



2019

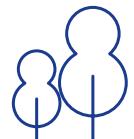
| Corporate Social Responsibility Report

Create the Future with SMIC

Contents



About this Report	01
Message from the Chairman	02
2019 Social Responsibility Performance, Awards and Honors	03
Core Values	05



About SMIC

Company Profile	08
Market Position and Products	10
Products and Services	16
Financial and Tax Information	23

Corporate Social Responsibility Management

Social Responsibility Policy	27
Social Responsibility Management Mechanism	30
Interactions with Stakeholders	31

Sustainable Economic Growth

Corporate Governance	35
Ethics and Regulatory Compliance	41
Innovation Management	46
Customer Service	51
Supply Chain Management	58

Caring for Employees

Talent Attraction and Retention	63
Career Development	68
Occupational Health and Safety	72
Wonderful Life	78



Caring for the Environment

Environmental Protection Policy and Management	87
Climate Change and Energy Management	90
Water Resource Management	96
Air Pollutants Control	100

Waste Management	101
Awareness of Environmental Protection	103

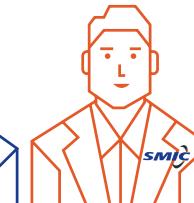
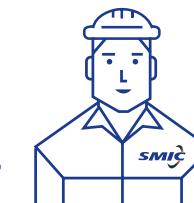
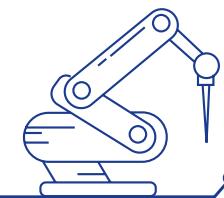


Caring for Society

Medical Assistance	106
Education Support	109
Public Welfare Activities	115

Appendix

2019 Corporate Social Responsibility Index Summary	118
Honors and Awards of SMIC in 2019	119
Index of Environmental, Social and Governance Reporting Guide	120
Future Outlook	122
Comments and Suggestions	122



About this Report

Introduction

This report is the 11th Corporate Social Responsibility (hereinafter referred to as "CSR") Report released to the public by Semiconductor Manufacturing International Corporation (hereinafter referred to as "SMIC"), which illustrates the principles SMIC adheres to in practicing its corporate social responsibility and the work it has done in 2019. The report covers the economic, environmental and social sustainability issues of concern to key stakeholders.

Reference Standards

This report is written based on the Environmental, Social and Governance (ESG) Reporting Guide made by Hong Kong Exchanges and Clearing Limited (HKEX), with reference to the GRI Sustainability Reporting Standards (GRI Standards) made by Global Reporting Initiative, the China Corporate Social Responsibility Reporting Guide (CASS-CSR4.0) made by the Academic Division of Economics of the Chinese Academy of Social Sciences, the CSR Guide for China's Industrial Enterprises and Industrial Associations made by the China Federation of Industrial Economics (CFIE), SJ/T 16000-2016 Guidance on Social Responsibility of Information and Communication Technology Industry made by the China Electronics Standardization Association (CESA) and the main principles of ISO 26000:2010 Guidance on Social Responsibility made by the International Organization for Standardization (ISO).

Reporting Scope

The reporting scope of the report includes the subsidiaries and major holding companies of SMIC, which is consistent with the scope of the annual report. For ease of expression, this report refers to Semiconductor Manufacturing International Corporation as "SMIC", the "Group", "we" or the "Company". In addition, the "country" and the "government" with no full name in this report refer to the People's Republic of China and its administration.

Reporting Period

The reporting period of this report is from January 1, 2019, to December 31, 2019. To make the report more readable, some contents or data can be traced back to previous years or subsequent years.

Release Cycle

The CSR report of SMIC is an annual report, which is usually released in the second quarter of the following year.

Description of the Report Editing and Data Source

This report is edited by the members of the CSR Committee with the information and data of CSR-related businesses provided by all functional departments. The materials are then collected and edited by the CSR Group of the Company and reviewed and confirmed by the members of the CSR Committee. Finally, a third party is invited to rate the report.

Report Release

This report is released in both paper and electronic editions, including Chinese (simplified Chinese and traditional Chinese) and English versions. To browse the electronic version of this report, please visit www.smics.com.

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Message from the Chairman

Dear readers,

The rising uncertainty in the global macroeconomic prospect and the increasing downward pressure on the semiconductor industry in 2019 have presented SMIC with many challenges. We appreciate your continuing support and attention to SMIC and joining hands with us during a crucial year.

In the past few years, through unprecedented reforms, we have formed more powerful R&D, operations, supporting and management teams. We have developed and reserved diversified technology platforms and strengthened trusting cooperation with customers and suppliers at home and abroad.

These endeavors helped us improve our operations in 2019 with a revenue of US\$3.116 billion, successfully achieving our full-year target and securing strong domestic growth. We made smooth progress in R&D, achieving a 14nm Fin Field Effect Transistor (FinFET) process and mass production in mainland China to obtain significant revenue at the end of the year. We expanded our product portfolio and mature specialty process technology applications, constantly improving the diversity and competitiveness of our products and technology.

While seeking sustainable development, SMIC is committed to caring for people, the environment, and society. We work with industry chain partners to implant the concept of sustainable development in all aspects of business operations.

In 2019, we put great efforts into environmental protection and promoted green production. We invested US\$70 million in 20 energy-saving, water-saving and waste-reducing projects, accumulatively saving 9,351,707 kWh of electricity and 377,957 tons of water.

In 2019, we cared for our employees and further improved their living environment. We improved the employee Living Quarter and completed 11 apartment home improvement projects to improve the quality of life for their families. The occupancy rate of the Living Quarter family apartment, Tangzhen Town, Shanghai reached 96%.

In 2019, we continued to care for the well-being of children and strived to give back to society. 2019 is the seventh year of our SMIC Liver Transplant Program for Children. During its lifetime, we have worked with our employees and industry partners to raise RMB 24.8 million and helped 451 children enjoyed their new lives. SMIC also established special funds and invested RMB 6.42 million in health care, education, science, and technology, promoting the prosperity of social welfare.

In 2019, we engaged in charity activities. We organized charity activities with the participation of employees and their families. Our employees' total volunteer service hours this year reached 20,057, exceeding the annual target. We believe that more kindness will accelerate the development of a better life.

With the outbreak of COVID-19 in early 2020, we made employee health and safety a priority while striving to ensure the timely supply of products and technology for customers. We focus on both production and pandemic prevention. After the Spring Festival, 90% employees have returned to work, with production capacity hitting a historical high in the first quarter, achieving win-win results in both production and pandemic prevention. At the same time, caring about the front line of the fight against the pandemic, SMIC and its directors and employees donated RMB 10 million to the key areas affected by the virus.



Dr. Zhou Zixue, the Chairman of the Board of SMIC

Looking towards 2020, the COVID-19 pandemic has caused a huge loss to the global economy and will continue to impact the integrated circuit industry chain. The situation we are facing is not optimistic. As a leading company in the domestic integrated circuit manufacturing industry, we should take on the responsibility of promoting industrial development and stimulating economic recovery. We will work with our business partners to overcome difficulties. We call on you to keep supporting SMIC as we work for the sustainable development of our enterprise and society as a whole, and continue to make new achievements.

2019 Social Responsibility Performance, Awards and Honors

2019 Social Responsibility Performance



1

SMIC is Mainland China's most advanced and largest foundry, broadest in technology coverage, and most comprehensive in semiconductor manufacturing services.

US\$3,115.7 million

SMIC revenue reached US\$3,115.7 million in 2019.

75.1%

In 2019, our shareholder profits grew 75.1%, ranking the highest in the past five years.

22.1%

Our 2019 R&D investment reached a record of US\$687.4 million, accounting for 22.1% of revenue.

14nm

SMIC is the first company to mass-produce 14nm process technology in mainland China.



10.5%

The GHG emission per unit of products in 2019 was 10.5% lower than in 2018.

2.9%

The electricity consumption per unit of our products in 2019 decreased by 2.9% from 2018.

8.3%

External water consumption per unit of products decreased by 8.3% from 2018.

0.4%

Waste water discharge per unit of products fell 0.4% from 2018.

2.2%

The amount of waste generated per unit of products in 2019 decreased 2.2% from 2018.



4,083

We hired 4,083 new employees in 2019.

5,000 person-time

5,000 person-time of volunteers in 2019.

20,057 hours

Employees volunteered for 20,057 hours in 2019.

531

As of 2019, we had helped 531 impoverished children through our medical assistance programs.

RMB 9.3 million

Our total investment in social welfare exceeded RMB 9.3 million in 2019.



Awards and Honors



Listed in the FTSE4Good Index Series in December 2019



Included in the Hang Seng Corporate Sustainability Index Series for our ninth consecutive year



Earned the Outstanding Corporate Social Responsibility Award by the Mirror for the sixth consecutive year



Listed in the Top 50 CSR Award in ICT industry on China Electronics and Information Technology Industry CSR Annual Summit for the second consecutive year

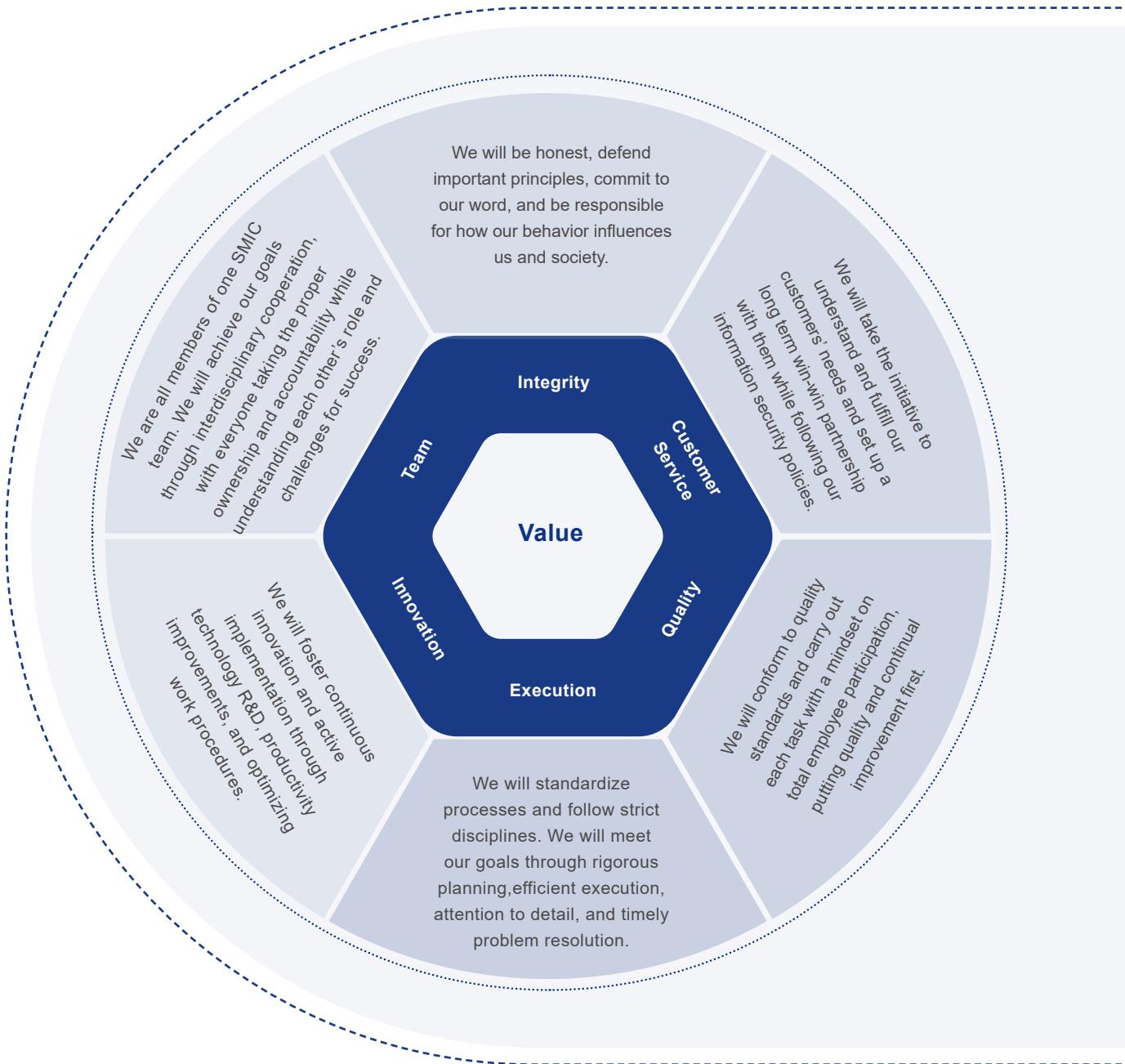
Core Values

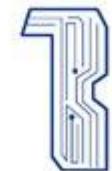
Vision

To be recognized by global customers and stakeholders as a high quality, innovative and trusted foundry.

Mission

We aim to achieve a sustainable and profitable growth by committing to far-sighted strategies, efficient execution, outstanding product services, innovation and fostering talent.





About SMIC

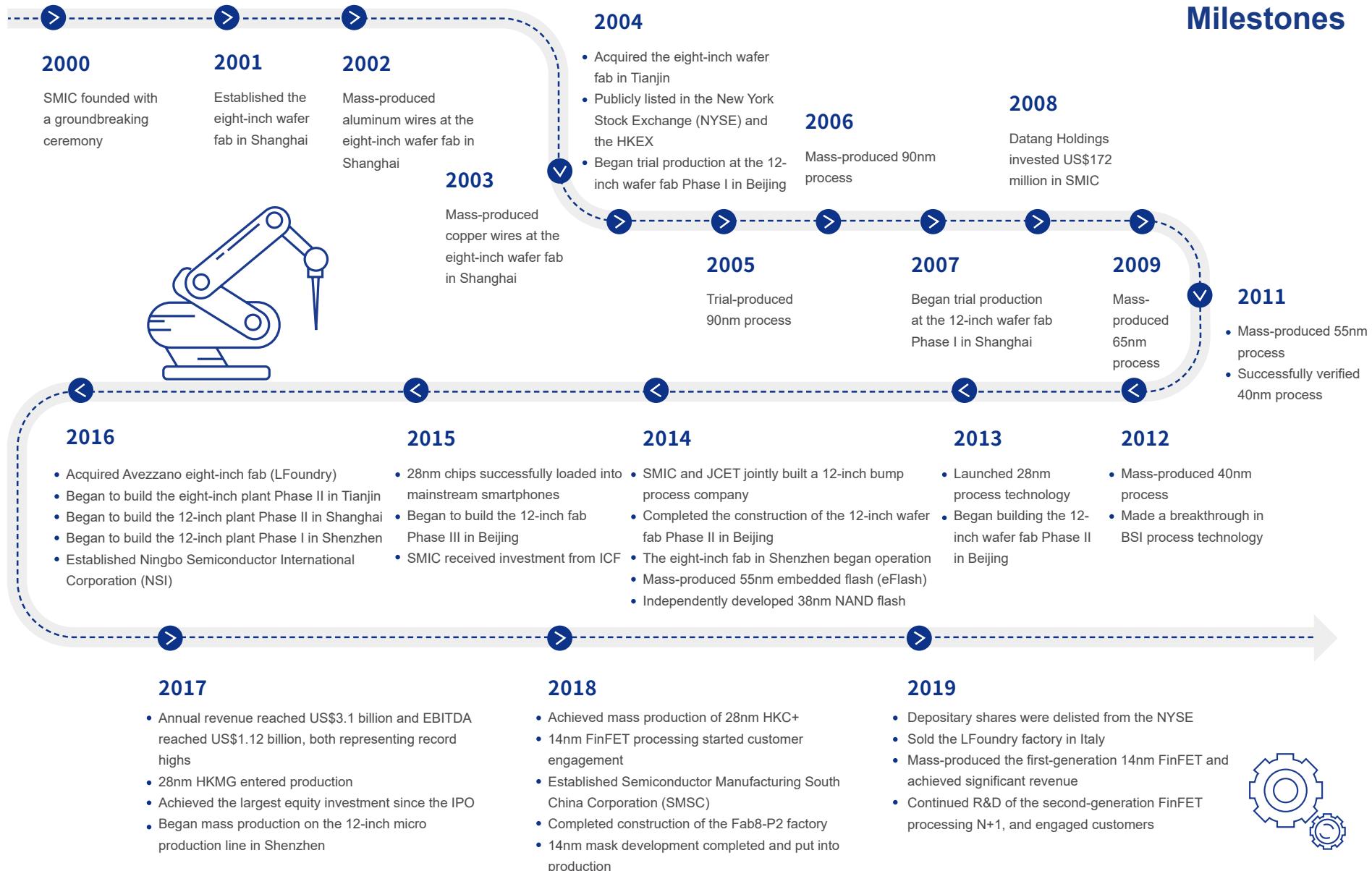
Semiconductor Manufacturing International Corporation ("SMIC", SSE STAR MARKET: 688981; SEHK: 00981; OTCQX: SMICY) and its subsidiaries collectively constitute one of the leading foundries in the world, is Mainland China's most advanced and largest foundry, broadest in technology coverage, and most comprehensive in semiconductor manufacturing services. SMIC provides integrated circuit (IC) foundry and technology services on process nodes from 0.35 micron to 14 nanometer.

Company Profile Market Position

Products and Service Financial and Tax Information



Milestones





Company Profile

Headquartered in Shanghai, China, SMIC has an international manufacturing and service base. In China, SMIC has a 300mm wafer fabrication facility (fab), a 200mm fab and a majority-owned joint-venture 300mm fab for advanced nodes in Shanghai; a 300mm fab and a majority-owned 300mm fab for advanced nodes in Beijing; 200mm fabs in Tianjin and Shenzhen; and a majority-owned joint-venture 300mm bumping facility in Jiangyin. SMIC also has marketing and customer service offices in the U.S., Europe, Japan, and Taiwan China, and a representative office in Hong Kong China.



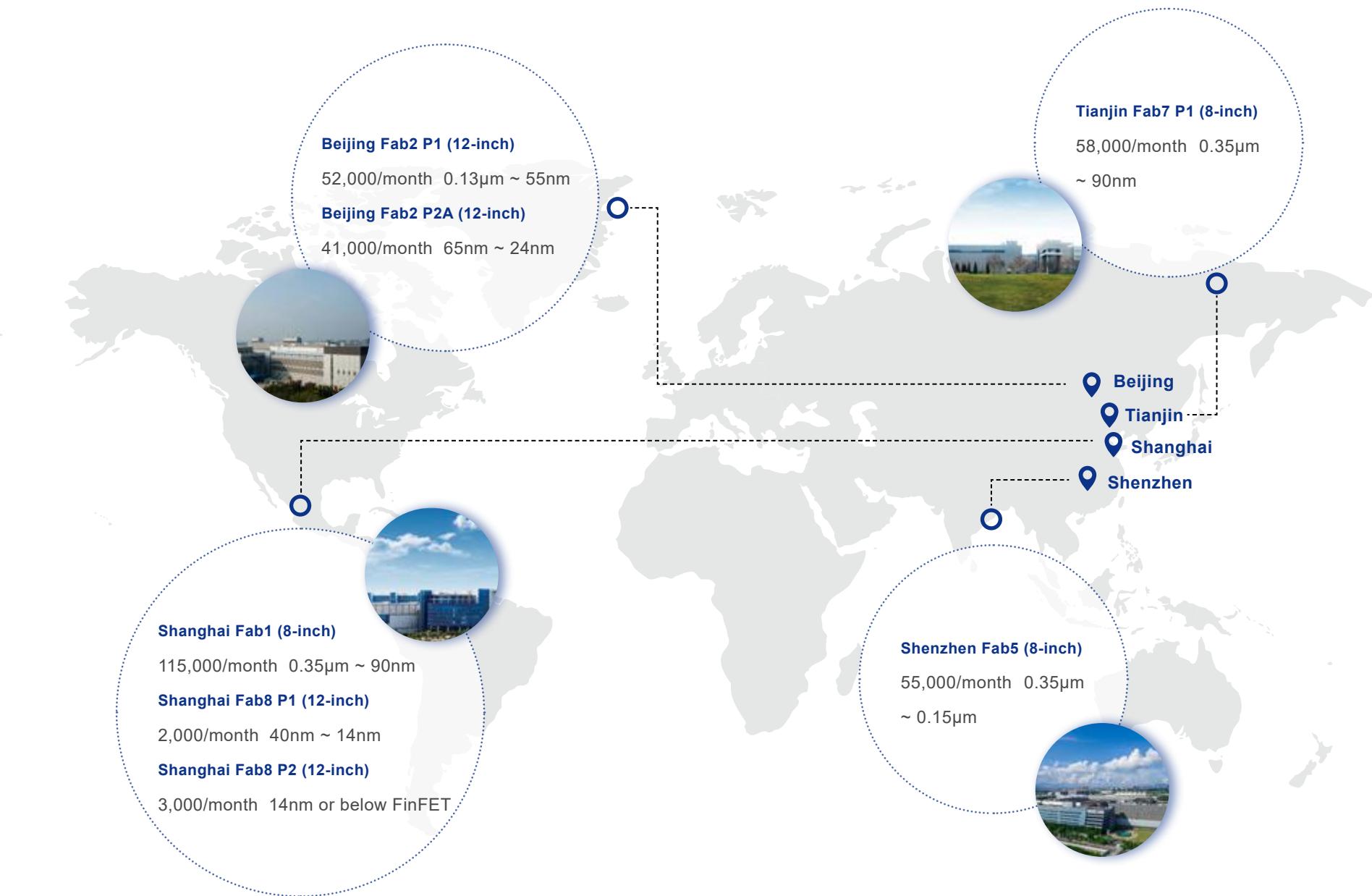
Headquarters:
Zhang Jiang Hi-Tech Park

Date of establishment:
2000

Number of employees:
15,946

Major business:
Integrated circuit foundry service

Production capacity
450,000 eight-inch wafer equivalents per month



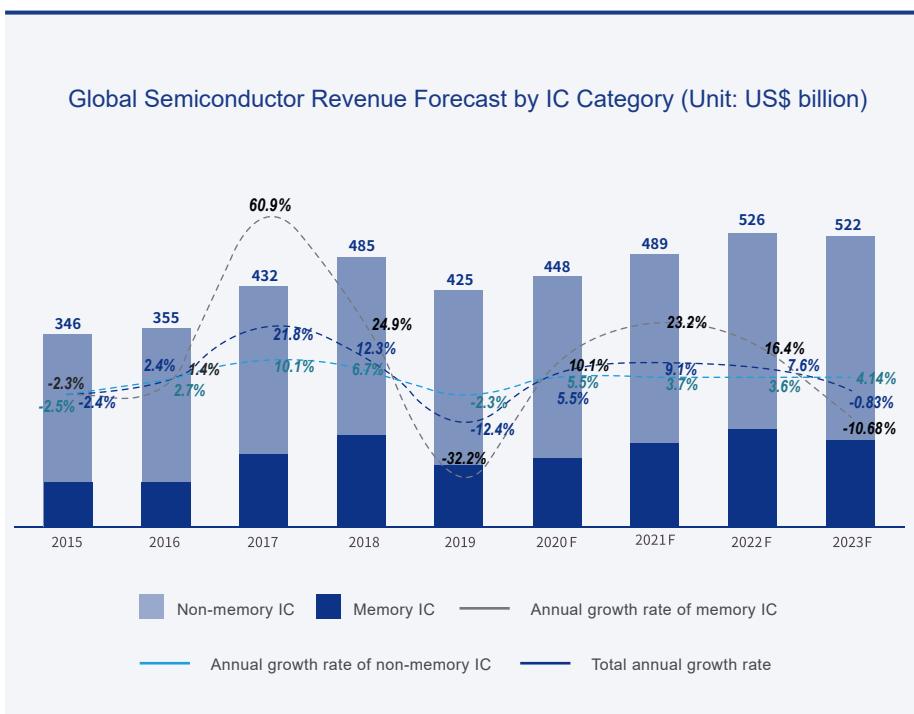


Market Position

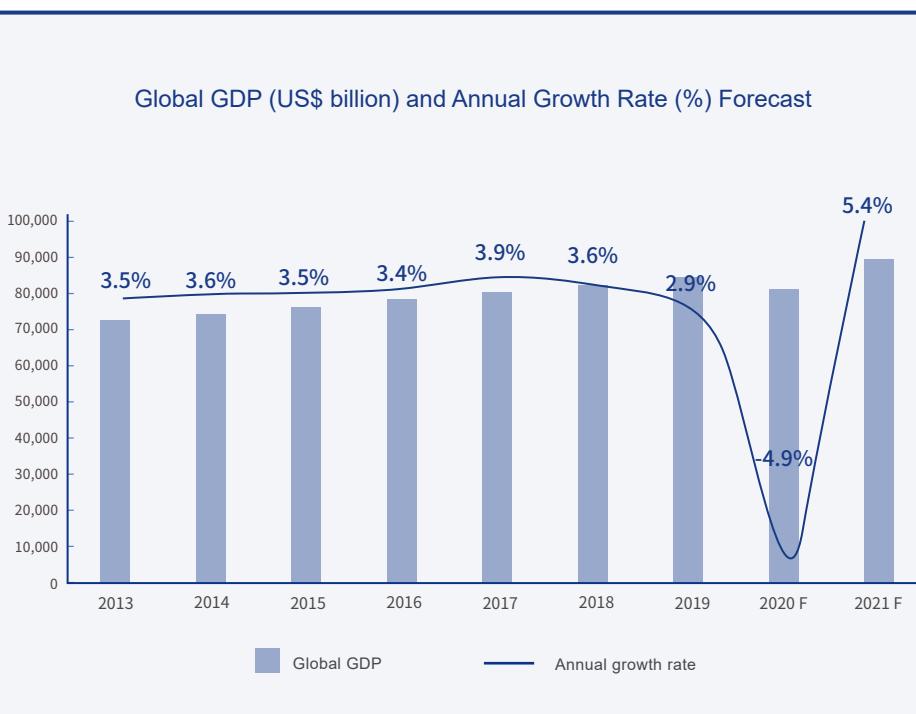
Global Market Position

According to IHS Markit, the global semiconductor market revenue was US\$425 billion in 2019, a year-on-year 12.4% decrease. The annual growth rate of memory products was 32.2% decrease and the annual growth rate of non-memory products was 2.3% decrease.

Due to the impact of the COVID-19, the global economy would go downturn in 2020. It is, however, expected that the global economy will continue to grow after full recovery from the epidemic. So does the semiconductor market.



Source of data: IHS Market, AMFT, 4Q19

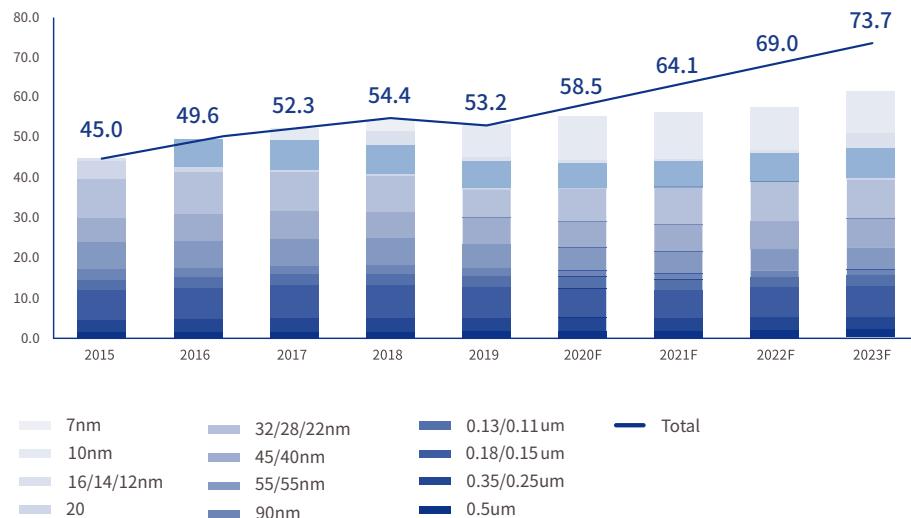


Source of data: IMF, June, 2020



IHS Markit estimated the revenue of the pure-play foundry market at \$53.2 billion in 2019, with an annual decline of 2.2%. But with the popularity of our fabless IC design business model and the growing reliance of integrated device manufacturers (IDMs) on the manufacture of advanced nodes by pure-play foundries, the revenue of leading pure-play foundries will continue to grow. It's expected that the pure-play foundry market will reach \$73.7B in 2023, with a 2019-2023 compound annual growth rate (CAGR) of 6.0%.

Global Pure-Play Foundry Revenue Forecast (US\$ billion)



Source of data: IHS Markit, Pure Play Foundry Market Tracker, December, 2019

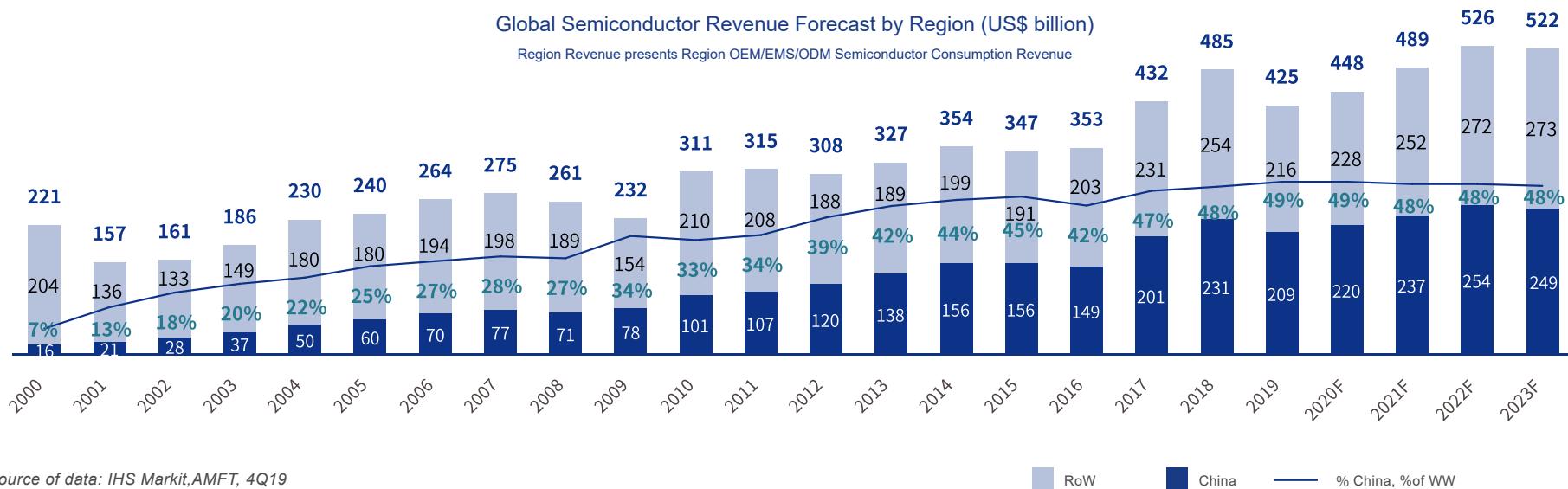


China Semiconductor Market

With the high concentration of electronics production related industries, China continues to have the number one semiconductor demand in the world. According to the statistics from IHS Markit 4Q19, the worldwide semiconductor revenue reaches \$425B in 2019, with YoY rate of -12.4%. The main market-driven applications include mobile communication, 5G, IoT, AI, automotive, and industrials. China holds 49% of the global semiconductor market share. Local brands and IC designers continue to thrive.



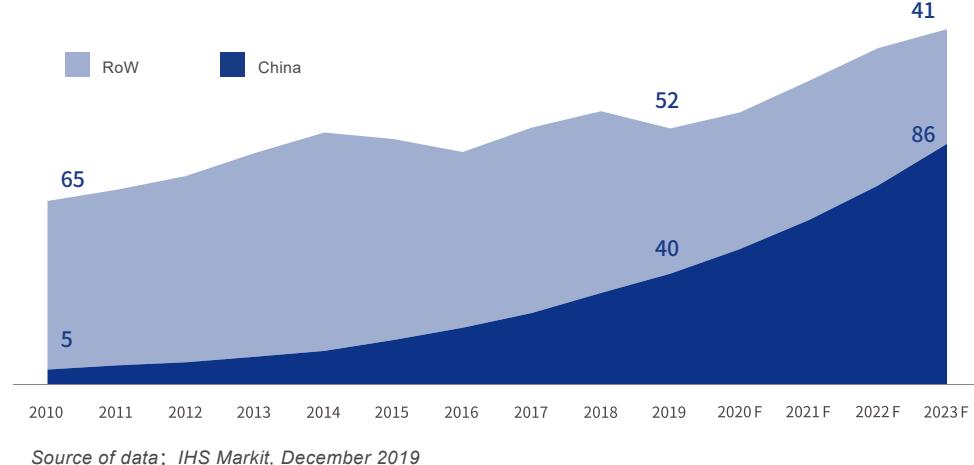
China's share of the global semiconductor market continues to grow



As the leading pure-play foundry in China, SMIC serves both the domestic Chinese fabless and overseas IDMs and fabless companies.



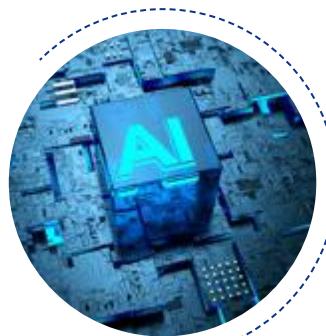
China's IC Design Companies Are Growing Quickly





The traditional electronics market spans sectors including automotive, computer, communication, consumer, and industrial. Most of these products now incorporate technologies including the internet of things (IoT), artificial intelligence (AI), and deep learning, which create opportunities for the semiconductor industry with various requirements for ICs, such as high density, low power consumption, and high-speed-related features.

Future Market Growth Blocks



Mobile

- 5G/LTE
- AMOLED
- Bio-sensing
- 3D-CIS
- Modular structure
- Quick / wireless charging
- AR/VR
- AI (edge)

IoT

- | | |
|-----------------|------------------|
| LPWAN/NB-IoT | Smart grid |
| Smart home | Smart farming |
| Smart wearable | Smart industrial |
| Smart medical | Security |
| Smart logistics | M2M |
| Smart city | Smart Dust |
| | AI (Edge) |

Automotive/Industrial

- ADAS
- V2V, V2I, V2X
- Autonomous driving
- Radar, Sensor hub
- EV/HEV
- AI (Edge)

Infrastructure

- HPC
- SCM
- Cloud storage/Cloud computing
- Optical Transport network (OTN)
- AI (Cloud)



Competitive Advantages

SMIC is one of the few pure-play foundries in the world offering complete wafer manufacturing solutions from mature to advanced processes. The 0.35µm to 14nm products are now in mass production, and 7nm FinFET processing is in development. SMIC boasts a wide range of advantages in the pure-play foundry market.

SMIC Continues to Promote Advanced Processing

Others	Altis Semiconductor	Others	Dongbu HiTek	Huahong Grace Semiconductor	SMIC	UMC	Global Foundries	TSMC	Seiko Epson	Fujitsu	IBM	Panasonic	Freescale	Sony	Infineon	Renesas Electronics	STMicroelectronics	Toshiba	Texas Instruments	Samsung	Intel	130nm	
Others	Dongbu HiTek	Others	Huahong Grace Semiconductor	Huahong Grace Semiconductor	SMIC	UMC	Global Foundries	TSMC	Seiko Epson	Fujitsu	IBM	Panasonic	Freescale	Sony	Infineon	Renesas Electronics	STMicroelectronics	Toshiba	Texas Instruments	Samsung	Intel	90nm	
					SMIC	UMC	Global Foundries	TSMC														65/55nm	
					Others	SMIC	UMC	TSMC														45/40nm	
						Others	SMIC	TSMC															32/28nm
							SMIC	UMC															22/20nm
							SHHIC	TSMC															16/14nm fin-shape components (FinFET)
							UMC	Global Foundries															10nm fin-shape components (FinFET)
							Global Foundries	IBM															7nm fin-shape components (FinFET)
								TSMC															5nm fin-shape components (FinFET)

High Capital Expenditure

Complex Technology

Talent Shortage

Manufacturing Innovation

Pure-play Foundries

IDM

Source of data: ARM,
SMIC internal studies,
4Q19

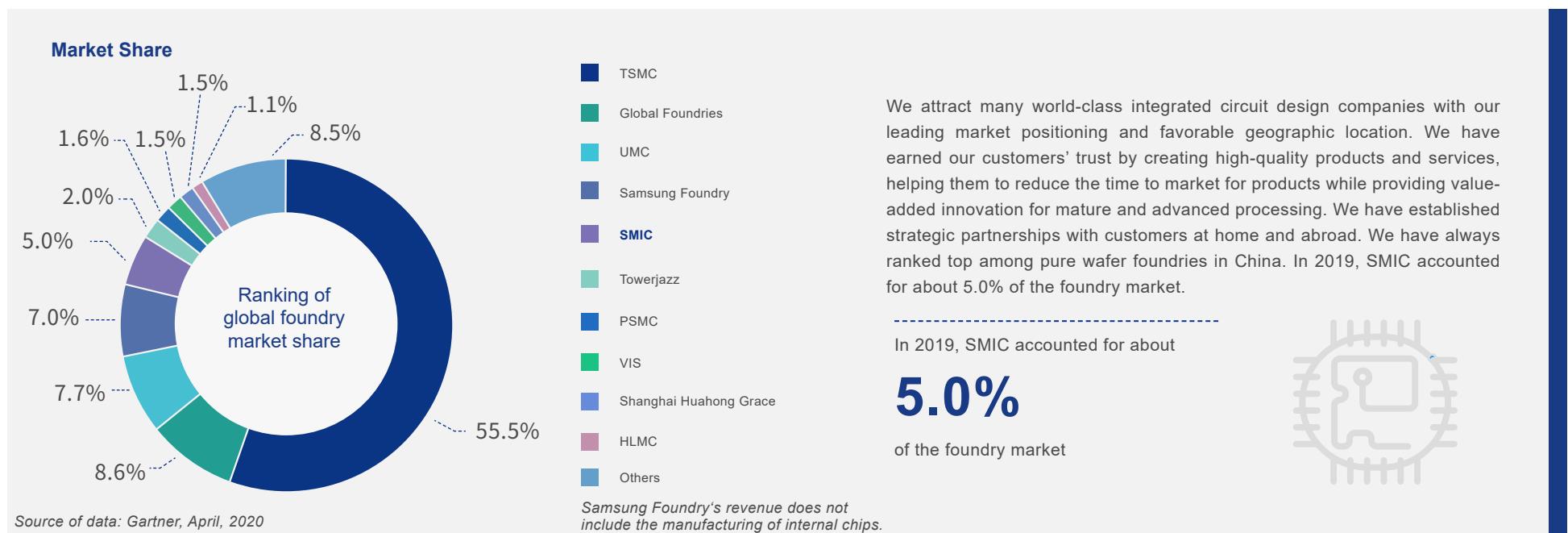


SMIC Exceeds the Average Capacity Usage Rate of the Global Foundry Industry



Source of data: 4Q19 IHS, SMIC

— SMIC capacity usage rate - - - Industry average capacity usage rate





Products and Services

Integrated Circuit Industry Value Chain

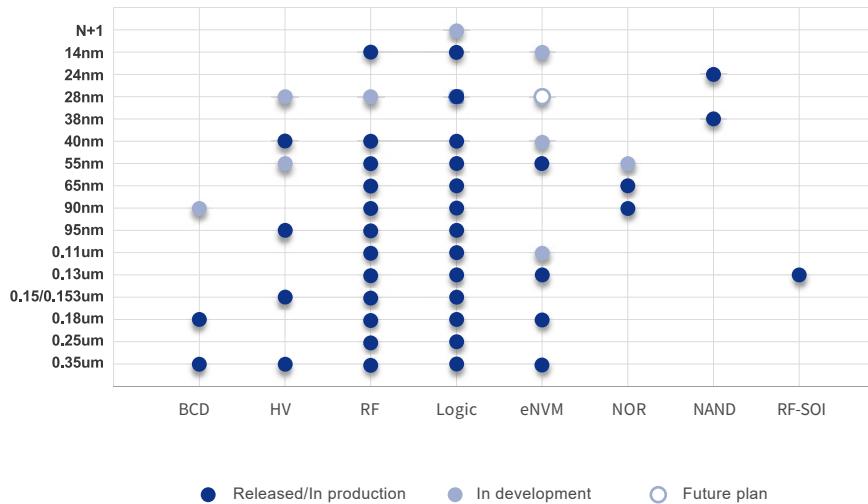




Technology Products

SMIC focuses on the balanced development of mature and advanced processes. We have a comprehensive product technology portfolio.

SMIC International Technology Platform

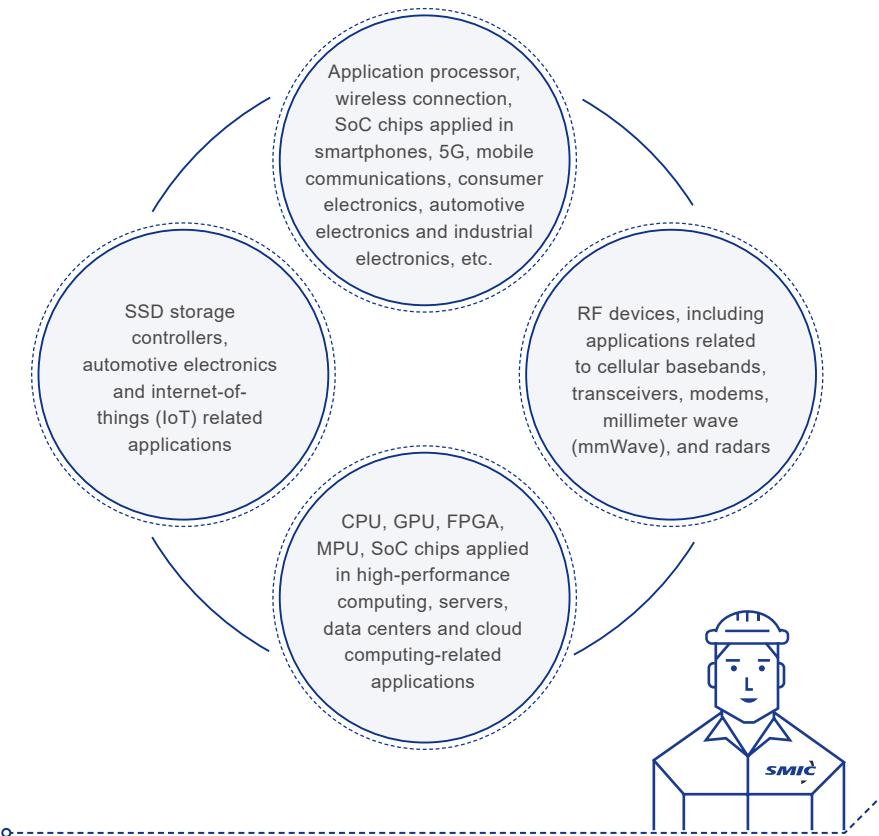


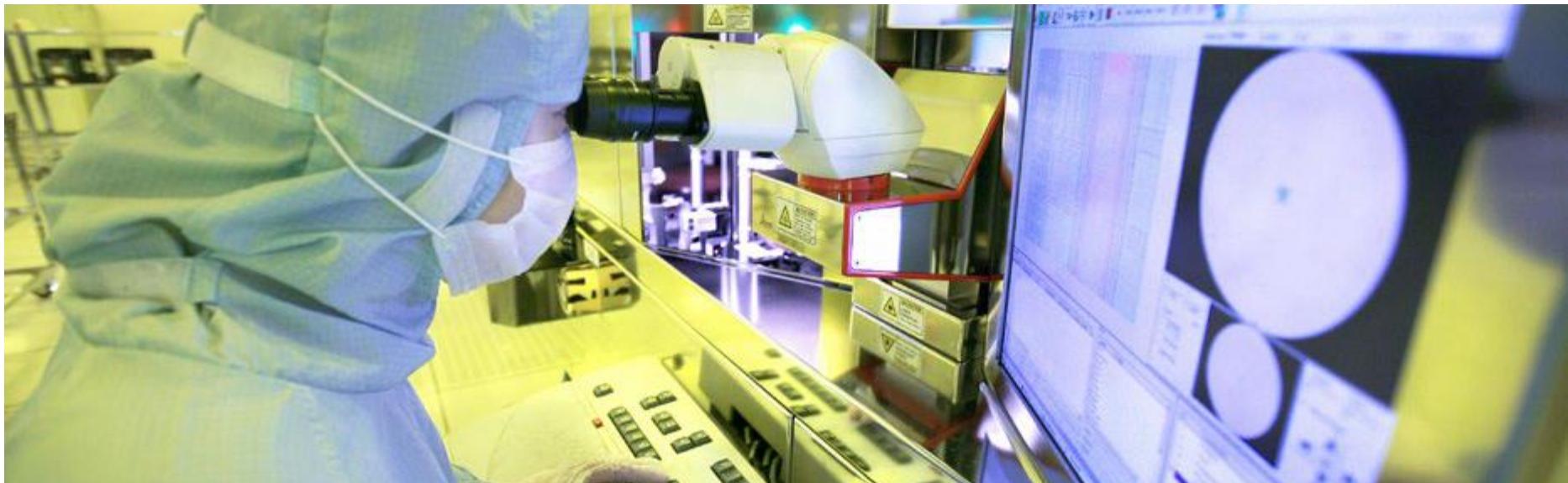
We provide manufacturing solutions regarding logic, mixed signals/RF, ULP (Ultra-Low-Power) devices, HV/BCD, IGBT, non-volatile memory (NVM, such as NOR flash and NAND flash), embedded NVM (eNVM, such as embedded flash memory, embedded electrical erasable read-only memory (eEE-PROM), one time programmable read-only memory (OTPROM), CMOS Image Sensors (CIS), fingerprint recognition chips, Micro-Electro-Mechanical System (MEMS) and through silicon via (TSV)/3DIC on various technologies.

Advanced Technology Products

14nm FinFET Technology Products

Our first-generation 14nm FinFET technology reached mass production in 2019. It has applications in the following fields:





28nm Technology Products

Our 28nm technology includes traditional polysilicon (PolySiON) and high-k metal gate (HKMG) processes of the gate-last. We launched it in the fourth quarter of 2013 and successfully entered the multi-project wafer (MPW) stage. In 2015, we made a key breakthrough in the yield of 28nm products and produced mobile phone processor chips with low power consumption and high performance for customers. In the fourth quarter of 2015, we put the 28nm products into mass production and began generating revenue. In 2016, we continued to provide stable supplies of our 28nm products for key pioneer customers and expanded new business cooperation. In 2018, our 28nm HKC+ entered mass production stage, reaching standard industry yields. Up to now, more than 150 IPs from SMIC design service teams and many third-party IP partners have provided various project services for globally integrated circuit design companies. In the future, we will continue to position our 28nm process in the mobile computing and consumer electronics fields including smartphones, tablets, wireless connection products, digital TVs, set-top boxes, solid-state drives, and the internet.

45/40nm Technology Products

SMIC was the first fab to provide 40nm technology in mainland China. The 40nm standard logic process provides a low leakage (LL) device platform, 1.1V core devices of three threshold voltage levels, as well as 2.5V I/O options (OD 3.3V, UD 1.8V), to meet different design requirements. The 40nm logic process integrated advanced immersion lithography, stress technology, ultra-shallow junction (USJ) technology, and low-k dielectric. This processing technology achieves the perfect combination of high performance and low power consumption, suitable for a wide range of scenarios including mobile phone basebands and application processors, multimedia application processors in tablet computers, digital TVs, set-top boxes, games, and other wireless interconnection applications. The 40nm ULP products in the development which can work at 0.9 V are tailored for IoT application scenarios.





65/55nm Technology Products

Our 65/55nm process platform can support a wide range of IC products including logic, mixed signals, RF, BCD, NOR flash, eFlash and CIS. We have years of experience in mass 65/55nm production and customers use these ICs in mobile computing, electronic home appliances, and mobile storage. Our 65/55nm solution gives customers a stable high yield and a diversified and verified IP platform. It offers high performance and low power consumption, which helps optimize advanced technology costs and improve product design. We select our 65/55nm technology process components from low leakage (LL) device platform, core devices of three threshold voltage levels, and options with 1.8 V I/O, 2.5 V I/O, or 3.3 V I/O, to achieve a flexible process design platform. In 2014, SMIC became the world's first professional pure-play foundry to provide 55nm eFlash solutions for smart cards and SIM cards and achieved mass eFlash production in the fourth quarter of 2014. In 2015, we announced the 55nm ULP platform with low operating voltage, low leakage, and low power consumption. 55nm ULP products with an operating voltage of 0.9 V enjoy 90% lower leakage than the 1.2 V 55nm ULP products.

Our 65/55nm RF/IoT portfolio supports products in areas including wireless LAN, GPS, Bluetooth, NFC, and ZigBee. eFlash and RF technologies open up IoT wireless connection opportunities for our 55nm wireless solution.





Mature Technology Products

90nm Technology Products

Our 300mm wafer fab has mass-produced multiple 90nm products available to customers worldwide. The 90nm process adopts copper interconnect, low-k material to produce high-performance semiconductor components. 90nm production at our state-of-the-art 12-inch facilities is cost efficient and open to technology enhancements. We can customize it to accommodate different design requirements including high speed, high performance, low power consumption, mixed signals, RF, and embedded solutions.



0.13μm/0.11μm Technology Products

Compared with 0.15μm process technology, our 0.13μm process can reduce the chip size by 25% or more and improve performance by about 30%. Compared with the 0.18μm process technology, the chip size can be reduced by more than 50% and its performance can be improved by more than 50%. The 0.13μm process adopts all-copper processing technology, which can drive high-performance devices while enabling cost optimization. The 0.13μm technology uses eight metal layers with a poly gate length of 0.08μm and can offer generic devices with a core voltage of 1.2V and I/Os with a supply voltage of 2.5V or 3.3V options. The low-voltage and low-leakage processing products have been in mass production. The 0.13μm cell library, memory compilers, I/O, and analog IP are available directly from SMIC or through our network of library partners.



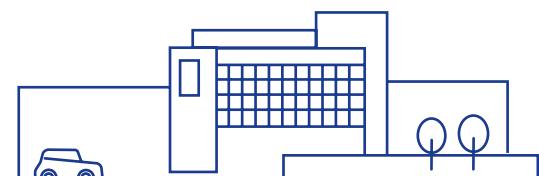
0.18μm Technology Products

The 0.18μm process technology family includes logic, mixed signal/RF, high-voltage, EEPROM, and OTP technologies. They are all supported by an extensive range of libraries and IPs. This process adopts a single poly, up to six-metal-layers (1P6M) (aluminum) process, which is characterized by a high gate density of over 100,000 gates per mm² and three voltages of 1.8 V, 3.3 V and 5 V for customers to choose from. SMIC provides low-cost and verified smart cards, electronic products for consumers, and other wide-ranging application products based on the 0.18μm technology, providing the best choice of speed, power, density, and cost for multiple product applications such as consumer products, communication, and computing. It also offers customers flexible solutions with modules for embedded memory, mixed signal, or RF CMOS.



0.35μm/0.25μm Technology Products

SMIC provides 0.25μm logic circuits and mixed signals/RF CMOS (for 3.3V and 5V applications) along with cost-effective and proven solutions at the 0.35μm process, which can be applied to multiple fields such as smart cards and consumer products. Our 0.35μm process technology includes logic circuits, mixed signals/RF CMOS, HV circuits, EEPROM and OTP chips. These technologies are supported by a wide range of libraries and IPs.





Product Application Scopes

Our foundry solutions serve the applications shown on the right. More than 80% of our revenue comes from the communication and consumer sectors with driving applications such as smartphone/feature phones, tablets, DTV, STB, smartcards, DSC/DV, home appliances, memory storage, and consumer electronics.

SMIC's Product Application Scopes





IC Services

IP Development Service & Design Service

We offer a vast and diverse portfolio of semiconductor IP blocks from 0.35μm to 28nm to support the design needs of customers. Our design services support customers' designs for production, using proven technologies to allow improvements in chip complexity, performance and functionality, while reducing power consumption and optimizing die size. Our services minimize chip design risk and shorten products' time to market.

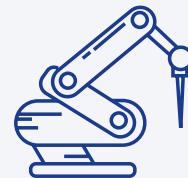


Mask Making Service

Our mask shop provides mask manufacturing services for SMIC's foundry customers and other fabs and institutions. Currently, SMIC has China's largest and most advanced mask making facility with 0.50μm to 28nm in production and also with 20nm and 14nm capabilities. Equipped with state-of-the-art equipment and tools, the facility offers binary masks and phase shift masks complete with optical proximity correction (OPC). Both 5"×5" and 6"×6" reticles are available for G-line, I-line, DUV and ArF steppers and scanners.

Multi Project Wafer (MPW) Service

SMIC's Multi-Project Wafer (MPW) program offers customers a cost-effective prototyping service by enabling multiple customers and projects to share common mask and engineering wafers. We provide a shuttle service for processes from 0.18μm to 28nm on a regular basis.



Wafer Probing and Testing Services

Our test facility provides customers with quick turnaround and strict quality control for wafer-level testing. Our advanced testing and laser repair machines offer customers comprehensive testing services in 200mm and 300mm wafer sizes. Services offered include wafer probing, epoxy probe card building and repair, and testing for contact and contactless IC card types. The wafer probing service includes test program development as well as failure analysis and reliability testing. We can build, repair, and maintain epoxy probe cards up to 16 DUTs as well as low-leakage probe cards.

Bumping Service

Bumping is a necessity for wafer yield testing of advanced front-end IC manufacturing technologies and is the basis of the 3D wafer level packaging technology development. We offer an 8" bumping service in-house and have also founded a joint venture with JCET for 12" bumping and related testing services.

Our bumping line is capable of lead-free solder bump processing, redistribution layer (RDL), WLCSP processing, and die processing services (DPS). The solder bumping processes are compatible with both Al and Cu pads. This service can be used on products such as SoC, RF devices, and high performance ICs that require flip chip or wafer-level chip scale packaging. DPS, which takes either bumped or WLCSP products from wafer form into die form (including processes such as testing, die saw and tape & reel), is also offered for customers who require backend services.



Financial and Tax Information

Financial Performance

Full-year revenue in 2019 reached US\$3,115.7 million while revenue in 2018 was US\$3,360.0 million. Our revenues excluding the Avezzano 200mm wafer fab and the confirmed 2018 technology licensing revenue increased from US\$2,973.1 million in 2018 to US\$3,014.0 million in 2019. Gross profit was US\$642.5 million and the net profit margin was 5.1%. The profit attributable to SMIC shareholders was US\$234.7 million. For more financial information, see the 2019 annual report.

Full-year revenue in 2019 reached

US\$ 3,115.7 million

Gross profit was

US\$ 642.5 million



The net profit margin was

5.1%



The profit attributable to SMIC shareholders was

US\$ 234.7 million

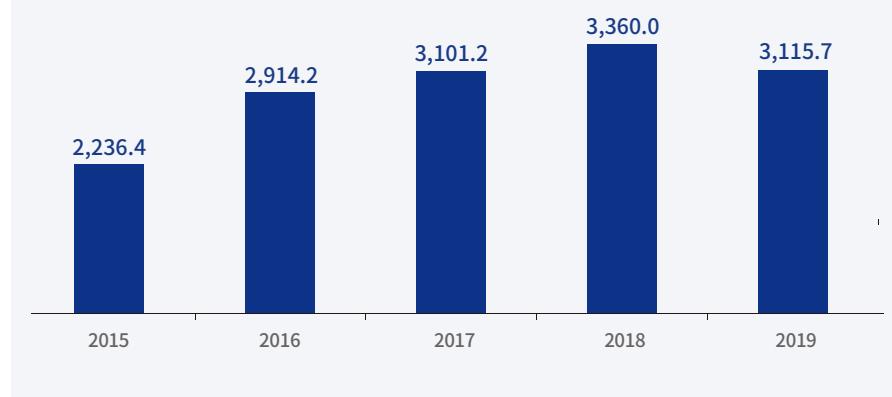


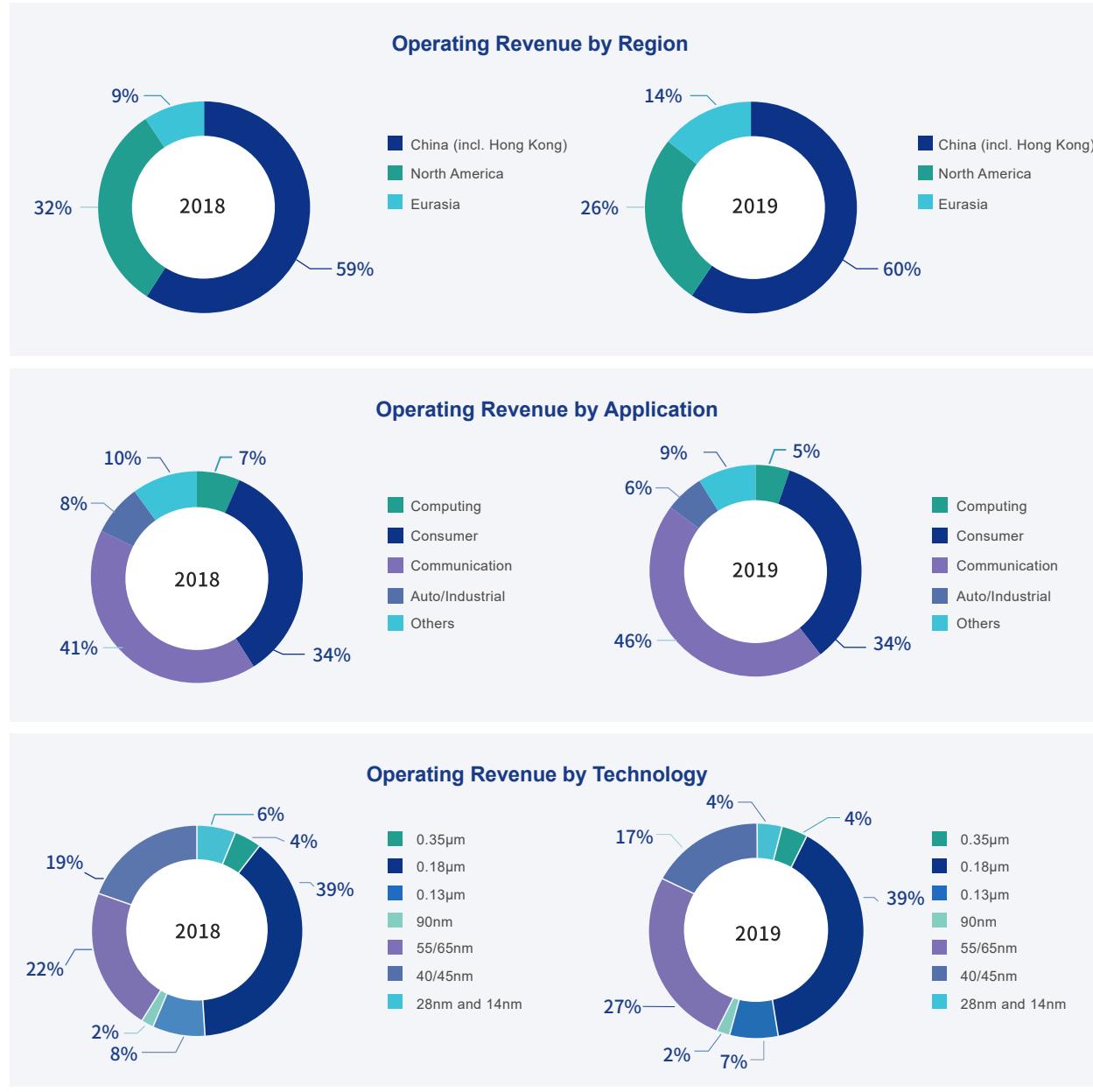
Main Financial Indicators

Financial Indicators	2015	2016	2017	2018	2019
Operating revenue (US\$ million)	2,236.4	2,914.2	3,101.2	3,360.0	3,115.7
Operating revenue growth (%)	13.5%	30.3%	6.4%	8.3%	-7.3%
Profit attributable to the owner of the Company (US\$ million)	253.4	376.6	179.7	134.1	234.7
Profit growth rate to the owner of the Company (%)	65.7%	48.6%	-52.3%	-25.4%	75.1%
Attributable ROE to the owner of the Company (%)	6.8%	9.1%	3.5%	2.5%	4.1%
Asset-liability ratio (%)	41.1%	46.6%	43.6%	38.1%	38.0%
R&D inputs (US\$ million)	273.4	370.8	509.4	663.4	687.4
Ratio of R&D input to operating revenue (%)	12.2%	12.7%	16.4%	19.7%	22.1%

Note: the data of R&D input is consistent with the previous comparative data of R&D expense disclosed in SMIC's 2019 annual report.

Operating Revenue (US\$ million)







Tax Performance

We comply with tax regulations and pay taxes in accordance with the law. We adhere to this principle by taking the following actions:

We established a forecasting and evaluation mechanism and integrated tax management into our business decision-making and daily business management activities. These help us to examine the impact of taxes.

01

We complied with international tax laws, regulations, and policies by conducting tax-related work based on our business operations, meeting our tax payment obligations in accordance with the law.

02

We continuously optimized our tax management process, promoted departmental collaboration, and focused on effective control and risk reduction during tax management.

03

In 2019, SMIC paid

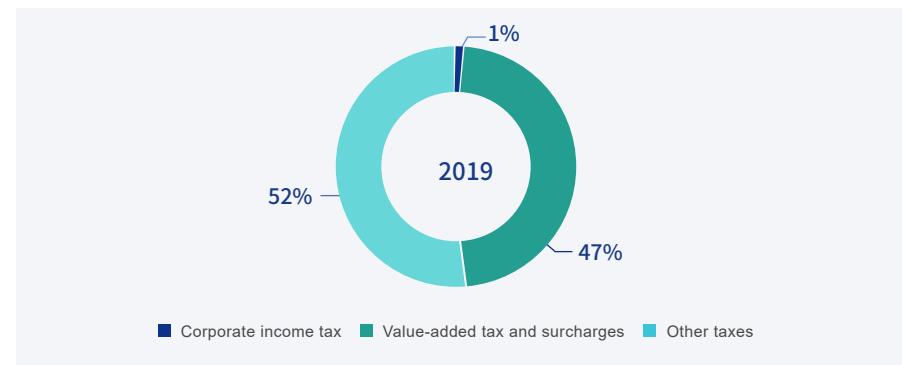
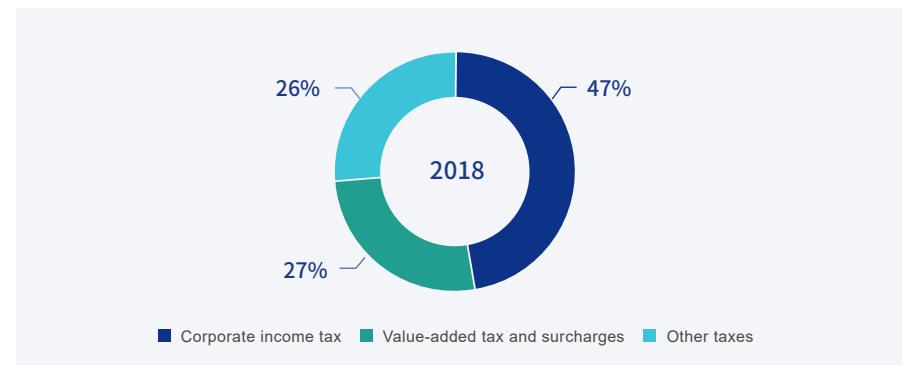
US\$ **26** million

to tax authorities (excluding withholding taxes)

More than

99% of

taxes were paid in China





Corporate Social Responsibility Management



As an international company, SMIC must comply with strict legal requirements for corporate governance, financial accounting, and transparent reporting. Our business practices also must be ethical, safe, environmentally sound, and fair to our employees, in accordance with all the laws, rules, and regulations of the countries where we operate.

- Social Responsibility Policy
- Social Responsibility Management Mechanism
- Interactions with Stakeholders



Social Responsibility Policy

In addition to obeying the letter and mandates of such laws, we seek to promote their spirits. Through our CSR Program, we hope to advance social, environmental, and ethical responsibility according to internationally recognized standards. In short, we intend to remain worthy of our inclusion in the Hang Seng Corporate Sustainability Index Series as a company that has "attained a high standard of performance in the environmental, social and corporate governance areas".

To achieve these goals:

We declare our support for Responsible Business Alliance (Formerly the Electronic Industry Citizenship Coalition®) Code of Conduct and will actively pursue conformance to the Code and participation by our suppliers.

We will strive to maintain a safe workplace for our employees and a healthy environment for the public while minimizing adverse effects on the community, environment, and natural resources, consistent with our Environmental Protection, Safety, & Health Policy and our related ISO and other international certifications.

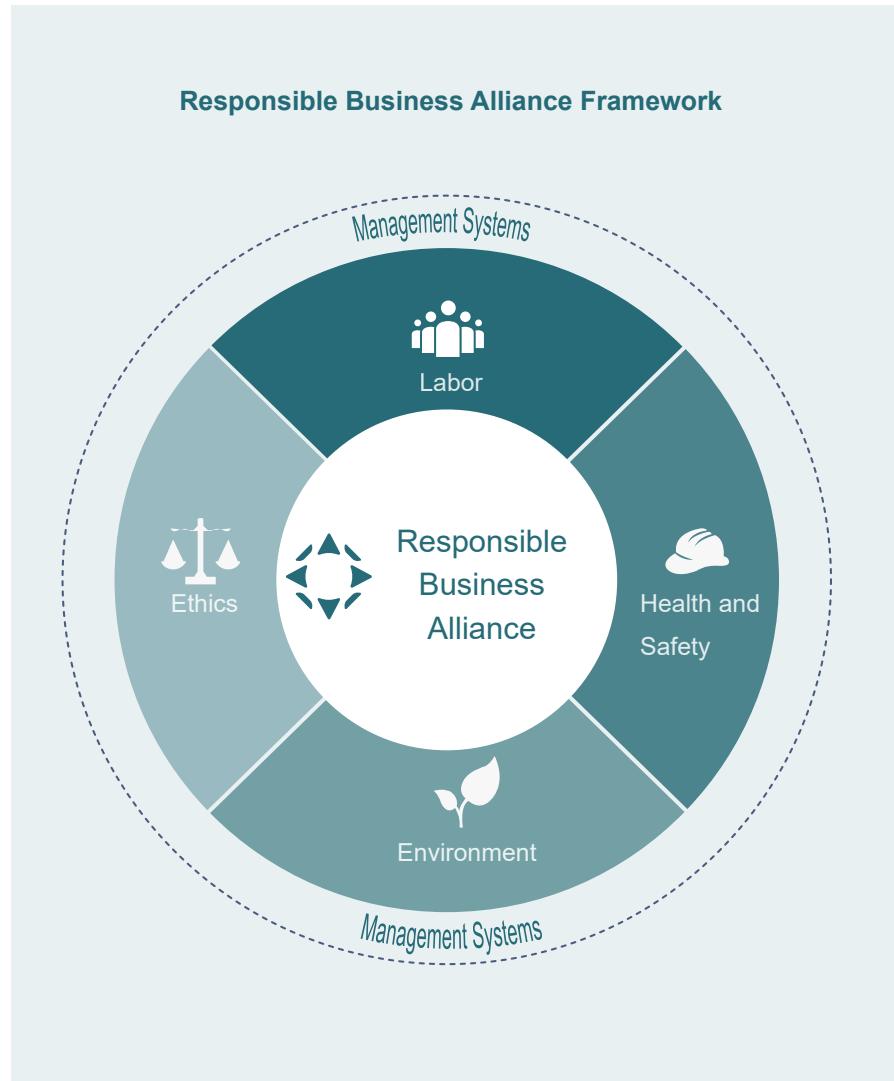
We will uphold the human rights of our staff and the highest standards of business integrity, as required by the RBA Code, the SMIC Code of Business Conduct & Ethics, SMIC Human Resources policies, and all other SMIC policies.

We will develop and maintain management systems to implement this CSR Policy with continual improvement as part of a holistic CSR Program.

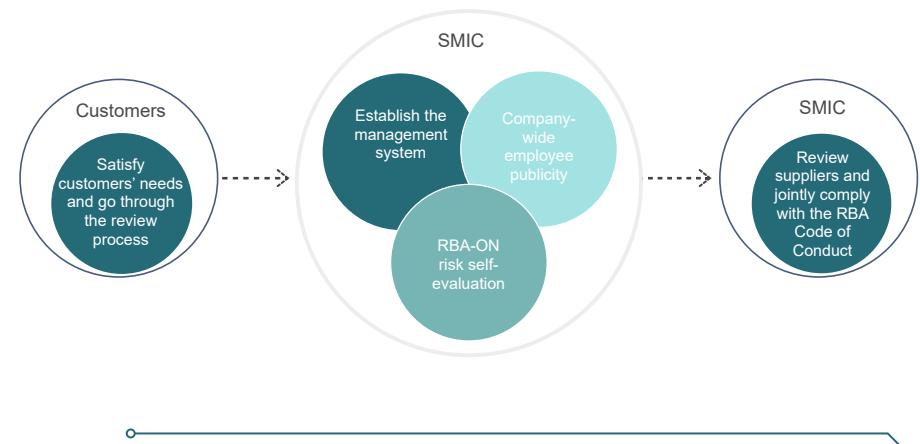




Responsible Business Alliance



Implementation of Responsible Business Alliance



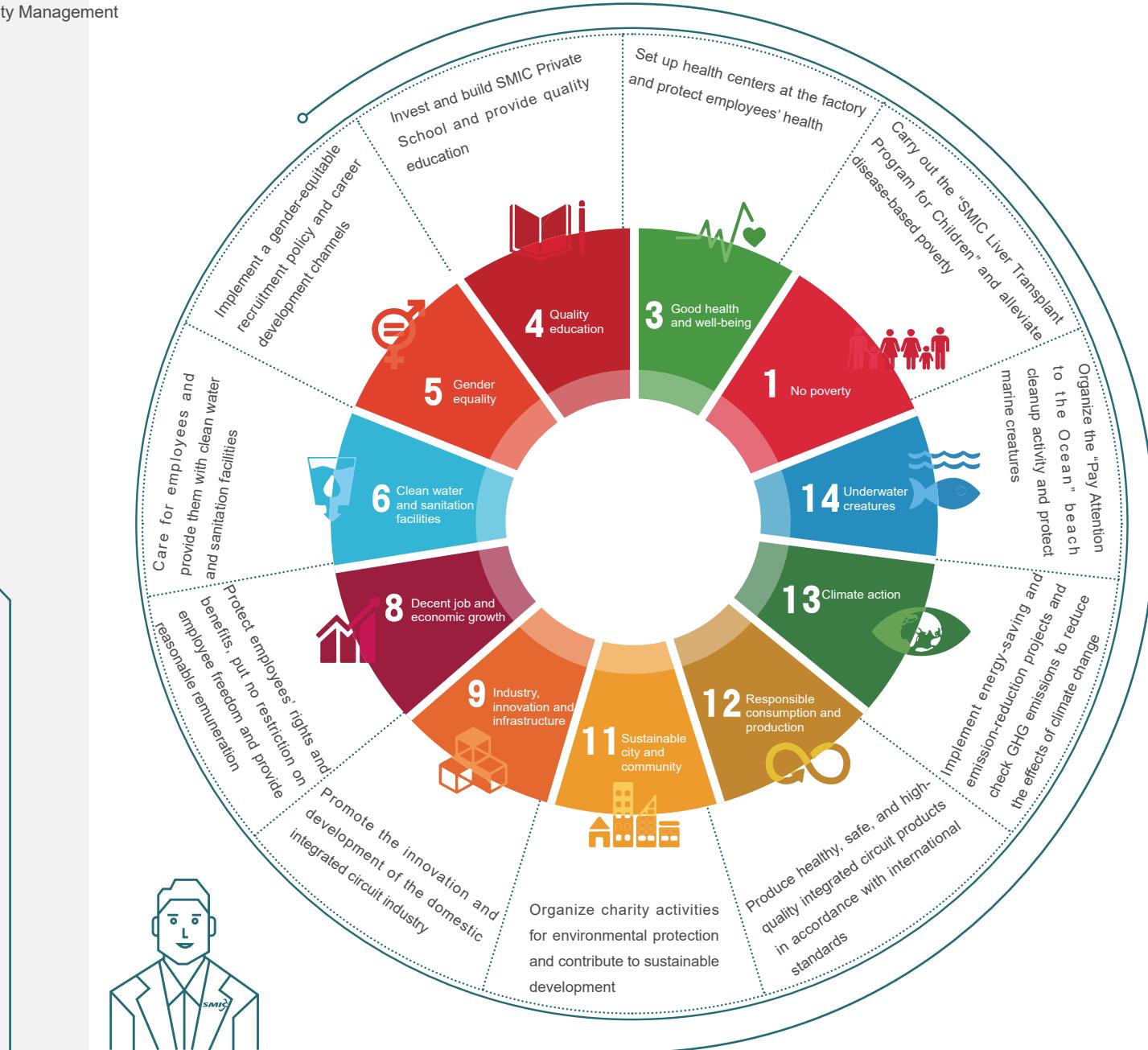
In 2013, we began assessing our environmental, health, safety, labor, and ethical management using the Responsible Business Alliance Online Risk Assessment (RBA-ON) system, and developing a continuous improvement plan for the existing risks. In 2019, the Company and its plants were rated at low risk upon assessment. We will continue to make improvement and try to keep the risk at a lower level as far as possible.

Besides adhering to the RBA Code itself, SMIC also requires suppliers to comply with the Code and fulfill their social responsibility. Key suppliers must sign an undertaking to this effect. According to the implementation performance of suppliers, we conducted on-site audit on major domestic suppliers in 2019, and once again promoted the Code.



The UN's Sustainable Development Goals

In 2019, SMIC continued to incorporate some requirements of the UN's Sustainable Development Goals and China's National Plan for Implementing the 2030 Agenda for Sustainable Development into our CSR management.



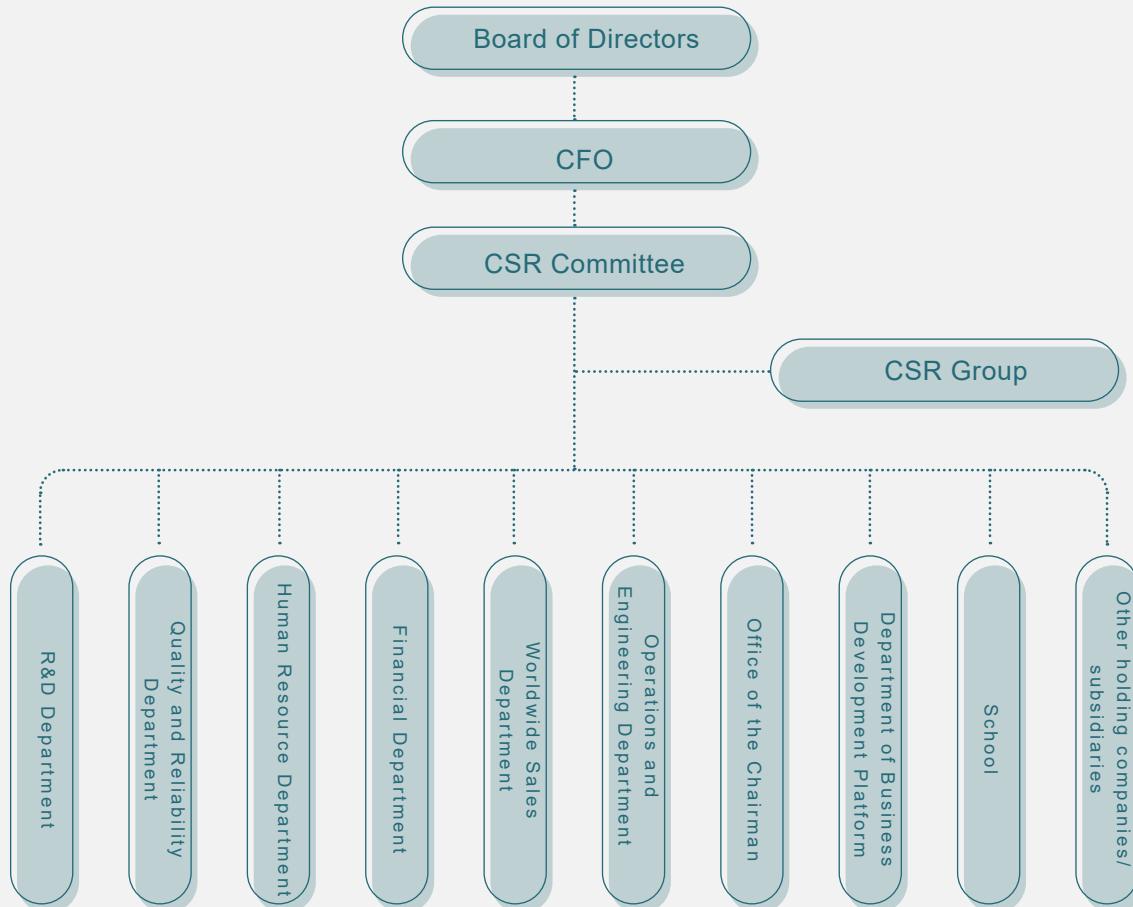


Social Responsibility Management Mechanism

SMIC has established the CSR Committee to promote CSR management projects and achieve the goals in the CSR policy. Under the leadership of the Board of Directors, where the CFO serves as Chairman and the Vice President of Public Affairs works as Vice Chairman, the representatives from all functional departments hold the position of committee members to jointly carry out CSR work. The CSR Committee holds monthly work meetings to review social responsibility-related issues and delivers regular CSR progress reports to our management.

The CSR Committee has several duties: create a CSR development outline, set and promote to achieve Company's CSR goals, supervise the implementation of CSR work across all functional departments, study, discuss, plan and promote CSR-related issues, ensure compliance, achieve our sustainable development goals, and show our care for people, the environment, and society.

CSR Committee Organizational Structure





Interactions with Stakeholders

Stakeholders

SMIC identifies six types of stakeholders on the basis of the principles of dependency, accountability and influence among them.



Communication with Stakeholders

SMIC safeguards stakeholder interests by maintaining good communications between CSR Committee members and the stakeholders, describing international and social trends and company status, and responding to stakeholder needs.

Stakeholder Communication Management

Project	Description	Frequency
Identification of major stakeholders and concerned topics	CSR Committee responsible for coordination	per annum
Stakeholder communication planning and execution	CSR Committee and relevant departments to establish stakeholder communication channels	per plan
Stakeholder communication results verification	CSR Committee to discuss and report communication results, and feed back issues of concern	per annum
Disclosure	CSR Report	per annum

SMIC has established transparent and effective communication channels with all stakeholders to understand their needs and expectations of the Company as an important reference for the formulation of CSR policies and plans.



Corporate Social Responsibility Management

Type of Stakeholders	Employees	Shareholders/ Investors	Customers	Suppliers	Government	Society
Recipients	<ul style="list-style-type: none"> All employees 	<ul style="list-style-type: none"> Shareholders Investors Analysts HKEX OTC markets in the US 	<ul style="list-style-type: none"> Sales and technical support team Quality Management department 	<ul style="list-style-type: none"> Raw materials suppliers 	<ul style="list-style-type: none"> National and local Development and Reform Commissions, Economic & Information Commissions, Commercial Commissions, Science & Economic Commissions, Tax Departments, Financial Departments, Customs Departments, Environmental Protection Departments National and local industry associations Local management committees for regions including Zhangjiang, Yizhuang, Xiqing, Pingshan and other places 	<ul style="list-style-type: none"> Print media: newspapers, magazines Electronic media: internet, WeChat, TV, radio Nursing homes Non-profit organizations Living quarters
Communication Channels and Forms	<ul style="list-style-type: none"> Employee communication meetings Employee satisfaction surveys Email announcements Internal website Ethics violation tip-offs hotline SMIC magazine 	<ul style="list-style-type: none"> Annual general shareholder meeting, extraordinary shareholder meeting Quarterly SMIC financial report, investor conferences Seminars on investment institutions at home and abroad Non-deal roadshows Face-to-face meetings, phone calls and emails Financial media Annual and semi-annual report containing the information required for public disclosure by the HKEX and the OTC markets in the US, CSR report, and news irregularly posted on official company website and WeChat public account 	<ul style="list-style-type: none"> Semi-annual customer satisfaction survey Quarterly business/quality/technology evaluation meeting for customers 	<ul style="list-style-type: none"> Scoring on-site review, supplier questionnaire survey 	<ul style="list-style-type: none"> Official documents, conferences (briefings and seminars), face-to-face communications 	<ul style="list-style-type: none"> Press releases Interviews and special reports Press conferences Social media releases Regular visits Participation in charity activities Environmental protection promotions
Issues of Concern	<ul style="list-style-type: none"> Employee benefits and perks Future growth potential Our competitive advantage in the industry Talent retention Employee training and education Employees' physical and mental health Employees' personal career development Corporate governance 	<ul style="list-style-type: none"> Outlook for the semiconductor market and Chinese market Our competitive advantage in the industry Future growth potential Continuous improvement of profitability Corporate strategy Chinese governmental support for the industry and the Company Senior manager shakeup R&D goals and progress Impact of China-US trade frictions 	<ul style="list-style-type: none"> Customer service and satisfaction Innovation management Our competitive advantage in the industry Product quality control Protection of confidential information Business ethics 	<ul style="list-style-type: none"> Quality, price, delivery, service Compliance with laws and regulations Business ethics Supplier sustainability management Business ethics 	<ul style="list-style-type: none"> Future growth potential Outlook for semiconductors Our competitive advantage in the industry Pollution prevention Continuous improvement of profitability Anti-corruption 	<ul style="list-style-type: none"> Corporate governance Economic benefits Innovation management Anti-corruption Social participation External cooperation Biodiversity protection
2019 Communication Activities	<ul style="list-style-type: none"> 4 quarterly cadre communication meetings Employee satisfaction survey and feedback Annual corporate sports meeting Talent competition Festival activities Birthday parties Various club activities and sports competitions Cultural promotion activities Volunteer activities 	<ul style="list-style-type: none"> One annual general shareholder meeting One extraordinary shareholder meeting Four investor conferences 37 non-deal roadshows 30 seminars for investment institutions Nearly 300 meetings (including teleconferences) 	<ul style="list-style-type: none"> 2 semi-annual customer satisfaction surveys and related action plans 4 quarterly business assessment meetings 4 quarterly quality assessment meetings 4 quarterly technology assessment meetings 1 annual technology seminar 103 responses to the surveys related to conflict mineral management 45 customer surveys related to Responsible Business Alliances 	<ul style="list-style-type: none"> Two semi-annual ratings Four special CSR audits for suppliers 34 on-site quality supplier audits 144 supplier quality surveys via questionnaires 	<ul style="list-style-type: none"> SMIC briefings for all levels of government Visits and inspections from all levels of government, reports on our development Pollutant emissions data on our website Policy briefings, Symposia, Trend, prediction, and marketing meetings 	<ul style="list-style-type: none"> Official WeChat Spokesperson response to issues of concern for the media, communication with the public regarding the Company's vision 6 nursing home visits 2 orphanage visits "Pay Attention to the Ocean Pollution" beach cleanup activity for environmental protection Second-hand items recycling activities for environmental protection



Management of Issues of Concern

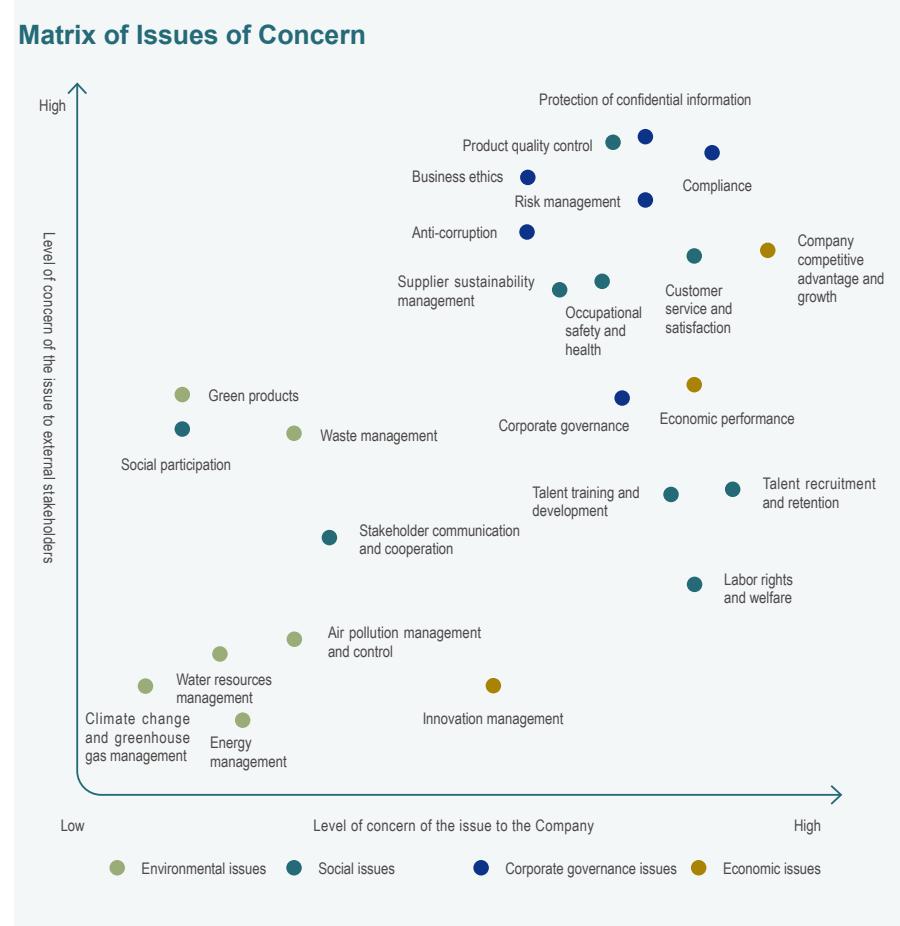
Management Process of Issues of Concern

We use the Environmental, Social and Governance Reporting Guidance (ESG), Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-CSR 4.0), Guidance on Social Responsibility for the Electronics and Information Industry in China, GRI Sustainability Reporting Standards (GRI Standards), ISO 26000: 2010 Guidance on Social Responsibility and other standards as the basis for selecting issues of concern to stakeholders, along with stakeholder feedback



Analysis of Issues of Concern

In 2019, SMIC conducted a survey on concerns of employees, suppliers, customers, the government, shareholders/investors, society (including the media, NGOs, communities) and other stakeholders, by means of questionnaires to assess their level of concern around specific issues, and formed a matrix of concerns through comprehensive analysis.





Sustainable Economic Growth

SMIC advocates and acts upon the principles of operational transparency and respect for shareholder rights. We believe that the basis for successful corporate governance is a sound and effective Board of Directors. In line with this principle, the Board of Directors authorizes the committees established under it to assist in performing its supervisory duties. The charter of each committee are subject to approval by the Board. Each Committee's chairperson regularly reports to the Board on the activities and resolutions of the relevant committee.

- Corporate Governance
- Ethics and Regulatory Compliance
- Innovation Management
- Customer Service
- Supply Chain Management

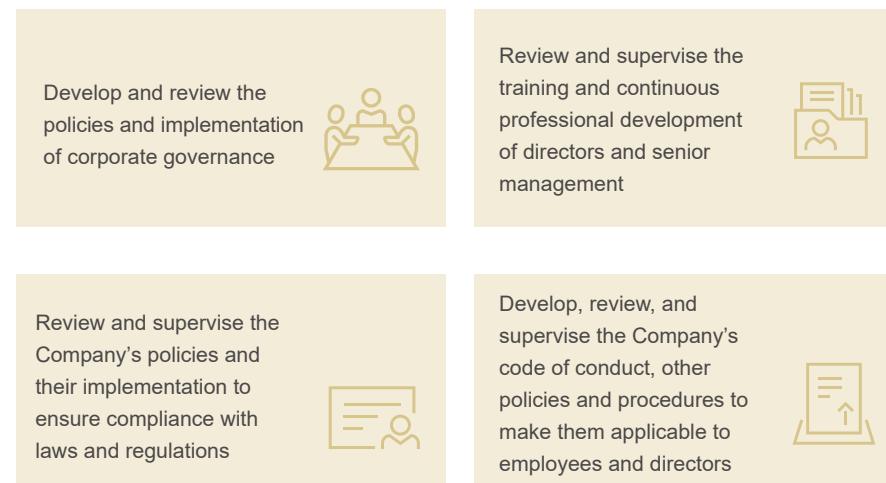


Corporate Governance

Board of Directors

The Board of Directors (the "Board") has a duty to the Company's shareholders to direct and oversee the affairs of the Company in order to maximize shareholder value. The Board acting itself and through the various committees of the Board, actively participates in and is responsible for the determination of the overall strategy of the Company, the establishment and monitoring of the achievement of corporate goals and objectives, the oversight of the Company's financial performance and the preparation of the accounts, the establishment of corporate governance practices and policies, and the review of the Company's system of internal controls and risk management. The management of the Company is responsible for the implementation of the overall strategy of the Company and its daily operations and administration. The Board has access to the senior management of the Company to discuss enquiries on management information.

The Board's management responsibilities include:



Relevant information on the Board as of December 31, 2019, is as follows:

Organizational Structure of the Board of Directors



Information of members of the Board





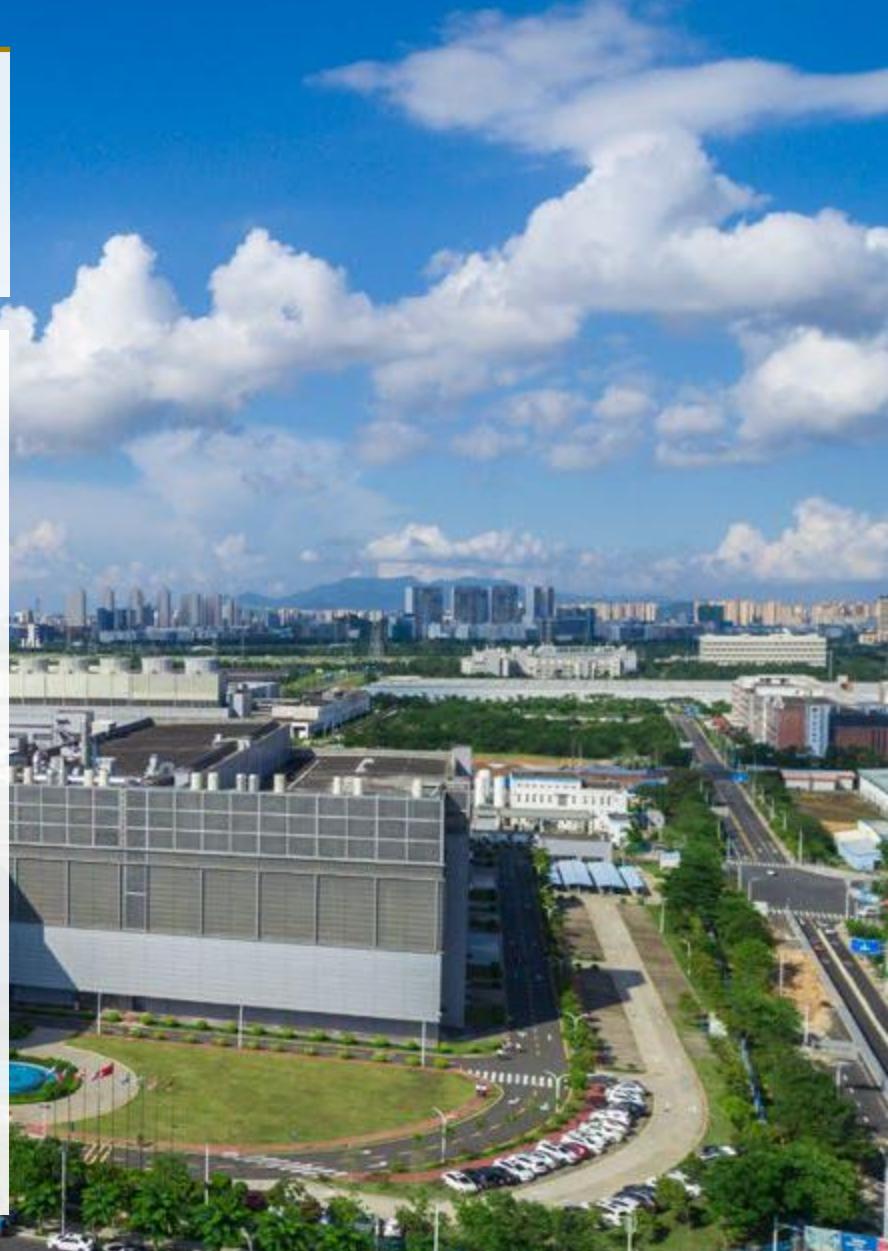
The Board sets an Audit Committee, a Compensation Committee, a Nomination Committee, and a Strategic Committee. Each committee is governed by its own terms of reference.

As of December 31, 2019, the positions held by members of the Board in these committees were as follows:

Positions of Board Members in Committees

Members of the Board	Positions			
	Audit Committee	Compensation Committee	Nomination Committee	Strategic Committee
Zhou Zixue			●	
Zhao Haijun				
Liang Mong Song				
Gao Yonggang				
Chen Shanzhi				●
Zhou Jie	●	●		
Ren Kai			●	
Lu Jun		●		
Tong Guohua		●		
William Tudor Brown	●	●	●	●
Fan Renda Anthony	●		●	●
Lau Lawrence Juen-Yee	●	●	●	●
Young Kwang Leei				
Cong Jingsheng Jason				

Note: ● refers to Chairman





Audit Committee

The Audit Committee reviews the Company's accounts, financial reporting procedures, and financial announcements. Its responsibilities include: (1) Quality and completeness of the Company's financial announcement and the related disclosure; (2) Compliance with laws and regulations; (3) Qualification, independence, salary, and employment period of the independent auditor; (4) Effectiveness of internal audit and risk controls. The Committee regularly reports to the Board at each quarterly meeting and meets with our external auditors at least four times a year.

For more information, see



Nomination Committee

The Nomination Committee ensures that the Board has an effective size, structure, and composition to meet the Company's strategy and shareholders' benefit. The responsibilities of the Nomination Committee include: (1) Review the structure, number and composition of the Board of Directors at least annually; (2) Monitor the implementation of the Board diversity policy; (3) Identify qualified individuals who can serve as directors and make recommendations to the Board; (4) Assess the independence of independent non-executive directors; (5) Make recommendations to the Board on the appointment or reappointment of directors and succession planning. The Committee regularly reports its resolutions and presents its recommendations to the Board.

For more information, see



Compensation Committee

The Compensation Committee's responsibilities include: (1) Approve and supervise the implementation of the management team's compensation plan, evaluate the CEO's performance, and review the CEO's evaluation of the other executives' performance; (2) Determine the remuneration packages of executive directors and make recommendations to the Board on the remuneration of non-executive directors; (3) Administer and review the long-term incentive compensation or equity plan made available to the directors, employees and consultants. Make relevant recommendations to the Board; (4) Review the compensation philosophy, strategy and principles covering directors and executives; (5) Review, approve, and monitor new and existing employment, consultancy, retirement, and severance agreements for directors and executives and other officers; (6) Ensure proper supervision of our human resources policy; (7) Review established policies to fulfill our ethical, legal, and human resource responsibilities. The Compensation Committee reports to the Board at its quarterly meeting.

For more information, see



Strategic Committee

Functions, responsibilities and competencies of Strategic Committee include: (1) Evaluate and consider strategy options; (2) Help and participate in discussions with potential strategic partners on any strategic options; (3) Present recommendations to the Board and the Company regarding strategic options.

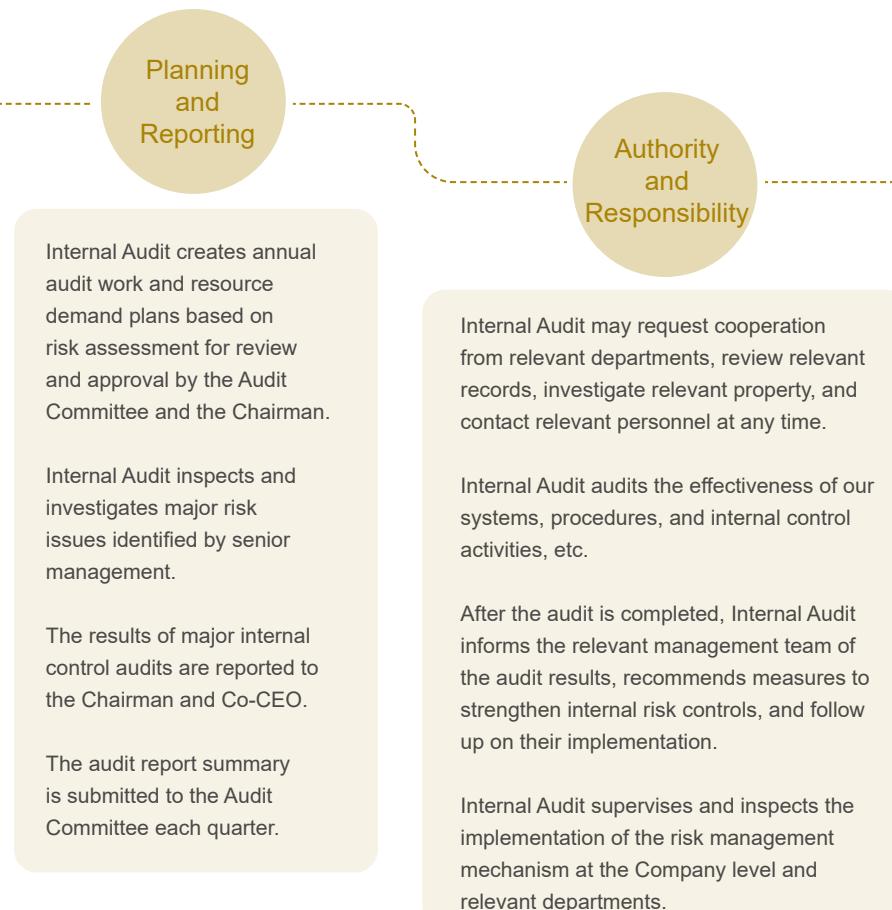




Other Corporate Governance Departments

Internal Audit

As the daily work organization under the Board, Internal Audit cooperates with our management team to help the Audit Committee evaluate operating risks. It supports and supervises the management team to improve our risk management, internal control, and corporate governance systems.



Compliance Office

Compliance Office oversees and executes (1) professional and commercial conducts of the company and its employees in accordance with Business Conducts and Ethics of the company; and (2) the Company's Anti-Fraud Policy and Anti-Corruption Policy, investigation of any fraud leads (reports, etc.) and reporting to the Audit Committee.





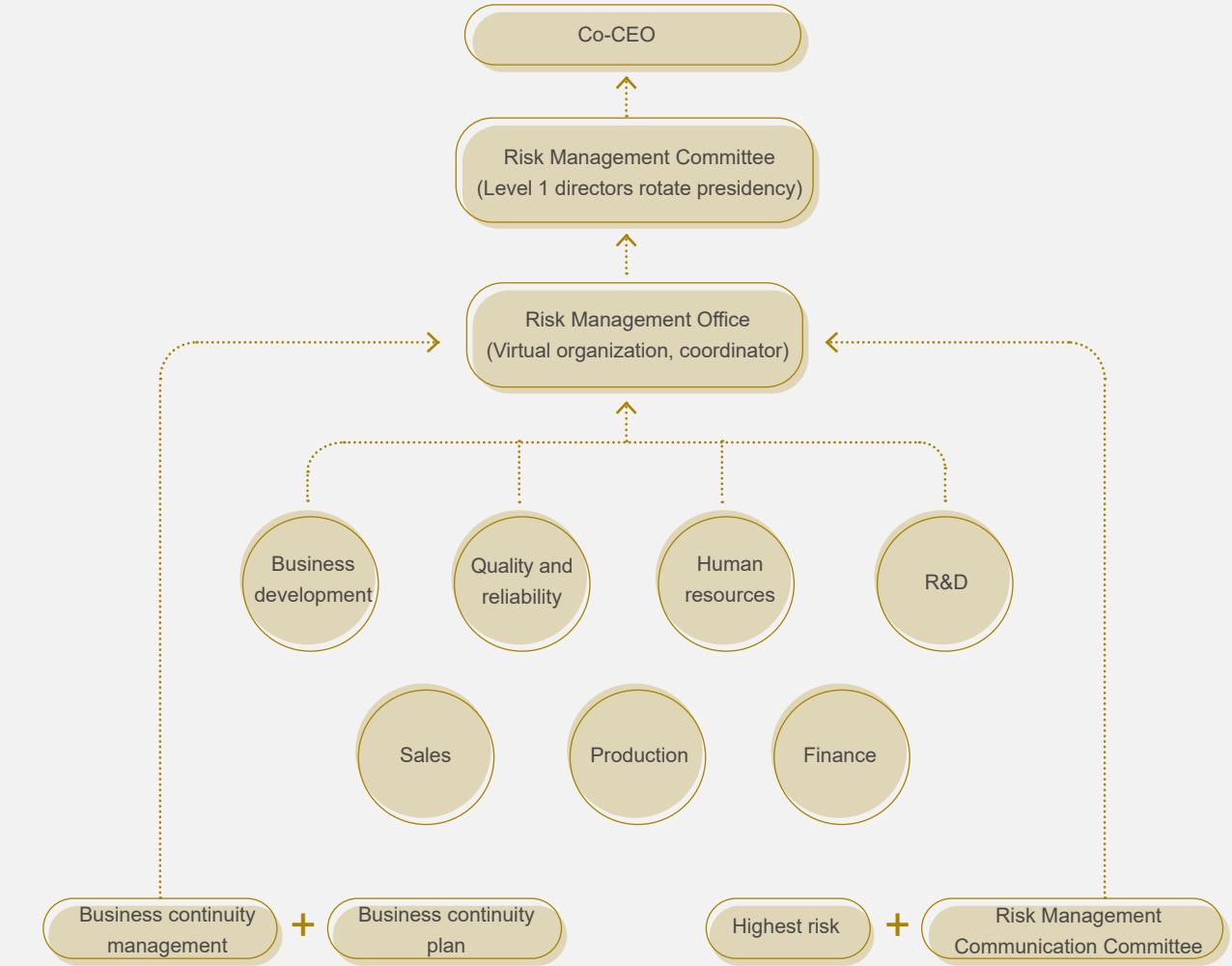
Risk Management

We established a corporate risk management system aligned with the framework of the Committee of Sponsoring Organization (COSO) under the Treadway Committee to assess risk frequency and impact. The system helps us to categorize risks at different risk levels and define corresponding measures to monitor them.

The Risk Management Committee comprises the top managers from our Level 1 Organization. It is responsible for creating our company-wide risk strategy and supervising our risk management effectiveness. The Risk Management Communication Committee, comprising representatives appointed by each functional division, implements and follows up on our risk assessment plan. When necessary, a special task team performs risk control activities based on actual needs. This helps the Board identify, analyze, and evaluate overall corporate risk, and monitor the risk management system to ensure the effectiveness of the risk management project.

According to the Corporate Governance Code, management annually confirms the effectiveness of the system to the Audit Committee and the Committee's President reports its results to the Board. The Board is ultimately responsible for ensuring that SMIC maintains a sound and effective risk management and internal control system, and supervises management to continuously monitor the system.

Risk Management Organizational Structure





Our risk management measures are as follows:

- 01 Identify risks in areas including macro/external, operational, strategic, legal, and financial, etc.
- 02 Analyze and assess risk levels, with focus on impacts including finance, goodwill and operation. Assess the likelihood of these risks occurring. Grade risks in these two dimensions to establish follow-up risk assessment frequencies and response plans.
- 03 Design, operate, and monitor internal control systems to reduce and control related risks.
- 04 Monitor risk early warning indices and report risk management results for major risks.



Based on this method, We identified and monitored major risks in 2019 including (but not limited to) the following:





Information Disclosure

Disclosure Policy

The Disclosure Committee of SMIC develops and implements the Company's information disclosure policy and procedure, and reviews the compliance of our timely information disclosure. The disclosure policy applies to all employees and consultants, the Board of Directors, and authorized spokespeople, and covers all documents and statements. This mechanism helps to ensure the accuracy of our reports.

Shareholder Communication Policy

SMIC distributed information to shareholders through various publications and online platforms, including annual general meetings (AGMs), extraordinary general meetings (EGMS), and a quarterly ER webcast. We also published annual and interim reports and briefings and press releases through the New York and Hong Kong stock exchanges. In addition, our investor relations team arranged a number of meetings and conference calls with investors to brief them on the latest developments and strategies. In 2019, Institutional Investor magazine selected us as the most honored semiconductor company in Asia outside of Japan. We are committed to providing timely, accurate and fair information to our stakeholders. We also provide convenient online access for our potential investors and other interested parties. Most of the information above can be accessed from the corporate website and the SECs website of the stock exchange.

For more information, see



Ethics and Regulatory Compliance

Business and Ethics

Our Code of Business Conduct and Ethics (Ethics Code) ensure our legal compliance as well as our integrity, professionalism, and accountability. Our Ethics Code is committed to anti-fraud, compliance with public interest, corporate opportunities, protection of intellectual property, transactions in SMIC securities, use of SMIC assets, public disclosure, record keeping, anti-bribery, relationships with customers, vendors, investors and other parties, and much more.

For more information, see





Our Ethics Code applies to all employees, directors, contractors, consultants, agents and business partners, and requires them to comply with all company policies and applicable laws, and to report any violations under confidential procedures. It is enforced by our Compliance Office, as supervised by our Compliance Officer and our Board's Audit Committee. Violations, depending on their severity, result in warnings, discipline, termination, or prosecution.

All of our employees observe the Ethics Code and certify that they will comply with its policies and any additional policies or laws specific to their jobs. They also receive regular mandatory training, test on ethics, and relevant information from our Compliance Office, legal department, and outside counsels. Some key areas covered by our Ethics Code are mentioned in the following sections.

In order to promote integrity and eliminate fraud, especially in the areas of commercial bribery, conflict of interest, intellectual property and information security, in early 2019 all SMIC employees signed the integrity commitment letter as a commitment from each person to observe the highest standard of ethical conduct, and maintain integrity and self-discipline.

Anti-Fraud Policy

Our Ethics Code demands honest business dealings. All our employees are entrusted with trust, expecting the use of customers', third parties', and Company's assets including physical and intellectual properties (IPs) in an ethical manner. The actions of each employee reflect on the company as a whole. Accordingly, fraud by any employee cannot be tolerated. Any employee learning of such activities must report the matter to the Compliance Office or the Audit Committee (if applicable).

For more
information, see



Anti-Corruption Policy

Regardless of rank or nationality, our employees, contractors and business partners must comply with the U.S. Foreign Corrupt Practices Act (FCPA), the Hong Kong Prevention of Bribery Ordinance, and other applicable anti-bribery laws. Our rules for giving and receiving gifts are detailed in our Ethics Code and the Anti-Corruption Policy.

Training

To raise the awareness of ethical compliance, we provide various trainings and seminars to employees throughout the years, that include all employees mandatory annual training, trainings for new hires and new managers, special topic training to target group, case sharing, etc.



Ethics Hotline and Investigation

SMIC opens reporting channels and encourages any employees, investors, contractors, customers, suppliers, business partners or other people through confidential mailbox Code@smics.com or hotline +86-21- 20812121 to report any suspected violation of law or policy to SMIC's Compliance Office, in order to prevent dangerous or illegal acts on the existence of commercial interests. All information relating to informants will be kept strictly confidential. The informants will not be subjected to any form of retaliation or adverse treatment.

After receiving the report, the Compliance Officer will conduct investigation in accordance with relevant procedures. The Compliance Officer reports any serious breaches of accounting, legal, regulatory or law enforcement requirements to the Audit Committee and the Chairman of the Board, and ensures that the Company has taken appropriate corrective action. Any director, executive and employee who is found to have violated any of the laws, regulations or Company policy will subject to disciplinary actions in accordance with Company policy. The Compliance Officer establishes an ethics log of all reported cases, to record incoming complaints, investigation process and findings of the case. The Company regularly reviews the effectiveness of the reporting process to ensure its effective implementation.

The number of corruption lawsuits filed against SMIC or its employees during the reporting period (2019) is

0





Regulatory Compliance

Export Compliance Management

SMIC establishes an internal compliance program (ICP) to ensure our compliance with international export control laws and treaties on high-technology products. The United States and many other countries have joined the international export control system. Suppliers and customers in these countries generally need to obtain export licenses to transport controlled items (such as equipment, parts, materials, software, or technology) to China. We, as well as relevant suppliers and customers, strictly abide by the restrictions and regulations of these export licenses.

We incorporate the internal compliance program into the ICP handbook, including policies and procedures to ensure compliance with all legal requirements. Our ICP handbook contains 10 elements:



In order for all employees to fully understand our internal compliance obligations, the CEO issues an export compliance policy statement that must be acknowledged and signed by all employees. Our ICP team conducts regular training and maintains the ICP web page on our company intranet. Meanwhile, our ICP compliance is verified in regular audits by vendors and government officials.





Conflict Mineral Compliance Management

SMIC has created a working group on conflict mineral management and developed strong conflict mineral management policies and procedures to ensure effective management of conflict minerals. The working group on conflict minerals management comprises departments covering areas including legal, supply and purchasing management, customer engineering, corporate social responsibility and other divisions. They are responsible for developing and promulgating our conflict mineral policy and establishing a management supervision system. They require all relevant suppliers to provide evidence meeting the requirements of conflict mineral management, and achieve regulatory compliance through close communication with suppliers. We base our conflict mineral management policy and procedures on the US law (Chapter 1502, Dodd-Frank Act) and the US SEC's rules on conflict mineral disclosure. We also take guidance from the Organization for Economic Co-operation and Development (OECD) due diligence framework. We use the due diligence tools of the Responsible Mining Initiative (RMI) and the Global e-Sustainability Initiative (GeSI) to conduct due diligence on suppliers to ensure the legitimacy of these metals.

The key to conflict mineral management is to manage suppliers and ensure that all links in the supply chain conform to the conflict mineral management requirements. In 2019, we conducted due diligence on all relevant suppliers in strict accordance with the requirements of conflict mineral management. The due diligence was conducted based on the Conflict Minerals Reporting Template (CMRT) created by the Responsible Minerals Initiative and the Global e-Sustainability Initiative. All first-tier suppliers responded to conflict minerals queries with evidence to demonstrate compliance with the conflict minerals management requirements.

At the same time, SMIC actively assists clients in the implementation of conflict mineral due diligence. According to the customer's request, we respond to more than 100 conflict mineral reports in a timely manner, demonstrating our effective management of conflict minerals and ensuring that smelters 100% compliant with management requirements.





Innovation Management

We incorporate innovation as an important component of our corporate culture. We have established a sound innovation management system and continue to actively cooperate with many research institutions outside the Company.

Innovation Mechanism



Independent R&D

We are committed to independent R&D. We have established a leading R&D organization and continue to increase our investment in technological innovation and intellectual property.

In 2019, the number of R&D personnel exceeded

2,000

R&D expenses were

US\$ **687.4** million

The ratio of R&D expenses to operating revenue for 2019 reached

22.1%

Industry-University-Research Collaboration

SMIC has collaborated with over 10 top universities and research institutes in China on over 20 cooperative projects, investing over RMB 100 million. We have worked with many leaders in the integrated circuit industry along with senior-level talents from well-known overseas companies on scientific research achievements including integrated circuit patents, industry journal papers, and conference presentations.

Talent Development

In order to cultivate more outstanding talents for the integrated circuit business, We have launched a school-enterprise collaborative education platform. We collaborated with the University of Chinese Academy of Sciences to set up a master's degree program aimed at training integrated circuit engineers. We also provided internship opportunities for graduates and undergraduates from Shanghai Jiaotong University, Fudan University, Zhejiang University, Xidian University, Tianjin University, Shanghai University and Datang University.



Intellectual Property Protection

We are committed to the protection of intellectual property rights in all aspects of R&D, production, procurement, and sales. This helps us continue to make advanced technological achievements, consolidating our leading domestic industry position and matching leading international competitors.

We choose suitable partners to prevent intellectual property violations during R&D and have established rights assessment and early warning mechanisms for intellectual property violations. We track market development trends and consult patent documents to avoid the loss of intellectual property rights due to our outdated research findings in the intentional context; and we promptly apply for patents and trademarks to patent trolls. We also monitor competitors in the same industry and international the intellectual property systems.

Patent Protection

We combines patents and project R&D with its unique characteristics, promote project-based innovation and effectively advance the construction of intellectual property rights. Our patent protection strategies include targeted patent mining and mapping, technical experts' participation in patent review, a patent reward mechanism, a patent training mechanism, and strict control of patent applications. These measures encourage our personnel to innovate and protect our R&D results.

In order to build an appropriate number of patent asset portfolios with strong overall competitiveness. We conduct brainstorming meetings and patent knowledge training, encouraging employees to file patent applications to build our patent portfolio. We also evaluate and grade our management at each stage of a proposal application, patent application, patent authorization, and patent maintenance to ensure patent quality.

We have also established a patent management system to improve work efficiency and make management clearer and more convenient. We use this system from the initial proposal application, review, draft and submission of patent applications, through to subsequent dynamic patent evaluation.

Achievements in Innovation

Patents

As of December 31, 2019, we had accumulatively applied for 16,275 patents and been granted 10,556 patents. Our applied and granted patent portfolios are among the largest in the domestic semiconductor industry. The number of patent applications for advanced technology such as HKMG and FinFET technology is among the largest in the world.

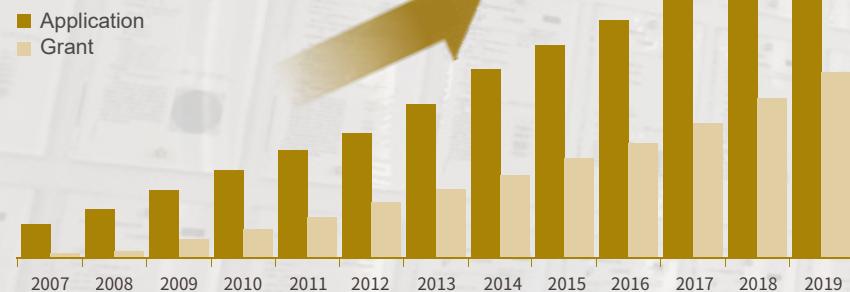
As of December 31, 2019, SMIC has accumulatively applied for

16,275 patents

Has accumulatively been granted

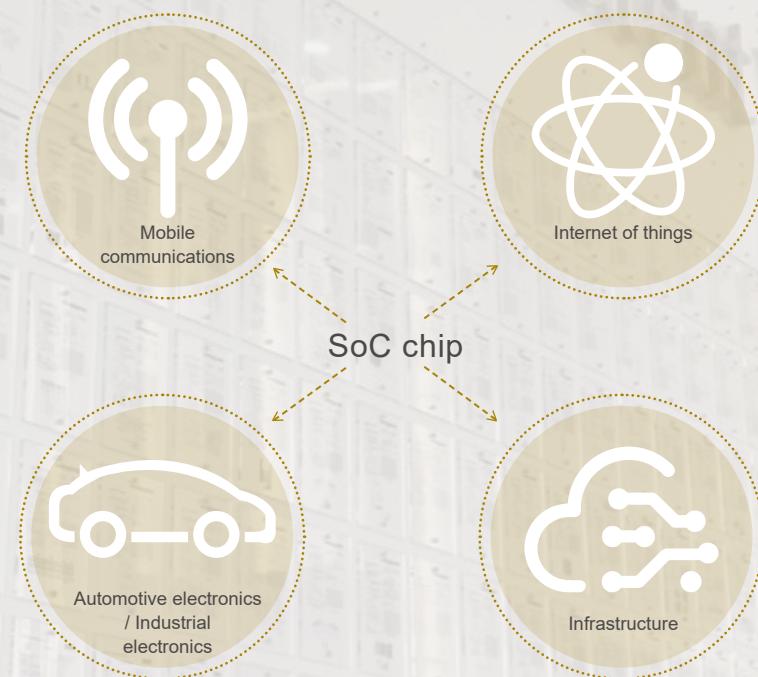
10,556 patents

SMIC Has One of the Largest Portfolios of Granted Patents



Technological Achievements

One of our most significant important technological achievements in 2019 was the completion of the 14nm technology platform, which has entered customer engagement and production. Our 14nm FinFET technology can be widely used in the following fields:



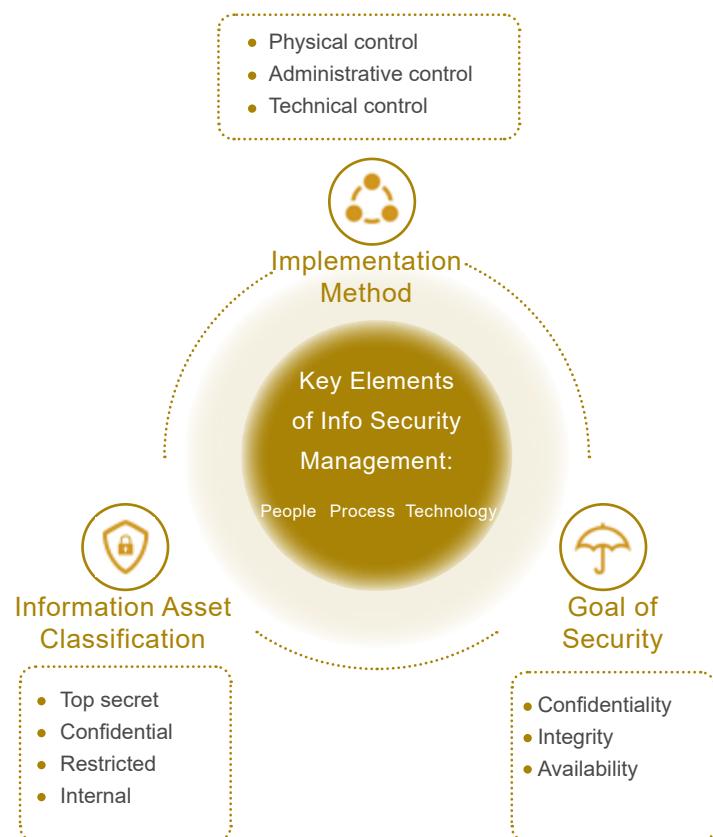
At the same time, our development of second-generation FinFET N+1 is progressing faster than previous FinFET nodes. Our 12nm and N+1 R&D is progressing well and is currently in customer engagement and product qualification certification.



Information Protection

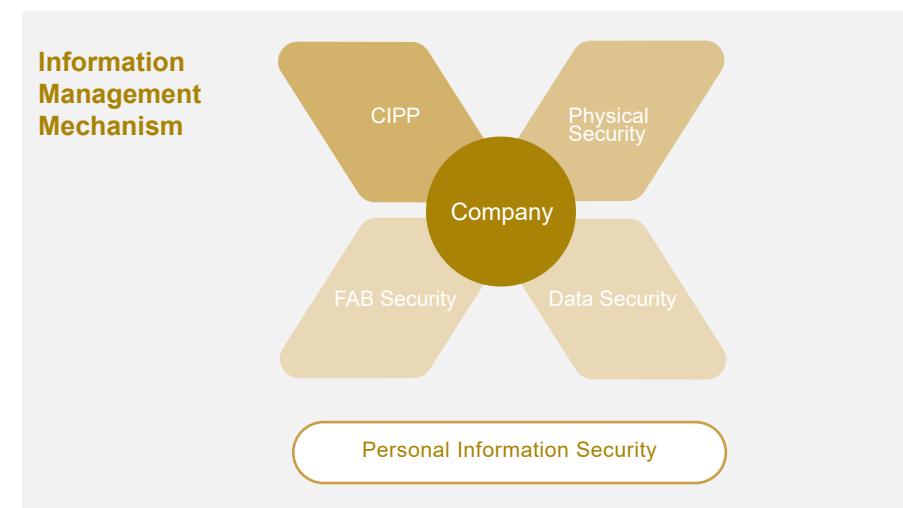
SMIC adheres to the idea of ensuring the best interests of the Company, its shareholders, customers, suppliers and employees, and attaches great importance to the protection of its own R&D intellectual property and customers' confidential information. We have established a comprehensive protection system and mechanism for information security, including management system optimization, technology prevention and control, and security awareness promotion, which has passed ISO 27001:2013 information security management system certification.

Information Security Administration



Information Management Mechanism

We created the Information Security Committee to effectively formulate, integrate, strengthen and implement our Confidential Information Protection Policy (CIPP), physical security, data security and FAB security, as well as our personal information security prevention policy.





Comprehensive Technical Control and Monitoring System

We have developed a confidential information technology control and monitoring system that includes a strong security team, continuous control improvements in our physical environment, network access, and data usage, confidentiality in data communications and data storage, and stronger identity authentication. Measures include:

- ✓ Implement classified management, strengthen the security classification of information assets and protect confidential information.
- ✓ Divide physical areas into different levels according to the degree of business confidentiality and implement a multi-level protection scheme.
- ✓ Establish a log collection, analysis and management platform for key and core systems to better analyze big data for daily operations and maximize its value. Build an effective warning and tracking mechanism for violations based on this platform.
- ✓ Establish an Information Security Inspection Department to strengthen security inspections.
- ✓ Strengthen the visitor registration, access control and monitoring system to secure visitor access.
- ✓ Implement a confidential information access control mechanism to comply with authorized access and on-demand access for unified management.
- ✓ Conduct regular audits of specific confidential data access, transmission, and storage activities to ensure continuous and effective control.
- ✓ Monitor, report and process information security incidents to reduce the risk of confidential information leakage and improve security controls.

In 2019, we built a real-time intelligent defense production and R&D information security platform based on the Ministry of Industry and Information Technology's Industrial Internet Production Enterprise Safety Standard System Specification. We designed the system on three pillars: anti-hacking, real-time anti-virus and comprehensive anti-leakage. It provides comprehensive protection in five areas: equipment security, control security, network security, application security and data security.





Posters



Customer Information Protection

We are committed to protecting customer information and privacy using the highest level of information management and control.

Protection of Customer Information



Customer Service

Customer service is one of our core values, and winning customers' trust and long-term cooperation is an important cornerstone for us. We have been committed to providing excellent service for our customers based on the principle of customer orientation. With long-term unremitting efforts to create value for customers, we have established a good relationship with them and won the trust of lots of customers around the world in the long-term and stable cooperation and development, finally forming a win-win situation between the Company and the customers.

Customer Service Strategy

With its manufacturing, technology and services, SMIC has the confidence to execute its customer service strategy and strives for superior customer service and common success through a number of strategies:

- Help customers shorten their time to market by providing quality products and services.
- Continuously invest and provide value-added innovation with differentiated mature and advanced technology.
- Continue to serve as a gateway for customers to succeed in the Chinese market through strategic partnerships with customers and others in the semiconductor and electronic industry.

Servicing Customers with Commitments for Excellence





Customer Service System

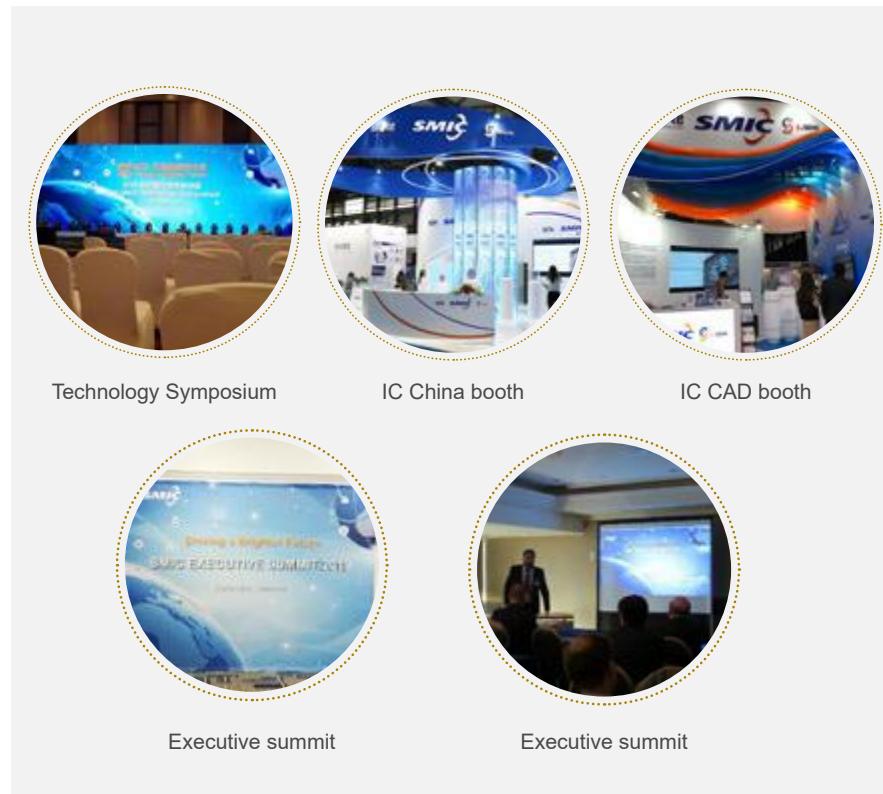
In order to understand and meet the needs of customers in a timely manner, We maintain professional sales and customer engineering teams in Shanghai, Beijing, Tianjin, Shenzhen, Taiwan, California (USA), Milan (Italy), Tokyo (Japan) and other regions around the world to provide worldwide customer service. They maintain close contact with customers and coordinate internal resources in technology R&D and production service departments to provide customers with one-stop services including pre-investigation projects, IP selection, design support, Process Design Kit (PDK) delivery, mask production, integrated circuit manufacturing, and the construction of various back-end tests and packaging platforms. We also provide custom technology platform services to help customers improve the market competitiveness of their products and significantly shorten their time to market.

Global Distribution Map of Customer Service Team





SMIC is committed to pursuing excellent quality, providing customers with the highest quality products and services and constantly innovating to adapt to market development trends. In 2019, we held a Technology Symposium in Shanghai to showcase our latest technology platform and teach customers more about us. We also actively participate in various conferences and activities in the semiconductor industry value chain, including IC China and ICCAD. We also work with our customers and with other upstream and downstream manufacturers and technical elites, including Foundry, EDA, and IC Design, to explore future developments. At the same time, Our executive summits in the United States and Europe enhanced communication and trust with customers through high-level exchanges.



If a worker wants to do his job well, he must first sharpen his tool. Our SMIC-NOW (networked-service on web) online service system enhances our customer service. After logging into the system, customers can access to the technical platform information files, design service information, import new product requirements and processes, and directly tape-out products through the platform. At the same time, the system also provides customers with real-time production reports, keeping them abreast of each step of their masks and products from the placing of the order, to shipping, to the corresponding product quality report. As an important hub to communicate with customers, the SMIC-NOW system continuously collects online feedback from customers, enabling us to improve our service. In 2019, with the joint efforts of the technical team and customers, the optimized version has been fully put into use, significantly improving work efficiency.

SMIC NOW customer online service platform's link on SMIC's official website:



Login interface

Customers can log into the SMIC NOW online system, query information, and view new product introductions.



SMIC-NOW interface

The SMIC NOW online system provides customers with product and design services, technical platform documents and reports.



SMIC-NOW input interface



Product Quality Management

We have adopted a comprehensive control system covering the entire product manufacturing and service process from R&D to mass production. It includes the following measures:

01

Control production process performance through statistical process control (SPC). Establish a strict product performance audit mechanism and a proprietary production record management system (RMS) for product production, so that all important parameters are under control and the quality of the product can be guaranteed well.

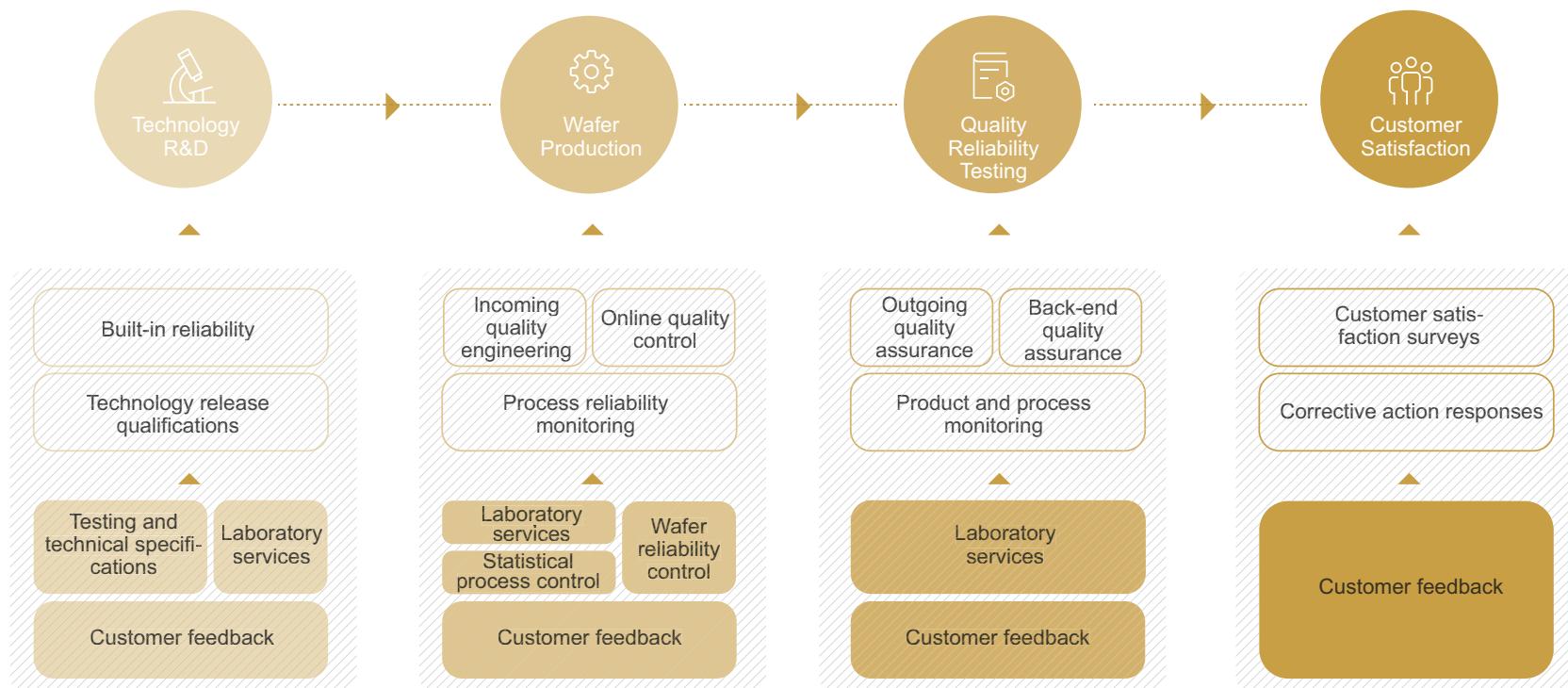
02

Adopt the concept of "one factory", that is, optimize the equipment and process parameters in each factory to standardize product quality and yield requirements

03

Establish a variety of laboratories and tools for chemical and raw material analysis, product failure analysis, yield improvement, reliability testing and monitoring

Comprehensive Product Quality Control



The incoming quality project includes incoming quality control and supplier quality assurance



In 2019, the SMIC launched a series of quality improvement projects to improve product quality control and achieved good results.



Quality Improvement Projects

SS and CIT

To strengthen company culture, continuously improve product quality and production efficiency, reduce production cost, encourage innovation and to improve customer satisfaction, SMIC promotes a grassroots-level suggestion system (SS) program and Continuous Improvement Team (CIT) activities throughout the company. Every year, every site of SMIC hold both the suggestion and CIT program activities to present the improvement cases. The Company provides incentives, including cash bonuses and public recognition at the conference to encourage employees to strive for excellence, drive cross-team observation and learning, and enhance their innovative and problem-solving abilities. These programs greatly contribute to achieving a win-win situation of maintaining SMIC's competitive and achieving customer satisfaction.

January-December 2019

In 2019, thanks to the active involvement of SMIC employees, there were **4,937** suggestions generated from the grassroots level and **345** from Continuous Improvement Team activities. The benefits generated from these two improvement programs reached US\$**135** million.

Quality Month

In order to enhance employees' quality awareness and improve product quality, during the quality month, our Quality Management and Manufacturing Departments organized an activity of "respecting quality, keeping promises, winning credibility and seeking development" to promote quality control skills and launch quality knowledge competitions.

January-December 2019

We created a cultural atmosphere of high quality and improved quality control skills and the application of quality tools.

Special Quality Plan

In order to improve product quality, the Quality Department implemented the Excellent Quality project along with 12 major special programs covering hardware, procedures, tools, and process windows.

January-December 2019

We conducted monitoring and spare parts service life management for over **1,000** machines, completed over **1,000** wafer edge monitoring exercises, **28** quality awareness training courses, and over **100** file optimizations to achieve streamlined, quantifiable, IT-based management.

Outgoing Intelligent Identification Projects

In order to improve the outgoing efficiency, the Quality Department achieved intelligent defect identification in three stages:

First stage: Improved the ability of AVI defect recognition, sparing OM micro inspection

Second stage: Developed an AI-based defect detecting system

Third stage: Integrated the AI defect detecting system and defect sign-off system

August 2018 - September 2019

Our image product recognition success rate increased from **80%** by manual recognition to more than **90%**. The actual investment was US\$**210,000** and the calculated output was US\$**5.03** million, delivering a 24-fold return on investment.

Quality Management System

We take the industry standards as the guidance to establish an honest and complete internal management system and meet the customer demands. This process ensures that we do our business in the best way we have and get ready to meet the emerging market needs by relying on a high-tech supply chain.

We have passed audits by a number of internationally recognized organizations, including the British Standards Institute (BSI) and other organizations allied to the International Organization for Standardization (ISO). Main certifications are as follows:

ISO 9001 Quality Management System

Since 2002, all of the company's factories have passed the ISO 9001 certification, and developed a quality management system for planning, execution, check and action under the guidance of ISO 9001, to ensure the quality of design, development, production and service. Please see the details of the certificate:



Management system
certificate-ISO 9001

TL 9000 Supply Chain Directives

Based on ISO 9001 certification, TL 9000 certification focuses on the quality management system for customers in telecommunication industry, and emphasizes the integrity of supply chain directives. Our factories in Shanghai, Beijing, Tianjin and Shenzhen have passed this certification successively since 2005. Please see the details of the certificate:



Management system
certificate-TL 9000

IATF 16949 Defect Prevention

On the basis of ISO 9001 certification, IATF 16949 certification focuses on the quality management system for customers in the automotive industry, and aims to eliminate defects existing among automotive supply chains and provides quality assurance for end customers. Please see the details of the certificate:



Management system
certificate- IATF 16949



Customer Evaluations and Complaint Handling

SMIC has established a sound system to track and handle customer complaints. All customer complaints are subject to timely investigation by relevant departments, which shall prepare an 8D analysis report within 10 days and take targeted improvement measures according to the root causes found in the report, to prevent the recurrence of similar incidents. In 2019, we received a total of three customer complaints, down 50% from 2018. We handled them promptly according to our customer complaint handling process.



In 2019, we received a total of

3 customer complaints



50%

lower than 2018



We operate product quality verification and product recall procedures and handle nonconforming products in accordance with the procedure to avoid negative customer impacts.

We control product safety and health risks in accordance with the QC 080000 system so that products meet the relevant international and domestic regulations and customer requirements. In 2019, no products sold were recalled for safety or health reasons.

Customer Satisfaction

In 2019 we continued to improve our biannual customer satisfaction survey mechanism. Every six months, the quality management team conducted customer satisfaction survey. The contents of the survey covers topics including new product development, product quality and reliability, on-time delivery, business service quality, complaint handling and so on.

Customer satisfaction assessment elements

- | | |
|---|---|
| <input checked="" type="checkbox"/> Capacity, Production Cycle & Delivery | <input checked="" type="checkbox"/> Design Service |
| <input checked="" type="checkbox"/> Yield | <input checked="" type="checkbox"/> Sales Support |
| <input checked="" type="checkbox"/> Technology R&D | <input checked="" type="checkbox"/> Quality Control System |
| <input checked="" type="checkbox"/> Mask Service & Technology | <input checked="" type="checkbox"/> Customer Engineering Services |
| <input checked="" type="checkbox"/> System Interface (SMIC NOW) | <input checked="" type="checkbox"/> Fab Ability Performance |
| <input checked="" type="checkbox"/> Process/ Product Reliability | |

We listen to customer feedback and take corrective measures after comprehensive analysis and evaluation in accordance with continuous improvement principle of "PDCA", and provides the improvement results for customers' approval so as to improve customer satisfaction.



In 2019, SMIC continued to make unremitting efforts and improvements in product and service quality and production capacity, earning us a high level of customer satisfaction score on 89 (full score 100). In the future, we will continue our efforts on customer orientation strategy to improve customer satisfaction.

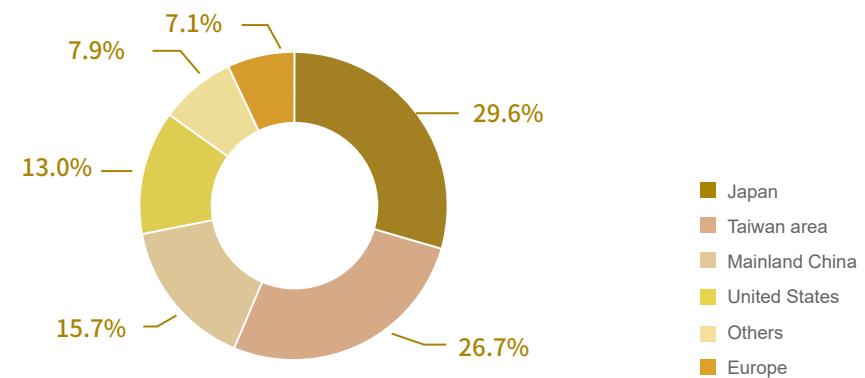


Supply Chain Management

Supply Chain Overview

Integrated circuit manufacturing is in the middle of the entire integrated circuit industry and is connected with both upstream and downstream industries. As a large local company in China, we procure a wide variety of products and materials including production equipment, maintenance parts, raw materials, factory facilities, firefighting facilities, and professional services. We strive for mutually beneficial cooperation with suppliers to help improve overall social responsibility management capabilities in our supply chain, reduce risk, safeguard stable production and operation, and ensure high-quality customer service.

Distribution of Raw Material Suppliers



Local Supply Chain Support

We support the development of the local supply chain and increase the proportion of our raw material suppliers based in mainland China annually. The proportion of suppliers in mainland China has increased from 9.1% in 2014 to 15.7% in 2019.

Proportion of Mainland Chinese Suppliers





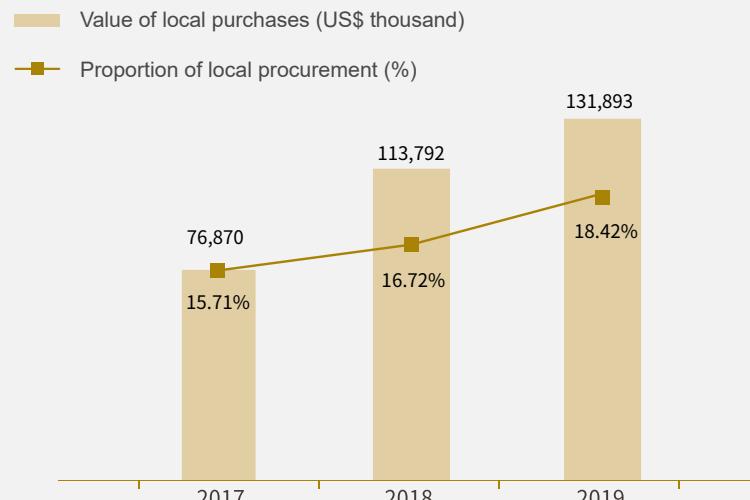
To support the local supply of raw materials, we continue to cooperate with local suppliers to continuously increase the evaluation and purchase of their products. In 2019, we purchased US\$131.893 million in local raw materials, accounting for 18.42% of the total, promoting the construction of the local semiconductor industry chain.

In 2019, the amount of local raw materials purchased reached

US\$ **131.893** million



Purchase Amount and Proportion of Local Raw Materials



Supplier Management Mechanism

SMIC has established a sound supplier management system, specially to manage key links in our supply chain. These include supplier access regulations, supplier evaluation regulations and supplier promotion regulations.

Supplier Admittance

We have developed an access assessment mechanism for new and alternative suppliers. The departments involved in the supplier admittance assessment include the Quality Management Department, Environmental/Safety/Hygiene Department, CSR Department, Procurement Department, and user organizations. They assess suppliers in areas including product quality parameters, supplier quality, supplier environmental/safety/hygiene, human rights, business ethics, warehousing/logistics, after-sales service management, production, and product usage. Suppliers can be included in our approved vendor list and considered for contracts only after they meet our relevant qualification requirements with a satisfactory score.





Supplier Assessment and Evaluation

Supplier Quality and Business Assessment and Evaluation

We monitor supply chain risks using an assessment and evaluation mechanism for contracted suppliers. We score them every six months based on scoring indexes covering areas including quality, cost, delivery, service, safety, and environmental performance. For projects that fail to reach the standards, the supplier must provide an improvement plan and make improvements within a certain period.

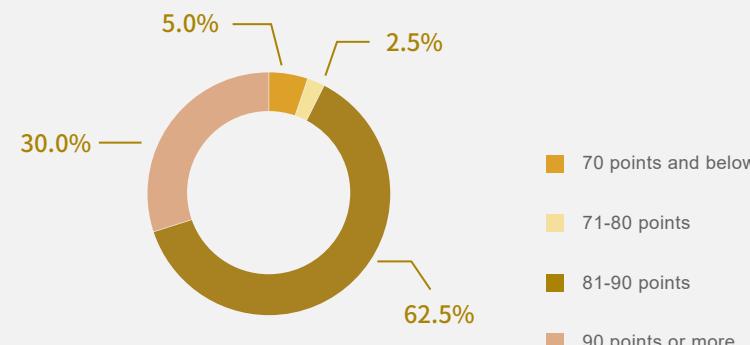
In 2019, the supplier performance was stable overall, with

92.5%



of suppliers scoring 80 or above

2019 Supplier Assessment Results



Supplier Sustainability Assessment and Evaluation

We use a sustainable operation survey to evaluate the sustainable operations of all suppliers providing raw materials in the year. It focuses on:

Whether they have established an assessment system for risks including earthquake, flood, IT system paralysis, and terrorist attack that reassesses and controls risks

Whether they establish on-site recovery, capacity transfer, and supply recovery plans in response to disasters and conduct regular drills

Whether the business continuity plan is managed by senior management and reviewed regularly

Whether they have an early warning and notification mechanism for supply interruptions

Whether they manage the continuous operation of suppliers properly during the procurement

In 2019, we assessed the sustainable operational risk for over 40 major raw material suppliers. The survey results reached a satisfactory standard, yielding similar results to last year.



Supplier Capability Improvement

SMIC attaches great importance to grow together with suppliers, especially the factory contractors. In order to improve the contractors' safety construction level and reduce the operational risk in the factory, the Environment/Safety/Hygiene Department provides construction safety training for all operators to improve the contractors' safety construction level and reduce the operational risk in the factory. The training covers:



Safety site construction knowledge and requirements



SMIC environmental protection/safety/hygiene regulations



Safety essentials for nine high-risk operations: hot works, fall protection, fire system impairment, hazardous piping cutting, special machinery operations, gas detectors isolation, fire detectors isolation, confined space operations, and excavation work



Construction accident case sharing

Only those operators who pass the training are allowed to work in the construction site. The training improved our supplier operators' safety construction abilities and reduced our risks from external factors.

We increased communication and interaction with our contractors by organizing a contractor communication meeting and contractor selection system. At the meeting we summarize contractors' annual safety construction results, allow them to share their environmental protection and safety and hygiene experiences, summarize major contractor accident lessons, and commend outstanding contractors.

In 2019, we selected 16 contractors as outstanding, spreading their experience in environmental protection, safety and hygiene management to all contractors. This enhanced contractors' safety management levels overall, reducing safety accidents and injuries.

List of ESH Excellent Contractors

Contractor	Nominating Plant
Beijing YIHETONG M&E Installation Engineering Co.,Ltd.	Beijing
SCREEN Electronics Shanghai Co.,Ltd.	Beijing
Beijing Kanken Environmental Protection Equipment Co.,Ltd.	Beijing
Lam Research (Shanghai)Co.,Ltd.	North
MURATA MACHINERY(SHANHAI)CO., LTD.	North
TAN HOU(SHANGHAI)SEMICONDUCTOR EXHAUST INDUSTRY CO.LTD	North
Uniquetek International Corporation	Tianjin
SHENYANG PIOTECH CO.,LTD	Tianjin
Shanghai Ruile Electrical Technology Co.Ltd.	Tianjin, Shenzhen
Beijing Zhongkaida Automation Engineering Co.,Ltd	Shenzhen
Oribright Shanghai Co., Ltd.	Shenzhen
Hitachi High-Technologies(Shanghai) Co.,Ltd	Shanghai
KLA-Tencor International Trading(Shanghai)Co.,Ltd.	Shanghai
Konfoong Materials International Co.,LTD (KFMI)	Shanghai
Shanghai Suding Mechanical&Electrical Engineering Co.,Ltd.	Shanghai
Shanghai Zhilin Environmental Engineering Co., Ltd.	Shanghai



Contractor Recognition Meeting for Excellent ESH Performance



Caring for Employees

SMIC has always believed that only when the talents are offered macroscopic visions, broad stages and opportunities to achieve personal dreams and enjoy work and life, can it have a better future. Therefore, the Company adheres to the people-oriented principle to ensure that employees enjoy fair treatment, good health and opportunities to improve themselves, so as to promote technological innovation, growth of the company as well as economic and social development.

- Talent Attraction and Retention Career Development

- Occupational Health and Safety Wonderful Life



Talent Attraction and Retention

Talent Structure

Since its inception in 2000, SMIC has attracted a large number of visionary scholars to work together to change the industry and the world. Coming from all over the world, they have contributed excellent skills and advanced technologies, and also brought good values to our industry and community. These different types of employees from different regions have developed a harmonious culture based on mutual understanding and respect in the Company, which is helpful to connect and communicate with customers, suppliers and investors around the world.

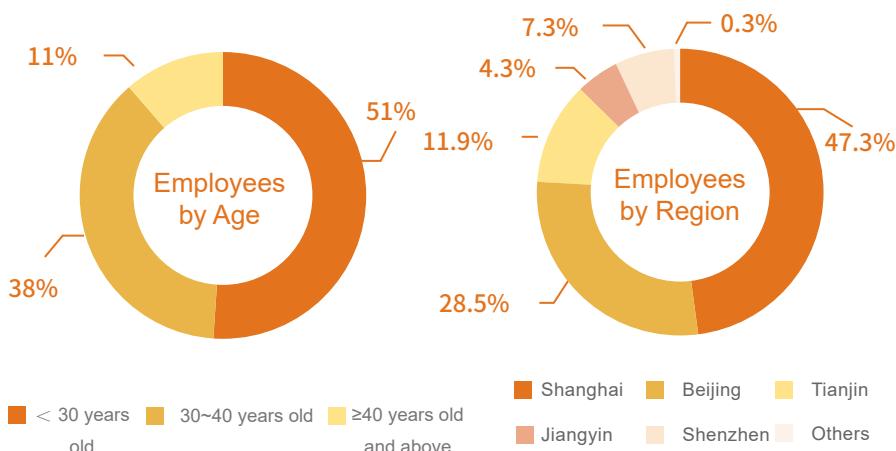
In 2019, the total number of employees reached 15,946, including 260 foreign employees from 20 countries and regions, and including 9,427 males and 6,505 females, where female supervisors accounted for 30% of the management. In 2019, SMIC recruited 4,083 new employees. In addition, welcome to the disabled is also a consistent policy of SMIC, and we provide them with the necessary assistance as far as possible.

In 2019, the total number of employees reached

15,946

In 2019, SMIC recruited

4,083 new employees



Safeguarding of Rights and Interests

In accordance with international and domestic legal requirements, protection of all employees' rights and interests is the minimum standard commitment that SMIC keeps. We give employees more rights and interests according to the Company's development strategy, so that employees enjoy common development and benefit with the Company.

Based on the Responsible Business Alliance Code and SA 8000, SMIC has established the labor human rights management system to implement the labor human rights management system and protect the rights and interests of employees.

We abide by more than 50 labor protection laws and regulations, including Responsible Business Alliance Code of Conduct, Labor Law of the People's Republic of China, Labor Contract Law of the People's Republic of China, Law of the People's Republic of China on Promotion of Employment, Special Provisions on Labor Protection of Female Workers, Law of the People's Republic of China on the Protection of Minors and Trade Union Law of the People's Republic of China.



Recruitment Policy

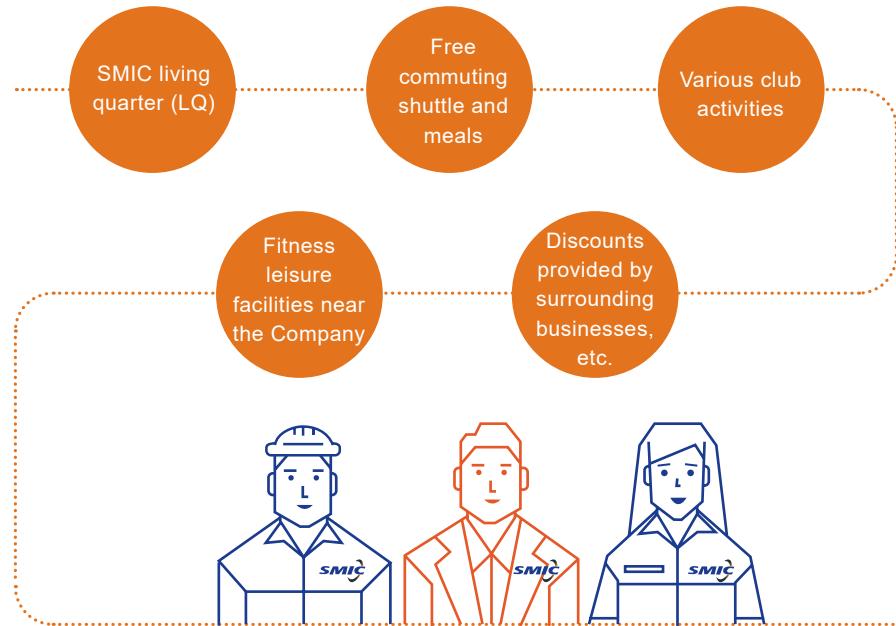
In the recruitment process, SMIC adheres to the principles of openness, fairness, impartiality, merit and anti-discrimination, and complies with relevant laws and regulations on prohibiting the employment of child laborers, human rights protection, remuneration and benefits, working hours and holidays, and in no case SMIC recruits persons under the age of 16.

SMIC has always adhered to the lawful and compliant consistency principle in employment. The signing rate of the labor contract reaches 100% and the collective labor contract is signed regularly with the trade union. We also protect the personal information and privacy of employees, and continuously improve their satisfaction.



The signing rate of the labor contract reaches

100%



Remuneration and Benefits System

SMIC provides a comprehensive salary and benefit system for all employees, including salaries, bonuses, social insurance, commercial supplementary medical insurance, humanized paid vacations and sick leave in accordance with national and local laws and regulations.

The Company pays attention to the career progress and personal ability development of each employee, and provides career development and promotion channels internally to retain and motivate outstanding employees. In addition, in order to motivate the managers to make contributions to the long-term development of the Company, the Company provides stock options and other incentive policies for management talents and technical backbones.

SMIC also provides other welfare guarantees that facilitate life, including:

Incentive Awards

SMIC has a variety of awards to motivate groups and individuals, encouraging employees to pursue personal development consistently, thereby enhancing the Company's competitiveness. Our awards include:





Talent Retention

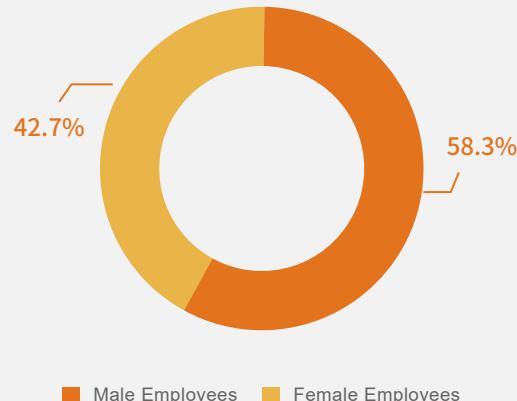
Employees are the most crucial assets of the Company. We try to retain top performers by offering competitive remuneration and benefits, as well as diverse career development paths. We cultivate a unique corporate culture, embrace open communication, and show our care to employees. In 2019, we had particularly launched the Building the Best Workplace Program and Organizational Value Program, programs that aimed to build a more friendly, supportive working environment so that employees can feel better about the work they do and be more productive. By improving employee recognition and their sense of belonging, we are doing well with talent retention.

As of 2019, the employee turnover rate was kept at 17.5%, down 4.5% compared to 2018, and about 50% of employees that left were from SMIC (Shanghai). Details on employee turnover are as follows:

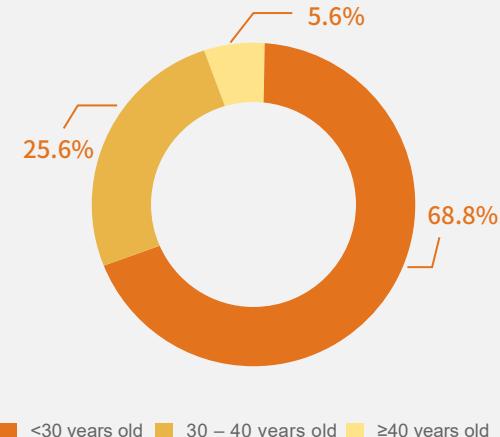


Distribution of Employee Turnover

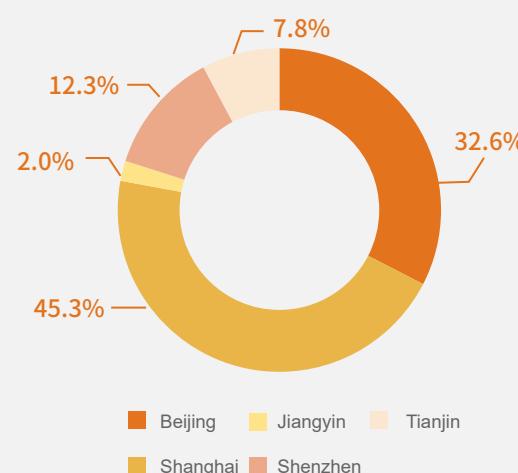
Gender in Employee Turnover



Age in Employee Turnover



Region in Employee Turnover



Retention of Manufacturing Assistants

Manufacturing assistants (MAs) account for the largest percentage in the Company as the most basic employees. SMIC has been implementing the manufacturing assistant retention plan since 2012. In 2019, we continued job evaluation, new environment integration, shaping good character, festival care and other projects.

Retention Program	Description
Job Evaluation	To reduce turnover due to mismatch between personal characteristics and position requirements, and to screen emotional high-risk candidates to reduce accident rates, the MA candidate-position matching measurement project was launched across the board.
New Environment Fit-in	Help newcomers to quickly get familiar with the surrounding environment, understand the psychological process of adapting to a new job, and learn about health knowledge in shift work, and solve their psychological problems as they are being employed, complete their transition to the professional MA role as SMIC requires. Promote newcomers' interpersonal and communication skills, and enhance their stability.
Good Character Shaping	In 2019, we carried out various kinds of psychological training seminars for MAs. We added various books at restroom on the Mid-Autumn Festival to rich their spiritual world, and orgnized the activities of visiting nursing homes in the Double Ninth Festival.
Festival Care	We visited the staff quarters in the Spring Festival of 2019. The "Spirit of Mind" was released on the Company's website bulletin board to cared for MAs on the Women's Day, Mid-Autumn Festival, National Day, Christmas and other holidays.





Greater Employee Engagement

Under the philosophy of inheriting culture and using art to cultivate people, we held cultural activities in SMIC in 2019 to help employees increase self-awareness, develop their potential, and build an effective team. We successively organized company culture-themed events such as Masters at SMIC, Young Artists at SMIC, and Calligraphers at SMIC where arts and culture were displayed at SMIC to cultivate the employees' spirits. Therefore, on a spiritual level, we help employees build a positive outlook on life and values. They grow and achieve success with the organization and feel like a part of the Company, which in turn, contributes to the Company's cultural construction and brand image. Furthermore, that will enable us to attract more talented people to join the Company.



Seminar: Masters' at SMIC

Advocacy of Open Communication

SMIC establishes company quarterly communication conference attended by the Chairman, CEO, managers at all levels and employees representatives, grass-roots employees communication meeting attended by engineers, manufacturing assistant communication meeting attended by front-line production employees, technical trainee communication meeting and other communication meetings covering all levels of employees, and opens an email to ensure smooth communication. In 2019, a total of 36 different types of communication meetings were held.

In 2019, a total of

36

different types of communication meetings were held

Communication Type	Frequency
Corporate Communication Conference	Once quarterly
Employee communication meeting	Once bimonthly
Manufacturing assistant communication meeting	Twice monthly
Technical trainee communication meeting	1-2 times every six months
Communication with e-mail/ tel.	Realtime



Communication Meetings



We also talk with those who decided to quit and listen to their frank and objective opinions to improve corporate policies and the management system, promoting the sound development of the Company.

We appointed Change Agents (CA) directly from each business department in early 2019 to coordinate business departments with human resources management. And we require CAs to help department heads reassure employees and lead the team to higher efficiency and better operation.

While representing employees' opinions and delivering positive energy to the Company, the CA team is also in charge of overall communication strategies and planning. With communication planning, management, and various communication channels, we can better listen to our employees, give feedback, and persuade protesters promptly, and by doing so, we also enhance the consistency, openness, and timeliness in information transmission to ensure smooth and frank communication.

Cycle Diagram of Communication Planning Management

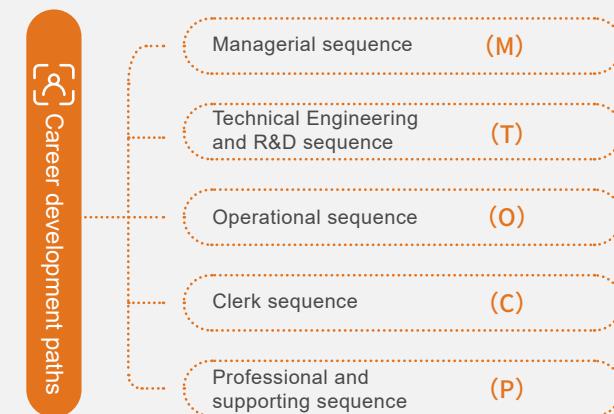


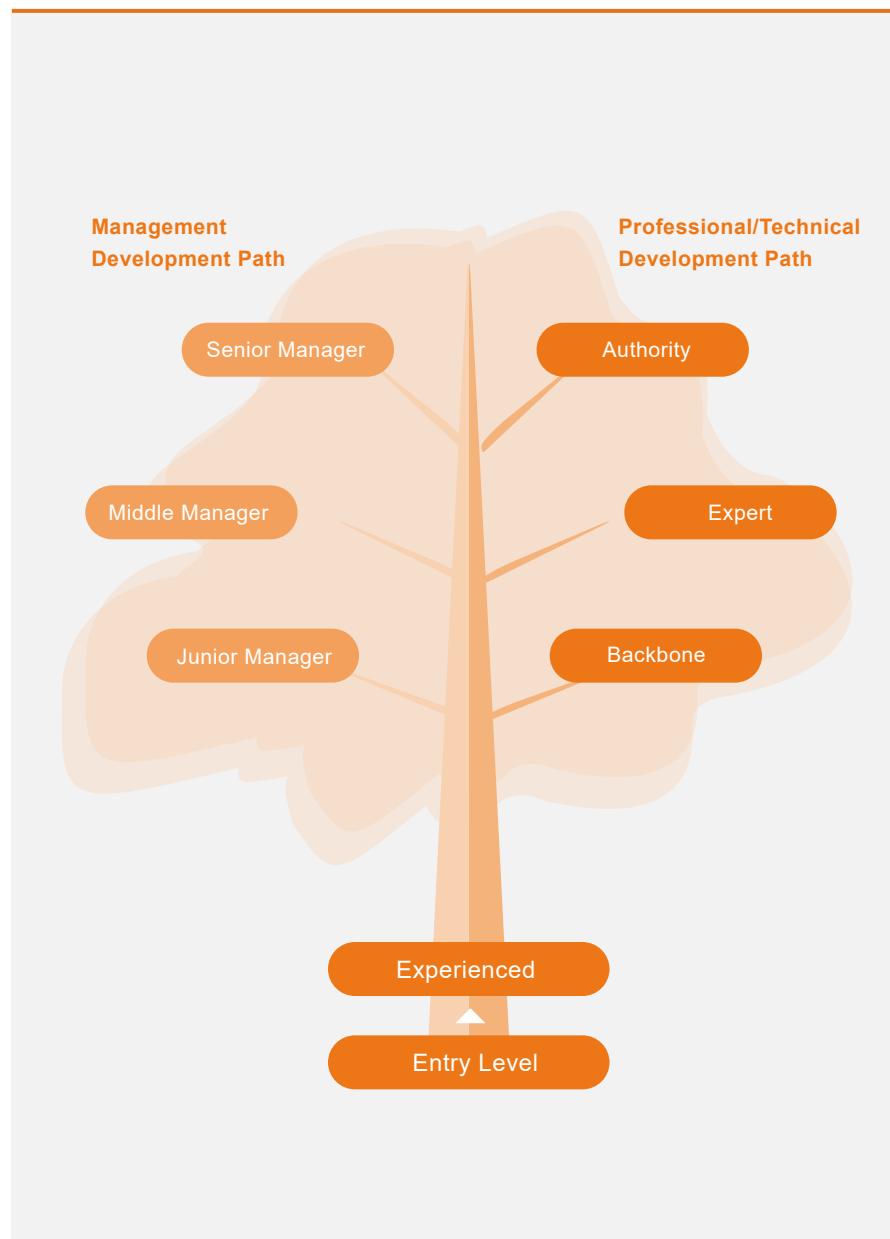
Career Development

We recognize employees' career development and have established reasonable development paths with comprehensive supporting resources as well as a specific retention system.

Career Development Paths

Learned from the best companies in China and around the world, we have been developing a career ladder system since 2019 and continue to improve the sequence of the positions to explicitly present all available career development paths.





Vertical Development Channel—Promotion

The Company offers promotions to employees with excellent performance and ability, while motivating them with pay, bonuses and development opportunities.

Horizontal Development Channel—Job Transfer

The Company publishes internal recruitment information on the intranet as required by the business for employees to apply according to their own personal career planning, interests and strong point, thus fully mobilizing their initiative and enthusiasm and optimizing the Company's human resources allocation.

Rapid Development Channel

In order to build a rapid development channel for technical talents, attract high potential talents to join and cultivate a group of high- level technical experts, the Company sets up a rapid growth project in the technique sequence. Employees entering the project will be given more attention, training and responsibilities, so that they can quickly grow into the Company's technical backbone.





Career Development Booster

By means of training, online learning platform, further study program, and other career development boosters, the Company provides employees with a full range of resource support, to help employees continue to grow and promote continuous development of the Company.

Employee Training

The Company provides targeted training for different levels of employees, such as orientation, training for new employees, capacity development projects for middle and middle-senior managers, sets up multi-dimensional training contents, such as corporate culture, professional skills, general skills and management and leadership development, etc., carries out training in diversified forms, such as face-to-face, on-the-job training, job rotation, study group, reading group, knowledge base, etc.

In 2019, the Company offered more than

9,000 different courses



18.9 hours per capita

The total hours of training for employees at all levels

229,602 hours

The total number of trainees is

146,897 person-time

Training Types





Online Learning Platform

In order to facilitate the employees to learn at any time, the Company sets up an online learning platform E-learning, covering 990 courses, including the most advanced semiconductor technology knowledge at home. To adapt to the development of the employees in the new era, the Company in 2019 upgraded the training management system to integrate existing resources and provide employees with rich curriculum contents, enhance the system functions in all aspects, improve the learning experience of employees to meet their learning needs and improve the Company's learning efficiency.

The screenshot shows the 'TRAINING system' homepage. At the top, there are links for 'Online Survey', 'Help', and 'Logout'. Below that are buttons for 'Employee' and 'Instructor'. The main menu includes 'Home Page', 'To Do', 'Individual Development Plan', 'Training Course', and 'Continuing Education'. A search bar says 'Please input key words: Java'. Below the menu, there are sections for 'My Training' and 'Recent Courses', each with a table showing columns for 'Training method', 'Name', 'Course Date', 'Location', and 'Instructor'. A sidebar on the left shows 'Total Learning Points: 2' with a progress bar.

Online training platform

Further Education Program

The Company supports the continuous education of employees by providing continuing education opportunities and platforms and cooperating with the domestic first-class universities (including Fudan University, Shanghai University, Peking University, Beijing Institute of Petrochemical Technology, Tianjin University, Shenzhen University, etc.) to set up three types of schooling program at levels of master, bachelor and junior college, to meet the on-job learning needs of employees at different levels, enhance the overall cultural level of the Company's employees, and at the same time the Company gives a certain tuition subsidy to eligible employees.





Occupational Health and Safety

We care about the occupational health and safety of employees. Since the founding, we have applied the occupational health and safety management system in the Company which will be audited by a third party annually to ensure effective operation. Also, we provide sufficient funds to ensure occupational health and safety every year. In 2019, we invested nearly RMB 180 million in the matter.

We comply with over 100 applicable occupational health and safety laws or standards such as the Prevention and Control of Occupational Diseases Law of the People's Republic of China and the Production Safety Law of the People's Republic of China.

In 2019, we invested



RMB **180** million

in occupational health and safety.

Healthy and Safe Work Environment

Risk Identification, Management and Control

We attach great importance to controlling the source of security risks. We have developed a risk inspection and assessment mechanism in the construction of factories to ensure the fire prevention facilities, safety facilities, and emergency response facilities are all in place and ensure we have a safe factory;

We strictly control the use of hazardous chemicals or facilities, manage any related changes, and particularly look into the safety interlock switches and detection devices on the equipment, so that we can control and reduce external risks;

We have set up an emergency response team which will conduct regular drills; regular maintenance of fire prevention facilities, safety devices, and detection systems; daily on-site auditing to eliminate health and safety hazards; regular detection of occupational health hazards in the workplace and provide special workers with appropriate personal protective equipment.

Factories Construction

Equipment Installation

Experimental Factory Operations



Health and Safety Management

In strict accordance with the national occupational disease prevention and control law, SMIC organizes annual occupational health examinations for employees who are exposed to occupational hazards. In 2019, the Company organized a total of 5,382 employees to participate in the occupational health examination, with occupational physical examination and health records covering 100%.

In 2019, SMIC continued to develop the target of zero major fire accident and ensured achievement of the target by implementing surprise drills, cross-plant risk control conference, fire risk inspection and other management projects. The goal was achieved successfully.

In 2019, the number of employees participated in the occupational health examination

5,382 employees

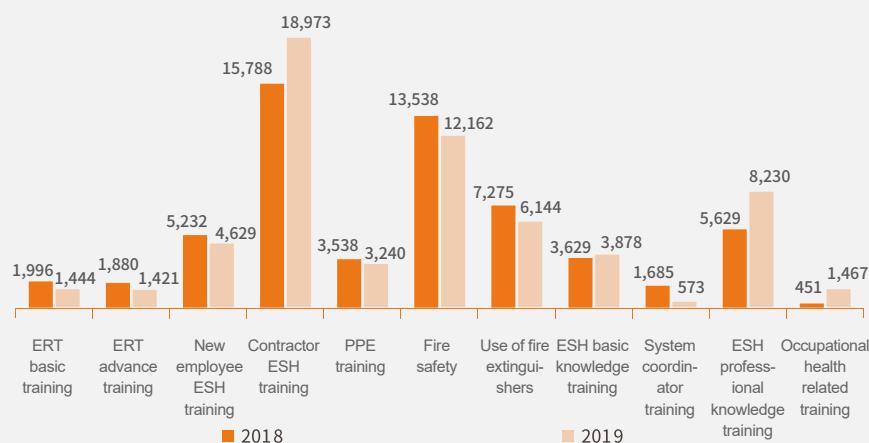
Occupational physical examination and health records covering

100%

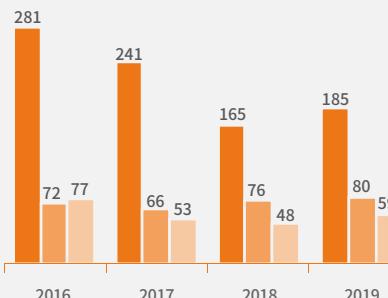


Rescue drill

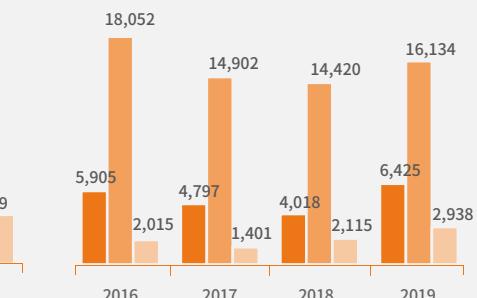
Health and Safety Training Summary (Person-time)



List of Drills (Times)



List of Drills (Number of participants)





In June 2019, factories of SMIC organized the 16th Safety Month activities at the same time. The Company management attached great importance to the activities and attended the opening ceremony, which enhanced the employees' safety consciousness and simultaneously improved their safety skills. Safety Month activities fall into dynamic and static activities, the former including SCBA training, firefighting training, fire hose training, CPR training, etc. and the latter including safety knowledge contests, posters, safety culture photography, displaying of posters, etc. The factory in Beijing also received local government awards.

Safety Month activities



Summary of main activities of Safety Month

A total of

28,399

person-time

A total of

18,545

person-time of
dynamic activities

A total of

9,854

person-time of static activities

Shanghai
10,578
person-time

Beijing
5,697
person-time

Beifang
5,420
person-time

Tianjin
2,652
person-time

Shenzhen
4,052
person-time

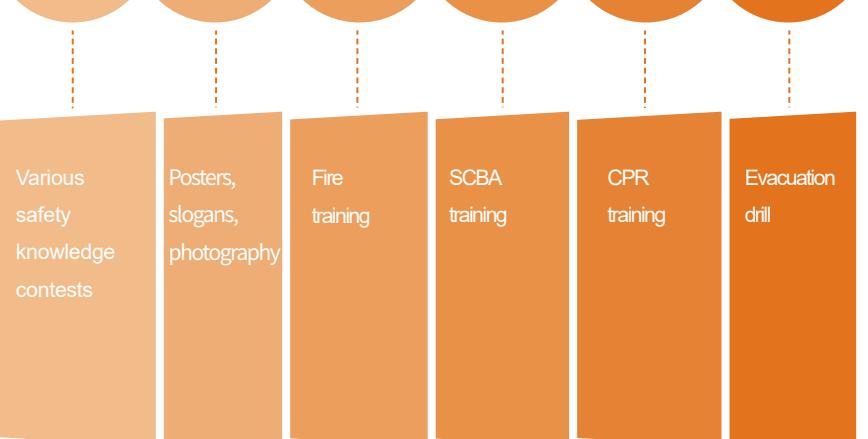
2,241
person-time

8,145
person-time

3,926
person-time

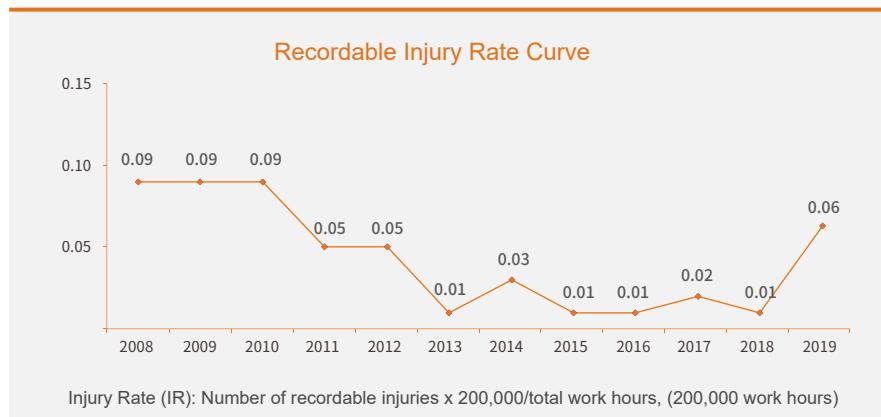
2,265
person-time

3,601
person-time





We record work-related injuries according to the standards set forth by OSHA and our recordable injury rate has always been lower than the average rate in the industry. However, the recordable injury rate of 2019 was a little higher than usual and we have investigated these injury injuries, analyzed them and made corrections. So far, all preventive measures are being put into practice. We will continue to try to reduce the recordable injury rate to zero.



Care for Physical and Mental Health of Employees

Health Center

SMIC has a health center in the factory and living quarter (LQ), equipped with experienced medical employees and adequate facilities, to provide free medical care and emergency medical assistance for employees and immediate family members, so that the general disease can be diagnosed within the Company. The Company arranged a number of courses to promote health, to improve the employees awareness of "focusing on health and laying emphasis on prevention".



CPR Training

In order to improve the first aid awareness of employees, the Company has established cardiopulmonary resuscitation (CPR) as a regular training program and offered the public training course on CPR in the health center. The Company arranges a certain percentage of employees (including engineers, operators, secretaries, etc.) to receive CPR training and rehabilitation each year, and carries out CPR competition in the Safety Month event. There were 3,601 in total attending CPR training in 2019.

In 2019, the total person-time of CPR training is

3,601





Infectious Diseases Prevention

Preventing the spread of infectious diseases is essential to a harmonious society. As a member of society, we have always been ready to assume responsibility. Every year, our health center will have new hires vaccinated against measles, manage employees with infectious diseases such as hepatitis and tuberculosis, and visit them regularly. A total of 409 people were vaccinated against measles in 2019.

A total of

409

people were vaccinated against measles in 2019.



Psychological Crisis Prevention and Assistance

To prevent serious psychological problems amongst employees, which may endanger their safety as well as the Company and society, we have provided a standard psychological consulting room with a 24-hour psychological assistance hotline where professional consultants are ready to help employees. In case of a serious psychological crisis, our Company's professional psychological consultants will give immediate help to prevent progressive mental deterioration. In 2019, the psychological consulting room continued to improve the three-tier psychological crisis prevention system, including psychological screening before employment, mental health education following employment, psychological counseling, and crisis management. As of 2019, our psychological counselors had provided psychological counseling 156 times for individuals, including employees and their immediate family members, covering all aspects of the employee assistance program (EAP), along with 56 various psychological courses.

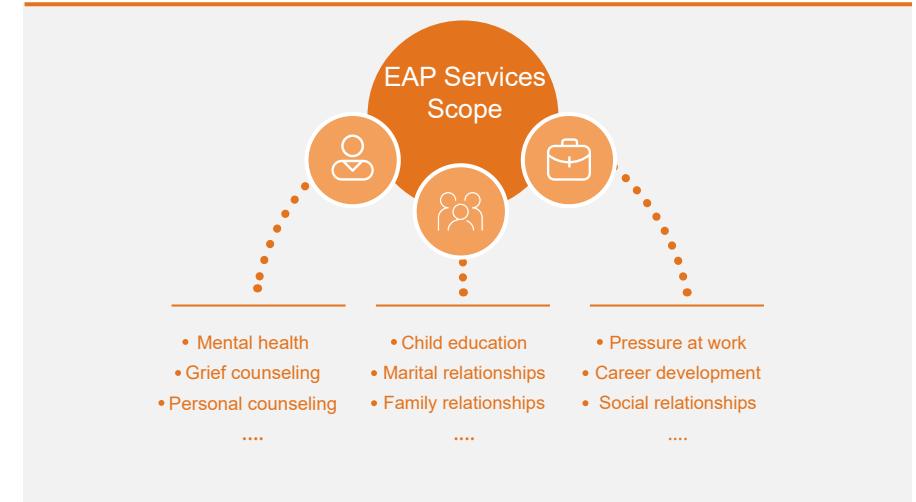
As of 2019, our psychological counselors had provided psychological counseling

156

times for individuals including employees and their immediate family members.

56

various psychological courses.



The Loving Mommy's Room

We have a loving mommy's room for employees returning from maternity leave. The room is warm and equipped with facilities to give unique care to female employees.





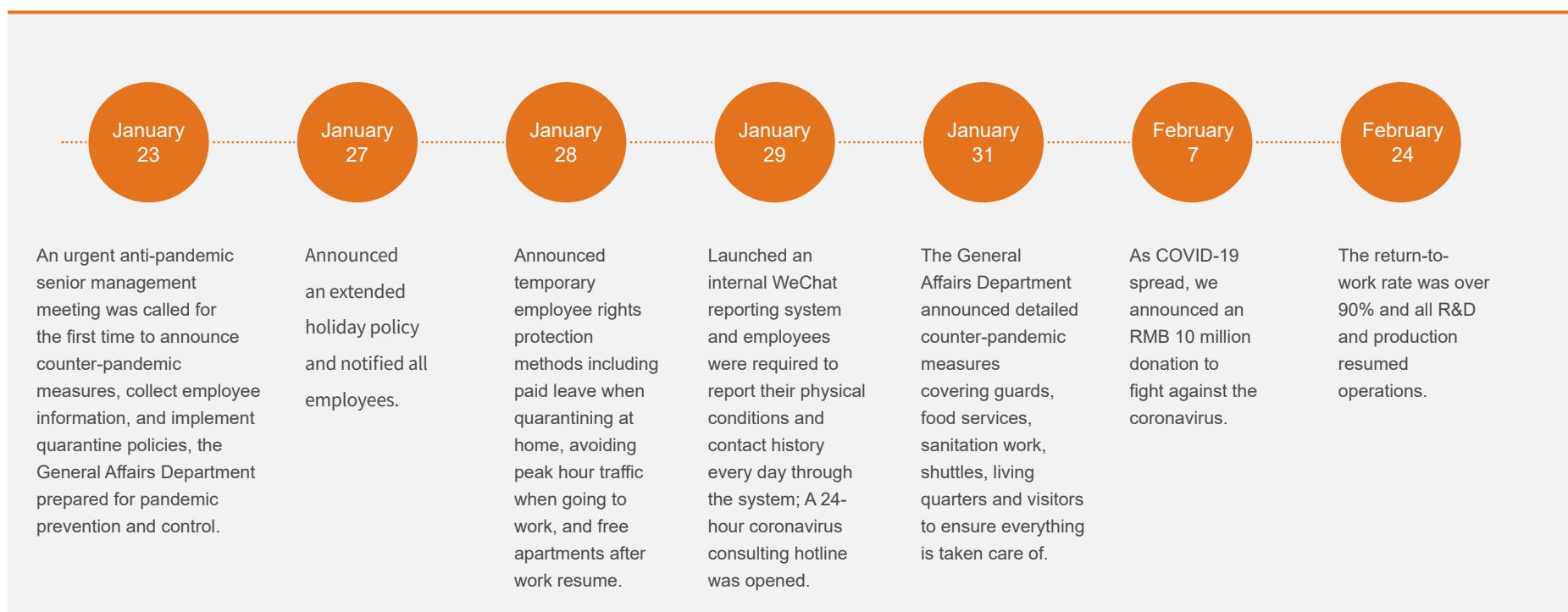
Curb the Spread of COVID-19

Novel Coronavirus Pneumonia (COVID-19) Prevention

In early 2020, after the COVID-19 pandemic broke out in Wuhan, China, the disease spread quickly to the whole country, threatening human health and safety, as well as companies' operations. We set up a COVID-19 Control and Prevention Committee promptly, early in the epidemic, to direct prevention work at every level of the Company, ensuring instructions are relayed top-down and are well followed, and each level is accountable for certain duties.

Under the Committee's leadership and with each department's cooperation, we have been victorious in multiple phases of the battle against the pandemic and safeguarded Company's production. Both employee safety and business operations are protected, and factories are continuing to operate orderly.

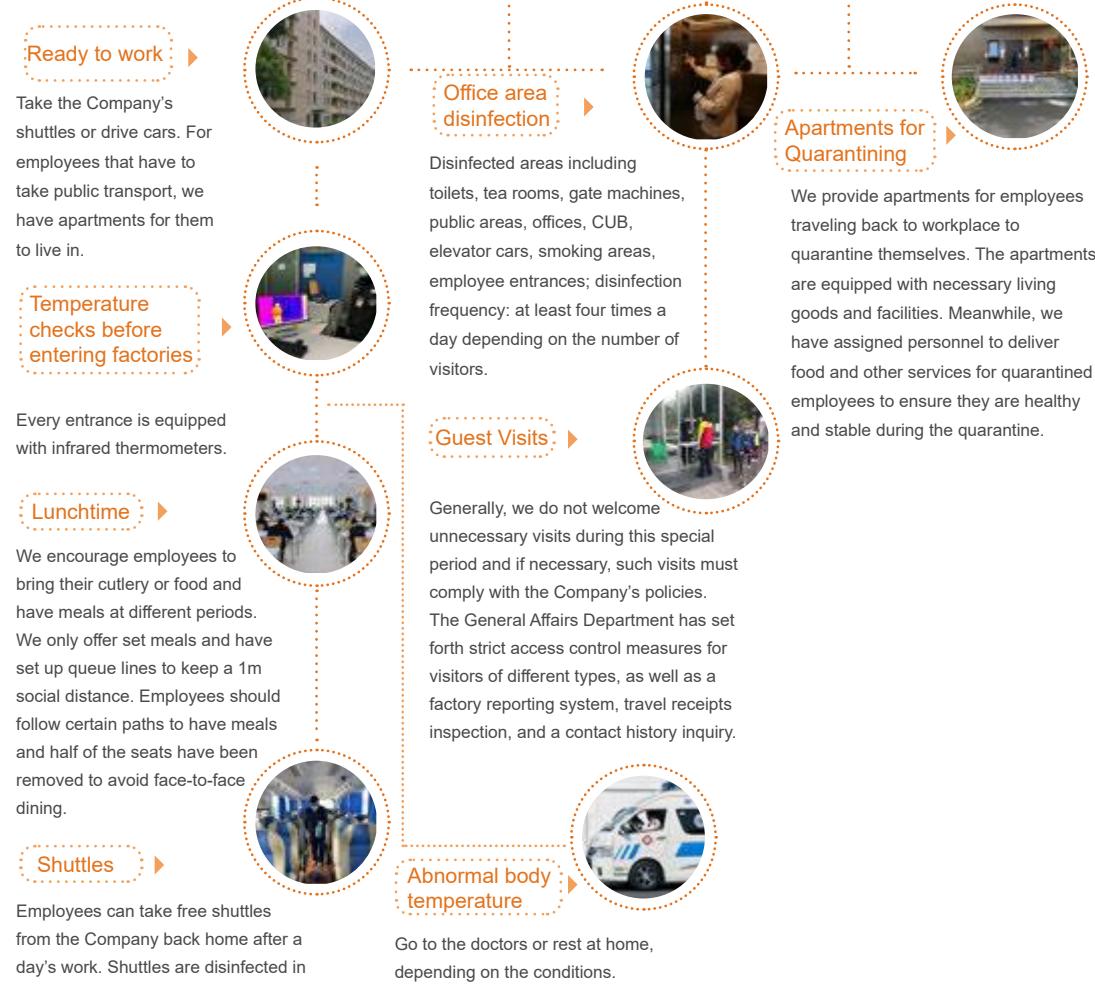
SMIC Anti-epidemic Timeline





Putting Employee Safety First

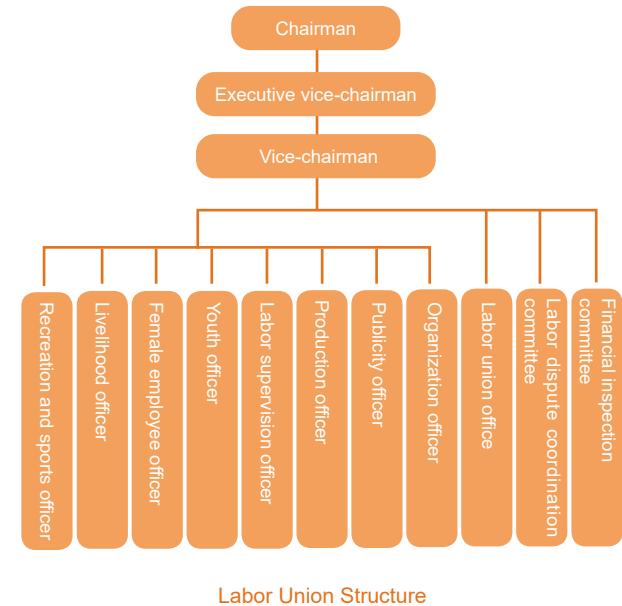
In the context of work resumption, how to ensure employee safety has been our first concern. The health center together with the General Affairs Department has formulated strict preventive measures for employees from the moment they leave the house.



Wonderful Life

Democratic Management

We have set up the Labor Union, established a Labor Union management system, and adopted democratic management under applicable national laws to safeguard employee rights. The Labor Union consists of the chairman, executive vice-chairman, vice chairman, Union members, and Union office workers. The chairman of the Labor Union is the Company's Vice President, and the executive vice-chairman, vice chairman, and union members are representatives from each department. Employees are welcomed to join the Union at their will.





In 2019, the Labor Union showed its concern for employees' lives and a harmonious employment relationship. The Union encouraged employees to actively participate in business-related activities including scientific innovation, labor competition, and awards for excellent teams and workers. It carried out various cultural and sports activities for employees to display their talents and enrich their lives.

Diverse Activities

We encourage employees to enjoy themselves in various recreational sports and every year we will hold large-scale events including sports games and carnivals. Also, a dozen recreational sports associations are endeavoring to enrich employees' lives and meet their spiritual needs at a comprehensive level and from diverse perspectives.

“Forge Ahead for a Win-Win Future” Fall Sports Games

The annual fall sports games were held in full swing on October 19, 2019, when we also made innovations based on our inherited pioneering spirit. In addition to group games, we also had individual events and simple, fun games. The games not only enhance team cohesion and teamwork across the Company but also give a special and different experience to the cheering crowd as well as employees' family members. We stand together, forging ahead for a win-win future.





Movie Watching

To reduce employees' pressure at work, relieve their stress, and considering that they may gain some inspirations from movies, our Shanghai Labor Union had carefully prepared a series of film watching activities themed "Labor Union Invites You to Watch Movies" throughout 2019, once every one and a half month to two months. All movies were carefully selected considering the quality and purpose of the film. Ultimately, we selected movies about family affection, motivation, and select blockbusters, so employees can enjoy their viewing experience with the rest of the Company.

Flash Mobs

The year 2019 celebrates the 70th anniversary of the founding of the People's Republic of China. SMIC (Shanghai) organized three flash mobs on Youth Day (May 4), Party's Day (July 1) and National Day (October 1). Hundreds of performers gathered together and thousands of employees participated in the events that united us together to move forward, never forgetting our mission and remaining true to our original wishes.



Spring Festival Party

To welcome the New Year, the Labor Union held a Spring Festival Party on January 28, 2019, and invited employees to watch a free viewing of Bumblebee, then the hottest New Year film, under almost simultaneous release with the theater, so employees could enjoy the movie-theater experience in the Company. At the same time, the Union also prepared New Year gifts for everyone, wishing the new year a great, new start.



Labor Competition with Consistently Good Results

We encourage employees to participate in various competitions, and since 2013, our employees have been winning the best awards. In 2019, SMIC teams and individuals received many invaluable awards such as Shanghai May 1st Labor Award, Shanghai May 1st Labor Medal, Shanghai Craftsman, Shanghai Workers Pioneer Award, and First Prize of Shanghai Best Invention Competition.



Recreational Sports Associations and Activities

We have established many associations based on employees' interests and needs. As of the end of 2019, there were a dozen of associations such as the running association, football association, and basketball association. We also have wonderful activities each year and take part in various competitions where we have won many prizes. These activities enrich employees' lives, motivate them, and enhance team cohesion. The reading association and chorus are under active preparation and ready to open in 2020.





Singers Wanted

SMIC (Beijing) and SMNC successfully held the fierce singing contest Singers Wanted - Music of Your Heart and Singing Enthusiastically on June 20, 2019. And 154 employees participated in online auditions, and 20 singers from different departments stood out. Busy work cannot bury our love of music, and the roaring machine cannot drown out the high notes of youth. When we are occupied with reports, some lines of lyrics suddenly come to our mind and when we are having endless meetings, we may casually hum melodies we love. It is time to set yourself free, put aside work, pressure and tiredness, open the heart of music to sing enthusiastically.



Celebrating Festivals in Various Ways

The Labor Union organizes various unique and diverse activities that deliver positive energy to celebrate different festivals, enrich employees' lives and strengthen cohesion in the Company. In addition to traditional festivals such as the Lantern Festival and the Mid-Autumn Festival, the Labor Union also prepares events for specific groups on Secretary's Day, Women's Day, etc.

Care for On-duty Employees on New Year's Eve

To show care to employees that were on duty on New Year's Eve, SMIC (Shanghai) particularly held a New Year's Eve party on February 4, 2019. Everyone together shared the delicious New Year's Eve dinner and enjoyed the wonderful programs. At the same time, employees also received red envelopes and blessings from the chairman and officers of the Labor Union.



Guessing Lantern Riddles

On February 19, 2019, the day of the Lantern Festival, the SMIC Shanghai's cafeteria was full of festive atmosphere. While enjoying the hot glutinous rice balls, employees were also enthusiastic about guessing riddles on the lanterns. Everyone gathered here to happily celebrate the Lantern Festival and create new stories in SMIC.



Women's Day Wishes

The rose is in her hand, the flavor in mine. We presented flowers to female employees on March 8, 2019, which is also a tradition of SMIC on international women's day.





Dragon Boat Festival

SMIC (Shenzhen) and Shenzhen Labor Union together held the event - Enjoying Sweet-Flavored Zongzi on Dragon Boat Festival on June 3, 2019. The event had strengthened employees' understanding of the traditional festival, increased their sense of belonging, and made every employee feel the warmth of the Company.



Family Open Day

SMIC Tianjin held the Family Day Carnival in Celebration of the 70th Anniversary of the Founding of the People's Republic of China on September 28, 2019. People sang the Ode to the Motherland and played fun games such as tug-of-war, jump rope, give a ball, and relay races.



Learning Etiquette on Secretary's Day

Secretary's Day has become a unique festival we celebrate annually, and on April 18, 2019, we did have quite a good time. The Labor Union had invited the secretaries of all departments to enjoy the beauty of the etiquette when they could learn new knowledge about etiquette and have more communication with each other.



Programmer's Day

The Information Technology Department held the first Programmer's Day on October 24, 2019, to motivate the hard-working programmers.



Convenient Living Services and Facilities

Shanghai Living Quarter

SMIC (Shanghai) Zhangjiang Living Quarter covers an area of 276,000 m² and can house over 2,500 employees and their families. It is about 1.4 Kilometer away from the factory and easy for employees to walk, bicycle, or take free shuttles there. SMIC (Shanghai) Zhangjiang Living Quarter has 3,031 beds and the occupancy rate is 79%. The living quarter also has a children's activity center and other service facilities.

Shanghai Tangzhen Living Quarter is about 7 Kilometer away from the Company. Phase I construction covers an area of more than 70,000 m² with 16 high-rise residential buildings taking over 130,000 m² in floor area. Inside, there are 1,100 apartments and 431 dormitories, both of which are well decorated and furnished, able to house 4,500 employees and their families. The living quarter currently serves about 3,100 people with 1,100 family apartments (occupancy rate: 96%), 431 dormitories, and 1,492 beds (occupancy rate: 70%). The living quarter also has a children's activity center, a large underground garage, ground garage, commercial building and other service facilities.



SMIC (Shanghai) Makes On-going Efforts to Improve Living Environment and Facilities

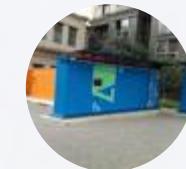
Installation of Electric Vehicle Charging Stations

In cooperation with StarCharge, we installed 20 electric vehicle charging stations in the underground garage in 2018 for employees and their families. In 2019, we added 10 stations on the community ground. So far, we have installed 30 electric vehicle charging stations.

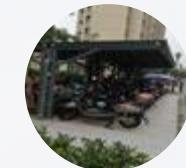


Parcel Locker Installation

We already installed 4 sets of parcel lockers with the help of CIMC in 2018 for the convenience of employees and their families. In 2019, again we cooperated with Cainiao to install another 2 sets of parcel lockers. Together, at the west entrance to the community, we have 6 sets of parcel lockers.



There are over 100 electric scooters in the community that need charging and sheds. We cooperated with Jiaxing Zhixing Internet of Things Technology Co., Ltd. in 2018 to install 1 charging station (28 piles) and 1 shed at the west entrance to the community. In 2019, we added 1 charging station and 1 shed at the west entrance (50 piles) and south entrance (24 piles) respectively. So far, we have 102 charging piles and 3 sheds for electric scooters.



Garbage Sorting Stations

We set a garbage sorting station at the south and west entrances to the community respectively on June 1, 2019, under the call of the Shanghai government and for residents' convenience.



New Laundry Room

A new laundry room was opened in the Building 1, No.6 Collective Dormitory, Zhangjiang Living Quarter for employees to clean their clothes and quilts.



Maintenance and Updates

Fix water leaks in the employee apartments of Zhangjiang Living Quarter; replace old equipment; waterproof the bathroom; maintenance and updates of other facilities.



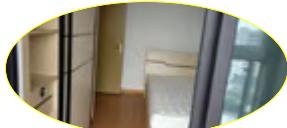


Beijing Living Quarter

SMIC (Beijing) Living Quarter provides accommodation for the Company's employees. At present, it serves about 3,328 people with 232 apartments in Phase I construction area, 371 one-bedroom apartments, and 1,732 beds in collective dormitories (1,519 people are housed).

Yongkang Apartments for Rent is to meet more first-line workers' needs for accommodation. Collective dormitories have 1,381 beds for rent and now 1,304 people are living there.

White-collar Worker's Apartments/Public Rental Units are for married employees in Beijing. In 2019, we had developed 227 white-collar worker's apartments and public rental units to house employees.



Tianjin Living Quarter

SMIC (Tianjin) Living Quarter provides accommodation for the Company's employees. At present, it serves about 1,237 people with 169 apartments and 967 beds in collective dormitories (759 people are housed).

Lejing Living Community Dormitories for Rent are to meet more first-line workers' needs for accommodation. Collective dormitories have 75 beds for rent and now 21 people are living there.

Shenzhen Living Quarter

The SMIC (Shenzhen) General Affairs Department helps employees solve living problems and the living quarter now houses about 685 people.

There are one-bedroom, two-bedroom, and four-bedroom dormitories, totaling 765 beds and housing 409 people.

There are 316 public rental units available for employees and their families , including 100 one-bedroom apartments and 216 one-bedroom-and-one-living-room apartments



Food Service

We provide food in all factories according to the number of employees and the size of the cafeteria as well as food subsidies. The cafeteria is operated by different food providers, serving both Chinese and western food, to meet the diverse appetite of employees. In 2019, the cafeteria held food festivals and cook-offs all while promoting frugal, healthy eating.

Food Festivals

All cafeterias in factories have carried out a variety of food festivals to promote communication and interaction between food suppliers and employees, as well as the concept of healthy eating. After the food festival, employees can have meals in a better atmosphere, feel better towards food, and build a stronger communication bridge with the food suppliers, thus improving the quality of food service.

- 150 people participated in DIY Zongzi on Dragon Boat Festival.
- The Dongxun Food Festival lasts for 5 days, and every day about 300 people can enjoy the delicious food.
- Food Festival Activities - Find More Delectable Food in SMIC.



Zongzi on Dragon Boat Festival



Food serving



Christmas and Santa Claus



Christmas Eve fruits

Transportation Services

We provide free shuttles between factories, living quarters, and nearby subway stations to better serve our employees, conserve energy, and reduce carbon emissions as most shuttles we use are alternative fuel vehicles. In 2019, employees took over 3 million trips by shuttles. To resolve parking difficulties, in 2019, SMIC built new parking sheds of 266 m² in Shanghai, 504 m² in Beijing and 170 m² in Tianjin to provide employees with parking space for bicycles, electric scooters and motorcycles, so that to ensure parking safety for bicycles, electric scooters and motorcycles.

In 2019, employees took over

3 million

trips by shuttles.



SMIC built new parking sheds of

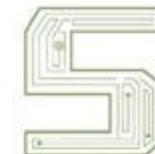
940 m²



SMIC shuttles



Dongxun Food Festival



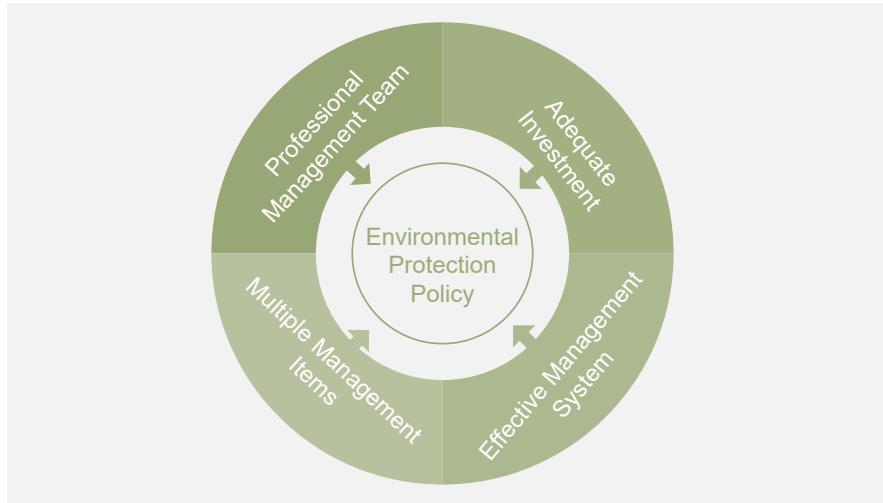
Caring for the Environment

We not only recognize the importance of business development and value creation but also care for environmental protection and the efficient use of resources and energy. We keep improving our practices to fulfill our responsibilities in environmental protection and pursue sustainable development.

- Environmental Protection Policy and Management
- Water Resource Management
- Waste Management
- Climate Change and Energy Management
- Air Pollutants Control
- Awareness of Environmental Protection



Environmental Protection Policy and Management



Environmental Protection Policy

Since the founding, we have created the Environmental, Safety and Occupational Health Management Department, established the environmental protection management system, and implemented both the ISO 14001 environmental management system and the OHSAS 18001 (ISO 45001) occupational health and safety management system. We have created our Environmental Protection, Safety and Health Policy with reference to both these standards. Following the continual improvement concept, we also optimized and modified this policy.



Environmental Protection, Safety and Health Policy

Environmental Protection Management

We integrate environmental management into our production in areas including organizational structure, document control, operation control, supervision management, and continual improvement under the environmental management policy and pursuant to applicable laws, regulations or standards.

We comply with over 100 applicable environmental protection laws, regulations or standards such as the Environmental Protection Law of the People's Republic of China, Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution, Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste, and the Law of the People's Republic of China on Environmental Impact Assessment.

Professional Management Team

Our Environmental, Safety and Occupational Health Management Department contains more than 100 skilled management experts. Each factory has an Environmental, Safety and Occupational Health Committee that is chaired by the factory head. Representatives from various business functions serve as officers on the Committee. The Environmental, Safety and Occupational Health Committee's power and responsibilities are clearly defined and it works collaboratively with the business on environmental management projects to achieve our environmental objectives.

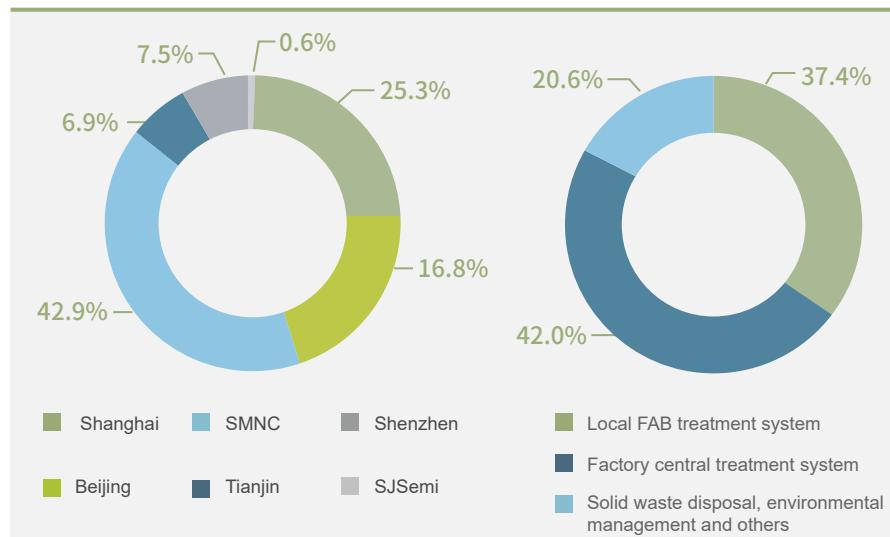




Adequate Investment

We invested more than US\$70 million in environmental protection in 2019, including operation, renovation, and expansion of treatment facilities for wastewater, waste gas, and solid waste, as well as pollution monitoring and third-party audit of environmental management system.

SMIC invested more than
US\$ **70** million
in environmental protection



Effective Management System

We adhere to the ISO 14001 environmental management system, ISO 14064 GHG emissions inventory verification system, and the QC 080000 hazardous substances process management system in all fabs. In 2019, all fabs were operating effectively and compliantly as 100% of them had passed certification by a third party.

100%
of management systems passed
third-party certification



Multiple Management Items

Cleaner Production

We implement cleaner production measures to minimize or eliminate the impact of operations on human beings and the environment. These measures include reducing pollution sources, improving our resource usage rate, and reducing or eliminating pollution during production, maintenance, and product usage.

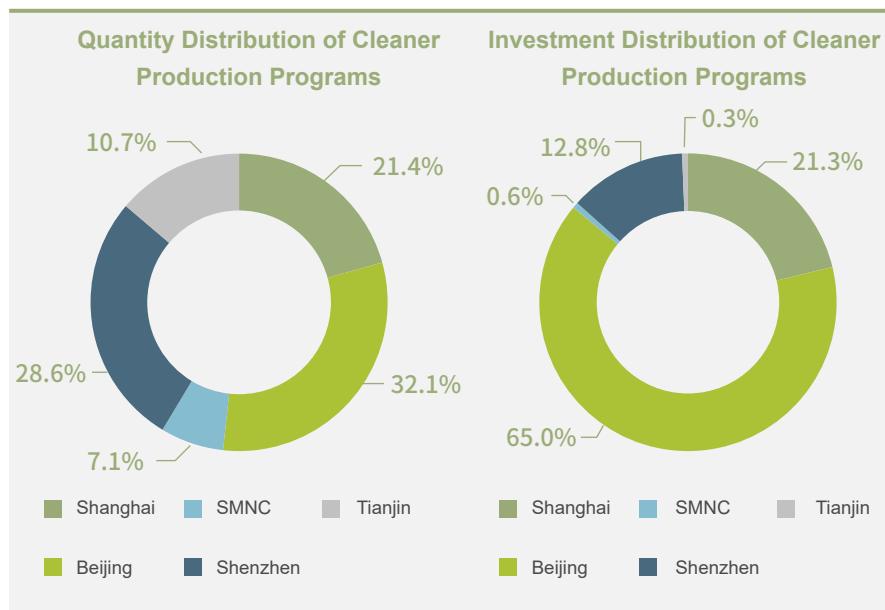
We conduct cleaner production audits every five years as required by the local government and improve our cleaner production scheme according to expert opinions in the audit report.

In 2019, we implemented

28 cleaner production programs

Invested approximately

RMB **10.56** million



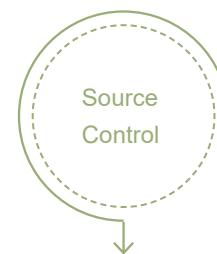
Green Industrial Construction

SMNC cooperates with the green building demonstration area in the Beijing Economic Technological Development Area to build a sustainable, energy-conserving, and environmentally friendly company. In September 2019 the Ministry of Housing and Urban-Rural Development evaluated and approved SMNC's advanced energy-conserving construction concepts, certifying it as a level-III national green industrial building.



Green Products

We control hazardous substances throughout production following the QC 080000 hazardous substances process management approach to meet domestic and international standards such as the Administrative Measures on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Products, the RoHS Directive and REACH regulations to ensure our products are green and safe.



We promote an assessment mechanism for green suppliers to control hazardous substances from the source. We choose suppliers that meet our green assessment and conduct regular documentation inspection and on-site supplier audits. We require raw material suppliers to provide a Non-Hazardous Materials Declaration. For high-risk substances, we need them to provide regular testing reports which should indicate zero hazardous substances.



We control production processes and partition equipment for management, training operators to prevent contamination of external hazardous substances during production.

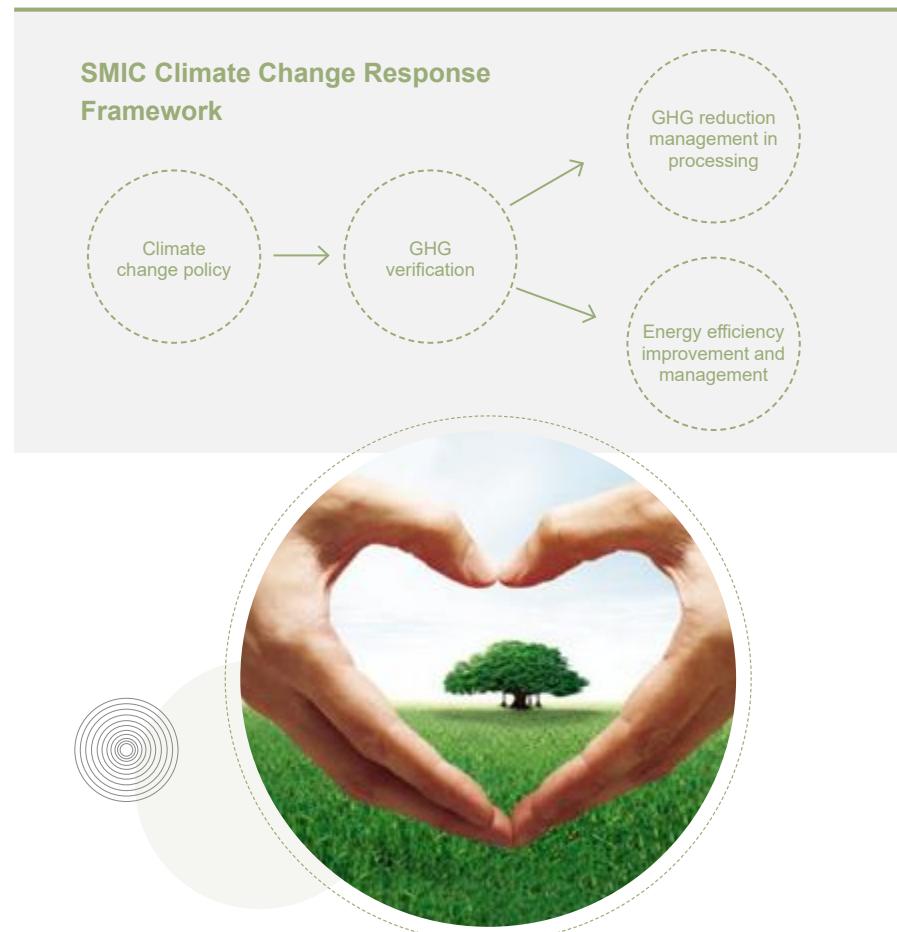


Each year we conduct hazardous substances testing for products and verify that the number of hazardous substances in products is under the specified limit.



Climate Change and Energy Management

The UN, governments of all countries, the society, and businesses all concerned about the issue of climate change, which has already caused natural disasters and affected the global ecological environment, human life and health, and production operations. We are concerned about the issue and are taking measures to mitigate climate change.



Climate Change Policy

We assume our responsibilities to mitigate climate change through climate change policies, implementing measures to reduce greenhouse gas emissions.

SMIC Climate Change Policy

SMIC conducts business with the wellbeing of our environment, our community and our next generation in mind. Concerned about global climate change, SMIC remains committed to save resources, reduce disaster losses caused by extreme weather, slow down and reverse the effect of climate change to achieve sustainable development and leave behind a cleaner and more stable environment. To achieve these objectives, SMIC commits to:

1. Decrease Greenhouse Gas emissions;
2. Reduce product energy consumption;
3. Lower product water consumption;
4. Pursue green production and energy saving products; and
5. Enhance the ability to prevent, respond, and recover during adverse weather conditions.

Approved by Date

JULY 2019
SMIC Group Co., Ltd. | Shanghai, China | Tel: +86 21 3200 0000

GHG Verification

We verify GHG emissions under ISO 14064 standards, calculating factory emissions annually and implementing emission reduction measures as scheduled.

Total GHG emissions in 2019 fell by 4.4% YoY to 1,722,781 tons of CO₂e. GHG emissions per unit of products (eight-inch wafer equivalent mask layer) decreased by 10.5% (representing a 10.5% reduction in emission intensity).

Total GHG emissions in 2019 fell by

4.4%



GHG emissions per unit of products decreased by

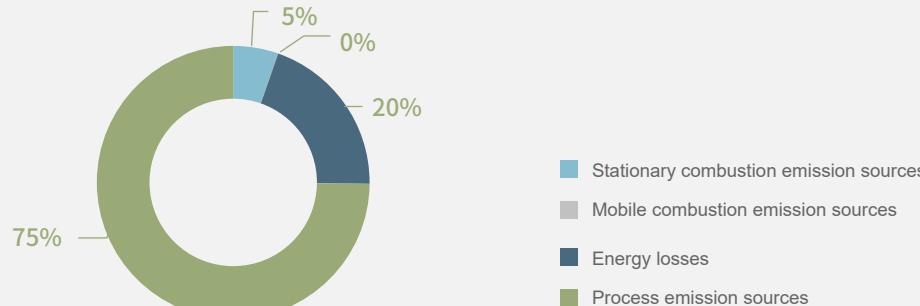
10.5%





Direct GHG Emissions

Direct GHG emission sources: Combustion emissions from fossil fuels such as gasoline, diesel and natural gas, perfluorinated compound (PFC) gas from the process of Chemical Vapor Deposition and Dry Etching, volatile organic compound (VOC) combustion treatment emissions, leakage of refrigerant gas, wastewater treatment emissions, pure water treatment emissions.



Note: Stationary combustion emission sources: VOCs treatment, backup generators, fire pumps, boilers, and combustion-based local exhaust gas treatment.

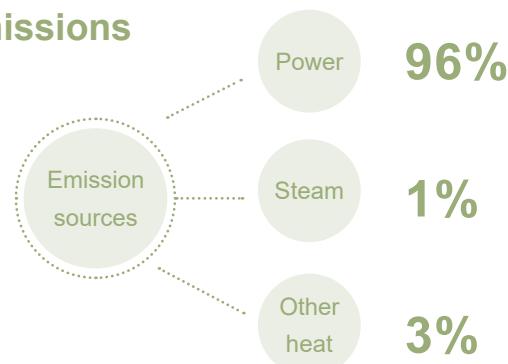
Direct GHG Emissions



Note: Direct emissions are calculated based on the discharge coefficient and mass balance provided in the 2006 IPCC Guidelines for National Greenhouse Gas Inventories.

Indirect GHG Emissions

Indirect GHG emission sources: Outsourced energy such as power, steam, and heat.



Indirect GHG Emissions



Note: Indirect emissions are calculated based on the discharge coefficient and mass balance provided in the 2006 IPCC Guidelines for National Greenhouse Gas Inventories.



Process PFC Management

As the Vice-Chairman of the China Semiconductor Industry Association (CSIA), we participate in events held by CSIA and the World Semiconductor Council (WSC). We cooperate in the WSC's PFC emission reduction program, strive to implement the best practice of emission reduction technology advocated by WSC, and reduce PFC emissions.

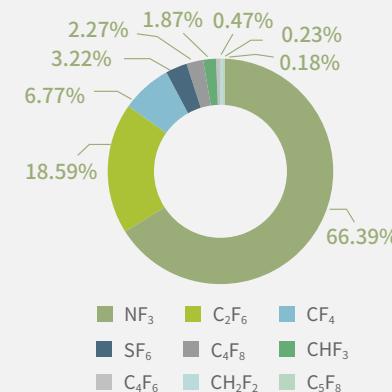
GHG reduction of PFC emissions reached 318,510 tons of CO₂e in 2019, up 2.8% from last year, but PFC emissions per product were 1.2% lower than last year. We adopt practices to reduce the GHG of PFC emissions as follows:

Optimize processes to reduce the use of PFC

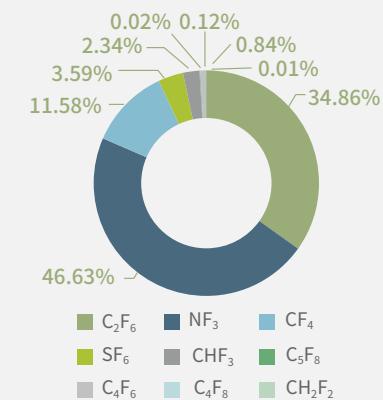
Use highly efficient local PFC treatment facilities to enhance treatment efficiency



2019 PFC Gas Consumption



2019 CO₂e from PFC Emissions



Energy Management

We have responded to the state's call for energy conservation and emission reduction by establishing our energy management team and continuously implement energy conservation and emission reduction projects. This enabled us to achieve both economic gains and environmental benefits.

Energy Management Mechanism

Most SMIC fabs have built a complete system for energy management in accordance with the ISO 50001 international standard. We operate a three-tier energy management network complemented by an energy management accountability system. We also appoint professional energy management agencies or individuals to ensure optimal energy management.

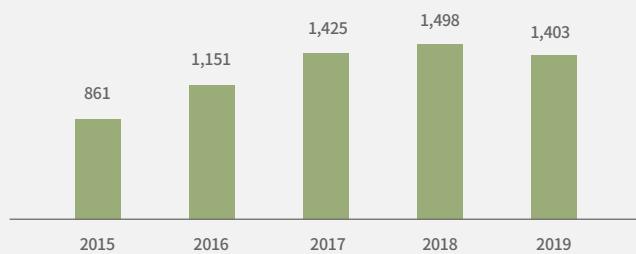




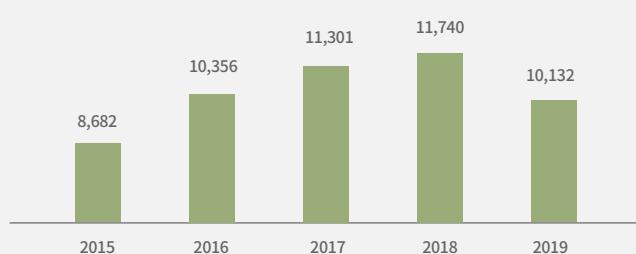
Energy Consumption

Our total energy consumption in 2019 was 1,752.23 million kWh. Direct and indirect energy consumption were 1,650.96 million kWh and 101.27 million kWh respectively. Indirect and direct energy consumption intensity was 10.76 kWh/eight-inch wafer equivalent mask layer and 0.66 kWh/eight-inch wafer equivalent mask layer respectively. Energy consumption and intensity of major energy types both declined compared to 2018.

SMIC Power Consumption (unit: million kWh)



SMIC Natural Gas Consumption (unit: kilostere)



SMIC Steam Consumption (unit: kiloton)



SMIC Power Consumption Intensity (unit: kWh/8-inch wafer equivalent mask layer)



SMIC Natural Gas Consumption Intensity (unit: liter/8-inch wafer equivalent mask layer)



SMIC Steam Consumption Intensity (unit: kg/8-inch wafer equivalent mask layer)



Note: Energy consumption data of 2019 does not include LFoundry.

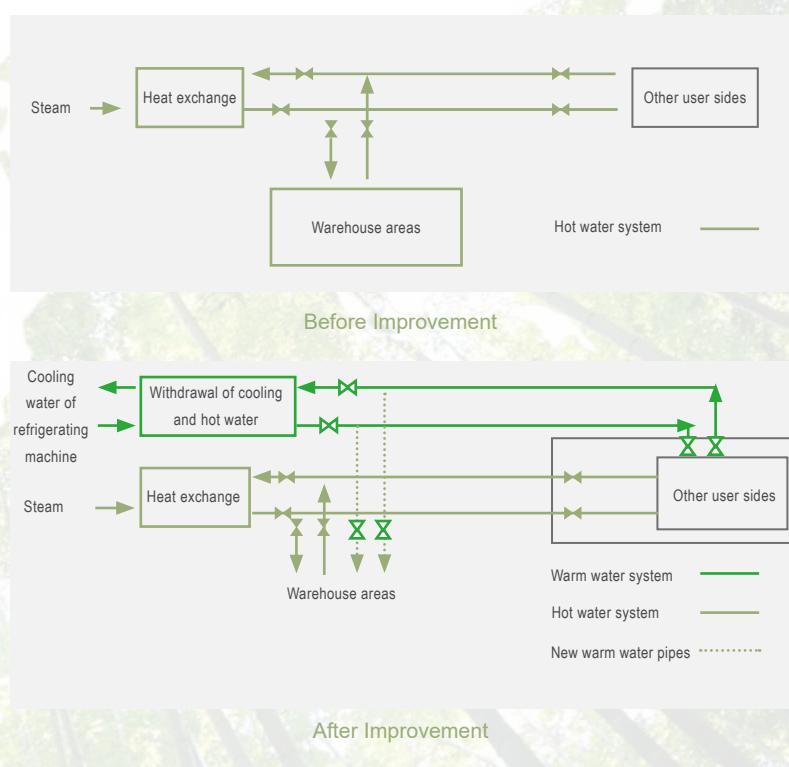
Major Energy Saving Projects

Plant	Project	Project Description	Energy Saving
Shanghai	Improving energy efficiency in the lighting system	Replacing 160 13-watt downlights in the central corridor of Shanghai Office Building No. 2 with 8-watt LED lights. Replacing 14,000 37-watt fluorescent lamps in Shanghai Office Buildings No.1 and No. 2 with 10.5-watt LED lights, to meet the requirement of illuminating and energy saving	1,650,209 kWh
Shanghai	Heat recovery from the heat-pump refrigerator	Stopping the use of municipal steam in summer and heat from the heat-pump refrigerator to replace the steam used to heat warehouses and other areas	289 tons of steam
Shanghai	Energy saving in plasma local scrubber equipment	Optimizing plasma torch currents of 89 plasma local scrubber equipment by changing the 160-volt DC (direct current) from 65-80A to 60-75A to reduce energy consumption	623,710 kWh
Shanghai	Energy improvements in vacuum pumps	Installing energy-saving equipment at the exhaust ends of 50 vacuum pumps without special gas reaction chambers	219,000 kWh
Shanghai	Optimization of make-up air conditioners in offices	Optimizing make-up air conditioners in offices to Halve the energy consumption of air conditioners	1,153,152 kWh
SMNC	Integrated management of cold/thermal energy	Managing cold/thermal energy through introducing new energy-saving devices and improving thermal energy efficiency based on the increase of total supplying areas	30,240 tons of steam
Beijing	Heat recovery from the heat-pump refrigerator	When the operation of the heat-pump refrigerator is conducted from November to next March, the heat-pump is connected to the heat recovery water pipe in series and the original heating system remains unchanged. Heating water from 55°C to 68°C to partly replace steam heat and producing water at 7°C , providing free cold energy	23,040 tons of steam
Beijing	Increase of frequency converters in the ultrapure water system	Originally the soft starter is installed on the pump of ultrapure water pretreatment system, and meets flow and pressure requirements by the adjustment of hand valve at the pump outlet, which is a mode of operation consuming large electric energy. Equipping 28 water pumps with frequency converters to replace soft starters, reducing running currents and energy consumption	844,355 kWh
SMNC	Energy-saving lighting modifications	Replacing 1,000 36-watt lights lights in non-core production factory areas, power supplying device areas, and office areas with 18-watt LED lights and 1,200 18-watt lights with 8-watt LED lights	851,472 kWh
Tianjin	Replacing the air compressor with compressed air	Replacing the original air compression system with compressed air in the large newly-built gas station to ensure a stable supply of compressed air and save energy	3,239,580 kWh
Shenzhen	Energy-saving optimization in offices	Optimizing the use of office space by encouraging work in centralized offices and reducing office operating times to reduce the usage of air conditioners and lights	433,770 kWh
Shenzhen	Increase of frequency converters in the water treatment system	Installing frequency converters to ammonia-nitrogen blowers and filtered/deionization/raw water pumps to improve lower energy consumption	336,459 kWh
Total		53,569 tons of steam	9,351,707 kWh



Case Sharing: Heat Recovery from Heat-Pump Refrigerating Machine

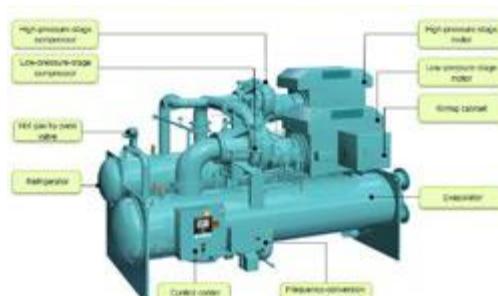
MAUs (make-up air units) are needed in warehouses and other areas to maintain stable temperature and humidity. These units need hot water to heat dehumidified low-temperature air when using ice water for dehumidification. MAUs need less heat in summer than in winter, when steam is used for heat. In hot weather, water warmed by the heat recovery system from the heat-pump refrigerating machine provides heat to the MAU, saving energy.



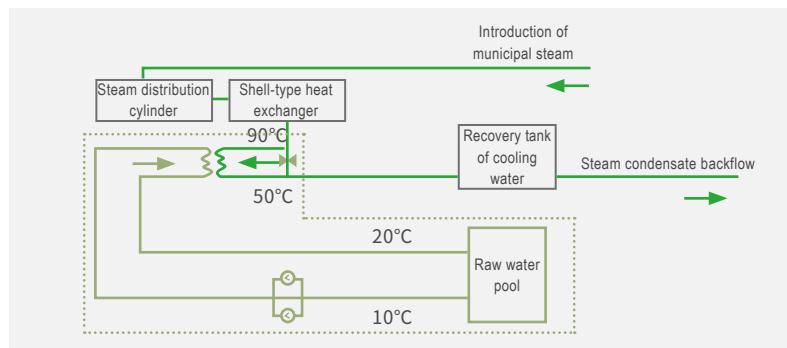


Case Sharing: Integrated Management of Cold/Thermal Energy

Cold and hot areas serving thermal energy systems in factories expand along with the overall facility's capacity, increasing their cost. We made several improvements to improve efficiency and stabilize costs. We installed a system to recover steam condensate using waste heat from the heat-pump refrigerator, cooling the energy in water. This decreases the cost of outsourced heat sources. We also optimized air conditioners and refrigerating machines for operation within a more effective range to reduce power consumption.



Heat-pump Refrigerating Machine

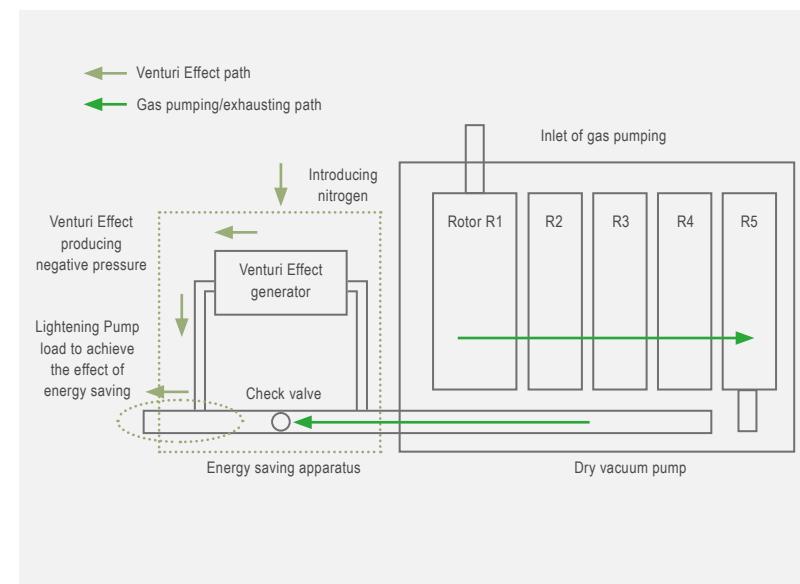


Heat Recovery of Steam Condensate



Case Sharing: Energy Saving Improvements in Vacuum Pumps

We installed energy-saving equipment at the exhaust end of 50 dry-etching devices without a special gas reaction chamber to reduce energy consumption. Gas is gradually extruded downward and exhausted out as each rotor (R1-R5) rotates. When the gas travels to R4, the discharge pressure will exceed the atmospheric pressure, causing considerable power consumption from final discharge pressure. The vacuum pump keeps discharging gas under reduced pressure through outlets, reducing the load of R4 rotating to exhaust toward R5. We installed the energy saving apparatus at the exhaust outlet of the vacuum pump, using the Venturi Effect. We use existing nitrogen or compressed air for cleaning to produce negative pressure in the lower area of its check valve, reducing the pressure on the dry vacuum pump's exhaust pipes. This lowers the loads of R4 and R5 and reduces power consumption.

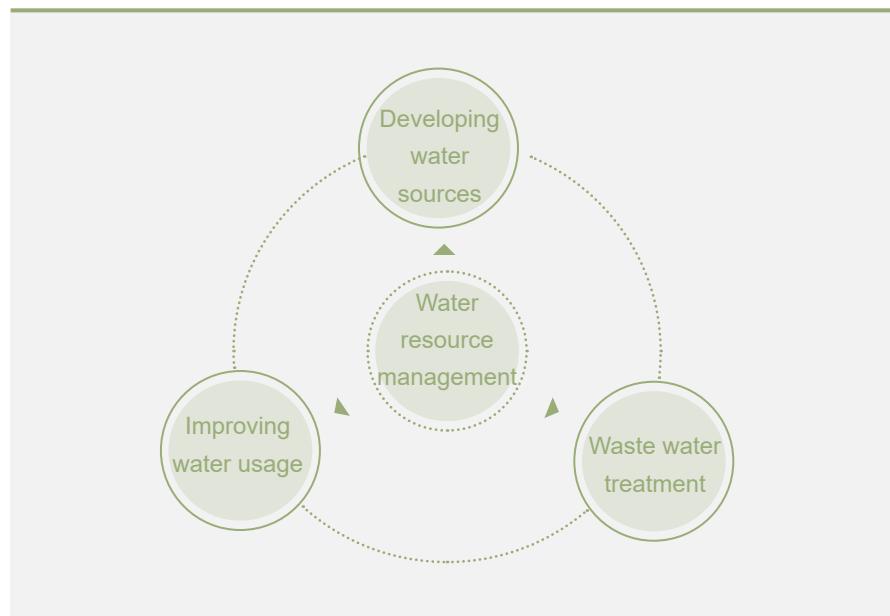


Schematic Diagram of Energy Saving for Vacuum Pump



Water Resource Management

As the water resource serves as an indispensable part for integrated circuit industry, SMIC upholds the principle of rationally utilizing water resources to mitigate the impact on the environment, and enforce water resource management in three ways: developing water sources, improving water usage, and treating waste water.



Developing Water Sources

Factories are built in different areas and available water resources differ based on local conditions. We adapt using various measures to develop water sources. These sources include tap water, external reclaimed water (recycled water), air-conditioner condensate water, and natural (rain and mountain spring) water.

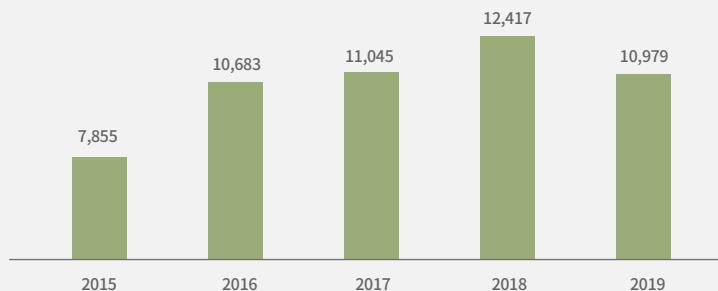
Water Resource Sources 2019

Water Resource Source	Amount (ton)	Proportion (%)
External sources (tap water + reclaimed water)	10,979,475	99.73
Air-conditioner condensate water	4,221	0.04
Natural water (rain water and mountain spring water)	25,539	0.23

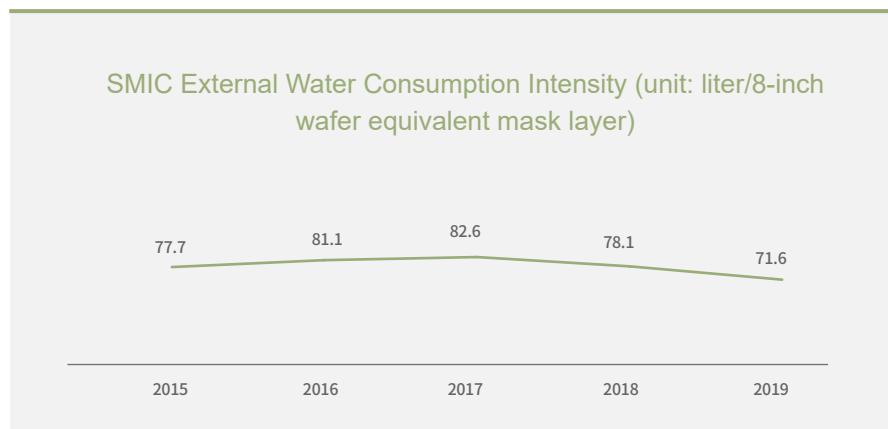
Improving Water Usage

As the proportion of products manufactured with advanced processes increases and integrated circuit wires narrow, cleanliness requirements and water demands increase. This in turn increases the need to recycle water resources. We have engaged in water saving projects and management measures to improve water usage and reduce external water source consumption. These include reducing water consumption in the facility system, increasing waste water reclamation, improving our water production rate and lower water draining losses. Data on our external water source consumption in 2019 are as follows:

SMIC Consumption of External Water Sources (unit: kilostere)



Note: 2019 data excludes LFoundry.



Water Conservation Effectiveness	2015	2016	2017	2018	2019
Average water recycling rate for process water (%)	69.39	65.46	71.16	71.81	70.77
Ultrapure water consumption (ten thousand tons)	766.74	975.24	1,099.53	1,158.48	1,194.03
Water consumption from external water sources (ten thousand tons)	785.47	1,061.76	1,071.98	1,081.31	1,097.94
Recycled water (ten thousand tons)	992.89	1,182.26	1,364.94	1,522.82	1,553.49
Number of times each drop of water is used	2.26	2.11	2.27	2.41	2.41

Notes: 1. 2016-2019 data above excludes LFoundry.

2. The number of times each drop of water is used = (water consumption from external water sources + recycled water) / water consumption from external water sources.

Major Water Saving Projects

Plant	Project	Project description	Tap water saved (ton)
Shanghai	Backwash water recycling	Recycling backwash water and used it as DWW raw water to improve water efficiency	18,396
Beijing	Rinsing and drainage water recycling	Treating the first-time rinsing and drainage water from equipment through a recycling system and feeding the water into an ultrapure water system in place of tap water to reduce tap water consumption	310,980
Tianjin	Process water system optimization	After the new factory is put into production, optimizing the flow of process water when wet etching equipment stands idle to reduce the consumption of process water and tap water	29,800
Shenzhen	Rainwater collection and reuse	Based on the rainy conditions of Shenzhen, converting reserved water pools on the top of cooling towers for collecting rainwater, and treating and reusing the collected rainwater as circulating water for the cooling towers to reduce tap water consumption	2,242
Shenzhen	Mountain spring water	Building collection pools for underground mountain spring water in the factory and conveying the spring water to the waste water recycling system and local scrubber treatment equipment system by lift pumps and control units to reduce the tap water consumption	16,539
Total			377,957

Notes: Water consumption percentage is the ratio of water recycling volume to waterconsumption volume by the treatment equipment.



Case Sharing: Rinsing and Drainage Water Recycling Project

As the amount of the first-time rinsing and drainage water from wet etching equipment increased, our equipment could not recycle and reuse it all, so we added new water recycling equipment. After treatment, it supplied the ultrapure water system in place of tap water. We recycled about 1,000 tons of water per day.



Electrical installation



Equipment installation



Case Sharing: Rainwater Recycling Project

SMIC Shenzhen factory is located in a rainy area. At present, only half of the towers in the cooling tower zone are running, and on the top of the other half are seven reserved water pools that can be used for collecting rainwater. The rainwater feeds the cooling towers as makeup water to reduce tap water consumption.



Waste Water Treatment

Classified Management of Waste Water Sources

Classified management of waste water sources can lead to the best treatment efficiency. We reach our contaminant reducing and recycling goals by improving our current treatment equipment and setting up new treatment facilities. We also divert waste water from our manufacturing equipment to waste water treatment systems for initial degradation of waste water contaminants before condensing and recycling it to increase contaminant dilution. Process waste water includes hydrofluoric acid waste water, acidic and alkaline waste water, grinding waste water, and high-concentration waste liquid. We classify and channel it into 18 diversion systems based on their compositions and concentration.

Process waste water	Classification of sources	Recycling system	Waste water treatment system/treatment methods	Recycling and reuse
Hydrofluoric acid waste water	Hydrofluoric acid waste water	Recycling of exhaust gas scrubbing water	Hydrofluoric acid treatment system	Recycling and reuse of tower scrubbing water
	Hydrofluoric acid waste water containing ammonia and nitrogen		Ammonia and nitrogen treatment system	
	Process scrubbing waste water			
Acidic and alkaline waste water	Acidic waste water	Waste water recycling system	Acid neutralizing treatment system	Sulfuric acid
	Alkaline waste water			
	Ammonia-containing waste water		Ammonia and nitrogen treatment system	Ammonium sulfate
Organic waste water	Domestic waste water		Domestic waste water treatment system	Treating water recycling
	Organic process waste water	Waste water recycling system		
Grinding waste water	Copper-containing grinding waste water		Copper-containing waste water treatment system/breaking sedimentation	
	Oxidized grinding waste water		Fluorine-containing waste water treatment system/coagulating sedimentation	
	Heavy metal-containing grinding waste water		Fluorine-containing waste water treatment system/coagulating sedimentation	
	Wafer back grinding waste water	Recycling of wafer back grinding waste water	Membrane treatment	
	Grinding and cleaning waste water	Recycling of grinding and cleaning waste water		
High-concentration waste liquid	Copper sulfate-containing waste liquid		Outsourced	
	Sulfuric acid-containing waste liquid		Outsourced	Used for acid neutralizing system dosing
	Nitric acid-containing waste liquid		Outsourced	
	Phosphoric acid-containing waste liquid		Outsourced	
	Waste solvent		Outsourced	

Waste Water Discharge and Monitoring

The amount of waste water discharge depends heavily on the consumption of tap water and the amount of recycled water. With an increasing proportion of products adopting advanced manufacturing processes, water consumption and waste water discharge for a single product increase synchronically. We have stepped up the recycling of water resources to reduce waste water discharge, achieving 64.0 liters /8-inch equivalent wafer layer of waste water discharge for a single product.

Waste water discharge	2015	2016	2017	2018	2019
Amount of waste water discharge (ten thousand tons)	688.9	901.2	986.5	946.2	980.9
Amount of waste water per unit of products (liter/8-inch wafer equivalent mask layer)	68.2	68.9	70.9	64.2	64.0

We use uninterrupted monitoring devices for water quality and quantity at the outlets of waste water treatment facilities in each fab to monitor and record changes in water quality and quantity in real time. They respond immediately and appropriately to any unusual conditions. Apart from following waste water discharge standards, we put continuing efforts to be environmentally friendly. We have also acted to manage chemical oxygen demand (COD) and suspended solids that have direct influences on aquatic life and to reduce the impacts of waste water discharge on the environment. Please see our monitoring data for detailed information:



Treatment facilities for ammonia and nitrogen in waste water



Domestic sewage treatment facilities



Waste water reuse and treatment facilities

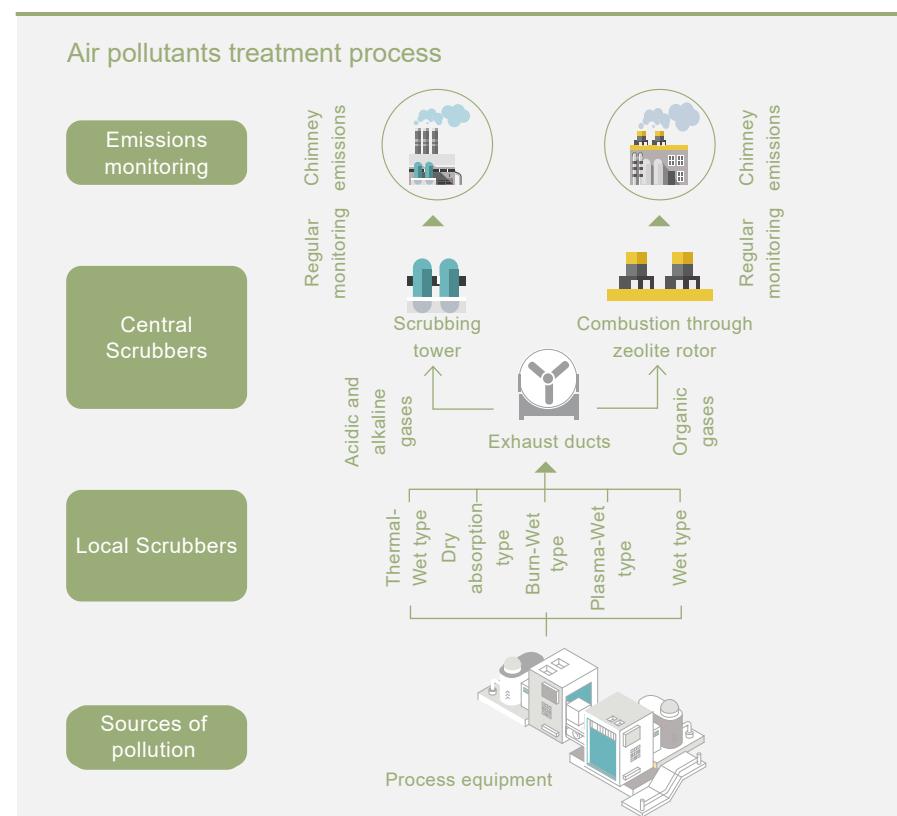


Air Pollutants Control

We focus on treating pollutants in our air emissions to minimize our impact on air quality in our business locations.

Pollutants Treatment

SMIC takes tiered and classified approaches to treat air emissions, adopting an equipment-based system and a fab-based central treatment system.



Local Scrubbers

The gas pollutants from equipment include perfluorocarbons (such as C_4F_6 and C_5F_8), combustible gases (such as acetylene and silane), toxic gases (such as chlorine trifluoride, arsine, phosphine and borohydride), and corrosive gases (such as hydrogen chloride, hydrogen bromide and ammonia).

Taking into account the features of high concentration pollutants from equipment, we mainly use thermal-wet type, dry absorption type, burn-wet type, plasma-wet type, wet type equipment for local pre-treatment of exhaust gases. This cuts about 97% of the targeted pollutants.

Type of local scrubber	Targeted pollutants	Common process section	Treatment efficiency	Monitoring parameters
Thermal-Wet type	Perfluorocarbons, corrosive gases and combustible gases	Diffusion and local scrubber	>97%	Temperature of reaction furnace, air intake parameters, and quantity of circulating water inflow
Dry absorption type	Toxic gases	Ion implantation	>99%	Air intake pressure and color of the ball-shaped detectors
Burn-Wet type	Corrosive gases and perfluorocarbons	Dry etching	>97%	Natural gas flow rate, oxygen flow rate, quantity of circulating water inflow, air intake pressure, and temperature inside the combustion chamber
Plasma-Wet type	Perfluorocarbons, combustible gases and corrosive gases	Dry etching	>99%	Amperage value of electric current, air intake parameters, and quantity of circulating water inflow
Wet type	Corrosive gases	Wet etching	>95%	Air intake parameters and quantity of circulating water inflow



Air emissions in-place treatment equipment



Air emissions collection pipework



Central Scrubbers

After local treatment, the air emissions are then conveyed into different collection pipelines. Acidic air emissions will enter the central scrubbing tower for acidic air emissions while alkaline air emissions enter the central scrubbing tower for alkaline air emissions for further neutralizing treatment. Organic air emissions will enter the zeolite rotor system for combustion. The central treatment system cuts about 95% of the targeted pollutants.



Acidic air emissions treatment system



Organic air emissions treatment system

Air Emissions Monitoring

After treatment through the central scrubbers, the air pollutants are emitted into the atmosphere via exhaust funnels whose heights abide by national standards. In order to verify that the emissions are up to standard, we have engaged third-party agencies to monitor the pollutants emitted through the funnels. All testing results have satisfied national standards. Please see the detailed monitoring data published on our website.



Air pollutants

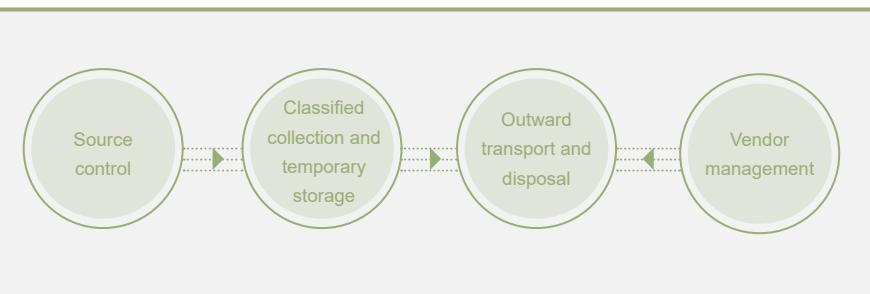
Name of pollutants	2019
Total air emissions (ten thousand m ³)	4,672,583
NOx emissions (tons)	72
Sulfur dioxide emissions (tons)	6
VOCs emissions (tons)	59



Air emissions outlets

Waste Management

SMIC has established a sound waste management system in strict compliance with national rules and regulations on waste disposal.



Source Control

We have implemented cleaner production projects to optimize our raw materials usage, reduce resource consumption, and minimize waste generation at the source of production. We continue to explore possibilities for reusing the waste generated from raw materials through production processes in the factory to maximize resource recycling and reduce our environmental impact. When we are unable to recycle resources in the factory, we work with other industries to improve our resource efficiency. Only when appropriate approaches to recycling are impossible will we transfer the waste to qualified waste disposal plants.



Main Waste Reduction and Harmless Treatment Project

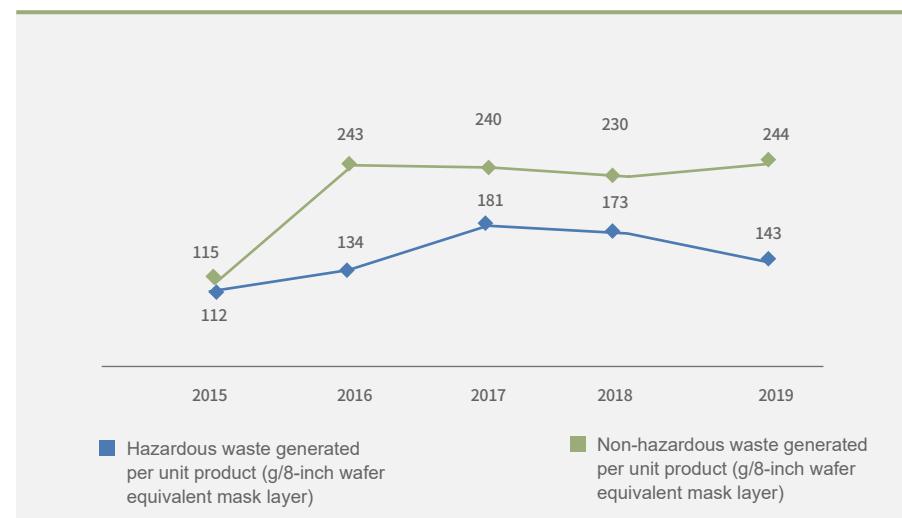
Plant	Project name	Project description
Beijing	Isopropanol Reduction	Using ionized water instead of isopropanol during maintenance of some facilities and local air emissions treatment equipment to reduce isopropanol usage and generation of isopropanol-stained combustible waste
Shenzhen	Harmless Treatment of Sludge from Water Treatment System	Proactively stepping up the harmless identification of water treatment sludge to convert such hazardous waste into general waste and reduce disposal costs
Shenzhen	Photoresist Reduction	Optimizing the time intervals of automated spraying in photolithographic processes to reduce photoresist usage and organic solvent waste discharge in production

Classified Collection and Temporary Storage

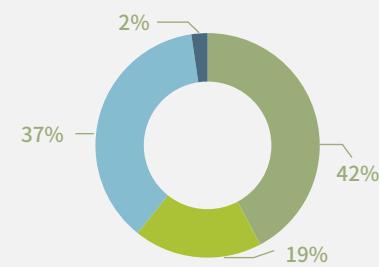
We classify the collection and temporary storage of our waste based on its characteristics. The types of waste we classify include production waste, water treatment sludge, hazardous waste, and domestic waste. We strictly implement relevant control measures for hazardous waste.

In 2019, we reduced the total waste of various types by 0.16% compared with the previous year. Waste generation data is as follows:

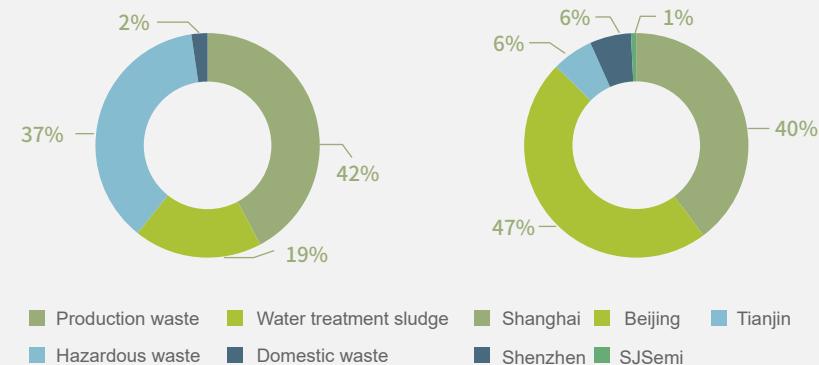
Waste generation data



Waste percentages



Waste percentage by factories

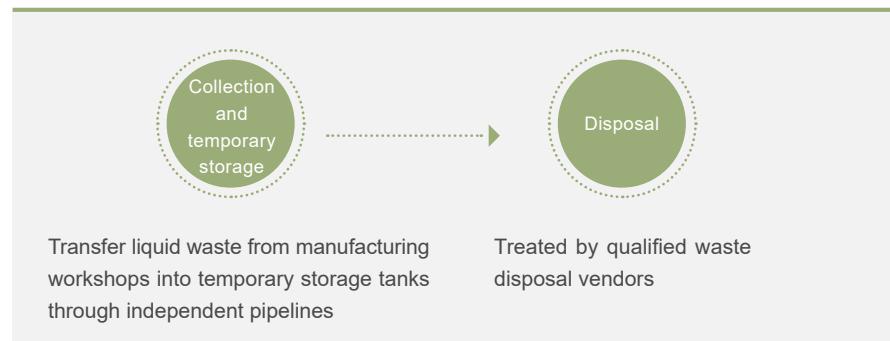




Hazardous Solid Wastes



Hazardous Fluid Wastes



Management of Waste Disposal Vendors

We manage waste disposal vendors according to strict criteria, only signing contracts with government-accredited facilities that meet our assessment scores. During the cooperation, our Environment Safety and Health Department carries out on-site and vehicle-following inspections at vendors and implements our waste transfer form system for hazardous waste.



Awareness of Environmental Protection

We engage our employees in environmental protection activities, holding everyone responsible for environmental protection. We have supported this approach by organizing various activities to strengthen employees' awareness of environmental stewardship. In 2019, our Environmental Protection Department used environmental days to increase public awareness around environmental themes and organized activities.





Date: March 22
Occasion: World Water Day
Theme: water saving



Date: April 22
Occasion: World Earth Day
Theme: low-carbon lifestyle

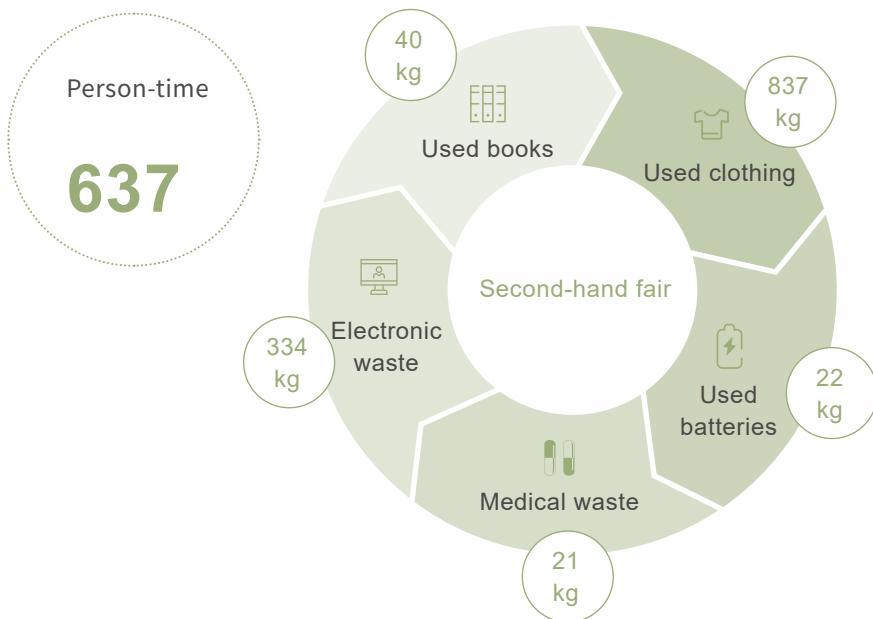


Date: June 5
Occasion: World Environment Day
Theme: emissions reduction and energy saving



Date: September 22
Occasion: World Car Free Day
Theme: green travel

In 2019, our factories continued to organize multiple second-hand fairs to advocate waste reuse and recycling.



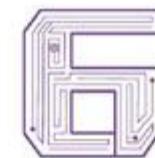
Person-time of participants in the second-hand fairs from 2014 to 2019

4,375

Weight of recycled articles through the second-hand fairs from 2014 to 2019

20,103^{kg}





Caring for Society

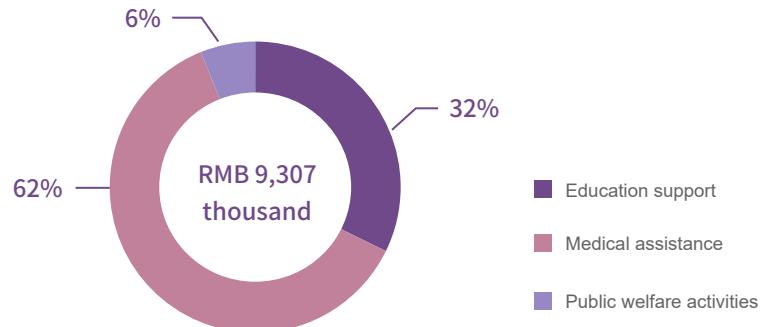
Since its establishment in 2000, SMIC has been actively involved in public welfare activities and community services, and participated in regional environmental protection. Volunteers from different divisions of the company and at different ages are actively involved in volunteer service activities, bringing warmth to thousands of people. In 2019, the number of volunteer services reached 20,057 hours, achieving the annual target.

- Medical Assistance Education Support

- Public Welfare Activities



Our social investment



Medical Assistance

Since 2000, SMIC has been paying close attention to the health conditions of children and teens. We have initiated a series of medical assistance programs to relieve the burden of sick children and teens and help them lead a healthy life. By 2019, SMIC had invested RMB 19.24 million and saved 531 children through SMIC Liver Transplant Program and other liver transplantation programs, and artificial cochlear implant program.

Number of children saved:

531

Money invested:

RMB **19.24** million

Contributions to fighting the COVID-19

In early 2020, the coronavirus disease (COVID-19) swept across China. It seriously threatened the health and life of the general public and caused great concern for the society as well as every SMIC member. "Care for people, the environment and the society" has always been a principle of SMIC to fulfill its corporate social responsibilities. We not only make concerted efforts and overcome difficulties to maintain normal, sustainable operations and guarantee the health and safety of every SMIC employee but also are highly concerned about the progress of the fight against the pandemic and the safety of medical workers and epidemic prevention personnel.

On February 7, 2020, SMIC, board directors and employees donated 10 million yuan for fighting the COVID-19 coronavirus. The donation was specially intended for supporting works such as coronavirus containment, treatment of people and guarantee of the safety and health of medical workers.

Money donated by SMIC, board directors and employees for fighting the coronavirus:

RMB **10** million



"We are still facing severe challenges and arduous tasks in fighting the coronavirus. Medical workers and the people's army on the frontline are working day and night to contain the virus. Their strong work ethics and selfless dedication are admirable and heartwarming. Through the donation, all SMIC members want to express our great concern about the fight against the coronavirus and treatment of the infected as well as our highest respect to the medical workers. I'm very confident that under the leadership of the government and with the concerted efforts of the society, we can finally win the battle against the invisible enemy at an early date", says Dr. Zhou Zixue, Chairman of the Board.





SMIC Liver Transplant Program for Children

After SMIC launched the "SMIC Liver Transplant Program for Children" in April 2013, SMIC makes annual donation to China Soong Ching Ling Foundation to finance the poor children receiving liver transplant operation in Renji Hospital affiliated to Shanghai Jiao Tong University School of Medicine. The program aims to help more poor children with liver disease to regain life and lead the society to bring more love to this group of children.

On June 10, 2019, SMIC donated RMB 2.32 million to the Program through China Soong Ching Ling Foundation for the seventh time, with a cumulative donation of RMB 15.82 million. Under the influence of SMIC, "SMIC Liver Transplant Program for Children" has been spread from the semiconductor industry to the whole society and become a common mission and responsibility to promote public welfare and benefit the society. In 2019, 62 loving companies in the semiconductor industry joined the "SMIC Liver Transplant Program for Children" with donation of RMB 1.38 million.

SMIC donated

RMB **2.32** million

to the Program through China Soong Ching Ling Foundation for the seventh time.

Total donation:

RMB **15.82** million.

In 2019



62

companies in the semiconductor industry joined the "SMIC Liver Transplant Program for Children".



SMIC Chairman Dr. Zhou Zixue made a speech at the donation ceremony



SMIC Co-CEO Zhao Haijun (left) handed over the donation cheque to China Soong Ching Ling Foundation Deputy Director Jing Dunquan



Group photo of SMIC Chairman Zhou Zixue (fourth from right), the Foundation leaders, Renji Hospital leaders and families of the helped children



By 2019, SMIC Liver Transplant Program cumulatively received a total donation of more than RMB 24.8 million and saved 451 impoverished children across China.

Donation received by SMIC Liver Transplant Program exceeding:

RMB **24.8** million

Number of Chinese poor children saved:

451

Other Liver Transplant Programs

In order to save poor children who need liver transplants and help more sick children recover health, SMIC worked with China Soong Ching Ling Foundation again on funding the impoverished children patients who were waiting for liver transplants at Renji Hospital of Shanghai Jiaotong University School of Medicine. In 2019, SMIC saved 75 children and received a total donation of RMB 3 million.

Number of children saved through SMIC liver transplant programs in 2019:

75

Donation cumulatively received by SMIC:

RMB **3** million

Artificial Cochlear Implant Program

People with severe hearing impairment hear no sound. In order to help such people restore hearing loss, SMIC has cooperated with China Soong Ching Ling Foundation to fund the poor patients undergoing artificial cochlear implants at Dali Bai Autonomous Prefecture People's Hospital, hoping that the implants could enable them to hear natural sounds, enjoy chatting with families and friends, and get rid of the world of silence. In 2019, SMIC funded 5 children patients and donated RMB 420 thousand.

Number of children patients SMIC funded through the Artificial Cochlear Implant Program in 2019:

5

Donation amount of SMIC:

RMB **420** thousand

Education Support

Apart from insufficient education resources, poverty and family structure have also impeded educational equality. Through building schools and setting up scholarship and fellowship funds, SMIC has been helping the school-age vulnerable groups to obtain good educational resources and has been encouraging and helping academically outstanding students to realize their dreams.

SMIC Private School

In the initial stage of SMIC, the Company invested in building the SMIC Private School in order to erase the employees' worries about their children's future. In the beginning, the SMIC Private School mainly recruited the children of SMIC employees. When it became successful and socially well-accepted, it began to open its doors to the society at large and share its excellent educational resources, which were highly praised by the employees and local communities.



Shanghai SMIC Private School

Shanghai SMIC Private School was established in September 2001 with the school campus covering an area of 120 mu (about 80,000 m²), of which nearly 50 mu is green spaces. It is a non-profit private school that offers schooling from kindergarten to high school. The school has both Chinese and English Tracks and the English Track has been accredited by the U.S. Western Association of Schools and Colleges (WASC). It boasts a wide range of teaching, arts and sports facilities and an astronomical observatory.



Founding Philosophy

The school follows the founding philosophy of "Honor, Excellence, Community and Joy".

Operation Strategy

The school sticks to a "high-quality, characteristic and diversified" path.

Educational Objective

The school aims to nurture future talents with "Chinese heart, national spirit, global vision, and international competitiveness".

School Characteristics

The school strives to develop its international characteristics based on integrated Sino-foreign education featuring "holistic education and balanced development".



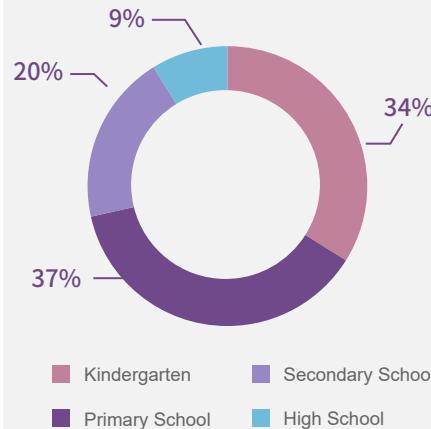
As of 2019, there had been 3,000 students from 25 countries and nearly 400 faculty members, half of whom are overseas. Shanghai SMIC Private School covers all levels of education from kindergarten to senior high school, including English and Chinese divisions, where the former is taught according to the elementary and secondary school curriculum of the United States, while the latter taught according to the teaching material outline prescribed by the Shanghai Municipal Education Commission. In addition, the Curriculum Integration Center of the school provides students with first-class training in English, Chinese and a third foreign language.

Shanghai SMIC Private School adheres to the people-oriented principle and pays attention to the unique personality development of each student. The school holds a belief that every student is endowed with potential and entrusted with important tasks. The school provides a wide variety of extracurricular activities for students to help them bring out their own best. The school also offers first-class academic programs to stimulate students' creativity and innovative thinking. The high school division of both Chinese and English of SMIC Shanghai Private School offers American Advanced Placement (AP) courses, and it is also a test center authorized by the Advanced Placement (AP) test and the Scholastic Aptitude Test (SAT).

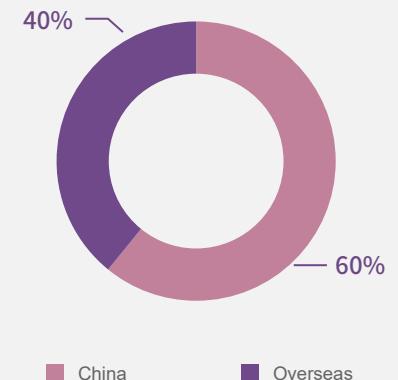
The school was awarded the honors of "Excellent Private School in Primary and Secondary Education", "Model School of School-Running Characteristics", "Advanced School with Characteristics", and other honorary awards granted by the National and Shanghai education associations, and won a variety of awards in domestic and foreign disciplines, arts, school newspapers, sports and other competitions. For more information, see [SMIC](#)



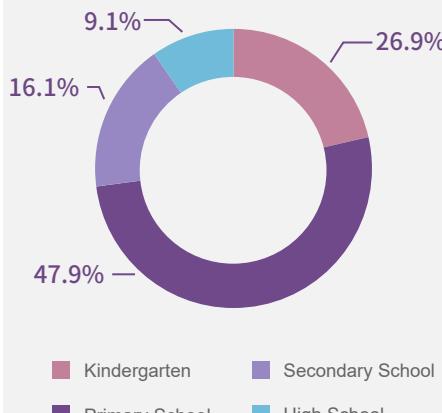
Composition of Faculty



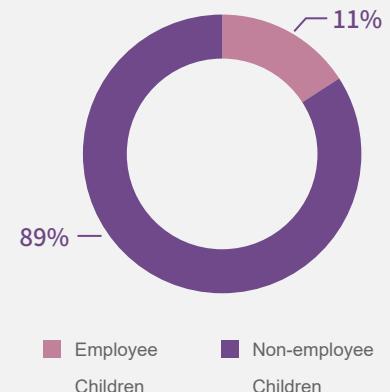
Student Source



Composition of Students



Ratio of Employee Children





Caring for Society

Beijing SMIC Private School

Beijing SMIC Private School was founded in the fall of 2005, covering an area of over 50,000 square meters, including more than 40,000 square meters' school building area with supporting modern teaching, sports facilities and a library occupying 750 square meters.

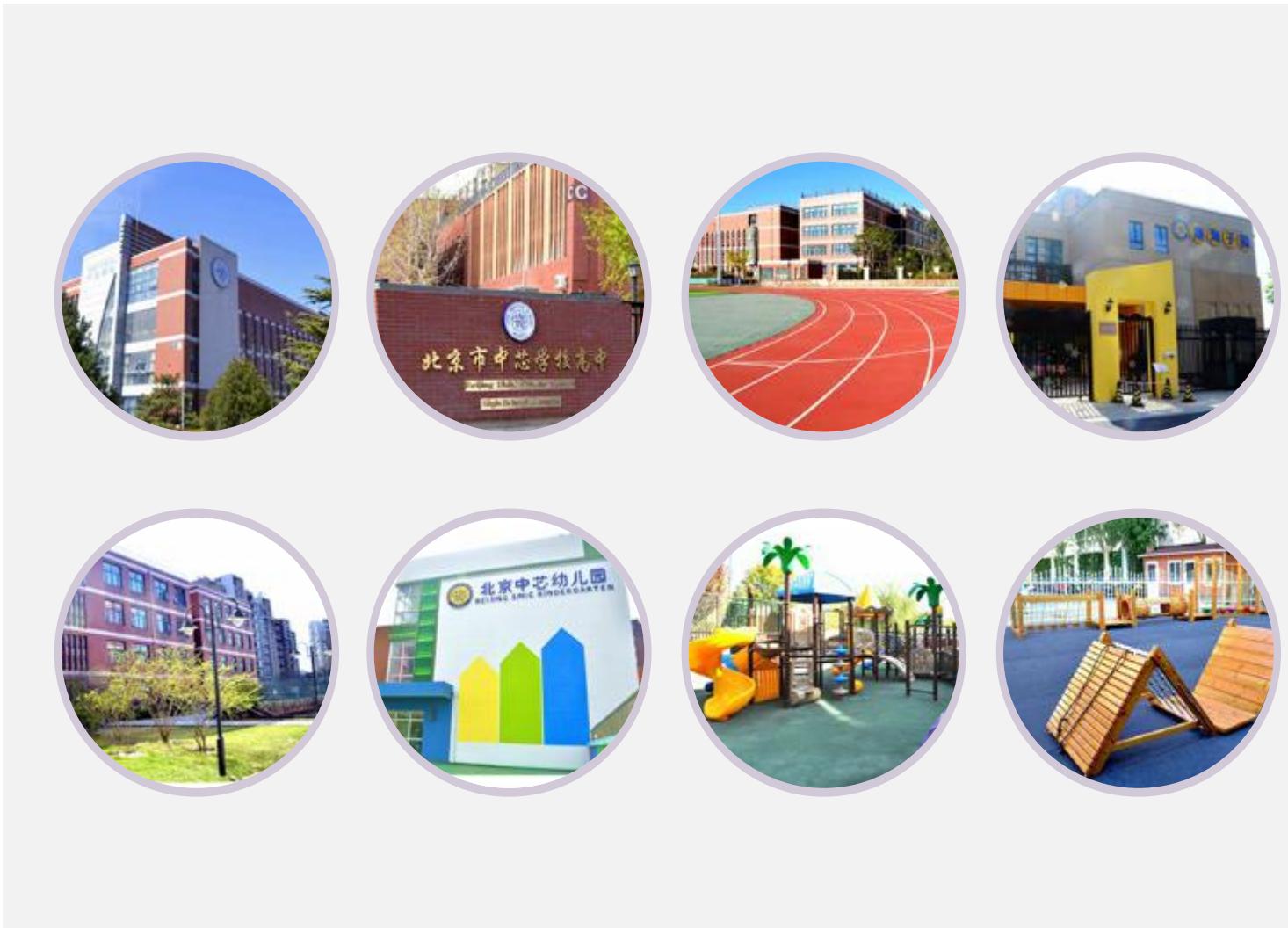
As 2019, the school had more than 400 teachers and a total of 2,500 students.

As 2019, the school had more than

400 teachers

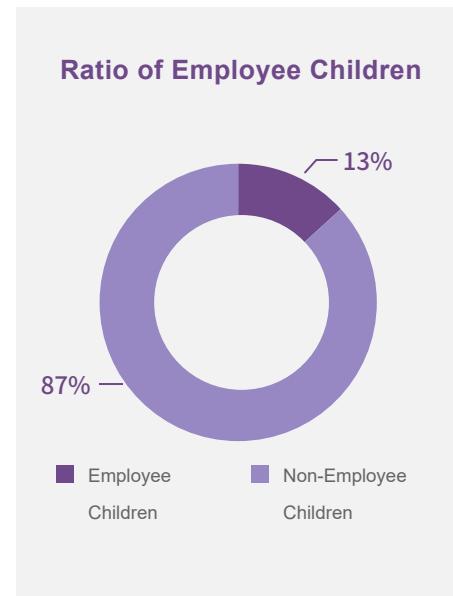
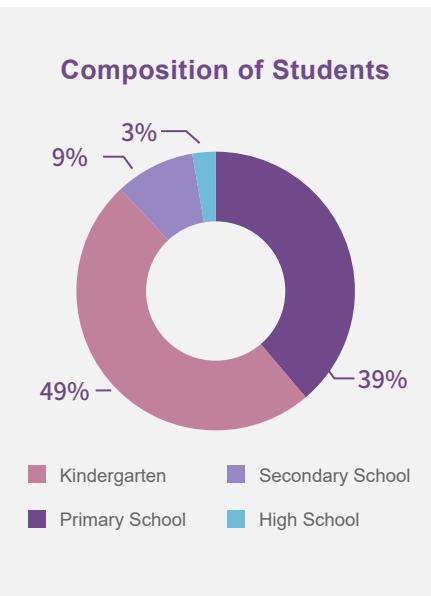
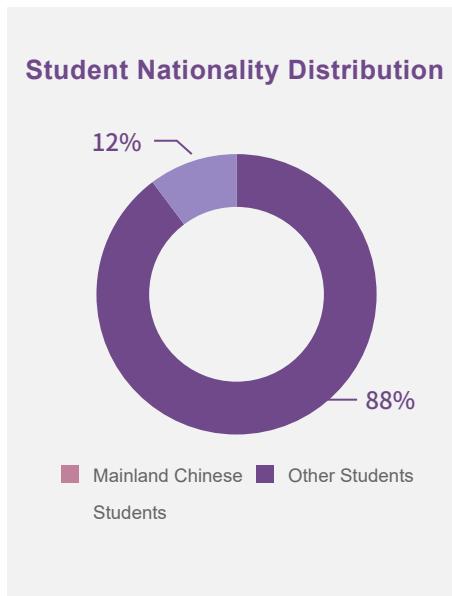
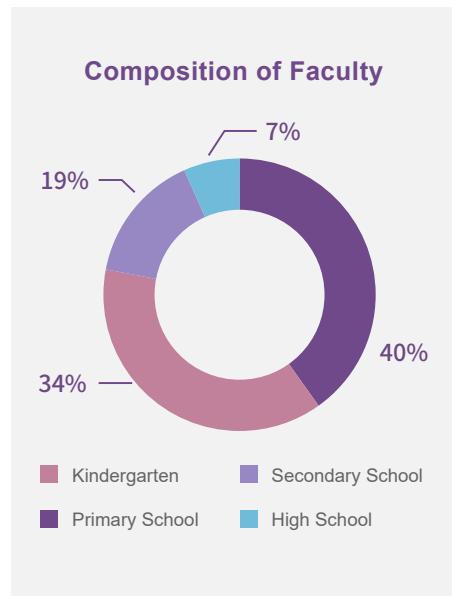
A total of

2,500 students





Beijing SMIC Private School is a private school with distinctive bilingual characteristics. For more than 10 years, the school has provided education for students based on the idea of "Honor, Excellence, Community and Joy", with holistic education as its aim to develop curriculum by combining Chinese and western elements. The school is committed to developing students' abilities of independent exploration and lifelong learning, respecting students' individual development, encouraging children to develop global vision and critical thinking, and cultivating world citizens with a sense of social responsibility. For more information, see





Diverse School Activities



Autumn Sports Meeting - highlights



Autumn Sports Meeting - martial arts performance



Part-time teachers' creative English vocabulary show



Students' creative English vocabulary show



“My Great Country” themed speech under the national flag - for commemorating the 70th anniversary of the founding of the P.R.C.



Singing the song “My Country and I” - for commemorating the 70th anniversary of the founding of the P.R.C.



Reading Week - cultivating the interest in reading



Reading Week activity



Faculty celebrating the New Year



International Day - feeling the cultures of different countries



International Day - tasting different food

Scholarship and Fellowship Program

In order to encourage students with excellent academic performance in schools and help them realize their dreams, SMIC has set up scholarship and fellowship funds for providing financial aids to students in integrated circuit-related majors from domestic top-class universities through China Soong Ching Ling Foundation. By 2019, the program had funded 400 students with a total amount of RMB 3 million. It's expected that the program can help the students complete their studies and relieve their burden of life.

Number of students funded by the Scholarship and Fellowship Program:

400





Public Welfare Activities

Zhangjiang Fun Run

SMIC gets itself actively involved in local public welfare activities, and has joined in "Zhangjiang Fun Run" for many years. On September 20, 2019, more than 30 employees from SMIC factory in Shanghai participated in the 12th "Zhangjiang Fun Run" outreach, running for joy and love together with employees from other companies in Zhangjiang Hi-Tech Park. In the course of the game, participants encouraged and supported each other to make it to the end, fully embodying the "happiness and mutual assistance" and the "perseverance" spirit, and showing the style of SMIC members. At the event, SMIC donated RMB 10,000 to charity institute as a love gift for the migrants' school.



Visits to Nursing Homes

SMIC employees have volunteered to visit the elderly in Sunqiao Nursing Home, Zhangjiang Town, Shanghai for five years in a row. They go there on weekends every two months. Every time they go, they devise ways with effort and ingenuity to bring joy to the elderly. For example, they went there along with children to perform dances; they formed up in a group to perform choruses; they sent blood pressure meters to the elderly, measured their blood pressure and kept records; they took photos of the elderly and made them into exquisite photographs to preserve the beautiful memories of the elderly; they invited medical workers of the Company to hold health lectures; they extended their regards to the elderly on holidays; they sent towels which are needed the most to the nursing home; and they gave plasticine to the nursing home to enrich the life of the elderly in twilight years. All these things had bettered our relationship with the elderly. Every time the volunteers go there, the elderly will gather in the activity room and chat with them happily. The actions of these volunteers have been prompting more and more people to join.

Voluntary Blood Donation

SMIC responds to local government's call and actively publicizes and organizes unpaid blood donation activities. In 2019, 125 employees from Shanghai factory participated in the unpaid blood donation and made a blood donation amounting to 25,200 ml.



In 2019,

125 employees

from Shanghai factory participated in the unpaid blood donation

made a blood donation amounting to

25,200 ml





Charity Sales

In December 2019, Shanghai SMIC Private School held the 16th Charity Sales event. The event has aroused growing public concern. Donations of goods from surrounding communities and enterprises were offered for charity purposes. This year, we added new elements to the event by allowing every child to have a chance to show their talents and every parent could extend their love, which received a warm response from the faculty and students' parents. Each division of the school took part in the event in multiple ways. Kindergarten Division of the Main Campus and SMIC TangZhen Kindergarten and the SMIC-Shanda Private Kindergarten organized charity sales respectively; the Elementary and Secondary Divisions performed many fascinating concerts. All schools raised RMB 305,920 (including RMB 100,000 donated by the school). All the money was donated to four charitable organizations for helping the children, including left-behind children who live in impoverished mountainous areas and other vulnerable groups to improve living conditions and help students complete their studies.



“Be Grateful & Spread Love” Charity Sales



On December 21, 2019, Beijing SMIC Private School held “Be Grateful & Spread Love” charity sales at Zhuzong Vanke Square, Jiugong Town, Daxing District. The school's faculty members, students and their parents put on wonderful performances and also sold their DIY articles at the selling stalls after the performances in order to raise money for orphaned and disabled children. At last, they raised RMB 235,572, which would all be used for the medical care and living support of orphaned and disabled children.

One-Day Charity Donation

In early 2019, SJSEMI held a Charity Donation activity. Led by the corporate leaders, the employees saved their expenses and donated their on-day incomes with generosity, which raised RMB 25,016.38. The donation was given to the Jiangyin Charity Federation for the charitable cause of Jiangyin city and Jiangyin National High-Tech Industrial Development Zone, especially for the aid to people in difficulties, which demonstrated the spirit of “when one is in trouble, help comes from everywhere”.





Giving Tree

The Giving Tree Project aims to provide love gift bags containing winter clothing, toys and school supplies for school-age children of the migrant workers. Shanghai SMIC Private School has been involved in the project for many years. In 2019, a total of RMB 178,250 was raised for the purchase of 650 love gift bags and donated to students in the schools for children of migrant workers in surrounding cities through partners.

In 2019, a total of

RMB **178,250** was raised

Used to purchase

650 love gift bags



“Pay Attention to the Ocean” - Beach Cleanup Protection Activity

On May 11, 2019, SMIC worked with its business partners and organized the “Pay Attention to the Ocean in 2019” beach cleanup activity. 92 volunteers came to Nanhui Beach, collaboratively engaged in the activity of protecting the marine ecological environment. By virtue of collaboration and joint efforts, around 420 kg of waste was collected. We contributed our part and maintained the sound environment of the ocean by concrete actions.



Tree Planting Activity in Inner Mongolia

Tree planting activity in Inner Mongolia is a joint program launched by "Root and Bud" association and the Environmental Protection Club of Shanghai SMIC Private School, which responds to the government's call to fight against desertification and protect the environment. It was the 13th year for Shanghai SMIC Private School to participate in the program and the Environmental Protection Club raised money to fund more than 3,000 trees in 2019. A total of 16 students and teachers went to Inner Mongolia to plant the trees, where students received environmental education in the real environment.



In 2019, the Environmental Protection Club raised money to fund more than

3,000 trees



Equivalent to the weight of 210 adult black-faced spoonbills

The black-faced spoonbill, also known as *Platalea minor*, is one of the most endangered species in the world. It is also the animal of national second-class protection in China.



Roughly equivalent to the weight of an adult Chinese horseshoe crab

The Chinese horseshoe crab, also known as *Tachypleus tridentatus*, is a “living fossil”. With sharply declining numbers, it is now the animal of national second-class protection in China.



Appendix

2019 Corporate Social Responsibility Index Summary

Performance indicators		Units	2019	Performance indicators		Units	2019
Economic	Operation Revenue	US\$ million	3,115.7	Total Emissions	ten thousand m ³	4,672,583	
	Net Profit	US\$ million	158.9	Total Amount of NOx	tons	72	
	Total Tax	US\$ million	31.5	Total Amount of Sulphur Dioxide	tons	6	
	R&D Investment	US\$ million	687.4	Volatile Organic Solvents	tons	59	
	Employees	number	15,946	Total Greenhouse Gas Emissions	tons of CO ₂ equivalent	1,722,781	
	Proportion of Female Employees	%	45%	Total Direct Emissions (scope1)	tons of CO ₂ equivalent	431,212	
	Labor Contract Signing Rate	%	100%	Total Indirect Emissions (scope2)	tons of CO ₂ equivalent	1,291,569	
	Employee Training Coverage	%	100%	Amount of Hazardous Waste	tons	21,930	
	Employee Training Time Per Capita	hours	18.9	Amount of Production Waste	tons	25,051	
	Death Toll Due to Work	number	0	Amount of Water Treatment Sludge	tons	10,983	
Social	Loss of Working Days Due to Industrial Injury	days	275	Amount of Domestic Waste	tons	1,376	
	Number of New Occupational Diseases	number	0	Total Power Consumption	kWh	1,403,121,227	
	Cumulative Number of Occupational Diseases	number	0	Total Natural Gas Consumption	m ³	10,132,104	
	Safety Training	times	673	Total Steam Consumption	tons	236,942	
	Safety Training	person-time	62,119	Total Outsourced Water Consumption	m ³	10,979,475	
	Number of Accidents (according to national standards)	times	0	Packing Materials Consumption	tons	343	
	Annual Safety Investment	US\$ million	26	Annual Environmental Protection Investment	US\$ million	70	
	Social Donation Amount	RMB ten thousand	930.7	Environmental Training	times	48	
	Employee Volunteer Service Time	hours	20,057	Environmental Training	person-time	8,600	
				ISO 14001 Passing Percentage	%	100%	



Honors and Awards of SMIC in 2019

Award winner	Name of honor or award	Awarded by	Award winner	Name of honor or award	Awarded by
Semiconductor Manufacturing International Corporation (SMIC)	Excellent Supplier	Giga Device	Semiconductor Manufacturing International (Beijing) Corporation	New Platform Best Cooperation and Development Award	Giga Device
	Best Wafer Foundry Award	Giantec Semiconductor Corporation		Best Supplier of the Year	Anyka (Guangzhou) Microelectronics Technology Co., Ltd.
	Strategic Partner with the Most Growth Potential	OmniVision Semiconductor (Shanghai) Co., Ltd		Model Enterprise of Beijing in the Construction of Safety Culture	Beijing Emergency Management Bureau
	Best Strategic Supplier	Blutrum		Outstanding Organizer of the First National Safety Culture Outstanding Paper Competition	Ministry of Emergency Management of the P.R.C.
	Best Supplier	Shanghai Fullhan Microelectronics Co., Ltd.		Second-prize winner of the First National Safety Culture Outstanding Paper Competition	Ministry of Emergency Management of the P.R.C.
	Best Partner	Beken Integrated Circuit (Shanghai) Co., Ltd.		Third-prize winner of the First National Safety Culture Outstanding Paper Competition	Ministry of Emergency Management of the P.R.C.
	Outstanding Corporate Social Responsibility (CSR) Award	The Mirror, Hong Kong		Outstanding Organizing Award for Safety Month activities	Urban Operation Management Bureau of Beijing Economic-Technological Development Area
	Top 50 Companies in Corporate Social Responsibility & Corporate Governance in ICT Industry	Social Responsibility Committee of the Chinese Electronics Standardization Association (CESA-SRC)		Best Practice Award for Safety Month activities - themed painting exhibitions	Urban Operation Management Bureau of Beijing Economic-Technological Development Area
	Strategic Supplier	Bright Power Semiconductor		Best Practice Award for Safety Month activities - safety knowledge competition	Urban Operation Management Bureau of Beijing Economic-Technological Development Area
	Best Support Award	Silead Inc.		Outstanding Organizing Award for "Ankang Cup" Online Knowledge Competition	Urban Operation Management Bureau of Beijing Economic-Technological Development Area
Semiconductor Manufacturing International (Shanghai) Corporation	Important Partner of the Year	Shanghai Fudan Microelectronics Group Co., Ltd.		Advanced Enterprise for Fire Prevention Works	Office of Fire Safety Committee of Beijing Economic-Technological Development Area
	Best Technical Support Award	Joulwatt Technology Inc. Limited		Model of Beijing in Safety Supervision - Safety Guardian of Beijing Economic-Technological Development Area	Beijing Emergency Management Bureau & Urban Operation Management Bureau of Beijing Economic-Technological Development Area
	Winning Company of Pudong New Area "Ankang Cup" Competition	Shanghai Pudong New Area Federation of Trade Unions		Best Strategic Support Award	Blutrum
	Meritorious Constructor in the Key Projects Construction Competition of Pudong New Area	Ecology and Environment Bureau of Pudong New Area		Three-Star Green Buildings Certificate	Science and Technology and Industrialization Development Center, Ministry of Housing and Urban-Rural Development
	Shanghai Security Defense Advanced Collective Unit	Shanghai Municipal Public Security Bureau Pudong Sub-Bureau		Best Practice Award for Safety Month activities of Beijing Economic-Technological Development Area	Safe Production Supervision and Administration Bureau of Beijing Economic-Technological Development Area
Semiconductor Manufacturing International (Shenzhen) Corporation	Excellent Supplier	Silergy Corp. (Hangzhou)		Outstanding Team Award for Safety Month activities	Safe Production Supervision and Administration Bureau of Beijing Economic-Technological Development Area
	Best Delivery award	Silead Inc.		Advanced Individual for Safe Production of Beijing Economic-Technological Development Area	Safe Production Supervision and Administration Bureau of Beijing Economic-Technological Development Area
	Best Support Award	Joulwatt Technology Inc. Limited		Outstanding Organizing Award for "Ankang Cup" Online Knowledge Competition	BDA Federation of Trade Unions & Urban Operation Management Bureau of Beijing Economic-Technological Development Area
	Star Enterprise of Wuxi Overseas Chinese Enterprises	Wuxi Municipal Federation of Returned Overseas Chinese		Model Collective for Safe Production Demonstration of Beijing	Communist Youth League Beijing Committee & Beijing Emergency Management Bureau
SJ Semiconductor (Jiangyin) Corporation (SJSemi)	Advanced Enterprise in Scientific and Technological Innovation in Jiangyin	Jiangyin Municipal People's Government		Best Innovation Award	Silead Inc.
	Provincial Model of the Smart Workshop in Jiangsu	Industry and Information Technology Department of Jiangsu		Outstanding member	Tianjin Management Association of Work Safety
	Technological Innovation-Oriented Enterprise	Management Committee of Jiangyin National High-Tech Industrial Development Zone			
	Advanced Foreign-Invested Enterprise	Management Committee of Jiangyin National High-Tech Industrial Development Zone			
	Advanced Enterprise in Emerging Industries	Management Committee of Jiangyin National High-Tech Industrial Development Zone			
	Advanced Enterprise for Effective Input	Management Committee of Jiangyin National High-Tech Industrial Development Zone			
	Top 10 Workers Vanguard	Federation of Trade Unions of Jiangyin National High-Tech Industrial Development Zone			
Semiconductor Manufacturing North China (Beijing) Corporation					
Semiconductor Manufacturing International (Tianjin) Corporation					



Index of Environmental, Social and Governance Reporting Guide

ESG Guide Number	Guidance Notes	Report Content or Instructions	Page
A. Environmental			
Aspect A1: Emissions			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	Environmental Protection Management	87
KPI A1.1	The types of emissions and respective emissions data.	Air Pollutants Control	100
KPI A1.2	Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	GHG Verification	90
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Waste Management	101
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Waste Management	101
KPI A1.5	Description of measures to mitigate emissions and results achieved.	Air Pollutants Control	100
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	Waste Management	101
Aspect A2: Use of Resources			
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	Environmental Protection Policy	87
KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	Energy Consumption	93
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	Water Resource Management	96
KPI A2.3	Description of energy use efficiency initiatives and results achieved.	Major Energy Saving Projects	94
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	Major Water Saving Projects	97

ESG Guide Number	Guidance Notes	Report Content or Instructions	Page
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	Corporate Social Responsibility Index Summary	118
Aspect A3: The Environment and Natural Resources			
General Disclosure	Policies on minimising the issuer's significant impact on the environment and natural resources.	Environmental Protection Policy	87
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Energy Management	92
		Water Resource Management	96
B. Social			
Employment and Labour Practices			
Aspect B1: Employment			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	Safeguarding of Rights and Interests	63
KPI B1.1	Total workforce by gender, employment type, age group and geographical region.	Talent Structure	63
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	Talent Retention	65
Aspect B2: Health and Safety			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	Occupational Health and Safety	72
KPI B2.1	Number and rate of work-related fatalities.	Corporate Social Responsibility Index Summary	118
KPI B2.2	Lost days due to work injury.	Corporate Social Responsibility Index Summary	118
KPI B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	Occupational Health and Safety	72



Appendix

ESG Guide Number	Guidance Notes	Report Content or Instructions	Page
Aspect B3: Development and Training			
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	Career Development Booster	70
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	Career Development Booster	70
KPI B3.2	The average training hours completed per employee by gender and employee category.	Career Development Booster	70
Aspect B4: Labour Standards			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	Recruitment Policy	64
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	Recruitment Policy	64
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	Recruitment Policy	64
Operating Practices			
Aspect B5: Supply Chain Management			
General Disclosure	Policies on managing environmental and social risks of the supply chain.	Supply Chain Overview	58
KPI B5.1	Number of suppliers by geographical region.	Supply Chain Overview	58
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	Supplier Admittance Supplier Assessment and Evaluation	59 60
Aspect B6: Product Responsibility			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	Product Quality Management	54

ESG Guide Number	Guidance Notes	Report Content or Instructions	Page
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Customer Evaluations and Complaints Handling	57
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	Customer Evaluations and Complaints Handling	57
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	Patent Protection	47
KPI B6.4	Description of quality assurance process and recall procedures.	Product Quality Management Customer Evaluations and Complaints Handling	54 57
KPI B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	Protection of Customer Information	51
Aspect B7: Anti-corruption			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	Ethics and Regulatory Compliance	41
KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	Ethics Hotline and Investigation	43
KPI B7.2	Description of preventive measures and whistleblowing procedures, how they are implemented and monitored.	Ethics Hotline and Investigation	43
Community			
Aspect B8: Community Investment			
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	Caring for Society	105
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	Caring for Society	105
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	Caring for Society	105



Future Outlook

The year 2020 marks SMIC's 20th anniversary. Over the past two decades, it has undergone trials and hardships. Our partners in all industrial chains, our dear customers and those who care about us have witnessed the development of SMIC. Our thanks go to everyone who has paid attention to us or applauded us.

This year is also a new starting point for SMIC's development. The Company has launched its capital expenditure planning for a new round. In 2020, SMIC will expand its production capacity, speed up R&D, and provide better services to its customers and the industry.

At the beginning of 2020, with the outbreak of COVID-19, uncertainties rose in the international political and economic environment, imposing great impacts on the growth of the global semiconductor industry. However, China's semiconductor industry maintained a momentum of rapid development. In the meantime, the application of artificial intelligence (AI), the Internet of Things (IoT), 5G and other new technologies are changing with each passing day, making the world increasingly intelligent, but all cannot be realized without a chip. Faced with both challenges and opportunities in this special period, SMIC has carried out reforms for two years. It has built a more competitive R&D, operation, support and management team, successfully deployed, developed and stored many technical platforms; it has also strengthened mutual trust and cooperation with its domestic and international customers and suppliers. We are firmly confident that we can continue steady development and are fully prepared for it.

- We will deepen our reforms, optimize the Company's management mode and improve our employees' efficiency;
- We will increase R&D investment, strive to catch up with advanced technology nodes, and continue to develop all kinds of processing platforms;
- We will remain dedicated to creating a healthy, safe and humanized working and living environment;
- We will stick to green development, promote energy saving and emissions and carbon reduction, and fulfill our corporate responsibilities in environmental protection;
- We will organize public benefit activities, encourage the participation of employees, and make contributions to the harmony of the society.

In the future, SMIC will enhance its overall competitiveness, continue to fulfill its commitments to the stakeholders, and keep moving forward on the path of sustainable development through firmer determination in reforms, stronger execution of R&D and more considerate customer services.

Comments and Suggestions

This is the 11th Corporate Social Responsibility (CSR) report published by SMIC to the public. In order to constantly improve our works on social responsibility management and strengthen our capability in fulfilling social responsibilities, we wish to hear your opinions and suggestions. Please help us complete the questions below and give your feedback through the following contact methods.

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1. What is your overall evaluation of this CSR report?

Very Good Good Average Bad

2. What issues are you most concerned about in this report?

- Innovation management
- Employee health and safety
- Occupational development
- Supply chain management
- Climate change and energy management
- Customer services
- Charity activities
- Others

3. Do you think this report reflects SMIC's significant impacts on the economy, society and environment?

Yes Generally No Not sure

4. What's your opinion on the clearness, accuracy and completeness of the information, data and indices disclosed in this report?

Very high High Medium Low Very low

5. Which aspects of this report need to be improved in your opinion?

Page layout Report length
 Issue coverage Form of release/ media

You are appreciated to give your opinions and suggestions on the SMIC CSR report here:



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