of quality issues that arose during production, identified root causes, and proposed improvement and control plans. Funing GCL SI also worked with suppliers to carefully assess and develop improvement plans for issues such as lamination breakage and microcracks. Wuhu GCL SI held a total of 18 communication meetings on quality improvement for various raw and auxiliary materials, collectively enhancing quality indicators such as concentric circles and silicon wafer resistivity.

Quality Culture Promotion

To improve the quality awareness and quality capability of all staff, and to optimize the quality control points and quality processes, the Company has carried out quality and safety training many times during the Reporting Period. Through Quality Month activities, various quality-themed trainings, and quality skills competitions, we effectively communicated the key challenges in our quality management systems and practical operations to enhance the quality consciousness and skills of all employees.



Case Quality Month Activities

In September 2024, Wuhu GCL SI organized a total of 28 activities during the Quality Month, including the "Quality Red and Yellow Line" campaign, quality-themed debate competitions, quality knowledge contests, and presentations of Quality Control Circle (QCC) improvement projects. Among these, there were 75 QCC improvement project proposals, with 55 projects concluded. After financial assessment, the projects generated over RMB 17 million in benefits, enhancing quality management levels while achieving significant economic returns.



Case Training through Practice with Quality Skills Competitions

In May 2024, Funing GCL SI conducted a series of quality-themed activities. In addition to traditional quality awareness training and testing, Funing GCL SI focused on seven major position-based quality skills competitions themed around string welding machine ribbon replacement, rework of lamination, EL image inspection, lamination framing, junction box welding machine head replacement, cleaning inspection and effectiveness, and packaging skills. Through this practice-oriented training approach, the Company significantly enhanced employees' participation in quality management and effectively improved the quality skills of frontline workers.



GCL SI Quality and Safety Training Performance in 2024

Total number of training sessions

1,007 Times

Total training hours

2,598.25 Hours

Number of employees trained

15,682 Persons





Customer Service

A high-quality customer service system is crucial for photovoltaic enterprises. GCL SI enhances customer satisfaction by refining service processes and response mechanisms. At the same time, the Company practices responsible marketing, paying close attention to customer needs and rights. By establishing long-term customer relationships based on honesty and transparency, GCL SI promotes the Company's stable growth.

Customer Service System

GCL CL has established an advanced customer service system and formulated internal policies such as the Control Procedures for Customer Requirements and the Management Regulations for Customer Complaints. In 2024, the Company newly released the Global Marketing Center Pricing Management System and revised customer service-related systems such as the Customer Complaint Management System and the Distributor Management System. These policies are designed to standardize the process of handling customer complaints and opinions to ensure that customer feedback is resolved in a timely, reasonable, and effective manner.

The Company values timely responses to customer feedback and has set up a regular-return-visit system in the After-sales Department. Within three months of product delivery and implementation, the after-sales team conducts a follow-up visit to have thorough communication with the customer and assesses their satisfaction, while also inspecting the product's appearance and operational efficiency. The collected data will be analyzed and integrated to generate a detailed case report, which will be fed back to the Sales Department and Customer Purchasing Department to support the closed-loop management.

The Company ensures the smoothness and timeliness of the after-sales handling process. Customers can reach out to us via our 24-hour service hotline and public email. For after-sales issues reported by global customers, we commit to the following: Reply to customer inquiries within 1 working day after receiving their request. Complete the assessment of customer requests within 3 working days. Provide corrective and preventive measures within 5 working days after the assessment is completed, ensuring a convenient and efficient service experience for our customers.

In 2024

the Company conducted on-site follow-up visits with overseas customers

12 times

and domestic customers

24 times

achieving a follow-up satisfaction rate of

100%

Customer Satisfaction

The Company has established internal systems such as the Customer Requirements Control Procedure, Customer Satisfaction Management Standards, and Customer Satisfaction Measurement and Analysis. We send out the Customer Satisfaction Survey to customers at least once a quarter to gauge their satisfaction. The survey covers both product dimensions (appearance, performance, ease of installation, packaging, delivery time) and after-sales service dimensions (response speed, quality of resolution, staff attitude, staff skills) to gain a comprehensive understanding of customer feedback. For key feedback points, we collaborate with departments such as process and production to address and effectively resolve the issues quickly, thereby enhancing customer satisfaction.



Case

Refined Services to Boost Customer Satisfaction

In 2024, the Company moved the Issue to Resolution (ITR) phase of after-sales service to an earlier stage. Before the product reaches the project site, we conduct a risk assessment of the site's environment and installation conditions to reduce potential risks during product use. Additionally, we continuously improve our after-sales management system, especially in customer follow-ups, by making systematic adjustments. We proactively reach out to customers periodically to address any issues they encounter during product use in a detailed manner. This enhances the proactivity of our service, strengthens the customer service experience, and continuously improves customer satisfaction.

In 2024

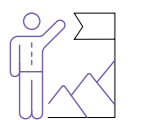
Annual Average Customer Satisfaction Score

98.5 Points



Target Customer Satisfaction Score

97 Points



Responsible Marketing

The Company upholds the principles of honest operation and responsible marketing, strictly complies with the *Advertising Law of the People's Republic of China* and other laws and regulations. On such basis, we have established a compliance audit mechanism for products and services, and conduct regular compliance awareness training for all staff. With these efforts, we seek to ensure that the product promotional materials are truthful and accurate, well designed to provide all necessary information, and in conformity with laws and regulations, thus effectively safeguarding customers' right to know. During the Reporting Period, the Company reported none of product marketing violations.

Information Security and Privacy Protection

GCL SI attaches great importance to information security and the protection of personal information. The Company always strictly abides by applicable laws and regulations such as the *Data Security Law of the People's Republic of China*, the *Personal Information Protection Law of the People's Republic of China* and the *Administrative Measures for the Graded Protection of Information Security* to regulate data processing activities and protect customer privacy. GCL SI has formulated internal management systems, including the Network System Management Standards, the Database System Management Standards, the Information Data Security and Mobile Media Confidentiality Management Standards to ensure full coverage and compliance of information security.

Responsibilities for Information Data Security Management of GCL SI

Information Department

Responsible for implementing and executing information and data security and confidentiality management standards from superior departments. Based on this, the Department is also responsible for the inspection, supervision, assessment, rewards and punishments of information and data security and confidentiality management work in the management center, subsidiaries and project companies.

Other Functional Departments

Responsible for cooperating with the information department to implement relevant regulations on information data security and confidentiality management standard.

Management Center and Subsidiaries

Responsible for implementing and executing information and data security and confidentiality management standards, inspecting and supervising the security and confidentiality management work of the affiliated information system.



GCL SI attaches great importance to data security management. We have taken multiple data protection measures for all-round management on the use of computers and related devices, virus protection of the computer information system, security in the use of the Internet, security of the E-mail system, the security of the computer room, etc. Our purpose is to effectively protect confidential information and data throughout the lifecycle from collection to storage, processing to transmission, and use to destruction in order to reduce the Company's information security risks. The Company conducts regular internal audits of its information systems annually to identify and promptly optimize and improve any issues.

Meanwhile, the Company regularly conducts data security training on enhancing information security awareness, covering critical areas such as information security protocols and information system operations, and strengthens the publicity and implementation of data security and private-sensitive data protection policies. By doing so, we ensure that employees are capable of responding to information security challenges, safeguarding information security and privacy protection.

In 2024, the Company reported none of violations against information security or data leakage incidents, nor were there any confirmed complaints regarding the infringement of customer privacy or the loss of customer information.

In 2024
the Company achieved
100%
coverage rate for
information security-
related training across all
employees.

「T」rust

Through mutual commitment, we build lasting success for both business and personal journeys; with shared promises, we create value that lifts the economy and society.

GCL SI adheres to the strategic pillar of mutual trust in business to build a high-standard corporate governance system and foresee the business basis of fair competition and honest operation. We prioritize the independence and diversity of our Board, ensuring transparent information disclosure and fostering close relationships with our investors. The Company implements strict risk management, compliance and internal control, and strengthens business ethics audits, in order to uphold a fair and just business environment with a transparent reporting mechanism.

Contribution to the United Nations Sustainable Development Goals



Strategic Goals and Annual Performance

Strategic Goals	Indicators	Units	2024 Performance
By 2030 at the latest, maintain a 100% internal audit coverage rate for all business entities and subsidiaries every two years.	Internal Audit Coverage Rate	%	100
By 2030 at the latest, maintain the problem rectification completion rate at audits of over 95%.	Problem Rectification Completion Rate	%	100
By 2030 at the latest, ensure annual training on conflicts of interest, anti-fraud, anti-money laundering, and anti-unfair competition topics covers all employees.	Training Coverage Rate on Conflicts of Interest, Anti-fraud, Anti-Money Laundering, and Anti-unfair competition Topics	%	100
By 2030 at the latest, conduct at least one corruption risk assessment covering all locations annually.	Corruption Risk Assessment Coverage Rate	%	100
By 2030 at the latest, maintain a 100% signing rate for the Integrity Commitment Letter among all employees.	Employee Integrity Commitment Letter Signing Rate	%	100

Corporate Governance

Diversity and Independence of the Board

By the end of the Reporting Period

the Board of Directors comprised

9 members



including

3 independent directors



and

1 female director



In recent years, domestic and foreign regulators have consistently reinforced the criteria for independent directors of companies to improve corporate governance structures and enhance supervisory effectiveness. GCL SI fully recognizes that bolstering the independence of the Board is essential for the Company to promote fair and transparent decision making and to strengthen risk management, thereby enhancing the overall value and market credibility of the Company.

The independent directors of GCL SI play an essential role in protecting the rights and interests of minority shareholders, reviewing related-party transactions, and monitoring the financial authenticity. To effectively perform the duties of independent directors, GCL SI has continuously revised and improved the internal rules and regulations, such as the Articles of Association, the Rules of Procedure for Shareholders' Meetings, the Rules of Procedure for the Board of Directors, the Rules of Procedure for the Board of Supervisors and the Working Policy for Independent Directors, which stipulate the rights, obligations, nomination and election procedures, and mechanism for exercising special authorities of independent directors. These documents ensure that independent directors can autonomously express their opinions, propose extraordinary shareholders' meetings, conduct independent reviews of material issues, and genuinely uphold the interests of all shareholders, especially minority shareholders.

The diversity of the Board enriches decision-making by incorporating a wide range of perspectives and experiences, mitigating the risk of narrow-mindedness within the Company. It fosters innovation, enhances corporate governance, and boosts the overall competitiveness of the Company. The current board members of the Company possess extensive experience in photovoltaics, finance, risk management, and other fields. They have the professional knowledge and skills required to fulfill their duties, providing effective decision-making support for the Company's strategic planning with their diverse backgrounds and perspectives.

Board Members' Professional Backgrounds

	Zhu Gongshan	Zhu Yufeng	Sun Wei	Zhu Zhanjun	Ma Junjian	Zhang Qiang	Cheng Bo	Zhang Lijun	Huo Jiazhen
Gender	Male	Male	Female	Male	Male	Male	Male	Male	Male
Position	Director	Chairman	Director	Director	Director	Director	Independent Director	Independent Director	Independent Director
Photovoltaic Industry	✓	✓		✓					
Energy Industry	✓	✓		✓					
Sustainable Development	✓				✓		✓		
Financial Management			✓			✓	✓		
Legal Management						✓		✓	
Corporate Management	✓	✓	✓	✓	✓				✓
Risk Management							✓		



GCL SI Corporate Governance Performance in 2024

Annual General Meetings

6 Times



Board Meetings

12 Times



Supervisory Board Meetings

6 Times



Transparent Disclosure and Investor Relations

GCL SI Transparent Disclosure and Investor Relation Performance in 2024

Investor Site Visits

25 Times

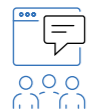
Investor Briefing Sessions

76 Times



Earnings Conference Calls

1 Times



Q&A on Exchange Interaction Platforms

70 Times



GCL SI recognizes that information disclosure is a key means for listed companies to present their operating reality, financial position and material issues to the public, which is of central significance to both companies and investors. We strive for detailed and timely disclosure of information to enhance market credibility.

The Company has established and followed the Measures for the Administration of Information Disclosure, and issued 160 announcements during the Reporting Period, covering financing, periodic reports, related party transactions, equity incentives, meeting resolutions, legal compliance and other contents. Besides, we have issued and implemented the Investor Relations Management Guideline and strengthened bilateral communication with investors through a variety of means, including investors' on-site visits, thematic investor presentations, regular performance briefings, and real-time responses to market concerns through online platforms. This approach ensures information transparency, effective management of investor expectations, and maintains a positive market image.

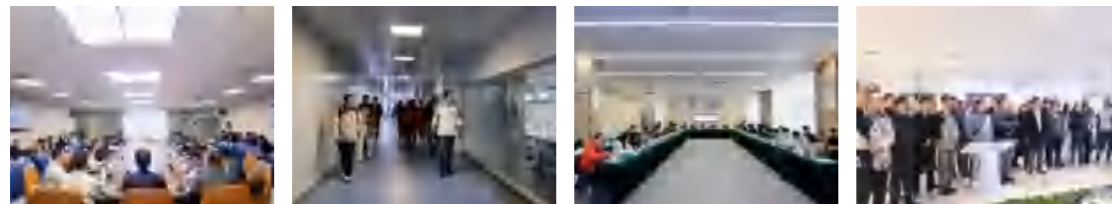


Case

Focusing on the Future of the Industry, Drawing a Blueprint for Development --Investment Institutions Survey Wuhu GCL SI

GCL SI places great emphasis on investor relations management and is committed to conveying corporate value through in-depth interaction. In November 2024, Wuhu GCL SI hosted research representatives from over 30 institutions, including the National Green Development Fund, Shanxi Securities, and Founder H Fund. Through a model of "in-depth dialogue + on-site inspection", the Company showcased its business layout and development strategy, further enhancing investors' confidence in GCL SI's future development.

During the symposium, the R&D team of Wuhu GCL SI elaborated on the innovation of photovoltaic technology routes and the future product matrix. The management team provided detailed introductions to the breakthrough progress of the Wuhu GCL SI in production and operation, technology research and development, and industrialization layout, and responded to investors' concerns about market prospects and strategic implementation. During the survey, investors visited the base's intelligent production lines to gain a direct understanding of the Company's manufacturing strength and industrial synergy. This event strengthened the two-way trust between the Company and the capital market, demonstrated GCL SI's benchmark practices in technological innovation and industrial layout, and deepened transparent communication with investors.



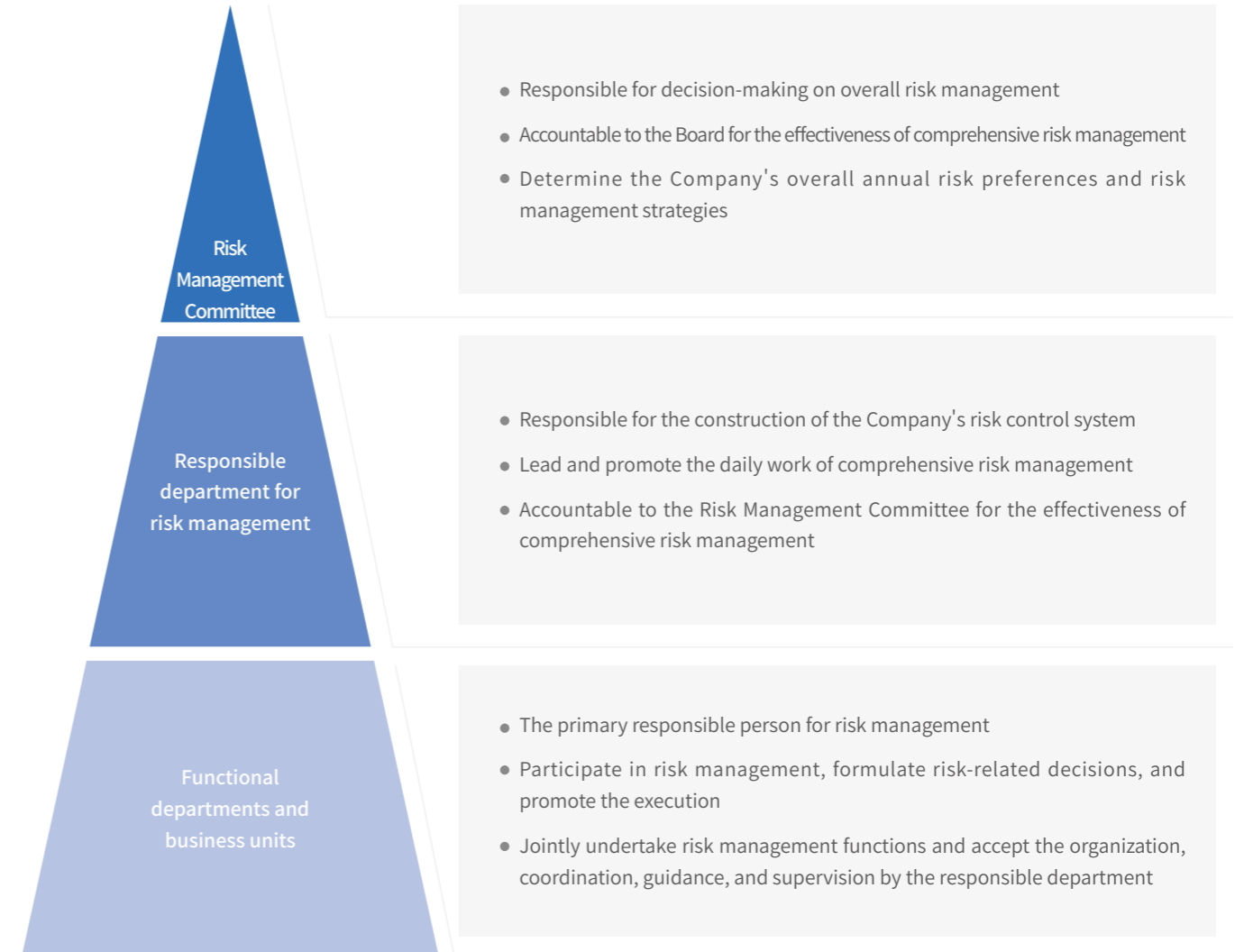
On-site Survey of Wuhu GCL SI by Investment Institutions

Compliance and Risk Management

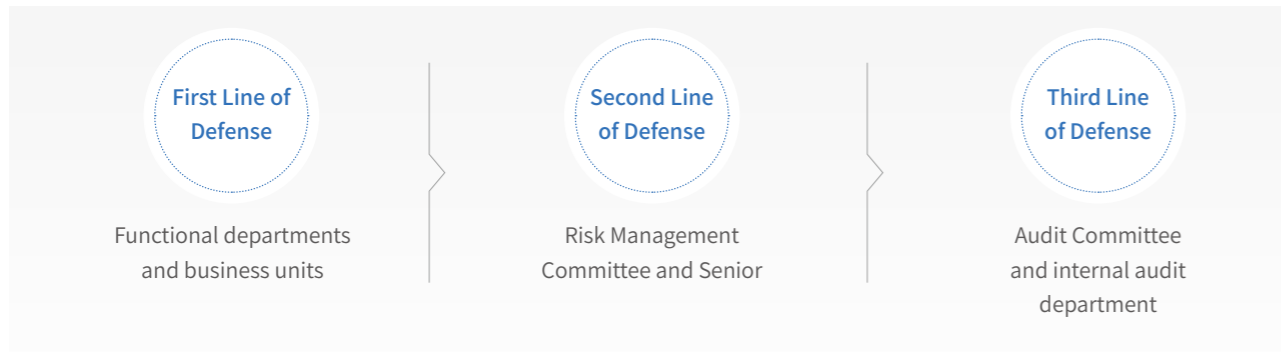
GCL SI has established an effective risk management system based on the Company's strategies and operation objectives. Additionally, the Company has formulated the Comprehensive Risk Management Standards, improved the operating mechanism, cultivated a compliance culture, and strengthened the risk management supervisory organization, to continuously strengthen risk control capabilities.

The Company has established a risk management organizational system characterized by corporate governance structure, responsible department for risk management, and risk management responsibilities shared by all functional departments. The Company has also built a "three lines of defense" system for risk management, integrating the risk management requirements into the Company's management and business processes to ensure effective risk prevention and control.

Risk Management Framework



"Three Lines of Defense" for GCL SI's Risk Management



In 2024

The Company organized

25 onsite risk management training sessions.



The Company's risk management is centered on the core concepts of "Early Involvement, Indicator Tracking, and Risk Communication". We are involved in key project reviews and process approvals in the early stage and proactively participate in core business activities to effectively prevent risks. We check quantitative risk indicators to dynamically monitor risks in key business processes, and flag risk timely. In 2024, to further enhance risk management efficiency and strengthen the Company's risk perception and response capabilities, GCL SI advanced the construction of a risk data platform and formulated a three-year implementation path for risk control digitalization. Through continuous risk identification and assessment, the Company revised and improved the risk library and indicators for listed companies to ensure that the risk management system keeps pace with the times. The Company completes a risk assessment report annually, laying a solid foundation for enhancing its risk management capabilities. Furthermore, risk management trainings and promotion across all employees is conducted to enhance risk management awareness and promote enterprise-wide risk control.



Case

Building a Comprehensive Risk Control Line of Defense through Risk and Compliance Awareness Training

GCL SI continuously strengthens its risk control system by integrating compliance culture cultivation into its core management agenda. In November 2024, the Legal Department conducted a thematic training session titled "Enhancing Compliance Awareness and Shaping a Compliance Culture" for all employees. This training systematically enhanced employees' ability to identify risks and ensured the in-depth integration of compliance requirements with business practices. The training effectively promoted the implementation of a culture of "proactive compliance and full participation," deepening the risk prevention awareness among all employees.



Thematic Training on "Enhancing Compliance Awareness and Shaping a Compliance Culture"

Anti-bribery and Corruption

Management System

In 2024

the Company carried out a total of

33 internal audits

including

2 business ethics audits and anti-corruption audits

identifying a total of

179 risk points with the rectification rate of

100%

GCL SI has established a robust risk management and internal control compliance system and adheres to integrity to resist any form of corruption. The Company conducts professional trainings and multiple reporting mechanisms to improve the risk awareness and compliance culture of all employees, establishing a robust foundation for the steady development of the Company amidst a complex and changing market environment.

GCL SI strictly complies with laws and regulations such as the *Criminal Law of the People's Republic of China* and the *Company Law of the People's Republic of China*. The Company adheres to the principles of clean business operations, upholds an honest and upright business philosophy, firmly resists corrupt practices, and is committed to creating a trustworthy, fair, and transparent business environment. The Company has established policies and standards such as the Anti-Corruption Policy, Anti-Bribery and Integrity Agreement, and Anti-Fraud and Reporting Management Standards, clearly adopting a "zero-tolerance" stance towards acts of corruption, bribery, and conflicts of interest.

In accordance with the Company Internal Audit Work System and Standard Guidelines, the Company regularly conducts various internal audits, including business ethics audits. In 2024, the Company carried out a total of 33 internal audits, among which there were 2 business ethics and anti-corruption audits. A total of 179 risk points were identified, and the rectification rate reached 100%.

GCL SI is committed to working with stakeholders, including customers, partners, and suppliers, to build a clean and healthy market environment. The Company explicitly stipulates that during bidding, tendering (or procurement, engineering) projects, and contract execution, all employees must strictly adhere to the relevant regulations on integrity and self-discipline. They are prohibited from soliciting or offering bribes, kickbacks, or gratuities, from providing or accepting any gifts, valuable items, or other direct and indirect personal benefits, and from disclosing or inquiring about commercial secrets in procurement projects.

In 2024, the Company did not experience any illegal cases resulting from fraud or corruption.

Cultural Promotion

The Company has established a comprehensive anti-corruption and business ethics training system, regularly conducting anti-corruption training for directors and all employees to promote the Company's culture of integrity, honesty, and clean business practices. Anti-corruption training is integrated into the existing employee promotion training programs, as well as the "GCL Eagle" and "GCL Elite" new joiner training camps, ensuring that both new and existing employees receive systematic training. For directors, supervisors, and senior management, the Company has specifically established an executive training camp, emphasizing the responsibilities and obligations of senior managers. The training content includes the dissemination of company policies and laws and regulations, and through the analysis of real corruption cases, it provides warning effects to prevent potential issues from becoming serious problems. This approach builds a strong foundation for integrity from the source, integrating a culture of integrity into the Company's day-to-day operations and management from top to bottom. During the Reporting Period, the Company achieved a 100% coverage rate for anti-corruption and business ethics training for directors and employees.

GCL SI Anti-corruption Training Performance in 2024

Coverage rate of anti-corruption training for directors

100%



Coverage rate of anti-corruption training for employees

100%



Anti-corruption training sessions for directors

16 Times



Anti-corruption training sessions for employees

25 Times



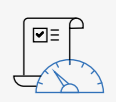
Anti-corruption training for directors

720 Minutes



Anti-corruption training for employees

1,020 Minutes



During the Reporting Period

GCL SI did not have any illegal cases resulting from corruption at the Company or employee level.

In external cooperation, the Company is determined to eliminate corruption in the procurement process, and actively promotes the integrity awareness among suppliers. The Company carries out anti-corruption trainings for suppliers during the bidding and tendering process, and signs the Anti-Commercial Bribery and Integrity Agreement with suppliers during the execution of contracts for procurement projects.

In addition, the Company holds regular integrity meetings to introduce suppliers to the Company's systems and policies related to integrity building, demonstrating the Company's strong commitment to integrity and honesty. Through these initiatives, we are dedicated to jointly creating a clean and law-abiding business environment and providing a safe and reliable cooperation platform for our partners.

Reporting Mechanism

To protect the legitimate interests of the Company and ensure independent, objective, and fair investigation and handling of violations, we encourage employees and other stakeholders to report any known or potential misconduct. The Company has established clear reporting and handling management processes, reporting channels and reward standards.

GCL SI has established a strict whistle-blower protection mechanism, requiring all departments to cooperate with each other in accordance with their respective responsibilities and fully protect the legitimate rights and interests of whistle-blowers. The Company strictly prohibits disclosing the information and reported contents of the whistle-blower to report the Report personnel and unit, and strictly prevents the leakage of reporting information and loss of whistle-blowing materials. Any person who illegally divulges the information of the whistle-blower or retaliates against the whistle-blower shall, once verified, be dismissed and never be employed. In 2024, the Company conducted a walkthrough test of reporting the Report channels and the handling process for reported incidents to ensure their continued effectiveness.

Reporting Channels



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

Anti-Unfair Competition

GCL SI strictly complies with laws and regulations that advocate fair and proper competition among business entities, such as the *Anti-Unfair Competition Law of the People's Republic of China*. The Company has formulated and publicly disclosed the Code of Business Conduct, respecting the principles of fair and proper business competition, eliminating any actions that restrict market competition, and ensuring that all commercial activities always meet industry standards and ethical norms.

Key Measures Against Monopoly and Unfair Competition by GCL SI



Strictly comply with relevant anti-monopoly and anti-unfair competition laws, regulations, and company policies.



Do not enter into monopoly or anti-competitive agreements with competitors.



Do not negotiate or conclude any agreements with competitors that affect market competition, such as fixing prices, dividing markets, jointly boycotting transactions, restricting production volumes, or hindering technological development.



Do not exchange sensitive business information with competitors, such as production costs, sales prices, customer lists, and future strategic plans.



Do not use one's dominant market position to exclude competitors, set unreasonable trading conditions, or force the bundling or tying sale of products and services.



Do not engage in discriminatory practices or impose restrictions on customers and suppliers, ensuring that all trading parties have fair access to market opportunities.



Do not fabricate or disseminate false or misleading information that damages the commercial reputation or product reputation of competitors.



During the Reporting Period —

GCL SI did not experience any litigation cases related to unfair competition.



Appendix

United Nations Global Compact

GCL SI joined the United Nations Global Compact in August 2023. We reaffirm our support for UN Global Compact and its ten principles. We conduct business in accordance with ten principles and meet our social obligations. At the same time, we are committed to achieving the UNSDGs and becoming a reliable long-term partner of the United Nations.

Area	Principle	Response
Human Rights	Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights	Labor Rights Protection Diversity, Equity and Inclusion Responsible Supply Chain
	Principle 2: Make sure that they are not complicit in human rights abuses	Labor Rights Protection Diversity, Equity and Inclusion Responsible Supply Chain
Labor	Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	Labor Rights Protection
	Principle 4: The elimination of all forms of forced and compulsory labor	Labor Rights Protection Responsible Supply Chain
	Principle 5: The effective abolition of child labor	Labor Rights Protection Responsible Supply Chain
	Principle 6: The elimination of discrimination in respect of employment and occupation	Labor Rights Protection Diversity, Equity and Inclusion Responsible Supply Chain

Area	Principle	Response
Environment	Principle 7: Businesses should support a precautionary approach to environmental challenges	GCL Carbon Chain 2.0 — An Industry First, Injecting New Momentum into Low-Carbon Development Responding to Climate Change Environmental Compliance Management Energy Management and Renewable Energy Utilization Water Stewardship Pollutant & Emissions Management Waste Management Circular Economy Ecosystem and Biodiversity Conservation
	Principle 8: Undertake initiatives to promote greater environmental responsibility	GCL Carbon Chain 2.0 — An Industry First, Injecting New Momentum into Low-Carbon Development Responding to Climate Change Environmental Compliance Management Energy Management and Renewable Energy Utilization Water Stewardship Pollutant & Emissions Management Waste Management Circular Economy Ecosystem and Biodiversity Conservation
	Principle 9: Encourage the development and diffusion of environmentally friendly technologies	GCL Carbon Chain 2.0 — An Industry First, Injecting New Momentum into Low-Carbon Development Responding to Climate Change Energy Management and Renewable Energy Utilization Water Stewardship Pollutant & Emissions Management Waste Management Circular Economy Responsible Supply Chain
Anti-Corruption	Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery	Anti-bribery and Corruption

Key Performance Table

Economic Performance

Disclosure item	Unit	2022	2023	2024
Economic Indicator Performance				
Revenue	RMB 10,000	835,360.92	1,596,761.03	1,623,978.68
Total assets	RMB 10,000	1,023,955.00	1,910,936.80	1,920,263.62
Net income attributable to shareholders	RMB 10,000	6,510.83	15,771.95	6,829.40
Basic earnings per share	RMB/share	0.011	0.027	0.012
R&D investment	RMB 10,000	8,095.98	14,640.12	21,021.69
Proportion of R&D investment to revenue	%	0.97	0.92	1.29
Number of R&D technical personnel	Persons	133	240	329
Proportion of the number of R&D technical personnel	%	3.78	3.83	5.42

Environmental Performance

Disclosure item	Unit	2022	2023	2024
Environment Compliance Management				
Environmental Investment	RMB 10,000	-	5,107	3,676
Percentage of employees who have received environmental training (internal or external) out of the total workforce across all locations:	%	-	100	100
Percentage of operational sites that have conducted environmental risk assessments out of all operational locations:	%	-	100	100
Main Energy Consumption¹³				
Natural gas	m ³	150,729	315,951	306,464
Production-based natural gas consumption intensity	m ³ /MW	-	16.94	9.07
Total electricity	kWh	150,893,426	473,387,732	935,976,903
-Self-generated renewable electricity	kWh	-	37,403,487	49,376,053
-Purchased municipal electricity	kWh	150,893,426	432,258,316	211,759,306
-Purchased renewable electricity	kWh	-	3,725,929	-
-Contracted purchased electricity	kWh	-	-	674,841,544
Renewable electricity in total electricity	thousand kWh	-	41,129	49,376
Percentage of renewable electricity in total electricity	%	-	8.69	5.28
Production-based electricity consumption intensity	MWh/MW	-	25.38	27.70
Steam ¹⁴	m ³	3,238	6,640	-
Gasoline	kg	-	59,974	40,858

Disclosure item	Unit	2022	2023	2024
GHG Management^{15,16}				
Scope 1 GHG emissions	tCO ₂ e	325.87	1,309.95	1,295.60
Scope 2 GHG emissions (location-based)	tCO ₂ e	87,669.92	250,992.40	475,748.90
Scope 2 GHG emissions (market-based)	tCO ₂ e	-	248,867.51	519,191.67
Total Scope1 and Scope 2 GHG emissions (location-based)	tCO ₂ e	87,995.79	252,302.35	477,044.50
Total Scope1 and Scope 2 GHG emissions (market-based)	tCO ₂ e/RMB 10,000	-	250,177.45	520,487.27
Revenue-based Scope 1 and Scope 2 GHG emission intensity (location-based)	tCO ₂ e/RMB 10,000	-	0.16	0.29
Revenue-based Scope 1 and Scope 2 GHG emission intensity (market-based)	tCO ₂ e/RMB 10,000	-	0.16	0.32
Production-based Scope 1 and Scope 2 GHG emission intensity (location-based)	tCO ₂ e/MW	-	13.53	14.12
Production-based Scope 1 and Scope 2 GHG emission intensity (market-based)	tCO ₂ e/MW	-	13.41	15.40
Scope 3 GHG emissions	tCO ₂ e	-	14,408,778	21,949,731.60
Water Consumption¹⁷				
Total water withdrawal ¹⁸	Tonnes	506,229	3,732,935	5,930,366
Total water consumption	Tonnes	267,280	1,647,653	1,054,675
Water recycling and reuse volume	Tonnes	-	202,569	884,961
Water consumption intensity	Tonnes/MW	-	88.35	31.21
Waste Water Discharge				
Total wastewater discharge volume	Tonnes	238,949	2,085,282	4,875,691
Total Suspended Solids (TSS) Discharge Volume	Tonnes	-	21.79	67.65
Chemical Oxygen Demand (COD) discharge volume	Tonnes	-	76.54	263.96
Ammonia-Nitrogen discharge volume	Tonnes	-	11.71	41.27
Phosphorus discharge volume	Tonnes	-	0.29	0.30
Fluoride Discharge volume	Tonnes	-	9.71	22.58
Waste Management				
Total solid waste generated	Tonnes	13,325.26	52,238.60	49,005.45

¹³ GCL SI 2024 energy management performance scope includes the Suzhou Management Center, three production bases (Hefei GCL SI, Wuhu GCL SI, Funing GCL SI), GCL Energy Storage, GCL Green Energy, and GCL SI offices in Beijing, Japan, and Munich.

¹⁴ GCL SI did not use steam in 2024.

¹⁵ GCL SI calculated 2024 greenhouse gas emissions data based on operational control during the Reporting Period. The scope includes the Suzhou Management Center, three production bases (Hefei GCL SI, Wuhu GCL SI, Funing GCL SI), GCL Energy Storage, GCL Green Energy, and GCL SI offices in Beijing, Japan, and Munich. Scope 1 and Scope 2 GHG emissions data for 2024 have been validated by a third-party organization.

¹⁶ Due to GCL SI's significant production capacity expansion in 2024, greenhouse gas emissions increased notably. The Company will continue to implement diversified emission reduction measures to achieve its targets.

¹⁷ GCL SI's 2024 water management performance scope includes three production bases: Hefei GCL SI, Wuhu GCL SI, and Funing GCL SI.

¹⁸ GCL SI's total water consumption in 2024 is calculated as total water withdrawal minus total wastewater discharge.

Disclosure item	Unit	2022	2023	2024
Total general industrial solid waste generated	Tonnes	13,465.74	52,218.69	48,830.28
General industrial solid waste recycling rate	%	-	99.93	99.74
Hazardous waste	Tonnes	15.90	19.91	175.17
Total amount of disposed hazardous waste ¹⁹	Tonnes	-	17.82	172.17
Waste Gas Discharge				
Total waste gas emissions	m ³	307,476,003.73	5,839,417,312.00	14,506,850,032.00
Nitrogen oxides (NOx) emissions	Tonnes	-	1.43	3.32
Sulfur oxides (SOx) emissions	Tonnes	-	0.25	0.80
Non-methane hydrocarbon (NMHC) emissions	Tonnes	-	5.26	12.57
Particulate matter emissions	Tonnes	-	2.46	0.20

¹⁹ The inconsistency between the total volume of hazardous waste generated and the total volume of disposal is attributable to the fact that some of the hazardous wastes were processed in early 2025 under a single disposal.

Social Performance

Disclosure item	Unit	2022	2023	2024	
Employment and Diversity Performance					
Number of employees	Persons	3,520	6,256	6,074	
By gender	Male	Persons	2,383	4,465	4,385
	Female	Persons	1,137	1,791	1,689
	Proportion of female employees	%	32.3	28.63	27.81
By employment category	Full-time employee	Persons	2,276	4,942	4,317
	Contractor	Persons	1,225	1,216	1,713
	Others (interns, rehired retirees)	Persons	19	98	44
By ethnicity	Ethnic minority employees	Persons	30	88	121
	Over 51 years old	Persons	65	75	61
By age	41-50 years old	Persons	566	816	794
	30-40 years old	Persons	1,736	2,885	2,685
	Under 30 years old	Persons	1,153	2,480	2,534

Disclosure item	Unit	2022	2023	2024	
By region	Number of employees working in the Chinese mainland	Persons	3,500	6,222	6,037
	Number of employees working in Hong Kong, Macau, Taiwan, and oversea regions	Persons	20	34	37
By education background	Bachelor degree or above	Persons	669	1,254	1,187
	Below bachelor degree	Persons	2,851	5,002	4,887
By employment category	Middle management employees	Persons	94	120	117
	Number of female employees in middle management	Persons	15	21	21
	Proportion of female employees in middle management	%	15.96	17.50	17.95
	Percentage of employees from minority groups and/or vulnerable groups (where the vulnerable groups refer to the disabled) in the middle-level management team	%	-	0.5	0.85
	Number of senior management employees	Persons	38	42	38
	Number of female employees in senior management	Persons	4	5	6
	Proportion of female employees in senior management	%	10.53	11.90	15.79
	Percentage of employees from minority groups and/or vulnerable groups (where the vulnerable groups refer to persons with disabilities) in the senior-level management team	%	-	0	5.26
	Proportion of female employees in STEM positions	%	-	-	10.89
	Proportion of female employees in middle management of STEM positions	%	-	-	2.94
Proportion of female employees in senior management of STEM positions	%	-	-	0	
Proportion of female employees in revenue-generating (sales) department	%	-	-	31.54	
Proportion of female employees in middle management of revenue-generating (sales) department	%	-	-	28.57	
Proportion of female employees in senior management of revenue-generating (sales) department	%	-	-	33.33	
Percentage of employees who have received training on diversity, discrimination, and/or harassment out of the total workforce across all company locations	%	-	100	100	

Disclosure item	Unit	2022	2023	2024
Employee Training Performance				
Total investment in employee training	RMB 10,000	-	550.11	760.00
Number of employees trained ²⁰	Persons	87,578	9,003	6,074
Total training hours	Hours	3,598	292,162	115,130
Average training hours per employee	Hours	37	47	19
By gender	Total training hours for male employees	Hours	2,598	226,623
	Average training hours per male employee	Hours/ Persons	-	51
	Total training hours for female employees	Hours	1,001	65,539
	Average training hours per female employee	Hours/ Persons	-	37
By employment category	Total training hours for non- management level	Hours	3,119	287,224
	Average training hours for non- management level	Hours/ Persons	-	47
	Total training hours for middle management level	Hours	299	4,430
	Average training hours for middle management level	Hours/ Persons	-	37
	Total training hours for senior management level	Hours	180	508
	Average training hours for senior management level	Hours/ Persons	-	12
Employee Rights and Interests Performance				
Labor contract signing rate	%	100	100	100
Percentage of employees covered by collective agreements	%	-	80	90.69
Retention rate of employees returning to work after maternity and paternity leave	%	91.5	83	92
Employee Compensation Performance				
Unadjusted Average Gender Pay Gap	%	-	25	27
Occupational Health and Safety				
Safety production investment	RMB 10,000	335.8	1,470.0	3,156.8
Total recordable incident rate (TRIR)	-	-	0.14	0.07
Number of work-related incidents ²¹	cases	-	5	5

²⁰ The total number of employees trained in 2022 was measured by the metric of total training participants. The statistical indicator for 2023 was measured by the metric of the total number of employees receiving training among active and former employees at the end of the year, and the statistical indicator for 2024 is the total number of employees receiving training among active employees at the end of the year.

²¹ Among these incidents, four employees were injured while performing equipment maintenance, and one employee was injured after falling on stairs. Moving forward, GCL SI will implement more comprehensive measures to ensure workplace safety and provide a solid safeguard for the health and safety of its employees.

Disclosure item	Unit	2022	2023	2024
Number of individuals with work-related injuries	Full-time employee	Persons	5	5
	Contractor	Persons	0	0
Number of work-related fatalities	Full-time employee	Persons	0	0
	Contractor	Persons	0	0
Days of absence due to work-related injuries	Full-time employee	Persons	330	330
	Contractor	Persons	0	0
Percentage of operational sites that have conducted employee health and safety risk assessments or hazard identification and risk assessments	%	-	100	100
Supply Chain Performance				
Total supplier registered	Quantity	-	95	146
By Region	Chinese Mainland	Quantity	-	146
	Overseas, Hong Kong SAR, Maca SAR, and Taiwan	Quantity	-	0
Percentage against total number of suppliers registered	Number of suppliers having signed the safety and environmental protection agreement	%	-	61
	Number of suppliers obtained to the ISO 14001 Environmental Management System Certification	%	-	81
	Number of suppliers obtained the ISO 9001 Quality Management System Certification	%	-	91
	Number of suppliers obtained the ISO 45001/OHSAS 18000 Occupational Health and Safety System Certification	%	-	78
	Number of product suppliers obtained the Product Carbon Footprint Certification	%	-	18
	Suppliers who have signed the Sustainable Procurement Charter/Code of Conduct	%	-	-
	Suppliers with contracts containing clauses on environmental, labor, and human rights requirements	%	-	-
	Suppliers who have undergone Corporate Social Responsibility (CSR) assessments (e.g., questionnaires)	%	-	-
	Suppliers who have undergone on-site CSR audits	%	-	-
	Suppliers who have undergone third-party CSR audits	%	-	-
Number of New Suppliers	Suppliers who have participated in corrective actions or capacity-building following audits/assessments	%	-	-
	Quantity	-	37	38

Disclosure item	Unit	2022	2023	2024
Number of suppliers having signed the safety and environmental protection agreement	%	-	-	76
Number of suppliers obtained to the ISO 14001 Environmental Management System Certification	%	-	92	74
Number of suppliers obtained the ISO 9001 Quality Management System Certification	%	-	95	97
Number of suppliers obtained the ISO 45001/OHSAS 18000 Occupational Health and Safety System Certification	%	-	81	74
Percentage against total number of new suppliers registered				
Number of product suppliers obtained the Product Carbon Footprint Certification	%	-	-	8
Suppliers who have signed the Sustainable Procurement Charter/Code of Conduct	%	-	-	82
Suppliers with contracts containing clauses on environmental, labor, and human rights requirements	%	-	-	58
Suppliers who have undergone Corporate Social Responsibility (CSR) assessments (e.g., questionnaires)	%	-	-	45
Suppliers who have undergone on-site CSR audits	%	-	-	76
Suppliers who have undergone third-party CSR audits	%	-	-	16
Suppliers who have participated in corrective actions or capacity-building following audits/assessments	%	-	-	89
Percentage of procurement staff who have received sustainable procurement training across all regions	%	-	100	100
Share of local procurement	%	-	-	100
Intellectual Property Management Performance				
Cumulative number of patents authorized	Items	445	542	656
Cumulative number of software copyrights held	Items	17	17	35
Cumulative number of invention patents	Items	-	5	97
Public Welfare/Community Relation				
Number of Employee Volunteer Services Conducted	Times	-	-	9
Employee Volunteer Service Participation (in Persons)	Persons	-	-	210
Total Duration of Employee Volunteer Services	Hours	-	-	400
Total Amount of Public Welfare Donations	RMB 10,000	-	-	85.64
Rural Revitalization support funding	RMB 10,000	-	-	53.24
Amount of Charitable Donation	RMB 10,000	-	-	32.40
Individuals impacted	Persons	-	-	3,237

Corporate Governance Performance

Disclosure item	Unit	2022	2023	2024
Corporate Governance Performance				
Number of Directors	Persons	9	9	9
Number of Independent Directors	Persons	3	3	3
Number of Female Directors	Persons	1	1	1
Anti-Bribery and Anti-Corruption Performance				
Training Coverage Rate for Directors on Anti-Corruption	%	-	100	100
Training Coverage Rate for Employees on Anti-Corruption	%	-	100	100
Number of Anti-Corruption Training Sessions for Directors	Times	-	26	16
Number of Anti-Corruption Training Sessions for Employees	Times	-	26	25
Total Duration of Anti-Corruption Training for Directors	Minutes	-	780	720
Total Duration of Anti-Corruption Training for Employees	Minutes	-	780	1,020
Number of Anti-Corruption Audits	Times	-	5	2
Number of Confirmed Corruption Incidents	Cases	-	0	0
Number of Reports Generated by Reporting Procedures	Cases	-	0	0
Percentage of Sites that Have Conducted Internal Assessments or Reviews on Specific Business Ethics Issues	%	-	100	100

Index of GRI 2021 Standards

Use Instruction	GCL SI reported the information cited in this GRI content index during the period from January 1, 2024, to December 31, 2024, with reference to the GRI Standards.
Standard Citation	GRI 1: Foundation 2021

Disclosure	Title	Chapter Index
2-1	Organizational details	About GCL SI
2-2	Entities included in the organization's sustainability reporting	About the Report
2-3	Reporting period, frequency and contact point	About the Report
2-4	Restatements of information	About the Report
Activities and workers		
2-6	Activities, value chain and other business relationships	About GCL SI
2-7	Employees	Labor Rights Protection Diversity, Equity and Inclusion Employee Training and Development Occupational Health and Safety
2-8	Workers who are not employees	Responsible Supply Chain Community Contribution Rural Revitalization Industrial Cooperation and Exchange
Governance		
2-9	Governance structure and composition	Sustainability Governance Corporate Governance
2-10	Nomination and selection of the highest governance body	Sustainability Governance Corporate Governance
2-11	Chair of the highest governance body	Sustainability Governance Corporate Governance
2-12	Role of the highest governance body in overseeing the management of impacts	Sustainability Governance Corporate Governance
2-13	Delegation of responsibility for managing impacts	Sustainability Governance Corporate Governance
2-14	Role of the highest governance body in sustainability reporting	Sustainability Governance
2-15	Conflicts of interest	Anti-bribery and Corruption
2-16	Communication of critical concerns	Sustainability Strategy Sustainability Governance
2-17	Collective knowledge of the highest governance body	Sustainability Strategy Sustainability Governance

Disclosure	Title	Chapter Index
2-18	Evaluation of the performance of the highest governance body	Sustainability Governance Board of Directors Statement
2-19	Remuneration policies	Labor Rights Protection
2-20	Process to determine remuneration	Labor Rights Protection
Strategy, policies and practices		
2-22	Statement on sustainable development strategy	Sustainability Strategy
2-23	Policy commitments	Sustainability Strategy
2-24	Embedding policy commitments	Sustainability Strategy
2-25	Processes to remediate negative impacts	Sustainability Governance Anti-bribery and Corruption
2-26	Mechanisms for seeking advice and raising concerns	Sustainability Governance Stakeholder Communication
2-27	Compliance with laws and regulations	See chapters in this Report
2-28	Membership associations	Sustainability Strategy Industrial Cooperation and Exchange
Stakeholder Engagement		
2-29	Approach to stakeholder engagement	Stakeholder Communication
2-30	Collective bargaining agreements	Labor Rights Protection
3-1	Process to determine material topics	Stakeholder Communication
3-2	List of material topics	Stakeholder Communication
3-3	Management of material topics	Stakeholder Communication
GRI 201 Economic Performance		
3-3	Management of material topics	2024 Sustainable Performance Key Performance Table
201-1	Direct economic value generated and distributed	2024 Sustainable Performance Key Performance Table
201-2	Financial implications and other risks and opportunities due to climate change	Responding to Climate Change
201-3	Defined benefit plan obligations and other retirement plans	Labor Rights Protection

Disclosure	Title	Chapter Index
201-4	Financial assistance received from government	Company annual report
GRI 204 Procurement Practices		
3-3	Management of material topics	Responsible Supply Chain
GRI 205 Anti-corruption		
3-3	Management of material topics	Anti-bribery and Corruption
205-1	Operations assessed for risks related to corruption	Anti-bribery and Corruption
205-2	Communication and training about anti-corruption policies and procedures	Anti-bribery and Corruption
205-3	Confirmed incidents of corruption and actions taken	Anti-bribery and Corruption
GRI 302 Energy		
3-3	Management of material topics	Energy Management and Renewable Energy Utilization
302-1	Energy consumption within the organization	Energy Management and Renewable Energy Utilization
302-2	Energy consumption outside of the organization	Energy Management and Renewable Energy Utilization
302-3	Energy intensity	Energy Management and Renewable Energy Utilization
302-4	Reduction of energy consumption	Energy Management and Renewable Energy Utilization
302-5	Reductions in energy requirements of products and services	Energy Management and Renewable Energy Utilization
GRI 303 Water and Effluents		
3-3	Management of material topics	Water Stewardship Pollutant & Emissions Management
303-1	Interactions with water as a shared resource	Water Stewardship Pollutant & Emissions Management
303-2	Management of water discharge-related impacts	Water Stewardship Pollutant & Emissions Management

Disclosure	Title	Chapter Index
303-3	Water withdrawal	Water Stewardship
303-4	Water discharge	Pollutant & Emissions Management
303-5	Water consumption	Water Stewardship
GRI 304 Biodiversity		
3-3	Management of material topics	Ecosystem and Biodiversity Conservation
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	N/A
304-2	Significant impacts of activities, products, and services on biodiversity	Ecosystem and Biodiversity Conservation
304-3	Habitats protected or restored	N/A
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	N/A
GRI 305 Emissions		
3-3	Management of material topics	Responding to Climate Change Pollutant & Emissions Management
305-1	Management of material topics Direct (Scope 1) GHG emissions	Responding to Climate Change
305-2	Energy indirect (Scope 2) GHG emissions	Responding to Climate Change
305-3	Other indirect (Scope 3) GHG emissions	Responding to Climate Change
305-4	GHG emissions intensity	Responding to Climate Change
305-5	Reduction of GHG emissions	Responding to Climate Change
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant gas emissions.	Pollutant & Emissions Management
GRI 306 Waste		
3-3	Management of material topics	Waste Management
306-1	Waste generation and significant waste-related impacts	Waste Management

Disclosure	Title	Chapter Index
306-2	Management of significant waste-related impacts	Waste Management
306-3	Waste generated	Waste Management
306-4	Waste diverted from disposal	Waste Management
306-5	Waste directed to disposal	Waste Management
GRI 308 Supplier Environmental Assessment		
3-3	Management of material topics	Responsible Supply Chain
308-1	New suppliers that were screened using environmental criteria	Responsible Supply Chain
308-2	Negative environmental impacts in the supply chain and actions taken	Responsible Supply Chain
GRI 401 Employment		
3-3	Management of material topics	Labor Rights Protection
401-1	New employee hires and employee turnover	Labor Rights Protection Key Performance Table
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Labor Rights Protection
GRI 403 Occupational Health and Safety		
3-3	Management of material topics	Occupational Health and Safety
403-1	Occupational health and safety management system	Occupational Health and Safety
403-2	Hazard identification, risk assessment, and incident investigation	Occupational Health and Safety
403-3	Occupational health services	Occupational Health and Safety
403-4	Worker participation, consultation, and communication on occupational health and safety	Occupational Health and Safety
403-5	Worker training on occupational health and safety	Occupational Health and Safety
403-6	Promotion of worker health	Occupational Health and Safety
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Occupational Health and Safety
403-8	Workers covered by an occupational health and safety management system	Occupational Health and Safety

Disclosure	Title	Chapter Index
403-9	Work-related injuries	Occupational Health and Safety
403-10	Work-related ill health	Occupational Health and Safety
GRI 404 Training and Education		
3-3	Management of material topics	Employee Training and Development
404-1	Average hours of training per year per employee	Employee Training and Development
404-2	Programs for upgrading employee skills and transition assistance programs	Employee Training and Development
404-3	Percentage of employees receiving regular performance and career development reviews	Employee Training and Development
GRI 405 Diversity and Equal Opportunity		
3-3	Management of material topics	Diversity, Equity and Inclusion
405-1	Diversity of governance bodies and employees	Diversity, Equity and Inclusion
GRI 406 Non-discrimination		
3-3	Management of material topics	Diversity, Equity and Inclusion
406-1	Incidents of discrimination and corrective actions taken	Diversity, Equity and Inclusion
GRI 407 Freedom of Association and Collective Bargaining		
3-3	Management of material topics	Labor Rights Protection
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Not involved in operations and suppliers in which the right to freedom of association and collective bargaining may be at risk
GRI 408 Child Labor		
3-3	Management of material topics	Labor Rights Protection
408-1	Operations and suppliers at significant risk for incidents of child labor	Not involved in operations and suppliers at significant risk for incidents of child labor
GRI 409 Forced or Compulsory Labor		
3-3	Management of material topics	Labor Rights Protection
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Not involved in operations and suppliers at significant risk for incidents of forced or compulsory labor

Disclosure	Title	Chapter Index
GRI 413 Local Communities		
3-3	Management of material topics	Community Contribution
413-1	Operations with local community engagement, impact assessments, and development programs	Community Contribution
413-2	Operations with significant actual and potential negative impacts on local communities	Not involved in operations with significant actual and potential negative impacts on local communities
GRI 414 Supplier Social Assessment		
3-3	Management of material topics	Responsible Supply Chain
414-1	New suppliers that were screened using social criteria	Responsible Supply Chain
414-2	Negative social impacts in the supply chain and actions taken	Responsible Supply Chain
GRI 416 Customer Health and Safety		
3-3	Management of material topics	Product Safety and Quality Customer Service
416-1	Assessment of the health and safety impacts of product and service categories	Product Safety and Quality Customer Service
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Product Safety and Quality Customer Service
GRI 417 Marketing and Labeling		
3-3	Management of material topics	Customer Service
417-1	Requirements for product and service information and labeling	Customer Service
417-2	Incidents of non-compliance concerning product and service information and labeling	No incidents of non-compliance concerning product and service information and labelling occurred
417-3	Incidents of non-compliance concerning marketing communications	No marketing-related violations have occurred
GRI 418 Customer Privacy		
3-3	Management of material topics	Information Security and Privacy Protection
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Information Security and Privacy Protection

SZSE Indicator Index Table

Dimension	No.	Topic	Clause	Report Response
Environment	1	Responding to Climate Change	Article 21 - 28	GCL Carbon Chain 2.0— An Industry First, Injecting New Momentum into Low-Carbon Development Responding to Climate Change
	2	Pollutant Emission	Article 30	Pollutant & Emissions Management
	3	Waste Management	Article 31	Waste Management
	4	Ecosystem and Biodiversity Conservation	Article 32	Environmental Compliance Management
	5	Environmental Compliance Management	Article 33	Environmental Compliance Management
	6	Energy Utilization	Article 35	Energy Management and Renewable Energy Utilization
	7	Water Stewardship	Article 36	Water Stewardship
	8	7 Circular Economy	Article 37	Circular Economy
Social	9	Rural Revitalization	Article 39	Rural Revitalization
	10	Community Contribution	Article 40	Community Contribution
	11	Innovation-driven Development	Article 42	Innovation-Driven
	12	Technology Ethics	Article 43	Innovation-Driven
	13	Supply Chain Security	Article 45	Responsible Supply Chain
	14	Equal Treatment of SMEs	Article 46	Responsible Supply Chain
	15	Product and Service Safety and Quality	Article 47	Product Safety and Quality
	16	Data Security and Customer Privacy Protection	Article 48	Information Security and Privacy Protection
	17	Employee	Article 50	Labor Rights Protection Diversity, Equity and Inclusion Employee Training and Development Occupational Health and Safety
Sustainability-Related Governance	18	Due Diligence	Article 52	Sustainability Governance
	19	Stakeholder Communication	Article 53	Stakeholder Communication
	20	Anti-Bribery and Anti-Corruption	Article 55	Anti-bribery and Corruption
	21	Anti-Unfair Competition	Article 56	Anti-Unfair Competition

Assurance Statement



Independent Assurance Statement

Introduction

TÜV Rheinland (Shanghai) Co., Ltd., a member of TÜV Rheinland Group (hereinafter "TÜV Rheinland" or "We"), was entrusted by GCL System Integration Technology Co., Ltd. (hereinafter "GCL SI" or "the Company") to conduct an independent third-party assurance of 2024 Sustainability Report of GCL SI (hereinafter, "Report"). The report disclosed sustainability information for the fiscal year 2024 (January 1, 2024 to December 31, 2024) of GCL SI.

Responsibilities

GCL SI is not only responsible for the preparation of sustainability report and the collection and submission of sustainability information in accordance with applicable reporting standards but also has the obligation to implement and maintain effective internal control of information and data to support the report compilation process.

TÜV Rheinland is a global service provider that provides CSR and sustainability services in more than 65 countries, with experienced and technical expertise in the areas of environment, CSR, sustainability and stakeholder engagement. TÜV Rheinland Assurance team follows the TÜV Rheinland Global Business Ethics Compliance Policy and Procedures, covering the principles of integrity compliance and conflict of interest. Therefore, our assurance services are based on the principles of independence and impartiality, and we do not participate in the writing and preparation of the report of GCL SI. It is the duty of TÜV Rheinland to carry out independent assurance in accordance with the assurance agreement and the agreed scope of assurance work, and to make independent and impartial judgments on sustainability reporting.

Assurance Standard

TÜV Rheinland undertook assurance work for the sustainability information disclosed in sustainability report of GCL SI in accordance with the AccountAbility AA1000 Assurance Standard v3 (AA1000AS v3), Type 1 and Moderate level.

Assurance Objectives

The purpose of the assurance was to provide management of GCL SI and stakeholders concerned with the company's sustainability information and performance to provide an independent view of the assurance, including assessment of whether the content of the report adhered to the AA1000AP (2018) Assurance Principles (including inclusivity, materiality, responsiveness and impact), and verification of sustainability information disclosure.

Assurance Criteria

The following assessment criteria were used in undertaking the work:

- Self-Regulatory Guidelines No. 17 for Listed Companies - Sustainability Report (Trial) of the Shenzhen Stock Exchange
- GRI Sustainability Reporting Standards (GRI Standards) of Global Sustainability Standards Board (GSSB)
- The United Nations Sustainable Development Goals (UN SDGs)
- Adherence to the AA1000 AP AccountAbility Principles, i.e., *Inclusivity, Materiality, Responsiveness, and Impact*

Methodology

Our assurance activities and procedures include:

- Inquiring management and those personnel responsible for collecting and aggregating sustainability performance information to understand the management processes, systems, and controls for sustainability performance information.

- Reviewing and assessing the availability, adequacy, and relevance of performance information based on sampling principles.
- Applying analysis program to assess the accuracy of the information available for performance data.
- Collecting and examining the supporting evidence of available performance information to assess the extent to which the relevant evidence and information related to the scope of the assurance in the sustainability report supports and adheres to the AA1000AP AccountAbility Principles.
- Reporting assurance observations or recommendations to give the company's management an opportunity to correct errors before the assurance process is completed.

Limitations

TÜV Rheinland planned and executed the verification in accordance with the scope of the assurance agreed upon in order to obtain all the information, evidence and necessary explanations to provide the basis for the conclusion of the assurance in accordance with the moderate level of AA1000AS v3.

The information and performance data relating to the assurance is limited to the disclosure of the contents of this report. Our assurance work did not include financial report and its financial data, as well as other information not related to the topic of sustainability.

Conclusions

Based on the above assurance procedures and methodology performed and the evidence obtained, we conclude that there are no instances or information that would be contrary to the following statements:

- 2024 Sustainability Report of GCL SI and its contents are in adherence to the AA1000AP AccountAbility Principles and align with the information disclosure requirements of the GRI Standards.
- GCL SI has implemented processes to collect and aggregate performance information and data related to materiality issues within the reporting boundary, and the company's management practices have also shown that the company conducted double materiality analysis and evaluation of issues.
- The sustainability-related information and performance disclosed in the report have been assessed and supported by documentary evidence, which truly reflected management practices of GCL SI in the field of sustainable development.

TÜV Rheinland shall not bear any liability or responsibility to a third party for perception and decision on GCL SI based on this Assurance Statement.

Adherence to the AA1000AP AccountAbility Principles

Inclusivity

The key stakeholders identified by GCL SI included employees, customers, suppliers, shareholders and investors, as well as governments and regulators. Evidence showed that interaction of GCL SI with these stakeholders was a regular occurrence in its business activities. In 2024, the company has also conducted internal and external stakeholder surveys, covering topics such as corporate governance, circular economy, compliance and risk management, response to climate change, and responsible supply chains. The results of the survey and analysis provided a reference for the evaluation of issues of double materiality.

Materiality

Evidence indicated that in 2024, GCL SI has implemented a double materiality assessment process. Based on the analysis of new guidelines for benchmarking exchanges, sustainability standards and frameworks, international ratings, peer benchmarks, ESG trends and industry developments, the company has constructed a list of sustainability issues and considered the views of stakeholders to evaluate and prioritise the importance of these issues from two dimensions: impact materiality and financial materiality, including the financial importance of the company's management assessment of the relevant issues and the opinion of external experts. The materiality matrix showed the key issues for the year (e.g., product safety and quality, response to climate change, R&D and innovation, energy management and renewable energy use, responsible supply chains, etc.). The Strategy and Sustainable Development Committee reviewed and confirmed the results of the materiality assessment.



Responsiveness

Communication channels between GCL SI and its key stakeholders are diverse. Evidence indicated that in 2024, the company's interaction with these stakeholder groups mainly included employee training, customer service and satisfaction surveys, supplier evaluation and empowerment, investor interaction platform, public information disclosure, complaints and reports, and engagement of standards setting.

The report disclosed data on key performance indicators such as energy consumption, greenhouse gas emissions (including Scope 1, 2, and 3 emissions), water use, pollutant and waste management, employee employment and diversity, occupational health and safety, supply chain, etc., and these performance figures are historically comparable. The report also disclosed commitments and targets related to materiality issues to respond positively to key stakeholder concerns.

Impact

Evidence showed that in 2024, GCL SI focused on and monitored risks in the areas of water management, employee training and development, employee health and safety, anti-bribery and anti-corruption, responsible supply chain, response to climate change, and energy management. The company implemented ESG risk management (including climate risks), and combined operation management, compliance management processes, and internal control systems to assess and control critical risks related to their own operations and upstream and downstream of the value chain and implemented a closed-loop rectification. The company formulated a biodiversity conservation strategy and promoted the management of conflict minerals in the supply chain.

The report disclosed a climate risk matrix (including risk types, risk factors, potential financial impacts, response measures, etc.), as well as the company's emission reduction targets and greenhouse gas reduction roadmap. Evidence indicated that in 2024, GCL SI has taken corresponding measures (such as energy improvement, energy optimization, procurement of renewable energy, photovoltaic desertification control projects) to reduce the impact on the company's operations. We recommend that GCL SI continue to conduct impact analysis on other sustainability materiality issues and measure and manage these impacts.



Daniel Pan
 Technical Manager of Corporate Sustainability Services
 TÜV Rheinland (Shanghai) Co., Ltd
 Shanghai, China, April 23, 2025





GREENHOUSE GAS VERIFICATION STATEMENT

This verification statement is aimed at:

<p>Applicant GCL System Integration Technology Co., Ltd. Address: Jianghai Economic Park, Nanqiao Town, Fengxian District, Shanghai</p> <p>Verified Organization GCL System Integration Technology Co., Ltd. Address: Jianghai Economic Park, Nanqiao Town, Fengxian District, Shanghai</p> <p>Organizational boundaries: Multiple addresses are involved. See Appendix A for a detailed list of organizational boundaries</p>	<p>Certificate Number: 25GV20004R0L</p> <p>Verification Report Number: LVG-SH-GHG-V-2025004</p> <p>This statement shall be used in conjunction with the Greenhouse Gas Verification Report issued by Leverage Limited.</p> <p>Date of issue: 2025-04-17</p>
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Leverage Limited checked the GHG inventory of GCL System Integration Technology Co., Ltd. in accordance with ISO14064-3:2019 and confirmed that the quantification of GHG emissions and removal of GCL System Integration Technology Co., Ltd. meets the relevant requirements of ISO14064-1:2018.

GCL System Integration Technology Co., Ltd. greenhouse gas emissions during the reporting period from January 1, 2024 to December 31, 2024 were 477044.50 tCO₂e. No material deviation was found in emissions calculations, which met the agreed level of reasonable assurance.

Detailed information are as follows :

Greenhouse Gas Categories	Greenhouse Gas Emissions	Unit
Category 1: Direct greenhouse gas emissions	1295.60	tCO ₂ e
Category 2: Indirect greenhouse gas emissions from imported energy	475748.90	tCO ₂ e
Total emissions	477044.50	tCO₂e

Lack of fulfillment of the conditions in Certification Agreement may render it invalid. For validation, please go visit: <https://www.leverageimltd.com>




Authorized by:



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Room 402-A, 402-B, 402-C Building No. 2, PLM Centre, No. 132R, Hengnan Road, Minhang District, Shanghai, China
Website: <https://www.leverageimltd.com>



Verification method

LVG employs a risk-based methodology in its verification process. The verification team conducts a comprehensive evaluation of the strategic analysis outcomes derived from verification activities, audit criteria, greenhouse gas (GHG) information control mechanisms, the reliability of activity-level data, and the identification of potential errors, omissions, and misrepresentations, along with their sources and severity, in relation to the verification activities.

The primary objective is to understand and manage the risks associated with reported GHG emissions data, implementing controls to mitigate these risks effectively. Our verification process includes a thorough assessment of evidence pertaining to emissions and the accuracy of an organization's GHG emissions disclosures.

Appendix A-List of organizational boundaries

No.	Organization name	Organizational registered address
1	Hefei GCL System Integration New Energy Technology Co.,Ltd.	Southeast Corner of Intersection of Sidingshan Road and Ruquan Road, Hefei Circular Economy Demonstration Park, Feidong County, Hefei City, Anhui Province, P.R. China
2	Funing GCL System Integration Technology Co.,Ltd.	No. 888 (A) Hongkong Road, Funing Economic Development Zone, Yancheng City
3	Wuhu GCL System Integration New Energy Technology Co.,Ltd.	18 Jijuzi Avenue, Anhui Xinwu Economic Development Zone, Wanzhi District, Wuhu City, Anhui, China
4	GCL Solar photovoltaic / thermal (PV/T) technology (Nantong) Co., Ltd	No. 372 Fuhai Road, Tongzhou Bay River Sea Joint Development Demonstration Zone, Jiangsu Province
5	GCL System Integration Technology Co., Ltd.	GCL Energy Center, No. 28 Xinqing Road, Suzhou Industrial Park, Jiangsu, China
6	GCL Energy Storage Technology (Suzhou) Co., Ltd.	9F, Building A, No. 68 Fujingtian Road, Suzhou Industrial Park, Jiangsu, China
7	GCL Green Energy System Technology Co.,Ltd.	9F, Building A, No. 68 Fujingtian Road, Suzhou Industrial Park, Jiangsu, China
8	Suzhou GCL System Integrated Technology Industrial Application Research Institute Co., Ltd	GCL Energy Center, No. 28 Xinqing Road, Suzhou Industrial Park, Jiangsu, China
9	GCL Guoxin Financial Consulting Co., Ltd	GCL Energy Center, No. 28 Xinqing Road, Suzhou Industrial Park, Jiangsu, China
10	GCL SOLAR JAPAN CO., LTD.	Level1,Yusen Building,2-3-2 Marunouchi Chiyoda-ku, Tokyo 100 0005,Japan
11	GCL System Integration Technology GmbH	Leopoldstr.8,80802 Munich, Germany

Feedback

Dear Reader:

Thank you for taking the time to read the 2024 Annual Sustainability Report of GCL SI Technology Co., Ltd. In our commitment to providing you and other stakeholders with more specialized and valuable information on corporate sustainability, we kindly request your assistance in completing the relevant questions within the feedback form. Your input will be instrumental in guiding us towards further enhancing our sustainability management practices 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. Your overall evaluation of the degree of information disclosure in the Report:
 1 2 3 4 5
7. Your overall evaluation of the quality of the language presented in the Report:
 1 2 3 4 5
8. Your overall evaluation of the design style of the Report:
 1 2 3 4 5

9. Which issues in the Report are you most interested in? _____
 Name: _____ Company: _____
 Telephone: _____ Title: _____
 10. Do you have any other comments or suggestions on the Report?
 E-mail: _____ Fax number: _____



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Email: gclsizqb@gclsi.com

Website: www.gclsi.com