



2023 Annually
Environmental, Social &
Governance Report



# **About this report**

#### **Reporting Boundary**

This report is the first ESG report published by Sunshine Global Circuits Co., LTD. The information and data in the report mainly cover the company's environmental, social and corporate governance related practices during the period from January 1, 2023 to December 31, 2023. Based on the continuity and comparison of the reports, Some data and information are not limited in 2023.

### **Reporting Principle**

This report refers to the GRI standard, the ISO 26000:2010 Guidance on social responsibility standard, the United Nations Sustainable Development Goals (SDGs), and the Self-Regulatory Guidelines for Listed Companies issued by the Shenzhen Stock Exchange No. 17 - Sustainability Report (trial) requirements are prepared.

#### **Report Content**

In preparing the report contents, the company adheres to the criticality, integrity, and responsiveness principles of the GRI standard. The report covers three main aspects: Organizational, Governance, and Society & Environment. It focuses on the company's responsibility in ESG governance, product responsibility, environmental responsibility, and employee responsibility. The data and information for this report are collected following the company's existing workflow.

### **Referring description**

For the convenience of expression and reading, Sunshine Global Circuits Co., Ltd. is referred to as 'the SGC' or 'Company' or 'We/us'. The copyright of this report belongs to Sunshine Global Circuits Co., Ltd.

#### **Publish mode**

The report is released annually and is available for browsing or download on the company's official website (https://www.sunshinepcb.com). For any questions or suggestions about the report's content, feel free to contact us.

Email address: esg@sunshinepcb.com Phone number1:+86 (0) 755-2724-3597 Phone number2:+86 (0) 755-2724-3968

Fax:+86 (0) 755-2724-3609

# **CONTENTS**

# Catalogue

07
on 08

### 01 SGC Overview

1.1 Globa	l Operations Overview	12
1.2 Milesto	ones	16
1.3 Econo	mic Performance Metrics	18
1.4 Award	s and Recognitions	19

# 02 Organizational Governance: Foundation of Growth

2.1	ESG Governance Structure	2
2.2	Business Ethics	2
2.3	Risk Management and Internal Control	2
2.4	ESG Key Issues	2

# 03 Product Innovation Empowers a Connected World

3.1 R&D and Innovation	34
3.2 Quality Management	37
3.3 Quality Control and Test	40
3.4 Enhancing Customer Satisfaction	42

# 04 Environmental-friendly Leading Green & Intelligent Manufacturing

4.1 Hazardous Substances Control	46
4.2 Building a Green Enterprise	48
4.3 Clean Production Management	50
4.4 Responding to Climate Change	51

# 05 People-oriented, Supporting Employee Development

5.1	Our Employee	56
5.2	Employee Rights Protection	57
5.3	Occupational Health and Safety	59
5.4	Training and Development	62
5.5	Employee Care	64

# 06 Transparent Procurement Fulfilling Social Responsibilities

6.1 Responsible Procurement	68
6.2 Charitable and Public Welfare Activities	70

ESG Report Verification Statement	73
Reader Feedback	75
GRI Standards Index of Indicator	74

# Message From Management

Thank you all for your continuous trust and s for SGC. I would like to share our thoughts and outlook on our company's philosophy, actions, and commitments in the areas of Environmental, Social, and Corporate Governance (ESG).

Environmental responsibility is the cornerstone of our company's survival and development. In the face of increasingly severe global environmental challenges, SGC deeply feels the mission and responsibility it bears. We always adhere to the concept of green development, actively promoting energy conservation, emission reduction, resource recycling, and the research and application of clean energy technologies. During our production processes, we strictly comply with environmental regulations, continuously optimize processes, and reduce waste emissions, striving to build a low-energy consumption, low-carbon emission industrial chain. In the future, we will further increase investment, explore more efficient and environmentally friendly solutions, and achieve harmonious coexistence between industry and the natural environment.

Social welfare is the driving force behind our growth. SGC has always adhered to a people-oriented approach, focusing on the growth and development of our employees. We are committed to creating a safe and healthy work environment, implementing fair and inclusive employment policies, and continuously providing employee training and education to help each employee realize their self-worth. Additionally, we actively participate in community service and public welfare activities to give back to society and strive to be a responsible corporate citizen. We deeply understand that only by sharing prosperity with society can we go further.

In terms of corporate governance, we adhere to the principles of integrity and transparency, establish and improve modern enterprise systems, strengthen internal management, optimize decision-making mechanisms, and protect the rights and interests of all shareholders and

ne ne face Illenges, billity it f green rvation, stakeholders.

nd the We place great

We place great importance on the quality and timeliness of information disclosure, ensuring that the public has a full understanding of the company's operating conditions. At the same time, we continuously improve our risk management framework to prevent various potential risks and pursue stable and sustainable growth for the company.

Looking to the future, SGC will continue to deepen its ESG strategic deployment, integrate ESG concepts into the fabric of our corporate culture, and embed them in all aspects of strategic planning, technological research and development, production operations, and market marketing. We firmly believe that through relentless efforts and innovation, SGC will leave a solid footprint in promoting green industry development, fulfilling social responsibilities, and enhancing corporate governance. Let us join hands and write a new chapter in SGC's ESG endeavors, respond to the call of the times with practical actions, and make greater contributions to the progress of human society and the sustainable development of our planet! Thank you again for your support and companionship, and we look forward to creating a bright future together! Thank you, everyone!

SGC President Sign: 34422

# **Company Culture**

# **Duty**

Innovation Drives a Smart-Connected World Dual Carbon Policy Builds a Better Life

### **Key value**

Customer-Oriented, Efficient Collaboration Professional and Dedicated, Co-Creation and Sharing

# **Vision**

Becoming the Global Leader in Green and Intelligent Manufacturing of High-Precision Electronic Circuits

## Strategy

Innovation Brings the Leading Position in Global Specialty Market 深圳明阳电路科技股份有限公司 12023 年度 ESG 报告 S

# **2023 ESG Performance Data**

#### **Economic Information**



3.481



76.48



§ 1.619

Annual Product Volume(10k m²/ Year)





Tax (Million RMB/Year)







86 Number of training courses

Sales Revenue (Billion RMB/Year)



Environmental protection investment (Billion RMB / Year)



Product Harmful Substance Complaints (PCS/Year)



Scope 1 Emission (TCO<sub>2</sub>-e/Year)



Patents Granted



Wastewater Treatment

Compliance Rate (%)



78,435.10 Scope 2 Emission (TCO<sub>2</sub>-e/Year)



**Emission Monitoring** Compliance Rate (%)





Scope 1&2 Total Emission (TCO2-e/ Year)



Employee Average Compensation

Growth Rate (%)



Safety Investment (10k RMB/Year)



Recovery of the amount of recyclable waste (Ton/ Year)

Performance indicator	2023
First Time Yield (%)	89.64%
Government incentives and support funds (10k RMB/Year)	767.37
Water Consumption (T/Year)	1,080,465.00
Wastewater Discharge (T/Year)	747,242.00
Total electricity consumption (KWH/Year)	118,290,242
Natural Gas (KWH/Year)	1,193,076
Diesel (KG/Year)	81,247.10
Solid waste discharge (KWH/Year)	25,224.81
Gasoline (KG/Year)	19,791.40
Material Batch Qualification Rate (%)	99.97%
FQA Sampling Set Pass Rate (%)	99.12%
R&D Investment (10k RMB/Year)	8,565.77
Number of R&D group member	331
Female Middle-to-Senior Management Ratio (%)	7.59%
Frontline Employee Average Wage Ratio to Local Minimum Basic Wage	3.81:1
Average employee satisfaction (%)	91%
Gender Pay Ratio for Same Positions (%)	1:1
Labor contract signing rate (%)	100%
Employee Health Examination Rate (%)	100%
Work-Related Deaths (person/Year)	0
Occupational Disease Diagnoses (Times/Year)	0
Safety Training Course (H/Person/Year)	27.4
Employee Annually Training (H/Year)	75,204
Employee Training Cost (10k RMB/Year)	154.37
Average Employee Training Time (H/Person/Year)	31.30
Number of New Supplier Certification Audits	21
Annual Supplier SER Audit	37



SGC is a professional PCB manufacturer, equip with powerful R&D capability and professional product line. Following the mission of "Innovation Drives a Smart–Connected World, Dual Carbon Policy Builds a Better Life", we are dedicated to becoming the global leader in environmental–friendly and intelligent manufacturing of high–precision printed circuited board.



1.1 Global Operations Overview
1.2 Milestones
1.3 Economic Performance Metrics
1.4 Awards and Recognitions
18



# 1.1 Global Operations Overview

SGC was established in July 2001 and is headquartered in Xingiao Street, Bao 'an District, Shenzhen. On February 1, 2018, it was listed on the Shenzhen Stock Exchange (stock abbreviation: 明阳电路, stock code: 300739). After more than twenty years of development, SGC has six major production bases and sales entities under its umbrella: Shenzhen SGC, Jiujiang SGC, Germany SGC, Malaysia SGC, Hong Kong SGC, and the United States SGC. Its business scope covers multiple countries and regions worldwide.

For many years, the company has been dedicated to the research, development, production, and sales of high-end circuit boards. Based on the strategic positioning of "innovation-driven international market leadership in specialized areas," the company continuously increases its investment in research and development and technology. Its products include multilayer boards, HDI boards, high-speed boards, rigid-flex boards, flexible boards, thick copper boards, high-frequency boards, ATE boards, and Mini LED boards. Leveraging the differentiated layout of each production base, the company can meet customers' diverse needs from samples to small and medium batches. Its products are widely used in AI servers, automotive electronics, medical devices, energy power, electronic communications, and industrial control, among other



#### Sunshine Shenzhen

SGC headquarters is located in Shenzhen, known as the "Silicon Valley of China," with a registered capital of 299 million RMB. It boasts a 20,000-square-meter facility and approximately 1,000 experienced employees. With a strong technical foundation, SGC focuses on the incubation and development of quick-turn boards, ATE products, and complex high-layer-count products.



#### Sunshine Jiujiang

Jiujiang SGC was established in July 2011 and is located in the Jiangxi Jiujiang High-Tech Development Zone. With a registered capital of 1.273 billion RMB, it covers an area of 130,000 square meters. The company has the capability to mass-produce 2 to 40-layer PCBs and offers specialized product lines for high-speed, rigid-flex, thick copper, high-frequency, and Mini LED markets.



#### **Sunshine German**

In 2013, Sunshine PCB GmbH was established in Remscheid, near Düsseldorf, Germany. The company originated from the RINDE factory, which was founded in 1966 and has a history of producing high-tech products, including 12-18 layer PCBs and high-density PCBs. Under the strategy of "Close to Customers, Real-Time Support," Sunshine PCB GmbH provides localized and customized services to customers in the European region.



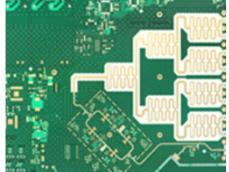
#### **Sunshine Malaysia**

In July 2023, Sunshine PCB (Penang) Sdn. Bhd. was established in Malaysia. The company originated from the Vision factory located in Penang, Malaysia. After SGC acquired Vision, a series of intelligent upgrades and expansions were carried out, increasing the monthly production capacity to 7,000 square meters. The processing capability now covers 2-12 layer PCBs. Currently, a new second-phase factory with a construction area of 135,000 square meters is being planned. The company aims to become a leading manufacturer of rigid, RF, and microwave PCBs in Southeast Asia, laying a solid foundation for SGC to expand its international market.

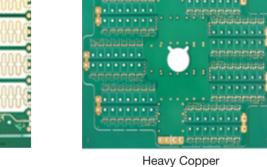


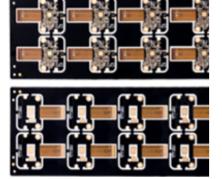
#### ■ Product and Service

In the context of continuously evolving customer demands and increasingly intense differentiated competition, SGC has proposed an innovation-driven international market leadership strategy. This strategy focuses on the research, production, and manufacturing of specialized products such as high-speed, rigid-flex, thick copper, high-frequency, ATE, and Mini LED. These products are widely used in AI servers, automotive electronics, medical devices, energy and power, electronic communications, and industrial control fields. Adhering to the business philosophy of "global layout, local service," the company continuously expands its overseas production and sales bases, providing high-quality and efficient services to customers in countries across Asia, Europe, and the Americas.

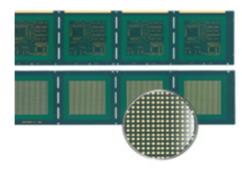


High frequency

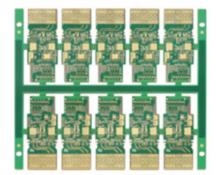




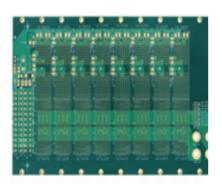
Rigid-flex



IC Substrate



Optical Module



Backplane

### ■ Industrial layout











电子通讯

医疗器械

能源电力

汽车电子

航天航空

工业控制

Electromechanical Systems











**Industrial Control** 









**Medical Electronics** 











Communications





























#### Our Global Customer Base

In the future, we will strengthen our foundational and product research and development to enhance product technical competitiveness and increase the proportion of sales of mid-to-high-end PCBs. Additionally, we will adapt to the evolving market demands by intensifying efforts in international market expansion, aiming to increase the company's global market share. 。

2016-

# 1.2 Milestones

SGC's development over the past 20 years has been filled with opportunities and challenges. Through continuous innovation and perseverance, the company has demonstrated its profound foundation and outstanding strength in the electronics circuit industry.

# 2014-

- reached production capacity and was awarded the title of "National High-Tech Enterprise"
- Jiujiang SGC obtained ISO 9001, ISO/TS 16949, and ISO 14001 certifications
- Shenzhen SGC obtained ISO/ TS 14067 carbon footprint verification

# 2018

- Listed on the Shenzhen Stock Exchange with the stock code 300739
- Shenzhen SGC established an Environmental-friendly Manufacturing Center

• Shenzhen SGC's IC substrate professional production line successfully went into operation

2019-2020

- Shenzhen SGC successfully introduced photomask products
- Jiujiang SGC's national-level laboratory construction was completed

· Jiujiang SGC's soft and hard

- combination board production line expanded to a monthly capacity of 10,000 square meters Comprehensive upgrade of the SAP
- enterprise management system and full implementation of international human resource management solutions

# 2021-2023

- Jiujiang SGC's monthly production capacity expanded to 100,000 square
- Jiujiang SGC's professional production line went into operation
- Jiujiang SGC achieved Customs AEO Advanced Certified Enterprise status
- Shenzhen SGC achieved Customs AEO Advanced Certified Enterprise status • Established ATE professional production
- Acquired Malaysian PCB company Vision

Industries

# 2002-2008

• The completion of the upgrade of the company's management system, obtaining ISO9001, ISO/TS16949, and ISO14001 certifications.

2010-

2013

the USA

Germany

• Established a sales subsidiary in

• Established a sales subsidiary in

· Acquired a factory in Remscheid,

Germany, and obtained ISO

13485 certification. Awarded the

titles of "Green Environmental

Protection Advanced Enterprise

in the Circuit Board Industry" and

"Shenzhen Pengcheng Waste

Reduction Advanced Enterprise"

Achieved international business

transformation

- Awarded the title of "Shenzhen High-Tech Enterprise"
- · Awarded the title of "National High-Tech Enterprise"
- Successfully transformed into a multi-variety, small-batch, hightech enterprise, and initiated international import and export

# 2015

- J. iujiang SGC successfully

### ENICS, Flex) • Jiujiang SGC expanded monthly production capacity to 40,000 square meters and successfully launched the specialized production line for rigid-flex boards

· Served as an executive director

CPCA, GPCA, and SPCA

unit of industry associations

• Awarded the title of "Outstanding

Supplier" by internationally

renowned companies (BMK,

# 2001

• SGC Shenzhen Headquarters Established Sunshine Global Circuits Co., Ltd | 2023 Annually ESG Report | Product Innovation Empowers a Connected World Green Intelligent Manufacturing Employee Development | Product Innovation Empowers a Connected World Green Intelligent Manufacturing Employee Development | Transport Procurement | Trans



# 1.3 Economic Performance Metrics

In recent years, the global PCB market has shown a fluctuating upward trend, benefiting from the development of emerging technologies such as 5G, cloud computing, and the Internet of Things (IoT). The industry has maintained stable growth globally. However, in the past few years, the PCB industry underwent strong expansion, leading to intensified competition. The release of new production capacity by companies has been affected, and it may take longer to digest the capacity. Currently, the industry is facing a crucial juncture of reshuffling.

With over twenty years of accumulation, SGC has built a solid international customer base. Facing the complex and ever-changing international environment and the critical juncture of industry reshuffling and transformation, SGC fully leverages its international advantages. It has proactively transformed and upgraded its senior management structure to an EMT model, optimizing and innovating operations. Additionally, based on a deep understanding of digitalization and intelligence, it actively promotes the intelligent construction of production processes and supply chains, addressing market challenges and seeking long-term development.

From 2021 to 2023, the company achieved sales revenue of 5.442 billion yuan, with a total R&D investment of 245 million yuan. In the future, SGC will continue to adhere to its internationalization and specialization market positioning, driving sustainable growth through innovation. It will seize opportunities in the PCB market development to achieve industry leadership.

Term	2021	2022	2023
Total Assets (billion)	3.247	3.083	3.481
Annual Product Volume(10k m2)	123.41	99.49	76.48
Sales Revenue (billion)	1.854	1.969	1.619
Total Tax (million)	16	24	24
R&D Investment (10k)	7,198.94	8,707.42	8,565.77
Government Incentives & Support Funds (10k)	679.25	3,182.68	767.37

# 1.4 Awards and Recognitions

Over the years, SGC has garnered numerous honors and accolades, driving us to maintain our spirit of innovation and craftsmanship. We relentlessly enhance product quality and service standards, contributing significantly to the advancement of the electronics information industry.

Order	Date	Award Title	Awarding unit
1	2017 May	Preferred Supplier Qualification by Flex	Flex
2	2018 Feb.	2017 Advanced Unit Award for Export Contribution	Jiujiang Chengxi Port District Management Bureau
3	2018 April	Guangdong Province 5G High-Density Interconnect (HDI) Circuit Board Engineering Technology Research Center	Guangdong Provincial Department of Science and Technology
4	2018 Sept.	Excellent National Brand Enterprise in the 4th China Electronic Circuit Industry	China Printed Circuit Association (CPCA)
5	2018 Dec.	Standardized Safe Production Enterprise	Bao'an District Safety Supervision Bureau, Shenzhen
6	2019 -2021	Consecutive Outstanding Enterprise Awards	Jiujiang Chengxi Port District Management Bureau
7	2019 Aug.	Top 100 Chinese Electronic Circuit Enterprises	China Printed Circuit Association (CPCA)
8	2020 Jan.	Outstanding Member Unit	Intelligent Manufacturing Industry Association
9	2020 May	Laser Technology Center in the PCB Industry	Chinese Academy of Laser Technology Research Institute
10	2020 Sept.	High-Tech Enterprise Certificate	Jiangxi Provincial Department of Science and Technology
11	2020 Nov.	Model Workers' Home in Jiangxi Province	Jiangxi Provincial Federation of Trade Unions
12	2020 Nov.	"Green Manufacturing" Certification	Jiangxi Provincial Department of Industry and Information Technology
13	2020 Nov.	Provincial Enterprise Technology Center	Jiangxi Provincial Department of Science and Technology
14	2020	Level 3 Safe Production Standardized Enterprise	Jiujiang Municipal Safety Production Committee Office
15	2021 Jan.	"Certificate of Honor" for Poverty Alleviation, Enthusiastic Public Service, and Caring Enterprise	Baihuasi Village Committee, Yong'an Township, Jiujiang Economic and Technological Development Zone
16	2021 Jan.	2020 Tax Contribution Award	Jiujiang Technical Development Zone (Export Processing Zone)
17	2021 Dec.	Top 40 Industrial Enterprises in Jiujiang City	Jiujiang Entrepreneurs Association
18	2022 Jan.	2021 Industrial Development Progress Award	Jiujiang Economic and Technological Development Zone (Export Processing Zone) Working Committee of the Communist Party of China
19	2022 Feb.	2021 Enterprise Excellence Contribution Award	Chengxi Port District Management Committee of the Communist Party of China and Jiujiang Chengxi Port District Management Bureau
20	2022 April	Civilized Unit of Jiujiang City	Jiujiang Municipal Committee of the Communist Party of China and Jiujiang Municipal People's Government
21	2022	Provincial Workers' Vanguard	Jiangxi Provincial Federation of Trade Unions
22	2022	Municipal Workers' Vanguard	Jiujiang Municipal Federation of Trade Unions
23	2022 July	2021 Green Manufacturing and Environmental Protection Excellence Enterprise	Shenzhen Environmental Protection Industry Association, GPCA
24	2022 July	Leading Manufacturing Cultivation Enterprise in Jiangxi Province	Jiangxi Provincial Industrial Strength Construction Leading Group Office
25	2022 Dec.	National Intelligent Manufacturing Demonstration Factory Excellent Scenario	Department of Equipment Industry, Ministry of Industry and Information Technology
26	2023 Feb.	2022 Outstanding Industrial Enterprise in Jiujiang City	Jiujiang Municipal People's Government
27	2023 Feb.	2022 Top Ten Industrial Enterprises	Jiujiang Economic and Technological Development Zone Working Committee of the Communist Party of China

Order	Date	Award Title	Awarding unit
28	2023 Feb.	2022 Per Acre Benefit Award	Jiujiang Economic and Technological Development Zone Management Committee of the Communist Party of China
29	2023 Feb.	2022 Science and Technology Innovation Award	Jiujiang Economic and Technological Development Zone Management Committee of the Communist Party of China
30	2023 June	2022 Green Enterprise in Shenzhen	Shenzhen Green Life Creation Action Guidance Committee Office
31	2023 Sept.	2023 Management Innovation Demonstration Enterprise in Jiangxi Province	Jiangxi Provincial Department of Industry and Information Technology
32	2023 Oct.	High-Tech Enterprise	Shenzhen Science and Technology Innovation Commission
33	2023 Nov.	National High-Tech Enterprise Certificate	Jiangxi Provincial Department of Science and Technology
34	2023 Dec.	Specialized, Refined, Unique, and Innovative Small and Medium-Sized Enterprise	Shenzhen Small and Medium Enterprises Service Bureau

















Awarded Flextronics Preferred Supplier Qualification in 2017



Best PCB Partner Supplier of the Year 2015 by BMK Group



Outstanding National Enterprise in China's **Electronic Circuit Industry** 



High-Tech Enterprise Certificate of Jiujiang



Top 100 Enterprises in China's Electronic Circuit Industry



Jiangxi Famous Brand Product Certificate



2.3 Enterprise risk management

2.4 ESG Key Issues

24

25



Sunshine Global Circuits Co., Ltd 2023 Annually ESG Report

Sunshine Global Circuits Co., Ltd 2023 Annually ESG Report

Sunshine Global Circuits Co., Ltd 2023 Annually ESG Report

Sunshine Global Circuits Co., Ltd 2023 Annually ESG Report

Transparent Procurement Fulfilling Social Responsibilities

Transparent Procurement Fulfilling Social Responsibilities



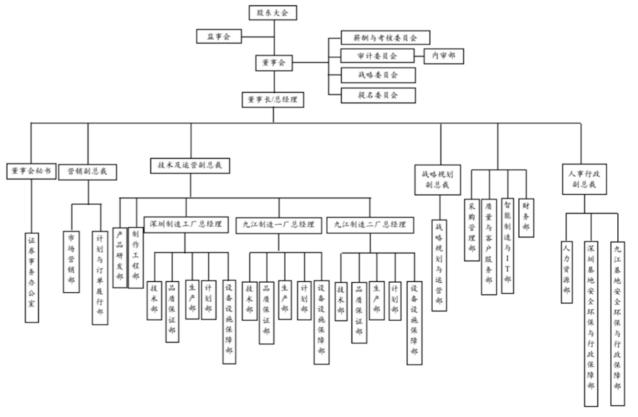
# 2.1 ESG Governance Structure

To ensure compliance and transparency in company operations, SGC continuously improves its governance structure, which consists of the General Meeting of Shareholders, the Board of Directors, the Board of Supervisors, and the EMT. In accordance with modern corporate governance requirements, functional departments are established with clear and reasonable business processes and well-defined responsibilities. This forms a governance structure where power institutions, decision-making bodies, supervisory agencies, and the executive management layer each perform their duties, effectively balance power, and coordinate with each other.

The General Meeting of Shareholders is the company's power institution, providing shareholders with a crucial means to exercise their legal rights. The company treats all shareholders equally, ensuring their right to be informed, to participate, and to vote on significant company matters. The procedures for notification, convening, holding, and voting at the General Meeting of Shareholders are regulated, and lawyers are invited to attend the meetings to provide legal opinions.

The Board of Directors executes the resolutions of the General Meeting of Shareholders in accordance with the law and is accountable to it. When forming the Board, the company fully considers factors of diversity and independence, actively promoting the independent director system. Independent directors play a role in enhancing the rationality, standardization, and scientific nature of company decisions.

The Board of Supervisors, entrusted by the General Meeting of Shareholders, supervises the company's operations and management. It oversees the compliance of the company's finances and the duties performed by directors and senior management. The Board of Directors has established the Strategy Committee, the Audit Committee, the Nomination Committee, and the Remuneration and Assessment Committee. These committees work collaboratively and provide effective oversight to ensure the company's stable operation.



ESG governance structure

Sunshine Global Circuits Co., Ltd | 2023 Annually ESG Report | Product Innovation Empowers a Employee Development | Product Innovation Empowers a Employee Development | Product Innovation Empowers a Employee Development | Product Innovation Empowers a Environmental-friendly, Leading Green & Intelligent Manufacturing | People-oriented, Supporting Employee Development | Social Responsibilities | Social Resp

# 2.2 Business Ethics Principles

SGC adheres to the principles of integrity and compliance with business ethics, ensuring a fair and just business environment. The company has established and improved an anti-corruption management mechanism to safeguard its sustainable development. In 2023, there were no verified incidents of corruption or related reports, nor were there any complaints or lawsuits due to corruption and bribery issues.



Audit Team Conducting Audits on Project Acceptance



#### **Anti-Corruption**

SGC has established the "Anti-Corruption Operations Manual," which must be strictly followed by all employees, suppliers, service providers, and contractors. This manual enhances the anti-corruption framework by focusing on the supervision of high-risk areas and key positions susceptible to corruption. By enforcing these measures, SGC ensures a transparent, ethical, and corruption-free business environment.



#### **Integrity Commitment Agreement**

All new employees must sign the "Integrity Agreement" upon joining SGC. Strategic partners, including suppliers, service providers, and contractors, are required to sign the "Sunshine Procurement Commitment for Strategic Partners." These agreements ensure that all parties act lawfully, maintain integrity, and resist any form of commercial corruption.



### **Oversight and Accountability**

SGC has established an Anti-Corruption Supervision and Management Team, including members from the Supervisory Board and the Internal Audit Department. This team monitors compliance with integrity agreements and anti-corruption policies. The Internal Audit Department focuses on detecting fraudulent activities and unethical behavior.

Employees violating the integrity agreement face strict accountability measures. Suppliers breaching the "Sunshine Procurement Commitment for Strategic Partners" will have their qualifications revoked. Any commercial bribery actions are referred to judicial authorities for prosecution. This ensures the maintenance of ethical standards and fairness in business operations.



### **Reporting Channels**

SGC has established the "Anti-Fraud and Reporting System" to encourage employees and business partners to report corrupt activities. Reports can be submitted via the publicly available email or hotline. The company advocates for real-name reporting, ensuring that whistleblowers are protected during the investigation process. Any form of discrimination or retaliation against whistleblowers is strictly prohibited.

Reporting Email: internal audit@sunshinepcb.com Reporting Hotline: 0755-27243927



### **Compliance Awareness Training**

To further maintain an atmosphere of integrity and transparency, and to enhance employees' awareness of legal compliance, SGC conducts compliance training through various channels. These include new employee orientation, distribution of employee handbooks, and annual training programs. These initiatives aim to improve employees' understanding of compliance, ensuring they adhere to laws and regulations and uphold the highest standards of ethical conduct.

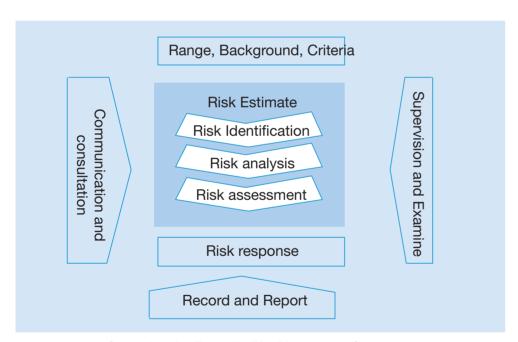


Sunshine Global Circuits Co., Ltd | 2023 Annually ESG Report | Product Innovation Empowers a Environmental-Irriendly, Leading Green & Intelligent Manufacturing Employee Development Social Responsibilities | Social Responsibili

# 2.3 Risk Management and Internal Control

### In recent years, SGC has had no incidents of non-compliance or major risk events

SGC places great emphasis on managing risks throughout its operations, establishing a three-line defense system for risk control. First Line of Defense: Core frontline business departments, which bear the primary responsibility for risk management. Second Line of Defense: Regulatory departments, including Legal, Quality, Safety, Finance, and Human Resources, which support the frontline departments through audits, inspections, and assessments to assist in risk control. Third Line of Defense: Internal oversight departments, such as Internal Audit and the Audit Committee, which identify risks and issues through supervision and inspections, continuously improving the company's risk management and internal control systems. In 2023, SGC's risk control measures were effective, with no incidents of legal or regulatory violations.



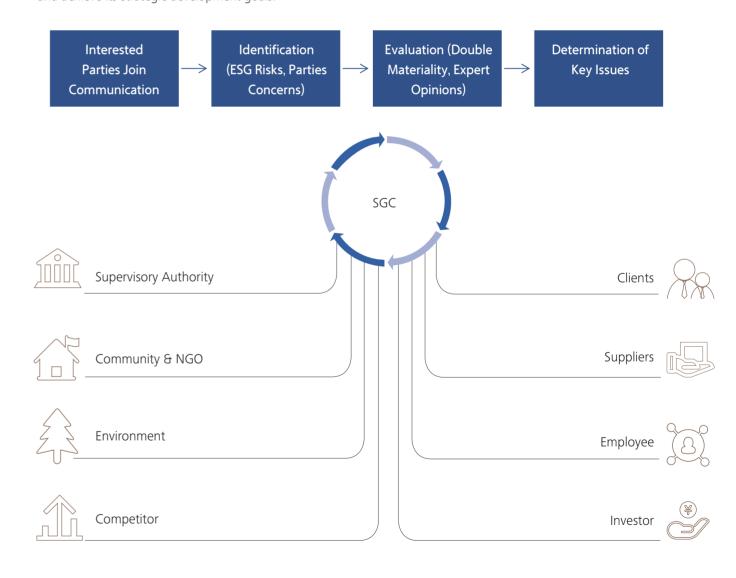
Comprehensive Enterprise Risk Management System

SGC, in accordance with the "Basic Norms for Corporate Internal Control" and other relevant laws and regulations, has established a comprehensive internal control system that is effectively implemented. The Internal Audit Department conducts special audits on key matters such as internal control operations, financial income and expenditure, placement and use of raised funds, and related transactions in accordance with the "Internal Audit System." This ensures the company's operations and management are legal and compliant, assets are secure, and financial reports and related information are truthful and complete.

We also conducts internal control self-evaluation work according to the "Basic Norms for Corporate Internal Control" and relevant regulations, issuing internal self-evaluation reports. Additionally, the company engages external accounting firms to independently audit the effectiveness of the internal control system. In 2023, there were no major or significant deficiencies in internal control related to financial and non-financial reports. The internal control system operated effectively, maintaining effective internal control in all major aspects.

# 2.4 ESG Key Issues

To promptly obtain and respond to stakeholder needs, the company, based on the requirements of "ISO26000:2010 Guidance on Social Responsibility" and the "GRI Standards," has identified stakeholder requirements and expectations, as well as ESG issues. The company employs the "matrix evaluation method" to assess ESG key issues from two dimensions: "the degree of impact on corporate sustainability" and "the degree of stakeholder concern about ESG issues." The company aims to address stakeholder needs and expectations through communication and engagement, effectively control ESG risks, and achieve its strategic development goals.



Sunshine Global Circuits Co., Ltd | 2023 Annually ESG Report | Product Innovation Empowers a Fundation of Growth Connected World | People-oriented, Supporting Employee Development | Transparent Procurement Fulfilling Employee Development | Social Responsibilities | Social Respo

### **Interested Party Focus and Reply**

#### The statistical table of key issues of stakeholder communication and concern

Interested Party	Focused Issues	<b>Communicate Method</b>	Chapter
Client	> Product Quality > Hazardous Substances Control > Customer Service and Satisfaction > R&D and Innovation	> Customer Satisfaction Survey > Customer Communication Meetings > Customer Complaints	Chapter 3 Chapter 4 Chapter 3 Chapter 3
Investor	> Return and Growth > Enterprise Risk Management > ESG Governance > ESG Governance Performance	> Financial Report Release > Shareholder Communication Meetings	Chapter 1 Chapter 2 Chapter 2
Supplier	> Honesty and Anti-corruption > Responsible Procurement	> Supplier Meetings > On-site Audits > Joint Innovation	Chapter 2 Chapter 6
Employee	> Salary and Welfare > Occupational Health and Safety > Employee rights protection > Career development and training > Employee happiness life	> Employee Satisfaction Survey > OHS Management System > Internal Meetings	Chapter 5
Environment Environment	> Clean Production Management > Responding to Climate Change > Environmental-friendly Product Development	> Pollutant Monitoring > ESG Report > Product Promotion	Chapter 4
Supervisory Authority	> Compliance and Legal Adherence > Support Economic Growth	<ul><li>&gt; Government Meetings and Seminars</li><li>&gt; On-site Visits and Communication</li></ul>	Chapter 2 Chapter 4
Community & NGO	> Community Harmony > Charitable Activities	> NGO Survey > Communication Meetings	Chapter 6

### **Materiality Matrix**



Interested Parties Concerns on ESG Issues







3.1 R&D and Innovation
30
3.2 Quality Management
33
3.3 Quality Control and Test
35

3.4 Enhancing Customer Satisfaction 37



Sunshine Global Circuits Co., Ltd | 2023 Annually ESG Report | Product Innovation Empowers a Connected World | 2023 Annually ESG Report | Product Innovation Empowers a Connected World | 2023 Annually ESG Report | Product Innovation Empowers a Connected World | 2023 Annually ESG Report | Product Innovation Empowers a Connected World | 2023 Annually ESG Report | Product Innovation Empowers a Environmental-friendly, Leading Green & Intelligent Manufacturing | People-oriented, Supporting Employee Development | Social Responsibilities | Product Innovation Empowers a Connected World | Product Innovation Empowers | Product Innovation Empowers | Product

## 3.1 R&D and Innovation

Technological innovation is the driving force for a company to achieve high-quality development. SGC has invested in establishing a Technology Center, with the mission to "lead the company's technological innovation, support the company's core technical competencies, and continuously acquire new profit growth points." The company adheres to the core values of "customer orientation, open innovation, and efficient collaboration," aiming to become a leading electronic circuit R&D innovation institution in the industry.

SGC has also established an R&D Center, investing substantial funds annually in purchasing advanced R&D instruments and equipment, developing new products and processes, and improving product quality. From 2021 to 2023, the company invested a total of 245 million yuan in R&D, providing ample resources to ensure the success of product development and technological innovation projects.

#### **■** Excellent R&D Team

Mr. David Aldape has been SGC's Chief Technology Officer since 2012, leading the company's product development initiatives. With over 30 years of experience in the circuit board industry, Mr. David brings extensive expertise to the role. Earlier in his career, he worked in Silicon Valley, serving as Director of Engineering and Quality/Product Engineering Manager at Streamline Circuits, and as Director of Engineering at DDi (Dynamic Details Inc). At SGC, he leads a team of professional R&D engineers dedicated to continuously improving current production processes and advancing technological research and development.

Currently, SGC employs 331 R&D personnel and achieves the transformation of over six scientific and technological achievements annually on average. In 2018, the company's technology center was recognized as the "Guangdong 5G High-density Interconnection HDI Circuit Board Engineering Technology Research Center." In 2023, both Shenzhen SGC and Jiujiang SGC were honored with the titles of "Specialized and New Small and Medium-Sized Enterprises" and "Jiangxi Province Innovation Management Demonstration Enterprise," respectively.



#### Company R&D and Technological Innovation Performance Data (2021-2023)

Index data	2021	2022	2023
R&D Investment (10k RMB/Year)	7,198.94	8,707.42	8,565.77
Number of R&D Personnel	324	330	331
Patents Granted	5	12	13



SGC technical center has been awarded the title of "Guangdong Province 5G High-Density Interconnection (HDI) Printed Circuit Board Engineering Technology Research Center".



In 2023, Shenzhen SGC was awarded the honorary title of "Specialized, Special, and New Small and Medium-sized Enterprises



In 2023, Jiujang SGC was awarded the honorary title of "Jiangxi Province Management Innovation Demonstration Enterprise".

### ■ Technological Innovation Management

To improve the standardized management of technological innovation and new product development, the Technology Center has established a series of R&D project management procedures, including the "R&D Project Operation Management Process," "SGC Process Capability Management Specification," "Material Selection and Usage Work Instructions," "New Material Certification Work Instructions," and "R&D Board Order Operation Process Specification." These procedures control the critical processes of design and development to ensure that the quality of new products and technologies meets customer requirements, relevant laws and regulations, international standards, and industry standards. While actively conducting independent R&D, We also engages in extensive industry-university-research collaborations with enterprises, universities, and research institutes. On one hand, it fully leverages the disciplinary advantages of universities in manufacturing equipment, automation, electronic information, advanced materials, and light industry chemicals to assist in solving challenges encountered in the production process. On the other hand, the company continuously recruits high-quality talent and establishes industry-university-research partnerships with renowned institutions to jointly conduct research projects.

Sunshine Global Circuits Co., Ltd | 2023 Annually ESG Report | Product Innovation Empowers a Connected World | Product Innovation Empowers a Connected World | Product Innovation Empowers a Connected World | People-oriented, Supporting Employee Development | Social Responsibilities | Social Responsibilit

#### ■ Product R&D Achievements

Product	Product Technical Parameters	Picture	Application Fields and Their Functions
Probe Card	Layer: 18 Material: S1000-2M Thickness: 4.8+/-0.36mm Trace width/space: 0.163/0.2224mm Minimum hole diameter: 0.6mm Surface finish: Immersion Gold + Selective Hard Gold		Application in Semiconductor Packaging and Testing Probe cards are used in semiconductor wafer testing as an interface between the chip under test and the testing equipment. By conducting electrical performance tests on the chips on the wafer, defective chips can be screened out, reducing packaging costs and ensuring chip quality.
Burn-in Board	Layer: 20 Material: IT-180A Thickness: 2.225mm Trace width/space: .0.25/0.322mm Minimum Hole Diameter:0.13mm Minimum Hole-to-Conductor Distance: 4mil Surface finish: Immersion Gold + Selective Hard Gold + Golden finger Spacing: 0.4mm		Application in Semiconductor Packaging and Testing Burn-in boards are testing devices used for electronic products and semiconductor devices. They apply electrical and thermal stress to circuit boards or devices under specific conditions to identify and detect potential faults or defects early. This process helps in eliminating defective components promptly, ensuring the stability and reliability of the products.
Heavy Copper	Layer: 20 /26 Material: TU865 Thickness: 5.8±0.58mm Internal Copper thickness: 3/3 oz 4/4oz PTH Copper: 25um Trace width/space: 0.55mm/0.152mm Surface Finish: ENIG Voltage Tol: 2770V DC 60S Lamination misregistration: ±5mil Coil Resistance Range (MAX-MIN)/ MIN ≤ 3%		Application in the New Energy Vehicle Sector Transforming traditional wound coil motors into circuit boards with built-in winding coils, this innovation meets the key performance requirements of new energy vehicles.

# 3.2 Quality Management Policy

### ■ Management Policy

### **Quality First, Lean Production, Continuous Innovation, Reach Customers Requirements**

#### **Quality First**

Through education and quality activities, improve the quality system, so that all employees establish the concept of excellent quality management, focus on work quality, reduce scrap, and eliminate rework. Establish a good corporate reputation while firmly opposing any form of bribery and corruption to protect the company's interests and promote fair trade.

#### **Lean Production**

Through continuous improvement and innovation in software, hardware, and system methodologies, we consistently enhance our technical capabilities, reduce production process deviations, and maintain the company's vitality and drive.

#### **Continuous Innovation**

Through continuous improvement and innovation in software, hardware, and system methodologies, we consistently enhance technical capabilities, reduce production process deviations, and keep the company dynamic and motivated.

#### **Reach Customers Requirements**

While meeting customer needs for product quality, delivery, and service, we provide proactive and professional advice to improve product design and specialized services. This approach helps our customers achieve significant breakthroughs and advancements in product performance and cost efficiency

### ■ Quality Management Performance

The company has established a comprehensive quality management system based on international standards such as ISO 9001, IATF 16949, AS9100, ISO 13485, and QC 080000. Additionally, it has obtained product safety certifications like UL and CQC. For several consecutive years, the company has been listed among the top 100 PCB enterprises in China by the China Printed Circuit Association (CPCA).

From 2013 to 2021, the company ranked as follows in the CPCA's "China Electronic Circuit Industry Rankings": 64th, 61st, 59th, 54th, 47th, 48th, 45th, and 42nd, respectively. In 2023, the company ranked 38th in the comprehensive PCB top 100 enterprises and 20th among domestic PCB top 100 enterprises in the "22nd (2022) Revenue Rankings of Major Enterprises in China's Electronic Circuit Industry," jointly published by CPCA and the China Information Technology Industry Federation (CITIF). These rankings show a slight improvement compared to previous years.

Sunshine Global Circuits Co., Ltd | 2023 Annually ESG Report | Product Innovation Empowers a Connected World | Social Responsibilities | Social Resp









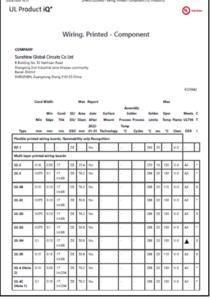
ISO9001: Certificate

IATF 16949 Certificate

ISO13485 Certificate

AS9100D Certificate







CQC Certificate CUL Certificate UL Certificate

SGC boasts a team of seasoned management professionals with extensive experience in the production of flexible and rigid boards. Adhering to international quality standards, the company implements comprehensive quality management across all products. This includes product quality planning, management processes, and operational standards. Quality objectives are systematically broken down and assigned to specific departments and positions. Monthly, the company conducts data collection, analysis, and improvements on these quality objectives.

From 2021 to 2023, the company's First Time Yield (FTY) rate and Final Quality Audit (FQA) sampling pass rate have consistently improved. These metrics demonstrate the company's maturity in product quality and delivery management.



The company's quality management has passed the on-site audit by the customer

#### 2021-2023 SGC Quality Performance Data

Quality indicators	2021	2022	2023
First Time Yield (%)	87.31%	89.41%	89.64%
Number of Product Hazardous Substance Complaints (Pcs / Year)	0	0	0
Material Batch Pass Rate (%)	99.97%	99.95%	99.97%
FQA sampling pass rate (%)	98.66%	99.97%	99.12%

Sunshine Global Circuits Co., Ltd | 2023 Annually ESG Report | Product Innovation Empowers a Connected World | Product Innovation Empowers a Connected World | 2023 Annually ESG Report | Product Innovation Empowers a Connected World | 2023 Annually ESG Report | Transparent Procurement Fulfilling | People-oriented, Supporting | Employee Development | Social Responsibilities | Socia

# 3.3 Quality Control and Test

**Building on a foundation of quality system management:** We actively promotes the operation concept of a smart factory. Focusing on the "flexibility" requirements of a smart factory, the company has transformed the traditional manual scheduling and handling of products, finished goods, and materials into an AGV (Automated Guided Vehicle) intelligent logistics system supported by MES (Manufacturing Execution System) and RCS (Robot Control System) intelligent scheduling systems. This system, combined with AGV's autonomous path planning and intelligent warehouse management functions, has significantly improved the level of quality management and production efficiency.

When a production process signals a material shortage, an AGV vehicle retrieves materials from the warehouse and delivers them to the machine. After the machine completes the detection process, the AGV vehicle transports the semi-finished products to the semi-finished goods warehouse. The pre-treatment line process within the company's inner layer has currently achieved full closed-loop production automation and data informatization, encompassing automatic logistics, automatic machine loading, automatic recipe cutting, automatic data collection, and automatic machine unloading.

The entire plant's transportation is uniformly managed by AGVs, allowing for 24/7 continuous operation. The use of AGV robots and intelligent scheduling systems enhances the timeliness and accuracy of transportation tasks, reduces manual labor intensity, includes error-proofing checks during operations, and provides real-time visualization and control of logistics conditions, facilitating material traceability management.



QC Board



Product Manufacturing Workshop



Advanced Production Equipment



AGV Intelligent System

**Supplier Quality Management:** To ensure that the quality of raw and auxiliary materials meets the required standards, SGC has formulated and published the "Supplier Quality Management Work Instruction." This document clearly specifies the control processes and execution guidelines for new supplier development, supplier quality assessment, annual review, change management, and handling of anomalies. From 2021 to 2023, the company maintained a material batch pass rate of over 99.9%.

**Product Inspection and Testing:** SGC has invested in establishing a central laboratory equipped with advanced testing instruments from both domestic and international sources. This laboratory conducts electronic product failure analysis and reliability research, and it also houses a semiconductor integrated circuit packaging process laboratory. Since its establishment, the laboratory has continuously improved its testing capabilities, covering the necessary performance tests for products. It provides comprehensive quality inspection and evaluation of products, materials, components, and intermediate products, meeting the testing requirements for product design, verification, and production processes.



White Light Interferometer



Thermal Shock Test Chamber



Thermomechanical Analyzer



Micro-Resistance Testing System



Infrared Spectrometer



**Thermal Emission Microscope System** 



Network Analyzer



Cyclic Interconnect Stress Testing System

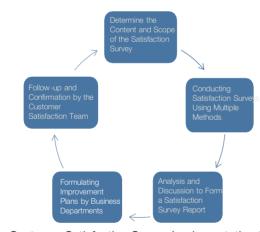
Sunshine Global Circuits Co., Ltd | 2023 Annually ESG Report | Product Innovation Empowers a Connected World | 2023 Annually ESG Report | Product Innovation Empowers a Connected World | 2023 Annually ESG Report | Product Innovation Empowers a Connected World | 2023 Annually ESG Report | Product Innovation Empowers a Connected World | 2023 Annually ESG Report | Product Innovation Empowers a Environmental-friendly, Leading Green & Intelligent Manufacturing | People-oriented, Supporting Employee Development | Social Responsibilities | Product Innovation Empowers a Connected World | Product Innovation Empowers | Product Innovation Empowers | Product

# 3.4 Enhancing Customer Satisfaction

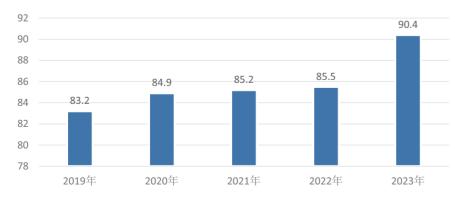
### **■ Customer Satisfaction Survey**

To assess the current level of customer satisfaction, uncover potential customer needs, and identify opportunities to improve service quality, SGC has established and implemented the "Customer Satisfaction Management Procedure" based on international standards. The company conducts annual customer satisfaction surveys using methods such as questionnaires, client visits, monthly scorecards, and daily communication. The survey covers areas including product quality, delivery, engineering documentation handling, customer complaints, manufacturing process levels, and pricing.

SGC convenes meetings with various business departments to discuss and analyze the survey results, producing a Customer Satisfaction Survey Analysis Report. Each department analyzes the issues identified in the survey, determines root causes, and formulates improvement plans. The Quality and Customer Service departments regularly track the progress and verify the effectiveness of these improvement actions. According to survey results from 2019 to 2023, customer satisfaction has increased from 83.2 points in 2019 to 90.4 points in 2023, demonstrating a steady improvement in the quality of SGC's products and services.



Customer Satisfaction Survey Implementation Steps



Trend Chart of Customer Satisfaction Survey Results (2019-2023)

### **■ Customer Privacy Protection**

SGC prioritizes customer information security and adheres to international standards, implementing scientific measures to manage information security risks effectively.

**Information Security Management Procedures:** Established procedures like "Server Backup Management," "Network Antivirus and Firewall Management," and "Computer and Network Usage Management" to ensure data integrity, security, and operational continuity.

**Information Security Hierarchical Management:**Developed workflows and security systems for collecting and using customer information, classifying data by confidentiality level, enhancing account security, and controlling access to contracts and project materials.

**Information Access Control:**Strictly manages system access permissions, allowing only approved personnel to access systems. Customer information is shielded in the SAP system, backed up regularly, and any bulk data actions are reviewed to prevent leaks.

**Firewalls and Antivirus Software:** Uses advanced firewalls and antivirus software to block external attacks, protecting the internal network and computer systems, ensuring a secure customer information protection framework.





and the planet. We are committed to consistent investment and scientific management to be a responsible and conscientious enterprise, ensuring





sustainable development.



4.1 Hazardous Substances Control 40

4.2 Building a Green Enterprise 42

4.3 Clean Production Management 44

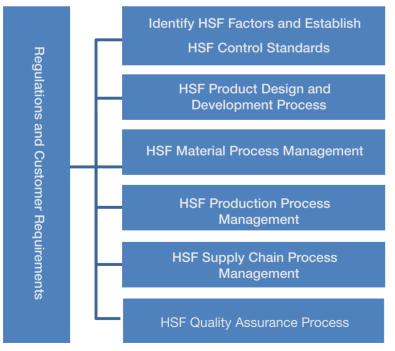
4.4 Responding to Climate Change 45



# 4.1 Hazardous Substances Control

HSF (Hazardous Substances Free) refers to the reduction of hazardous substances listed in RoHS directives. REACH regulations, or other relevant laws, as well as those restricted or prohibited by customer requirements due to their harmful effects on the environment and human health. To ensure that the company's PCB product production and operations fully consider environmental and human health impacts, comply with customer requirements, and adhere to relevant product safety and hazardous substance control regulations, the company has developed and published the "HSF Control Procedure." This procedure implements a systematic management mechanism to prevent hazardous substances from contaminating products.

In 2023, the company's hazardous substances management system was certified with the QC080000:2017 certification. From 2021 to 2023, the company did not experience any hazardous substance complaints.



Hazardous Substances Free System

### ■ HSF Control Measures

- 1) The company has established HSF (Hazardous Substances Free) plans and policies, complying with environmental regulations worldwide and implementing a hazardous substances management system to ensure product compliance with HSF requirements.
- 2) The company identifies all factors affecting HSF, including manufacturing, packaging, labeling, delivery, equipment, tools, fixtures, and auxiliary materials.
- 3) The company formulates "Hazardous Substance Control Standards" and "Declaration of Non-Containment of Hazardous Substances" to meet customer and regional regulatory requirements, controlling hazardous substances in incoming materials, processes, and finished products.
- 4) The procurement department evaluates and approves suppliers according to the "Supplier Management Procedures" to ensure effective hazardous substance control systems. For new materials, HSF monitoring data is requested from suppliers to verify compliance.
- 5) The company commissions third-party testing agencies for annual monitoring of finished products to ensure compliance. Non-compliant products are sealed immediately and subject to further tracing, verification, and rectification.



**REACH Compliance Commitment** 



Finished Product Hazardous Substance Monitoring Report



QC080000:2017 System Certification Certificate

Sunshine Global Circuits Co., Ltd | 2023 Annually ESG Report

SGC Overview

SGC Overvi

# 4.2 Building a Green Enterprise

### **■** Environmental Policy



#### Energy conservation and emission reduction, green and safe

Environmental protection serves as the bedrock for our company's survival and growth, representing an obligation we are duty-bound to fulfill. Grounded in the principles of social and planetary responsibility, we remain steadfast in our commitment to invest resources, em ploy scientific methods for governance, meet emissions standards, adhere strictly to legal and regulatory frameworks, and act as a conscientious enterprise. These actions are taken to guarantee our sustained and responsible business operations, fostering a future of enduring prosperity.

The company adheres to a path of green development, adopting the policy of energy conservation and emission reduction, as well as promoting green safety in our management approach. We uphold the principle of allocating appropriate environmental costs in a rational manner, striving for a win-win scenario between corporate profits and environmental benefits. We prioritize conservation, protection, green industrial layout, green management, and green production. Focusing on green, low-carbon, and circular practices, we aim to establish ourselves as a green enterprise.

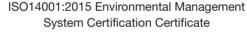


#### **Environmental management mechanisms**

The company has established a systematic environmental management system in accordance with the ISO14001:2015 standard, continuously increasing its investment in environmental protection while adhering to national environmental protection regulations. Utilizing the PDCA (Plan-Do-Check-Act) operational model, it continually enhances its environmental performance. Statistics show that between 2021 and 2023, the company's total investment in environmental protection amounted to 82 million RMB.

- **1. Establishment of Environmental Objectives:** The company has formulated a series of environmental objectives, comprising energy conservation targets, input-output efficiency goals, and pollutant discharge standards compliance aims. These objectives are propelled through an assessment mechanism that drives the execution and advancement of environmental activities across departments, fostering ongoing pollution prevention and improvement initiatives.
- **2. Clean Production Audit:** The company has conducted multiple clean production audits, starting from product design, raw material selection, process improvements, and production management. This approach seeks opportunities for enhancement in clean production, maximizing the conversion of raw materials and energy into products, minimizing resource wastage, and reducing the emissions of pollutants and their environmental impact.
- **3. Environmental Awareness Training:** An annual plan for environmental protection publicity and training is formulated, which includes organizing related activities, environmental protection training sessions, promotional campaigns, and exchanges. These efforts enhance understanding of environmental regulations and environmental management activities, thereby raising employees' environmental awareness.
- **4. Environmental Inspection and Monitoring:** The company regularly conducts internal audits and management reviews, and periodically arranges for third-party monitoring of environmental pollutants to identify and address potential environmental hazards. Between 2021 and 2023, the company achieved a 100% compliance rate for emissions of pollutants such as waste gas and waste water, marking significant environmental performance achievements. In 2021 and 2022, Shenzhen SGC Circuit respectively earned the titles of "Excellent Enterprise in Green Manufacturing and Environmental Protection" and "Shenzhen Green Enterprise," recognizing its outstanding contributions to environmental sustainability.









#### **Environmental Performance Data Summary Table for 2021-2023**

Environmental Indicators	2021年	2022	2023
Environmental protection investment amount (Billion RMB/year)	0.37	0.27	0.25
Total water consumption (T/year)	1,232,530.00	1,213,350.00	1,080,465.00
Wastewater discharge volume (T/year)	838,857.00	819,059.00	747,242.00
Proportion of wastewater treated up to standard (%)	100%	100%	100%
Rate of exhaust gas monitoring meeting standards (%)	100%	100%	100%
Chemical Oxygen Demand (COD) discharge volume (T/year)	33.11	28.62	25.85
Ammonia nitrogen discharge volume (T/year)	2.08	2.18	1.50
Total electricity consumption (KWH/ year)	120,122,321	126,272,371	118,290,242
Natural gas (m³/ year)	878,468	1,104,326	1,193,076
Diesel (KG/year)	116,068.93	102,393.44	81,247.10
Gasoline (KG/year)	18,770.44	15,481.67	19,791.40
Solid waste discharge volume (T/ year)	20,525.92	23,740.28	25,224.81
Amount of recyclable or reusable waste (T/ year)	9,225.52	10,422.50	11,761.97

Sunshine Global Circuits Co., Ltd | 2023 Annually ESG Report

Sunshine Global Circuits Co., Ltd | 2023 Annually ESG Report

Sunshine Global Circuits Co., Ltd | 2023 Annually ESG Report

Transparent Product Innovation Empowers a Connected World Connected

# 4.3 Clean Production Management

**Environmental Management Responsibilities:** SGC Circuit adheres strictly to national environmental protection regulations, actively implements the Environmental Impact Assessment (EIA) system and the "Three Simultaneities" principle. The company has established rigorous environmental management systems, setting up environmental management departments and dedicated personnel to oversee environmental protection work, communicate with government environmental authorities, operate, maintain, and supervise environmental facilities.

**Clean Production Audit:** Shenzhen SGC has undergone three rounds of clean production audits. The first round was completed in 2012, the second in 2018, and the third in 2023. These clean production audits have significantly assisted the enterprise in enhancing production efficiency, energy utilization rates, and reducing pollutant emissions. They have also brought about substantial economic benefits, realizing a "win-win" scenario where both economic and environmental benefits are achieved.

**Upgrade of Exhaust Gas Treatment Systems:** The company operates three sets of organic exhaust gas treatment systems, which originally employed a process combining "water scrubbing + UV photocatalytic decomposition + primary activated carbon adsorption." In 2023, the company upgraded the treatment process for these systems, modifying it to feature filtration + water scrubbing + secondary activated carbon adsorption. Following the upgrade, the efficiency in treating volatile organic compounds (VOCs) was enhanced, resulting in a reduction of organic exhaust emissions by 1.06 tons per year compared to 2022 levels.

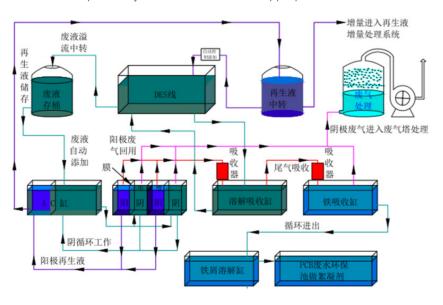
**Stripping Line Replacement and Upgrade:** In 2023, the company invested 700,000 RMB to phase out an aging assembled thick gold stripping line in the surface treatment area and replace it with a fully automatic stripping line. The project has been completed and is now operational. The new stripping line has reduced the amount of water used in repeated rinsing processes, leading to annual savings of 6,682 tons of water and 59,200 kWh of electricity. Moreover, it has decreased sludge discharge by 33.02 tons per year and membrane residue output by 7.21 tons per year.

**Acidic Etching Solution Recycling System:** During the production process, acidic etching waste liquid is generated. The company uses membrane electrolysis technology to extract copper ions from the acidic etching solution. By combining multiple proprietary innovative technologies, the waste liquid is entirely recycled back into the production process, achieving 100% recycling and zero discharge of etching waste liquid.

**Waste Sorting and Disposal:** The company manages various wastes generated during the production process through classification. Recyclable waste is sorted and recycled for reuse, while non-recyclables are handled according to national regulatory requirements for classified disposal. Hazardous waste is entrusted to qualified agencies for proper handling, and domestic waste is regularly cleared and transported by sanitation services for appropriate treatment.



The upgraded organic exhaust gas treatment system



Acidic Etching Solution Recycling SystemRecycling System

# 4.4 Responding to Climate Change

#### ■ Climate Change Risk Identification

As the global economy expands, the consumption of fossil fuels by humans has led to a significant increase in greenhouse gas emissions, which in turn have caused a worldwide climate impact through the greenhouse effect. In response to this, the company refers to the risk analysis framework provided by the Task Force on Climate-related Financial Disclosures (TCFD) to identify potential climate-related risks and opportunities in its production activities, incorporating these into its overall environmental risk management. By conducting climate risk identification and assessment, policy research, benchmarking against industry peers, and integrating expert opinions, the company has identified the following climate change risks relevant to its business development.

#### Climate Risk and Opportunity Identification and Evaluation Table

Risk Category	Risk Factor	Potential Financial Impact	Mitigation Measures
	Climate Disasters (e.g., Typhoons, Floods Leading to Safety Incidents or Forced Suspension of Production)	Increased Operating Costs; Decreased Value of Fixed Assets	Establish Emergency Response Plans and Conduct Annual Drill Exercises
Physical Risks	Climate Change Impacts (such as Persistent High Temperatures Causing Power Supply Anomalies, Increased Cooling Costs, Unstable Supply Capacity and Transportation)	Rising Operating Costs	Integrate Climate Change Awareness into Daily Operations Management and Enhance Energy Efficiency
	Policy and Legal Risks (such as Rising Carbon Prices and Implementation of Carbon Taxes Leading to Increased Operational and Procurement Costs)	Rising Operating Expenses, Increased Financing Costs	Monitor Relevant Laws and Regulations, Regularly Report Greenhouse Gas Emissions Data, and Effectively Respond to Policy Changes
Transition Risks	Technology Risks (such as Upgrading to Energy-Saving and Emission-Reduction Equipment)	Growing Operating Expenses	Enhance Equipment Utilization Efficiency and Increase Product Manufacturing Productivity
	Market Preference Risk (such as Increasing Scrutiny from Capital Markets, Customers, and Other Stakeholders on Corporate Climate Actions; Poor Environmental and Climate Performance May Subsequently Affect Company Reputation and Performance)	Impaired Product Sales, Negative Impact on Corporate Reputation and Brand Influence	Elevate Climate Change as a Key Agenda Item, Disclosing Carbon Emission-Related Information through ESG Reports, Stakeholder Surveys, and Other Channels
Transition	Technology Opportunities (Early Adoption of Clean Technologies and Use of Renewable Energy Sources to Effectively Mitigate Future Risks of Rising Energy Prices)	Decreased Operating Costs, Boosted Sales of Low-Carbon Products	Formulate Carbon Reduction Strategies, Employing Clean Energy to Decrease Product-Related and Operational Carbon Emissions
Iransition Opportunities	Market Preference Opportunities, Enhancing Competitive Position in the Market by Developing Innovative Low- Carbon Products to Meet the Demands of Capital Markets, Customers, and Stakeholders for Sustainable Solutions	Increased Revenues; Enhanced Environmental Image and Brand Influence	Actively Increase Investments in Decarbonization, Engage Suppliers in Collective Action, and Offer Customers Cleaner, Lower-Carbon, and More Efficient Products

Sunshine Global Circuits Co., Ltd | 2023 Annually ESG Report | Product Innovation Empowers a Foundation of Growth | Connected World | People-oriented, Supporting Employee Development | Social Responsibilities | People-oriented, Supporting Employee Development | Social Responsibilities | People-oriented, Supporting Employee Development | People-oriented, Support

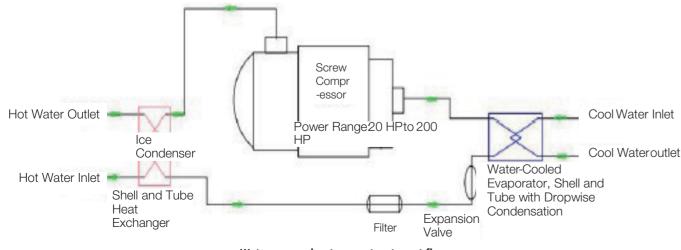
#### ■ Our Carbon Reduction Actions

- **1. Carbon Verification:** We conducts carbon auditing at the operational level in accordance with the ISO14064 standard, entrusting a third-party verification agency to audit carbon emission data and issue a carbon audit report. In 2023, the Scope 1 and Scope 2 emissions from our operations amounted to 81,500.94 tons of CO2-e per year, representing a reduction of 6.4% compared to 2022.
- **2. Energy Management Mechanism:** The primary source of our company's carbon emissions stems from electricity consumption during production processes. To decrease these emissions, we have established an energy management body, the Energy Saving and Emission Reduction Team, which has formulated comprehensive energy management systems. These include the 'SGC Company Energy Management System', 'SGC Company Energy Conservation and Rewards & Punishment System', and 'Energy Management Procedures', comprehensively promoting energy conservation and efficiency enhancement measures that have yielded notable carbon reduction outcomes.

2021-2023 Greenhouse Gas Emissions Data Statistical Table

Environmental Indicators	2021	2022	2023
Scope 1 Emissions (T CO <sub>2</sub> -e/ year)	1,994.52	2,902.80	3,065.84
Scope 2 Emissions(T CO <sub>2</sub> -e/ year)	80,317.24	84,129.13	78,435.10
Scope 1 and Scope 2 Total Emissions (T CO <sub>2</sub> -e/ year)	82,311.76	87,031.93	81,500.94

**3. Adoption of Water Source Heat Pump Central Heating in Place of Electric Heater Terminal Heating:** Heat pumps, known for their high efficiency and energy conservation capabilities, commonly exhibit heating efficiencies of over 400%, far surpassing the 95% to 98% efficiency range of electric heaters. The company has incorporated more water source heat pumps into its system, leveraging existing air-source heat pumps and the residual heat from air compressors, creating centralized hot water management for each building floor. This strategy lowers the energy consumed by hot water supply, achieving an annual reduction of 338,400 kilowatt-hours (kWh) in electricity consumption and a decrease in carbon emissions by 193 metric tons of CO2 equivalent (CO2-e) per year.



Water source heat pump treatment flow

- **4. Jiujiang SGC Geothermal System:** The geothermal heat pump system project of Jiujiang SGC Circuit Technology Co., Ltd. is constructed in two phases according to the park development plan. The first phase has completed the construction of the underground pipeline network, and the second phase aims to finalize equipment installation and commence operations within three years. Upon completion of the project, it is anticipated to conserve 870,000 degrees of electricity annually and reduce carbon dioxide emissions by 485.72 tons.
- **5. Jiujiang SGC Photovoltaics:** Solar photovoltaic panels have been installed on the rooftops of dormitories, water treatment facilities, R&D buildings, general areas of Factory 1 and Factory 2, the curved roof area of Factory 2, and the dome areas of Phase 1 and Phase 2 of the tank farm at the company's Jiujiang site. Harnessing solar power for electricity generation, this green energy is utilized for both production and daily life. The total capacity of the project can reach up to 7,591.15 kWp, with an estimated total generation of 190,835 MWh over 25 years. Based on the grid factor of 2022, it is expected to reduce carbon emissions by 4,353 tons of CO2-e, significantly contributing to carbon reduction efforts.
- **6. Energy saving and carbon reduction projects:** During the period from 2021 to 2023, the company has implemented numerous energy-saving projects, achieving remarkable results in carbon reduction. Details are provided in the following table.
- **7.Energy saving and carbon reduction projects:** During 2021-2023, the company has carried out many energy saving projects and achieved significant carbon reduction effects, as shown in the following table

#### Company Energy-Saving Retrofit Project Emission Reduction Performance Statistics Table

Serial Number	Project Name	Carbon Emission Reduction Volume (TCO <sub>2</sub> -e)
1	Drilling Machine Conversion from Standalone Chiller to Central Oil Cooling Project	128.23
2	Drilling Workshop Dust Collection Pipeline Energy-Saving Retrofit Project	230.58
3	Heat Recovery Project for 200HP Thermal Air Compressor and 200HP Atlas Copco Air Compressor	81.98
4	High-Temperature Oven Energy-Saver Addition Project	374.94
5	New Energy Vehicle Replacement for Traditional Fuel Vehicle Project	11.39
6	Shenzhen SGC and Jiujiang SGC Energy-saving Fan Renovation Project	633.15





Adhering to the core concept of position value, SGC Circuit ensures the rights and dignity of every employee, guaranteeing a fair and transparent work environment. The company actively promotes a culture of strivers, encouraging employees to contribute with enthusiasm and relentless efforts towards the continuous growth and prosperity of the enterprise.











5.1 Our Employee	50
5.2 Employee Rights Protection	51
5.3 Occupational Health and Safety	53
5.4 Training and Development	56
5.5 Employee Care	58



Sunshine Global Circuits Co., Ltd | 2023 Annually ESG Report | Product Innovation Empowers a Foundation of Growth | Connected World | Conn

# **5.1 Our Employees**

### **■ Human Resource Policies**

SGC Circuit deeply understands the significance of talent, considering it the core driving force and most cherished asset for the company's development. The company emphasizes the selection, cultivation, and motivation of talents, upholding an employment ideology centered around "people first, combining virtue with competence, utilizing each person's strengths, and realizing win-win outcomes." Committed to fostering an environment that nurtures a steady stream of talents, SGC Circuit establishes a robust foundation for its sustainable growth.

The company actively promotes diversity among its employees, attracting and retaining a broad spectrum of talents from diverse backgrounds, genders, ages, ethnicities, and religious affiliations. It strictly prohibits any form of discrimination based on race, skin color, gender, nationality, religion, disability, marital

People-Oriented Approach Respecting the individual value of each employee, the company places great emphasis on their personal development and growth, while attentively addressing their needs and expectations.

## Combining Virtue with

The company focuses not only on cultivating employees' professional skills but also places a higher premium on their moral character, professional ethics, and overall demeanor.

Maximizing Each Person's Potential Based on individual abilities, strengths, and interests, the company makes reasonable job allocations to ensure that each employee can maximize their value in their respective positions.

Achieving Win-Win Outcomes With a fair compensation and benefits system, alongside a promising career development platform, employees are empowered to realize their selfworth while contributing to the company's growth, thereby achieving a mutually beneficial outcome for both parties.

#### **Company Human Resources Management Philosophy**

status, age, pregnancy, or any other legally protected characteristics. Forced labor is explicitly banned, and the hiring of child labor is strictly forbidden. The company respects employees' individual freedom of belief and safeguards their personal privacy, dedicated to creating a diverse and inclusive workplace environment. By the end of 2023, the company had a total of 2,400 employees, including 166 individuals from ethnic minority groups, with female managers constituting 7.59% of the management team.

#### **Human Resources Performance Data Sheet**

Human Resources Performance Data	2023
Total Number of Employees	2400
Male to Female Employee Ratio (%)	70:30
Age Distribution of Employees (Under 30 / 30-50 / Over 50)	25:70:5
Number of Ethnic Minority Employees (Persons)	166
Number of Employees with Disabilities (Persons)	2
Educational Attainment Distribution of Employees (Bachelor's Degree & Above / High School & Above / Junior High School & Below)	3:5:2
Percentage of Middle-Level and Above Female Managers Among Management Staff (%)	7.59%
Number of Foreign Employees (Persons)	1

# **5.2 Employee Rights Protections**

### **■** Employee Rights and Benefits

The company adheres to national labor regulations, strictly prohibiting any form of discrimination during the hiring process, and is fully committed to safeguarding all employees' rights and benefits, ensuring equal development opportunities for every staff member.

- 1. The company implements a comprehensive and transparent compensation and benefits system, focusing on work schedule arrangements, promoting a reasonable work regime, and prioritizing employees' physical and mental well-being.
- 2. The company encourages employees to actively engage in corporate governance, supporting their establishment and participation in trade unions. Through collective bargaining, both parties collaborate to uphold employees' legal rights and interests. A union organization has been established within the company, with employee representatives elected by their peers to participate in management and decision-making processes. They assist in resolving and addressing employee grievances, ensuring that employee voices are respected and heard.
- 3. The company strictly prohibits any form of discriminatory behavior. By establishing internal grievance channels, issues are handled and resolved based on principles of fairness and impartiality, thereby preventing employees from experiencing discrimination or unfair treatment. This ensures a respectful and equitable working environment for all.



Employee Grievance Handling Process

### ■ Compensation and Benefits

SGC Circuit comprehensively considers factors such as job value, individual competence, performance, and market standards when formulating a competitive, comprehensive, and diversified compensation and benefits system for its employees. Adhering to principles of fairness, competitiveness, motivation, economic viability, and legality, this system not only acknowledges the value employees bring to the company but also reflects the company's commitment to employees' career advancement and quality of life. In 2023, the average salary increase rate for employees reached 13%, with an employee satisfaction rate of 91%.

#### **Company Employee Compensation and Benefits Data Statistics Table**

Human resources metrics data	2021	2022	2023
The ratio of the average wage of frontline employees to the local minimum basic wage.	3.25:1	3.45:1	3.81:1
Employee turnover rate (%)	5.22%	3.42%	3.4%
Average employee satisfaction rate (%)	85%	90%	91%
Average employee salary growth rate (%)	24%	36%	13%
Gender pay ratio for the same position (%)	1:1	1:1	1:1
Labor contract signing rate (%)	100%	100%	100%

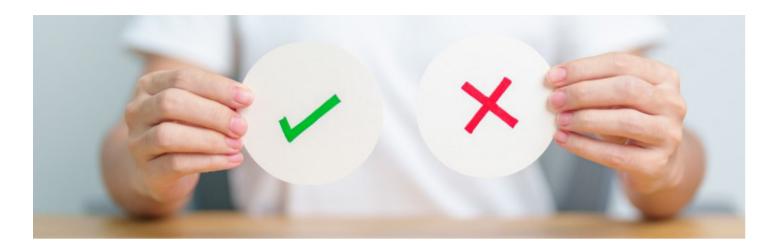
Sunshine Global Circuits Co., Ltd | 2023 Annually ESG Report

Sunshine Global Circuits Co., Ltd | 2023 Annually ESG Report

Sunshine Global Circuits Co., Ltd | 2023 Annually ESG Report

Transparent Procurement Fulfilling Employees Development Social Responsibilities

Transparent Fulfilling Employees Development Social Responsibilities



To ensure that salary levels across different positions within the company effectively combine internal fairness with external competitiveness, the company implements a system where salaries are determined by responsibilities and capabilities, compensation is based on performance, and salary adjustments are linked to both performance and capabilities. Performance bonuses fluctuate with performance, and annual and monthly performance evaluations are important bases for salary adjustments. The company legally provides various benefits to employees, including the state-mandated five insurances and one fund, holidays, annual leave, sick leave, breastfeeding leave, and maternity leave. Additionally, the company offers comprehensive accident insurance, free meals and accommodation, employee shuttle services, and gifts for holidays and birthdays.

### ■ Satisfaction Survey

The company is dedicated to fostering an open, inclusive, and harmonious communication atmosphere, ensuring that every employee's voice is swiftly and accurately conveyed and addressed. To promptly gain insight into employees' genuine thoughts and needs, an annual Employee Satisfaction Survey is conducted, encompassing various aspects such as work environment, compensation and benefits, career development, work pressure, communication between management and subordinates, as well as corporate culture. Based on the survey findings, numerous improvement initiatives have been implemented to enhance employees' engagement and sense of belonging.

In 2023, the company's employee satisfaction rate has risen from 85% in 2021 to 91%, and the employee turnover rate has decreased to 2.4%, indicating a continuous enhancement of the company's attractiveness.



Living Environment

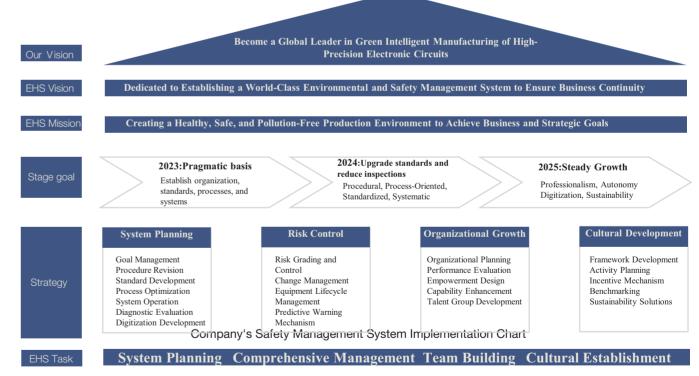


Office Environment

# **5.3 Occupational Health and Safety**

### ■ Safety Policy

We consistently prioritizes the safety and health of its employees, adhering to the principle of "Safety First, Prevention Foremost, Comprehensive Management." We have established a systematic occupational health and safety management system, gradually advancing the operation of this safety management system through four aspects: risk identification, system planning, organizational development, and cultural construction. The company has formulated an implementation plan with the goals of strengthening the foundation in 2023, improving standards and reducing risks in 2024, and achieving stable enhancement in 2025. Currently, Shenzhen SGC has obtained the ISO 45001 Occupational Health and Safety Management System certification.



Company's Safety Management System Implementation Chart

Sunshine Global Circuits Co., Ltd 2023 Annually ESG Report

Sign Spring Global Circuits Co., Ltd 2023 Annually ESG Report

Sign Spring Global Circuits Co., Ltd 2023 Annually ESG Report

Sign Spring Green & Intelligent Manufacturing Connected World Green & Intelligent Connected World Green & Inte



ISO 45001:2018 Occupational Health and Safety Management System Certification Certificate

### **■** Safety Management Measures

1. Safety Management Structure: The company has established a safety governance framework comprising a Safety Management Committee, a dedicated Safety Department, and a Production Safety Leadership Group, clearly defining the safety responsibilities and obligations of personnel at all levels. Moreover, the company has implemented incentive mechanisms and accountability systems for safety, fostering a top-down, all-participant safety management system. During the period from 2021 to 2023, the company did not experience any major accidents causing injuries or fatalities, nor were there any cases of occupational diseases, achieving commendable performance in safety and health.

2021-2023 Occupational Health and Safety Performance Data Summary Table

Occupational Health and Safety Data	2021	2022	2023
Safety Investment Funds (10K RMB / Year)	384	467	454
Employee Health Check-up Coverage Rate (%)	100	100	100
Work-related Fatalities (Persons/Year)	0	0	0
Occupational Disease Incidence Frequency (Occurrences/Year)	0	0	0
Safety Training Hours per Person per Year (H/Person/Year)	25	26	27.4

- 2. Dual Prevention Mechanism: The company has established a dual prevention mechanism comprising risk grading control and hidden danger investigation and rectification, pinpointing and preventing various risks at their source. Close attention is paid to weak links and potential issues in the risk control process, with regular hidden danger inspections and remediation to prevent safety accidents.
- **3. Standardization of Work Safety:** All production lines and equipment are subject to risk identification based on safety standardization within the company, standardizing and quantifying safety risks. Each position has a visual safety awareness card, informing employees of safety operation requirements and the dangers of non-compliance, ensuring adherence to safety operation standards by all staff.
- **4. Safety Inspection System:** The company regularly carries out diverse safety inspections to enhance the execution of safety management and operational norms. Daily, on-duty supervisors along with the security team patrol key risk positions, promptly addressing and resolving any identified hazards.
- **5. Occupational Health Protection:** The company engages third-party testing agencies to periodically monitor working conditions and the operational environment, strictly controlling occupational hazard factors. Regular occupational health check-ups are organized, with postings of occupational hazard notification signs and provision of personal protective equipment to comprehensively and stringently safeguard employees' occupational health.
- **6. Safety Awareness Training:** In accordance with national safety regulations, the company has constructed a three-tier safety training system, delivering training in fire safety, operational safety, emergency response, first aid, chemical management, among others, through various methods. This has effectively heightened employees' safety awareness and response capabilities.



**On-duty Supervisor Conducting Safety Inspection** 



Fire Emergency Drill

Sunshine Global Circuits Co., Ltd | 2023 Annually ESG Report | Product Innovation Endugates and Communication of Growth Connected World | Product Innovation Endugates and Connected World | Product Innovation En

# 5.4 Training and Development

#### ■ Training and Development

The company tailors training programs according to employees' job roles and career development needs. For those on the management track, it sets up leadership training programs for grassroots, mid-level, and senior managers. For professional roles, it constructs training programs centered around job competency requirements and personalized learning pathways. Meanwhile, a 'New Talent Cultivation Plan' is established for fresh graduates, aiming to build an industry-leading incubator for newcomers – a 'Whampoa Military Academy' equivalent, fostering a steady stream of outstanding talents to support the company's sustainable growth and talent reserve. Encouraging continuous learning, the company provides abundant online and offline learning resources, regularly soliciting and acting upon employee feedback to refine its training and career advancement mechanisms. From 2021 to 2023, the total investment in employee training amounted to 2.942 million RMB, with an average of 26.4 training hours per person per year. The variety of training courses available expanded to 86, indicating a consistent upward trend in the company's commitment to professional development.

#### 2021-2023 Employee Training Performance Data Summary Table

Indicator Data	2021	2022	2023
Employee Annual Training Total Hours (H/ Year)	47695	59485	75204
Employee Training Investment (10K RMB / Year)	89.11	50.72	154.37
Number of Training Course (Categories / Year)	55	72	86
Average Training Hours per Employee (H/ Person/ Year)	21.47	24.22	31.30

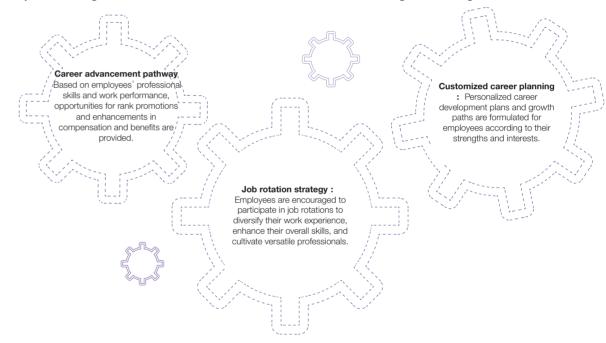


Project Management Training

College Student Bootcamp

#### **■** Employee Career Development

A scientifically sound and rational career development mechanism is pivotal in facilitating employee growth and enhancing corporate competitiveness. At its core, our company's career development approach revolves around a structured promotion ladder, job rotation strategies, and tailored career planning, thereby offering extensive professional growth opportunities to employees with diverse skills and at various hierarchical levels. We continuously advance and refine our competency-based job role management system, furnishing employees with clear guidelines for their career progression. This system is designed to assist employees in navigating the myriad challenges and issues they may encounter throughout their careers, ensuring they progress steadily along their growth trajectories. By fostering a culture that encourages ongoing learning, adaptability, and proactive engagement with career development resources, we empower our workforce to stay ahead in their respective fields, ultimately contributing to both individual success stories and the collective strength of our organization.





The company holds the 2023 Annual Staff Commendation Ceremony, recognizing outstanding employees and promoting exemplary achievements.

SGC Overview

Organizational Governance:
Foundation of Growth
Foundation

# **5.5 Caring for Employees**

### **■** Employee Mutual Assistance Fund

In order to enhance corporate cohesion and facilitate harmonious development, the company established a special Employee Mutual Assistance Fund Association in 2021. To date, it has amassed over RMB 1.6 million in donations, successfully assisting 11 employees in overcoming personal hardships by providing them with approximately RMB 290,000 in total aid. This assistance encompasses various aspects such as medical expenses, emergency handling of family incidents, educational subsidies, and more, truly embodying the spirit of offering timely help and mutual support among colleagues.



The company has established an Employee Mutual Assistance Fund Association to support staff members facing unexpected difficulties or special circumstances, aiding them in overcoming challenges.

### **■** Colorful Employee Life

To foster a vibrant and uplifting work environment alongside a pleasant living atmosphere, we arrange a diverse array of cultural and sports activities. These initiatives enrich the spiritual lives of our employees, alleviate psychological pressures, and empower them to achieve a harmonious work-life balance. Annually during the summer vacation, our "Together in SGC, Cultivating Growth with Our Children" parent-child event brings abundant laughter and joy. It offers a wealth of diverse experiences that broaden children's perspectives, while interactive parent-child segments strengthen bonds between employees and their offspring, yielding immense fulfillment. Throughout each year, the company organizes various cultural and sports engagements, including badminton, basketball matches, tug-of-war competitions, lantern riddle-solving during the Lantern Festival, birthday celebrations, and more. Such events reinforce team unity, enhance collaborative spirits among team members, and bolster a sense of collective honor and achievement.













Team Building Activities



The company adheres to the principle of "Disinterested Procurement, Win–Win Cooperation," and is dedicated to building a sustainable supply chain. The company actively participates in community development, gives back to society, and strives to be an exemplary corporate citizen!











**6.1 Responsible Procurement** 

6.1 Charitable and Public Welfare Activities

62

64



# **6.1 Responsible Procurement**

#### Procurement Values: Integrity and Collaboration, Understanding and Communication, Continuous Improvement

Vision and Goals:

Practice disinterested procurement, create strategic value, and build a supply ecosystem based on equality, respect, transparency, development, and win-win cooperation. Commit to providing timely, accurate, high-quality, and cost-effective procurement and supply chain services.

#### **■** Responsible Procurement Management

Since SGC establishment, the company has always adhered to the principle of integrity in its operations. Based on the principles of fairness, openness, and impartiality, the company advocates for sunshine procurement policies, standardizes the operations of all stakeholders in the supply chain, and collaborates with suppliers to strictly follow standards of integrity and business ethics in all commercial activities

#### 1) Supplier Selection:

SGC has established a comprehensive and applicable set of management standards. According to the "Supplier Certification Management System" and "Supplier Management Procedures," competitive suppliers are selected through setting entry thresholds, material evaluation, and assessments and guidance by a professional audit team. The company uses the SRM system to manage the full lifecycle of suppliers. To promote regional economic development, the company prioritizes local suppliers, with local suppliers accounting for 96.3% of production materials in 2023.

#### 2) Supplier Management:

SGC signs the "Strategic Partner Disinterested Procurement Commitment" and the "Supplier Environment/ Safety/Social Responsibility Commitment" with all suppliers. These agreements include provisions on integrity, compliance, human rights, environmental protection, safety, and ROHS standards. Suppliers are required to adhere to these commitments and mutually monitor each other to ensure the implementation of sunshine procurement. Any violations may result in the immediate termination or dissolution of contract terms.

#### 3) Disinterested Procurement Training:

SGC regularly conducts training for internal procurement personnel on topics such as integrity, honesty, and supplier social responsibility management. This extends the company's social responsibility principles and requirements to the supply chain. Together with suppliers, the company advances social responsibility management to ensure that all operations comply with environmental regulations, labor laws, and corporate social responsibility standards.

#### 4) Supplier Performance Evaluation:

SGC conducts annual SER (Social and Environmental Responsibility) audits for key suppliers, referencing the RBA (Responsible Business Alliance) audit program. These audits cover five major areas: labor, health and safety, environment, ethics, and management systems. This ensures that suppliers comply with relevant social responsibility regulations in their business activities. In 2023, the company completed on-site SER audits for 37 suppliers.

Additionally, the company held the first SGC Supplier Conference in 2023, presenting awards such as the Excellent Quality Award and the Best Green Partner Award to recognize and motivate suppliers who have made significant contributions to the company.





The First Global Supplier Conference in 2023

#### **Responsible Procurement Performance Data**

Performance Indicators	2021	2022	2023
Production Local Supplier Percentage (%)	95.7%	96.1%	96.3%
Number of New Supplier Certifications	32	19	21
Annual Number of Supplier SER Audits	13 (Due to Covid)	13 (Due to Covid)	37

### ■ Integrity Procurement Plan

To achieve sustainable development of the supply chain, the company will establish and improve supplier ESG management based on the requirements of the ISO 20400 Sustainable Procurement standard. The short-term supply chain ESG advancement plan includes:

- 1) Strengthening supplier ESG risk evaluation and grading management, focusing on managing suppliers with high ESG risks, and adding ESG-related evaluation criteria to the supplier QEMCDS performance scoring system;
- 2) Enhancing audits on suppliers' hazardous substance management, ESG compliance, and management performance. The company plans to increase the annual audit count from 37 per year to 50 per year by 2029 to help suppliers improve their ESG management levels;
- 3) Actively responding to the national "Dual Carbon" strategy and customers' carbon reduction requirements, promoting carbon inventory and carbon reduction initiatives among suppliers to reduce the carbon footprint of products and contribute to mitigating global climate warming.



Supplier Participation in Empowerment Training



On-Site Audits for Suppliers

# **6.2 Charitable and Public Welfare Activities**

We embraces the idea of "Contributing with Love, Giving Back to Society." It actively participates in social welfare and charitable activities, taking tangible steps to shoulder its responsibilities and positively impact the community.

### ■ Rural Assistance Charity Initiative

SGC actively implements the directives of the Central Committee of the Communist Party of China and the State Council on consolidating the achievements of poverty alleviation and promoting rural revitalization. By adopting targeted assistance, the company fulfills its corporate social responsibility. The company has made a directed donation of nearly 100,000 RMB to Xingwang Village in Du'an Yao Autonomous County, Hechi City, Guangxi Zhuang Autonomous Region. This donation aims to improve rural infrastructure, support rural revitalization, and enhance the well-being of the local population.



### ■ Education poverty alleviation project

In December 2023, Jiujang SGC, in conjunction with the Jiujang City Volunteer Federation, made a heartfelt donation to the Kangcheng Middle School in the Economic Development Zone. Principal Wu Min of Kangcheng Middle School expressed gratitude for the company's act of kindness and warmly welcomed the children of company employees to enroll in Kangcheng Middle School. The Jiujang City Volunteer Federation commended the company for its compassionate support and awarded it a plaque reading "Passion for Public Welfare, Moving Forward Together."

In the same year, Jiujiang SGC also donated supplies to the Maotian Town Central Primary School in Wuchuan County, Guizhou Province, including electronic whiteboards for teaching, improving the school's teaching conditions and



the learning environment for the children. These practical actions supported the development of local education. We hope to genuinely help children in impoverished areas, providing them with better educational resources, and allowing them to feel the care and warmth from society.

### **■ Volunteer Activities**

During Covid-19, We actively responded to the government's call, organizing employees to join the community volunteer team to support nucleic acid testing services. Additionally, the company mobilized employees to participate in street volunteer organizations and provided resource support for volunteer activities.





SGC organized employees to participate in community volunteer activities.

As corporate citizens, the company deeply recognizes the importance of fulfilling corporate social responsibility. We hope to illuminate every dim corner of the world with the light of love, making our society full of love and warmth.



### INDEPENDENT ASSURANCE STATEMENT

#### Introduction and objectives of work

BUREAU VERITAS has been commissioned by Sunshine Global Circuits Co., Ltd. (hereafter referred to as "SGC") to conduct an independent assurance to 2023 Environment, Social and Governance Report (hereafter referred to as "the Report"). This Assurance Statement applies to the related information included within the scope of work described below.

This information and its presentation in the report are the sole responsibility of the management of SGC. Bureau Veritas was not involved in the drafting of the Report. Our sole responsibility was to provide independent assurance on its content.

#### Scope of work

Validated the accuracy and objectivity of key data, information and their management support systems during the disclosure period 2023.1.1 to 2023.12.31;

Evaluated the management process of collecting, summarizing, analyzing and inspecting the data and information in the Report;

The assessment team visited SGC(located in Building B, No. 32 Nanhuan Road, Shangxing Second Industrial Zone, Xinqiao Street, Bao'an District, Shenzhen City, Guangdong Province, China) and relative functional departments, Bureau Veritas did not visit its other stakeholders.

Excluded from the scope of our work is any assurance of information relating to:

Activities outside the defined assurance period;

Positional statements (statements of beliefs, goals, future intentions and commitments);

Much of the operating financial data in this Report is taken from SGC Annual Reporting and accounts, which is separately audited by an external auditor and therefore excluded from the scope of the Bureau Veritas assurance.

#### Methodology

As part of its independent assurance, Bureau Veritas undertook the following activities:

Interviewing with relevant personnel of SGC;

Reviewing of documentary evidence produced by SGC;

Auditing of sampled ESG performance data;

Evaluating the processes for collecting and managing performance data and information.

Our work was conducting verification against Bureau Veritas' standard procedures and guidelines for external Assurance of Sustainability Reports, based on current best practice in independent assurance. For this assignment, we have used the verification rules and instructions such as ISAE3000, AA1000 and GRI standards. The work was planned and carried out to provide reasonable, rather than absolute assurance and we believe it provides a reasonable basis for our conclusions.

#### **Verification Conclusion**

On the basis of our methodology and the activities described above, it is our opinion that the information included in the report are objective, reliable and free from material mistake or misstatement.

Certification body address: Room 02, 9 / F, West Office Building 1, Oriental Economic and Trade City, Oriental Plaza, No.1 East Chang'an Street, Dongcheng District, Beijing, China. 100738

Further clarifications regarding the verification scope of this statement may be obtained by consulting the organization. To check this statement validity please call: +86 10 59683888 or +86 20 83073800

Page 1 of 2



ertificatio

S

Verita

O

O

#### Objectivity

The information and data presented in the report are objective and reliable. SGC uses information system to collect and aggregate sustainability data. Through the on-site verification, the evidences provided by SGC are reliable and the content of the report is objective.

#### Completeness

The scope of the report covers SGC and all entities with financial and operational control, focusing on "SGC overview", "Organizational governance", "Product Innovation", "Environmental-friendly", "People-oriented", "Transparent Procurement" and disclosing issues of stakeholders concern such as the company's sustainable development management and community development, covering the disclosure requirements of the "core" scheme of the GRI Standard.

#### Materiality

According to GRI standards requirements, SGC identifies relative key sustainability issues in a rational manner, and discloses the company's strategy, management actions and performance data, rendering the content of the report substantial.

#### Responsiveness

Focused on issues stakeholders concerned, the report discloses and responds particularly to key sustainability issues such as Product quality, R&D and innovation, Occupational health and safety, Compliance with laws and regulations, Climate change response and so on. So the report is responsive.

#### Statement of independence, impartiality and competence

Bureau Veritas is an independent professional services company that specialises in Quality, Health, Safety, Society responsibility and Environmental management with more than 195 years history in providing independent assurance services. Members of the assurance team have no interests or conflicts of relationship with SGC. We have conducted this verification independently and impartially.

Fanny Zou
Director of Greater China Region
Bureau Veritas Certification
2024-05-27

Haoyu Huang
Assurance Team Leader
Bureau Veritas Certification
2024-05-22

Certification body address: Room 02, 9 / F, West Office Building 1, Oriental Economic and Trade City, Oriental Plaza, No.1 East Chang'an Street, Dongcheng District, Beijing, China. 100738

Further clarifications regarding the verification scope of this statement may be obtained by consulting the organization. To check this statement validity please call: +86 10 59683888 or +86 20 83073800

Page 2 of 2

# **Reader Feedback**

Dear readers,

Thank you very much for taking the time to read Sunshine Global Circuits Co.,Ltd. 2023 ESG Report. If you have any thoughts or suggestions regarding this report, please kindly fill out the feedback form below and send it to us via mail, fax, or email. Your valuable input is greatly appreciated!

Name:	Tel:_		Email:	
1. Which sections did yu	find most informat	ive?		
☐ SGC overview				
☐ Organizational Gov	ernance Laying the	Foundations for G	rowth	
☐ Product Innovation	Empowering a Sm	art Connected Wor	·ld	
☐ Environmentally Frie	endly and Low-cark	oon Leading Green	Manufacturing	
☐ People-oriented Fac	cilitating Employee	Development		
☐ Transparent Sourcin	ig Fulfilling Social R	esponsibility		
2. How would you rate th	nis report?			
Readability	☐ Good	☐ Average	□ Poor	
Completeness	☐ Good	☐ Average	□ Poor	
Objectivity	☐ Good	☐ Average	□ Poor	
Layout Design	☐ Good	☐ Average	□ Poor	
Overal Impression	☐ Good	☐ Average	□ Poor	
3. Your suggestions for o	ur next annual repo	ort?		

4. Please get in touch with us:

Email: esg@sunshinepcb.com Tel: +86 (0) 755-2724-3597 +86 (0) 755-2724-3968 Fax: +86 (0) 755-2724-3609

# **GRI Standards index**

	Part 1: General Standard Disclosures	
	Organizational Profile	
No.	Description	Page
102-1	Name of the organization	9
102-2	Activities, brands, products, and services	9
102-3	Location of headquarters	9
102-4	Location of operations	9
102-5	Ownership and legal form	9
102-6	Markets served	9
102-7	Scale of the organization	9-10
102-8	Information on employees and other workers	46
102-9	Supply chain	42
102-10	Significant changes to the organization and its supply chain	N/A
102-11	Precautionary Principle or approach	17
102-12	External initiatives	23-24
102-13	Membership of associations	N/A
	Strategy	
102-14	Statement from senior decision-maker	4
102-15	Key impacts, risks, and opportunities	13-14
	Ethics and integrity	
102-16	Values, principles, standards, and norms of behavior	5-6
102-17	Mechanisms for advice and concerns about ethics	16
	Governance	
102-18	Governance structure	16
102-19	Delegating authority	16
102-20	Executive-level responsibility for economic, environmental, and social topics	21
102-21	Consulting stakeholders on economic, environmental, and social topics	21-22

102-49	Changes in reporting	2
102-50	Reporting period	2
102-51	Date of most recent report	2
102-52	Reporting cycle	2
102-53	Contact point for questions regarding the report	53
102-54	Claims of reporting in accordance with the GRI Standards	2
102-55	GRI content index	54-60
102-56	External assurance	52
	Management approach	
103-1	Explanation of the material topic and its Boundary	22
103-2	The management approach and its components	All chapters
103-3	Evaluation of the management approach	All chapters
	Part2: Topic-specific disclosures	
	Economic performance	
201-1	Direct economic value generated and distributed	10
201-2	Financial implications and other risks and opportunities due to climate change	13, 39
201-3	Defined benefit plan obligations and other retirement plans	N/A
201-4	Financial assistance received from government	N/A
	Market presence	
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	44
202-2	Proportion of senior management hired from the local community	46
	Indirect economic impacts	
203-1	Infrastructure investments and services supported	23-27
203-2	Significant indirect economic impacts	42
	Procurement practices	
204-1	Proportion of spending on local suppliers	42
	Anti-corruption	
205-1	Operations assessed for risks related to corruption	16

205-3 Confirmed incidents of corruption and actions taken N/A  Anti-competitive behavior  Legal actions for anti-competitive behavior, anti-trust, and monopoly practices  Materials  301-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices  Materials  301-1 Materials used by weight or volume N/A  301-2 Recycled input materials used N/A  301-3 Reclaimed products and their packaging materials N/A  Energy  302-1 Energy consumption within the organization 38,40  302-2 Energy consumption outside of the organization 38  302-3 Energy intensity 38  302-4 Reduction of energy consumption 38,40  302-5 Reduction in energy requirements of products and services 32-37  Water and effluents  303-1 Interactions with water as a shared resource 38  303-2 Management of water discharge-related impacts 35  303-3 Water withdrawal 35  303-4 Water discharge 35,38  Bliodiversity  Bliodiversity  Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas N/A  304-2 Significant impacts of activities, products, and services on biodiversity N/A  304-3 Habitats protected or restored N/A  Emissions  305-1 Direct (Scope 1) GHG emissions 38,40	205-2	Communication and training about anti-corruption policies and procedures	16
Legal actions for anti-competitive behavior, anti-trust, and monopoly practices  Materials  301-1 Materials used by weight or volume N/A  301-2 Recycled input materials used N/A  301-3 Reclaimed products and their packaging materials N/A  Energy  302-1 Energy consumption within the organization 38,40  302-2 Energy consumption outside of the organization 38  302-3 Energy intensity 38  302-4 Reduction of energy consumption 38,40  302-5 Reduction in energy requirements of products and services 32-37  Water and effluents  303-1 Interactions with water as a shared resource 38  303-2 Management of water discharge-related impacts 35,38  303-3 Water withdrawal 35  303-4 Water consumption 35,38  Biodiversity  304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas  N/A  1UCN Red List species and national conservation list species with habitats in areas affected by operations  Enissions	205-3	Confirmed incidents of corruption and actions taken	N/A
Materials  Materials weight or volume  N/A  301-1 Materials used by weight or volume  N/A  301-2 Recycled input materials used  N/A  301-3 Reclaimed products and their packaging materials  N/A  Energy  302-1 Energy consumption within the organization  38,40  302-2 Energy consumption outside of the organization  38  302-3 Energy intensity  38  302-4 Reduction of energy consumption  38,40  302-5 Reduction in energy requirements of products and services  Water and effluents  303-1 Interactions with water as a shared resource  38  303-2 Management of water discharge-related impacts  303-3 Water withdrawal  303-4 Water consumption  35,38  Biodiversity  Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas  N/A  304-3 Habitats protected or restored  N/A  IUCN Red List species and national conservation list species with habitats in areas affected by operations  Emissions		Anti-competitive behavior	
301-1 Materials used by weight or volume N/A 301-2 Recycled input materials used N/A 301-3 Reclaimed products and their packaging materials N/A  Energy  302-1 Energy consumption within the organization 38,40 302-2 Energy consumption outside of the organization 38 302-3 Energy intensity 38 302-4 Reduction of energy consumption 38,40 302-5 Reduction in energy requirements of products and services 32-37  Water and effluents  303-1 Interactions with water as a shared resource 38 303-2 Management of water discharge-related impacts 35 303-3 Water withdrawal 35 303-4 Water discharge 35,38 303-5 Water consumption 35,38  Biodiversity  304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas N/A 304-2 Significant impacts of activities, products, and services on biodiversity N/A 304-3 Habitats protected or restored N/A  IUCN Red List species and national conservation list species with habitats in areas affected by operations  Emissions	206-1	The second secon	None
301-2 Recycled input materials used N/A 301-3 Reclaimed products and their packaging materials N/A  Energy  302-1 Energy consumption within the organization 38,40 302-2 Energy consumption outside of the organization 38 302-3 Energy intensity 38 302-4 Reduction of energy consumption 38,40 302-5 Reduction in energy requirements of products and services 32-37  Water and effluents  303-1 Interactions with water as a shared resource 38 303-2 Management of water discharge-related impacts 35 303-3 Water withdrawal 35 303-4 Water discharge 35,38 303-5 Water consumption 35,38  Biodiversity  304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas N/A 304-2 Significant impacts of activities, products, and services on biodiversity N/A 304-3 Habitats protected or restored N/A  IUCN Red List species and national conservation list species with habitats in areas affected by operations  Emissions		Materials	
801-3 Reclaimed products and their packaging materials  Energy  302-1 Energy consumption within the organization  38,40  302-2 Energy consumption outside of the organization  38  302-3 Energy intensity  38  302-4 Reduction of energy consumption  38,40  302-5 Reduction in energy requirements of products and services  32-37  Water and effluents  303-1 Interactions with water as a shared resource  38  303-2 Management of water discharge-related impacts  35  303-3 Water withdrawal  35  303-4 Water discharge  35,38  303-5 Water consumption  Biodiversity  304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas  N/A  304-2 Significant impacts of activities, products, and services on biodiversity  N/A  304-3 Habitats protected or restored  N/A  1UCN Red List species and national conservation list species with habitats in areas affected by operations  Emissions	301-1	Materials used by weight or volume	N/A
Energy  302-1 Energy consumption within the organization  302-2 Energy consumption outside of the organization  38  302-3 Energy intensity  38  302-4 Reduction of energy consumption  38,40  302-5 Reduction in energy requirements of products and services  32-37  Water and effluents  303-1 Interactions with water as a shared resource  38  303-2 Management of water discharge-related impacts  35  303-3 Water withdrawal  35  303-4 Water discharge  35,38  303-5 Water consumption  35,38  Biodiversity  304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas  N/A  304-2 Significant impacts of activities, products, and services on biodiversity  N/A  304-3 Habitats protected or restored  N/A  Emissions	301-2	Recycled input materials used	N/A
302-1 Energy consumption within the organization 302-2 Energy consumption outside of the organization 38 302-3 Energy intensity 38 302-4 Reduction of energy consumption 38,40 302-5 Reduction in energy requirements of products and services 32-37  Water and effluents  303-1 Interactions with water as a shared resource 38 303-2 Management of water discharge-related impacts 303-3 Water withdrawal 35 303-4 Water discharge 35,38 303-5 Water consumption  Biodiversity  304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas  N/A 304-2 Significant impacts of activities, products, and services on biodiversity  N/A 304-3 Habitats protected or restored N/A  10CN Red List species and national conservation list species with habitats in areas affected by operations  Emissions	301-3	Reclaimed products and their packaging materials	N/A
Solution of the organization and services and services are sure of the organization and services are sure of products and services are sure of s		Energy	
302-3 Energy intensity 38 302-4 Reduction of energy consumption 38,40 302-5 Reduction in energy requirements of products and services 32-37  Water and effluents  303-1 Interactions with water as a shared resource 38 303-2 Management of water discharge-related impacts 303-3 Water withdrawal 35 303-4 Water discharge 35,38 303-5 Water consumption 35,38  Biodiversity  304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas  N/A 304-2 Significant impacts of activities, products, and services on biodiversity N/A 304-3 Habitats protected or restored N/A  IUCN Red List species and national conservation list species with habitats in areas affected by operations  Emissions	302-1	Energy consumption within the organization	38,40
302-4 Reduction of energy consumption 38,40 302-5 Reduction in energy requirements of products and services 32-37  Water and effluents  303-1 Interactions with water as a shared resource 38 303-2 Management of water discharge-related impacts 35 303-3 Water withdrawal 35 303-4 Water discharge 35,38 303-5 Water consumption 35,38  Biodiversity  304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas  N/A 304-2 Significant impacts of activities, products, and services on biodiversity  N/A 304-3 Habitats protected or restored N/A  N/A  Emissions	302-2	Energy consumption outside of the organization	38
Solution   Reduction   Reduc	302-3	Energy intensity	38
Water and effluents  303-1 Interactions with water as a shared resource  38 303-2 Management of water discharge-related impacts  35 303-3 Water withdrawal  35 303-4 Water discharge  35,38 303-5 Water consumption  35,38  Biodiversity  Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas  N/A  304-2 Significant impacts of activities, products, and services on biodiversity  N/A  304-3 Habitats protected or restored  N/A  1UCN Red List species and national conservation list species with habitats in areas affected by operations  Emissions	302-4	Reduction of energy consumption	38,40
303-1 Interactions with water as a shared resource  38 303-2 Management of water discharge-related impacts 35 303-3 Water withdrawal 35 303-4 Water discharge 35,38 303-5 Water consumption 35,38  Biodiversity  304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas  N/A 304-2 Significant impacts of activities, products, and services on biodiversity N/A 304-3 Habitats protected or restored N/A  IUCN Red List species and national conservation list species with habitats in areas affected by operations  Emissions	302-5	Reduction in energy requirements of products and services	32-37
303-2 Management of water discharge-related impacts 303-3 Water withdrawal 35 303-4 Water discharge 35,38 303-5 Water consumption 35,38  Biodiversity  Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas  N/A  304-2 Significant impacts of activities, products, and services on biodiversity N/A  304-3 Habitats protected or restored N/A  IUCN Red List species and national conservation list species with habitats in areas affected by operations  Emissions		Water and effluents	
303-3 Water withdrawal 35 303-4 Water discharge 35,38 303-5 Water consumption 35,38  Biodiversity  Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas  N/A  304-2 Significant impacts of activities, products, and services on biodiversity N/A  304-3 Habitats protected or restored N/A  1UCN Red List species and national conservation list species with habitats in areas affected by operations  Emissions	303-1	Interactions with water as a shared resource	38
303-4 Water discharge 35,38  303-5 Water consumption 35,38  Biodiversity  304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas  304-2 Significant impacts of activities, products, and services on biodiversity N/A  304-3 Habitats protected or restored N/A  304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations  Emissions	303-2	Management of water discharge-related impacts	35
Biodiversity  Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas  Significant impacts of activities, products, and services on biodiversity  N/A  Superior N/A  Water consumption  Biodiversity  N/A  N/A  Superior N/A  Buch Red List species and national conservation list species with habitats in areas affected by operations  Emissions	303-3	Water withdrawal	35
Biodiversity  Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas  N/A  Significant impacts of activities, products, and services on biodiversity  N/A  Habitats protected or restored  N/A  IUCN Red List species and national conservation list species with habitats in areas affected by operations  Emissions	303-4	Water discharge	35,38
Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas  N/A  Significant impacts of activities, products, and services on biodiversity  N/A  Habitats protected or restored  N/A  IUCN Red List species and national conservation list species with habitats in areas affected by operations  Emissions	303-5	Water consumption	35,38
areas and areas of high biodiversity value outside protected areas  304-2 Significant impacts of activities, products, and services on biodiversity  N/A  304-3 Habitats protected or restored  N/A  1UCN Red List species and national conservation list species with habitats in areas affected by operations  Emissions		Biodiversity	
304-3 Habitats protected or restored N/A  304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations  Emissions	304-1		N/A
IUCN Red List species and national conservation list species with habitats in areas affected by operations  Emissions	304-2	Significant impacts of activities, products, and services on biodiversity	N/A
species with habitats in areas affected by operations  Emissions	304-3	Habitats protected or restored	N/A
	304-4	·	N/A
305-1 Direct (Scope 1) GHG emissions 38,40		Emissions	
	305-1	Direct (Scope 1) GHG emissions	38,40

305-2	Energy indirect (Scope 2) GHG emissions	38,40
305-3	Other indirect (Scope 3) GHG emissions	38,40
305-4	GHG emissions intensity	38
305-5	Reduction of GHG emissions	N/A
305-6	Emissions of ozone-depleting substances (ODS)	N/A
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	N/A
	Effluents and waste	
306-1	Water discharge by quality and destination	N/A
306-2	Waste by type and disposal method	38
306-3	Significant spills	N/A
306-4	Transport of hazardous waste	N/A
306-5	Water bodies affected by water discharges and/or runoff	N/A/
	Environmental compliance	
307-1	Non-compliance with environmental laws and regulations	None
	Supplier environmental assessment	
308-1	New suppliers that were screened using environmental criteria	38, 42
308-2	Negative environmental impacts in the supply chain and actions taken	42
	Employment	
401-1	New employee hires and employee turnover	46
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	47
401-3	Parental leave	47
	Labor/management relations	
402-1	Minimum notice periods regarding operational changes	N/A
	Occupational health and safety	
403-1	Occupational health and safety management system	42-45
403-2	Hazard identification, risk assessment, and incident investigation	43
403-3	Occupational health services	44
403-4	Worker participation, consultation, and communication on occupational health and safety	44-45

403-5	Worker training on occupational health and safety	45
403-6	Promotion of worker health	45
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	42-45
403-8	Workers covered by an occupational health and safety management system	42-45
403-9	Work-related injuries	43
403-10	Work-related ill health	N/A
	Training and education	
404-1	Average hours of training per year per employee	48
404-2	Programs for upgrading employee skills and transition assistance programs	48
404-3	Percentage of employees receiving regular performance and career development reviews	48
	Diversity and equal opportunity	
405-1	Diversity of governance bodies and employees	46
405-2	Ratio of basic salary and remuneration of women to men	47
	Non-discrimination	
406-1	Incidents of discrimination and corrective actions taken	None
	Freedom of association and collective bargaining	
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	47
	Child labor	
408-1	Operations and suppliers at significant risk for incidents of child labor	N/A
	Forced or compulsory labor	
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	N/A
	Security practices	
410-1	Security personnel trained in human rights policies or procedures	N/A
	Rights of indigenous peoples	
411-1	Incidents of violations involving rights of indigenous peoples	N/A

	Human rights assessment	
412-1	Operations that have been subject to human rights reviews or impact assessments	N/A
412-2	Employee training on human rights policies or procedures	46
413-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	42
	Local communities	
413-1	Operations with local community engagement, impact assessments, and development programs	50
413-2	Operations with significant actual and potential negative impacts on local communities	N/A
	Supplier social assessment	
414-1	New suppliers that were screened using social criteria	42
414-2	Negative social impacts in the supply chain and actions taken	None
	Public policy	
415-1	Political contributions	N/A
	Customer health and safety	
416-1	Assessment of the health and safety impacts of product and service categories	29
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	None
	Marketing and labeling	
417-1	Requirements for product and service information and labeling	29
417-2	Incidents of non-compliance concerning product and service information and labeling	None
417-3	Incidents of non-compliance concerning marketing communications	None
	Customer privacy	
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	None
	Socioeconomic compliance	
419-1	Non-compliance with laws and regulations in the social and economic area	None