



# 2022 Corporate Social Responsibility Report

Semiconductor Manufacturing Electronics (ShaoXing) Corporation

## **About this Report**

This report is the fourth annual social responsibility report issued by Semiconductor Manufacturing Electronics (ShaoXing) Corporation (SMEC). This report details the Company's social responsibility management work in 2022, and highlights practices in fulfilling economic responsibilities, staff responsibilities, customer responsibilities, environmental responsibilities, partner responsibilities, and public responsibilities on the principles of objectivity, standardization, transparency, and comprehensiveness.

## Time scope

From January 1 to December 31, 2022, some contents exceed the above scope.

## **Data description**

The data in the report are derived from internal documents and information statistics of the Company. All data are retained to only two decimal places, subject to a rounding system.

### Reference standard

UN Sustainable Development Goals (SDGs)

Global Reporting Initiative (GRI), Sustainability Reporting Guidelines (GRI-standards)

Guidelines for Corporate Social Responsibility Reporting in China (CASS-CSR 4.0) issued by Chinese Academy of Social Sciences

Guidance on Social Responsibility Reporting (GB/T36001-2015) issued by Standardization Administration

ISO 26000: Guidance on Social Responsibility issued by International Standardization Organization

Listing Rules issued by Hong Kong Stock Exchange, Appendix 27 Environmental, Social and Governance Reporting Guidelines

## **Preparation process**

 $Preliminary \ preparation \rightarrow report \ preparation \rightarrow content \ review \rightarrow design \ release \rightarrow reader \ feedback$ 

## **Reporting boundaries**

The organizational scope of this report is Semiconductor Manufacturing Electronics (ShaoXing) Corporation (SMEC). In this report, SMEC", "Company", and "We" are both "Semiconductor Manufacturing Electronics (ShaoXing) Corporation".

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## **Address by Managers**

### As time goes by, we are keeping growing.

The year 2022, which has just passed, is a milestone year in the history of the Party and the country, a year with challenges and opportunities coexisting in the integrated circuit industry, and a very special and extremely important year in the development process of the Company's career. In the face of an exceptionally complex external environment, frequent risk challenges, deeply evolving technological and industrial revolutions, and increasingly fierce market competition, SMEC has deeply grasped the important opportunity period of industrial transformation and adjustment, faced difficulties, forged ahead with determination, and blazed new trails in a pioneering spirit with the unremitting efforts of all employees of the Company. The Company has achieved new results, and successfully completed various annual goals and tasks, and achieves a good start to the "14th Five-Year Plan".

This year, we actively seek to adapt to the situation, forged ahead, and make the cornerstone of development more solid. We take high-quality development as the main line, make sustained efforts to promote compliance management, continuously improve the corporate governance structure and management system, strengthen corporate integrity construction, improve anti-corruption governance capabilities, and create a fair, impartial, efficient, and transparent work environment and cultural atmosphere. We have made every effort to stabilize the basic situation of business operations, overfulfilled the annual revenue assessment target, successfully achieved large-scale mass production of IGBT, and obtained the approval of Shanghai Stock Exchange for the IPO application of the Science and Innovation Board in the face of complex and volatile external environment and market challenges, achieving the perfect conclusion of the Company's first "five-year plan".

This year, we optimize our products and services, providing customers with multiple choices, and gaining stronger momentum for development. Focusing on technological innovation, we continue to deepen industry-university-research cooperation, and have launched 1,055 new products throughout the year, accounting for more than one-third of the total number of new products since the Company was founded; We are deeply and meticulously exploring the market growth potential, with the module products fully entering the list of independent brands of the new energy industry, and with the sales market of "based in China, going global" taking shape; We adhere to the responsibility concept of "brand cornerstone, quality first", and stick to production standards superior to "national standards" to provide customers with satisfactory high-quality products, and have become the first mainland wafer factory in China to obtain TISAX automotive industry information security certification, and we are committed to providing customers with safe and reliable products and services.

This year, we have continuously strengthened ESH management, guarded the development background, and made the development model more sustainable. We have thoroughly implemented the national "dual carbon" strategy, improved the level of environmental protection and risk prevention, and have not incurred environmental pollution accidents throughout the year; We make a comprehensive layout of the new energy industry and play an increasingly important role in the fields of new energy vehicles, green energy, energy storage technology, smart grid, etc.; We deeply promote energy conservation and emission reduction, significantly reduce energy consumption and total emissions of major pollutants, vigorously develop the circular economy, and achieve significant results in comprehensive sewage treatment. Green has become a bright background for high-quality development of the Company.

This year, we have adhered to the principle of people-oriented, bearing in mind social responsibility, and practicing responsibility more effectively. We always regard employees as the first resource for enterprise development, persist in promoting the leadership construction project for managers, successfully complete the second phase of new manager growth camp training, strengthen

occupational health and safety production management, enrich employees' spare time life, and strive to create a happy workplace; We adhere to the principles of fairness, impartiality and win-win cooperation, integrate multiple advantageous resources, participate in the formulation of two national standards, and promote the healthy and sustainable development of the industry; We stick to public good deeds, persist in giving back to the society, and fully utilize our own advantages to participate in activities such as caring for students, public welfare charity, and voluntary service, to help build a harmonious and civilized community cultural environment.

Hundreds of boats compete to win; the one rowing hardest will be the leader; Only the brave can forge ahead against the tide in the middle of the rapids. The year 2023 marks the fifth anniversary of the founding of SMEC, and is a crucial year for the "14th Five-Year Plan" to connect the past and the future. Standing at a turning point in history, we can see opportunities and challenges coexisting. What we can do is to boldly try, strive with all our strength, work hard, and forge ahead on the century-old road and in the 14th Five-Year Plan with the courage of "daring to gnaw hard bones, daring to wade into dangerous beaches" and the courage of "cutting a way through when confronted by mountains and building bridges when faced with water"! In 2023, we will continue to adhere to our original aspiration and mission, work with partners from all sides, strive to explore and innovate, actively fulfill our responsibilities, and unremittingly strive for the Company's foundation and the development and growth of China's integrated circuit industry, firmly moving forward!





## **Entering SMEC**

## **Company Profile**

Semiconductor Manufacturing Electronics (ShaoXing) Corporation (SMEC) was founded in March 2018 with a registered capital of RMB 5.076 billion and headquartered in Shaoxing, Zhejiang province. SMEC provides foundry service focusing on technology solution for power, connection and sensor signal chain. On top of wafer foundry service, SMEC also extended its foundry service to module package in order to support semiconductor companies with one stop solution. SMEC provides complete manufacturing platform to support customer mass production as well as technology development.

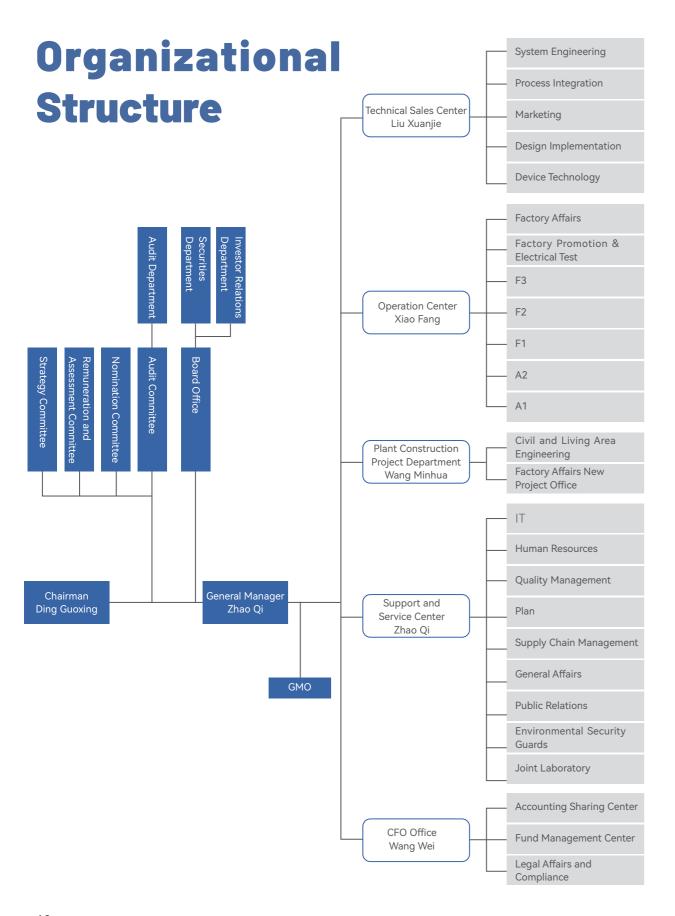
SMEC offers global service. In addition to headquarter in Shaoxing, Zhejiang, SMEC has sales and marketing offices in Shanghai, Tokyo, and Switzerland. SMEC has established strategic cooperation with many customers. On the basis of mass production cooperation, SMEC continuously support customer with advanced technology development as well.

The Company's process platform covers ultra high voltage, vehicle-mounted, advanced industrial control, and consumer power devices and modules, as well as vehicle-mounted, industrial, and consumer sensors. Its application fields include smart grid, new energy vehicles, wind power generation, photovoltaic energy storage, consumer electronics, 5G communication, the Internet of Things, and household appliances.

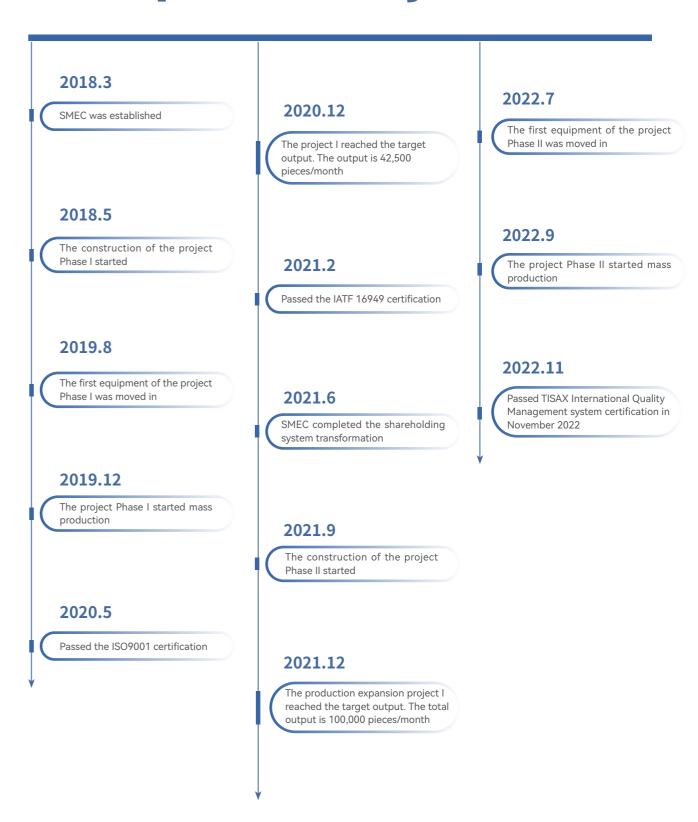
The Company is also one of the few wafer foundries in China that provide automotive-grade chips. It has established a full process automotive-grade chip quality management system from research and development to mass production. It has passed a series of international quality management system certifications such as ISO 9001 (Quality Management System), IATF 16949 (Automotive Quality Management System), and currently the first TISAX in mainland China. It also implements ISO 26262 (Functional Safety System for Road Vehicles), and has established cooperative relationships with many leading customers in the industry.

Adhering to the direction of independence, marketization, and internationalization continuously, The Company will be committed to the research and development and production capacity layout of advanced analog circuit chips and modules with unique processes, and achieve continuous optimization and efficiency improvement of research and development, production, and related services, and will strive to become a reliable partner for domestic and foreign customers, provide high-quality, large-scale mass production OEM services, and achieve its own development and growth by creating greater value for customers, and strive to become a world-class foundry enterprise for analog chip manufacturing and module packaging, and make positive contributions to the development of the entire industry and the progress of the entire society.





## **Development History**



#### Entering SMEC

### **Products and Services**

SMEC has established in-depth strategic cooperation with many well-known customers worldwide. Currently, and its power devices (IGBT, MOSFET) and micro electro mechanical (MEMS) have become core nodes in China and have entered the global supply chain. Micro electro mechanical technology and products have been at the world's first-class level, and power device technology and products have been at the national leading level.

#### **IGBT**

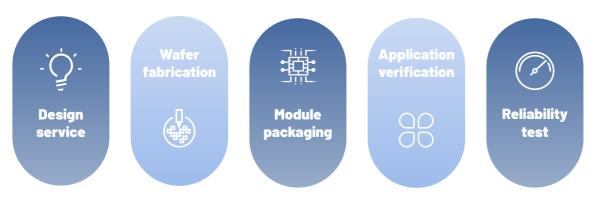
Based on a Field Stop IGBT structure, SMEC employs industry advanced back processing techniques, including back thinning process, ion implantation, laser annealing, and special metal deposition and other processes. Device processes such as 600V to 1,200V have achieved large-scale mass production, with technical parameters that can reach industry-leading levels, while providing OEM services for fast recovery diodes. Based on field stop IGBT structure, advanced back processing technology and flexible metal layer selection, the Company can provide customers with customized process research and development and large-scale mass production solutions, which can be widely used in industrial frequency conversion, white household appliances, rail transit, new energy vehicles, smart grids, wind power generation, solar energy, and other fields.

#### **MOSFET**

SMEC provides a complete MOSFET process platform, including grooved MOSFETs, split gate MOSFET, and super junction MOSFETs, including advanced back surface processes, special metal deposition processes, etc. With a complete layout and advanced technology, the process platform can provide customers with customized process research and development and large-scale mass production solutions, which can be widely, used in consumer electronics, industrial control, and new energy vehicles.

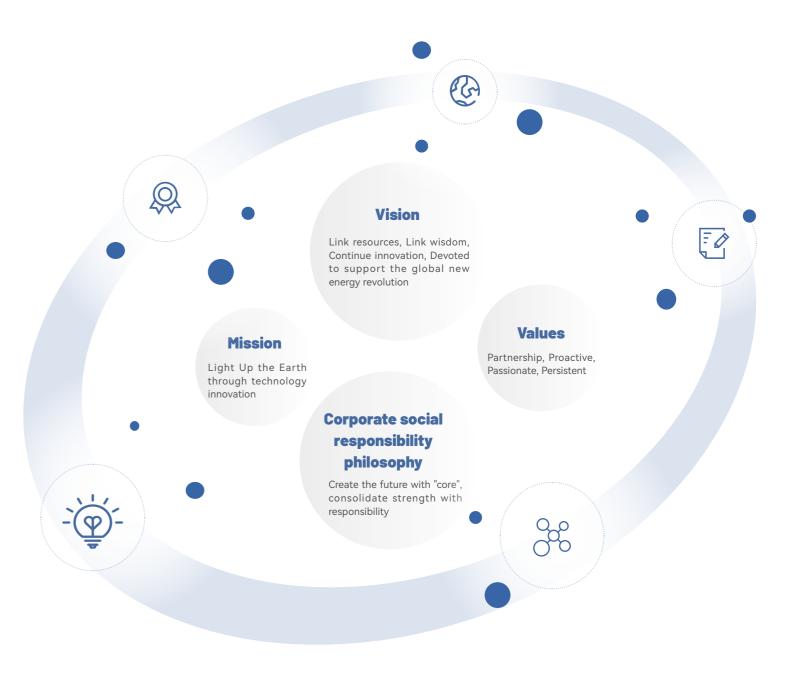
#### **MEMS**

SMEC team has been working in the field of MEMS for more than ten years, and has rich experience in R&D and mass production. The technology mainly divided into two categories: one is opening device, such as microphone, pressure sensor, ultrasonic sensor and etc.; the other is the sealed device, such as oscillator, accelerometer, gyroscope and etc. SMEC has complete MEMS process platform, providing advanced technology, CMOS-MEMS single chip integration and wafer-level packaging service, which can provide customized process development and mass production solutions to customers.



One-stop service

## **Corporate Culture**



### **2022 Chronicle of Events**

2022.6



the main body of the project Phase II was completed.

2022.7



the first equipment of the project Phase II was moved in

2022.10



the first equipment for the 12-inch pilot test line of the project Phase III was moved in

2022.11



the first batch of wafer for the 12-inch pilot test line of the project Phase III was off line

2022.11



it passed the TISAX Information Security AL3 level review

2022.11



the company's IPO was approved by the review committee of the Science and Technology Innovation Board

## \*

## **Honor 2022**



Honor name: "Zhejiang SMEC MEMS

Sensor and Power Device Enterprise

Research Institute" was recognized

as the provincial enterprise research

Award unit : Science Technology

Department of Zhejiang Province





**Honor name**:Zhejiang Science and Technology Little Giant Enterprise

**Award unit** :Science Technology Department of Zhejiang Province

Honor name: "Testing Center of Semiconductor Manufacturing Electronics (ShaoXing) Corporation" was recognized by CNAS laboratory

**Award unit**: China National Accreditation Service for Conformity Assessment (CNAS)



Honor name: "SMEC Industrial Internet Platform" Project won the second prize in the second Shaoxing Industrial Internet Application Competition

**Award unit**: Shaoxing Municipal Bureau of Economy & Information Technology



**Honor name**:2022 Outstanding Contribution Award for High Quality Development and Common Prosperity

**Award unit** :CPC Shaoxing Yuecheng District Committee, Shaoxing Yuecheng District People's Government



## **Perfect Company Governance**

SMEC makes sustained efforts to promote the construction of a governance system, standardizes the operating mechanism of the board of directors, gives full play to the functions of the board of directors, establishes and improves the internal control system, strengthens internal and external risk management and control, and promotes the sustainable and healthy development of the enterprise.

## Improve governance mechanisms



The Company continuously improves the relevant systems of corporate governance and compliance management, improves the internal control system, constructs and improves a modern management system that meets the requirements of regulatory agencies, and achieves the normal and effective operation of the internal management and control system in strict accordance with the relevant provisions of the Company Law and other laws and regulations, as well as the Articles of Association. In 2022, the Company held three shareholders' meetings, three meetings of the board of directors, and one meeting of the board of supervisors.

# Standardize the construction of the board of directors

Adhering to the overall idea of managing the enterprise according to law, market-oriented, and equal rights and responsibilities, the Company continuously optimizes the construction of the board of directors, ensures that the board of directors exercises various rights in accordance with the law, improves the operating mechanism, strengthens responsibility supervision, continuously enhances the standardization, effectiveness, and overall function of the board of directors, gives full play to the role of the board of directors in formulating strategies, making decisions, and preventing risks, and promotes the construction of a more scientific, standardized, and efficient corporate governance system.

The board of directors has a reasonable personnel composition, clear structure, and comprehensive, efficient, and independent decision–making ability. It is composed of 9 directors, including 4 independent directors. The members come from multiple industries such as semiconductor, finance, law, finance, and management, and all of them have senior experiences in their respective fields. The Board of Directors consists of a strategy committee, a nomination committee, an audit committee, and a compensation and assessment committee. Each professional committee has independent directors participating in it. Among them, the nomination committee, the audit committee, and the compensation and assessment committee are all convened by independent directors, with independent directors holding a majority of seats.

## Strengthen risk management



The Company continuously improves the organizational effectiveness of risk management, deepens the construction of internal control systems, and gives full play to the foundation consolidating role of internal control for the enterprise. The audit department is established under the board of directors as a daily work organization for internal risk control, assisting the board of directors and the audit committee in establishing and implementing the Company's internal control system, assessing operational risks, supporting and urging the Company to improve internal control, and ensuring the stable and high-quality development of the enterprise.

#### Improve internal control of audit

The Company continues to carry out full audit coverage work, with the audit department conducting audit supervision over various departments, covering the engineering, production, procurement, sales, finance and other business fields. It provides relevant audit opinions, effectively improves the level of risk prevention and control, strictly controls costs, and reduces project investment risks. Moreover, the audit results are used to improve supplier warehousing standards, urge the establishment of a dynamic supplier management system, implement the rectification for audit findings, and regularly review the projects that have been audited, and continuously track the rectification results.



#### **Protect intellectual property rights**

The Company always regards respecting and protecting intellectual property rights from infringement as its main long-term responsibility, strictly abides by intellectual property laws and regulations, and respects the intellectual property rights and interests of all parties. The Company standardizes the management of internal knowledge exchange and sharing, external intellectual property management, and enterprise intellectual property asset management, ensures not to infringe the patents, copyrights, or other intellectual property rights of other companies and individuals during the operation, prevent legal risks of infringing others' intellectual property rights, and safeguard the legitimate rights and interests of the enterprise; The Company formulates the SMEC Patent Policy to encourage employees to actively invent and innovate, apply for patents, and further better protect the Company's technology and intellectual property rights. In 2022, the Company did not have any disputes or lawsuits involving intellectual property rights.

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## **Adhere to Compliance Management**

SMEC adheres to the principle of "integrity management, quality first", strictly abides by business ethics, strictly regulates information disclosure, pays attention to good interaction with investors, continuously improves the Company's ability to continue operating, and ensures sustainable returns for shareholders.

#### Adherence to business ethics



The Company adheres to the business values of legal operation, honesty and trustworthiness, fair dealing, and orderly competition, strictly complies with laws, regulations, and standards, and does not harm the legitimate interests of other enterprises or disrupt market order through improper business practices.

The Company has formulated a Code of Business Ethics and Conduct to strictly control relationships with competitors, requiring employees, suppliers, and all persons with business relationships with the Company not to knowingly make false or misleading statements about their competitors or their products, customers, and suppliers' products; Formulated the Export Control Compliance Policy to ensure the compliance operation of international trade; Establish a reporting procedure to monitor the discovery of unfair competition, protect whistleblowers, and actively create a healthy and transparent business atmosphere and a good business competition environment. In 2022, the Company did not have any legal proceedings related to improper competition.





Standardize information disclosure



The Company strictly complies with the Articles of Association and other relevant laws, rules and regulations, and formulates and implements the Information Disclosure Management System, strengthens information disclosure management, strictly performs information disclosure obligations, maintains smooth information channels, and discloses information based on the principles of authenticity, accuracy, completeness, timeliness, and fairness; Based on the principle of authenticity and reliability, the Company has independently released social responsibility reports for four consecutive years, actively disclosing corporate information to the public; Regularly prepared the Financial Annual Report, disclosing business performance and financial situation, and strictly performing information disclosure obligations.

### **Protect shareholders'** rights and interests



The Company formulates and implements the Management Measures for Investor Relations in accordance with the Articles of Association and other relevant laws, rules and regulations, and establishes a good communication mechanism between the board of directors and shareholders; The Company timely sends the reports regularly prepared to shareholders through email, and maintains good communication with shareholders through email, phone or other channels to ensure an objective, truthful, accurate, and complete introduction and reflection of the actual situation of the Company.

## Adhere to the Defense Line for Incorruption

SMEC attaches great importance to anti-corruption and commercial bribery work, builds a solid bottom line of integrity and moral defense for all employees, and creates a good atmosphere of integrity. The Company has developed and issued systems such as the Code of Business Ethics and Conduct and the SMEC Gift Acceptance Policy to prohibit any form of bribery, corruption, extortion, and misappropriation of public funds, ensuring that all business activities of the Company comply with the highest standards of integrity, and achieving openness, fairness, fairness, and transparency.

The Company unblocks anti-corruption complaint reporting channels, provides hotline, email, letter and other reporting channels, sets up a reporting box for preventing commercial bribery, and takes effective measures to protect the informant's information and data; Organizes training on anti-fraud, anti-commercial bribery, conflict of interest reporting, keeping Company secrets, free and fair market competition, and prohibiting insider trading of the Company securities, to help employees understand the hazards of fraud and bribery and their professional red lines more clearly, deeply, and intuitively; improves the awareness of integrity and self-discipline among employees, customers, suppliers, and other relevant interest groups by conducting business ethics training sessions, posting integrity reminder cards in the workplace, and in other forms, and creates a clean and honest atmosphere of "do not dare, are not able, and ultimately have no desire to be corrupt".



If you report any behavior that may involve violations of SMEC regulations, Articles of Association, and policies, please contact:

compliance-office@smecs.com;

Corporate Ethics Reporting Hotline:

+86(575)-88060000-61054/62590



Anti-fraud and commercial bribery training



Follow the trend and strive for excellence. Conforming to the upgrading "core" requirements of the power device, MEMS sensor chip manufacturing process, and module packaging and testing industries, SMEC has continuously strengthened product quality assurance, enriched product categories, created thoughtful services, established a good reputation among customers, and continued to enhance corporate brand leadership.

24 ----- Pursue Excellent Quality 26 ----- Optimize Customer Service

29 ----- Stimulate Innovation Vitality





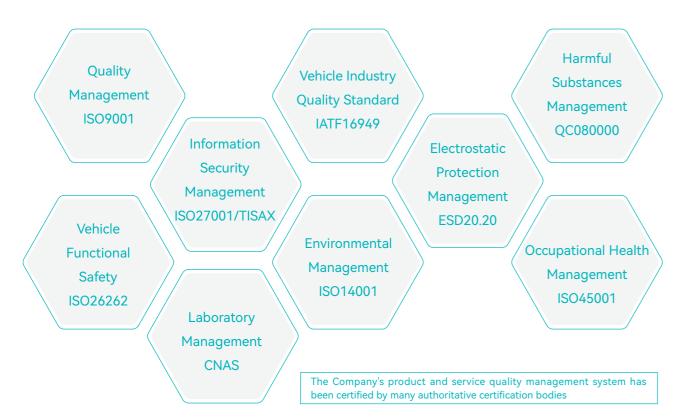
## **Pursue Excellent Quality**

Quality is the life of an enterprise. With the goal of "providing outstanding quality and highest value products and services to our customers", SMEC adheres to creating value through quality and promoting harmony through quality. The Company has established a complete quality management system, strictly controlled the quality of each process, continuously improved the quality control level of employees, and made the quality concept internalized in mind and externalized in practice.

### **Improve quality management**



The Company has established a complete quality management system in accordance with ISO 9001 and IATF 16949 quality management standards, and continuously improved the quality management coverage and implementation capabilities; has established a "full product inspection" management system to implement total quality management throughout the entire process of research and development, production, sales, delivery, etc., and established relevant management procedures at all stages, required each employee to strictly abide by work quality standards, clarified product quality control requirements, and ensured high-quality product delivery.



### **Build a quality culture**



The Company actively organizes and carries out technical training and achievement competitive activities, forming an atmosphere of joint participation by all employees. The Company actively carries out monthly quality improvement activities, sharing lean experience, promoting lean concepts, and striving to improve the quality awareness of all employees through quality knowledge competitions, CIP (Continuous Improvement) review meetings, and other forms. In 2022, a total of 1,566 persons participated in the quality knowledge competition, of which 520 obtained full marks; Two CIP review conferences were held, and a total of 15 excellent improvement projects were awarded and encouraged, saving a total cost of RMB 39.09 million.



In 2022, a total of

#### 1566

persons participated in the quality knowledge competition

#### 15

excellent improvement projects were awarded and encouraged

RMB

39.09

million cost was saved



The Company organizes employees to participate in the quality knowledge competition by answering questions online via mobile phones



Company leaders present awards to winning teams and individuals at the CIP Review Conference, encouraging all employees to improve their quality control level

## **Optimize Customer Service**

Based on its own business development and centered on customer needs, SMEC has established a complete customer relationship management system, firmly established a sense of service, satisfied customer demand for product supply and technology upgrades, provided customers with a comfortable and satisfactory experience, and driven enterprise development with high-quality services.

### **Conduct responsible marketing**



The Company carries out product and process technology publicity in accordance with laws and regulations, actively carries out responsible marketing, and ensures that the legitimate rights and interests of customers are fully protected. The Company has set up a special section on its official website to introduce the latest process platform information; Customers can fully understand the latest information on the Company's process research and development, further promoting close cooperation and mutual trust between the two sides by distributing product manuals, visiting customers, and holding regular meetings.



#### **Secure customer information**



The Company attaches great importance to customer information protection, and continues to improve the data security protection and customer privacy information protection management system. The Company continuously improves the level of business secrets and information security management and protects the interests of society, the Company, and customers through system construction and the establishment of a comprehensive data security and customer privacy protection mechanism. In 2022, the Company successfully passed the TISAX Information Security AL3 level review, becoming the first mainland wafer factory in China to obtain this certification.



Through the construction of the ISO/IEC 27001 information security management system, the Company conducts the lifecycle information assets protection and management, covering all aspects of customer information reception, circulation, storage, and isolation, and forming a comprehensive and reasonable information control and protection mechanism

#### Improve safety protection technology



Establish a digital protection platform, introduce a technical prevention and control and monitoring system, establish a four-in-one detection, traceability and forensics system associated with "users, devices, data, and applications", and control from multiple aspects such as physical security, network security, application security, and mobile media security, to improve the efficiency and quality of customer information security management



Provide employees with induction training and normalized training related to customer information security protection, and continuously enhance their confidentiality awareness



Security Management System Certification



The Company has passed ISO/IEC 27001 Information The Company holds monthly information security implementation meetings to promptly publicize information security policies and events to all employees

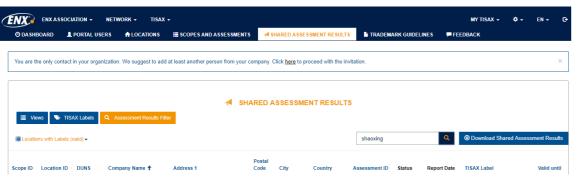
#### Case | SMEC has successfully passed the TISAX Information Security AL3 level review



In November 2022, SMEC successfully passed the TISAX (Trusted Information Security Assessment Exchange) information security AL3 level review, becoming the first mainland wafer factory in China to obtain this certification, indicating that the Company's protection level for the availability, integrity, and confidentiality of key information assets, including customer data, meets the highest requirements of the European automotive industry.

TISAX is an information security standard for the automotive industry jointly launched by the Verband der Automobilindustrie (VDA) and the European Automobile Industry Information Exchange Platform (ENX). It provides a mutual recognition model for information security evaluation results for different service providers in the automotive industry. German Volkswagen, BMW, and other European automotive companies have adopted TISAX as a qualification requirement that their suppliers must pass.





### Improvement of the customer satisfaction



The Company adheres to the principle of customer first, continuously improves the customer service system, continuously improves the customer service ability and quality, and optimizes the customer service experience; establishes and improves a complaint response mechanism, responds promptly after receiving customer complaints, and establishes an internal working group to actively identify causes and solutions, forms a complete report and submits it to customers, and strives to provide solutions to customers quickly and professionally; adheres to taking customer satisfaction as the core of customer management, conduct customer satisfaction surveys every year, listen to customer voices, and continuously improve product and service quality during subsequent operations. In 2022, the Company's complaint resolution rate and customer satisfaction reached 100%.

## **Stimulate Innovation Vitality**

Innovation is the core driving force behind industrial development; SMEC has deeply implemented the innovation driven development strategy, injected new development momentum into the semiconductor industry through continuous innovation, cultivated new project and product development advantages, and makes great efforts to improve core technology capabilities.

The Company advocates an innovative culture, continuously creates an innovative atmosphere, establishes a complete technology research and development system, continuously establishes and improves the incentive mechanism for innovation, forms a high-quality development model led by innovation, and further enhances its core competitiveness. By the end of 2022, the Company has undertaken a total of five major national science and technology projects, including the leading "MEMS sensor mass manufacturing platform" project, as well as participating in the "Development and Application of Automotive Level High-precision Integrated Navigation Sensor System" project, "Micro/nano Sensor and Circuit Monolithic Integration Process Technology and Platform" project "Wafer Level Vacuum Packaging and Its Testing Technology and Platform" project and "Multi-machine Collaboration Oriented Logistics Scheduling and Optimization Software Development for Semiconductor Manufacturing Intelligent Factories" project.



The Company has formed a complete technology and product layout, accumulated rich R&D and production experience, and established a leading domestic process platform in the field of power devices. In terms of IGBT, the Company has high-end process technologies such as deep groove etching, ultra-thin thinning process, high-energy injection, planarization process, laser annealing, double-sided alignment, proton injection, local carrier lifetime control, embedded sensors, diversified metal layers, high-performance dielectric layers, high and low temperature CP testing, with the manufactured IGBT products characterized by excellent performance in reliability, switching efficiency, product consistency, and other performance; In terms of MOSFETs, the Company has mastered key process technologies such as ultra-thin wafer processing, hydrogen injection, and epitaxial growth of superjunction products. The MOSFET products manufactured have the features of small conduction resistance, fast switching speed, and low switching loss. Power device products manufactured by various process platforms of the Company have been mass produced and widely used in multiple application fields. Among them, large-scale mass production of 750V to 1,200V high-density advanced IGBT and advanced main drive inverter modules for electronic control and electric systems of new energy vehicles have been formed; 600V to 1,700V high-density advanced IGBTs for industrial control have also been mass produced; For ultra high voltage 3,300V and 4,500V IGBTs for smart grids and low-voltage MOSFETs for lithium battery protection, import substitution have been achieved.



In the field of MEMS, the Company has the largest and most advanced MEMS wafer foundry in China, and has taken the lead in undertaking the key project of "MEMS Sensor Batch Manufacturing Platform" in the 14th Five-Year Plan of the Ministry of Science and Technology. The Company has the ability to process bulk silicon and surface silicon, and has developed standardized complete manufacturing processes for mainstream applications. It focuses on researching and overcoming a series of common key technologies such as high-precision film deposition/growth, high-strength bonding technology, high compatibility low-temperature process for sensitive components, and MEMS sacrificial layer release technology for non-destructive integrated devices. These technologies have been applied to the rapid development of the Internet of Things, new energy vehicles The demand for MEMS sensor chips in fields such as 5G communication provides strong support. The Company's MEMS products have entered a wide range of communication and consumer applications, and a number of advanced in-vehicle sensors have entered the supply chain of new energy vehicles.

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In the field of RF front-end, the Company has taken the lead in making breakthroughs in the manufacturing process of high-frequency filter chips and integrated system modules for multiple frequency bands of 4G and 5G, achieving mass production with high yields and high reliability, and manufacturing products with leading performance in China, which have entered the mainstream mobile communication market.

Case | The innovation center led by the Company was recognized as a provincial industrial innovation center



In March 2022, the Zhejiang Wide Band Semiconductor Specialty Process Industry Innovation Center, led by the Company as the main implementation body, was approved, becoming the first in Shaoxing City and the fourth in Zhejiang Province to be recognized by the Provincial Development and Reform Commission as a provincial-level industry innovation center.

The center will focus on key technologies for SiC MOS-related power devices, forming industrial innovation capabilities in "broadband semiconductor chip design, specialty process manufacturing, high-end terminal applications, production equipment manufacturing, advanced packaging and testing" to meet the needs of the rapid growth of China's consumer market and the development of independent and controllable strategic emerging industries.

## 浙江省发展和改革委员会

浙发改高技函[2022]163号

### 省发展改革委关于认定浙江省宽禁带半导体 特色工艺产业创新中心的通知

绍兴市发展和改革委员会:

为深入实施创新驱动发展战略, 加快培育我省战略性科技力 量,进一步提升"卡脖子"技术自主可控能力,根据《浙江省产 业创新中心培育创建实施方案(2019-2022年)》(浙发改办高技 Case | Two employees of the Company were evaluated as "Shaoxing Craftsmen"

Convergence of Sincere Heart of

"SMEC" to Create Multiple Values



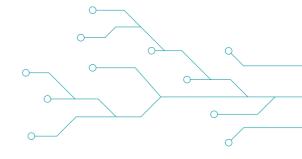
In February 2023, the Shaoxing City Federation of Trade Unions and Shaoxing City Human Resources and Social Security Bureau selected 100 "Shaoxing Craftsmen" in 2022, aiming to commend highly skilled talents who love their work, overcome difficulties and pursue excellence. Two employees of the Company were honored to be selected by virtue of their innovative deeds of overcoming technical difficulties in their workplace.

绍市总工发[2023]7号

### 关于命名 2022 年"绍兴工匠"的通知

各区、县(市)总工会、人社局,市产业工会,市直部门(系统) 工会,省直协管单位工会:

为深入贯彻习近平总书记关于技能人才工作的重要指示精 神, 贯彻落实人才强市战略, 充分发挥高技能人才的引领示范作 用,大力弘扬劳模精神、劳动精神、工匠精神,绍兴市总工会、 绍兴市人力资源和社会保障局决定命名马群飞等 100 名同志为





2022 | SMEC Corporate Social Responsibility Report

## **Consolidate Environmental Management**

SMEC adheres to the environmental philosophy of resource conservation, pollution prevention, environmental improvement and lawabiding, establishes a sound environmental management system, implements the main responsibility of corporate environmental management, formulates environmental emergency disposal plans, and effectively improves the level of corporate environmental management.

### **Environmental** management system



The Company actively responds to climate change, attaches great importance to the environmental impact brought about by its own development, formulates scientific and perfect environmental protection management system in energy resources, waste management, waste water management, soil pollution, noise control, etc., makes specific management plans, strictly implements ecological and environmental protection responsibilities, and does a good job of environmental protection management and energy saving in "blue water, blue sky, energy saving and efficiency" and "green low-carbon". In 2022, the Company did not have any environmental pollution accidents.



### **Environmental** emergency management



The Company attaches great importance to the early warning and prevention of environmental accidents and incidents, and has formulated a number of environmental emergency rescue plans to form an environmental warning and emergency response mechanism with internal and external coordination and up and down linkage; Regularly carry out the identification of environmental factors, do a good job of risk identification of environmental emergencies, discover potential hidden danger points, and take corrective and preventive measures in a timely manner; Regularly carry out emergency drills for environmental accidents to effectively improve the emergency response capability of front-line staff.



CH3F Special Gas Leak Environmental Cleanroom chemical spill emergency Disaster Drill



handling drill

### **Commitment to Green Production**

SMEC integrates sustainable development into the whole process of enterprise operation and development, fully practices the 3R principles of circular economy (Reduce, Reuse, Recycle), takes circular economy and transformation of production mode as the foothold, continues to explore new ways of green development in energy saving and emission reduction, accelerates the formation of new green production mode, and takes care of the green home with practical actions.

### **Reduce energy** consumption

The Company insists on the concept of resource saving and environment friendly, establishes complete and effective energy management system and process, advocates each plant to continuously optimize energy consumption system and reduce energy consumption.



The 55 street lights in the area with good sunlight in the factory area are upgraded for energy saving, from the original traditional electric lights to solar photovoltaic street lights, powered by solar panels, which are environmentally friendly and save electricity, and are expected to reduce carbon dioxide emissions by 20.3 tons per year.

The VOC furnace temperature setting is lowered in a gradient, and the VOC emission concentration is closely monitored to keep it within the national regulations to achieve a significant reduction in natural gas use while meeting VOC treatment standards.

The substation is equipped with SVG dynamic reactive power compensation device and capacitor cabinet to ensure the power factor of electricity consumption and has the effect of detuning, while the production equipment and facilities are equipped with frequency converters to significantly reduce energy consumption.

Through technical modifications, hot water generated by chilled water heat pumps is used to supply ammonia and nitrogen wastewater treatment, significantly reducing the boiler turn-on time, while the resulting chilled water is recycled to the existing chilled water system to achieve energy conservation; The introduction of condensate recovery system can effectively collect condensate from the plant air conditioners and use it as a water source for cooling tower replenishment, effectively reducing water consumption.

Effectively recover the residual heat of the ice machine, and efficiently utilize various water sources with different temperatures such as 80°C, 38°C, 18°C, 12°C, 6°C, and ice water through thermal energy cascade classification to achieve energy conservation



Upgraded solar photovoltaic street light



The VOC furnace temperature setting is lowered in a gradient to achieve a significant reduction in natural gas use while meeting VOC treatment standards.



Install SVG dynamic reactive compensation device and capacitor Hot water generated by chilled water heat pumps is used to supply cabinet to significantly reduce energy consumption



effectively reducing water consumption.



ammonia and nitrogen wastewater treatment, significantly reducing



The introduction of condensate recovery system can collect 
Efficiently utilize various water sources with different temperatures condensate from the plant air conditioners for reutilization, through thermal energy cascade classification to achieve energy conservation purposes.

### **Control pollution emissions**

"SMEC" to Create Multiple Values



The Company continues to promote the green enterprise action plan, focusing on the management of emissions of various pollutants, carrying out emission reduction and pollution reduction projects, while promoting the reduction of pollutant emissions in the whole life cycle of products in downstream industries, vigorously developing circular economy, and striving to build a new competitive advantage in green.

#### **Wastewater management**

Built a wastewater treatment system, and the wastewater is treated by the system to form pure water for recycling, with a treatment capacity of 2,000 m3/day and a recovery rate of up to 70%; Through real-time monitoring with double instruments, water quality can be guaranteed to meet the standards before being discharged, achieving the effect of increasing quality and reducing quantity.

Annual wastewater discharge per K/year capacity	2018	2019	2020	2021	2022
Total amount of wastewater (tons)	3218.08	2925.523	2737.249	2384.251	2381.771
Chemical oxygen demand (COD) (tons)	0.579	0.527	0.411	0.286	0.238
Ammonia nitrogen (NH3N) (tons)	0.032	0.029	0.027	0.024	0.019
Suspended material (tons)	0.257	0.234	0.219	0.191	0.191

#### **Waste Gas Management**

Use scrubber towers to neutralize and spray the process exhaust with acid and alkali, so that NOX, SOX and particulate matter in the exhaust gas can be reduced, and regularly commission third-party testing; Install a local treatment device in the exhaust gas of the process machine, with a treatment efficiency of up to 99% for fluorinated gases; The zeolite rotor is used to concentrate the organic waste gas and then incinerate it to ensure that the pollutant index of each gas meets the requirements of national standards before it is discharged into the atmosphere.

Annual exhaust emissions per K capacity	2018	2019	2020	2021	2022
Nitrogen oxides (NOX) (tons)	0.78	0.74	0.50	0.46	0.39
Sulfur oxide emissions (SOX) (tons)	0.59	0.57	0.50	0.44	0.42
Particulate matter emissions (tons)	0.64	0.61	0.18	0.13	0.11

#### **Waste Management**

In 2022, the Company transferred a total of 7,814 tons of solid waste (including 4,971 tons of hazardous solid waste and 2,843 tons of general solid waste), all of which were entrusted to vendors with corresponding qualifications to complete disposal.

Types of solid waste	Recorded volume (tons)	Transferred volume (tons)
Empty waste drums	296.00	129.08
Chemical nickel waste liquid	310.00	108.14
Chemical palladium waste liquid	17.00	6.14
Chemical gold waste liquid	40.00	17.16
Waste Cr7 etchant	43.00	15.60
Ammonium sulfate waste liquid	774.00	623.80
Waste acid	2717.00	2182.46
Waste solvent	2963.00	1679.28
Waste glass bottles	50.00	16.52
Contaminated solid waste	87.00	53.46
Calcium fluoride sludge	3695.00	2843.68
Copper-containing waste liquid	10.00	2.66
Tin-containing waste liquid	17.00	2.18
Copper-containing sludge	50.00	29.96
Chromium-containing sludge	50.00	37.70
Nickel-containing sludge	6.00	4.90
Wastewater sludge	237.00	53.06
Waste activated carbon	200.00	8.56

### **Green Supply Chain**



The Company attaches great importance to the environmental compliance of suppliers, through a comprehensive audit of suppliers' supply capacity, product composition and other qualifications, as well as the signing of the Letter of Guarantee of No Use of Hazardous Substances, and requires manufacturers to provide regular testing reports on hazardous substances to ensure the safety and harmlessness of purchased materials and promote green consumption in society with green procurement.

#### **Benchmarking Regulations**

Suppliers must provide goods that comply with the Company's regulatory requirements regarding REACH, Sony GP requirements and other environmentally hazardous substances

☆



### Raw materials provided by

**Comprehensive Marking** 

suppliers such as silicon wafers, targets, backing gold materials and other packaging materials must be labeled with the RoHS logo

### **Test passed**

Suppliers must provide MSDS and ICP test reports for the goods provided



### **Promote Green Culture**

SMEC integrates the green concept of equal emphasis on corporate development and ecological protection into its daily operations, strives to reduce the impact of corporate operations on the ecological environment and biodiversity, actively participates in environmental protection public welfare practices, makes every effort to maintain the integrity and balance of the ecosystem, strictly adheres to the ecological protection red line, and leaves enough space for sustainable development.

### **Environmental protection propaganda and education**



The Company organizes staff to participate in special training on environmental protection, and conducts training and lectures on various aspects such as energy conservation and emission reduction, green ecological construction, sustainable development, waste classification, consumption reduction and efficiency increase, etc. to enhance environmental protection awareness and capability. With the full use of banners, publicity panels, and the organization of all departments to make use of the "6 • 5" World Environment Day, Energy Conservation Awareness Week and other extensive energy conservation and environmental protection publicity activities, create an atmosphere of ecological environmental protection and energy conservation in the Company, and the participation of all people.



The Company organized staff to participate in environmental protection special training

#### **Green office**



The Company integrates the green low-carbon concept into the daily management of the enterprise, advocates green, energy-saving, low-carbon work style and living habits, constantly improves internal management regulations, strengthens the management of air conditioning temperature, water and electricity in the office environment, and creates a low-carbon and environmentally friendly office environment. The Company has posted energy-saving slogans at the switches in each office area to remind employees to turn off the power of equipment at the end of the day, so that "the lights go out when people leave"; Require that the air-conditioning temperature in the office be no lower than 26°C in summer and no higher than 18°C in winter; Use OA office system, promote paperless office, require double-sided use of printing paper, and give priority to using recycled products or fast-growing forest wood products when purchasing printing paper; Classify office waste to reduce pollution to soil and groundwater.







## **Deepen Strategic Collaboration**

SMEC adheres to the concept of win-win cooperation and development, gives full play to the advantages of its main industry, focuses on the frontier of science and technology, actively expands the "circle of friends" of domestic and foreign cooperation, expands cooperation with governments, enterprises, research institutes and universities, consolidates and deepens partnership, and joins hands to write a new chapter of mutually beneficial and win-win cooperation.



The Company has joined hands with Peking University, Zhejiang University and other famous universities and industry enterprises to take the lead in the "14th Five-Year Plan" of the Ministry of Science and Technology to undertake the "MEMS sensor batch manufacturing platform" project, which will change the situation of MEMS sensor core chip dependence on imports and support China's technology level and scale production in this field to the global forefront.



The Company cooperates with Tsinghua University to jointly carry out product research and development and process analysis of new third generation semiconductor power devices such as SiC, providing a technical foundation for breaking through the key technologies of SiC power devices and realizing the industrialization of achievements in the future.



The Company cooperates with Hangzhou Dianzi University to build a modern integrated circuit industry college to cultivate high-quality applied, compound, and innovative talents that can adapt to and lead the development of the modern integrated circuit industry, thereby promoting high-quality integration and innovation between industry and education.



Through a cooperation agreement with Tsinghua University, the Company jointly conducts product research and development and process analysis of new third generation semiconductor power devices such as SiC.



The Company takes the lead in undertaking the "research and development and manufacturing of charging pile power chips" project in the Shaoxing City Industrial Key Technology Research Plan through collaboration with institutions such as Shaoxing University, thereby helping to accelerate the process of domestic substitution of charging piles and carbon neutralization, in order to meet the increasing demand for charging new energy vehicles.

## **Create Responsible Supply**

Based on the principle of "integrity management, quality first", SMEC strictly abides by business ethics, implements procurement management, and creates a lasting business ecosystem through collaborative supply chain management, thereby creating value for the Company, developing together with suppliers, complementing each other's strengths, and achieving mutual benefit, and developing sustainably with business partners in the future.

## Purchase with integrity and compliance



Based on industry norms and business ethics, the Company actively performs procurement in good faith and compliance, not only explicitly requiring all employees to strictly abide by integrity and professional standards, and standardizing the behavior of the employees in the procurement process, but also maintaining fair competition, observing the avoidance system, and fulfilling the procurement information confidentiality system. At the same time, we also seek to build and implement high standards of business ethics by requiring all suppliers to sign a Letter of Commitment on Integrity of Suppliers, which clearly stipulates the responsibilities of both parties for integrity construction and the penalties for violating relevant integrity behaviors

## Management and evaluation of suppliers

The Company strives to fully protect the interests of suppliers, and based on this premise, we require all suppliers to meet the expectations for employee health and safety, environmental protection, labor standards, and other aspects in the Company's policies, and clarify the selection, admission, and evaluation criteria for suppliers.

During the process of introducing new suppliers, we will review the quality, social responsibility, safety, and environmental aspects to ensure that qualified suppliers are introduced. We will also require them to sign the Environmental Material Warranty for Environmental Protection Products, the Warranty for Non Use of Conflicting Metals, and the Quality Agreement, Supplier Social Responsibility and Ethical Code Commitment Letter and other measures to ensure that the supplier's social responsibility management is consistent with the Company's philosophy.

The Company will regularly review suppliers that have passed the assessment to ensure that they always meet the requirements; The Company will require unqualified suppliers to undergo rectification within a limited period of time, freeze their cooperation qualifications, and eliminate them.



2022 | SMEC Corporate Social Responsibility Report

Abide by the "Core" Principle, Maintain the Evergreen Foundation Industry Forever

Forge Craftsman's "Core", Empower A Better Life

#### Admission and registration

- All cooperating suppliers can only cooperate with the Company after passing the certification
- Effective and differentiated access standards are formulated and implemented for different types of suppliers
- It is necessary for suppliers to sign the CSR Commitment Letter and the Supplier Integrity Commitment Letter

#### **Maintenance and evaluation**

- The Company establishes a roster of qualified suppliers and manages them in a differentiated manner;
- The Company institutionalizes supplier evaluation, evaluates and assesses suppliers from aspects such as quality, cost, delivery, EHS, and grades suppliers
- The Company strengthens communication and exchange with suppliers, and establishes a mutual visit communication mechanism and platform between QBR and senior management

#### **Elimination and punishment**

 The Company periodically downgrades and eliminates suppliers that are evaluated as unqualified, so as to achieve the survival of the fittest in the supply chain

## regulation



### **Supplier growth**



The Company regularly holds QBR meetings, supplier conferences, and other activities to convey to suppliers the concept of social responsibility in environmental protection, safety, health, anti-corruption, and other aspects; The Company communicates through on-site EHS education and training, daily technical exchanges, and integrity promotion and implementation to strengthen the integrity of partner enterprises in the supply chain and their ability to proactively assume social responsibilities.





## Conflict minerals regulation

The Company not only implements a policy of not using conflict minerals, but also does not support mineral transactions that may violate human rights. It also formulates the SMEC Conflict Minerals Management Procedures to manage in compliance, continuously conducts supply chain conflict metal investigations, and tracks the source of metals in materials, thereby avoiding the purchase of metals from conflict mining areas, further ensuring that product materials do not cause conflicts.

In 2022, the Company strictly followed due diligence requirements to adopt the Conflict Minerals Reporting Template (CMRT), Extended Minerals Reporting Template (EMRT), and Cobalt Reporting Template (CRT) created by the Responsible Minerals Initiative Organization, and conducted due diligence on all suppliers. All suppliers have responded to the investigation report and provided corresponding evidence; The Company actively assists clients in implementing responsible mineral due diligence. According to customer requirements, the Company has responded to 94 customer conflict mineral surveys in a timely manner, which proves our effective management of conflict minerals.

#### **Local procurement**

Adhering to the purpose of sustainable development, the Company bravely assumes social responsibility, giving priority to domestication and localization procurement under the same conditions, reducing procurement costs and industrial pollution by promoting and using raw materials from domestic manufacturers, and creating sustainable economic benefits for the local community by driving the employment of residents in neighboring provinces and cities. In 2022, the Company's domestic suppliers accounted for 86.5% of the total suppliers.



the Company's domestic suppliers accounted for

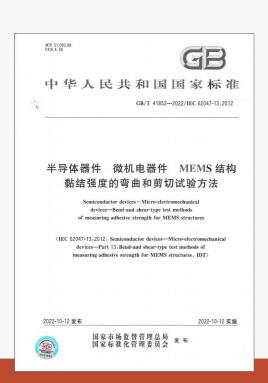
86.5

% of the total suppliers

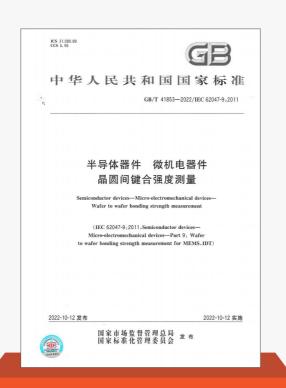


## **Enhance industry communication**

SMEC actively participates in the construction of national and industrial technical standards and plays a role in promoting the development of the industry by fully leveraging its professional and technical advantages, continuously promoting scientific and technological innovation, and focusing on improving the level of technological innovation around key projects. In 2022, the Company participated in the drafting and formulation of two national standards, which were successfully released and implemented, namely, Semiconductor Devices--Micro-electro mechanical Devices--Bend and shear-type test methods of measuring adhesive strength for MEMS structures (GB/T41852-2022/IEC62047-13:2012) and Semiconductor Devices --Micro-electro mechanical Devices--Wafer Bonding Strength Measurement (GB/T41853-2022/IEC62047-9:2011), which contributed to the independent, controllable, and highquality development of China's integrated circuit industry.



The Company has participated in the compilation of the National Standard for Semiconductor Devices--Micro-electro mechanical Devices--Bend and shear-type test methods of measuring adhesive strength for MEMS structures, which has been officially released and implemented



The Company participated in the compilation of the National Standard for Semiconductor Devices -- Micro-electro mechanical Devices--Wafer Bonding Strength Measurement, which was officially released and implemented

Industry associations to which the Company is a member	Position
Zhejiang Integrated Circuit Industry Technology Alliance	Vice president unit
Shaoxing Federation of Industry and Commerce	Vice President (Vice Chairman)
Zhejiang Semiconductor Industry Association	Vice president unit
China Semiconductor Industry Association	Membership
China Sensors and IoT Industry Association	Membership
Zhuzhou Power Semiconductor Industry Alliance	Vice president unit
China advanced semiconductor industry innovation alliance in Beijing	Executive Chairman Unit
Shaoxing Yuecheng District Gaobu Town Chamber of Commerce	Vice President
Shaoxing Association of Foreign Investment Enterprises	Membership
Shaoxing Integrated Circuit Industry Association	President





# Safeguard Employees' Rights and Interests

SMEC respects and protects the legitimate rights and interests of employees, advocates equal and non discriminatory employment policies, and creates a fair and harmonious work environment for employees by continuously improving the salary and welfare system and establishing a sound democratic mechanism.

#### **Equal employment**

The Company strictly abides by relevant laws and regulations, firmly protects the legitimate rights and interests of employees, treats all employees equally, adheres to the principle of equal employment, effectively protects the legitimate rights and special interests of female employees, opposes discrimination in terms of age, gender, race, etc., strictly abides by international conventions prohibiting the use of child labor, and strengthens inspections of suppliers' illegal use of child labor; The Company signs labor contracts with employees in accordance with the law and pays full social insurance, pursuing both economic benefits and paying attention to the reasonable demands and rights of employees. As of the end of 2022, there were 3,656 on-the-job employees in the Company.

As of the end of 2022

The number of on-the-job employees in the Company was

The rate of Labor contract signing was

3656

100 %

Indicator/Year	2020	2021	2022
Labor contract signing rate (%)	100.00%	100.00%	100.00%
Social insurance coverage rate (%)	97.17%	98.97%	99.48%

\*Note: During the reporting period, a small number of employees did not pay social insurance, mainly due to the following reasons: (1) If Hong Kong, Macao, Taiwan, and foreign employees do not pay social insurance, the Company will pay commercial insurance for them; (2) Some employees are newly recruited and their social insurance payment procedures have not been completed at the social insurance declaration time point of the current month

#### **Salary and welfare**



The Company actively learns from excellent enterprises in the same industry, provides multiple guarantees for employees' work and life, and shares the development achievements of the Company with employees. We strictly implement national and local social security mechanisms to pay for five types of insurance, provident fund, and commercial medical insurance for our employees; Employees not only enjoy the rights of rest and vacation in accordance with the law, but also enjoy marriage and funeral leave, maternity leave, and other holidays in accordance with regulations, as well as paid vacation; The Company adheres to the concept of "win-win" and provides competitive and incentive compensation and welfare policies by establishing a comprehensive compensation and welfare system with fixed wages as the main body and bonuses and other benefits matching.



#### Salar

 The Company follows the principle of distribution according to work, adheres to the concept of "winwin", and establishes a comprehensive salary and welfare system with fixed wages as the main body, bonuses, and other benefits matching



#### Incentive

 The Company has established a three-dimensional and systematic talent retention incentive mechanism, as well as incentive measures that comprehensively cover employees' life, work, and learning needs

#### Welfar



- Catering subsidies
- Ü
- Legal leave and annual leave
   Birthday and holiday greetings
- · Annual physical examination
- · Government talent subsidy policy
- · Social security and public accumulation funds
- · Supplementary commercial health insurance





#### **Democratic management**



The Company effectively ensures that employees exercise democratic management power, adheres to open, candid, and effective communication with employees through multiple channels such as factory affairs disclosure, employee communication meetings, real-time online communication platforms, and employee suggestion boxes. When it comes to employees' vital interests, the Company adheres to listening to employees' opinions and suggestions, promotes scientific decision-making, democratizes management, and safeguards employees' legitimate rights and interests, thereby striving to create a united, harmonious, and positive atmosphere. In 2022, a total of 43 employee communication meetings were organized in the Company and 113 various issues were effectively resolved.

Indicator/Year	2020	2021	2022
Number of employee communication meetings (sessions)	36	36	43
Number of effectively solved problems (pieces)	69	106	113

### **Occupational health**



In 2022,

928

employees were arranged to participate in the occupational health examinations

times of seminars by inviting psychologists were delivered

The Company strictly complies with the relevant requirements on employee occupational health in laws and regulations such as the Occupational Disease Prevention and Control Law, and protects the physical and mental health of employees by formulating employee occupational health management measures. The Company not only formulates internal management procedures for personal protective equipment (PPE), distributes personal protective equipment that meets national occupational health and safety protection requirements to employees, and irregularly audits the wearing of personal protective equipment; The Company regularly conducts occupational hazard inspections to provide employees with pre job, during job, and post job occupational health inspections to ensure their physical health; The Company provides professional psychologists to alleviate the psychological pressure and anxiety of employees; The Company actively carries out health and safety publicity and education to improve the safety and risk prevention awareness of employees.

In 2022, the Company arranged 928 employees to participate in the occupational health examinations (466 of them participated in the pre-work examination, 364 of them participated in the in-work examination and 98 of them participated in the post-work examination); Invited psychologists to deliver 4 times of seminars, carried out 12 times of psychological counseling sessions, and 1 joint free clinic. All in all, there were over 400 participants; Organized 21 employees to participate in first-aid training. As of the end of 2022, there was no patient with occupational contraindications and occupational diseases in the Company.



Organized staff to participate in an occupational health seminar



Invited psychological experts to carry out psychological counseling

## **Develop Talent Potential**

Based on the talent development values of "respecting human values, developing human potential, and sublimating human soul", SMEC has provided targeted training for different types of positions by building a comprehensive training system, so as to help employees lay a solid business foundation. Meanwhile, it helps employees achieve their career development dreams by establishing a clear career development path, providing professional career guidance, and creating abundant job rotation opportunities.

### **Employee training**

By establishing a perfect training system, the Company can carry out general training; professional training and management training in light of the training object and post hierarchy, to help employees constantly adapt to the development requirements of the new situation, as well as improve employees' abilities and qualities. In 2022, the Company carried out a total of 31 induction training courses for new employees, 39 post specific training courses for fresh graduates, 10 training courses for the management, 5 training courses for production line masters and internal lecturers, and 128 general and professional open courses, with a total of 8,896 trainees.



In 2022.

8896 people were trained

#### **Professional training**



The Company has carried out "On-the-Job Training for Operators" project, "On-the-Job Training for Engineers" project, "Youth Training Camp for Fresh Graduates" and "Seminars on Posts Professional Topic Knowledge for Fresh Graduates", to fully improve the professional knowledge and skills of new operators and engineers. In addition, it has continuously carried out "Six Sigma Yellow Belt Training" and "Six Sigma Green Belt Training" projects, to cultivate engineers' quality awareness and application ability of quality knowledge tools, comprehensively improve the ideological consciousness, business skills and comprehensive ability of basic talents of the Company, and consolidate the talent echelon foundation of the Company.

#### **General training**

Employees are trained the Company's basic business processes, rules and regulations, general vocational skills, etc., so as to strengthen their comprehensive quality, further improve their work enthusiasm, and help them achieve a sense of achievement and belonging.



#### Management training

The Company has planned and implemented as series of management empowerment training projects, such as "High Performance Foreman Training Camp", "High Executive Production Supervisor Training Camp", "Project Management Practice Camp", and "Manager Growth Camp", to continuously build the leadership in the management talent echelon and help the Company's business strategy be smoothly implemented.





Special Training Camp for Instructor Skills

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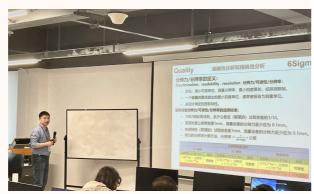
High Performance Foreman Training Camp



Induction Training for Fresh Graduates



Manager Growth Camp



Six Sigma Training Certification Project

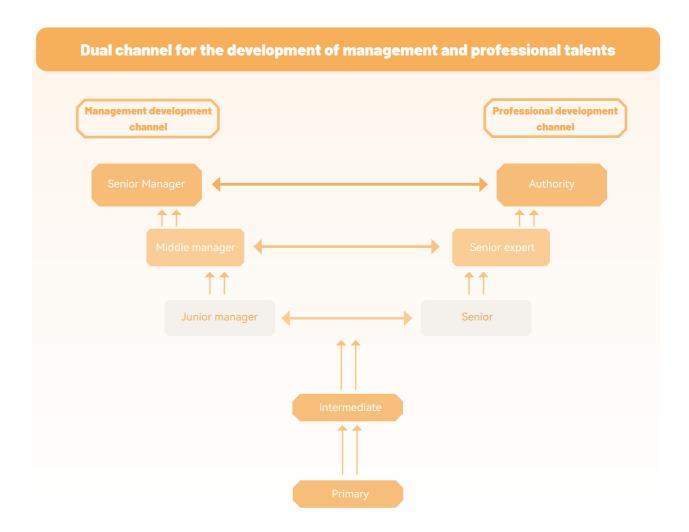


On-the-Job Training for New Operator

### **Career development**



The Company has built a "dual-channel" employee career development platform, implemented a dual-channel growth path of "management talent team training" + "professional talent team training", so provide clear and rich career development paths for employees; Besides, the Company has clearly defined and divided the job sequence of employees, as well as refined the professional sequence, to differentially manage different posts; In addition, the Company has broadened the development space of professional channels, and provided a mechanism guarantee for employees to switch within professional channels and between sequence. Therefore, employees' work passion and organizational vitality can be further stimulated.



Indicator/Year	2020	2021	2022
Number of persons enjoying internal promotion (person)	157	446	1054

## **Care for Employees**

SMEC cares for the work and life of every employee, encourages members to develop hobbies, carry out diversified activities, to enrich their spare time. Cares for and provides convenience to female employees; Actively helps employees in difficulty, to let them feel the warm care of the Company.

### **Enrich trade union** activities



Guided by the enterprise development and employee needs, the Company has continuously created a series of characteristic labor union activities, and been committed to creating a sincere, united, open, and enterprising organizational atmosphere, so that, employees' enthusiasm for learning can be mobilized, and employees' personal qualities and professional competitiveness can be enhanced, which can help them adapt to enterprise development. In addition, the construction of enterprise culture can be promoted.





Zhende Medical and SY Science & Technology, organized and held in SMEC, Beautiful Encounter" a friendly basketball game named "Zhenxin Shengshi, Create a Better Future Together"



On May 17, the Company, together with companies, such as On May 20, the Company organized a bachelor party named "Love



named "Who Can Win in the SMEC Badminton Competition"



On June 8, the Company held a badminton team competition On July 8, the Company held the first open day for employees'



On July 29, the Company held the SMEC Lawn Music Festival



On September 9, the Company organized the Mid-autumn Mooncake DIY Activity

### **Care for special** employees



The Company always insists on sincerely caring for every employee, and pays attention to the care and protection of special groups such as female employees and employees in difficulty. We advocate gender equality in the workplace, and shall not refuse to hire women or raise the standards for the employment of women on the grounds of gender, except for jobs or positions unsuitable for women as stipulated by the State. In addition, we strictly implement the national regulations on the protection of female employees and relevant systems of the Company, and ensure that female employees enjoy paid maternity leave in accordance with the law; Provide care and assistance to employees in difficulty and their families, to continuously enhance employees' senses of gain, happiness and security. In 2022, an employee Mr. Liu was seriously ill. To alleviate his economic burden, the labor union of the Company called on all employees to carry out fundraising activity, as well as sent the sympathy expense of the labor union and the money raised, a total of RMB 96,500, to him immediately to convey the collective warmth in time.



The Company's labor union representatives distributed donations to employees in difficulty



## **Build a Strong Security Line**

As SMEC advocates life first, and takes creating a safe and harmonious environment as its own responsibility, it has improved the safe production responsibility, strengthened the construction of infrastructure, management team and emergency level. As a result, employees' safety awareness has been improved, the Company has been running in a safe and stable manner, and no general accident or above has occurred during the reporting period.

### **Safety production** management



More than

300

safety production responsibility letters have been signed



The Company has conscientiously implemented the safety work policy of "safety first, prevention first, comprehensive management", established and improved the safety management system, to benchmark the excellent experience at home and abroad. Besides, the Company has passed ISO 45001 occupational health and safety management system certification and other standards, established a safety production management organization, ESH Department, which is equipped with full-time and a number of part-time safety management personnel; Moreover, the Company has established and implemented the safety responsibility system for all employees, where the General Manager is the first responsible person, and all levels, positions and all employees have their safety production target responsibilities; To promote and supervise all departments implement the safety responsibility system for all employees, more than 300 safety production responsibility letters have been signed, Additionally, the Company has set up an employee suggestion box to encourage employees to put forward reasonable suggestions on safety production and continuously improve the safety management capabilities.





The Company regularly holds safety production summary meetings

### **Supervision and** treatment of hidden dangers



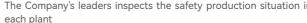
In 2022,a total of

120

special safety actions have been completed

The Company has established a long-term mechanism for the investigation and treatment of hidden dangers of ESH accidents, focusing on the production site, and strengthening the investigation and treatment of hidden dangers. The Company regularly organizes and carries out safety hazard investigation and treatment activities, and plans and implements various safety production special actions such as "Monthly Safety Inspection", "Quarterly Safety Inspection", "Bad Weather Safety Inspection", "Major Holiday Safety Control Plan", "Contractor Special Safety Inspection", "Hazardous Chemicals Special Safety Inspection", "safety production month", "fire safety month", etc., to fully investigate safety hazards; In addition, the hidden dangers and problems found must be reported timely, and rectified within a time limit. Besides, the rectification must be tracked, to effectively reduce the occurrence of safety accidents. In 2022, the Company completed a total of 120 special safety actions, which has ensured the safety production of the Company.







The Company's leaders inspects the safety production situation in Staff regularly check the operation of equipment to investigate the potential safety hazards

### Improve the emergency system



Based on the principles of "prevention first, combining prevention with emergency", in 2022, the Company has revised and formulated the Production Safety Accident Emergency Plan of Semiconductor Manufacturing Electronics (ShaoXing) Corporation to standardize the emergency handling and response procedures for accidents; In addition, the Company has allocated professional emergency supplies and equipment, which must be subject to the principles of "professional management, guaranteeing urgent needs, and special supplies are for special use"; Besides, the Company has organized and carried out emergency drills to continuously improve the actual emergency handling operational ability.

In 2022, the Company continued to warn of high-risk ESH and carried out 74 various drills such as disaster relief drills and personnel evacuation drills, including 60 disaster relief drills, with a total of 936 participants; 12 evacuation drills, with a total of 4678 people being evacuated.

2022 | SMEC Corporate Social Responsibility Report

Abide by the "Core" Principle, Maintain the Evergreen Foundation Industry Forever

Forge Craftsman's "Core", Empower A Better Life



In April 2022, the Company organized an electrical fire emergency drill



In June 2022, the Company organized a fire evacuation drill for all employees





Limited space accident rescue drill

## Strengthen safety publicity and education

The Company regards occupational health publicity and education and training as long-term basic management work, carries out targeted safety production education activities, improves the effect of education and training through practical problems and case sharing, so as to enhance employees' awareness of safety production. We have formulated the Safety Production Training Management Procedure to provide safety training for employees at different levels and different types of work. As a result, the coverage rate of safety training for employees has reached 100%; We have carried out contractor safety standard training to enhance contractor's EHS accident prevention and emergency handling capabilities; In addition, we have set up and ESH bulletin board and a LED screen to publicize safety and health knowledge.

In 2022, the Company carried out 4 theoretical and practical training for ERT (Emergency Response Team) members, with a total of 331 people trained and 666 people re-trained; Organized 31 three-level safety education and training sessions for new employees, with a total of 2,488 trainees; Organized 156 contractor safety trainings, with a total of 6,079 trainees; Organized 520 people to participate in the safety training for millions of employees organized by the government, and 2,465 people participated in safety training according to the requirements of the Yuecheng District Fire Brigade and obtained the blue code of fire protection.









Training in the use of fire fighting equipment

#### Case | The Company carried out the "Safety Production Month" activity to create a safety culture atmosphere



In June 2022, the Company actively carried out the "Safety Production Month" activity themed with "Abiding by the Safety Production Law and Being the First Responsible Person". In this activity, a series of activities have been held, including CPR competition, firefighter uniform + fire hose competition, SCBA wear competition, and safety knowledge competition. In addition, a total of 1,776 people participated in this activity, which effectively deepened employees' understanding of knowledge on safety, health and environment, helped employees combine theoretical knowledge with work practice, and improved employees' safety and production capacity.



## Improve People's Wellbeing

Over the years, SMEC has actively assumed community responsibilities, and encouraged employees to participate in public welfare undertakings through various forms such as supporting education, donations, and serving the community, so that the spirit of volunteerism can be actively promoted, and the warmth and positive energy can be delivered to the society with practical actions.



#### **Caring for students**



The Company donated RMB 40,000 to Zhejiang Agricultural Polytechnic College and Zhejiang Post and Telecommunication College, and provided internship employment opportunities for students with excellent academic performance.

#### Fighting the epidemic together



The Company donated RMB 50,000 to Red Cross Society of China Shaoxing Branch and Shaoxing City Charity Federation to fight the COVID-19 epidemic; In November, when the epidemic prevention and control work was most urgent, Company leaders visited the dormitory of the employees involved in the epidemic to express condolences and deliver warm care.

#### **Charitable donations**



The Party General Branch of the Company cooperated with the Party Branch of Dongyangwan Village to jointly launch the Common Prosperity Project, and the Company funded RMB 150,000 to promote the development of local agriculture and rural areas, enabling local people to achieve "common prosperity".



involved in the epidemic to express condolences



Company leaders visited the dormitory of the employees Secretary of the General Party Branch and the head of the labor union of the Company attended the launching ceremony of the Yangwan Village Common Wealth Project

#### Case | Company volunteers visited Yucai School to warm the "winged angels"

On May 13, 2022, the Company's volunteers visited the Yucai School in Yuecheng District to greet the disabled children in the school and present learning gift bags. In the activity, volunteers interacted cordially with the children, instructed them to make dumplings hand by hand. In addition, they patiently understood the children's life and learning status, and encouraged them to study hard. Through this condolence activity, employees have been effectively mobilized to actively participate in the public welfare action of caring for children with disabilities, to bring warmth to them.

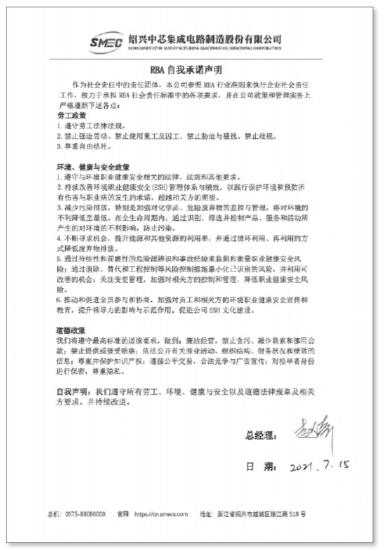




## **Responsibility Management**

### **Responsibility concept**

In light of the social responsibility concept of "creating the future with 'core', and uniting the strength with responsibility", SMEC aims to become a "reliable OEM partner in the fields of sensing, connecting and power", strictly follows the Code of Conduct of the Responsible Business Alliance (RBA), provides a career development platform for employees, creates a strategic cooperation platform for partners, and is committed to building a better undertaking with all stakeholders to share the development achievements.



RBA Self Commitment Statement

### **Responsibility Organization**

The support and promotion from senior leaders is an important guarantee for the development of corporate social responsibility. SMEC attaches great importance to social responsibility and actively integrates social responsibility into all aspects of enterprise operation and management. In February 2022, the Company established a CSR Management Committee, with the CEO of the Company serving as the chairman of the Committee, and the second level directors of relevant departments serving as members, and established the CSR Promotion Office, with Yu Qing from the Public Relations Department serving as the manager of the office, who is responsible for promoting the specific work of CSR, continuously translating the Company's concept of responsibility and commitment to stakeholders into specific actions, to ensure that the social responsibility work can be implemented and promoted.





CSR Management Committee Appointment Ceremony

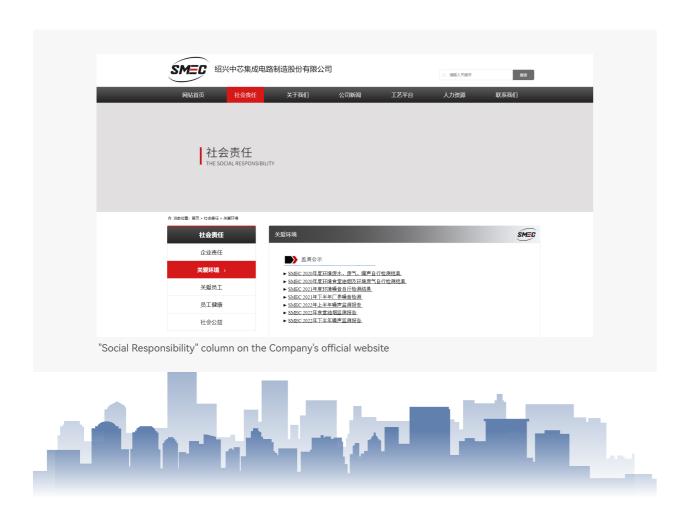


The Chairman of the CSR Management Committee issued a letter of appointment to the members

Meanwhile, in accordance with the management requirements and strategic planning of social responsibility work, as well as in combination with the characteristics of the industry, a social responsibility report preparation working mechanism featured by cross-unit linkage has been established. As the leading department, the Public Relations Department of the Company is responsible for promoting the preparation and release of reports, guiding relevant departments to carry out communication and coordination, so as to ensure the implementation of the project. In addition, the Public Relations Department is responsible for liaising and mobilizing all units to submit relevant materials timely, as well as strictly controlling the quality of materials; As the cooperating units, functional departments must give full play to their respective expertise to fulfill their responsibilities, collect relevant materials relating to the report and assist in the preparation and review of the report. After preparation of the report, the Board of Directors is responsible for the final review of the content of the report before it is released.

## Responsibility Communication

SMEC firmly believes that, without the trust and support from internal and external stakeholders, it is impossible to promote the social responsibility. Therefore, it actively establishes the social responsibility information communication mechanism. In terms of internal communication, the Company has carried out a series of social responsibility training, seminars, etc., guiding various departments to carry out social responsibility practices and effectively fulfilling their social responsibilities. In terms of external communication, the Company has established and improved the external information disclosure mechanism, publicly releasing the annual social responsibility report to the public; On the Company's official website, there is a social responsibility column to continuously publicize the Company's social responsibility concepts and practices to stakeholders in a systematical way, further strengthen the communication between SMEC and customers, the public, and government agencies, to enhance the Company's social image, and establish a responsible SMEC brand.





## **Future prospect**

Brave the dangers and ride the wind and waves. Looking forward to 2023, SMEC will deeply recognize the essence of changes in the external environment, respond to uncertainty with the certainty of its core capabilities, work hard and diligently with a sense of crisis, urgency, and responsibility as well as much greater determination, faster action, and more effort, so that it can achieve more glories, and create a new situation for high-quality development.



## **Annex** Key performance

Indicator	2020	2021	2022
Customer Satisfaction/%	100%	100%	100%
Customer complaint resolution rate /%	100%	100%	100%
Contract performance rate /%	100%	100%	100%
Number of new patents/piece	31	67	75
Number of patents held/piece	31	98	173
Number of suppliers whose cooperation has been suspended due to non-compliance/piece	0	0	0
Number of potential suppliers rejected due to non-compliance/piece	0	0	0
Total number of employees/person	1344	2525	3656
Labor contract signing rate/%	100.00%	100.00%	100.00%
Social insurance coverage rate /%	97.17%	98.97%	99.48%
Number of accidents in production safety/piece	0	0	0
Total number of work-related injuries/person	0	0	0
Number of working days lost due to work-related injuries / day(s)	0	0	0
Times for training in safety production /time	-	217	193
Number of persons receiving safety production training / person	-	13464	12549
Number of environmental accidents/case	0	0	0
Total annual power consumption/10,000 kWh	8660	19230	32145
Total annual energy consumption/tce	21600	50142	83262
Comprehensive energy consumption per unit of output value/(tce/RMB 10,000)	0.041	0.087	0.09
Total annual fresh water consumption/m³	95.53	216.49	335.33
Total annual recycled water consumption / 10,000 m <sup>3</sup>	44.42	159.96	261.34
Wastewater discharge/10,000 m³	96.72	200.31	312.78
Wastewater reduction/10,000 m³	44.42	159.96	261.34
Exhaust emissions/ton	10.0	43.0	40.07
General waste discharge/ton	820.7	2156.2	2897.3
Hazardous waste discharge/ton	1157.6	3175.1	4953.5
CO <sub>2</sub> emissions/ton	75645	168438	249669

### **Indicator Index**

First-level title	Second-level title	Guidelines for Corporate Social Responsibility Reporting in China (CASS-CSR 4.0)	Report location
About this report	-	P1.1-1.3	3
Address by managers	-	P2.1-2.2	6
Entering SMEC	-	P4.1-4.4, G1.1	8
2022 Chronicle of Events	-	P3.2, P4.4	14
Honor 2022	-	P3.2	14
Abide by the "core"	Perfect Company governance	M1.1, M1.2, M1.5, S1.1	18
principle, maintain the evergreen foundation	Adhere to compliance management	M1.1, S1.2	20
industry forever	Adhere to the bottom line of integrity	M1.1, M1.2, M1.5, S1.1	21
	Pursue excellent quality	M2.2,M2.9	24
Forge craftsman's "core", empower a better life	Optimize customer service	M2.1-2.2,M2.8-2.17	26
empower a better life	Stimulate innovation vitality	M2.4, M2.7	29
Build a common ecological civilization with persistent "heart" of SMEC	Consolidate environmental management	E1.1, E1.5	34
	Commitment to green production	E1.3, E1.6, E2.3, E2.12, E2.14, E2.16, E2.22	35
	Promote green culture	E1.5, E3.6, E3.1, E3.2	40
Convergence of sincere heart of "SMEC" to create multiple values	Deepen strategic collaboration	M3.4, M3.6	44
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	Safeguard employees' rights and interests	S1.5-1.6,S2.1-S2.12	52
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### **Suggestion Feedback**

Dear readers,

Thank you for reading this report. In order to improve SMEC's social responsibility capabilities and management level, and continuously improve its social responsibility management and report preparation, we sincerely hope that you can put forward relevant comments and suggestions regarding this report and provide feedback to us through any of the following methods:

Address: No.518 Linjiang Road, Yuecheng District, Shaoxing City, Zhejiang Province Postal code: 312000 Tel.: 0575-88060000 Email: SMEC\_Public@smecs.com 1. What is your overall evaluation on this report? Very good ☐ Relatively good ☐ Average ☐ Relatively poor ☐ Very poor Unclear  $2. \ Do \ you \ think \ whether \ this \ report \ can \ reflect \ the \ significant \ impact \ of \ SMEC \ on \ the \ economy, \ society, \ and \ environment?$ Can Average Cannot Unclear 3. Do you think whether this report can respond to and disclose the concerns of stakeholders? Can General Cannot Unclear 4. Do you think whether the information, indicators, and data disclosed in this report are complete? ☐ Very complete ☐ Complete Average Relatively complete Incomplete  $5. \ We lcome \ to \ putting \ forward \ your \ other \ comments \ on \ SMEC's \ social \ responsibility \ work \ and \ this \ report \ here:$ 



Scan the QR code to put forward your valuable comments and suggestions on this report!



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