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## **About This Report**

This is the first annual Environmental. Social and Governance (ESG) Report issued by CIG Shanghai Co., Ltd. (hereinafter referred to as "CIG", "the Company" or "we") to its stakeholders. The report provides a comprehensive disclosure of the Company's ESG practices and performance in the fields of ESG and other responsibilities in 2024, with the objective of facilitating effective communication with stakeholders and systematically respond to their expectations and requirements.

## **Reporting Period**

This report covers the period from January 1, 2024 to December 31, 2024. To enhance the comparability and forward-looking nature of the report, certain content may be extended to prior or subsequent periods where deemed appropriate.

## **Preparation Basis**

This report has been prepared with reference to Guidelines No. 14 of the Shanghai Stock Exchange for Self-Regulation of Listed Companies—Sustainability Report (Trial) and the Global Reporting Initiative (GRI) Standards. Additionally, it incorporates relevant provisions from Guide No. 4 of the Shanghai Stock Exchange for Self-Regulation of Listed Companies— Compilation of Sustainability Reports, the Hong Kong Stock Exchange (HKEX) Environmental, Social and Governance Reporting Guide, SDG Compass—The Guide for Business Action on the SDGs, the Guidelines on Sustainability Reporting for Public Companies of the China Association for Public Companies (CAPCO), among other standards and guidelines.

## **Terminology**

Terminology					
"CIG", "the Company" or "we"	<b>&gt;&gt;</b>	CIG Shanghai Co., Ltd.			
SSE Guidelines	<b>&gt;&gt;</b>	Guidelines No. 14 of the Shanghai Stock Exchange for Self-Regulation of Listed Companies—Sustainability Report (Trial)			
RMB, RMB 10,000, RMB 100 million	<b>»</b>	Renminbi (yuan), Renminbi 10,000 yuan, Renminbi 100 million yuan			
Reporting Period	<b>»</b>	From January 1, 2024 to December 31, 2024			

## **Data Sources**

The data and information presented in this report are sourced from the Company's operational data, publicly available government data, annual financial statements, internal statistical statements, third-party questionnaires, third-party interviews, etc. All financial data are denominated in RMB. In case of any discrepancies between this report and the Company's financial statements, the financial statements shall prevail.

## **Report Accessibility**

The electronic version of this report is available on the Company's official website (www.cigtech.com) and the Shanghai Stock Exchange website (www.sse.com.cn). For any inquiries or suggestions regarding this report, please contact us via email at investor@cigtech.com or by phone at +86 21-60904272. This report is published in both Chinese and English. In the event of any discrepancies or inconsistencies between the two versions due to language differences, the Chinese version shall prevail.



Message from

About CIG Standardizing Corporate Governance through Prudent **Ensuring Service Quality** with Premium Products

Building a Thriving Workforce with a People-Oriented Approach Honoring Our Responsibility to Give Back to Society

Building a Green Homeland by Promoting Ecological Development

## Message from the Chairman

Dear Shareholders, Partners, and Employees,

Greetings to you all!

In 2024, with technological innovation as our core driving force, CIG focused on Al-powered network solutions, deepened our capabilities in high-speed optical communication modules, Al connectivity, and intelligent terminal devices, and promoted independent R&D and vertical integration. Through these endeavors, we delivered high-value products and services to global customers and worked closely with our partners to build an open and sustainable global ecosystem. We also made significant strides in the areas of Environmental, Social and Governance (ESG). These achievements would not have been possible without the dedication of each employee and the unwavering support and trust of our partners. I would like to express my sincere gratitude to all of you.

On the environmental front, we have consistently adhered to the principles of green development and have proactively taken action to combat climate change. We have partnered with qualified third-party organizations to conduct greenhouse gas inventories and established a Strategy and ESG Leadership Group to define and advance our carbon reduction goals. Additionally, our Strategy and ESG Working Group has developed and implemented a series of energy-saving initiatives, including optimizing warehouse lighting, upgrading air compressors, and improving the humidification systems in our SMT workshops. These measures have significantly reduced both energy consumption and carbon emissions while also lowering operational costs. In terms of pollution control, we have rigorously complied with environmental regulations to ensure that emissions of exhaust gases, wastewater, solid waste, and noise are within permissible limits, achieving a 100% compliance rate across all pollutant monitoring indicators. Furthermore, we have continuously strengthened our water resource management practices and adopted recyclable packaging materials, aiming to integrate green development principles into product design and achieve a winwin outcome for both environmental and economic benefits.

Social responsibility is fundamental to our corporate development. Upholding a customer-centric approach, we have established a rapid response mechanism to ensure timely resolution of customer feedback. We have also taken an active role in driving industry progress. In 2024, we participated in multiple industry events to stay abreast of emerging trends while showcasing our cutting-edge technologies and products, thereby contributing our share to industry advancements. In supplier management and support, we have established a comprehensive supplier management system and digitized the procurement process via our online supplier platform. With the help of the platform, we have significantly enhanced our procurement efficiency. Moreover, we have provided training and support to help suppliers strengthen their capabilities. In 2024, we signed ESG-inclusive agreements with all suppliers to ensure a sustainable supply chain. Additionally, we have offered a positive work environment and diverse career development opportunities to improve the well-being of our employees. In corporate philanthropy, we have actively fulfilled our social responsibilities as a corporate citizen. We have organized the "Warm Hearts on Campus, Donations with Love" charity campaign for nine consecutive years, donating supplies to schools in underprivileged mountainous areas in Gansu, Sichuan, Guangxi, and beyond. This initiative has significantly improved their educational conditions while demonstrating our dedication to social welfare.

Corporate governance underpins our steady development. To this end, we have established a sound corporate governance system to ensure standardized and efficient operations, as well as scientific and transparent decision-making by the Shareholders' Meeting, the Board of Directors, and the Board of Supervisors. Recognizing ESG governance as our key priority, we have incorporated it deeply into our corporate strategy and established a three-tier, topdown ESG governance framework and a comprehensive

set of internal policies, thereby ensuring deep alignment between ESG goals and business operations. In terms of risk management and internal control, we have established a three-line defense mechanism to reinforce tax compliance measures and proactively manage various ESG-related risks. Furthermore, we have developed the Code of Business Ethics for Employees and other regulatory documents, accompanied by online training programs, with a view to fostering a culture of integrity and establishing a positive corporate image.

Reflecting on 2024, we have made steady strides in our ESG journey while recognizing that there is always room for improvement. Looking ahead, CIG will stay committed to pragmatic innovation, strengthen efforts in technology R&D, product quality, and customer service, and further integrate ESG principles into our practices. With these efforts, we will contribute more to the sustainable development of the environment, society, and business. I sincerely look forward to working alongside all of you to create a better future together.

Thank you all!

Chairman of CIG **Gerald G Wong** 

# **About CIG**

# **Company Profile**

CIG Shanghai Co., Ltd. (CIG) is a global enterprise serving the international ICT industry, with R&D and sales centers strategically positioned in its subsidiaries across the United States, Japan, and Europe. Backed by strong R&D strength and cutting-edge intelligent manufacturing capabilities, CIG has evolved into a high-tech enterprise recognized for its exceptional R&D capabilities, large-scale production capacity, and well-established brand reputation. CIG offers diverse collaboration models tailored to the global ICT ecosystem. Our core businesses span the R&D, production, and sales of telecom, data communications, terminal devices for enterprise and home networks-including telecom broadband, wireless networks, small cells, edge computing, and industrial IoT products—as well as high-speed optical modules. Our products have been widely deployed in the networks of leading global telecom operators and the data centers of major Internet giants worldwide.



## **Corporate Culture**





## **Milestones**



## 2006



About CIG

### 2011



### 2016

CIG established a sales and R&D center in Silicon Valley, USA, and expanded its R&D center to Xi'an and Wuhan. China.



### 2018

CIG acquired MACOM Japan's LR4 100G long-range optical sub-assembly product line and established the Tokyo-based subsidiary, CIG Tech Japan Ltd.

Leveraging cost advantages, large-scale production, and high-quality advanced manufacturing capabilities, CIG actively



### 2022

CIG established a business entity in Malaysia to manufacture wired and wireless access products and optical modules.

CIG positioned the Malaysia facility as a global manufacturing hub to better serve global



## 2010

CIG expanded into the U.S. market with the establishment of Cambridge Industries USA Inc. in Silicon Valley.



### 2014

CIG relocated its headquarters, R&D center, and manufacturing center to Pujiang Hi-tech Park.

CIG strengthened lean production and R&D while enhancing information systems and automation to significantly improve productivity and product quality.



## 2017

CIG successfully launched its Initial Public Offering (IPO) on November 10th, listing on the Shanghai Stock Exchange under the stock code 603083.

CIG upgraded automated production lines on a large scale, progressing towards Industry 4.0.



## 2019

CIG acquired Lumentum's Datacom transceiver product lines from Oclaro, Japan.

CIG leveraged expertise in the design and manufacturing of 25G/100G/400G optical modules to develop and produce 200G modules tailored for data center applications.

CIG launched the industry's first analog CDRbased 200G FR4 optical module for data center interconnect applications.



## 2024

CIG commenced construction of a planned 100,000-square-meter intelligent manufacturing and logistics support center in January 2024.



### **SDGs 1: No Poverty**

CIG actively engages in social welfare and rural revitalization by donating supplies to improve educational, cultural, and living conditions in underprivileged mountainous areas.

CIG has carried out the "Warm Hearts on Campus, Donations with Love" charity

campaign for **9** consecutive years



### SDGs 3: Good Health and Well-Being

CIG constantly enhances employees' workplace safety awareness to foster a safe and healthy working environment. In 2024, CIG had zero work-related fatalities recorded

CIG invested RMB

481,300

in workplace safety



## **SDGs 4: Quality Education**

CIG upholds the idea of lifelong learning by emphasizing internal training, selectively incorporating external courses, and encouraging employee to engage in self-directed learning. Our employees are provided with extensive learning resources and support.

Employees at CIG participated in training for a total of

12,322 hours



### SDGs 8: Decent Work and Economic Growth

CIG adopts a remuneration structure integrating fixed and variable pay, aiming to offer a remuneration incentive mechanism with both internal equity and external competitiveness to employees.

CIG granted stock options to

**779** employees as part of its incentive program



### SDGs 9: Industry, Innovation, and Infrastructure

With a focus on advancing its world-class technology R&D platform, CIG remains committed to driving growth through cutting-edge R&D and intelligent manufacturing while continuously making innovations in engineering technology and efficiency. In 2024, CIG officially launched its firstgeneration 25G PON product.

CIG invested RMB

408,575,000 in R&D



PARTNERSHIPS FOR THE GOALS

#### **SDGs 11: Sustainable Cities and Communities**

CIG drives digital connectivity and strives to enable high-quality, low-cost, and energy-efficient Internet access for everyone in the world.

### SDGs 12: Responsible Consumption and Production

CIG sets overall targets on energy utilization efficiency annually, requires each factory to set targets respectively based on their production and operating status, and closely monitors progress to improve energy utilization efficiency in production and operations. CIG also strictly controls the use of hazardous substances in its products and adopts an ecofriendly approach throughout the product lifecycle to minimize environmental impact.

#### SDGs 13: Climate Action

CIG has established a Strategy and ESG Leadership Group to set and advance carbon reduction goals. By conducting regular energy-saving retrofits in the factories, adopting more eco-friendly, energy-saving production processes and technologies, optimizing the energy mix, and raising the energy-saving level of products, CIG contributes to global climate action. In 2024, CIG conducted greenhouse gas emissions inventories for its Shanghai headquarters and subsidiary.

Total emissions of 10,417.93 tons

of CO2 equivalent

### SDGs 16: Peace, Justice, and Strong Institutions

CIG continuously enhances its risk management and internal control mechanism and unswervingly abides by business ethics and the principles of integrity to ensure stable corporate development.

**88.06%** of employees completed anti-commercial bribery and anti-corruption training

## SDGs 17: Partnerships for the Goals

CIG actively drives progress in global telecommunications technology by engaging in industry exchanges, global exhibitions, industry standard-setting initiatives, and industry association activities.

100% of suppliers signed CIG's Supplier Code of Conduct



governance system, actively promoting sustainability control mechanism to ensure scientific and transparent decision-making while effectively identifying and mitigating potential risks. At the same time, we unswervingly abide by business ethics and the principles of integrity, aiming to foster a level playing field alongside our stakeholders.







Sustainability Management

Strengthened Risk Management and Internal Control

Unwavering Commitment to Business Ethics

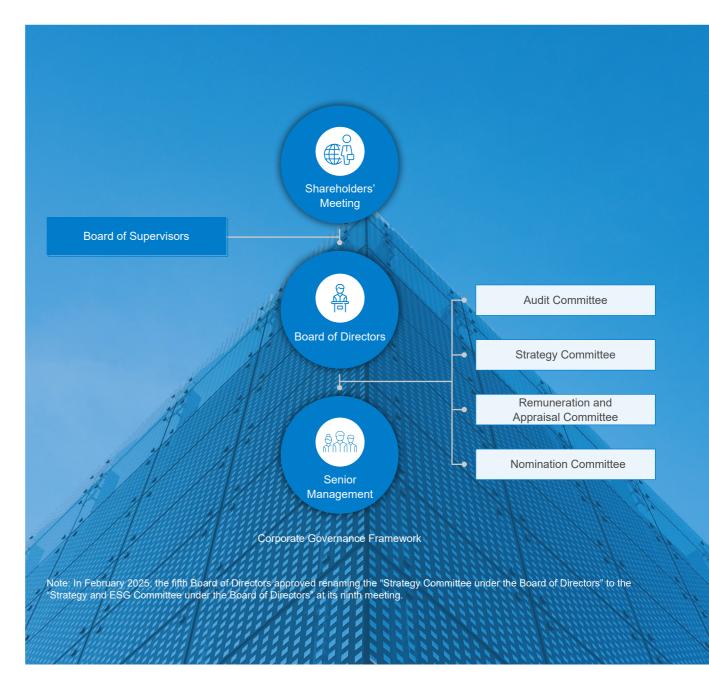


# **Efficient Governance Operations**

Efficient governance operations serve as a core driver of CIG's long-term stability and growth. By establishing a comprehensive governance structure, we ensure democratic, scientific decision-making processes and a rigorous supervision mechanism. Our Board of Directors consists of diverse and highly qualified professionals who possess deep market insights and formulate forward-looking development strategies. Meanwhile, we place a strong emphasis on investor relations management, ensuring proactive and transparent information disclosure. This initiative has enhanced investor confidence and support, elevated our market reputation, and expanded our space for development.

# **Operations of the Shareholders'** Meeting, the Board of Directors, and the Board of Supervisors

CIG has established a well-structured operation system consisting of the Shareholders' Meeting, the Board of Directors, and the Board of Supervisors to continuously regulate the operations and decision-making processes of these bodies. This framework ensures effective coordination and mutual checks while balancing among the governance, decision-making, and supervisory bodies. In strict compliance with the Company Law of the People's Republic of China, the Securities Law of the People's Republic of China. the Guidelines for the Articles of Association of Listed Companies, the Code of Corporate Governance for Listed Companies in China, the Guidelines No. 1 of the Shanghai Stock Exchange for Self-Regulation of Listed Companies— Standardized Operation, and other applicable laws and regulations, we regularly update and improve corporate governance documents to standardize the organization and operations of the Company and protect the legitimate rights and interests of shareholders and creditors





CIG's Shareholders' Meeting rigorously complies with the Company Law of the People's Republic of China, the Articles of Association, and the Rules of Procedure for the Shareholders' Meeting, ensuring that all convening, holding, and voting procedures are conducted with full compliance. It plays a key role in major corporate decision-making and oversight, allowing every shareholder to attend the meeting and fully exercise their supervisory and voting rights.



## **Key Performance Indicators (KPIs)**

During the reporting period,

CIG held

3 Shareholders' Meetings

with

resolutions (including sub-resolutions)

approved upon deliberation

## **Board of Supervisors**

CIG's Board of Supervisors diligently fulfills its responsibilities and duties in strict accordance with the Company Law of the People's Republic of China, the Articles of Association, and the Rules of Procedure for the Board of Supervisors. It holds regular meetings to oversee and examine the performance of directors and senior management and the Company's financial position, effectively safeguarding the rights and interests of the Company and its shareholders.



## **Key Performance Indicators (KPIs)**

During the reporting period,

the Board of Supervisors held

meetings

resolutions approved upon deliberation

## **Board of Directors**

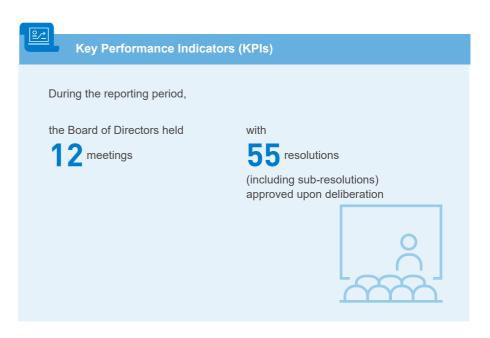
CIG's Board of Directors operates in full compliance with the Company Law of the People's Republic of China, the Articles of Association, and the Rules of Procedure for the Board of Directors, and is accountable to the Shareholders' Meeting. Its primary responsibilities include but are not limited to making major decisions and plans (e.g., making strategic plans, approving major investment projects, etc.), developing fundamental management systems in finance, human resources, and operations, and overseeing information disclosure to ensure that information is conveyed to shareholders and relevant stakeholders accurately, promptly, and comprehensively.

### **Objective**

The Board of Directors aimed to achieve a 100% attendance rate at all meetings in 2024.

### **Achievement Status**

The average attendance rate of the Board of Directors at all meetings was 100%.





CIG has established governance policies through its Articles of Association and Rules of Procedure for the Nomination Committee under the Board of Directors, whereby the selection criteria and nomination and appointment procedures for directors and senior management are clearly outlined. The Nomination Committee under the Board of Directors is responsible for formulating the selection criteria and procedures for directors and senior management, selecting candidates, and reviewing their qualifications.

We place great importance on Board independence, guided by our Independent Director Work System. The majority presence of independent directors in the Board of Directors and its specialized committees is also a key aspect we prioritize. This strengthens the impartiality of Board decisions and safeguards the legitimate rights and interests of shareholders.

Beyond independence, we also value Board diversity. Age, professional background, and other factors are carefully considered in the nomination procedure of our Nomination Committee. We believe that a diverse Board helps effectively oversee the Company's management and operations. Board members can evaluate the risks and opportunities of the Company's business model from multiple perspectives, facilitating a culture of equality, inclusiveness, and openness.

The Board of Directors has established four specialized committees, which, acting as specialized working bodies of the Board of Directors, provide important advisory opinions and suggestions on business decisions, project investment, standardized operations, annual financial statement audits, and executive nominations. These committees provide professional support to the decision-making process of the Board of Directors, effectively enhancing the scientific rigor of Board decisions.



### **Key Performance Indicators (KPIs)**

The Board of Directors consists of 7 members, including 3 independent directors.

The Nomination Committee, Audit Committee, and Remuneration and Appraisal Committee under the Board of Directors each have 3 members, of which 2 are independent directors, and all committee chairs are independent directors. The Strategy Committee under the Board of Directors has 5 members, including 1 independent director.

During the reporting period, the Nomination Committee held 3 meetings, the Audit Committee held 7 meetings, the Remuneration and Appraisal Committee held 6 meetings, and the Strategy Committee held 2 meetings.



## **Board Composition:**

Name	Position	Education	Field of Study	M Age	Strategy Committee	Nomination Committee	Audit Committee	Remuneration and Appraisal Committee
Gerald G Wong	Chairman and CEO	Master's degree	Electrical Engineering & Computer Science	72	Chair			Member
Zhao Haibo	Director and Vice President	Master's degree	Communication & Information Systems	51	Member	Member		
Zhang Jie	Director	Master's degree	Physical Electronics	45	Member		Member	
Zhao Hongwei	Director	Ph.D.	Electromechanical Control & Automation	52	Member			
Liu Guisong	Independent Director	Ph.D.	Computer Science	52		Member	Member	Chair
Yao Minglong	Independent Director	Ph.D.	Agricultural Economics & Management, Associate Professor of Accounting	62			Chair	Member
Qin Guisen	Independent Director	Master's degree	Law	49	Member	Chair		

## **Investor Relations Management**

CIG rigorously complies with the Measures for the Administration of Information Disclosure by Listed Companies and has formulated the Information Disclosure Management System and Investor Relations Management System to safeguard the legitimate rights and interests of stakeholders, in an effort to foster long-term, efficient, and mutually beneficial cooperation with all stakeholders.

## Information Disclosure

Transparent and well-regulated information disclosure is fundamental to effective communication with investors, regulatory authorities, and other stakeholders. CIG complies with relevant supervision rules and its Information Disclosure Management System. maintaining a strong focus on information disclosure management. The Company fulfills its disclosure obligations in accordance with defined scope, timelines, and procedures, ensuring true, accurate, timely, and comprehensive disclosure of corporate information to all investors. This guarantees equal and prompt access to relevant information for all investors, safeguarding their right to be informed.

CIG designates China Securities Journal, Shanghai Securities News, Securities Times, and Securities Daily as its official information disclosure channels, with all publicly disclosed information also available on the Shanghai Stock Exchange (SSE) website. Additionally, an Investor Relations section is available on CIG's official website, providing a platform for important corporate announcements. These initiatives ensure that investors and other stakeholders can conveniently and accurately access important information about the Company through official and authoritative channels.

## Objective

In 2024, CIG aimed for zero major information disclosure errors, zero penalties from securities regulatory authorities, and an annual information disclosure rating of B or above.

### **Achievement Status**

During the reporting period, CIG disclosed 86 interim announcements and 4 periodic reports, with no major information disclosure errors or penalties from securities regulatory authorities. The annual information disclosure rating was B.

## **Communication Activities**

CIG gives high priority to investor relations, with the Board of Directors and management actively engaging with investors through various channels and methods, including the Shareholders' Meetings, performance briefings, site visits, teleconferences, the SSE e-Interaction platform, investor hotlines, and dedicated email correspondence. We address key investor concerns within the scope of permitted disclosures to convey our value proposition. Additionally, CIG actively welcomes visits and research initiatives from regulatory authorities and industry associations, with the aim of further enhancing the transparency and accuracy of its disclosures.



### **Key Performance Indicators (KPIs)**

During the reporting period, CIG answered 228 investor hotline inquiries, responded to 112 questions via the SSE e-Interaction platform, and organized 3 investor events, including periodic business briefings and institutional research meetings.



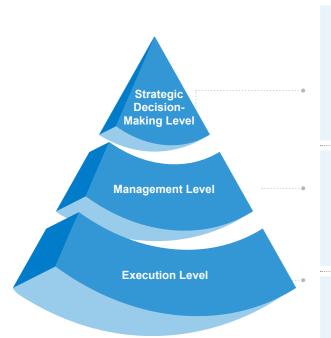
Collective Performance Briefing on the First Three Quarters of Shanghai-Listed Companies

# **Sustainability Management**

CIG's approach to sustainability management is centered on balancing the three pillars, i.e., economy, society, and environment. While ensuring long-term stable growth, we actively fulfill our corporate social responsibilities and safeguard the natural ecosystem. Through a top-down ESG governance framework, we effectively manage our ESG initiatives to achieve our sustainability goals.

## **ESG Governance**

At CIG, we are committed to creating sustainable value for stakeholders, including customers, suppliers, and communities where we operate, through our ESG practices. Our objective is to achieve long-term positive impacts. We place great emphasis on ESG matters by integrating ESG governance into our strategic decision-making process. Through an all-process management system covering strategic planning, execution monitoring, and performance evaluation, we ensure that our ESG goals are advanced in tandem with business growth. During the reporting period, CIG has established a three-tier, top-down ESG governance framework to ensure the deep integration of environmental, social and governance goals into our business operations.



#### **Board of Directors:**

Assumes ultimate responsibility for overseeing and making decisions on ESG matters.

### **Strategy Committee:**

Responsible for reviewing long-term strategic objectives, periodically assessing the effectiveness of the Company's ESG initiatives, identifying and evaluating ESG-related risks and opportunities in the Company, and ensuring the integrity and accuracy of the disclosure reports.

### Strategy and ESG Leadership Group:

Responsible for making early-stage preparations for the decision-making of the strategic decision-making level, coordinating with core departments to break down the strategies of the Board of Directors into actionable departmental tasks, such as setting carbon emission reduction and health and safety targets, and regularly tracking the progress of key initiatives.

### Strategy and ESG Working Group:

Incorporates ESG performance indicators into daily operations and management, while utilizing data analytical tools to enable the transparency of execution effectiveness. CIG has established a comprehensive set of internal policies to guide the management of ESG-related matters. The ESG governance body is responsible for monitoring our compliance with these policies and procedures and updating our policies based on changes in ESG-related policies and standards.

### **ESG-related Internal Policies:**



In accordance with ISO 14001 Environmental Management System standards, our policies and procedures cover (i) energy conservation, (ii) carbon emission reduction, and (iii) treating exhaust gas. wastewater, and solid waste.



In compliance with ISO 45001 Occupational Health and Safety Management and ISO 9001 Quality Management System standards, our policies cover (i) employee health and workplace safety, (ii) product quality and recall, (iii) employee promotion, compensation, benefits, and training, and (iv) corporate philanthropy and charitable initiatives.



We have formulated a comprehensive Code of Business Ethics for Employees that includes policies on conflict of interest, information confidentiality, and anti-corruption. Employees are provided with regular compliance training to strengthen internal regulatory compliance and ethical business practices.



CIG actively listens to stakeholders' suggestions and expectations regarding corporate sustainability and maintains effective communication with key stakeholders through various channels.

Stakeholders	Concerns & Expectations	<b>Communication Channels</b>	Stakeholders	Concerns & Expectations	Communication Channels	
<ul> <li>Corporate governance</li> <li>Anti-commercial bribery &amp; anti-corruption</li> <li>Equal treatment of SMEs</li> <li>Environmental compliance management</li> <li>Pollutant emissions</li> </ul>		<ul> <li>Accepting supervision</li> <li>Periodic disclosures</li> <li>Ad hoc reports</li> <li>Participation in relevant meetings</li> </ul>	Employee	<ul> <li>Protecting employees' rights and interests</li> <li>Talent training and development</li> <li>Employee healthcare</li> <li>Communication with stakeholders</li> </ul>	<ul> <li>Employee training</li> <li>Work meetings</li> <li>Employee complaints and grievance</li> <li>Employee satisfaction surveys</li> <li>Internal events</li> </ul>	
<ul><li> Waste disposal</li><li> Rural revitalization</li><li> Communication with stakeholders</li></ul>	Survey questionnaires		<ul> <li>Supply chain security</li> <li>Product and service safety and quality</li> <li>Anti-commercial bribery &amp; anti-</li> </ul>	<ul><li>Open bidding</li><li>Routine supplier communication</li></ul>		
	<ul> <li>Corporate governance</li> <li>Anti-unfair competition</li> <li>Due diligence</li> <li>Innovation-driven development</li> </ul>	<ul><li>Information disclosure</li><li>Shareholders' Meetings</li><li>Performance briefings</li><li>Investor hotline</li></ul>	Suppliers & Partners	corruption  Data security and customer privacy protection  Equal treatment of SMEs  Communication with stakeholders	<ul> <li>Supplier management &amp; audits</li> <li>Supplier training &amp; empowerment</li> <li>Survey questionnaires</li> </ul>	
Shareholders & Investors  • Product and service safety and quality • Communication with stakeholders	<ul><li>SSE e-Interaction platform</li><li>Survey questionnaires</li></ul>		<ul><li> Ecosystem and biodiversity protection</li><li> Energy use</li><li> Water resource management</li></ul>	Environmental activities		
₩ ₩	<ul> <li>Innovation-driven development</li> <li>Product and service safety and quality</li> <li>Data security and customer privacy protection</li> <li>Supply chain security</li> <li>Hazardous substance management</li> <li>Climate change response</li> </ul>	<ul> <li>Customer exchanges and cooperation</li> <li>Customer satisfaction surveys</li> <li>Technical seminars</li> </ul>	Communities & Industry	<ul> <li>Waste disposal</li> <li>Pollutant emissions</li> <li>Boosting industry development</li> <li>Social contributions</li> <li>Rural revitalization</li> <li>Communication with stakeholders</li> </ul>	<ul> <li>Industry conferences &amp; exhibitions</li> <li>School-enterprise cooperation</li> <li>Volunteer programs</li> </ul>	
Customer	<ul> <li>Circular economy</li> <li>Anti-commercial bribery &amp; anti-corruption</li> <li>Anti-unfair competition</li> <li>Communication with stakeholders</li> </ul>	<ul><li>customer audits</li><li>Daily communication</li><li>Website feedback</li></ul>	Media	<ul> <li>Innovation-driven development</li> <li>Product and service safety and quality</li> <li>Employees</li> <li>Communication with stakeholders</li> </ul>	<ul><li>Information disclosure</li><li>Communication and interviews</li><li>Official accounts</li></ul>	



Standardizing Corporate Governance through Prudent Ensuring Service Quality with Premium Products

Building a Thriving Workforce with a People-Oriented Approach Honoring Our Responsibility to Give Back to Society

# **Materiality Assessment**

Material topics serve as the starting point for our sustainability management and ESG risk identification and assessment. To gain a full understanding of stakeholder concerns and effectively integrate their demands and expectations into our sustainability management practices, we identify and analyze material topics. We establish a database for ESG topics based on an in-depth analysis of activities and business relationships of the Company and extensively solicit the opinions of various stakeholders through questionnaires. These topics are then ranked based on their materiality. In our assessments, we prioritize risks that could significantly impact our business, damage our reputation, or are of primary concern to stakeholders. This prioritization enables us to allocate resources efficiently and develop mitigation strategies addressing most major risks identified, thereby managing ESG-related matters better.

the background of and business relations



About CIG

Identify the database for ESG topics



topics according to their materiality



Confirm and report material topics



- · Assess corporate activities and business relations
- · Analyze the external objective environment
- · Identify key affected stakeholders

- · Based on the topics identified in the SSE Guidelines, identify other potential material topics by referencing peer companies and rating standards
- · Identify the relevant impacts, risks, and opportunities associated with each topic to establish a database for ESG topics

· Assess both impact materiality and financial materiality through surveys, interviews, and other methods

**Evaluate and prioritize** 

· Integrate assessment results to develop a double materiality matrix

- · Confirm or adjust material topics based on insights from the Strategy Committee
- Disclose these topics in the annual ESG report in accordance with the SSE Guidelines

with Premium Products

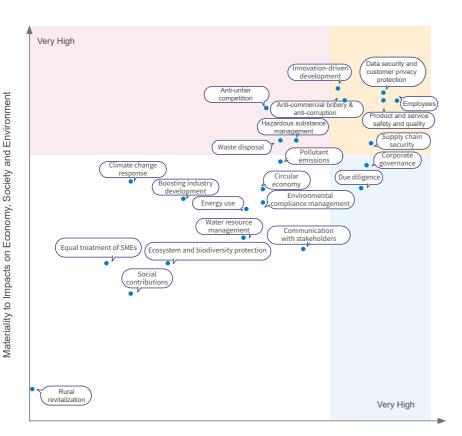
During the reporting period, CIG extensively collected stakeholder feedback through survey research to comprehensively build a double materiality matrix for the year across two dimensions: financial materiality and impact materiality. The finalized double materiality matrix identified six topics of double materiality, two topics of financial materiality only, and three topics of impact materiality only.

About CIG

Message from the Chairman

Standardizing Corporate

Governance through Prudent



Materiality to Corporate Finance

**Double Materiality Matrix** 

Topic Category	Material Topic	Report Section	Supply Chain	Production/ Operations	Customers	Employees S	Society
	Product and service safety and quality	Ensuring Product Quality	√	$\checkmark$	√		
	Data security and customer privacy protection	Driving Digital Connectivity	√	√	√	✓	
Social ·	Innovation-driven development	R&D Innovation-Driven Development	√	<b>√</b>	√	√	√
	Employees	Protecting Employees' Rights and Interests Talent Training and Development Employee Healthcare				V	
	Supply chain security	Supply Chain Management	√	<b>√</b>	√		
Governance	Anti-commercial bribery & anti- corruption	Unwavering Commitment to Business Ethics	√	√	√	✓	√
	Corporate governance	Efficient Governance Operations		√			
Governance	Due diligence	Sustainability Management Strengthened Risk Management and Internal Control	√	√	V	√	√
Environmental	Waste disposal	Pollution Emissions Control		√			<b>√</b>
	Hazardous substance management	Ensuring Product Quality	√	√	√		√
Governance	Anti-unfair competition	3 -		<b>√</b>	√	<b>√</b>	<b>√</b>

Note: Yellow Background: Topics of double materiality; Blue Background: Topics of financial materiality only; and Red Background: Topics of impact materiality only.

Impacts of Material Topics on the Value Chain

About CIG



CIG places significant emphasis on risk management and internal control. By establishing a robust mechanism for risk identification, assessment, monitoring, and response, we effectively prevent and control traditional financial and operational risks while also deeply analyzing the impact of ESG factors on long-term corporate value. By doing so, CIG aims to build a resilient and sustainable development model that creates greater value for shareholders, customers, employees, and society at large.

## Internal Control

The Audit Committee is responsible for overseeing the Company's internal control management. As a specialized committee, it plays a crucial role in reviewing financial information and disclosure, standardizing audit processes, ensuring financial management and accounting, and examining and supervising the development and operations of the enterprise-wide risk management and legal framework. The Audit Committee is accountable to the Board of Directors and provides advice and suggestions for Board decisions.

A Supervision and Audit Department has been set up under the Audit Committee, which has established a companywide Internal Audit System. It is responsible for verifying the authenticity and integrity of CIG's financial data while overseeing the establishment and implementation of the internal control system. To enhance daily internal control management and effectively avoid major operational risks, CIG has established a three-line defense mechanism for internal control consisting of business units, operations support departments, and the Supervision and Audit Department, thereby maximizing overall corporate value.

### **First Line of Defense**

Internal hierarchical review within business units, ensuring segregation of incompatible duties to mitigate process risks.

### **Second Line of Defense**

Coordinated oversight by finance, cost control, capital management, and legal departments to effectively prevent potential legal, financial. and other risks in business operations.

### **Third Line of Defense**

Independent supervision by the Supervision and Audit Department.

#### Three-Line Defense Mechanism for Internal Control

To ensure audit independence and professionalism, CIG has appointed dedicated internal auditors. The Supervision and Audit Department, under management authorization, conducts ad hoc audits of various business cycles and performs audit procedures such as reviewing the internal control system, interviewing critical control point (CCP) personnel, and conducting analytical reviews of business data and walk-through tests for key procedures. In case of any audit findings, the Supervision and Audit Department communicates with relevant control heads to improve the scheme and track its implementation. Additionally, the Supervision and Audit Department submits quarterly progress reports to the Audit Committee, culminating in a comprehensive internal control assessment report at the end of each year. These measures have significantly strengthened the establishment and enhancement of our internal control mechanism, ensuring efficient and stable operations.

## Tax Compliance Management

At CIG, tax compliance is a fundamental priority. We strictly comply with the Enterprise Income Tax Law of the People's Republic of China and other relevant tax regulations of the country and the regions where we operate. We are committed to maintaining legal, transparent, and stable tax practices, aligning tax management with business growth to ensure our long-term steady development. Meanwhile, we also fulfill our corporate social responsibilities by paying taxes in accordance with the law.



**Key Performance Indicators (KPIs)** 

During the reporting period,



CIG paid a total tax of

RMB **52,070,100** 

Had tax-related violations

## **ESG Risk Mitigation**

We recognize that ESG-related risks are multidimensional and challenging, which may have a potential impact on our production and operations. Nevertheless, by adopting forward-thinking technological layouts and upgraded governance models, we are positioned to transform ESG capabilities into a differentiated market barrier, driving long-term value growth.

Defining the Scope of Risks

- · Environmental risks: The continuous tightening of global carbon emission reduction policies may lead to increased regulatory pressures and rising compliance costs. Additionally, extreme weather events could disrupt supply chains, which may further threaten production stability.
- · Social risks: Labor rights and interest management in the supply chain present significant risks, as potential non-compliance with labor standards by suppliers may expose us to reputational damage and legal liabilities. Moreover, intensifying competition for technical professionals necessitates a robust skills development and incentive framework for employees. Otherwise, it may undermine the driving force for R&D and innovation. Disputes over community resource allocation may also risk impeding projects as we expand overseas.
- · Governance risks: The increasing demand for ESG data transparency and high-quality disclosures places considerable pressure on the Company. Insufficient data integration capabilities may invite scrutiny from investors. Furthermore, if the ESG oversight mechanism of the Board of Directors fails to be embedded into strategic decision-making, the effectiveness of risk responses may be weakened. In a globalized business environment, regulatory differences in anti-corruption, data privacy, and environmental protection across regions further complicate compliance efforts and increase the likelihood of legal disputes

Multi-Channel Data Collection and **Analysis** 

- Internal Evaluation: Each department reviews its existing business process. The Production Department focuses on resource consumption and environmental impact in the production process. The Procurement Department evaluates the stability and compliance of the raw materials from the suppliers. The Sales Department analyzes the impacts of market demand shifts on product sustainability. These departments jointly identify high-risk links.
- · Supplier Survey: The Procurement Department and other relevant departments assess the ESG performance of suppliers at all levels through questionnaires and on-site audits to ensure a sustainable supply chain.
- · Stakeholder Interview: We communicate with customers, employees, government bodies, and other stakeholders to collect their concerns.
- · Industry Benchmarking: Industry standards and peer companies' ESG reports are referenced for our risk identification and assessment.

Assessing Risk Prioritization

• Risk priorities are assessed using a "Likelihood × Impact" model. All departments coordinate to categorize risks into high, medium, and low priority levels.

To effectively address ESG-related risks and capture related opportunities, we have implemented a series of mitigation strategies. These strategies include but are not limited to establishing a sound internal ESG governance framework to enhance our monitoring and early warning capabilities for ESG-related risks, conducting regular risk assessments to ensure timely identification of potential issues, and formulating targeted mitigation measures based on core risk response strategies. Examples of these mitigation measures include optimizing production processes to reduce environmental pollution, improving employee benefits to enhance social responsibility, and refining corporate governance structures to increase transparency and accountability. Through these comprehensive initiatives, we aim to effectively mitigate ESG-related risks, advance sustainable development, and enhance both investor confidence and corporate social responsibility, thereby laying a solid foundation for our long-term business growth.



Core Risk Response Strategies

To implement mitigation strategies more effectively, we plan to develop specific measures based on the urgency and potential impact of risks.

Relevant Risk	Impact Period	Potential Impact	Mitigation Measures
Extreme climate	Short-term	Climate change increases extreme weather events, leading to physical risks with financial consequences. For example, natural disasters and power outages caused by climate change may disrupt industrial production.	Monitor the impact of extreme weather, establish emergency management mechanisms and contingency plans in advance, and provide employees with emergency drill training.
Health and safety incidents	Short-term	Employee health and safety risks may bring legal litigation, financial losses, production disruptions, and reputational damage to the Company, leading to stock price volatility and development setbacks.	Promote occupational health check-ups, set up a Workplace Safety Committee, enforce the accountability system for workplace safety, enhance safety awareness of all staff, and provide emergency safety equipment and training for employees.
Regulatory risk	Mid-term	Stricter regulation on sustainable development such as carbon emission regulation may impose pressures on the Company. Examples include the compliance requirements for China's carbon peaking and carbon neutrality goals (the "Dual Carbon" goals) and the EU's Carbon Border Adjustment Mechanism (CBAM). Transitioning to a sustainable development model may require us to explore lower-carbon products and reduce the use of non-environmentally friendly packaging materials, which may increase our operational costs.	Stay informed on environmental policies and regulations, and provide employees with environmental education and training on the latest policies.
Low-carbon technology risk	Mid-term	If low-carbon technology research and development efforts fail to keep pace, the risk of high-energy-consuming product lines being technologically substituted will become increasingly evident. Against the backdrop of global customers accelerating the shift toward green procurement, this could severely weaken our market competitiveness.	Integrate environmental requirements across all stages of the product lifecycle, including development, design, procurement, manufacturing, packaging, transportation, and usage, to create sustainable products and promote product carbon footprint certification.
Employee well-being	Mid-term	We may face multifaceted risks when hiring talent, such as labor disputes, business disruption or project delays caused by talent attrition, legal and reputational risks caused by employee misconduct, financial risks brought by excessive labor costs, and efficiency and innovation risks due to skill-job mismatches.	Set job positions according to actual needs, ensure talent-post matching, and provide employees with an equal, inclusive, fair, and open workplace.
Supply chain management	Mid-term	Delivery delays, supply disruptions, price fluctuations, and inconsistent product quality from suppliers may increase our procurement costs. Additionally, ESG compliance risks among suppliers are becoming more pronounced. Failure to conduct effective supplier audits may lead to unfair or unethical practices of the suppliers that harm our reputation.	Strengthen the role of the supplier platform as an online monitoring tool and enhance ESG assessments and audits of suppliers to ensure their compliance with our ESG standards.
Corporate compliance and governance	Long-term	Lack of corporate governance mechanisms may lead to issues such as deficiencies in transparency, weakened accountability, and unethical business practices. Additionally, failure to comply with relevant laws and regulations may result in regulatory penalties, legal disputes, and business restrictions.	Develop and implement a comprehensive corporate governance system, promote internal and external audits, and ensure compliance with laws and regulations in our operations.



About CIG



# **Fostering a Risk-Aware Culture**

CIG highly values risk management and compliance by deeply incorporating these principles into employee onboarding and various risk and safety training programs. Through a structured training framework, all new hires receive foundational education on the code of conduct, conflict of interest policies, anti-corruption regulations, data protection, and other fields from day one, equipping them with the knowledge to identify risks and handle compliance matters effectively. Additionally, CIG provides specialized risk and safety training tailored to specific roles, ensuring that employees can accurately identify and control special risks within their respective fields. These training initiatives collectively foster a comprehensive risk-aware and compliance culture at CIG, empowering every employee to make informed decisions within their scope of responsibility while maintaining the Company's overall security and compliance.

# **Unwavering Commitment to Business Ethics**

## Governance

CIG is committed to maintaining the highest standards of business ethics. We have formulated the Code of Business Ethics for Employees, the Supplier Code of Conduct, the Corporate Social Responsibility Management Policy, and other documents, which serve as fundamental guidelines for constraining and regulating the behaviors of our employees and related parties, ensuring that all business activities are carried out with integrity, fairness, and transparency. In these documents, CIG has clarified business ethics and explicitly defined unethical behaviors such as bribery, conflicts of interest, unfair transactions, and unauthorized disclosure of trade secrets. We have reiterated our zero-tolerance stance on these violations and set up the corresponding disciplinary mechanism. The Audit Committee and the Supervision and Audit Department separately manage and oversee the related work.



## **Strategy**

## **Preventive Measures** in Daily Operations

· Every supplier is required to sign the Supplier Integrity and Anti-Corruption Agreement. Any supplier found engaging in bribery will be immediately disqualified and permanently banned from future collaborations.

## **Fostering Correct Values**

· CIG emphasizes correct values among employees by conducting at least one business ethics training session each year, instilling anti-commercial bribery principles into their daily operations.

Anti-Commercial Bribery and Anti-Corruption Strategies



## **Online Training Course for Correct Business Ethics Values**

To strengthen employees' awareness of business ethics and reinforce anti-commercial bribery and anti-corruption practices, CIG launched the "Business Ethics and Integrity" online training program in December 2024 for all employees. The course provided in-depth guidance on the harmful effects of commercial bribery, identification methods, and preventive measures, and also introduced the Company's internal reporting mechanism and support channels. A total of 1,084 employees completed the online training and assessment, achieving an average test score of 98 (out of 100). The training has effectively encouraged employees to uphold the principles of fairness, justice, incorruptibility, and good faith cooperation in their business interactions with customers and suppliers, thereby supporting the Company's sound development and enhancing its ability to fulfill corporate social responsibility.



"Business Ethics and Integrity" Online Training Course



# **Risk Management**

To strengthen oversight, CIG has established mechanisms for mutual supervision among employees, as well as whistleblowing channels for suppliers and customers. Any actions that harm the Company's interests or reputation, or violate business ethics, can be reported via a dedicated email address (tousu@cigtech.com). Employees are responsible for widely promoting the Company's policies and whistleblowing channels to the customers and suppliers they serve. CIG is committed to promptly investigating all reported cases; once substantiated, appropriate disciplinary actions will be taken in accordance with the Company's regulations. Furthermore, all reports will be kept strictly confidential to protect whistleblowers' legal rights and interests. In addition, all business units conduct regular or ad-hoc self-inspections covering business transactions and internal personnel management. Each year, CIG consolidates self-inspection findings annually and implements management improvement initiatives to optimize the overall operation.

## **Acceptance**

 The Supervision and Audit Department accepts whistleblowing reports.



#### **Assessment**

· The feasibility of an investigation is assessed in collaboration with the management.



### **Approval**

 The management authorizes and approves the start of the investigation.



### **Action**

· Once the management formulates a resolution. the Human Resources Department implements it in accordance with relevant rules and regulations.

### Reporting

· Findings are compiled into a formal investigation report and submitted to the management.



### Verification

 Relevant departments collaborate to investigate and collect evidence.



Whistleblowing Handling Process

## **Indicators and Objectives**

### **Business Ethics Objectives**

In 2024, CIG aimed to achieve an 85% participation rate in anti-commercial bribery and anti-corruption training for employees.

### **Achievement Status**

In 2024, 88.06% of employees at CIG received anti-commercial bribery and anticorruption training.

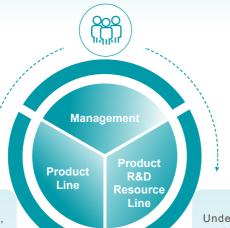
During the reporting period, CIG recorded **Zero** lawsuits related to commercial bribery or corruption and **Zero** lawsuits or administrative penalties due to unfair competition.



# **R&D Innovation-Driven Development**

Continuous innovation is intrinsic to CIG's corporate culture and where CIG's core competitiveness lies. Our long-term growth has been guided by a core development strategy of "pre-researching the next generation, developing the current generation, and manufacturing the mature generation". We remain committed to driving growth through cutting-edge R&D and intelligent manufacturing while continuously innovating in engineering technology and efficiency. With R&D centers in Shanghai, Japan, and the United States, CIG remains agile in adapting to market trends, fostering research synergies, and developing comprehensive solutions. As of the end of the reporting period, CIG has been recognized as a National High-Tech Enterprise, one of the Enterprises Using Special and Sophisticated Technologies to Produce Novel and Unique Products in Shanghai, and a Shanghai Enterprise Technology Center, underscoring our leading technical capabilities.

Under the leadership of the CEO, the management team is responsible for formulating innovative R&D strategies and plans in line with market trends and the CIG's vision, setting the long-term development direction, and controlling the pace of innovative R&D efforts at a macro level to ensure their alignment with CIG's overarching strategic goals.



Led by heads of the business units, the product lines define the innovation roadmap for products based on CIG's innovative R&D strategy, promote product iterations and upgrades, and oversee the approval evaluation and decisionmaking of innovative R&D projects, thereby promoting the efficient initiation and implementation of the project and ensuring the smooth process of innovation products from ideation to market launch.



Under the leadership of the CTO, the product R&D resource line defines and evaluates innovative technology pathways based on product innovation planning, determines the optimal product technical solution, and spearheads the R&D and testing of innovative products to ensure their compliance with quality and performance standards. It also focuses on pre-research in cutting-edge technologies to strengthen CIG's core technological competencies in innovative R&D across all product lines.





Continuously increasing pre-research investment in forward-looking technologies, closely monitoring industry trends, tracking the evolution of product technical standards and demands, and swiftly entering new product and technology domains

Engaging in deep technical collaboration with suppliers, customers, and other partners to continuously roll out new offerings aligned with market trends and enhance technological performance through the integration of technologies

Expanding our global R&D center network and strengthening interconnectivity among R&D teams in China, Japan, and the United States, fostering R&D synergies to leverage complementary advantages

### **R&D** Innovation Planning

### **Innovative R&D Objectives**

- In 2024, CIG aimed to conduct pre-research on 25G PON and 50G PON fields, invest in fundamental research resources, and develop initial technology schemes.
- By 2027, CIG aims to launch over 50 new products annually, with at least 5 leading the industry in terms of launch timing and technical indicators. More than 50% of the products are designed for Al applications, and AI technology is integrated into the development process of over 50% of the products. Additionally, the lowenergy-consumption product series is expected to reduce energy consumption by 20% compared to 2024 levels while maintaining the same functionality and performance.

### **Achievement Status**

- · Phased R&D on 25G PON and 50G PON is underway, with the first-generation 25G PON product officially launched in 2024.
- CIG is actively advancing related R&D initiatives and will continue to track and regularly disclose updates on the achievement of our objectives.





## **Key Performance Indicators (KPIs)**

During the reporting period,



CIG invested RMB

408,575,000

in R&D



Accounting for

of the operating revenue

## **R&D** Focus Areas of the Business Units

### **Broadband Product Business Unit**

Actively advancing the research and application of 25G/50G PON broadband technologies, exploring their optimal solutions in broadband networks to enhance network transmission efficiency and stability, while focusing on their potential in 5G and future 6G network backhaul applications.

### **Wireless Product Business Unit**

Strengthening the R&D of Wi-Fi 7 and small cells to enhance product performance and network coverage.

### **Photonics Business Unit**

Continuously driving the R&D and mass production of high-speed optical modules, including 800G and 1.6T products, to meet the demands of data centers, particularly those driven by Al computing power. Additionally, increasing R&D efforts in silicon photonics, Linear Pluggable Optics (LPO), and Co-Packaged Optics (CPO) products to deliver more efficient and flexible optical communication solutions for data center networks.

## **R&D Process Management**

To strengthen the management of R&D processes, CIG has built an R&D project management platform and formulated the *Product Design and Development* Management Procedure. Efforts have been made to establish a tiered system for technology and product development across three key stages: R&D, trial production, and mass production. The Company manages projects in a standardized manner throughout the lifecycle of new product design and development and ensures efficient R&D closely centered around market and customer needs, thereby constantly improving the efficiency of translating R&D efforts into market-ready products.



### **Product Concept**

- · Collect product requirements from customers and the market to define core functionalities and value
- Determine product framework plans and concepts based on the latest industry trends and technology roadmap
- Evaluate and decide on project approval



### Requirements & Plans

- · Define product specifications
- Establish a project team, develop a project schedule, quality plan, and resource budget, and formally initiate the project
- · Identify initial product and project risks and establish risk mitigation measures and contingency plans



### **R&D** and Testing

- Conduct hardware and software design, development, integration, and validation testing
- Perform a series of design and testing reviews throughout the R&D process to ensure that the product meets specification, functional, performance, and reliability requirements
- Provide necessary inputs for New Product Introduction (NPI) and prototype trial production to ensure readiness for pilot run



### **Mass Production & Maintenance**

- · Carry out mass production
- · Provide software and hardware maintenance and technical support



## Ramp Up

- · Ramp up production for new products, and optimize the mass production efficiency and yield rate of new products to boost production capacity
- Ensure a stable quality control system with mass production capacity and supply chain support ability of products



### **Pilot Run**

- Conduct pilot run production of new products and complete the validation of new product manufacturing processes, production testing procedures, and equipment validation
- Assess production process capabilities to ensure process stability, laying the foundation for mass production
- · Establish a rigorous quality control system to ensure consistency in product quality





CIG places a high priority on the development of its R&D talent. We actively attract and retain technical professionals while encouraging and guiding employees to maximize their creative potential, thereby driving our R&D momentum forward. We have introduced multiple incentive programs under the Project Incentive Management System, the Performance Management System, and other policy documents, including project incentives, patent awards, and specialized incentives. Outstanding R&D contributors will receive generous rewards for their achievements in scientific research. Additionally, we have set up a diversified R&D model. By organizing various R&D activities such as Lesson & Learn Meetings and First Article Inspection (FAI) Meetings, we aim to facilitate the collision, intersection, and integration of experience and knowledge in different domains. These initiatives help spark creativity in our R&D team, thereby enabling original, breakthrough, and leading-edge innovations.



### **Key Performance Indicators (KPIs)**

During the reporting period,



CIG employed a total of



Accounting for over

50% of the total workforce



### Lesson & Learn

 By establishing a structured review process, we systematically capture knowledge across the R&D cycle through the mechanism of "Lesson & Learn". We analyze the root causes of errors to develop preventive measures and summarize best practices into standardized templates. Using our cross-departmental digital experience database, the recurrence of similar issues can be prevented.



## **First Article Inspection (FAI)**

· When a hardware product rolls off the production line for the first time, senior experts from multiple departments are invited to conduct a reverse disassembly of the product. From the customer's perspective, they simulate the mindset of competitors to critically evaluate shortcomings in the product design. This measure provides the R&D team with a third-party viewpoint to rethink their technical choices and R&D decisions, spark new ideas, identify gaps, and creatively solve problems.



## **Brain Storming**

 Focused on customer and market demands, the R&D team is encouraged to think freely without any preset constraints, explore new conceptual territories, and challenge the convention with emerging crossing function knowledge. This approach generates many innovative insights and problem-solving methods or new ideas built upon others' perspectives.

# **Intellectual Property Management**

Intellectual property (IP) protection is a vital pillar of CIG's innovation-driven development strategy and a key element of its core competitiveness. We pay high attention to safeguarding our proprietary IPs while respecting the IPs of others. Through a three-pronged management approach consisting of "institutional guarantee, mechanism improvement, and process optimization", CIG has developed a systematic, standardized IP management strategy, ensuring that a comprehensive system covering IP application, management, enforcement, rewards, punishments, and other IP-related matters is in place.

# Policy Framework

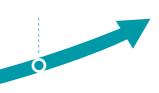
We have developed and implemented the Enterprise Patent and Software Copyright Application and Management Regulations, clearly defining full-process criteria for IP applications, utilization, protection, and management. A hierarchical and classified IP management system has also been established.

# Model

A collaborative management mechanism involving the "R&D Center, Sci-Tech Management Department, and Legal Department" has been adopted, wherein the R&D Center is responsible for IP research and development, the Sci-**Tech Management Department** oversees IP applications, coordinated management, and training and publicity, and the Legal Department manages IP protection affairs. In this way, a management model with welldefined powers and responsibilities and efficient collaboration has been formed.

## Operation and **Implementation**

A closed-loop IP management process has been established, covering "application, evaluation, maintenance, and implementation". Regular IP training sessions are conducted to enhance employees' awareness of IP protection, and we motivate key players in innovation to actively contribute through an improved incentive mechanism.



**Key Performance Indicators (KPIs)** During the reporting period, In China and overseas, CIG held a total of 405 valid patents with newly authorized patents during the year The Company obtained **587** patents through licensing agreements CIG held with **3** 1 software new software copyright copyrights added during the year CIG held

trademarks in China and overseas

# **Ensuring Product Quality**

About CIG

Quality is the lifeline of an enterprise. CIG strictly complies with the laws, regulations, and industry standards of the markets in which it operates, remaining committed to delivering high-quality products and services to customers. To achieve this, the Company has designated the CEO as the primary person responsible for quality management, established a three-year quality plan, set quality policies and objectives, and formulated regulatory documents such as the Quality Manual, the Corrective and Preventive Management Procedures, and the Product Recall Management Specification. Through a comprehensive product quality management system, CIG continuously enhances its quality management standards.

### **CIG's Quality Policy:**

Stay focused on customers

Get it right the first time

Uphold quality as our lifeline



To ensure zero major customer complaints

To improve overall First Pass Yield (FPY) by 10% annually

### **Achievement Status**

Zero major customer complaints

Improved by 11.52%

### **Certifications:**

As of the end of the reporting period, CIG has obtained ISO 9001 Quality Management System and TL 9000 Telecommunications Quality Management System certifications.







Photonics production line



Robotic assembly line



Control panel detailing aspects of our procuction



Robotic arms used in production



Prochuction line



Prochuction line



Prochuction line



Automated transport cars used in the production line

**Enhancing Quality Standards** 

To continuously improve quality standards, CIG has implemented ongoing quality enhancement initiatives. By introducing digital management systems, launching Quality

Month activities, conducting targeted quality enhancement

projects, and optimizing quality processes, the Company

ensures product quality across all stages, from R&D and

production to material management. Additionally, our

quality team collaborates closely with key suppliers by

taking various measures, including sharing best practices,

implementing specialized quality assurance programs, and

improving early warning efforts. Through these measures,

we have effectively improved our material quality and

worked with our partners to enhance overall quality

performance.









### **Product Quality Planning**

**Product Quality Assurance** 

**Product Quality Monitoring** 

 Develop quality standards and implementation plans aligned with the Company's strategic goals to define key indicators, process specifications, and resource allocation. Identify preventive measures through risk assessments, ensuring that all stages of product design and manufacturing comply with customer and industry requirements and laying a solid foundation for product quality enhancement.

 Establish a full-process control mechanism. Strengthen personnel capabilities through training on the quality management system, reinforce process audits and phase reviews, and systematically prevent and control quality issues through standardized operations, IT-based errorproofing techniques, and process management. Drive continuous improvement to ensure the production and delivery quality of products.

 Track quality performance through real-time data collection of the IT-driven system. Implement a data monitoring, analysis, and early warning mechanism for critical production processes. Develop timely processing and optimization processes for quality anomalies, forming a forward Plan-Do-Check-Act (PDCA) cycle and continuously improving product yield and customer satisfaction.

**Product Quality Assurance Measures** 



**Key Performance Indicators (KPIs)** 

During the reporting period, CIG recorded **Zero** major product quality incidents.





## **SFIS Enabling Efficient Production and Quality Control**

The Shopfloor Information System (SFIS), independently designed and developed by CIG, helps managers monitor production in real time with high accuracy, thereby enhancing product quality and production management efficiency. The system enforces stringent controls over the entire production process to avoid defective products. It offers features such as real-time process control, product traceability, quality reporting, and production data queries. SFIS ensures that all products are manufactured following system-defined process flows, effectively achieving errorproofing in the production process. Moreover, through the statistical analysis of production data, the system provides precise insights into defect rates, production capacity, and progress at each stage, ensuring the consistent delivery of high-quality products.



### **KANBAN System Boosting Digitalized Product Quality Management**

To enhance its digital production management capabilities and strengthen overall product quality control, CIG started using the KANBAN system, an internally developed big data analysis system for production and manufacturing, in its production workshops. This innovative system overcomes the shortcomings of traditional production management methods, which fail to satisfy real-time, precise, and comprehensive management demands. Leveraging the cloud computing platform and big data mining technology, CIG deployed data acquisition equipment and built a system based on the concept of Cyber-Physical Systems (CPS) and the industrial bus communication mode. The system captures real-time data across personnel, equipment, materials, methodologies, and environments and then conducts visualized analysis, thereby ensuring real-time production monitoring and reliable quality assurance.



The KANBAN System



### **Quality Month Initiative to Strengthen Employee Quality Awareness**

In October 2024, CIG launched a series of quality management activities under the theme "Driving Quality with Accountability, Hands-on Action, Reduced Cost, and Enhanced Efficiency". Relevant activities included lean proposals, 6S improvements, three standard compliance metrics (i.e., standard completeness rate, standard improvement rate, and standard compliance rate), and a quality knowledge quiz. Through these initiatives, employees were encouraged to propose quality improvement proposals and identify potential production quality risks. Those who demonstrated outstanding performance in the activities were recognized and rewarded, thereby raising the Company's overall quality management level and strengthening employees' quality awareness.



Quality Knowledge Quiz



## **Quality Case Study Training to Mitigate Risks Before They Arise**

In October 2024, the Production Quality Department of CIG led a quality case study training program targeting frontline managers and staff in key positions. The training aimed to effectively strengthen employee quality awareness and skills, reduce quality issues, and enhance the Company's product and service quality to improve its market competitiveness. During the training, 16 typical quality incidents from the past years, including material misidentification, mix-ups, and missing components, were carefully selected and their background, process, and consequences were thoroughly analyzed to help employees avoid similar issues and ensure product quality.



**Quality Case Study Training** 



# **Non-Conforming Products and Product Recall**

By establishing the Corrective and Preventive Management Procedures, CIG aims to analyze the root causes of actual or potential product non-conformities within its quality management system and take corrective and preventive actions to prevent recurrence. In the event of potential batch non-conformities in delivered products, CIG strictly follows established procedures for implementing product recalls and relevant stakeholders are promptly informed to ensure effective control of the affected products, avoiding or minimizing the impact of potential hazards.



# **Outstanding Customer Service**

At CIG, we firmly uphold the "customer-first" principle and continuously align with customer needs. Through flexible business models and high-quality customer service, we provide seamless support for our customers throughout their product development lifecycle. To foster direct and effective customer engagement while improving our service quality and customer satisfaction, we have established a diversified communication framework consisting of various communication channels including telephone, email, social media, and interviews. By conducting regular customer satisfaction surveys, we gain in-depth insights into customer expectations, continuously improve our customer service quality, and optimize the overall customer experience.



In the JDM model, CIG collaborates closely with customers on the design and development phases while assuming responsibility for manufacturing. This collaborative approach fosters shared innovation, with both parties contributing expertise and sharing intellectual property. Clear roles and responsibilities are outlined in our JDM agreements, ensuring transparency and alignment throughout the partnership.

With the ODM model, CIG takes charge of the entire product lifecycle-from concept generation to mass production. We pride ourselves on our flexibility and customization capabilities, ensuring that each project is tailored to meet customers' specific requirements. Our team excels at designing and executing projects with precision, delivering innovative solutions that set customers apart in the market.

CIG's Two Service Models

### **Customer Focus**

## Timely Response

### Fairness and Impartiality

· Always prioritize customer interests and spare no efforts to meet their needs

Ensure prompt response to customer inquiries and complaints to guarantee that every customer receives effective feedback Address all customer complaints fairly and impartially without favoritism

### **Problem Resolution**

### Continuous Learning and Improvement

· Take the initiative to resolve customer concerns with a positive attitude and try our best to give them a satisfactory solution.

View every complaint as an opportunity for improvement and constantly draw lessons from experiences to improve our service quality

### **Basic Principles of Customer Service**



# **Customer Complaint Handling**

To systematically handle customer complaints and feedback, CIG has developed the Customer Communication and Complaint Handling Management System. The Supply Chain clearly outlines complaint handling procedures and response time limits, ensuring that all complaints are promptly handled with appropriate solutions. With these measures, we aim to safeguard customer rights and interests and improve their satisfaction.

Complaint Receiving and Logging

- Upon receiving a customer complaint, we promptly reassure the customers and thoroughly understand the details of the complaint.
- We provide an initial response within 24 hours for urgent complaints and within 48 hours for general complaints.
- · We record complaint details, including content, time, and contact information, in the complaint log to ensure full traceability.

Complaint Analysis and Resolution

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- Analyzing and investigating the complaint: The responsible department conducts an in-depth analysis and investigation on the complaint to determine its root cause.
- Providing a solution: We provide a solution based on the nature of the issue and customer expectations and communicate with the customer for confirmation to guarantee that their problems are resolved in a timely manner.



- Establishing a complaint database: All complaints, including complaint details, handling processes, and handling results, are logged into the complaint database for further management and analysis.
- Making periodic analysis and summarization: We conduct regular statistics and analysis on the complaint data to summarize complaint types, root causes, and solutions, and also provide targeted training sessions to present corrective measures and prevent similar problems from recurring.

**Customer Complaint Handling Process** 



**Key Performance Indicator (KPI)** 

During the reporting period, CIG's customer satisfaction reached 89.88%

# **Customer Privacy Protection**

To safeguard customer privacy, CIG actively conducts privacy protection training to reinforce confidentiality obligations among employees and ensure the security of data generated during business operations or associated with customer privacy.







Employees are prohibited from using personal portable devices or storage media, such as external hard drives. USBs. memory cards, cloud storage, or email, to access customer networks without CIG's authorization.

Employees are prohibited from accessing customer systems, or collecting, storing, processing, modifying, disclosing, or transmitting any data or information within customer networks without authorization.

Employees are prohibited from using customer information or data for personal gain or any unlawful purposes, or running illegal software on customer networks.

**Employee Confidentiality Requirements** 



**Key Performance Indicator (KPI)** 

During the reporting period, **()** customer privacy breach incidents occurred

# **Supply Chain Management**

CIG places great importance on supply chain management through the development of policy documents such as the Supplier Management Procedures and the Supplier Safety Requirements Specification. These policies standardize the management of supplier classification, sourcing and onboarding, material selection and certification, category management, audit management, performance evaluation management, supplier qualification cancellation and reinstatement, and other procedures. Additionally, we proactively prevent and monitor potential environmental or social risks in the supply chain to ensure product quality and production stability, enabling suppliers to provide stable products and services while fostering a mutually beneficial development model for both supply and requisitioning parties.



# **Supplier Management**

To ensure a stable and efficient supply chain, CIG classifies its suppliers into three categories—core, important, and general—based on the importance of the materials supplied. Different qualification requirements apply to each level, including the total number of employees, the percentage of technical personnel, ISO 9001 quality management system certification, corporate social responsibility (CSR) performance, supply chain security systems, and financial performance. When sourcing and onboarding new suppliers, relevant departments are responsible for applications and qualification investigations, with onsite audits conducted as needed. For existing suppliers, we have formulated the Supplier Performance Evaluation Management Specification to manage and annually audit the daily performance of the suppliers. In principle, key material suppliers undergo an audit every two years. For suppliers that fail an audit, we have established a mechanism to track and verify their corrective actions. If the supplier still cannot meet the requirements after rectification, we will disqualify the supplier upon consensus.

Admission Scoring

 The procurement channel departments for production and nonproduction materials are respectively responsible for sourcing corresponding suppliers as deemed necessary. After qualification check, contract signing, price evaluation, sample certification, and audits, qualified suppliers are then onboarded with clearly defined coding rules.



- · Audits are categorized into three types: formal audits (for new suppliers), annual audits (for existing qualified suppliers), and special audits (for exceptional cases).
- An annual audit plan is developed every year to dynamically manage suppliers based on their performance, with findings recorded in the Supplier Audit Checklist

Corrective Actions and Exit Mechanism

- If a supplier fails in product quality, delivery performance, annual audits, or performance assessments, corrective actions must be taken immediately.
- If corrective actions are deemed unqualified, or multiple special circumstances exist, the supplier will be disqualified upon mutual agreement, and the exit affairs will be handled according to established procedures.

CIG's Supplier Admission and Evaluation Process

# Procurement Channel Department I

Focuses on developing upstream resources and responsible for sourcing global suppliers, assessing their qualifications, ensuring procurement demands through negotiation, and managing substitute material certifications and resource reserves.

### **Procurement Execution Department**

Responsible for executing midstream orders, conducting end-to-end management of procurement orders, ensuring on-time material delivery, handling supplier accounts, and maintaining partnerships.

# Supplier Management Department

Coordinates downstream full lifecycle management, including onboarding review, performance evaluation, resource pool optimization, agreement compliance, and closed-loop issue management, and collaborates with different departments to improve supplier quality.

#### Other Relevant Departments

Provide specialized support in areas such as demands, finance, legal affairs, and quality.

#### Supplier Management Structure



# **Digital Supplier Platform to Empower Supply Chain Management**

CIG actively drives digital transformation in supply chain management by establishing a supplier collaboration system for intelligent procurement. Leveraging the supplier platform, we enable end-to-end digital management of procurement processes, including procurement planning, sourcing, and supplier information management. Additionally, the platform also facilitates direct communication with suppliers by issuing notifications, sharing the latest policy requirements, and conducting online training to ensure effective policy dissemination. Beyond strengthening supply chain management and improving procurement efficiency, this initiative also helps suppliers stay informed about the our requirements and industry standards, thereby empowering their growth and development.



CIG's Digital Supplier Platform

# **Sustainable Supply Chain**

To mitigate risks and ensure security within the supply chain, CIG signs a General Procurement Agreement with suppliers, which includes the Supplier Confidentiality Agreement, the Supplier Quality Assurance Agreement, the RoHS, REACH and Conflict-Free Minerals Declaration, the Supplier Code of Conduct, the Supplier Integrity and Anti-Corruption Agreement, and the Supplier PCN Agreement. These agreements cover various ESG dimensions, including product quality, information security, hazardous substances, conflict minerals, and business ethics. In the Supplier Code of Conduct, we require both suppliers and their subcontractors to value and fulfill environmental and social responsibilities. Through agreement signing, the ESG-related requirements in the Code can be effectively implemented.

### **Labor Rights and Interests**

- Suppliers should comply with labor standards, provide humane treatment to employees, and prohibit discrimination, forced labor, child labor, or any other human rights violations.
- Suppliers should provide reasonable working hours, fair wages, benefits, and direct, open communication channels for their employees.

# **Health and Safety**

- Suppliers should control potential workplace hazards through appropriate design, engineering and management controls, preventive maintenance, safe operating procedures, and continuous safety training to protect employees' health and safety.
- Suppliers should establish procedures and systems to prevent, manage, track, and report occupational injuries and illnesses.

#### **Environmental Protection**

- Suppliers should strictly comply with environmental laws and regulations, prevent pollution, conserve resources, and minimize the use of hazardous substances.
- Suppliers should adopt appropriate measures to enhance the environmental performance of their products and services, delivering both social and environmental benefits.

#### **Business Ethics**

- Suppliers should comply with business ethics standards, strictly prohibit any and all forms of corruption, extortion and embezzlement, and implement monitoring and enforcement procedures to ensure their compliance with incorruptible management.
- Suppliers should respect intellectual property rights, develop standards for fair trade, advertising, and competition, and protect interested parties' privacy.

# **Conflict Minerals Management**

- Suppliers should develop policies to properly ensure that tantalum, tin, tungsten, and gold in their products do not directly or indirectly fund armed groups engaged in serious human rights violations in the Democratic Republic of the Congo or its surrounding countries/regions.
- Suppliers should conduct due diligence on the source and chain of custody of these minerals.

### **Hazardous Substances Control**

 All products and components provided by suppliers should comply with environmental regulations, directives, and standard requirements, including but not limited to the List of Controlled Ozone-depleting Substances in China, the EU RoHS Directive, the European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste, the REACH Regulation, and the US Toxic Substances Control Act (TSCA).

**ESG Requirements for Suppliers** 



In addition, CIG incorporates specific clauses into annual supplier audits, covering areas such as environmental protection, disaster recovery, social responsibility, and hazardous substances. This ensures that suppliers comply with labor management regulations, environmental compliance requirements, and hazardous substance-related standards. Suppliers are required to submit a report for analysis and improvement within two weeks if any noncompliance issues are identified. Failure to meet rectification requirements may result in disqualification upon friendly negotiation.



# Sustainable Management Objectives for Suppliers

In 2024, we aimed for 100% of suppliers to sign the Supplier Code of Conduct.

In 2024, we aimed for 100% of suppliers to sign contracts that include environmental and labor clauses.



#### **Achievement Status**

Achieved

# **Transparent Procurement**

CIG highly values business ethics management in its supply chain. As part of the Master Procurement Agreement, all suppliers are required to sign the Supplier Integrity and Anti-Corruption Agreement, which outlines fair competition, integrity and self-discipline policies, and anti-corruption clauses, along with the responsibilities for breach of contract and complaint channels, to safeguard the legitimate rights and interests of both parties in procurement transactions. Furthermore, CIG publishes an annual integrity notice on its procurement portal, requiring all suppliers to uphold integrity standards, reject commercial bribery and unfair competition, and foster cooperative relationships based on trust, honesty, and transparency.

Party B shall comply with relevant provisions on fair trade, integrity and self-discipline, and anti-corruption in applicable laws, regulations, and rules.

Party B shall provide regular integrity training for business personnel to foster strong professional ethics and practices.

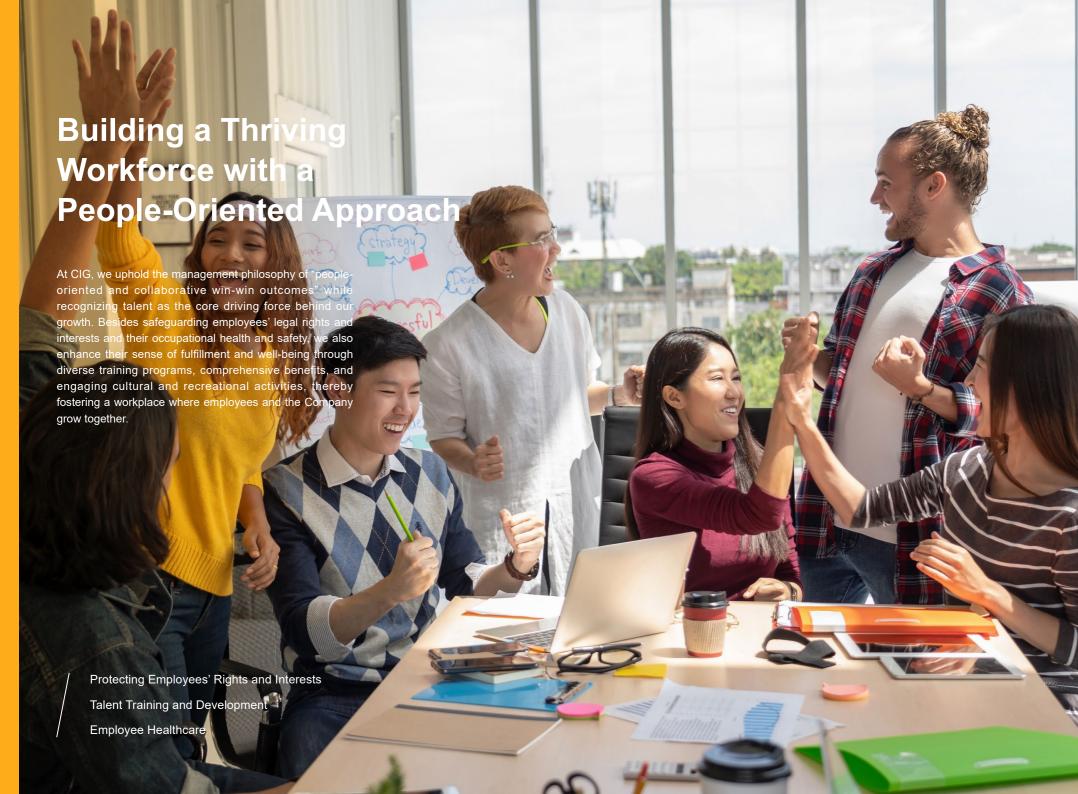
Party B shall support Party A's integrity initiatives; if any Party A's personnel solicit bribes in the daily business process, Party B must refuse and report the incident to Party A's competent department.

Party B shall refrain from offering bribes to Party A's personnel in any form.

Party B shall proactively declare any affiliation with Party A and avoid engaging in related-party transactions.

Party B shall strictly abide by the commitments made to Party A, as well as the contracts, agreements, and memoranda signed by both parties, ensuring the timely delivery of goods in compliance with the agreed quality and quantity.

Key Provisions in the Supplier Integrity and Anti-Corruption Agreement



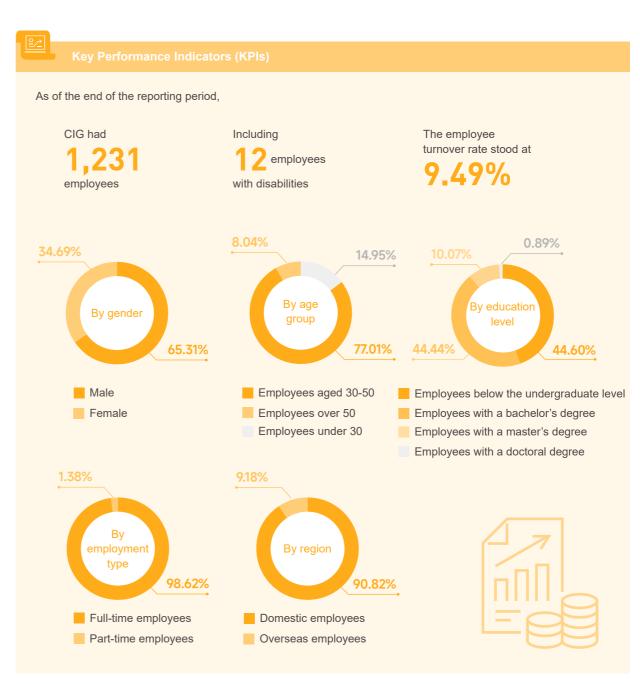
# **Protecting Employees' Rights and Interests**

CIG attaches importance to respecting and safeguarding the rights and interests of all employees. Led by the Human Resources Department and coordinated by the Administration and Factory Management Departments, we strive to create a fair, just, and harmonious work environment for our employees. We strictly comply with laws and regulations, effectively protect employees' rights and interests, and eliminate any form of illegal or unethical employment conduct.

# **Recruitment and Employment**

Adhering to the core principles of "openness, fairness, impartiality, and merit-based selection", CIG aims to build an efficient and harmonious talent team. Guided by this principle, we employ a scientific approach of "setting job positions with actual needs while ensuring talent-post matching" to precisely target our needs for talent, actively attract key professionals, and maintain a wellbalanced talent pool of highly skilled and high-potential employees. In the talent selection process, the Human Resources Department and other functional departments perform their duties, with the objective of selecting high-quality talent with both integrity and professional competence through a scientific and standardized selection mechanism and process.

To ensure a standardized, institutionalized recruitment and employment process, CIG has formulated and implemented the Employee Recruitment Management Policy, widely attracting individuals from diverse fields and backgrounds with different experiences. We emphasize candidate diversity, ensuring that all candidates are provided with suitable job opportunities in a fair and equal manner. Our hiring process strictly complies with legal and compliance requirements. Additionally, we also provide thoughtful accommodations for employees with disabilities, demonstrating our deep care and support for this special group.



CIG fully respects and safeguards all employees' legal rights and interests and rigorously complies with all applicable laws and regulations in both domestic and international markets where we operate. We uphold the highest standards of global labor conventions and initiatives, such as the Universal Declaration of Human Rights, ILO Eight Core Conventions, and the United Nations Guiding Principles on Business and Human Rights, and enforce a zero-tolerance policy against child labor, forced labor, and discrimination.

There should be zero incidents of child labor. forced labor, or discrimination in 2024.

Achieved



CIG firmly opposes and comprehensively prohibits child labor. The prohibition of child labor is explicitly outlined in our Employee Handbook and Employee Recruitment Management Measures. During the recruitment process, we rigorously verify candidates' age and identification documents, rejecting underage applicants and conducting further verification when necessary to foster a legal and regulatory workplace.

CIG provides regular training sessions on labor laws, regulations, and child labor prevention policies for employees to raise their legal and ethical awareness. Meanwhile, we have also established dedicated whistleblowing channels and conducted internal operation inspections and regular supplier audits to proactively detect and eliminate risks related to child labor. Any confirmed violations are subject to a strict closed-loop remediation process, including corrective action within a fixed period of time, accountability tracking, and disciplinary punishments, ensuring that compliance requirements are effectively implemented.



CIG strictly prohibits all forms of forced labor. Through our Employee Handbook and a structured attendance management system, we monitor employee work hours and ensure compliance with reasonable working hour policies. In cases where violations or complaints regarding excessive working hours arise, the Human Resources Department promptly conducts investigations and provides necessary support to affected employees.



CIG has established an Anti-Discrimination Policy and Management Measures, clearly defining management principles for preventing workplace discrimination. We firmly oppose any form of discrimination, ensuring an inclusive and mutually respectful work environment where every employee can fully realize their potential.

# **Remuneration Management**

CIG is dedicated to unlocking talent potential by fostering a culture where individuals can give full play to their talents, fulfill their responsibilities, and exercise their authority. We continuously refine and implement a strategic remuneration and performance management system, whereby all employees receive remuneration through a "fixed salary + variable pay" model. Meanwhile, to further improve employees' work enthusiasm, CIG has launched an equity incentive program facing all eligible employees, including management, key technical (business) personnel, and frontline workers. This initiative strengthens the alignment between employees' personal interests and the Company's long-term growth.



In 2024, CIG granted stock options to employees as part of its incentive program





Determined based on job responsibilities, skill requirements, workload, and market benchmarks; paid monthly to ensure income stability.

### Variable Pay



Linked to the Company, department, and individual performance goals; employee performance outcomes are quantified through key performance indicators (KPIs) to incentivize their performance improvement.

Awarded based on the Company's annual operating performance and annual performance evaluation results of individuals, serving as a reward for employees' year-round contributions.

Designed for key projects or specialized tasks; allocated based on individual contributions to the project, work outcomes, and project benefits.

CIG's Remuneration System



CIG provides employees with a clear performance grievance mechanism to ensure fairness and transparency in performance assessments. We strictly adhere to the principles of timeliness, accuracy, and two-way communication. Within a specific performance assessment cycle, once the assessment is finalized, the results are promptly shared with employees in a truthful, objective, and accurate manner, and employees will sign to confirm their acknowledgment of the results. In case of any objections, employees are encouraged to express their views, thoughts, and concerns, and all objections are handled promptly.



- A benefit-sharing mechanism is established to align individual goals with departmental and corporate goals.
- KPIs prioritize positive, measurable outcomes.
- CIG upholds the principles of fairness, impartiality, and objectivity.
- Dialogue between evaluators and employees is encouraged for timely feedback.



- Assessment outcomes may influence bonus distribution, promotions, remuneration and benefits, and job grade adjustment.
- CIG may, at its discretion, reassign, demote, place employees on training leave, or modify their pay packages if they rank at the lowest performance level.

Employees with concerns about their performance assessment results may submit a written appeal to the Human Resources Department within two working days.

& Decision

The HR Director will conduct an investigation and make a decision. If further clarification is needed, the grievance will be escalated to the CEO for final judgment.

Upon receiving a grievance, the relevant department shall promptly process it, conduct an investigation, verify the facts, provide a resolution based on the findings, and inform the employee accordingly.

Adjustment

If the grievance is deemed justified, timely corrections will be made to adjust the performance assessment results.

CIG's Performance Assessment System

**Employee Performance Grievance Process** 

# **Democratic Communication**

To ensure that employees' rights and interests are fully protected, CIG has established a comprehensive employee grievance and feedback mechanism. In accordance with the Employee Communication Management Measures and the Employee Grievance, Complaint and Whistleblowing System, CIG ensures that employees can express their opinions in a timely and unimpeded manner.

#### **Communication Channels**

• Employees at CIG can provide their feedback at any time through anonymous whistleblowing or open communication, including but not limited to the following channels: bulletin boards, electronic suggestion boxes for employees, employee forums, employee representative meetings, emails, meetings, one-on-one discussions, and employee satisfaction surveys.

### **Responsibilities of Functional Departments**

- The Communication Management Committee, led by the CEO and with department heads as deputy team leaders and members, and the employee relations specialist serving as the assistant, is responsible for reviewing communication reports, coordinating cross-departmental issues, managing the communication mailbox, issuing written decisions, conducting interviews with employees at the management level or above, and overseeing the implementation of communication feedback by the responsible department.
- The Human Resources Department is responsible for developing communication channels, organizing face-to-face discussions, collecting or urging the submission of communication reports, analyzing feedback information, issuing analysis reports, and maintaining communication records.
- The Administration Department is responsible for managing suggestion boxes and bulletin boards, gathering employee feedback, facilitating information exchange with employees, and supporting communication activities.
- · Other departments are responsible for organizing regular internal communication activities, expanding communication channels, addressing employee concerns, submitting communication reports, and cooperating with the Communication Management Committee.

#### **Handling Procedure**

 Once a grievance is recorded, the responsible personnel will promptly initiate an investigation and provide a clear response and resolution within the stipulated timeframe, ensuring that employees' concerns are addressed appropriately.

**Democratic Management of Employees** 



# **An Employee Representative Congress Held for Effective Communication on the Jiangyue Road Factory Relocation Plan**

To support business expansion, CIG planned to relocate its manufacturing base in Shanghai to Jiashan, Zhejiang Province. To better understand employees' relocation intentions and facilitate smooth transition arrangements, CIG held an Employee Representative Congress in February 2024, with over 35 representatives in attendance. At the meeting, the HR Director presented the blueprint of the new Jiashan factory through a PPT, detailing key concerns of employees regarding the relocation such as remuneration and benefits, housing arrangements, and education support for employees' children. This transparent presentation provided employees with a direct and comprehensive understanding of the new work environment. The management team listened attentively to employees' feedback and assured them that all necessary measures would be taken to ease their transition. The holding of this Employee Representative Congress not only deepened employees' understanding of the relocation plan but also strengthened team cohesion and morale.



**Employee Representative Congress** 



In 2024, a total of 758 employees actively participated in the employee satisfaction survey, with an overall satisfaction score of 75.6 points.

# **Talent Training and Development**

CIG has established and continuously refined its employee promotion and development management mechanism, ensuring scientific and standardized evaluation standards and processes within the Company. This mechanism not only ensures a tiered talent pipeline that meets the Company's needs for talent at different competency levels across various stages of development but also provides a clear pathway for employee promotion and career planning. CIG adopts a systematic, professional, diverse, and results-driven approach to training. Employees are encouraged to learn from each other as models, mentors, and coaches. This model integrates self-directed learning with knowledge-imparting and combines job-specific skills training with professional knowledge training, ultimately fostering a culture of training for all employees.

# **Employee Promotion**

To help employees understand their career growth trajectory, CIG has designed clear career advancement pathways for them.



For employees excelling in specialized technical fields, CIG offers career progression opportunities within professional roles, encouraging them to enhance technical skills and expertise and become industry experts.



For employees demonstrating leadership potential, CIG provides a management development track, supporting their progression into higher-level management positions through management and leadership ability enhancement.

**Employee Promotion System** 

# **Talent Training**

Recognizing the characteristics of business development, CIG prioritizes internal training while selectively incorporating external training courses. We encourage employees to engage in self-directed learning, advocate the concept of lifelong learning, and provide extensive learning resources and support for our employees.

# **Onboarding Training**

New hires are provided with comprehensive onboarding programs, covering corporate culture, rules and regulations, job-specific skills, and others to ensure a smooth integration into the team.

# **On-the-Job Training**

Internal training courses: A variety of professional skill development courses have been organized, covering areas such as technological advancements, management skills, and communication techniques. These courses are delivered by in-house experts or external consultants.

Online learning platform: Launched in March 2019, this platform serves as a key tool for internal training and development at CIG. The platform offers nearly 450 online internal courses, allowing employees to engage in flexible online self-paced learning or attend inperson training sessions tailored to their job roles and career aspirations. Employees can access online courses anytime, anywhere, facilitating their independent learning.

#### **Employee Training Mechanism**



A Wide Range of Courses Offered by CIG's Online Learning Platform





In 2024, we aimed for an employee training coverage rate of 95%.



In 2024, the employee training coverage rate reached 97%.



During the reporting period,



Annual training expenditure

**247,500** RMB **168** Sessions

Total training sessions

Total employees trained

**1,197** Persons



Total training hours

**12,322** Hours

Average training hours per employee

10.01 Hours/Person



# **School-Enterprise Cooperation to Develop Skilled Employees**

CIG has partnered with the Wuchang Institute of Technology in Hubei to promote school-enterprise cooperation and deepen the integration of industry and education. Through initiatives such as establishing a cooperation base and launching the "Young Talent Training Camp" program, CIG has aligned academic talent cultivation with corporate needs. In 2024, nearly 20 fresh graduates were recruited and underwent systematic training through the "Young Talent Training Camp", enabling them to rapidly transition into qualified engineers. This partnership not only provides university students with valuable practical and employment opportunities but also infuses fresh talent into the Company, creating a win-win collaboration between academia and industry.







# **Business English Training to Enhance Work Efficiency**

To enhance employees' English proficiency and better support its business expansion into global markets and communication with overseas customers, CIG conducts annual business English training programs on a regular basis. From May to October 2024, CIG organized a six-month online business English training course with 38 employees participating. The training covered Al-assisted learning and one-on-one lessons with native English-speaking instructors, which helped participants significantly improve their English listening and speaking skills and work efficiency.



# **Employee Healthcare**

CIG places a great emphasis on employee health and safety, having established comprehensive health and safety management systems and standards. The Company conducts regular hazard inspections and provides onging safety education and training for employees. Additionally, CIG has developed detailed emergency response plans, ensuring swift action in emergencies to protect employees' life safety. The Company also actively organizes employee care activities to show concern for employees and improve their well-being at work.

# **Health and Safety**

CIG is dedicated to providing employees with a healthy and safe working environment. To this end, we have developed policy documents such as the Regulations on the Management of Workplace Safety, the Accountability System for Workplace Safety, the Environment and Occupational Health and Safety Manual, the Quality and Hazardous Materials Process Management Manual, the Hazard Identification. Risk Assessment and Control Procedures, and the Emergency Preparedness and Response Control Procedures. We also maintain certification under the ISO 45001 Occupational Health and Safety Management System to minimize occupational health and safety risks and ensure the health and safety of employees.

# **Health and Safety Management**

Zero-accident objective: Striving for zero workplace accidents and injuries

Occupational disease prevention: Conducting regular health check-ups and taking occupational disease prevention measures to minimize occupational diseases

Healthy workplace: Ensuring that our workplace complies with health standards to minimize occupational hazards

Compliance with laws and regulations: Strictly complying with national and local workplace safety laws and regulations to maintain lawful and compliant operations

Continuous improvement: Carrying out periodic safety risk assessments and potential hazard inspections to continuously enhance the safety management system and improve safety performance

We set clear KPI targets at the beginning of each year and conduct regular occupational hazard factor testing in workplaces with potential occupational hazards according to relevant laws and standards, ensuring that our workplace complies with occupational health standards. Employees engaging in positions involving occupational hazards are provided with regular occupational health check-ups before taking up the post, while working in the post, and after leaving the post, to timely identify and address any emerging health concerns. Moreover, dedicated personnel are assigned to manage occupational health records, with each employee having a separate health tracking record, maintaining clear and complete health records for all employees.



We have established a workplace safety management framework led by the Workplace Safety Committee. A dedicated task force charged with promoting workplace safety is responsible for employee training, hazard identification, hazard rectification and follow-ups, among other tasks. According to the Accountability System for Workplace Safety, we have signed 94 workplace safety responsibility agreements with managers at all levels to enforce accountability for workplace safety management. Meanwhile, in compliance with the Regulations on the Management of Environmental Safety Education and the Safety Inspection and Hazard Management System, we conduct regular employee safety training to enhance safety awareness of all staff. Moreover, we also carry out various types of safety inspections to ensure that corrective measures are effectively implemented and potential hazards are eliminated in a timely manner.



We have formulated a well-rounded Emergency Response Plan for Workplace Safety Accidents and conduct regular emergency drills to ensure prompt and effective responses of all departments to safety emergencies. To enhance our capacity to respond to emergencies, we have set up a volunteer firefighting team equipped with emergency supplies and regular training sessions. Medical kits are placed in/on each area/floor and managed by assigned personnel, while Automated External Defibrillators (AEDs) are installed in the human resources and administrative offices. These enhanced emergency facilities effectively protect the life and health safety of employees in an all-round way.



Risk Identification: Identifying potential hazards and harmful factors in business operations

Risk classification: Categorizing risks into four levels based on their severity and likelihood: Level A (Critical/Red), Level B (High/Orange), Level C (Moderate/Yellow), and Level D (Low/Blue)

Risk assessment methods: Utilizing various assessment methods such as Job Hazard Analysis (JHA), Safety Checklist (SCL), Risk Matrix (LS), and Likelihood-Exposure-Consequence (LEC) to quantify risks across different operational units

Operational activity analysis: Conducting a detailed analysis of all operational activities of the Company to identify potential hazards such as mechanical injuries, electric shocks, fires, and falls from heights

Hazard Identification

Equipment and facility inspection: Performing comprehensive inspections of production equipment, auxiliary facilities, and electrical systems to detect potential hazards during operation

Environmental factors assessment: Assessing workplace hazards such as insufficient lighting, poor ventilation, and slippery floors

Management factors assessment: Identifying deficiencies in management, such as incomplete safety management system, inadequate safety training, and delayed emergency response

Safety Management Process

Routine inspections: Conducting daily site inspections to promptly identify and address on-site safety hazards such as equipment malfunctions, missing protective devices, and unstable material storage

Inspection

Specialized inspections: Performing regular targeted inspections on specific equipment, processes, or areas to ensure safety in high-risk zones

Periodic evaluations: Conducting comprehensive safety risk assessments every six months or annually and systematically evaluating and improving the Company's safety management system by integrating the potential hazard inspection results

Corrective actions and implementation: Developing detailed corrective measures for identified risks, assigning responsible personnel, setting deadlines, and ensuring timely elimination of hazards

During the reporting period,

CIG invested

in workplace safety

with a total of

dedicated to occupational health and workplace safety training

Work-related injuries resulted in a total loss of

non-productive

workdays

Note: All of the above losses occurred on non-productive workdays.

	Unit	2022	2023	2024
Work-related fatalities	Persons	0	0	0
Work-related fatality rate	%	0	0	0



# Training on Hazard Identification to Enhance Employee Safety Awareness

In June 2024, CIG conducted a training session on environmental factor assessment and hazard identification, aiming to publicize workplace safety knowledge, enhance safety and occupational health awareness among employees, and help them effectively recognize occupational health and safety hazards. The training combined theoretical instruction with assessments, with a total of 35 employees participating Following the training, employees demonstrated significantly improved safety awareness and the ability to independently identify hazards, greatly enhancing workplace safety.



**Occupational Safety Training** 



# **Emergency Response Drills to Ensure Workplace Safety**

In June 2024, as part of the Safety Month initiative to strengthen workplace safety publicity, CIG conducted workplace safety accountability training sessions for on-site managers, with 38 employees participating. The training covered factory safety conditions, workplace safety responsibilities, management regulations, and case studies of fire-related incidents. Through emergency response drills, employees learned proper responses to emergencies and improved their emergency response ability.



Fire Emergency Drill



# First Aid Training to Improve Self-Rescue Skills in **Emergency**

In June 2024, CIG conducted a comprehensive first aid training program to further enhance employees' safety awareness and emergency response capacity. The Company invited experienced external first aid instructors to provide face-to-face guidance and hands-on exercises for employees on cardiopulmonary resuscitation (CPR), wound dressing, and the operation of automated external defibrillators (AEDs). Employees actively engaged in the training, attentively listened to the instruction, and practiced first aid skills under the guidance of the instructor. Through practical exercises, employees gained a more intuitive understanding and firsthand experience in using emergency rescue equipment. By the end of the training, all attendees were proficient in basic first aid skills, significantly enhancing their self-rescue and mutual aid capabilities in emergency situations. This training further strengthened employees' safety awareness and self-protection capabilities, ensuring that they could remain calm and take appropriate actions during unexpected incidents.



First Aid Training

# **Employee Benefits**

CIG constantly improves its benefits system, prioritizes employee well-being, and endeavors to foster a warm and harmonious work environment for employees.

- Five insurances and housing fund: pension insurance, unemployment insurance, workrelated injury insurance, medical insurance, maternity insurance, and housing fund.
- Statutory leave: Includes but is not limited to annual leave, marriage leave, bereavement leave, maternity leave, paternity leave, and sick leave.

Supplementary medical insurance, accident insurance, employer liability insurance, and financial assistance for employees in need.

Health checkups and occupational disease screenings for in-service staff.

Transportation allowances, meal subsidies, communication subsidies, job subsidies, and high-temperature allowances, depending on job characteristics and work requirements.

- > Reduced workload for pregnant employees and one hour of breastfeeding leave per day for female employees with infants under one year old.
- Half-day leave on International Women's Day.



# Dragon Boat Festival Celebration to Enhance Employee Well-Being at Work

In June 2024, CIG hosted a Dragon Boat Festival celebration, which featured gift packages and fun activities, aiming to allow employees to experience the traditional festival and intimate care from the Company. On the day of the event, employees actively participated, enjoying an engaging and lively atmosphere. Activities such as sachet-making and ring toss games provided opportunities for interaction, teamwork, and an appreciation of traditional cultures. Through this celebration, employees took a break from their busy work, experienced the Company's care and support, and strengthened their sense of belonging and well-being.



CIG's Team-Building Activity on the Dragon Boat Festival



# **Employee Birthday Celebrations to Strengthen a Sense of Belonging**

CIG values employees as its most valuable asset and regularly organizes birthday celebrations to enhance employees' sense of belonging and well-being. In December 2024, CIG held its final birthday celebration of the year and prepared birthday gifts for employees. To make the event more interactive and enjoyable, a hands-on crafting session was organized where employees worked in teams to create Christmas trees and birthday cards. These activities not only nurtured their hands-on ability but also strengthened team bonding. Through these birthday celebrations, employees not only experienced the Company's appreciation and warmth but also strengthened their sense of team spirit and camaraderie, laying a solid foundation for future collaboration.







# **Driving Digital Connectivity**

We are living in a digital era, yet not everyone in every region has equal access to the benefits brought by the Internet. At CIG, we are committed to ensuring that everyone in the world, no matter where they are, can seamlessly connect to the Internet, have unrestricted access to information, engage in mutual communication and learning, and share their moments with the rest of the world.

### Digital Connectivity Provided by Our Products and Services



Wired broadband products provide users with a stable and high-speed network connection, serving as the backbone of digital connectivity. These products ensure reliable long-distance data transmission without interference from external wireless signals, offering uninterrupted, reliable network access for homes, businesses, and institutions. Additionally, wired broadband is a key enabler in building smart cities by providing robust network infrastructure for intelligent transportation, intelligent security, environmental monitoring, and other applications, thereby accelerating urban digitalization and intelligent transformation.

CIG's wired broadband product line covers 6 different ONT families of products all of which support the entire FTTx applications of triple-play services.



**>>** 

The widespread adoption of wireless network products has significantly expanded the scope of digital connectivity, allowing more people to enjoy the benefits of the Internet. Wireless networks have fueled the growth of mobile Internet, giving rise to innovative applications and services such as mobile social networking, live streaming, and the sharing economy, while transforming people's lifestyles and consumption habits. Moreover, wireless networks play a critical role in the Internet of Things (IoT), enabling seamless connectivity among devices and supporting smart homes, intelligent logistics, industrial IoT, and other sectors, thus driving digital transformation and innovative development across various industries.

Our wireless network products include indoor APs, outdoor CPE, and 4G/5G Small Cells, meeting the diverse and flexible requirements of the enterprise and residential markets.



The advancement of optical modules has dramatically enhanced network transmission capabilities and efficiency, providing strong technical support for digital connectivity. These products enable the rapid transfer of massive amounts of data within a short time, meeting the increasing bandwidth and speed demands of emerging technologies such as cloud computing, big data, and artificial intelligence. Meanwhile, optical modules help reduce network transmission costs while improving network reliability and stability, thereby accelerating the adoption and expansion of fiber-optic communication networks.

CIG offers a full range of optical transceiver solutions for data centers, high-performance computing, telecommunications (including 5G wireless networks), and other applications. In multiple fields such as Linear Pluggable Optics (LPO), and next-generation data rates (200G per wavelength), CIG continues to shape the future of networking.

# **Promoting Product Accessibility**

With technological innovation as our core driving force, we have focused on Al-powered network solutions, deepened our capabilities in high-speed optical communication modules, Al connectivity, and intelligent terminal devices, and promoted independent R&D and vertical integration. Through these endeavors, we aim to deliver high-value products and services to global customers, work closely with our partners to build an open and sustainable global ecosystem, and drive the global deployment of our products, enabling high-quality, low-cost, and energyefficient Internet access for more people in the world.



### **Expanding Sales Channels**

We primarily serve telecom operators and data center operators as our end customers. We have established operational sites in the United States, Japan, and Malaysia to continuously expand our market reach. Our business now covers most of the world's leading telecom operators and communication equipment providers.



# **Enhancing Affordability**

By diversifying its product portfolio and continuously improving product performance, we provide cost-effective products to users worldwide at an affordable price.





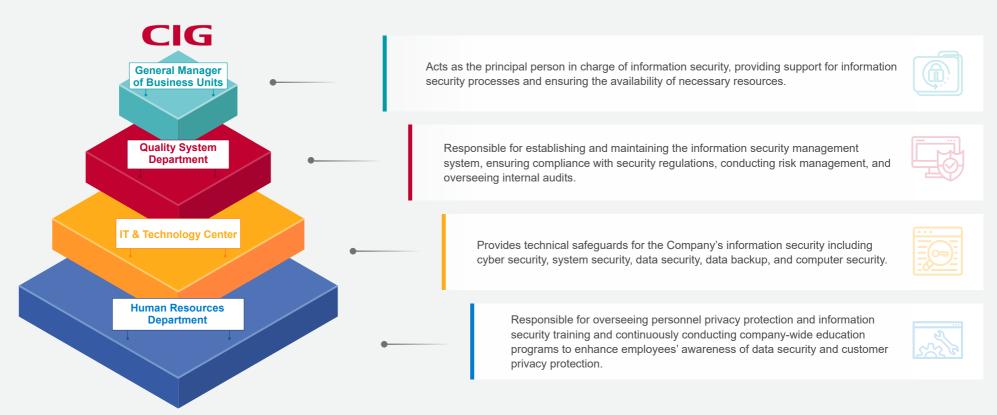
## Improving Information Accessibility

We offer detailed product introduction, including specifications, features, user guides, and aftersales support, to ensure ease of use and installation of our products by our customers.

# **Ensuring Cyber Security**

In the digital economy era, data has become the most essential productive factor, elevating the importance of data security to an unprecedented level. In active response to the Plan for the Overall Layout of Building a Digital China, CIG has established a multi-layered, comprehensive information security governance framework, committed to fulfilling the strategic imperative of "building a reliable and controllable cyber security barrier" and prioritizing "effectively safeguarding cyber security" and "enhancing data protection capabilities" as key initiatives.

# **Information Security Governance Framework:**



### CIG's Information Security Policy

Information security is everyone's responsibility.

Rapid response and proactive prevention are essential.

Customer trust is decisive for our long-term success.



To safeguard information security and ensure data confidentiality, integrity, and availability, CIG continuously enhances its information security management system from both managerial and technical perspectives. The Company has established management principles based on the complete lifecycle of information security, covering five key stages, i.e., creation, storage, processing, transmission, and destruction. At each stage, CIG identifies and assesses risks to data confidentiality, integrity, and availability, develops and implements corresponding technical and managerial measures, and regularly monitors and evaluates the effectiveness of measures and changes in risks to ensure information security.

By defining clear ownership and responsibilities, CIG has developed three essential elements for cyber security protection, i.e., personnel security, policy-based security, and technical security. These elements ensure both device and software security. Moreover, cutting-edge technologies such as data classification and grading, access control, and encryption technology provide support for the stringent enforcement of policies and procedures. Additionally, the Company conducts regular risk assessments and vulnerability remediation in compliance with relevant laws, regulations, and industry standards, to counter evolving threats and protect both user privacy and corporate data assets



# Confidentiality

Make sure that there is no unauthorized disclosure of information and the information is not used by unauthorized individuals, organizations, or computer programs.



Protect information from unauthorized modification or destruction.



# Availability

Ensure that authorized users and programs can access information in a timely and reliable manner.



· Deploying information security engineers, senior network engineers, senior system engineers, and 24/7 security operation and maintenance monitoring personnel to ensure comprehensive information security.



· Establishing comprehensive information security-related policies such as the Cybersecurity Management Specification, the Information Security Rewards and Penalties, the Information Security Management Measures, and the Control Procedures for Disaster Recovery and Business Continuity to strengthen internal information security management and reinforce employee awareness.



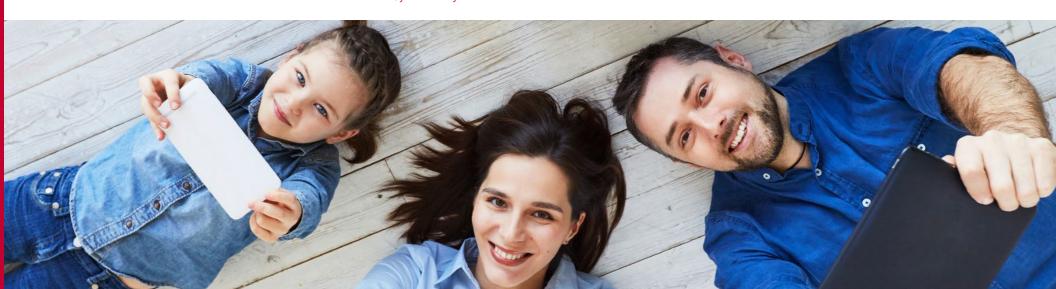
- · Deploying cyber security infrastructure, including cyber security topology, firewalls, bastion hosts, and network probes.
- Installing antivirus software platforms, patch management systems, and other cyber security software.
- · Conducting comprehensive scans of third-party software and hardware.

#### **Qualification Certificate**

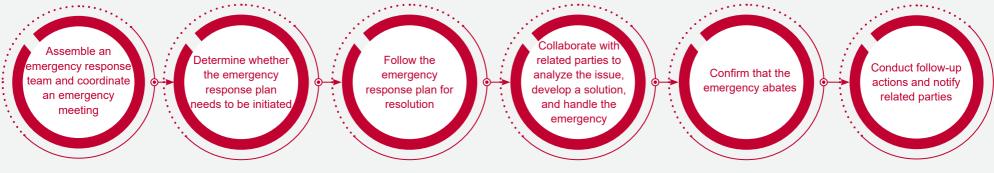
As of the end of the reporting period, CIG has successfully obtained the AAA-level Integration of Informatization and Industrialization Management System Certificate and ISO 27001 Information Security Management System certification.



#### Three Essential Elements for of Cyber Security Protection



To enhance its ability to respond to unexpected IT system failures, CIG has formulated the IT Emergency Response Plan, which outlines emergency response procedures to prevent and minimize losses caused by information security risks to the Company.



Information Security Emergency Response Process



# Offsite Disaster Recovery Drills to Ensure **Information Security**

To prevent potential disruptions caused by unforeseen incidents or cyberattacks on information security, CIG regularly backs up data both locally and offsite, adopts security protection measures for offsite disaster recovery, and conducts emergency data recovery drills. In 2024, CIG organized nine emergency restoration drills targeting key data and information, including the Procurement Portal, Sales Portal, SFIS Database, and WMS Database. These drills fully validated the effectiveness of CIG's information security framework and reinforced the Company's cyber security barrier.



# **Strengthening Technical Capabilities through Employee Training**

To safeguard cyber security, CIG organizes irregular IT and information security training. In March 2024, CIG organized dedicated training sessions on the use of the IT system and information security for IT personnel, where common types of cyberattacks, methods of virus transmission, Email and personal information security, and other topics were explained and publicized in detail. Through this training, CIG not only reinforced its internal information security defenses but also enhanced the professional capabilities of IT personnel, further securing the Company's products and services.



Information Security Training

# **Boosting Industry Development**

CIG actively participates in various industry events, fully showcasing its strengths in communication technology and its positive role in driving industry development. Moving forward, CIG will continue to drive technological innovation, strengthen industry collaboration, and contribute further to the advancement of global communication technologies.



# Joining the Broadband Forum and Participating in Standards Development

Since joining the Broadband Forum in 2008, we have actively participated in developing industry standards and technological innovations. As a globally leading nonprofit industry organization, the Broadband Forum is dedicated to driving the development of smarter and faster broadband networks, holding significant influence and authority in the telecommunications sector. With deep technical expertise, CIG became one of the first companies to receive BBF.247 certification, further solidifying its leading position in broadband technologies. BBF.247 certification is a key interoperability standard set by the Broadband Forum, which is designed to ensure the interoperability of the ONT Management and Control Interface (OMCI) between Optical Network Terminals (ONTs) and Optical Line Terminals (OLTs) from different manufacturers. This certification plays a crucial role in enhancing the compatibility and interconnectivity of global broadband networks.



# Participating in Industry Events to Explore Pathways for Low-Carbon Transition in the Industry

In April 2024, CIG, alongside Actiontec from the United States, attended an industry event hosted by Auray OTIC and Security Lab. The event featured six key topics, with the first focusing on energy consumption, efficiency, and saving testing for Open Radio Access Network (O-RAN) architectures. At the event, CIG showcased the energy efficiency test results of the SC705 O-RU, which passed the independent test verification conducted by Auray Lab. This confirmed that the device can effectively reduce mobile network energy consumption and carbon emissions, which has provided a practical reference for the green and low-carbon transition in the telecommunications industry.



Energy Consumption, Efficiency, and Saving Testing





# Showcasing CIG's Advanced Technologies at the Network X

In October 2024, CIG attended Network X held at the Paris Expo Porte de Versailles, France, showcasing its advanced technologies and products. At the event, CIG's teams from different countries and regions including China, the U.S., and Europe introduced a wide range of ICT products from different product lines and deeply engaged with global customers. Attending Network X gave CIG an opportunity to exhibit its latest technologies and solutions while gaining valuable insights into peer development and latest industry trends.



Network X



# Leading Innovation in the Photonics Industry at OFC

The Optical Fiber Communications Conference and Exhibition (OFC), jointly organized by the Optical Society of America (OSA), IEEE Communications Society (IEEE/ComSoc), and IEEE Lasers and Electro-Optics Society (IEEE/ LEOS), is the world's premier annual event in the photonics and optical communication industry. In 2024, CIG showcased its meticulously developed high-performance optical module product series at OFC. These innovative products are designed to meet the growing demand for high-capacity, lowcost, and low-power optical modules in data centers and Al computing. By presenting its latest innovations at this prestigious event, CIG reaffirmed its innovation capabilities and leadership in the photonics industry.



OFC

About CIG

# **Giving Back to Society with Compassion**

At CIG, we firmly believe that corporate social responsibility and business success go hand in hand and our sustainable development is inseparable from our contributions to society. Guided by our core philanthropic principle of "working together to create and share value", we actively fulfill our social responsibilities and give back to society through public service activities, such as educational support. Meanwhile, we also dedicate ourselves to rural revitalization, with a view to improving education and living conditions in rural areas and promoting social harmony and progress with concrete actions.

# **Social Welfare and Philanthropy**

CIG has established the Management System for Social Welfare and Philanthropy, which clearly defines the responsibilities of relevant departments. Through multidimensional public welfare projects in education support, health promotion, and environmental protection, CIG actively addresses social challenges, fosters positive societal impact, and contributes to social harmony and progress.



# **Key Performance Indicators (KPIs)**

During the reporting period,

CIG invested a total of

in public welfare

With employee volunteer activities recording a total of

participations

### Senior Management

Defines strategic plans for public welfare and approves major public welfare projects and budgets.

#### **Human Resources and Administration Center**

Formulates plans for public welfare projects, recruits and organizes employees to participate in public service activities, and conducts personnel deployment and event management.

#### Finance Management Center/Cost Management Department

Manages the funds for public welfare projects, including budget approval, expense reimbursement, and financial audits.

# Marketing Department

Sorts out materials for public service activities, produces promotional materials, and enhances the Company's public image.

# **Business Departments**

Coordinate with the implementation of public welfare projects and activities based on the plans, such as organizing volunteer services and fundraising donations.

Social Welfare Management Framework and Responsibilities



# **Educational Assistance and Donations**

2024 marks the 9th consecutive year of CIG's "Warm Hearts on Campus, Donations with Love" charity campaign. Over the years, CIG has paid constant attention and provided aid to schools and villages in underprivileged mountainous areas in Gansu, Sichuan, Guangxi, and other regions, continuously donating essential supplies to support underprivileged students in mountainous areas.



# Targeted Assistance for Underprivileged Students to Ignite Hope

Upholding social responsibility and humanistic care, CIG launched the "Warmth to Mountainous Areas, Love in Action" charity campaign, from October 2024, the 38-day campaign pooled goodwill and invested RMB 17,020.1 in total. This campaign provided targeted assistance to 52 students at Dahe Nine-Year School in Longxi County, Gansu Province, covering students from kindergarten to ninth grade. During the campaign, CIG specially organized a two-day dedicated donation event, attracting 81 enthusiastic employees who actively participated, embodying a spirit of compassion through their actions. Beyond supplying essential materials, CIG also delivered hope and dreams. The initiative not only underscored the Company's commitment to giving back to society but also inspired the sense of social responsibility of employees who jointly shaped CIG's positive and responsible public image. This event served as a bridge of warmth connecting cities and mountainous regions and bringing people closer.





Donation Event at an Impoverished School in Longxi, Gansu

# **Rural Revitalization**

CIG recognizes the critical role of rural revitalization in national development and has incorporated it as a key pillar of its ESG strategy. Through education rejuvenation, improving living conditions, and active engagement of social resources, CIG continues to contribute to the development of rural areas.

### **Education Rejuvenation**

By donating books and school supplies, CIG is committed to enhancing the quality of education for local students and nurturing a group of knowledgeable and skilled talents for rural areas.



## Quality of Life for Rural Residents

CIG prioritizes the quality of life for rural residents and ensures better living conditions for teachers and students by donating daily necessities and heating materials.



#### Demonstration Effect of Social Engagement

CIG organizes public service activities and encourages employees to actively participate in these activities, demonstrating the Company's exemplary role in rural revitalization. CIG aims to inspire more businesses and individuals to focus on rural development, fostering a positive social atmosphere and mobilizing more resources for this cause.



Areas of Concern for Rural Revitalization



# **Environmental Compliance Management**

CIG stays committed to a sustainable development strategy. By rationally using energy and resources and minimizing consumption, we aim to pursue harmony between the environment, nature, and society. We rigorously comply with national laws and regulations such as the Environmental Protection Law of the People's Republic of China, the Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution, and the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes. Based on these laws and regulations, we have established a systematic internal environmental management framework, enhancing the effectiveness of sustainability through standardized and process-oriented management mechanisms.

To strengthen systematic and forward-looking environmental governance, CIG has established an environmental management system in compliance with ISO 14001 standards, with its certification successfully renewed during the reporting period. Based on this effort, we have adopted a "goalaction-verification" closed-loop management approach. Specifically, we set annual environmental targets and specify the target definitions, statistical cycles, and responsible departments of key indicators (e.g., carbon emission intensity reduction, waste recycling rate). Regular performance evaluation mechanisms are also in place to keep track of execution efficiency, thereby ensuring full control over environmental management across the entire process, from strategic planning to onthe-ground implementation.



ISO 14001 Environmental Management System Certification

For new projects and factories, CIG rigorously complies with the Law of the People's Republic of China on Environmental Impact Appraisal to conduct life cycle assessments on environmental impacts. This initiative ensures that our projects comply with the red lines for ecological conservation, benchmarks for environmental quality, caps on resource utilization, and ecological environment access lists. Before project commencement, we engage third-party agencies to evaluate the feasibility of the precautionary measures for environmental protection and then submit third-party reports to competent authorities for examination and approval. Upon project completion, we invite third-party agencies for on-site acceptance inspections to ensure compliance with environmental regulations. Additionally, we systematically identify potential environmental risks through environmental impact assessments. For high-risk scenarios such as hazardous chemical leakage or sudden pollution incidents, we have established a multi-tiered *Emergency* Response Plan for Environmental Incidents, outlining emergency response procedures, resource allocation, and role responsibilities. Emergency drills are also conducted to enhance employee preparedness, thereby ensuring that risk prevention capabilities align with business expansion.





# **Chemical Spill Emergency Drill**

In September 2024, CIG organized a chemical spill emergency drill to simulate the execution of emergency response plans for potential spills occurring during receiving, inventory checks, and on-site storage. Employees responded swiftly, properly wore personal protective equipment, and methodically executed emergency response procedures, including spill containment and site cleanup. This drill significantly enhanced employees' emergency response capabilities for chemical spill incidents, reinforcing CIG's environmental risk control measures.



Chemical Spill Emergency Drill

CIG actively fosters a green workplace culture, encouraging all employees to adopt low-carbon practices. These initiatives include comprehensively implementing refined water and electricity conservation management, advancing waste sorting, and promoting a paperless office environment. Furthermore, we provide environmental awareness training for all employees, promoting sustainable habits in daily operations to reduce our carbon footprint while enhancing both environmental benefits and organizational efficiency.



# **Environmental Protection Training Sessions** to Convey a Vision of Green Development

In 2024, CIG conducted environmental protection training sessions in March, May, August, and December, covering topics such as the RoHS environmental system, the environment and occupational health and safety system, etc. During the training, instructors used theoretical explanations and case analyses to help employees gain a deeper understanding of environmental protection knowledge and CIG's environmental requirements. By the end of the sessions, 100% of participants successfully passed the training assessments. This series of training sessions significantly enhanced employees' awareness of environmental protection, successfully instilled environmental values, and encouraged them to actively implement environmental requirements in their future work, thereby supporting CIG's commitment to green development.



**Environmental Protection Training** 



# **Biodiversity Conservation Training to Enhance Employee Awareness**

In December 2024, CIG hosted a biodiversity conservation training session to educate employees on the definition, significance, and current status and challenges of biodiversity, along with practical conservation measures. This training effectively increased employees' understanding of biodiversity and inspired them to contribute to its protection by making eco-conscious choices in both their work and daily lives.





CIG

# **Climate Change Response**

To enhance carbon emission management while better adapting and responding to climate change, CIG has clarified that the Strategy and ESG Leadership Group is responsible for leading the setting of company-wide carbon emission reduction targets, and the Strategy and ESG Working Group is responsible for developing annual carbon emission reduction projects, so as to ensure that annual carbon emissions meet targets. Each department assists in advancing these projects through assessments, implementation, data statistics, summary, and supervision. In the future, we will gradually expand the boundaries of our inventory and plan to complete and disclose to the public the greenhouse gas (GHG) emissions inventory of our other subsidiaries and those covering the upstream and downstream of our supply chain (Scope 3) by 2026.

## **Key Performance Indicators (KPIs)**

	Unit	2022	2023	2024
Total GHG emissions	Tons of CO <sub>2</sub> equivalent	10,177.77	8,806.01	10,417.93
-GHG emissions (Scope 1)	Tons of CO <sub>2</sub> equivalent	1,218.53	931.72	1,060.28
-GHG emissions (Scope 2)	Tons of CO <sub>2</sub> equivalent	8,959.24	7,874.29	9,357.65

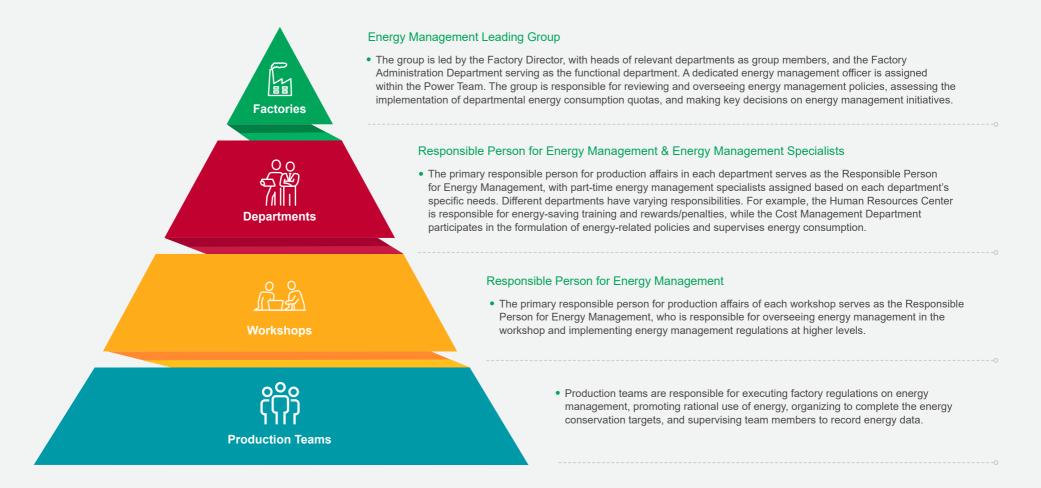
#### Notes:

- 1) The calculation scope of our GHG emission-related metrics indicators CIG Shanghai Co., Ltd. and CIG Shanghai Co., Ltd. Shanghai Branch.
- 2) The data is calculated based on ISO 14064-1 Greenhouse gases—Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.



CIG rigorously complies with relevant national regulations and policies, follows the energy management principles of aligning strict conservation with high efficiency, and has established the Energy Conservation Management Specification. A four-tier energy management framework covering factories, departments, workshops, and production teams has been implemented. With a clear division of labor at all levels, this framework strengthens energy management, reduces energy consumption, eliminates waste, and enhances energy efficiency.





**Energy Management Organizational Structure** 



Our primary energy consumption arises from power consumption by machinery and equipment in our production. The table below presents data on our energy consumption:

	Unit	2022	2023	2024
Electricity consumption	kWh	16,696,300	14,674,400	17,438,776.81
- Headquarters	kWh	887,600	964,400	1,079,700
- Factories	kWh	15,808,700	13,710,000	16,359,076.81
Diesel consumption	Liters	2,748	2,174	3,168



### **Data Tracking**

Records for energy-consuming equipment, high-energy-consuming equipment uptime, and energy-saving technical transformation measures are established. Energy consumption data are analyzed on a monthly basis and reported to relevant departments. Each department formulates improvement measures and tracks their implementation based on policies.



### **Daily Management**

Production and manufacturing areas: Power consumption targets for manufacturing processes are set, production scheduling is optimized, and the operation times of high-power-consuming equipment are controlled. Equipment maintenance is strengthened to reduce downtime and equipment power should be shut off after production tasks are completed.

Office areas: Electricity-saving policies are regulated, such as setting standard operating hours for electrical appliances and setting air conditioner temperature properly.



### **Employee Awareness**

All employees are encouraged to enhance electricity-saving awareness and comply with energy-saving regulations. Energy conservation reward and penalty policies are established, and instances of energy waste are collected and reported.



### **Equipment Upgrades**

Energy efficiency is enhanced and energy consumption is reduced through the implementation of energy-saving projects, such as LED light replacements and air compressor upgrades.



## Warehouse Lighting Energy-Saving Retrofit

In 2024, CIG carried out a lighting energy-saving retrofit project, replacing 87 existing 250W halogen lamps in the factory warehouse with 100W LED lamps, resulting in remarkable energy-saving effects. Calculations show that this upgrade can save 112,752 kWh of energy annually, effectively reducing energy consumption. Additionally, LED lamps have a simpler structure and higher stability, lowering the costs of maintenance materials and labor while also reducing fire risks. This initiative successfully achieved multidimensional benefits in energy saving, cost reduction, and safety guarantee.

This upgrade can save

of energy annually



### **Air Compressor System Energy Efficiency Improvement**

In 2024, CIG optimized the factory's air compressor system to enhance energy efficiency. Previously, the factory's compressed air system experienced increased overall pressure due to improperly configured gas supply pipelines for certain equipment. To address this, CIG implemented an optimization measure by increasing the pipeline diameter. Following the modification, the overall system pressure decreased by 0.1 MPa, resulting in an energy consumption reduction of 4% to 8%, with an average decrease of 6% for the factory. The factory has three 90 kW air compressors, and this modification is expected to save energy by 108,864 kWh annually. Through this retrofit, the efficiency of the air compressor system has been improved and energy consumption has been lowered.

This modification is expected to save energy by

108,864 kWh annually



## **SMT Workshop Humidification Solution Upgrade**

In 2024, CIG implemented a humidification solution improvement project in its SMT workshop. Due to the absence of a humidification function in the air conditioning units, the workshop humidity failed to meet standards, affecting the production environment. After evaluating existing air conditioning units and the electrode-based humidification solutions of other workshops, CIG adopted a low-energy-consumption two-fluid spray humidification method. The humidification solution was precisely planned based on key data, including outdoor air humidity during dry seasons in Shanghai, workshop area, ceiling height, fresh air volume, number of air cycles, and required temperature and humidity in the workshop. Compared to electrode-based humidification, this upgrade is projected to save 81,520 kWh of energy annually with 2,160 hours of operation per year. The modification resolved the humidity issue in the SMT workshop while achieving energy-saving goals.

This upgrade is projected to save

of energy annually

## **Pollution Emissions Control**

CIG rigorously complies with national laws and regulations on environmental protection as well as national emission standards and ensures strict controls over wastewater, exhaust gas, waste, and noise emissions. Our goal is to guarantee compliant discharge of all pollutants, minimize emissions, and reduce negative impacts on the environment and surrounding communities.

We monitor the following indicators to evaluate and manage pollution generated in our production:

### Pollutant Emission Objectives

Compliance rate of exhaust gas emission monitoring 100%

Compliance rate of noise emission monitoring 100% Solid waste recycling rate 100%

Hazardous waste recycling rate 100%

### Achievement Status

Achieved 100%

## Wastewater management

Domestic sewage, which is our primary wastewater source, is discharged into the municipal sewage pipe network via factory sewage pipelines. We conduct annual third-party testing of discharged domestic sewage on a regular basis to ensure compliance with the tertiary standard specified in DB31/199-2018 Integrated Wastewater Discharge Standard.

### Exhaust gas management

Exhaust gas generated during our production process is properly collected and treated before discharge. A comprehensive control plan for volatile organic compounds (VOCs) has been implemented to ensure that exhaust gas emissions comply with the concentration requirements in the DB31/933-2015 Integrated Emission Standard of Air Pollutants. In 2024, we conducted two rounds of third-party testing on organized exhaust gas emissions, one in the first half of the year and another in the second half, along with one round of third-party monitoring on fugitive exhaust gas emissions. The monitoring results were all qualified and the discharge was up to standard.

### Waste management

Both non-hazardous and hazardous solid wastes are generated in our production. Specifically, our hazardous waste mainly includes waste cleaning agents, chemical solvent containers, discarded circuit boards, soldering flux, etc. All hazardous waste is centrally collected and managed, with storage facilities designed to prevent leakage, rainwater, and loss. The designated storage area is equipped with explosion-proof facilities and clear warning labels, and dedicated personnel is responsible for maintaining detailed records of waste entry and exit logs. A hazardous waste management plan is formulated annually and submitted to local regulatory authorities for filing, and qualified third-party agencies are commissioned for regular waste collection and disposal. All hazardous waste disposal records are retained for at least five years. For non-hazardous waste, we entrust qualified recyclers for collection and disposal, with details reported to the environmental regulatory body via an online filing system.

### Noise management

Noise may be generated during the operation of production equipment. We have adopted soundproofing and vibration-damping measures and installed soundproof doors and windows in our factories to minimize the noise level generated by machinery and equipment and reduce the impact of noise. In 2024, we conducted third-party monitoring of daytime and nighttime noise emissions once per quarter. The monitoring results were all qualified and the discharge was up to standard.

## **Key Performance Indicators (KPIs)**

	Unit	2022	2023	2024
Total exhaust gas emissions	10,000 cubic meters	38,414.7	40,105.35	56,314.8
Total domestic wastewater discharge	Cubic meters	27,263	14,787	19,438.2
Total waste generation	Tons	170.9	105.557	93.829

# **Resource Recycling**

CIG is committed to strengthening water resource management, strictly controlling hazardous substances, and adopting recyclable packaging materials to promote green product design and achieve resource recycling.

## **Water Resource Management**

As a labor-intensive enterprise, CIG mainly consumes water in the daily lives of employees. To implement effective water resource management, CIG has adopted the following measures:



Water pipes and faucets are regularly inspected and repaired. Each department shall promptly report any damaged or leaking pipelines and faucets for repair, ensuring the elimination of water wastage caused by running, overflowing, dripping, or leaking.

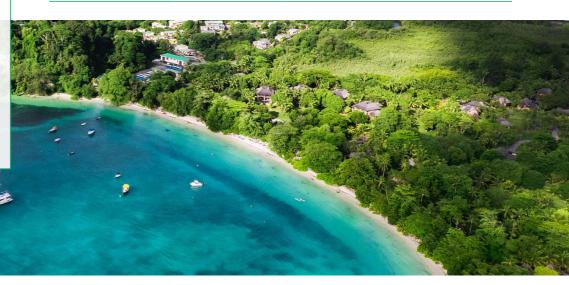


## **Employee Awareness**

Faucet flow is regulated and watersaving reminders are posted at all water-using points. Employees are encouraged to conserve water and eliminate continuous water flow.

# **Key Performance Indicators (KPIs)**

	Unit	2022	2023	2024
Total water consumption	Cubic meters	3,068.8	1,675.6	2,159.8
- Headquarters	Cubic meters	39.6	32.6	39.2
- Factories	Cubic meters	3,029.2	1,643.0	2,120.6
Total water consumption density	Cubic meters per RMB 10,000	0.008	0.005	0.006
Total water discharge	Cubic meters	27,619.2	15,080.4	19,438.2
- Headquarters	Cubic meters	356.4	293.4	352.8
- Factories	Cubic meters	27,262.8	14,787.0	19,085.4





As the green development concept is gaining widespread recognition, green design has become not only a necessary choice to meet customer demands but also a strategic initiative for sustainable and high-quality development of enterprises. In response, CIG actively explores environmentally friendly product design solutions in compliance with environmental laws, regulations, industry standards, and stakeholder requirements of different regions, continuously increases R&D investments in environmental protection, keeps refining its management of hazardous substances and product energy efficiency, and integrates eco-innovation across all stages from material selection, R&D, and production processes to product use and recycling. These efforts aim to constantly enhance the environmental performance of products and contribute to the green transformation of the industry.





QC 080000 Hazardous Substance Process Management Certification Obtained by CIG

### **Green Design Requirements**

CIG categorizes all products into three levels (I, II, III), each meeting at least the global regulatory requirements:

Level I: Complies with global regulatory requirements, customer-specific restricted substances, and halogen-free industry standards.

Level II: Meets global regulatory requirements and customer-specific restricted substances, including industry standards, substances with tightened regulations, and regulated substances for wearable products.

Level III: Complies with requirements for prohibited, restricted, and declarable substances specified in global regulations, including RoHS, REACH, the Battery Directive, the Packaging Directive, the WEEE Directive, and Persistent Organic Pollutants (POPs).

### **Product Material Design**

### **Raw Material Selection:**

- 1) We prioritize recyclable and reusable materials such as single-wall corrugated cardboard for packaging.
- 2) For assembled plastic materials, we actively collaborate with customers to eliminate plastic use, such as using Post-Consumer Recycled (PCR) materials in product casing design.

Surface treatment: No painting or coating is applied to packaging materials.

Printing ink: Plant-based ink is used instead of petroleum-based ink, because the latter is non-renewable and emits volatile organic compounds (VOCs).

Plastic use: Single-use plastics are strictly prohibited. Plastic packaging bags are avoided whenever possible; when necessary, they should be made from 100% recyclable materials.

### Product Energy Efficiency Design

Hardware design: Hardware design strictly complies with energy efficiency standards of different countries such as COC, ERP, and Energy Star. Power adapters shall meet Level VI energy efficiency standards.

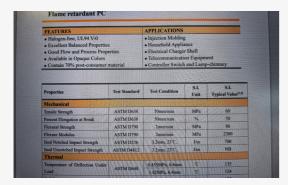
Software design: We optimize software mechanisms reasonably to reduce idle power consumption and improve energy efficiency utilization.

CIG requires suppliers to prioritize recyclable, eco-friendly packaging solutions and strictly regulates excessive packaging. We favor the use of recyclable and reusable packaging materials during production to minimize packaging material waste. During the reporting period, all EPE foam, packaging bags, pallets, protective corners, tapes, stretch films, and blister boxes used by CIG were made from recyclable materials.



### **Green Design for ONTs**

In August 2024, as part of an ODM cooperative project with a Nordic customer for XGS-PON ONTs, CIG incorporated green design in the R&D phase to meet the requirements of the customer for recyclable casing and Nordic import tax rebates for eco-friendly products. When designing the product casing, CIG adopted Post-Consumer Recycled (PCR) and halogen-free low-phosphorus materials and also used halogen-free lowphosphorus materials in PCB design. This eco-friendly design effectively reduced hazardous substances, lowered carbon dioxide emissions, and decreased energy consumption, contributing to environmental protection.





Screenshot of UL Yellow Card for the Casing & Recycled Plastic Label on the Casing



## **Energy-Efficient Innovation in Wi-Fi Network Equipment**

From 2022 to 2024, CIG made significant advancements in the R&D and applications of Wi-Fi network equipment energy-saving technology. By integrating cutting-edge technology, CIG significantly reduced the energy consumption per unit throughput of network operations. The average power consumption per unit throughput of Wi-Fi access points was successfully lowered from 5.4 W/GB (WF815) to 3.6 W/GB (WF710), saving energy by 33.33%. Additionally, CIG's Wi-Fi cloud controller intelligently detects usage fluctuations, promptly guides devices to the same frequency band, and shuts down idle channels to prevent unnecessary energy consumption. In real-world network testing conducted by a European customer, 84% of the areas operated in high-efficiency energy-saving mode for at least 6 hours per day, while 21% of the areas maintained this mode for 12 hours daily. This energysaving technology helps small and mediumsized enterprises (SMEs) reduce costs, improve efficiency, and accelerate the transition to a more intelligent, efficient, and eco-friendly future.



Saving energy by

33.33%

# **Table of Key Performance Indicators (KPIs)**

Indicator	Unit	2024
Economy	У	
Operating revenue	RMB 10,000	365,205.08
Taxes paid	RMB 10,000	5,207.01
Net profit attributable to parent company	RMB 10,000	16,668.12
Governand	ce	
Number of business ethics training sessions	Sessions	1
Total number of directors who attended business ethics training	Persons	7
Percentage of directors who attended business ethics training	%	100
Total number of management personnel who attended business ethics training	Persons	224
Percentage of management personnel who attended business ethics training	%	82.96
Total number of employees who attended business ethics training	Persons	1,084
Percentage of employees who attended business ethics training	%	88.06
Environme	ent	
Total exhaust gas emissions	10,000 cubic meters	56,314.80
Intensity of exhaust gas emissions	10,000 cubic meters/ RMB 10,000	0.1542
Volatile Organic Compounds (VOCs)	kg	474.66
Total domestic wastewater discharge	Cubic meters	19,438.2
Intensity of domestic wastewater discharge	Cubic meters/RMB 10,000	0.0532

Indicator	Unit	2024
Total waste generation	Tons	93.829
Intensity of waste generation	Tons/RMB 10,000	0.00026
Hazardous waste	Tons	5.322
Non-hazardous recyclable waste	Tons	88.507
Water consumption	Cubic meters	2,159.8
Water consumption density	Cubic meters/RMB 10,000	0.006
Total GHG emissions <sup>1</sup>	Tons of CO <sub>2</sub> equivalent	10,417.93
Intensity of total GHG emissions	Tons of CO <sub>2</sub> equivalent/ RMB 10,000	0.0285
GHG emissions (Scope 1)	Tons of CO <sub>2</sub> equivalent	1,060.28
Intensity of GHG emissions (Scope 1)	Tons of CO <sub>2</sub> equivalent/ RMB 10,000	0.0029
GHG emissions (Scope 2)	Tons of CO <sub>2</sub> equivalent	9,357.65
Intensity of GHG emissions (Scope 2)	Tons of CO₂ equivalent/ RMB 10,000	0.0256
Soc	ciety	
R&D investment	RMB 10,000	40,857.50
Total R&D personnel	Persons	630
Total employees	Persons	1,231
Male	Persons	804
Female	Persons	427

<sup>1</sup> The calculation scope of our GHG emission-related indicators includes CIG Shanghai Co., Ltd. and CIG Shanghai Co., Ltd. Shanghai Branch. The data is calculated based on ISO 14064-1 Greenhouse gases—Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.

Indicator	Unit	2024
Employees under 30	Persons	184
Employees aged 30-50	Persons	948
Employees over 50	Persons	99
Employees below the undergraduate level	Persons	549
Employees with a bachelor's degree	Persons	547
Employees with a master's degree	Persons	124
Employees with a doctoral degree	Persons	11
Full-time employees	Persons	1,214
Part-time employees	Persons	17
Domestic employees	Persons	1,118
Overseas employees	Persons	113
Annual training expenditure	RMB 10,000	24.75
Total training sessions	Sessions	168
Total employees trained	Persons	1,197
Employee training coverage rate	%	97
Total training hours	Hours	12,322
Average training hours per employee	Hours/Person	10.01
Average training hours per senior management employee	Hours/Person	4.68
Average training hours per middle management employee	Hours/Person	8.40
Average training hours per frontline management employee	Hours/Person	3.22
Average training hours per frontline ordinary employee	Hours/Person	12.77
Investment in workplace safety	RMB 10,000	48.13

Indicator	Unit	2024
Workdays lost due to work-related injuries <sup>2</sup>	Days	290
Work-related fatalities	Persons	0
Total number of suppliers	Companies	521
Domestic suppliers	Companies	405
Overseas suppliers	Companies	116
Direct suppliers	Companies	141
Indirect suppliers	Companies	380
Percentage of suppliers signing the Supplier Code of Conduct	%	100
Percentage of suppliers signing contracts that include environmental and labor clauses	%	100
Suppliers identified with actual or potential major negative social impacts	Companies	0
Suppliers identified with actual or potential major negative environmental impacts	Companies	0
Customer satisfaction	%	89.88
Customer privacy breach incident	Cases	0
Major customer complaints	Cases	0
Number of valid patents held	Pcs	405
Number of newly authorized patents during the year	Pcs	31
Number of software copyrights held	Pcs	31
Number of new software copyrights added during the year	Pcs	1
Number of trademarks held	Pcs	30
Total investment in public welfare	RMB 10,000	1.7

<sup>&</sup>lt;sup>2</sup> All are non-productive workdays.

## **Index of Indicators**

## **SSE Guidelines Index**

Issue Disclosed	Report Section
Climate change response	Climate Change Response
Pollutant emissions	Pollution Emissions Control
Waste disposal	Pollution Emissions Control
Ecosystem and biodiversity protection	Not Applicable. CIG's operational sites are not located within key protected areas, and its production and business activities do not have significant negative impacts on ecosystems and biodiversity.
Environmental compliance management	Environmental Compliance Management
Energy use	Climate Change Response
Water resource management	Resource Recycling
Circular economy	Resource Recycling
Rural revitalization	Giving Back to Society with Compassion
Social contributions	Giving Back to Society with Compassion
Innovation-driven development	R&D Innovation-Driven Development Resource Recycling
Science and technology ethics	Not Applicable. CIG's core business does not involve scientific research, technological development, or other relevant activities in sensitive fields such as life sciences or AI ethics.

Issue Disclosed	Report Section
Supply chain security	Supply Chain Management
Equal treatment of SMEs	Not Applicable. CIG treats small and medium-sized enterprises (SMEs) equally and has no overdue outstanding payments to SMEs.
Product and service safety and quality	Ensuring Product Quality
Data security and client privacy protection	Outstanding Customer Service Driving Digital Connectivity
Employees	Protecting Employees' Rights and Interests Talent Training and Development Employee Healthcare
Due diligence	Strengthened Risk Management and Internal Control
Communication with stakeholders	Sustainability Management
Anti-commercial bribery & anti-corruption	Unwavering Commitment to Business Ethics
Anti-unfair competition	Unwavering Commitment to Business Ethics

## **GRI** content index

Statement of use

CIG has reported the information cited in this GRI content index for the period from January 1, 2024 to December 31, 2024 with reference to the GRI Standards.

GRI 1 used

GRI 1: Foundation 2021

GRI STANDARD	DISCLOSURE	LOCATION
	2-1 Organizational details	Company Profile
	2-2 Entities included in the organization's sustainability reporting	About This Report
	2-3 Reporting period, frequency and contact point	About This Report
	2-4 Restatements of information	The company is issuing its inaugural ESG report with no information restatement.
	2-5 External assurance	Report Verification Statement
	2-6 Activities, value chain and other business relationships	Company Profile
GRI 2: General	2-7 Employees	Protecting Employees' Rights and Interests, Table of Key Performance Indicators (KPIs)
Disclosures 2021	2-9 Governance structure and composition	Efficient Governance Operations
	2-10 Nomination and selection of the highest governance body	Efficient Governance Operations
	2-11 Chair of the highest governance body	Efficient Governance Operations
	2-12 Role of the highest governance body in overseeing the management of impacts	Sustainability Management
	2-13 Delegation of responsibility for managing impacts	Sustainability Management
	2-14 Role of the highest governance body in sustainability reporting	Sustainability Management

GRI STANDARD	DISCLOSURE	LOCATION
	2-16 Communication of critical concerns	Efficient Governance Operations
	2-17 Collective knowledge of the highest governance body	Sustainability Management
	2-19 Remuneration policies	See the annual report
	2-20 Process to determine remuneration	See the annual report
	2-22 Statement on sustainable development strategy	Message from the Chairman
	2-23 Policy commitments	Protecting Employees' Rights and Interests
GRI 2: General Disclosures 2021	2-24 Embedding policy commitments	Strengthened Risk Management and Internal Control, Supply Chain Management
	2-25 Processes to remediate negative impacts	Protecting Employees' Rights and Interests, Unwavering Commitment to Business Ethics
	2-26 Mechanisms for seeking advice and raising concerns	Protecting Employees' Rights and Interests, Unwavering Commitment to Business Ethics
	2-27 Compliance with laws and regulations	Efficient Governance Operations; Environmental Compliance Management
	2-28 Membership associations	Boosting Industry Development
	2-29 Approach to stakeholder engagement	Sustainability Management
	2-30 Collective bargaining agreements	Sustainability Management



GRI STANDARD	DISCLOSURE	LOCATION
	3-1 Process to determine material topics	Sustainability Management
GRI 3: Material	3-2 List of material topics	Sustainability Management
Topics 2021	3-3 Management of material topics	Strengthened Risk Management and Internal Control
001004	201-1 Direct economic value generated and distributed	See the annual report
GRI 201: Economic Performance 2016	201-2 Financial implications and other risks and opportunities due to climate change	Strengthened Risk Management and Internal Control
	201-4 Financial assistance received from government	See the annual report
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	Table of Key Performance Indicators (KPIs)
GRI 205: Anti-	205-2 Communication and training about anti-corruption policies and procedures	Unwavering Commitment to Business Ethics
corruption 2016	205-3 Confirmed incidents of corruption and actions taken	Unwavering Commitment to Business Ethics
GRI 206: Anti- competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Unwavering Commitment to Business Ethics
GRI 207: Tax 2019	207-2 Tax governance, control, and risk management	Strengthened Risk Management and Internal Control
GRI 301: Materials 2016	301-2 Recycled input materials used	Resource Recycling
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Climate Change Response

GRI STANDARD	DISCLOSURE	LOCATION
	303-1 Interactions with water as a shared resource	Resource Recycling
GRI 303: Water and Effluents	303-2 Management of water discharge- related impacts	Pollution Emissions Control
2018	303-4 Water discharge	Resource Recycling
	303-5 Water consumption	Resource Recycling
GRI 304: Biodiversity 2016	304-2 Significant impacts of activities, products and services on biodiversity	Environmental Compliance Management
	305-1 Direct (Scope 1) GHG emissions	Climate Change Response
GRI 305: Emissions 2016	305-2 Energy indirect (Scope 2) GHG emissions	Climate Change Response
	305-4 GHG emissions intensity	Table of Key Performance Indicators (KPIs)
	306-1 Waste generation and significant waste-related impacts	Pollution Emissions Control
GRI 306: Waste 2020	306-2 Management of significant waste- related impacts	Pollution Emissions Control
	306-3 Waste generated	Pollution Emissions Control
	306-5 Waste directed to disposal	Pollution Emissions Control
GRI 308: Supplier Environmental Assessment 2016	308-2 Negative environmental impacts in the supply chain and actions taken	Table of Key Performance Indicators (KPIs)
GRI 401: Employment	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	Employee Healthcare
2016	401-3 Parental leave	Employee Healthcare



GRI STANDARD	DISCLOSURE	LOCATION
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	Employee Healthcare
	403-2 Hazard identification, risk assessment, and incident investigation	Employee Healthcare
	403-3 Occupational health services	Employee Healthcare
	403-4 Worker participation, consultation, and communication on occupational health and safety	Employee Healthcare
	403-5 Worker training on occupational health and safety	Employee Healthcare
	403-6 Promotion of worker health	Employee Healthcare
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Employee Healthcare
	403-8 Workers covered by an occupational health and safety management system	Employee Healthcare
	403-9 Work-related injuries	Employee Healthcare
	403-10 Work-related ill health	Employee Healthcare
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	Talent Training and Development
	404-2 Programs for upgrading employee skills and transition assistance programs	Talent Training and Development
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Efficient Governance Operations, Protecting Employees' Rights and Interests

GRI STANDARD	DISCLOSURE	LOCATION
GRI 406: Non- discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	Protecting Employees' Rights and Interests
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	Protecting Employees' Rights and Interests, Supply Chain Management
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	Protecting Employees' Rights and Interests
GRI 414: Supplier Social Assessment 201	414-2 Negative social impacts in the supply chain and actions taken	Table of Key Performance Indicators (KPIs)
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	Resource Recycling
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	No violations associated with health and safety implications of its products and services.
GRI 417: Marketing and Labeling 2016	417-2 Incidents of non-compliance concerning product and service information and labeling	No regulatory violations associated with product/ service information and labeling.
	417-3 Incidents of non-compliance concerning marketing communications	No violations associated with marketing communications activities.
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	Outstanding Customer Service



# **Report Verification Statement**



### Independent Assurance Statement

### Introduction

TÜV Rheinland (Shanghai) Co., Ltd., a member of TÜV Rheinland Group (hereinafter "TÜV Rheinland" or "We"), was entrusted by CIG Shanghai Co., Ltd. (hereinafter "CIG" or the "Company") to conduct an independent thirdparty assurance of 2024 Environmental, Social and Corporate Governance Report of CIG (hereinafter, the "ESG Report"). The report disclosed sustainability information for the fiscal year 2024 (January 1, 2024 to December 31,

### Responsibilities

CIG 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 report of CIG. 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 ESG

### Assurance Standard

TÜV Rheinland undertook assurance work for the sustainability information disclosed in ESG report of CIG 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 CIG 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:

- Shanghai Stock Exchange's Self-Regulatory Guidelines for Listed Companies No. 14 Sustainability Report
- GRI Sustainability Reporting Standards (GRI Standards) of Global Sustainability Standards Board (GSSB)
- Shanghai Stock Exchange's Self-Regulatory Guide for Listed Companies No. 4 Preparation of Sustainability
- 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.

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 ESG Report and performance information of CIG are in adherence to the AA1000AP AccountAbility Principles
- · CIG has implemented processes and system (e.g. human resource management system, procurement and supplier management platform), 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 dual materiality analysis and evaluation of issues.
- · The sustainability-related information and performance disclosed in the report have been assessed and supported by documentary evidence.

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

### Adherence to the AA1000AP AccountAbility Principles

### Inclusivity

Key stakeholders identified by CIG included governments and regulators, shareholders and investors, customers, employees, suppliers and partners, communities and industries, and the media. Evidence showed that in 2024, the company has conducted internal and external stakeholder questionnaire surveys, covering ESG issues such as innovation-driven, waste management, climate change response, and supply chain security. The results of the survey and analysis could provide a reference for the analysis of materiality issues.

### Materiality

Evidence indicated that in 2024, CIG has conducted a dual materiality assessment. The company identified ESG issues with reference to the new guidelines and rating requirements of the Shanghai Stock Exchange and evaluated and ranked the importance of ESG issues from two dimensions: the importance of the impact on the environment, society and economy, and the importance to the company's finances based on the analysis results of the stakeholder questionnaire survey and the opinions of financial experts. The issue matrix chart showed the key issues that are both financially materiality and impact materiality (e.g., data security and customer privacy protection, product and service security and quality, employees, anti-commercial bribery, etc.) during the year. The Corporate Strategy & ESG Committee confirmed the results of the materiality assessment.

CIG's communication channels with its stakeholders mainly included investor hotlines, customer satisfaction surveys, employee training, complaints and reports, supplier training and audits, industry conferences, community public

The report disclosed data on key performance indicators (e.g., greenhouse gas emissions (including Scope 1 and 2



emissions), emissions and waste, energy and water resources, employee management, workplace injuries, suppliers, etc.), with historically comparable data on environmental and work-related injury indicators.

### Impact

CIG has carried out risk and opportunity analysis of the business industry chain, covering labour and ethics, supply chain, information security, environmental security risk assessment, and combined with compliance management and countermeasures taken to reduce the impact on the value chain. We recommend that CIG further analyse, assess, monitor and manage the impacts, risks and opportunities of identified financial materiality issues (e.g., data security and customer privacy protection, product and service safety and quality, employees, etc.).



Technical Manager of Corporate Sustainability Services TÜV Rheinland (Shanghai) Co., Ltd Shanghai, China, March 18, 2025



## **Reader Feedback**

Dear Readers,

Thank you for reading the CIG 2024 Environmental, Social and Governance (ESG) Report. To provide you and other stakeholders with more professional and valuable corporate ESG information, we kindly ask for your assistance in completing this feedback form. Your responses will help us further improve our ESG efforts in the future.

Multiple-Choice Questions (Please tick in the appropriate box)	Open-Ended Question
Your relationship with CIG:	Do you have any comments or suggestions regarding our ESG efforts?
☐ Employee ☐ Customer ☐ Supplier ☐ Regulatory Agency ☐ Media ☐ Others(please specify)	
2. Your overall evaluation of this report:	
☐ Excellent ☐ Good ☐ Average ☐ Poor ☐ Very Poor	
3. The structure of this report is:	
☐ Very reasonable ☐ Fairly reasonable ☐ Average ☐ Poor ☐ Very poor	
4. The layout design and presentation of this report are:	
☐ Excellent ☐ Good ☐ Average ☐ Poor ☐ Very Poor	
5. How would you rate our overall performance on environmental issues?	
☐ Excellent ☐ Good ☐ Average ☐ Poor ☐ Very Poor	
6. How would you rate our overall performance on social issues?	
☐ Excellent ☐ Good ☐ Average ☐ Poor ☐ Very Poor	
7. How would you rate our overall performance on governance issues?	
☐ Excellent ☐ Good ☐ Average ☐ Poor ☐ Very Poor	



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