



2020

Corporate Social Responsibility Report

Create the Future with SMIC

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## Risk Reminder

### Dear Readers:

This Report mainly summarizes our corporate social responsibility performance in 2020. Some sections, such as Message from the Chairman, Future Prospects, and the policy summary of each segment may contain forward-looking or anticipatory statements. These statements are our projections of the future based on the present and best judgement assessment and are subject to known or unknown risks and uncertainties. These statements shall not be used as a major basis for investment decisions and may involve risks including (but not limited to) international political risks (such as changes in Sino-US relations), economic and trade risks, supply chain risks (such as supply chain disruption caused by restrictions on our suppliers), customer risks (such as customers restricted from placing orders), changes in business laws and regulations, pending legal proceedings, and common risks in the integrated circuit industry, such as intellectual property litigation risks, macroeconomic risks, changes in senior management, and foreign exchange risks.

In addition to this Report, readers and investors should refer to other documents disclosed by SMIC to the Hong Kong Stock Exchange and Shanghai Stock Exchange. Other unknown or unpredictable risk factors may also adversely affect SMIC's future results, performance, or development. Forward-looking or anticipatory statements do not reflect events that occur subsequent to or on the release date of this Report. SMIC bears no legal responsibility for the content of such forward-looking or anticipatory statements except as required by applicable laws and regulations.

Semiconductor Manufacturing International Corporation

July, 2021



# About This Report

## Introduction

This Report is the 12th Corporate Social Responsibility (hereinafter referred to as "CSR") Report released to the public by Semiconductor Manufacturing International Corporation, which discloses the CSR performance of SMIC in 2020 based on the principle of openness and transparency. This Report covers the economic, environmental and social sustainability issues that are of concern to key stakeholders.

## Reference Standards

This Report is prepared in accordance with the Environmental, Social and Governance (ESG) Reporting Guide of the Hong Kong Stock Exchange (HKEX) and requirements for companies listed on the Science and Technology Innovation Board of China, with reference to the *GRI Sustainability Reporting Standards* (GRI Standards) of the Global Reporting Initiative, the China Corporate Social Responsibility Reporting Guide (CASS-CSR4.0) of the Academic Division of Economics of the Chinese Academy of Social Sciences, the CSR Guide for China's Industrial Enterprises and Industrial Associations of the China Federation of Industrial Economics (CFIE), SJ/T 16000-2016 Guidance on Social Responsibility of Information and Communication Technology Industry of the China Electronics Standardization Association (CESA) and the main principles of ISO 26000:2010 Guidance on Social Responsibility of the International Organization for Standardization (ISO).

## Reporting Scope

The reporting scope of this 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", "Mainland China" 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, 2020, to December 31, 2020. To make this Report more readable, some content and data has been presented to include prior and or subsequent years.

## Release Cycle

The CSR Report of SMIC is an annual report, which is usually released in the July subsequent to the reported year.

## Description of Report Preparation and Data Source

This Report is prepared by the members of the CSR Committee with CSR-related information and data provided by functional departments. The materials are then organized and edited by the CSR Team of the Company and reviewed and confirmed by the members of the CSR Committee. Then the report is rated by a third party.

The financial data in the report are prepared and expressed in accordance with International Financial Reporting Standards. In this report, if the mantissa of total value is inconsistent with that of the sum of the sub-items, it is due to rounding.

## 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](http://www.smics.com).

## Contact Information

CSR Team of SMIC

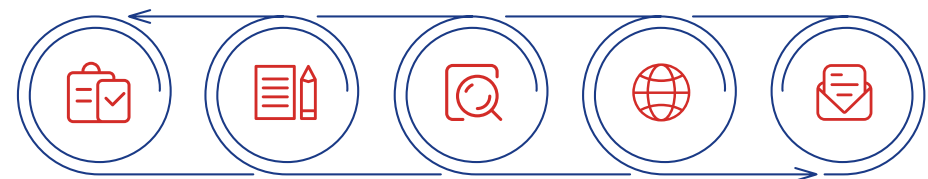
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## CSR Report Full-cycle Management



### Launch

- Set up working groups
- Benchmarking analysis
- Report the framework

### Report Preparation

- Collect materials
- Confirm the content
- Design the report

### Content Review

- Receive confirmation from departments
- Revise and polish
- Attain third-party assessment

### Approval and Release

- Approve the disclosure
- Release on official website
- Promote it to the public

### Feedback and Optimization

- Collect feedback and suggestions
- Optimize the work plan



# Message from the Chairman



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

Dear Readers,

2020 marks the 20th anniversary of SMIC. It is also the 12th year of releasing our Corporate Social Responsibility reports. Thank you for your long-standing interest and support for SMIC.

In 2020, we faced an extremely complex and challenging external environment and pressure from COVID-19 prevention. Waves can sweep away sand and gold can be made after hardship. We worked with upstream and downstream partners from the supply chain with strategic determination and lay a solid foundation for our long-term development.

Thanks to the joint efforts of all employees, we achieved a milestone success during this period of combatting the epidemic, as we listed on the Science and Technology Innovation Board, and achieved growth despite the sluggish global economic growth. Our sales revenue in 2020 was USD 3.907 billion, a year-on-year increase of 25.4%. The net profit was USD 716 million, a year-on-year increase of 204.9%. In terms of the advanced manufacturing process, the Company reached the target of 15,000 wafers installed FinFET capacity as planned. Mass production of our first generation of FinFET has steadily progressed, and the second generation has entered risk production.

"Caring for people, caring for the environment, and caring for society" has been our CSR philosophy. Since COVID-19 broke out at the beginning of 2020, the Company, together with its directors and employees, donated RMB10 million in cash and supplies to the frontline fighting the pandemic. We also strictly implemented prevention and control measures and introduced a series of support policies on vacations, subsidies, etc., prioritizing the safety and health of employees.

2020 was also the eighth year of the "SMIC Liver Transplant Program for Children". The program was initiated by SMIC and is supported by our

industry partners. In 2020, the number of SMIC employees that participated in the program, as well as the total donations raised from our partners hit all-time record highs. In the past eight years, we raised a total of RMB 28.93 million for 530 disadvantaged children. In addition, we established special purpose funds and invested RMB 18.44 million for charitable programs in healthcare and education.

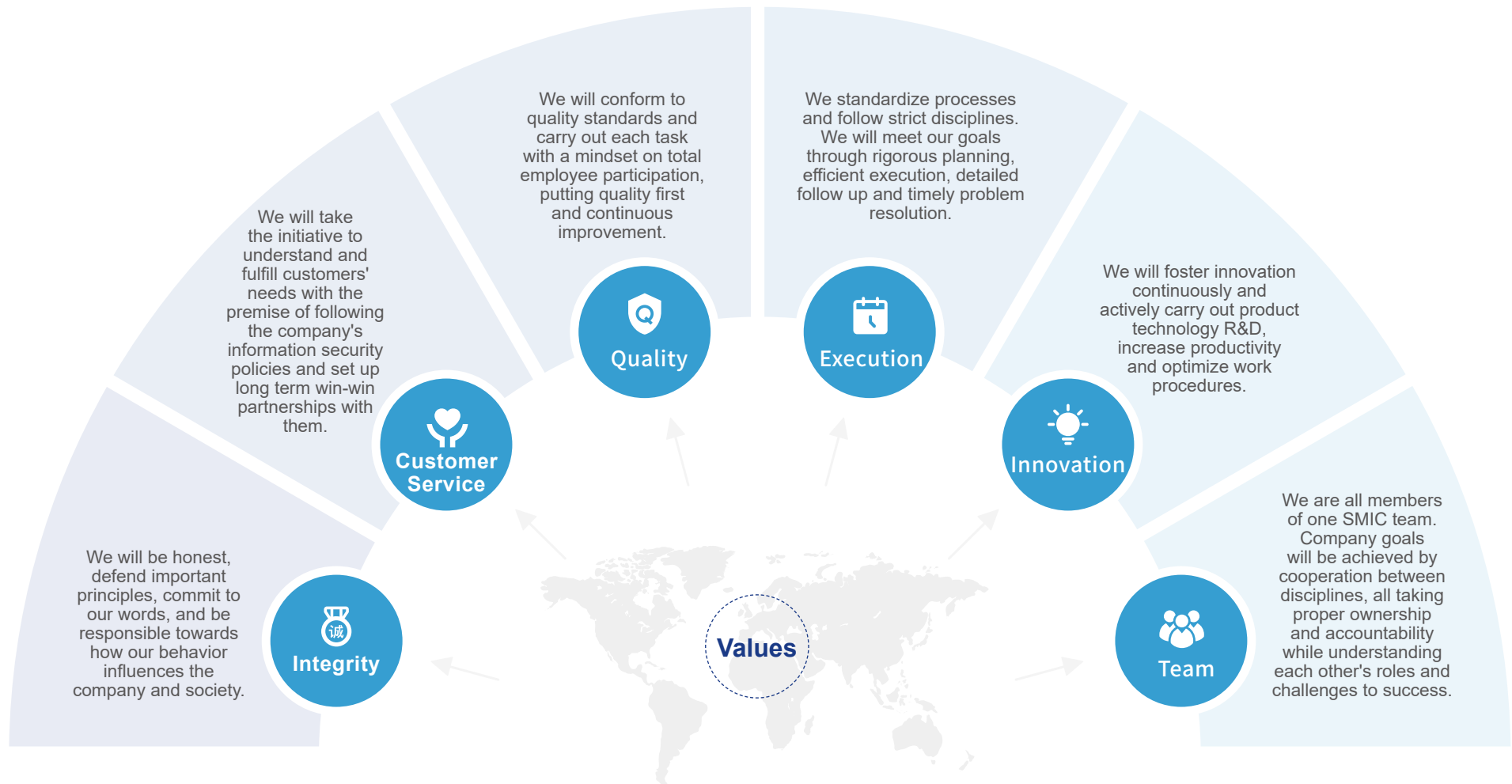
Despite the hardships, we continued our efforts to promote green manufacturing. In 2020, our environmental protection investment reached USD 142.06 million, with which we completed 14 energy-saving, water-saving, and waste-reduction projects, saving 17,942,676 kWh of electricity and 253,165 tons of water. We are happy to work with our partners to build a more eco-friendly and sustainable IC industry chain.

Over the years, every employee has been a participant and contributor to our corporate responsibility fulfilment. Each year, they actively participate in public welfare and environmental protection events and activities organized by the Company and earnestly practice a green and low-carbon lifestyle. As far as volunteering is concerned, more than 10,000 SMIC employees participated in volunteering and completed over 100,000 hours of service.

In the past 20 years, as we pursued our own growth, we have been committed to sustainable development. We align our mission and aspirations with the times and cooperate with business partners to create a better future. We hope everyone in the industry can maintain conviction and work together, and we thank you in advance for your continued support for SMIC.

Dr. Zhou Zixue, Chairman of the Board of SMIC

# Core Values



# 2020 Corporate Social Responsibility Performance



## Economy

**1**

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

**USD3,907.0 million**

The revenue of SMIC hit a new high in 2020

**204.9%**

In 2020, the net profit attributable to owners of the Company reached USD 715.6 million, a year-on-year increase of 204.9%

**17.3%**

In 2020, the R&D expenses were USD 677.4 million, accounted for 17.3% of revenue

**14 nm**

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



## Environment

**12 kg CO<sub>2</sub> equivalent/8-inch equivalent wafer mask layer**

GHG emissions per unit in 2020

**9.0 kWh /8-inch equivalent wafer mask layer**

Electricity consumption per unit in 2020

**74.8 L/8-inch equivalent wafer mask layer**

Water consumption per unit in 2020

**71.6 L/8-inch equivalent wafer mask layer**

Wastewater discharge per unit in 2020

**0.35 kg/8-inch equivalent wafer mask layer**

Waste generated per unit in 2020



## Society

**647**

Fresh graduates recruited in 2020

**36%**

The proportion of women in leadership roles accounted for 36% in 2020

**11,126 hours**

Number of employee volunteer service hours in 2020

**677**

Impoverished children were helped and saved by SMIC's medical assistance programs in 2020

**RMB16.76 million**

Social donation amount in 2020



# About SMIC

Semiconductor Manufacturing International Corporation ("SMIC", SEHK: 00981; SSE STAR MARKET: 688981) and its subsidiaries constituting 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 Group provides integrated circuit (IC) foundry and technology services on process nodes from 0.35 micron to 14 nanometer.

- Company Profile    ○ Market Position and Products
- Financial and Tax Information





## Milestones of SMIC

### • 2000

- SMIC was founded

### • 2001

- Produced the first 8-inch wafer in Shanghai fab

### • 2002

- SMIC Beijing was founded
- Mass-produced 0.18μm process

### • 2003

- SMIC Tianjin was found
- Mass-produced 0.35μm-0.13μm process

### • 2004

- Publicly listed in the New York Stock Exchange (NYSE) and the HKEX

### • 2006

- Mass-produced 90nm process

### • 2008

- Datang Holdings strategically invested in SMIC
- SMIC Shenzhen was founded

### • 2009

- Mass-produced 65/55nm process

### • 2011

- Mass-produced 45/40nm process

### • 2013

- Semiconductor Manufacturing North China (Beijing) Corporation (SMNC) was founded

### • 2014

- SMIC and JCET jointly built a 12-inch bumping process company

### • 2015

- Mass-produced 28nm process
- China IC Fund invested in SMIC
- Obtained approval from the Shanghai municipal government to set up its regional headquarters in Shanghai

### • 2016

- Semiconductor Manufacturing South China Corporation (SMSC) was founded
- New production lines in Shanghai, Tianjin and Shenzhen were launched



### • 2017

- SMIC became a major shareholder of JCET

### • 2018

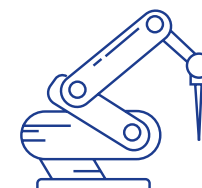
- 14nm FinFET processing started customer engagement

### • 2019

- American depositary shares were delisted from the NYSE
- Successfully mass-produced the first-generation 14nm FinFET and achieved significant revenue

### • 2020

- Successfully listed on the Sci-Tech Innovation Board
- Semiconductor Manufacturing Beijing Corporation was founded



# Company Profile

Semiconductor Manufacturing International Corporation ("SMIC", SEHK: 00981; SSE STAR MARKET: 688981) and its subsidiaries constituting 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 Group provides integrated circuit (IC) foundry and technology services on process nodes from 0.35 μm to 14 nanometer. Headquartered in Shanghai, China, SMIC Group has an international manufacturing and service base. In China, SMIC has a 300mm wafer fabrication facility (fab) , a 200mm fab and an effectively controlled joint-venture 300mm fab for advanced nodes in Shanghai; a 300mm fab and a majority-owned 300mm fab in Beijing; two 200mm fabs in each Tianjin and Shenzhen. SMIC Group also has marketing and customer service offices in the U.S., Europe, Japan, and Taiwan China, and a representative office in Hong Kong China.

For more information, please visit [www.smics.com](http://www.smics.com).



|  |                                   |                                      |  |
|--|-----------------------------------|--------------------------------------|--|
|  |                                   |                                      |  |
| <b>Headquarter</b><br>Shanghai,<br>China | <b>Year of Foundation</b><br>2000 | <b>Number of Employees</b><br>17,354 | <b>Major Business</b><br>Integrated circuit<br>foundry |



## SMIC owns Fabs in Shanghai, Beijing, Tianjin, and Shenzhen

At the end of 2020  
the total monthly wafer fabrication capacity of  
SMIC was **521** k 8-inch equivalent wafers

Beijing  
300mm Fab and 300mm  
Fab (majority-owned)



Tianjin  
200mm Fab



Shenzhen  
200mm Fab



Shanghai  
200mm Fab,  
300mm Fab  
and 300mm Fab  
(effectively controlled  
joint-venture)



# Market Position and Products

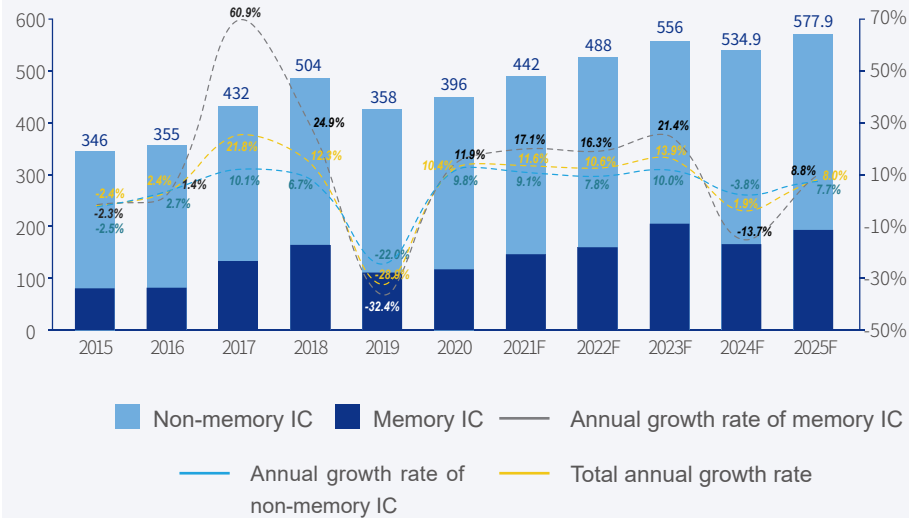
## Market Position

### Global IC Market

According to IC Insights, global IC market revenue was USD 396 billion, a year-on-year 10.4% increase. The annual growth rate of memory products was 11.9% and the annual growth rate of non-memory products was 9.8%.

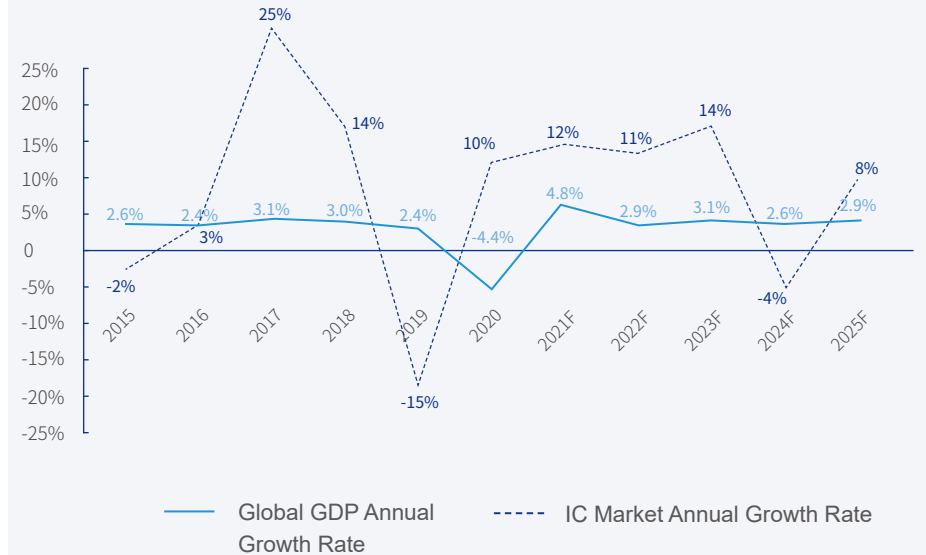
It is estimated that the global economy will maintain stable growth with an annual growth of approximately 3% in the coming years. The prosperity of the semiconductor market will be the same as before, closely related to the macroeconomic situation.

Global IC Revenue Forecast by Category (Unit: USD billion)



Source: IC Insights, 2021

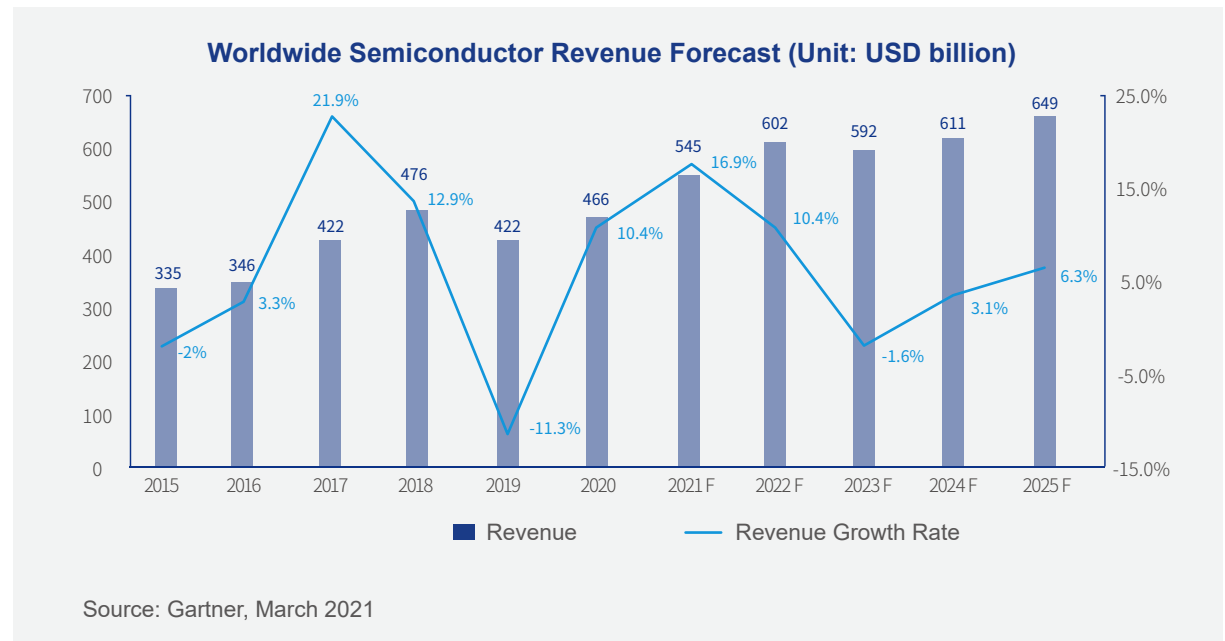
Global GDP Growth Rate and IC Growth Rate Forecast



Source: IC Insights, 2021



According to Gartner, the revenue of the worldwide semiconductor market was USD 466 billion in 2020, a 10.4% year-on-year increase. However, with the strong end-market demand post-COVID-19 from automotive, 5G, remote office, and so on, it is estimated that by 2022, the global semiconductor market revenue will exceed USD 600 billion, reaching a new milestone. In 2025, the global semiconductor market revenue will reach USD 649 billion, with a Compound Annual Growth Rate (CAGR) of 6.8% from 2020 to 2025.

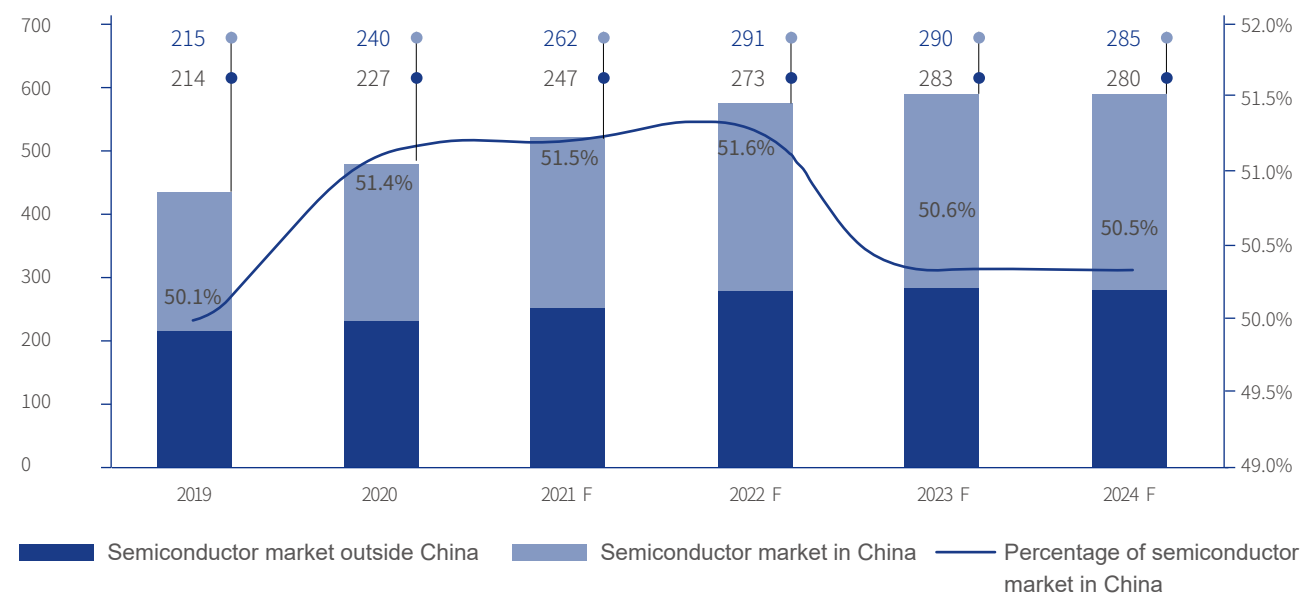


## China's Semiconductor Market

China is a central hub for the production of electronics, and is also the world's largest consumer of semiconductor products. Statistics by Omdia show that China represents 51.4% of the global semiconductor market, with local brands and IC designers continuing to thrive. It is estimated that by 2025, China's IC self-sufficiency will reach 19.4%.



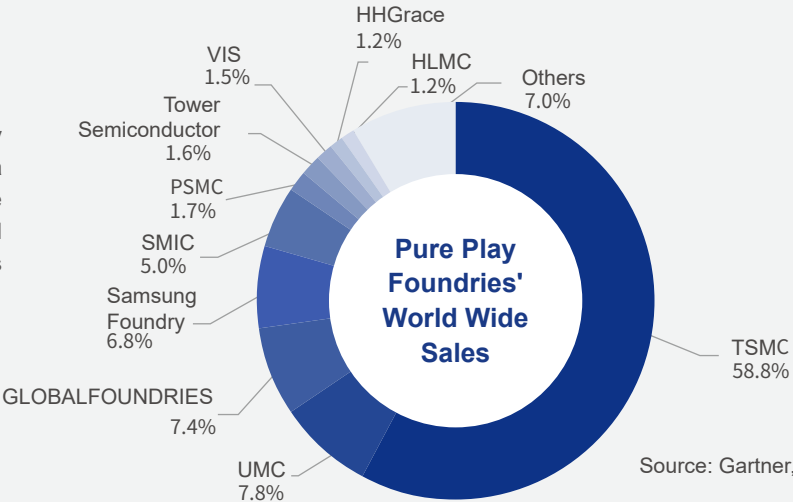
China's Semiconductor Market Share and the Global Semiconductor Market (Unit: USD billion)



Source: Omdia, 1Q21



SMIC, as the leading pure-play foundry in Mainland China, has a dominating advantage to service domestic Chinese fabless, as well as IDMs and fabless companies overseas.



Source: Gartner, March 2021

The traditional electronics market includes Automotive, Computer, Communication, Consumer, and Industrial applications. Most of these end products now incorporate the Internet of Things (IoT), Artificial Intelligence (AI), Deep Learning (DL), Machine Learning (ML), and other trends, which are expected to bring new opportunities and challenges to the semiconductor industry; such as the need for new products requiring chips with high density, low power consumption, and high-speed computing capabilities.



As a key manufacturer of semiconductor and electronic components in the supply chain upstream in Mainland China, SMIC will gain more market share in the Chinese market through enhanced cooperation and innovation.

## Competitive Advantages of SMIC

SMIC is one of the few pure-play foundries in the world that can provide complete wafer manufacturing solutions from mature to advanced processes. Products using 0.35μm to 14nm processes have been in mass production. SMIC boasts a wide range of advantages over other pure-play foundries.

SMIC provides customers with one-stop services in advanced and mature specialty processes

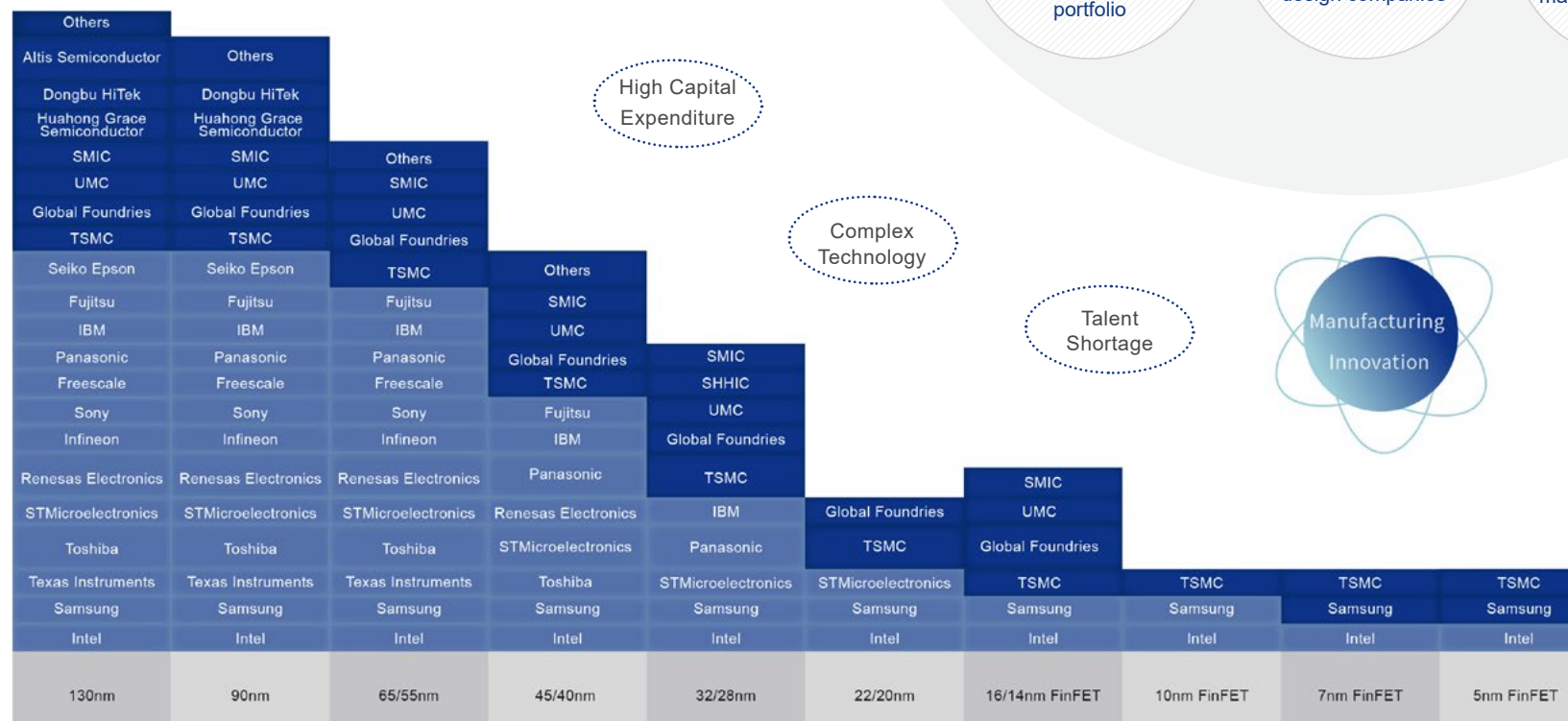
SMIC continues to invest in process R&D, IP development and establishment of the industry's ecosystem

SMIC maintains a high capacity utilization rate

SMIC is the largest pure-play foundry in Mainland China that can provide a complete product portfolio

SMIC is the most popular foundry partner for China's IC design companies

SMIC is located in China, the world's largest and fastest growing production and consumer market for electronic products

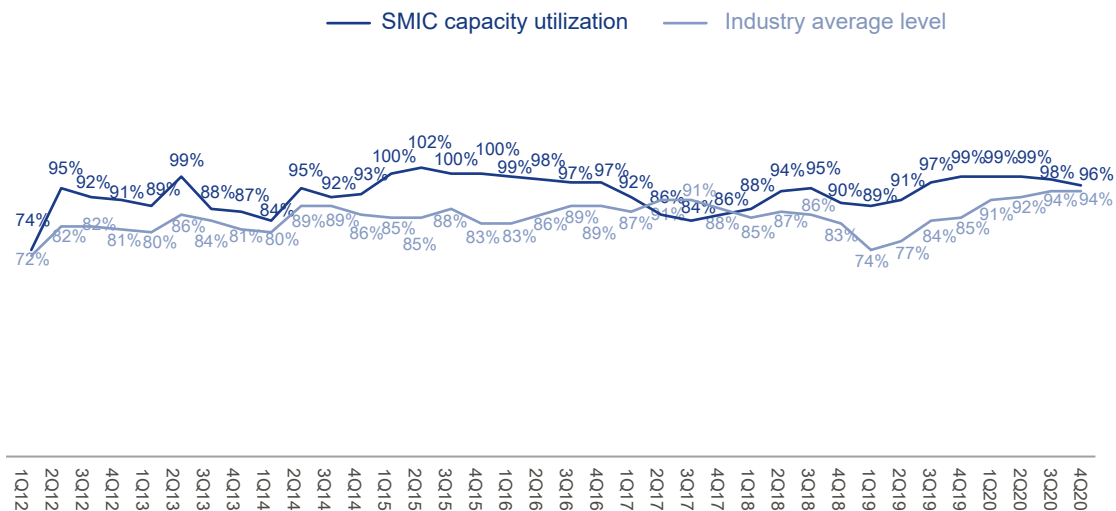


Source: ARM, SMIC internal studies, Q4 2020

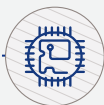


SMIC's capacity utilization rate continues to maintain a high level.

### Comparison of Capacity Utilization



Source: Gartner, 1Q21

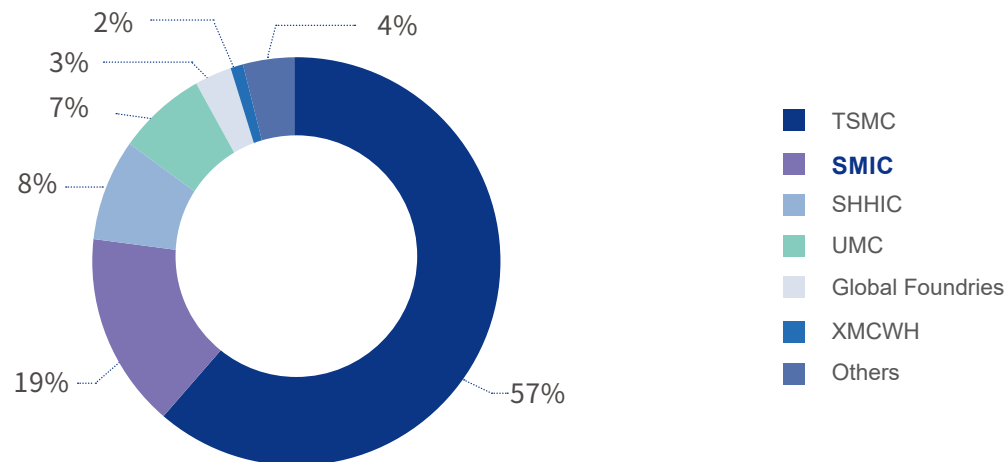


In 2020, SMIC accounted for about

**19%** of the pure-play foundry market in China

In 2020, SMIC accounted for about 19% of the pure-play foundry market in Mainland China, only second to TSMC. SMIC attracts many world-class integrated circuit design companies with its leading market positioning and favorable geographic location. SMIC has gained the trust of its customers through high-quality products and services, and helps customers reduce the time to market while providing value-added innovation for mature and advanced processes.

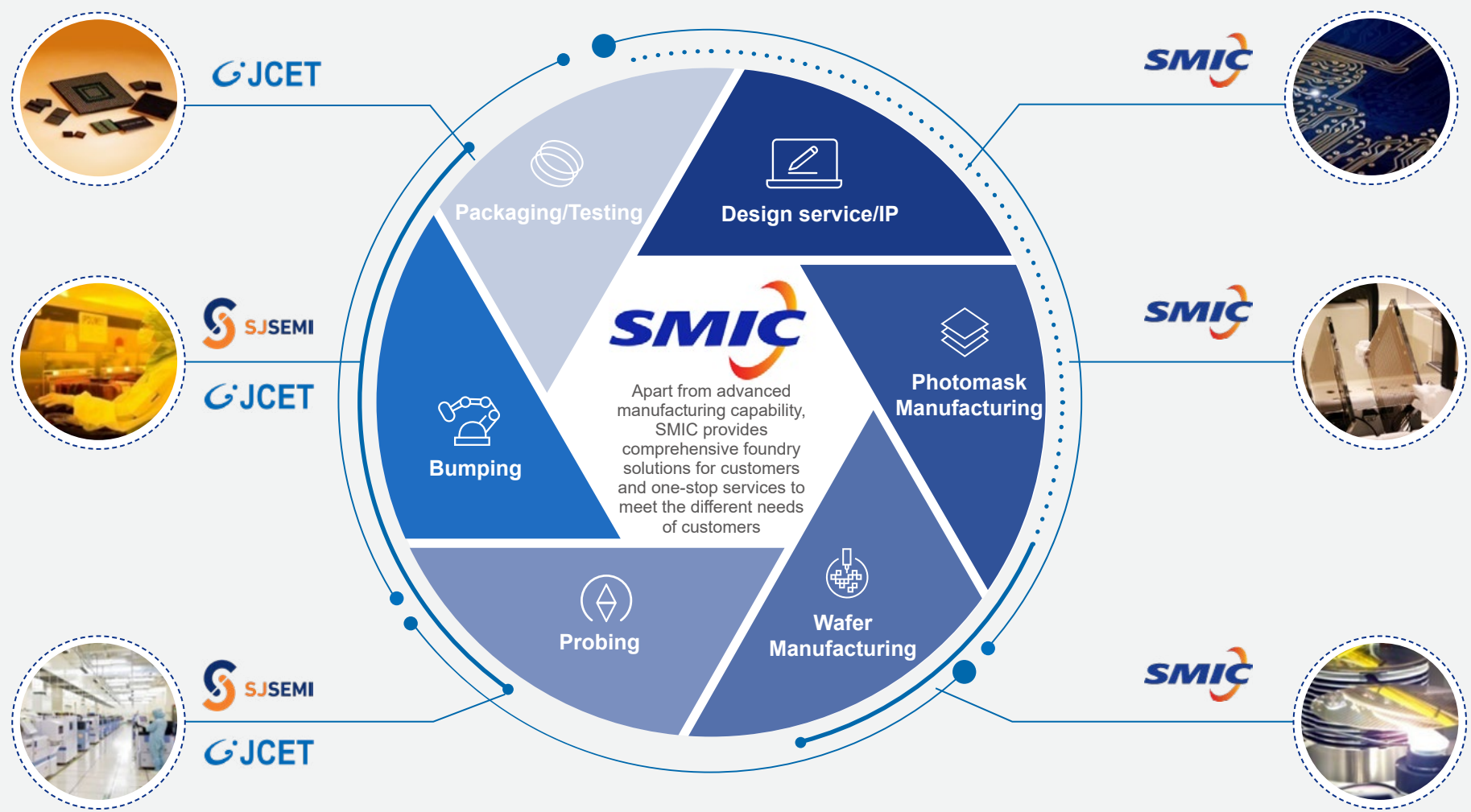
### SMIC has the second largest share in the Chinese pure-play foundry market



Source: IC Insights, 2021

Products and Service

IC Industry Chain





## Product Application Scopes

In general, SMIC's foundry solutions are applied in the fields shown in the right table. In 2020, about 80% of revenue in SMIC came from smartphones, smart homes and consumer electronics.

### Product Application Scopes of SMIC





## IC Services

### IP Development Service & Design Service

SMIC offers a vast and diverse portfolio of semiconductor intellectual property (IP) blocks ranging from 0.35  $\mu\text{m}$  to 14 nm to support customers' design needs. SMIC's design services can enable customers in mass production and use proven technologies to design increasingly sophisticated chips for products with higher-performance, decreased power-consumption, and enhanced chip size. SMIC's services help customers minimize the risks of chip design and shorten the time-to-market of products.

### Photomask Making

SMIC's photomask operation provides photomasks manufacturing services for SMIC's foundry customers and other fabs and institutions. Currently, we have Mainland China's largest and most advanced photomask making facility with 0.5  $\mu\text{m}$  to 14 nm capabilities. Equipped with state-of-the-art tools, the facility offers binary photomasks and phase shift photomasks complete with optical proximity correction. 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 MPW program provides customers a cost-effective prototyping service by enabling multiple customers and projects to share common mask and engineering wafers. Currently, SMIC provides shuttle service for processes from 0.18  $\mu\text{m}$  to 14 nm on a regular basis.



SMIC's test facility provides customers with quick turnaround and strict quality control for wafer-level testing. Equipped with advanced testing and laser repair machines, SMIC's test facility offers customers comprehensive testing services in 200mm and 300mm wafer sizes. Services offered include wafer probing, epoxy probe card building and repair as well as testing for contact and contactless IC card types. SMIC's wafer probing service includes test program development as well as failure analysis and reliability testing. SMIC can make, repair and maintain epoxy probe cards as well as low-leakage probe cards.



SMIC cooperate with world-class OSAT companies to offer 200mm and 300mm wafer bumping and Wafer Level Packaging (WLP), including solder bump, copper pillar bump, redistribution layer (RDL), WLCSP processing and Die Processing Services (DPS).

### Bumping and WLP service includes



# Financial and Tax Information

## Financial Performance

SMIC's total revenue in 2020 stood at USD 3,907.0 million, a 25.4% year-on-year increase. The gross profit reached USD 920.9 million, a 43.3% year-on-year increase. The net profit attributable to owners of the Company was USD 715.6 million, a 204.9% year-on-year increase.



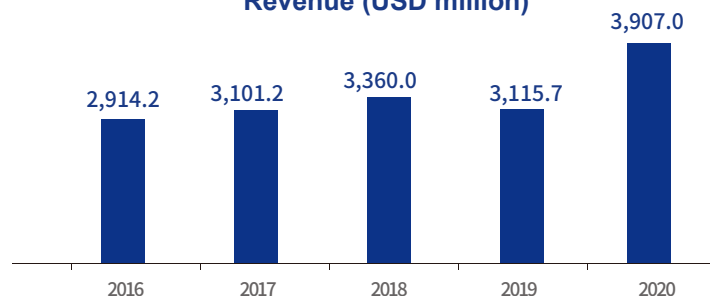
For more financial information, see the 2020 Annual Report:



### Key Financial Indicators

| Item   | 2016    | 2017    | 2018    | 2019    | 2020    |
|--|---------|---------|---------|---------|---------|
| Revenue (USD million)  | 2,914.2 | 3,101.2 | 3,360.0 | 3,115.7 | 3,907.0 |
| Revenue growth (%)   | 30.3%   | 6.4%    | 8.3%    | -7.3%   | 25.4%   |
| Profit attributable to Owners of the Company (USD million)     | 376.6   | 179.7   | 134.1   | 234.7   | 715.6   |
| Profit margin growth attributable to Owners of the Company (%) | 48.6%   | -52.3%  | -25.4%  | 75.1%   | 204.9%  |
| ROE attributable to Owners of the Company (%)                  | 9.1%    | 3.5%    | 2.5%    | 4.2%    | 9.6%    |
| Asset-liability ratio (%)                                      | 46.6%   | 43.6%   | 38.1%   | 38.0%   | 30.8%   |
| R&D expenses (USD million)                                     | 370.8   | 509.4   | 663.4   | 687.4   | 677.4   |
| Ratio of R&D expenses to revenue (%)                           | 12.7%   | 16.4%   | 19.7%   | 22.1%   | 17.3%   |

### Revenue (USD million)



In 2020, SMIC's revenue reached USD

**3,907.0** million

Gross profit USD

**920.9** million



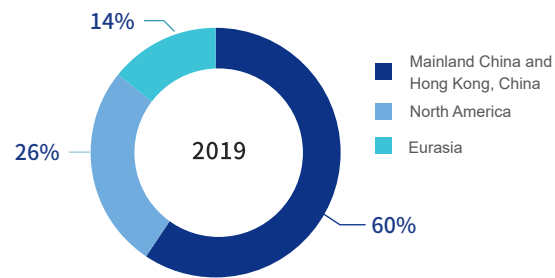
Net profit attributable to owners of the Company was USD

**715.6** million

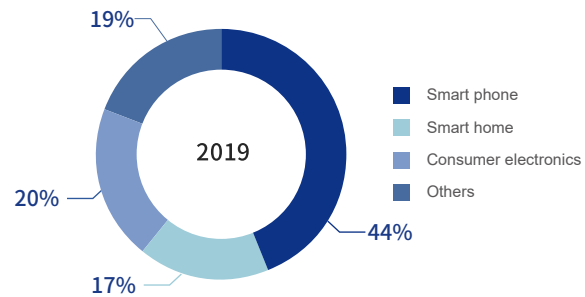




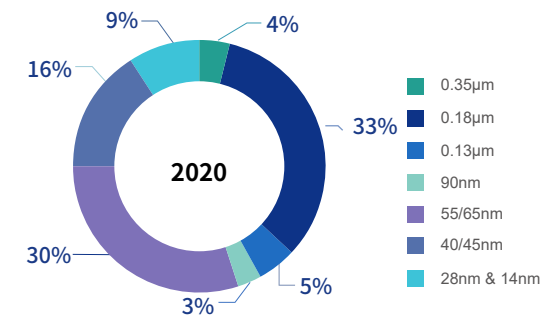
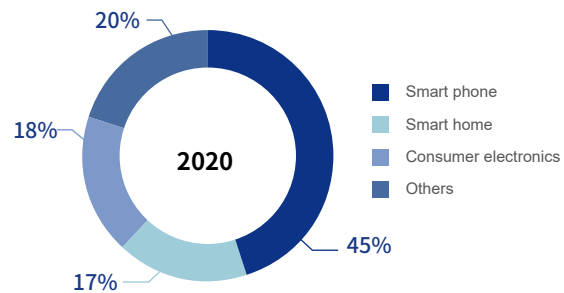
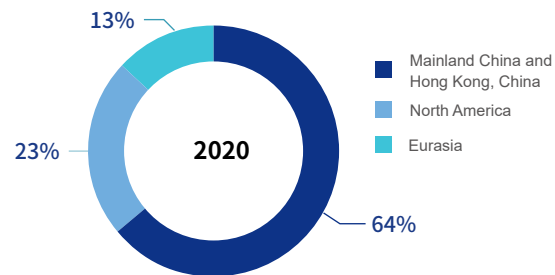
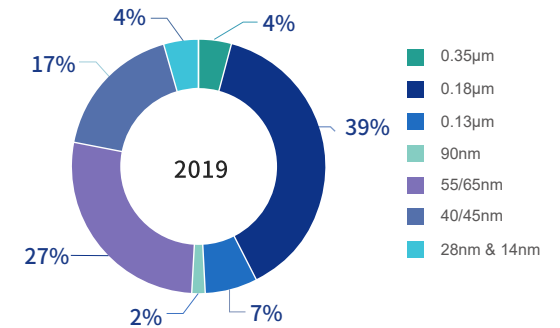
Revenue by Region



Revenue by Application



Revenue by Technology





## Tax Performance

The principle of SMIC tax management work is to comply with tax regulations and faithfully pay taxes in accordance with the law. To act in line with this principle, SMIC takes the following measures.



SMIC established a pre-forecasting and evaluation mechanism in advance and integrated tax management into the Company's business decision-making and daily business management activities to examine and weigh the impact of taxes;



In strict accordance with tax laws, regulations and policies of the country, the Company and tax management personnel carried out tax-related work based on the actual business operation of the Company and performed tax payment obligations in accordance with the law;



SMIC continuously improved tax management, optimized the tax management process, promoted the collaboration of departments, and implemented effective prevention, control and risk reduction during tax management.

In 2020, SMIC actually paid a total of USD **228** million in taxes (excluding withholding taxes)

More than **99%** of taxes were paid in China





# Corporate Social Responsibility Management

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

- Social Responsibility Policy    ○ Social Responsibility Management Mechanism
- Communication with Stakeholders



# Social Responsibility Policy

While complying with all legal responsibilities and obligations, we continually assume and diligently practice CSR. Through CSR projects, we hope to meet international standards in the areas of social development, environmental protection and ethical responsibility. We will try to keep presenting ourselves as a company which "has achieved high-standard performance in environmental protection, social responsibility and corporate governance."

To achieve these goals:

1

We assert our support for the Responsible Business Alliance (RBA; formerly the Electronic Industry Citizenship Coalition) Code of Conduct and will actively pursue conformance to the Code and participation by our suppliers.

2

We uphold the human rights of our employees 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.

3

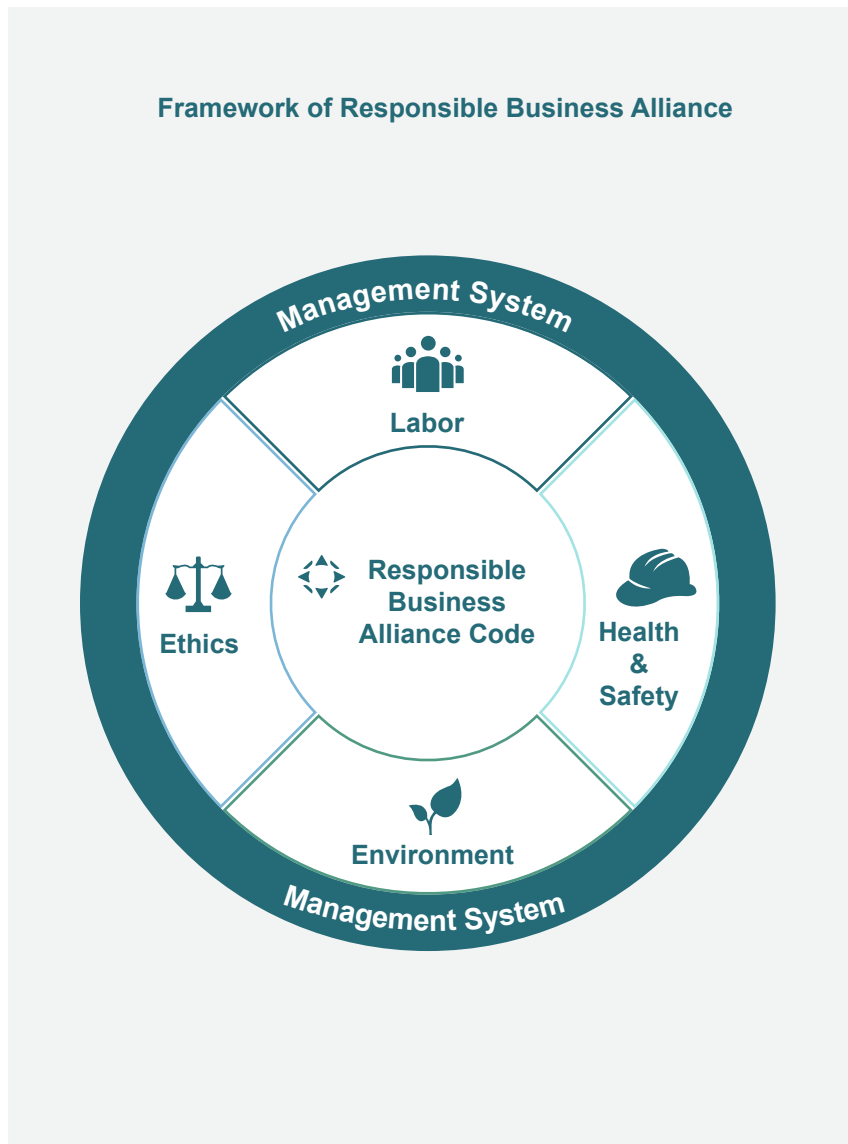
We strive to maintain a safe workplace for our employees and a healthy environment for the public while minimizing adverse effects on the community, environment, and natural resources, consistent with our Environmental Protection, Safety, and Health Policy and our related ISO and other international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

4

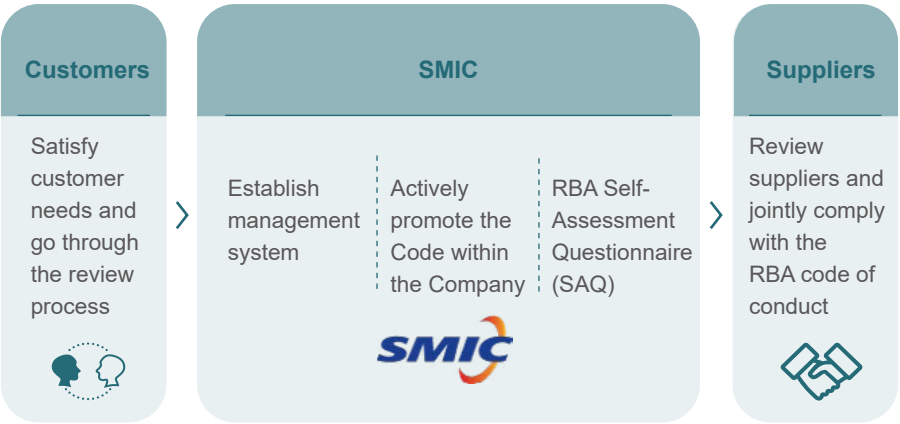
We develop and maintain management systems to implement this CSR Policy with continual improvement as part of a holistic CSR Program.



## Responsible Business Alliance Code of Conduct



## Responsible Business Alliance Implementation



In 2013, SMIC started to assess the environmental, health, safety, labor and ethical management of the company and its fabs by relying on the responsible business alliance online risk assessment (RBA-online) system and develop the continuous improvement plan for the existing risks. In 2020, the company and its facilities 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 required suppliers to comply with the Code and fulfill its social responsibility, with an undertaking signed with key suppliers. According to the implementation performance of suppliers, we conducted on-site audits of our major domestic suppliers in 2020, and once again promoted the RBA Code.



## Sustainable Development Goals (SDGs) of the United Nations

In 2020, SMIC continued to incorporate some of the requirements by the UN's SDGs and China's National Plan for Implementing the 2030 Agenda for Sustainable Development into CSR management. Combined with the actual situation, SMIC has selected 14 of 17 "UN sustainable development goals" and implemented relevant measures.

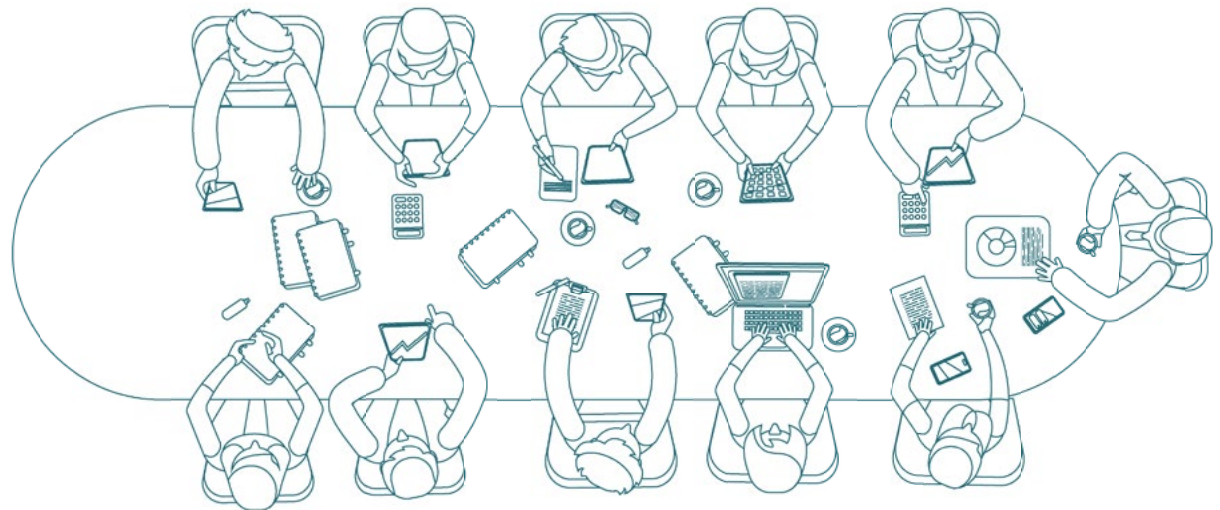


# Social Responsibility Management Mechanism

SMIC has established the CSR Committee to promote CSR management projects and to achieve its goals. The chairman of the committee is appointed by the management. The representatives from all functional departments hold committee member positions in order to jointly carry out CSR work. The CSR Committee holds monthly work meetings on a regular basis to review social responsibility-related topics and regularly reports to the management of the Company on the progress of CSR work.

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

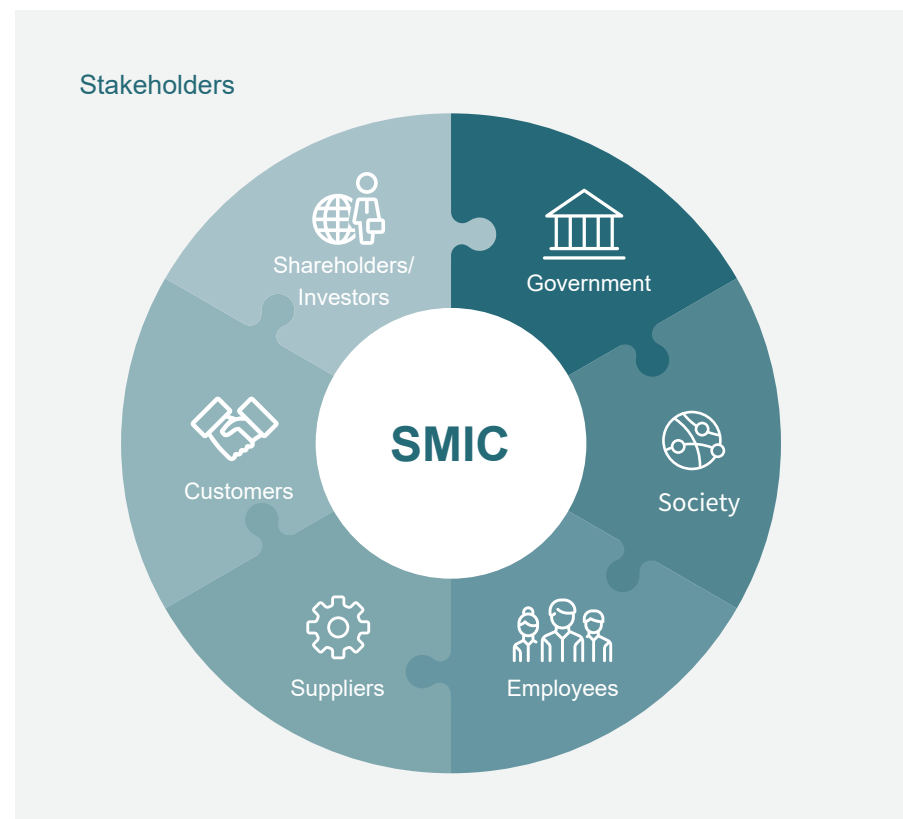
Organizational Structure of the CSR Committee



# Communication with Stakeholders

## Stakeholders

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









## Communication with Stakeholders

SMIC attaches importance to safeguarding the interests of stakeholders by maintaining good communication between CSR Committee members and the stakeholders, to convey international and social trends as well as company status and respond to the needs of the stakeholders.

### Management of Communication with Stakeholders

| Project  | Description   | Frequency |
|--|---|-----------|
| Identification of major stakeholders and topics of concern | CSR Committee responsible for coordination  | Per annum |
| Stakeholder communication planning and execution           | CSR Committee and relevant departments to establish the communication channel with stakeholders       | Per plan  |
| Stakeholder communication results verification             | CSR Committee to discuss and report communication results and offer feedback on the topics of concern | Per annum |
| Disclosure   | CSR Report  | Per annum |

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

| Type of Stakeholders             |  Employees  |  Shareholders Investors  |  Customers  |  Suppliers   |  Government  |  Society  |
|----------------------------------|--|---|---|---|---|--|
| Subjects of Communication        | <ul style="list-style-type: none"><li>All employees</li></ul>  | <ul style="list-style-type: none"><li>Shareholders</li><li>Investors</li><li>Analysts</li><li>Information disclosure media stipulated by law</li></ul> <ul style="list-style-type: none"><li>HKEX</li><li>SSE</li><li>OTC markets in the U.S.<sup>(1)</sup></li></ul>   | <ul style="list-style-type: none"><li>Sales/Technical support team</li><li>Quality management department</li></ul>  | <ul style="list-style-type: none"><li>Suppliers of raw materials</li></ul>  | <ul style="list-style-type: none"><li>National and local development and reform commissions, economic and information commissions, commercial commissions, science and economic commissions, tax departments, financial departments, customs departments and environmental protection departments</li><li>National and local industry associations</li><li>Local management committees in Zhangjiang, Yizhuang, Xiqing, Pingshan and other places</li></ul> | <ul style="list-style-type: none"><li>Print media: newspapers, magazines</li><li>Electronic media: Internet, WeChat, TV, radio</li><li>Nursing homes</li><li>Non-profit organizations</li><li>Living quarter</li></ul>   |
| Communication Channels and Forms | <ul style="list-style-type: none"><li>Employee communication meetings</li><li>Employee satisfaction surveys</li><li>All-user email announcements</li><li>Internal website</li><li>Ethics hotline for violation tip-offs</li><li>SMIC magazine</li></ul>  | <ul style="list-style-type: none"><li>Annual general meeting for shareholders</li><li>Extraordinary general meeting for shareholders</li><li>Quarterly earnings release and results announcement</li><li>Domestic and overseas investment conferences with institutional investors</li><li>Non-deal roadshows</li><li>IPO roadshows</li><li>Communication via face-to-face meetings, phone calls, and emails while regularly collecting opinions and feedback</li><li>Release Company information via information disclosure and media as stipulated by law</li></ul> <ul style="list-style-type: none"><li>Release of the Company's annual report and interim report, public disclosures of information as required by the HKEX and the OTC markets in the U.S.<sup>(1)</sup>, the CSR report, and ad hoc company news published on the official website and WeChat official account</li><li>The "SSE Interaction" platform and investor hotline</li></ul> | <ul style="list-style-type: none"><li>Semi-annual customer satisfaction survey</li><li>Quarterly business/quality/technology evaluation meeting for customers</li></ul>   | <ul style="list-style-type: none"><li>Scoring, on-site review, supplier questionnaire survey</li></ul>  | <ul style="list-style-type: none"><li>Official documents, conferences (briefings and seminars), face-to-face talks</li></ul>  | <ul style="list-style-type: none"><li>Press releases</li><li>Interviews and special reports</li><li>Press conferences</li><li>Social media releases</li><li>Regular visits</li><li>Participation in philanthropic</li><li>Promotion of environmental protection</li></ul>  |
| Topics of Concern                | <ul style="list-style-type: none"><li>Employee benefits and perks</li><li>Future growth potential</li><li>The Company's competitive advantage in the industry</li><li>Talent retention</li><li>Employee training and education</li><li>Employees' physical and mental health</li><li>Employees' personal career development</li><li>Corporate governance</li></ul>                     | <ul style="list-style-type: none"><li>Outlook for semiconductor</li><li>Outlook for the Chinese market</li><li>The Company's competitive advantages in the industry</li><li>Future growth potential</li><li>Continuous improvement of profitability</li><li>Corporate strategy</li><li>R&amp;D goals and progress</li><li>Impact of China-US trade frictions</li></ul>  | <ul style="list-style-type: none"><li>Customer service and satisfaction</li><li>Innovation management</li><li>The Company's competitive advantages in the industry</li><li>Product quality control</li><li>Protection of confidential information</li><li>Business ethics</li></ul>   | <ul style="list-style-type: none"><li>Quality, price, delivery, service</li><li>Compliance with laws and regulations</li><li>Business ethics</li><li>Supplier sustainability management</li><li>Anti-corruption</li></ul>         | <ul style="list-style-type: none"><li>Future growth potential</li><li>Outlook for semiconductors</li><li>The Company's competitive advantages in the industry</li><li>Pollution prevention</li><li>Continuous improvement of profitability</li><li>Innovation management</li></ul>  | <ul style="list-style-type: none"><li>Corporate governance</li><li>Economic benefits</li><li>Innovation management</li><li>Anti-corruption</li><li>Social participation</li><li>External cooperation</li><li>Biodiversity protection</li></ul>   |
| 2020 Communication Activities    | <ul style="list-style-type: none"><li>Quarterly communication meeting</li><li>Employee satisfaction survey and feedback</li><li>Annual corporate sports day event</li><li>Talent competition</li><li>Festival activities</li><li>Birthday parties</li><li>Various club activities and sports competitions</li><li>Cultural promotion activities</li><li>Volunteer activities</li></ul> | <ul style="list-style-type: none"><li>1 annual general meeting for shareholders</li><li>5 extraordinary general meetings for shareholders</li><li>4 quarterly results webcasts</li><li>50 non-deal roadshow meetings</li><li>40 IPO roadshow meetings</li><li>30 investment conferences for institutional investors (including online conferences)</li><li>Nearly 300 meetings (including teleconferences)</li></ul>  | <ul style="list-style-type: none"><li>2 semi-annual customer satisfaction surveys and related action plans</li><li>4 quarterly business assessment meetings</li><li>4 quarterly quality assessment meetings</li><li>4 quarterly technology assessment meetings</li><li>1 annual technology conference</li><li>147 conflicted minerals management topics</li><li>40 customer surveys related to responsible business alliances</li></ul> | <ul style="list-style-type: none"><li>2 semi-annual ratings</li><li>4 special CSR audits for suppliers</li><li>23 on-site quality audits of suppliers</li><li>More than 100 supplier quality surveys via questionnaires</li></ul> | <ul style="list-style-type: none"><li>Published pollutant emissions data on the Company website</li><li>Engaged in occasional policy briefings, symposiums, trends &amp; predictions meetings, and marketing meetings</li></ul>   | <ul style="list-style-type: none"><li>Official WeChat</li><li>Spokesperson responded to media on issues of concern and conveyed the Company's ideas and messages to the public</li><li>Participated in charity events such as the "Zhangjiang Fun Run"</li><li>Held a "Pay Attention to the Ocean Pollution" beach cleanup activity for environmental protection</li><li>Held multiple second-hand recycling activities for environmental protection</li></ul> |

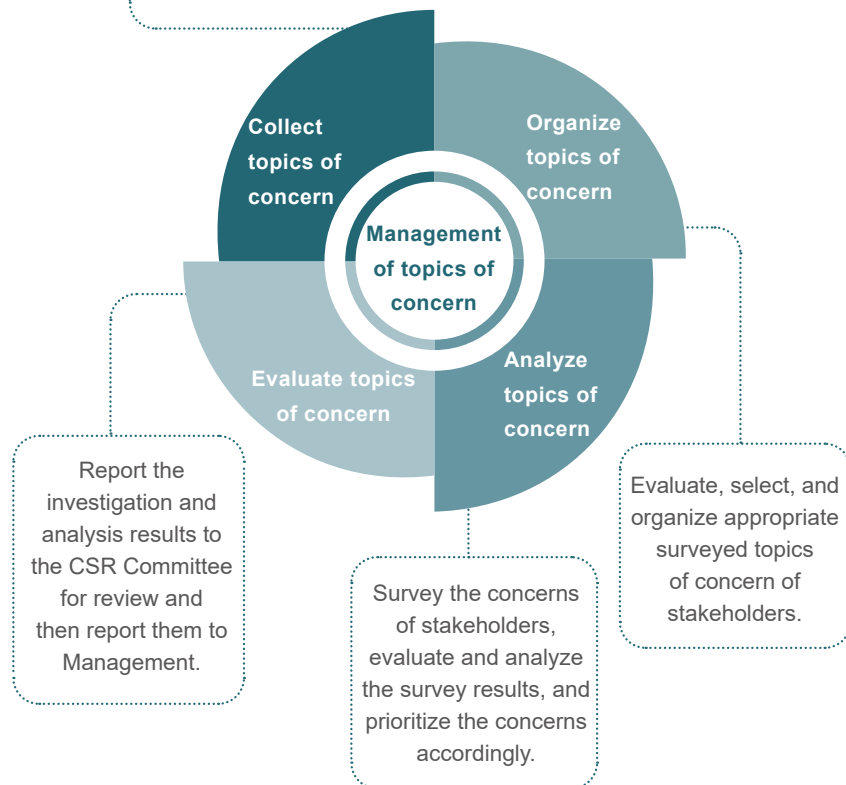
<sup>(1)</sup> ADR programme has terminated on March 4, 2021 (US Eastern Time).



## Management of Topics of Concern

### Management Process of Topics of Concern

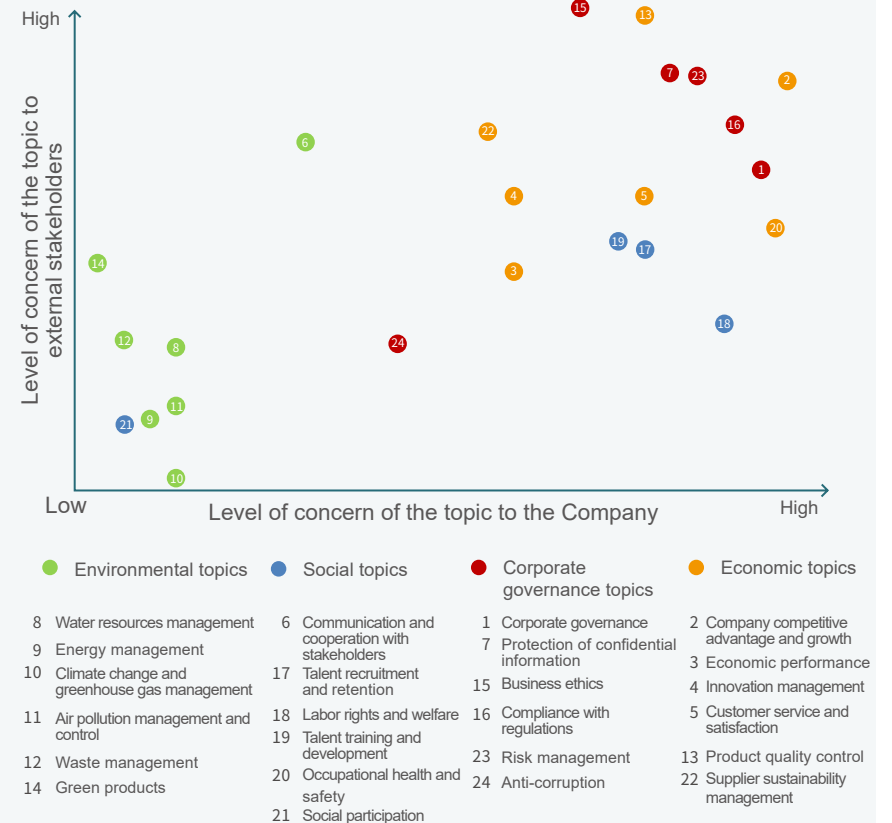
The *Environmental, Social and Governance Reporting Guidance (ESG)*, *Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-CSR 4.0)*, *Guidance on Social Responsibility for the Electronics and Information Industry in China*, *GRI Sustainability Reporting Standards (GRI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



## Analysis of Topics of Concern

In 2020, SMIC conducted questionnaire surveys on topics of concern to employees, suppliers, customers, the government, shareholders/investors, society (including the media, NGOs, communities) and other stakeholders, evaluated the level of concern of specific topics to stakeholders, and developed the matrix of topics of concern through a comprehensive analysis.

Matrix of Topics of Concern



# Sustainable Economic Growth

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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 delegates various responsibilities and authority to two Board Committees, the Audit Committee and the Compensation Committee. Each Committee's chairperson regularly reports to the Board on the activities and actions of the respective committee.

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



# Corporate Governance

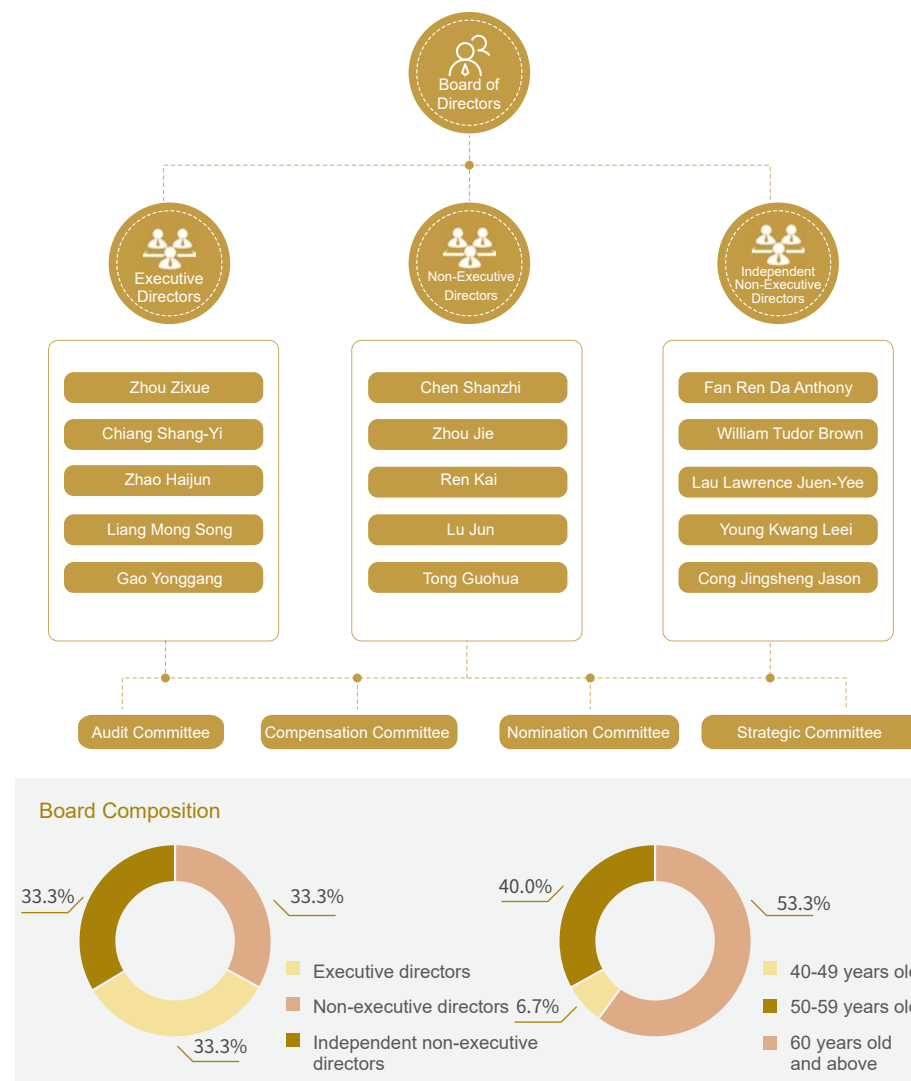
## Board of Directors

The Board of Directors 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 by itself and through its various committees, 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 management. The Board has access to the senior management of the Company to discuss enquiries on management information.

Other governance functions of the Board of Directors include:



The Board of Directors was organized as follows as of December 31, 2020.





The Board has established the Compensation Committee, Nomination Committee, Audit Committee, and Strategic Committee. The committees are governed by their respective charters setting out clear terms of reference.

As of December 31, 2020, the positions held by members of the Board in these committees were as follows:

### Positions of Board Members in Board Committees

| Board Member          | Position        |                        |                      |                     |
|-----------------------|-----------------|------------------------|----------------------|---------------------|
|                       | Audit Committee | Compensation Committee | Nomination Committee | Strategic Committee |
| Zhou Zixue            |                 |                        | ●                    |                     |
| Chiang Shang-Yi       |                 |                        |                      | ●                   |
| Zhao Haijun           |                 |                        |                      |                     |
| Liang Mong Song       |                 |                        |                      |                     |
| Gao Yonggang          |                 |                        |                      |                     |
| Chen Shanzhi          |                 |                        |                      | ●                   |
| Zhou Jie              | ●               | ●                      |                      |                     |
| Ren Kai               |                 |                        |                      | ●                   |
| Lu Jun                |                 |                        | ●                    |                     |
| Tong Guohua           |                 | ●                      |                      |                     |
| William Tudor Brown   | ●               | ●                      | ●                    | ●                   |
| Fan Ren Da Anthony    | ●               |                        | ●                    |                     |
| Lau Lawrence Juen-Yee |                 | ●                      | ●                    | ●                   |
| Young Kwang Leei      |                 | ●                      |                      |                     |
| Cong Jingsheng Jason  |                 |                        |                      |                     |

Note: ● Chairman ● Member



## Audit Committee

The Audit Committee audits the Company's accounts, financial reporting procedures, and financial announcements. Audit responsibilities of the Committee include: (1) quality and completeness of the Company's financial statements and related disclosure; (2) the Company's compliance with laws and regulations; (3) the independent auditor's qualifications, independence, remuneration, and terms of engagement; and (4) effectiveness of the Company's internal audit and risk control. The committee regularly reports to the Board at the quarterly meeting and meets with SMIC's external auditors at least four times a year.

For more information, see the Audit Committee Charter of SMIC.



## Compensation Committee

Responsibilities of the Compensation Committee include: (1) approving and overseeing the total compensation package for the Company's executive officers and any other officer, evaluating the performance of and determining and approving the compensation to be paid to the Company's Co-Chief Executive Officers and reviewing the results of the Co-Chief Executive Officers' evaluation of the performance of the Company's other executive officers; (2) determining the compensation packages of executive Directors and making recommendations to the Board with respect to non-executive Directors' compensation, including equity-based compensation; (3) administering and periodically reviewing and making recommendations to the Board regarding the long-term incentive compensation or equity plans made available to the Directors, employees and consultants; (4) reviewing and making recommendations to the Board regarding the compensation philosophy, strategy and principles covering Directors and executives and reviewing new and existing employment, consulting, retirement and severance agreements proposed for the Company's executive Directors; and (5) ensuring appropriate oversight of the Company's human resources policy and reviewing strategies established to fulfill the Company's ethical, legal, and human resources responsibilities. The Compensation Committee reports to the Board at its quarterly meeting.

For more information, see the Compensation Committee Charter of SMIC.



## Nomination Committee

The Nomination Committee ensures that the Board has an effective size, structure and composition that is aligned with the Company's strategy and meets the interests of shareholders. The responsibilities of the Nomination Committee include: (1) reviewing the structure, size and composition of the Board of directors at least annually; (2) monitoring the implementation of the Board Diversity Policy; (3) identifying individuals suitably qualified to become Board members, consistent with criteria approved by the Board, and making recommendations to the Board on the selection of individuals nominated for directorships; (4) assessing the independence of independent non-executive directors; (5) making recommendations to the Board on the appointment or reappointment of directors and the succession plan for directors. The Nomination Committee regularly reports its resolutions and presents its recommendations to the Board.

For more information, see the Nomination Committee Charter of SMIC.



## Strategic Committee

Responsibilities of the Strategic Committee include: (1) to evaluate and consider any strategic alternative of the Company; (2) to make recommendations to the Board on major matters of the Company and major investment and financing options; (3) to contribute and participate in discussions with potential strategic partners with respect to strategic alternative; and (4) to make recommendations to the Board and the management of the Company with respect to strategic alternative.

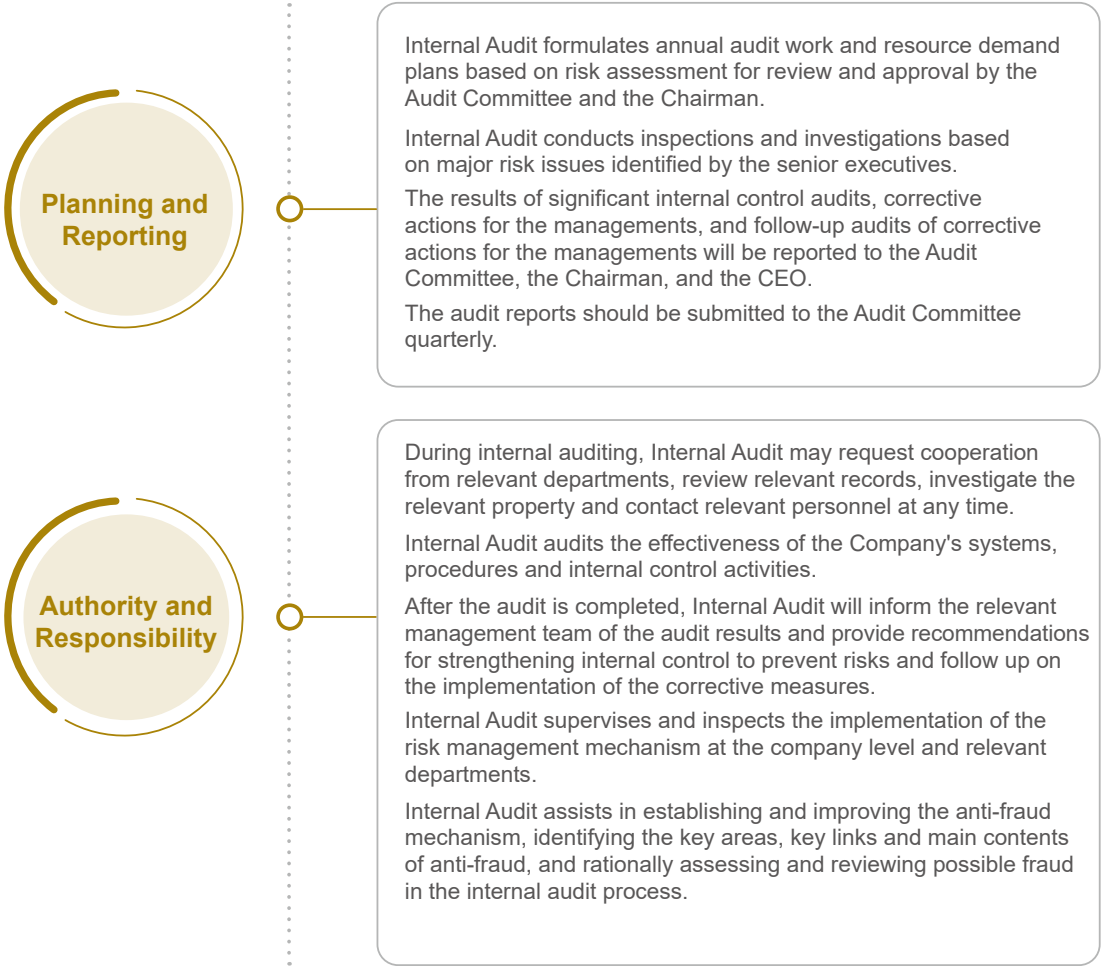




## Other Corporate Management Departments

### Internal Audit

As a regular division under the Board, Internal Audit cooperates with the management team of the Company to assist the Audit Committee of the Board in evaluating operating risks and committed to supporting and supervising the management team to improve the Company's internal control, risk management and corporate governance.



### Compliance Office

The Compliance Office is responsible for supervising and ensuring that the professional ethics and business conduct of the Company and employees comply with the Company's code of business conduct and ethics, implementing the Company's anti-fraud and anti-corruption policies, investigating any leads ( from complaint reports, etc.) with regards to fraud and reporting the findings to the Audit Committee.



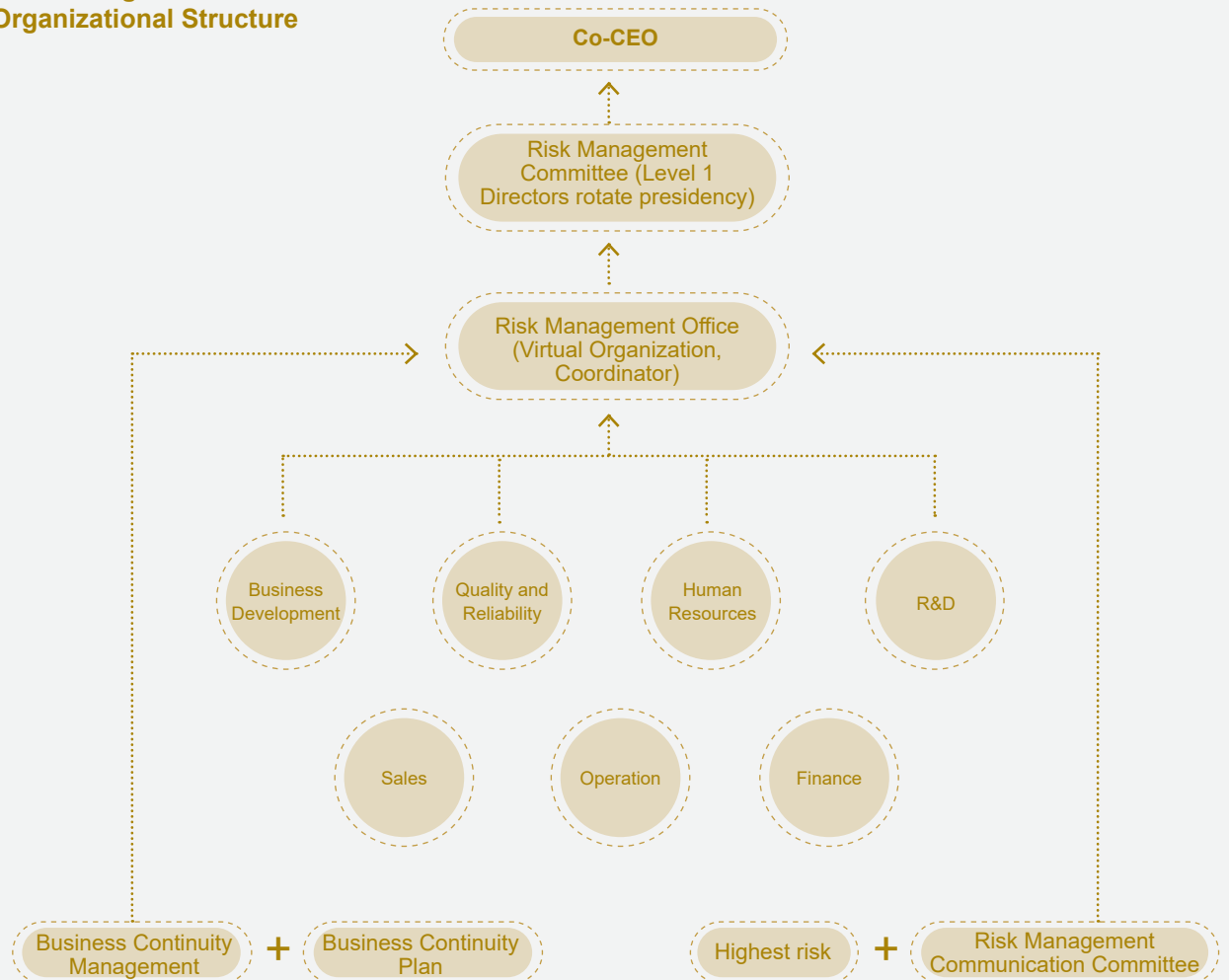
## Risk Management

Based on the Enterprise Risk Management – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), SMIC has established a corresponding corporate risk management system to assess the frequency and impact of the identified risks on the Company as a whole and to decide on different risk levels and corresponding measures to ensure that related risks can be monitored.

The Risk Management Committee, composed of the director of level 1 organizations, is mainly responsible for formulating the company-level risk strategy and supervising the effectiveness of risk management. The Risk Management Communication Committee, which is composed of representatives appointed by each functional division, is mainly responsible for implementing and following up on the risk assessment plan. When necessary, a special task team is also established to perform risk control activities based on actual needs. This is to assist the Board in identifying, analyzing and evaluating overall corporate risk, and monitoring the risk management system to ensure the effectiveness of the risk management project.

Under the Corporate Governance Code issued by HKEX, management should provide a confirmation to the Board on the effectiveness of such systems. The Board is responsible for ensuring that the Group maintains sound and effective risk management and internal control systems and for overseeing management in the operating of such systems on an ongoing basis. The systems are also designed to manage, rather than completely eliminate, risks impacting the Group's ability to achieve its business objectives. Accordingly, the risk management and internal control systems can only provide reasonable but not absolute assurance that the CSR management do not contain a material misstatement or loss.

### Risk Management Organizational Structure




The risk management measures taken by SMIC are as follows:

- 01 Identify risks, such as macro/external risks, operational risks, strategic risks, legal risks and financial risks, etc.;
- 02 Analyze and assess risk levels, with focus on their impacts (including impacts on finance, goodwill and operation) and likelihoods of their occurrence, and grade the risks through 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 indexes and report risk management results for major risks.

### Risk Management Framework



In 2020, SMIC, based on the approach above, identified and monitored major risks, including (but not limited to) the following.

For more risk factors, please refer to the annual report. 



## Information Disclosure

### • Disclosure Policy

SMIC's Disclosure Committee develops and implements the company's information disclosure policy and procedure, and approves and supervises whether the Company's information is disclosed timely and compliant. The disclosure policy applies to all SMIC employees and consultants, the Board and authorized spokespersons. The disclosure covers all documents and statements publicly presented orally and electronically by SMIC or in the form of media interviews, so as to ensure the timeliness, accuracy, consistency and compliance of the Company's external information disclosure.

### • Shareholder Communication Policy

SMIC issues information to its shareholders through various publications and online platforms, including its annual general meeting, extraordinary general meetings, quarterly results presentation, as well as the annual report, interim report, and quarterly reports released on the HKEX, the Shanghai Stock Exchange and the US OTC market<sup>(2)</sup>, as well as briefings and press releases. In addition, the Investor Relations department arranges a series of meetings and teleconferences with investors, so that they are better informed of SMIC's latest news, development strategies and directions. In 2020, SMIC was selected among Asian (excluding Japan) semiconductor companies, as a "Most Honored Company" by the Institutional Investor magazine. We are committed to providing timely, accurate and fair information disclosure for our stakeholders. We also offer convenient online information for potential investors and other stakeholders. You can visit the Company's website and the exchange's website for more information.

For more information, see the official website of SMIC.



<sup>(2)</sup> ADR programme has terminated on March 4, 2021 (US Eastern Time).



## Ethics and Regulatory Compliance

### Business and Ethics

Our Code of Business Conduct and Ethics ('Code of Ethics') ensures our legal compliance as well as our integrity, professionalism, and accountability. Our Code of Ethics is committed to anti-fraud, anti-bribery, compliance with public interest, 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 Code of Business Conduct and Ethics.







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

All SMIC employees shall observe the Code of Ethics and agree that they will comply with its policies and any additional policies or laws specific to their jobs. Employees 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, conflicts of interest, intellectual property and information security, since 2020, we required all employees to sign the Commitment to Integrity and Self-Discipline as a commitment to the highest ethical standards and honest and self-disciplined behavior.

### Anti-Fraud Policy

Our Code of Ethics demands honest business dealings. All our employees are accorded trust, and charged with the ethical and appropriate use of Company assets, whether physical or intellectual, as well as similar assets of customers and third parties. Further, the action of each employee reflects on the Company as a whole. Accordingly, fraud by any employee will not be tolerated, including but not limited to misappropriation of company assets, false financial statements and duty embezzlement. Any employee aware of such activities must report the matter to the Compliance Office or the Audit Committee (if applicable).

### Anti-Bribery Policy

Regardless of rank or nationality, our employees, contractors and business partners must comply with the related P.R.C laws, the U.S. Foreign Corrupt Practices Act (FCPA), the Hong Kong Prevention of Bribery Ordinance, and other applicable anti-bribery laws. No offering or receiving of bribery is allowed. Our rules for giving and receiving gifts are detailed in our Code of Ethics and the Anti-Corruption Policy.





### Ethics Hotline and Investigation

To report any suspected violation of law, Code of Business Conduct and Ethics, or other company policies SMIC has open reporting channels and encourages any employees, investors, contractors, customers, suppliers, business partners and others to make reports to SMIC's Compliance Office through the confidential email, Code@smics.com, or telephone hotline, +86-21- 20812121, in order to prevent non-ethical or illegal acts in connection with 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 a formal investigation in accordance with relevant procedures. It is the responsibility of the Compliance Officer to report any serious violations of accounting, legal, regulatory or enforcement requirements to the Audit Committee and the Chairman of the Board and ensure that the Company has taken appropriate corrective action. Any director, executive or employee who is found to have willfully and materially violated any laws, regulation or Company policy will be subject to disciplinary action in accordance with relevant Company policy. The Compliance Officer maintains an ethics log of all reported cases, to record incoming complaints, investigations processes and resolutions. The Company regularly reviews the effectiveness of the reporting process to ensure its effective implementation.

In 2020, there was no corruption lawsuits filed against SMIC or its employees.

### Training

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

## Regulatory Compliance

### Export Compliance Management

SMIC established an internal compliance program (ICP) to ensure our compliance with international export control laws and treaties for high-tech products. The United States and many other countries have adopted international export control systems. 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.

Our internal compliance program is documented in our ICP Handbook, which includes policies and procedures to ensure compliance with all legal requirements.

Our ICP Handbook includes nine sections:



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 trainings and maintains the ICP web page on our company intranet. Also, our ICP is also verified by the regular audit of External consultants.





## Conflict Minerals Compliance Management

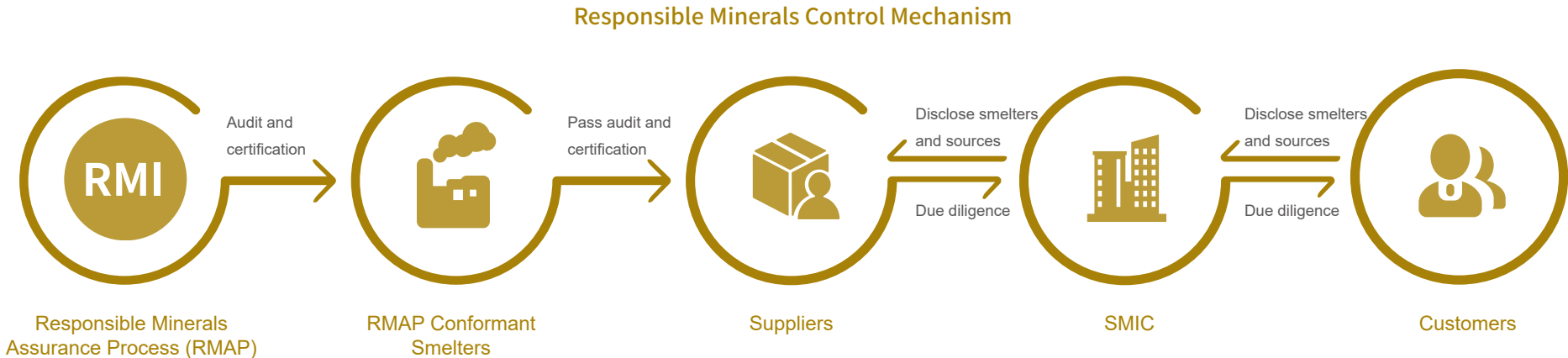
In 2020, SMIC revised the Conflict Minerals Policy into the Responsible Minerals Policy in accordance with the guidelines of the RBA code and customer requirements. We also reorganized and modified the previous Conflict Minerals Management Working Group and conflict minerals management procedures to ensure the effective implementation of the Responsible Minerals Policy. The Responsible Minerals Management Working Group remains an inter-departmental group of the legal, procurement, customer engineer, and social responsibility departments, which jointly develop and release relevant policies, establish management and monitoring systems, require all suppliers involved to substantiate their compliance with responsible minerals management, and ensure regulatory compliance through close communication with suppliers. Responsible

minerals management policies and procedures include but are not limited to the US law (Chapter 1502, Dodd-Frank Act) and rules of SEC on conflict minerals disclosure. In addition, in accordance with the due diligence framework of the Organization for Economic Cooperation and Development (OECD), we employ due diligence tools of the Responsible Mining Initiative (RMI) to conduct due diligence on suppliers to ensure the legitimacy of the metals.

The key to conflict minerals management is to effectively manage suppliers and ensure that all links of the supply chain conform to conflict minerals management requirements. In 2020, SMIC conducted due diligence on all suppliers involved in strict accordance with the requirements of conflict Minerals management, for which

we employed the Conflict Minerals Reporting Template (CMRT), Cobalt Reporting Template (CRT), created by the RMI. 100% of our suppliers responded to the conflict minerals reports and provided evidence to demonstrate their compliance with conflict minerals management requirements.

In addition, SMIC actively assisted customers in the implementation of due diligence for conflict minerals. According to customer's requests, we gave more than 120 prompt replies to conflict minerals reports, which reflects our effective conflict minerals management. 100% of our smelters were in the Smelters List of the RMI, some cobalt smelters are from the RMI legal list, and some are in the process of RMI certification.





# Innovation Management

SMIC attaches much importance to innovation management and incorporates innovation as an important component of its corporate culture. We have established a sound management system for innovation and continue to actively cooperate with many research institutions outside the Company.

## Independent R&D

SMIC attaches great importance to independent R&D, and has established a top-tier R&D organization and continues to increase investment in technological innovation and intellectual property. In 2020, SMIC had 2,335 R&D staff. The R&D expenses were USD 677.4 million, representing 17.3% of revenue.

## Innovation Mechanism



In 2020, R&D staff

**2,335**

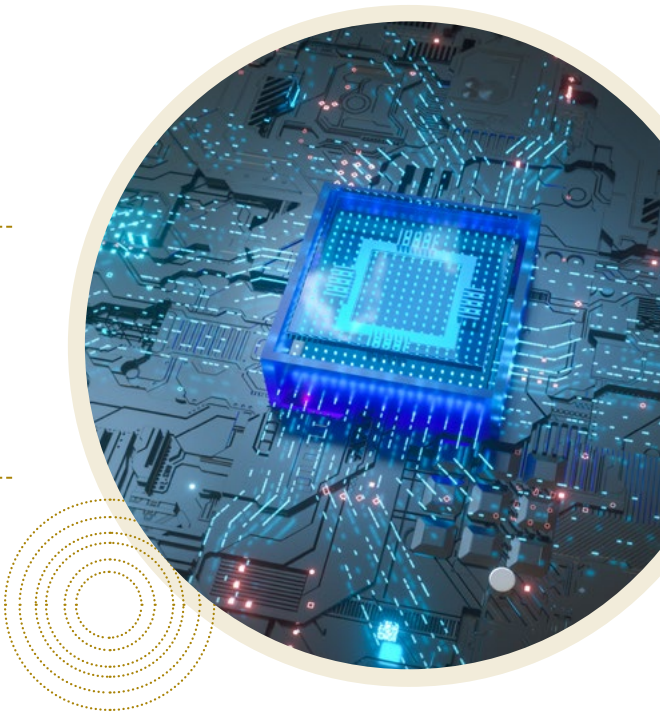
R&D expenses totaled USD

**677.4** million

Representing

**17.3%**

of total revenue





### Intellectual Property Protection

In order to improve the competitiveness of the enterprises, and maintain the hard-won advanced technological achievements, SMIC attaches great importance to the protection of intellectual property (IP) rights in all aspects of R&D, production, procurement, and sales to avoid IP risks.

SMIC chooses suitable partners to ensure that no IP rights are violated throughout the R&D process. SMIC establishes an early warning mechanism for IP rights and effectively uses IP rights assessments and early warnings. The Company collects a bigger picture of market development trends and consults patent documents during the R&D process to avoid the loss of IP rights due to obsolete research findings in the international context. SMIC promptly applies for patents and trademarks to prevent malicious squatting and application by others and subsequent losses to inventors; proactively looks to understand competitors in the same industry and the intellectual property systems of different countries and international general rules to stop companies from falling into a passive intellectual property owner.



### Patent Protection

SMIC combines patents and project R&D with its unique characteristics, promotes innovation based on projects, and effectively advances the construction of intellectual property rights. SMIC's patent protection strategies include: targeted patent mining and mapping, technical experts' participation in patent review, a patent reward program, a patent training program, and strict control of patent applications, and other implementations, to encourage R&D personnel to innovate and protect the Company's R&D achievements promptly.

In order to build an appropriate number of patent asset portfolios with strong overall competitiveness. On one hand, the Company regularly carries out brainstorming meetings and patent knowledge training, and continuously encourages employees to file patent applications; on the other hand, for the patents in key areas of concern, the Company implements regular evaluation and grading management at each stage of proposal application, patent application, patent authorization, and patent maintenance to ensure the quality of patents and enhance the overall competitiveness of the patent asset portfolio.

In order to improve work efficiency and make management clearer and more convenient, SMIC has also established a patent management system. The electronic patent management system is used throughout the procedures from the initial proposal application, review, draft and submission of patent applications, to subsequent patent dynamic evaluation.

## Patents

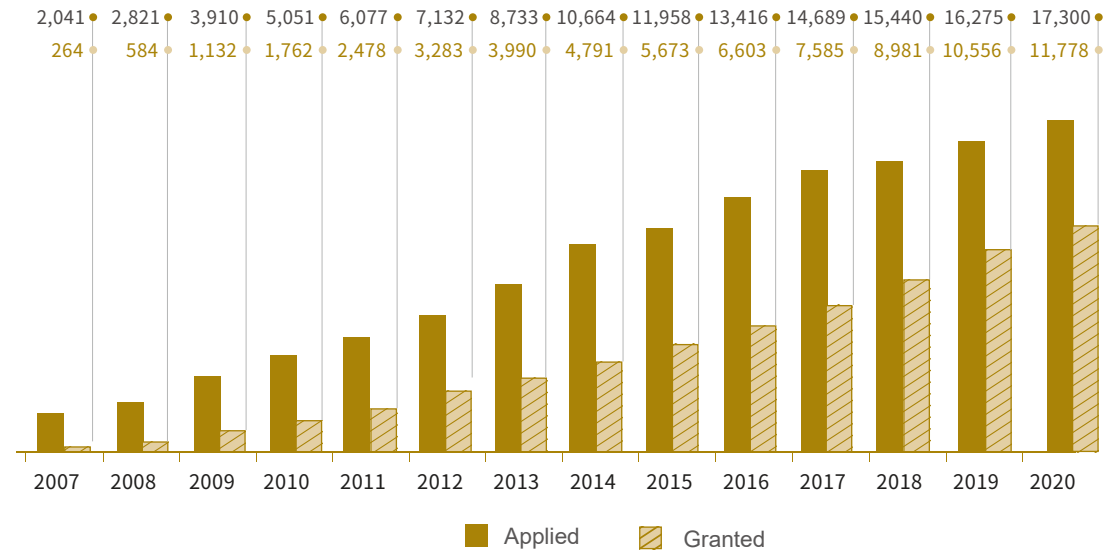
As of December 31, 2020, SMIC filed 17,300 patent applications, of which 11,778 were granted. SMIC is leading the Mainland China semiconductor industry in terms of the numbers of applied and granted patents. The number of SMIC's patent applications for HKMG and FinFET technologies are among the largest in the world.

Total number of patent applications filed

**17,300**

Total number of patents granted

**11,778**



## Technological Achievements

The research and development of SMIC's FinFET technology platform achieved smooth progress in 2020. The manufacturing process of the first-generation FinFET has gradually improved and entered mass production, and the product yield reached industry standards. The development of multiple derivative platforms has been completed as planned, and the goal of diversifying mass production products has been achieved. The advanced version of the first-generation FinFET technology further optimizes device performance, improves integration, and achieves performance improvement targets. The second generation of FinFET technology adopts SAQP to form a fin structure for the first time to meet the needs of a smaller size structure. Compared with the previous generation technology, the density of transistors per unit area is greatly improved. At present, SMIC's second-generation FinFET technology has completed low-voltage process development, which can provide 0.33V/0.35V low-voltage usage requirements, and has entered risk production.

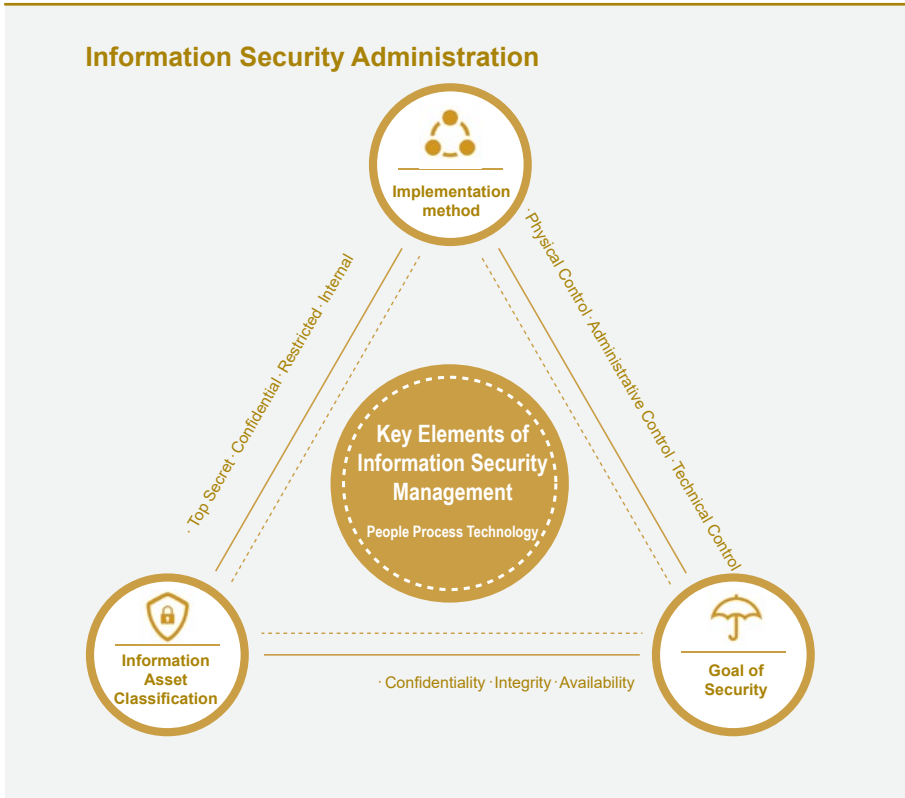
Meanwhile, the research and development of SMIC's specialty process technology is progressing smoothly. A number of technologies have been delivered to mass production. 40nm and 0.11  $\mu\text{m}$  embedded non-volatile memory platforms have entered risk production, and the research and development of other high-voltage drivers, specialty memory technologies and image sensor projects are also steadily proceeding.



# Information Protection

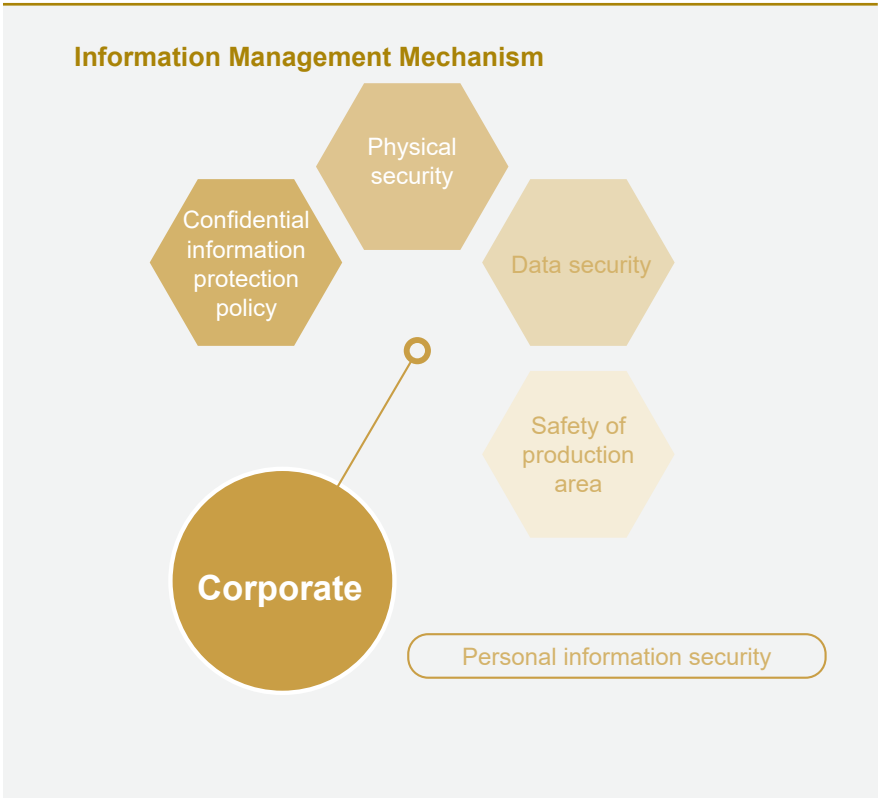
## Information Protection Concept

SMIC adheres to the principle of ensuring the best interests of the Company its shareholders customers, suppliers and employees, and attaches great importance to the protection of its own research and development 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 Protection Mechanism

The Company set up the Information Security Committee to effectively formulate, integrate, strengthen and implement the Company's confidential information protection policy (CIPP), physical security, data security and fab security, as well as personal information security prevention policies.















## Comprehensive Technical Control and Monitoring System

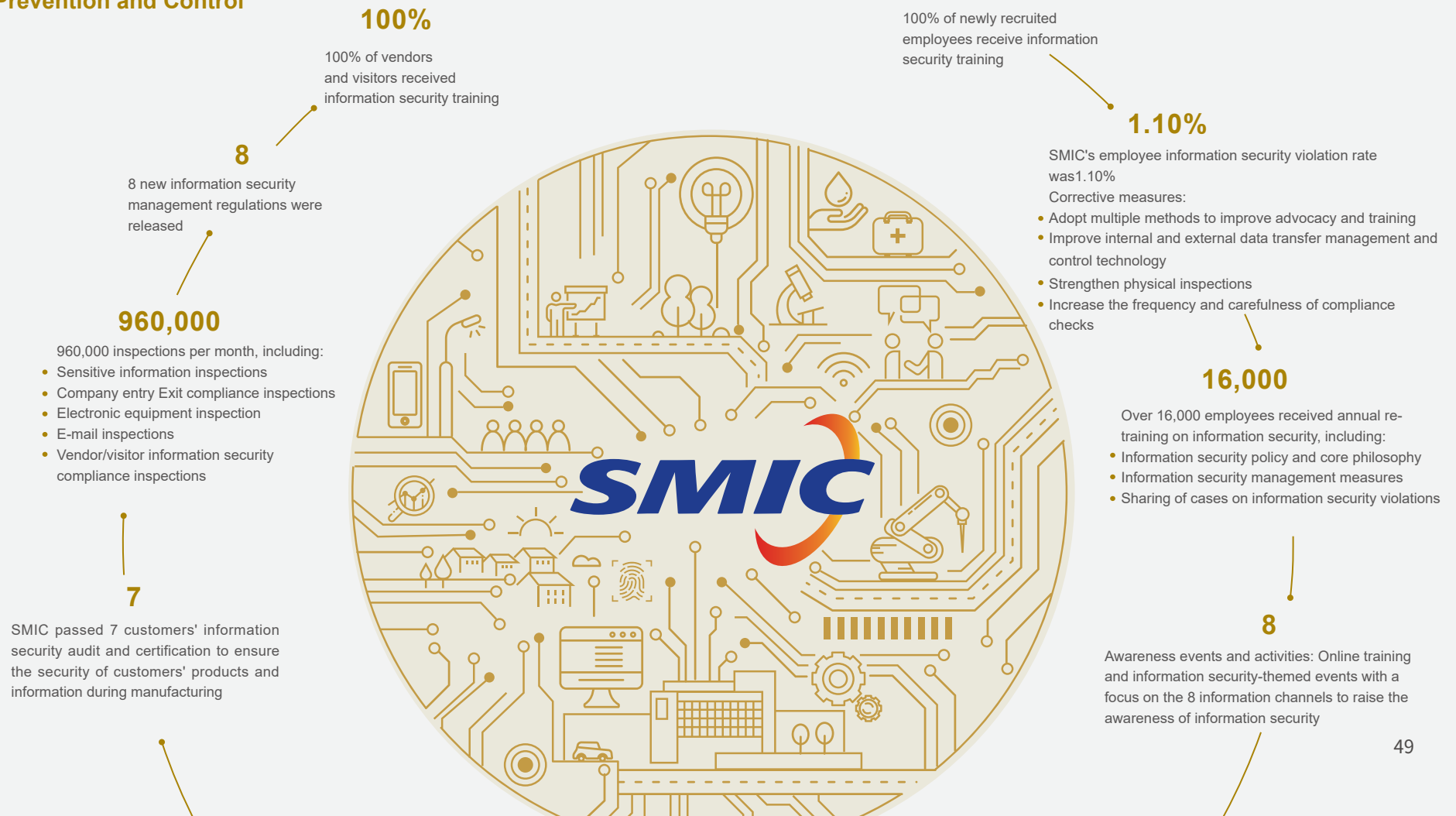
By continuously strengthening the security team, continuously optimizing physical environment control, network access control, identity authentication strengthening, data communications confidentiality, data storage confidentiality, data use controllability and other information security technologies, SMIC has developed a confidential information technology control and monitoring system.

-  Strengthen confidential level classification of information assets, implement classified management and protect confidential information of SMIC intellectual property.
-  Divide the physical area into different levels according to the degree of business confidentiality and optimize a multi-level protection scheme.
-  Establish a log collection, analysis and management platform for key and core systems, etc., so as to better analyze big data for daily operations and maximize the value of data. Build an effective warning and tracking mechanism for violations based on this platform.
-  Establish an information security inspection department to strengthen the inspection.
-  Strengthen the effective visitor registration, access control and monitoring system to standardize the safe access of visitors.
-  Consistently implement the effective company and customer 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.
-  Consistently implement information security incident monitoring, reporting, processing and process optimization to effectively reduce the risk of confidential information leakage and improve the effectiveness of prevention and control.

In 2020, SMIC established an information security infrastructure that consistently improves its anti-virus, anti-hacking, and anti-leakage performance to ensure the security of fab production and confidential data. Although other players in the industry are seriously threatened by attacks, SMIC has successfully blocked external virus attacks

and scans attacks with six well-established monitoring systems (cybersecurity, terminal and access, data security, application security, remote connection security, and security operation management). As SMIC achieved systematic control of all eight major channels, there was no risk incident in 2020.

## Comprehensive Prevention and Control



## Promote Information Security Awareness

In 2020, we continued our efforts to raise the information security awareness of employees. We employed regular emails and information security communication meetings to familiarize employees with information security policies. In addition, we continued to optimize our information security release window for updates in release information security related work as a platform of presentation for employees to fully understand our information security policies.



## Protection of Customer Information

SMIC attaches great importance to the protection of customer information and privacy and intellectual property rights. Customer information is subject to the highest level of information management and control, and comprehensive information security control measures are implemented to ensure the safety of customer information.



# Customer Service

Customer service is one of the core values of SMIC's corporate culture, and gaining customers' trust and long-term cooperation is an important cornerstone of the Company's development. We have been committed to providing excellent service for our customers based on the principle of customer orientation. Through long-term unremitting efforts to create value for our customers, we have established good relationships with our customers and won the trust of many customers worldwide through long-term and steady cooperation and development, ultimately forming win-win partnerships with our customers.

## Customer Service Strategy

SMIC is very confident in executing its customer service strategy given its excellent manufacturing capabilities, technologies, and services. We are committed to providing excellent services to customers and achieving shared progress through various strategies.





## Customer Service System

In order to understand and meet the needs of customers in a timely manner, SMIC has a professional sales and customer engineering team located in Shanghai, Beijing, Tianjin, Shenzhen, Taiwan(China), San Jose (USA), Milan (Italy), Tokyo (Japan) and other regions around the world, which can provide worldwide customer service. They maintain close contact with customers and at the same time coordinate internal resources in technology R&D and production service departments, to provide customers with one-stop services, covering pre-investigation projects, IP selection, design support, PDK

(Process Design Kit) delivery, mask production, integrated circuit manufacturing and the construction of various back-end tests and packaging platforms. SMIC also provides customized process platform services to help customers improve the market competitiveness of their products and significantly shorten the time to market (TTM) of products, thereby achieving long-term mutual development of the Company and customers.





SMIC is committed to providing customers with services of the best quality. As a customer-centric company, we update our technology platform in a timely manner to adapt to market trends and meet the various needs of customers in different periods. In 2020, as we celebrated our 20th anniversary, we held the SMIC Executive Summit in Shanghai for executives to exchange their views on the future of the industry and reinforce their dedication to work together and make progress. We also actively participated in important semiconductor industry conferences and events, such as IC China and ICCAD, where we summed up the past and reflected on the future together with other foundries, EDA, IC design companies, other upstream and downstream partners and customers. Close ties with customers also contributed to the continuous growth in our revenue.

SMIC's online service system "SMIC-NOW (networked-service on web)" plays a significant role in the communication with customers. After logging into the system, customers can easily access technical platform documents, design service information, requirements and processes for the introduction of new products, and directly tape out products through the platform. At the same time, the system provides customers with real-time production reports, so that they can keep abreast of each step of their masks and products from the placing of the order, to shipping, to the corresponding product quality report.

Link to the SMIC NOW Customer Online Service Platform:



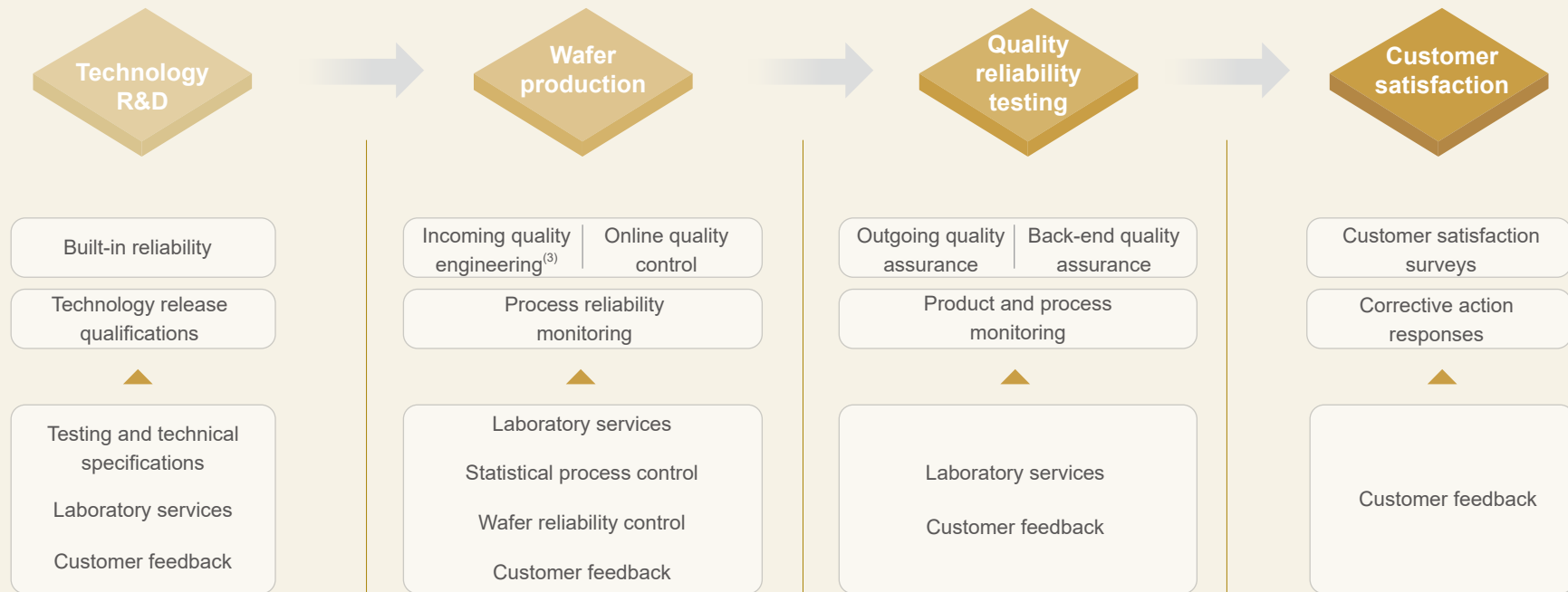
SMIC NOW online system customer interface: Provide technical platform documents, design services, tape out, product services, OSAT and product quality, and ESH reports.

## Product Quality Management

Throughout the product manufacturing and service process from research and development to mass production, SMIC adopts a comprehensive product quality process control system:



### Comprehensive Product Quality Control Flow



<sup>(3)</sup>The incoming quality project includes incoming quality control and supplier quality assurance

## Quality Management System

In line with industry standards, we developed a clean and comprehensive internal management system to meet the needs of customers. This process ensures that we conduct business in the best possible way and prepares us for a high-tech supply chain and the needs of emerging markets.

We have passed the audits of many internationally recognized organizations, including the British Standards Institute (BSI) and the International Organization for Standardization (ISO). The major certifications we received are as follows:

### ISO 9001 Quality Management System

Since 2002, all of our fabs have successively received the ISO 9001 quality management system certification. Guided by ISO 9001, we developed a reliable system for inspection, evaluation, and customer communication to ensure the quality of the design, development, production, and service processes. See the certification below:



Management System Certification – ISO 9001

### TL 9000 Telecom- munications Industry Quality Management System

Based on the ISO 9001 certification, the TL 9000 certification focuses on the quality management system of customers in the telecommunications sector, emphasizing the integrity of supply chain directives. Since 2005, our fabs in Shanghai, Beijing, Tianjin, and Shenzhen have successively received the certification. See the certification below:



Management System Certification – TL 9000

### IATF 16949 Automotive Industry Quality Management System

Based on the ISO 9001 certification, the IATF 16949 certification focuses on the quality management system for customers in the auto industry, with the goal of eliminating defects in the supply chain and providing quality assurance to end customers. See the certification below:



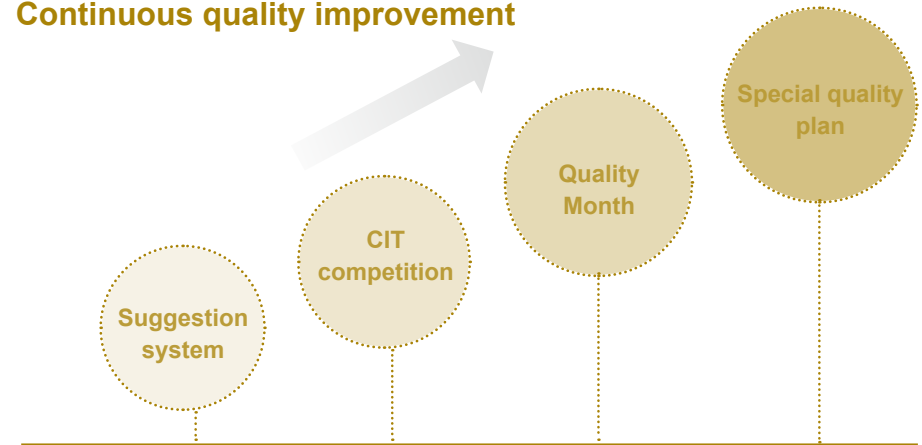
Management System Certification – IATF 16949





In 2020, SMIC continued quality improvement projects to strengthen product quality control and improve product quality.

### Continuous quality improvement



### Customer Evaluation and Complaints 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 similar incidents in the future. In 2020, all customer complaints were handled timely as per the customer complaint handling procedure.

SMIC has set up product quality verification and product recall procedures. The Company handles nonconforming products in accordance with the procedures to avoid negative impacts on customers.

In addition, we control product safety and health risks based on the QC 080000 system for our products to meet applicable domestic and international regulations and customers' requirements. In 2020, no products sold were recalled for safety or health reasons.

## Customer Satisfaction

In 2020, we continued to implement our customer satisfaction survey mechanism. Every six months, our quality management team conducted a customer satisfaction survey. The survey covered new product development, product quality and reliability, timeliness of delivery, business service quality, complaint handling and other aspects.

### Customer satisfaction assessment elements

✓ Capacity, Production Cycle & Delivery

✓ Yield

✓ Technology R&D

✓ Mask Service & Technology

✓ System Interface (SMIC NOW)

✓ Process/ Product Reliability

✓ Design Service

✓ Sales Support

✓ Quality Control System

✓ Customer Engineering Services

✓ Fab Ability Performance

According to customers' feedback, SMIC conducts comprehensive analysis and evaluation in accordance with its Plan-Do-Check-Act (PDCA) improvement model, and takes corrective measures in a timely manner, after which, the Company provides rectification results, to gain our customers' recognition and improve customer satisfaction.

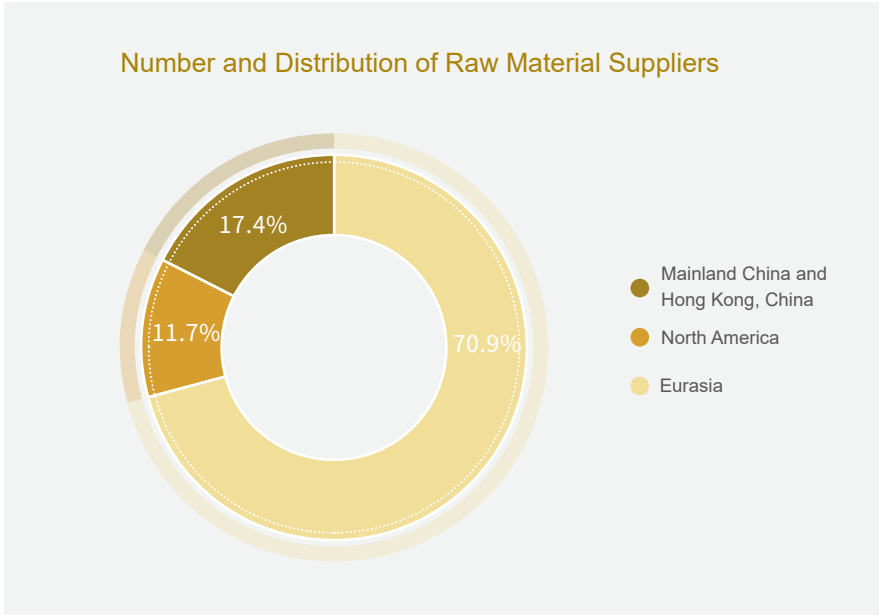
In 2020, SMIC made steady progress in product quality and reliability, manufacturing capabilities, service quality, production capacity, and production cycle and scored 89 out of 100 in the customer satisfaction survey. In the future, SMIC will continue to implement customer-oriented operation to further improve customer satisfaction.



# Supply Chain Management

## Supply Chain Overview

The manufacturing of integrated circuits is in the mid-section of the complete integrated circuit industry supply chain and is connected to both upstream and downstream industries. SMIC, being a large domestic company in Mainland China, has a wide range of procurement, including production equipment, parts for production equipment maintenance, raw materials for production, fab facilities, firefighting facilities and engineering, professional services and other categories. Based on the concept of win-win cooperation with suppliers, the Company strives to help improve the social responsibility management capabilities of enterprises in the supply chain, reduce the risks derived from the supply chain, safeguard stable production and operation, and ensure service quality for customers.



# Supplier Management System

SMIC has established a comprehensive supplier management system, focused on managing the key links in the supply chain, including supplier access regulations, supplier evaluation regulations and supplier promotion regulations, etc.

## Supplier Admittance

SMIC has developed an access assessment mechanism for new/alternative suppliers. The departments involved in the supplier admittance assessment include Q&R Department, Enviroment/Safety/Hygiene Department, CSR Department, Procurement Department, and user Departments, etc., which assess areas such as product quality parameters, supplier quality management system, supplier enviroment/safety/hygiene management, human rights labor management, business ethics management, supplier warehousing/logistics after-sales service management, production and use of products. Suppliers can be included in the company's list of approved suppliers only after they are evaluated to meet the relevant qualification requirements with a satisfactory score. All contracted suppliers must be on the approved vendor list (AVL).



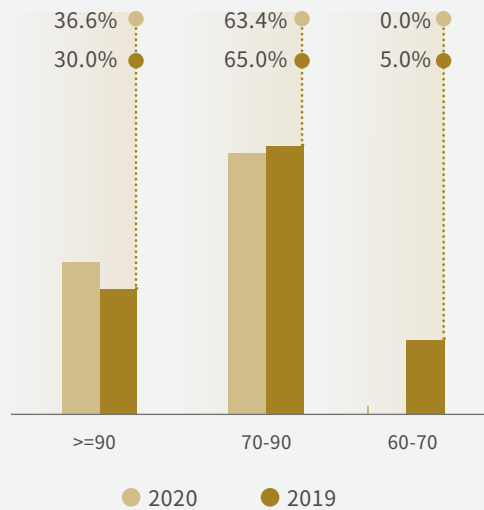
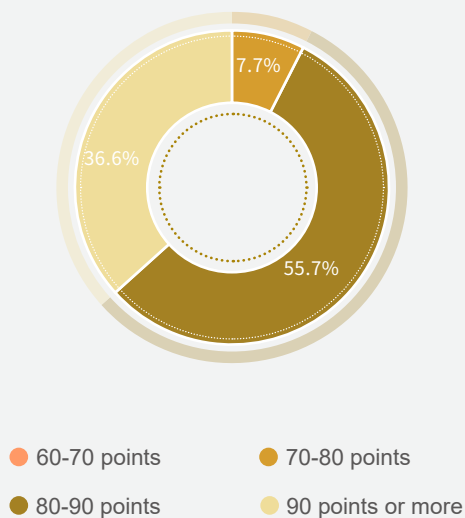
## Supplier Assessment and Evaluation

### Supplier Quality and Business Assessment and Evaluation

To monitor supply chain risks, SMIC has established an assessment and evaluation mechanism for contracted supplier. Contracted suppliers are scored every six months based on the scoring indexes including quality indexes, cost indexes, delivery and service indexes, safety and environmental indexes. If any project fails to meet the standards, the supplier must provide an improvement plan and make improvements within a certain period.

In 2020, the overall performance of suppliers was stable, and the ratio of suppliers with 80 points or above reached 92.3%, the ones with 90 points or more increased by 6.6% and those with 60-70 points reduced from 5% to 0%.

2020 Supplier Assessment Results



### Supplier Sustainability Assessment and Evaluation

To ensure long-term and stable business cooperation with suppliers, SMIC conducts a sustainable operation survey on all suppliers who provide raw materials in the year, to evaluate the supplier's sustainable operation status. The survey focuses on:



In 2020, SMIC continued to conduct sustainable operational risk assessments of more than 40 major raw material suppliers, and the survey results reached a satisfactory standard, yielding similar results to last year.



## Supplier Capability Improvement

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



In order to increase the communication and interaction with contractors, learn from each other and make progress together, SMIC established up a contractor communication meeting and an excellent contractor selection system. Each year SMIC holds the annual contractor communication meeting and conducts the selection of excellent contractors. Through the communication meeting, SMIC summarizes the annual construction safety achievements of contractors, shares the experience of contractors' construction environmental safety and health management, summarizes the lessons of major contractors' construction safety accidents, and commends these contractors with excellent performance in construction environmental protection, safety and health management. In 2020, after the selection of each fab area, 14 contractors won the award of excellent performance.

### ESH Excellent Contractors Commendation Meeting



# Caring for Employees

SMIC has always believed that only when talents are offered macroscopic visions, broad stages and opportunities to achieve personal aspirations, and also enjoy work and life, can they achieve a bigger and brighter future. Therefore, the company adheres to a 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

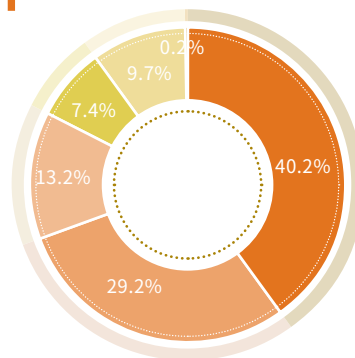
Since its inception in 2000, SMIC has attracted a large number of visionary scholars to work together to change the industry and the world. Coming from all over the world, they have contributed excellent skills, advanced technologies, and added value to the industry and community. These different types of employees from different regions have contributed to the development of 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 2020, the total number of employees reached 17,354, including over 300 foreign employees from 20 countries and regions, and 10,360 males and 6,994 females, with female supervisors accounting for 36% of the management. In 2020, SMIC recruited 5,364 new employees. In addition, it is also a consistent policy of SMIC to recruit the disabled, and we provide them with the necessary assistance as far as possible.

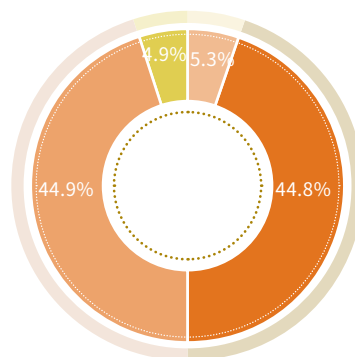


Recruitment of Fresh  
Graduates in 2020

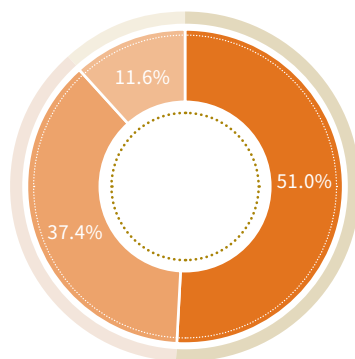
**647**



- Shanghai
- Beijing
- Tianjin
- Shenzhen
- Jiangyin
- Others



- Managerial staff
- Professional staff
- Technical staff
- Office staff



- Under 30 years old
- 30~40 years old
- 40 years old and above



## Safeguarding of Rights and Interests

In accordance with international and domestic legal requirements, the 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 responsibility 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.*

SMIC strictly abides by national laws and regulations and international labor rules. The employment policy stipulates that it is strictly forbidden to recruit and employ child labor or forced labor. We avoid the recruitment of child labor and forced labor by checking identity documents and through interviews. If we find (that has not happened so far) that

child labor or forced labor that enters our company by means of false documents, imposters, and so on. SMIC will immediately initiate remedial measures. In accordance with the relevant provisions of the reward and punishment policy, we immediately terminate the labor contract, deliver the child labor to guardians or return to school to ensure legal compliance of employment and respect of human rights.

Since its establishment and implementation in 2015, with five years of development, the labor human rights management system in 2015, after 5 years of operation and summary, the labor human rights management system has been completed gradually. We always pay attention to:

Sticking to recruiting by laws and regulations, SMIC has signed labor contracts with all employees, while entering into collective labor contracts with the labor union in a regular period. We also endeavor to protect the personal information and privacy of our employees for continuously improving the satisfaction of employees.

### Free choice of employment



As regulated by the Company, the employees under the comprehensive working hour system are not allowed to work continuously for more than 6 days, with the accumulative working hours of no more than 60 hours; the employees under the standard working hour system are not allowed to work overtime for more than 36 hours every month.

### Safeguard our employees' right to enjoy relaxation



A series of disciplines and policies have been formulated against inhuman acts, such as sexual harassment, sexual abuse, physical punishment, mental and physical coercion and verbal insult.

### Humane treatment



The Company respects the human right of our employees, including respecting freedom of religion, freedom of association, collective negotiation, and freedom to participating in the labor union.

### Freedom of association



### Prohibit child labor and protect underage workers by law

Under no circumstance, the workers under 16 years old shall be employed. The underage employees shall be not allowed to engage in any work being dangerous to their health and safety, including night shift and overtime work. Besides, the Company will arrange a physical examination for such workers regularly according to laws and regulations.

### Salary and benefits

The Company shall pay salary and provide payroll to employees in a timely manner by law.

### Anti-discrimination

The Company always insists on equal treatment all of our employees, regardless of their nationality, race, gender, political level and religion.





In 2020, to ensure full compliance with human rights regulations, SMIC implemented target management and identified and updated laws and regulations related to human rights and labor, and formulated the risk assessment, preventative measures, internal audit and corrective procedures. Meanwhile, we also informed our suppliers of human rights labor requirements and arranged inspection of some suppliers regarding the implementation of human rights for the protection of the rights and interests of employees and members of the supply chain.

## Remuneration and Benefits System

SMIC provides a comprehensive salary and benefit system for all employees, including salaries, bonuses, social insurance, commercial supplementary medical insurance, humane paid leave 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 as follows.

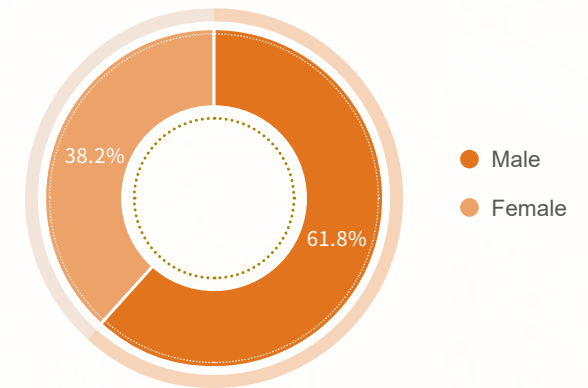


## Talent Retention

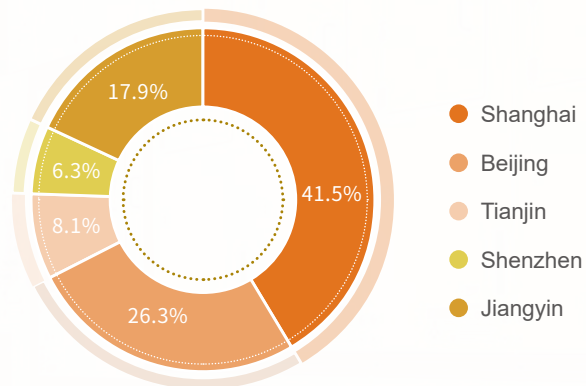
Employees are the most crucial assets of the Company. We try to retain top performers by offering competitive remuneration and benefits, diverse career development paths, corporate culture building, open communication, care for their physical and psychological health. Meanwhile, we also had particularly launched the Building of the Best Workplace Program and Organizational Value Program, aiming to build a 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.

The employees turnover rate in 2020 was about 17%, which went down to some extent compared to 2019. Details on employee turnover are as follows:

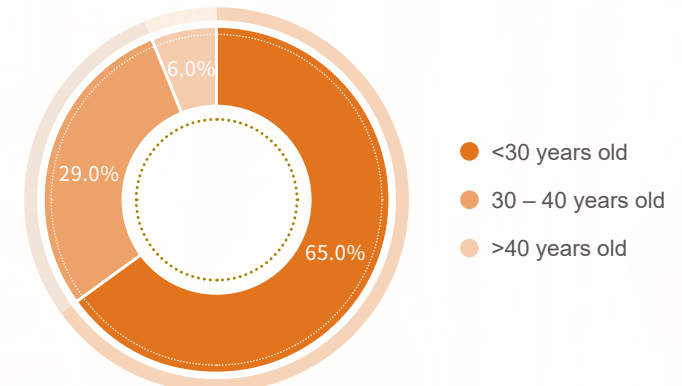
### Gender in Employee Turnover



### Region in Employee Turnover



### Age in Employee Turnover



## Retention of Manufacturing Assistants

Manufacturing assistants (MA) account for the largest percentage and most junior of employees in the company. SMIC has been implementing the MA retention plan since 2012. In 2020, we continued job evaluation, new environment integration, shaping good character, festival care and other projects.

### Position 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 2020, we carried out various kinds of psychological training seminars for MAs. We added various books at the restroom on the Mid-Autumn Festival to enrich their spiritual world and organized the activities of visiting nursing homes in the Double Ninth Festival.

### Festival Care

We visited the staff quarters in the Spring Festival of 2020. The "Spirit of Mind" was released on the company's website bulletin board to care for MAs on Women's Day, Mid-Autumn Festival, National Day and other holidays.



## 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:

### Chairman Special Retention Award

To motivate teams and individuals to promote revenue growth and cost optimization by adopting innovative concepts



### Long Service Employee Award

To appreciate senior employees' long-term devotion and commitment to the company



## Advocacy of Open Communication

SMIC establishes company quarterly communication meetings attended by the Chairman, Co-Chief Executive Officer, managers at all levels and has set up a special email address and telephone No. to ensure smooth communication. In addition, to improve our shortcomings, such as business policy and management system, and to promote the healthy development of the Company, we also communicate with employees applying for resignation to consider their honest and objective suggestions. In 2020, 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.               | 24 hours                   |



## Enhance Cohesion

In 2020, with 20 years of development devoted to "Caring for people, the environment, and society" from the beginning, SMIC actively contributed back to society and fulfilled corporate responsibilities. In the face of the COVID-19 epidemic, the Company set up epidemic prevention and control leadership and working groups to instruct and coordinate between departments in providing programs such as: "Health Reporting", "Psychological Counseling", "Publicity for Epidemic Prevention and Control", "Bringing warmth to the people fighting against the epidemic", and donations based on "Treating the epidemic and contributing to the frontline". In 2020, we also successfully listed on the A-share market and contributed to the battle against the COVID-19 epidemic. Meanwhile, based on the idea of "cultivating talents with the effort of SMIC", various training was arranged for SMIC's new employees in 2020, so as to facilitate their career development, accelerate their cultural integration, help them to create proper values and professional attitudes and accumulate a talent reserve for the Company.



## Career Development

We recognize employees' career development and have established such 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 (including five sequences) of the positions to explicitly present all available career development paths.

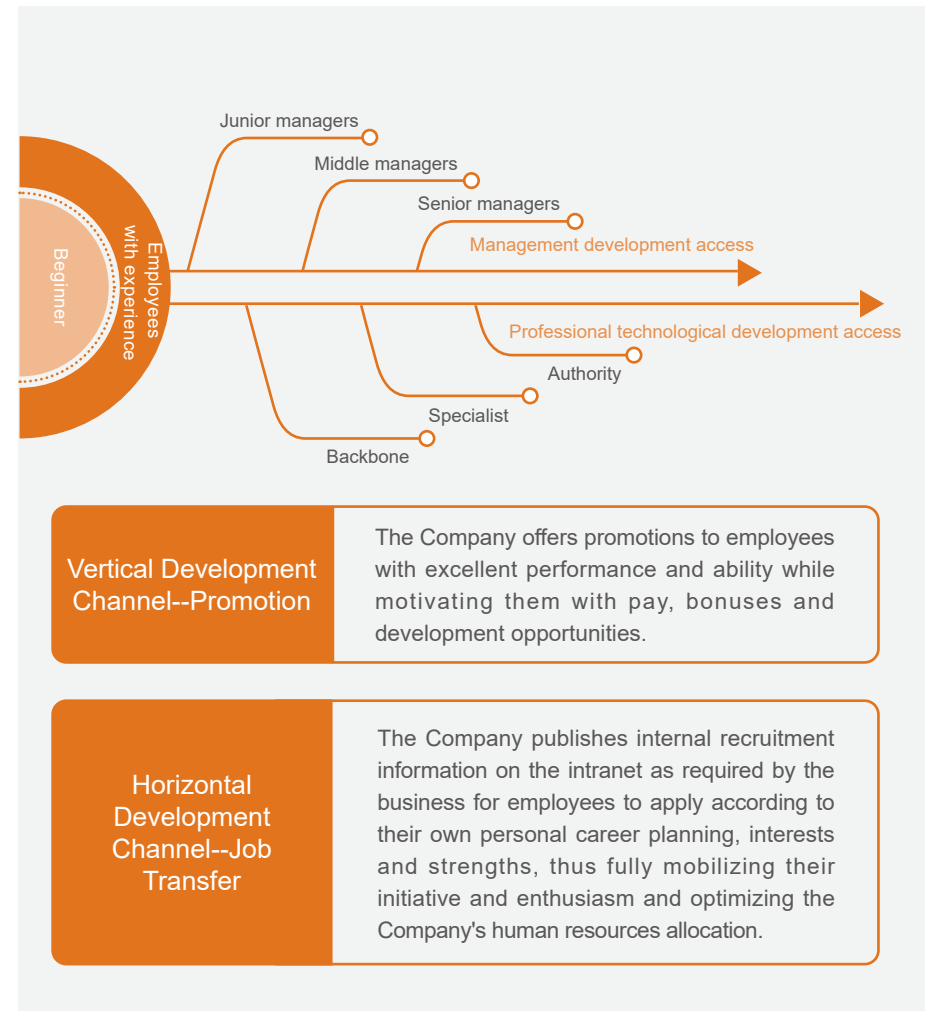


### Rapid Development Channel

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.

## Two-way Development Channel

The Company has established a two-way development channel in terms of management and professional skill supported by system safeguard and incentive measures, for meeting the common development demand of employees and the Company.





## Career Development Booster

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

## Employee Training

In order to improve employees' knowledge and skills in performing job duties, SMIC has issued policies such as SMIC Training Policy and SMIC Individual Development Plan (IDP) Procedure to ensure that 100% of employees receive training. The Company provides targeted training for different levels of employees, such as orientation for new employees, capacity development projects for middle and middle-senior managers, organization of multi-dimensional training contents, such as corporate culture, professional skills, general skills and management and leadership development, etc., implementation of training in diversified forms, such as face-to-face, on-the-job training, job rotation, study group, reading group, knowledge base, etc. In 2020, the Company offered more than 1,700 different courses for 294,012.5 hours in total, with 204,278 employees trained. On average, every employee was trained for 16.9 hours. Among them, the average training hours of female employees and male employees are 13.9 hours and 19.0 hours. The average training hours of senior managers, R&D staff, operation staff, sales staff and administrative staff are 4.0 hours, 21.7 hours, 18.2 hours, 10.7 hours and 2.5 hours.

The Company offered  
more than **1,700**  
different courses

**294,012.5**  
hours of training in total

**16.9** hours per  
capita

The total number  
of trainees is  
**204,278**



## Online Learning Platform

In order to facilitate employee learning at any time, the Company set up an online e-learning platform, covering 990 courses, including the most advanced semiconductor technology knowledge domestically. To adapt to the development of the employees in the new era, the Company in 2020 upgraded the training management system to integrate existing resources and provide employees with rich curriculum contents, enhanced all aspects of the system functions, and improved the learning experience of employees to meet their learning needs and improve the Company's learning efficiency.



The Company established an e-learning learning platform covering

**990** courses

## Further Education Program

The Company supports the continuing education of employees by providing continuing education opportunities and platforms and cooperating with first-class domestic universities (including Fudan University, Shanghai University, Peking University, Beijing Institute of Petrochemical Technology, Tianjin University, Shenzhen University, etc.) to set up three types educational programs including master's, bachelor's 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 while providing certain tuition reimbursements to eligible employees.

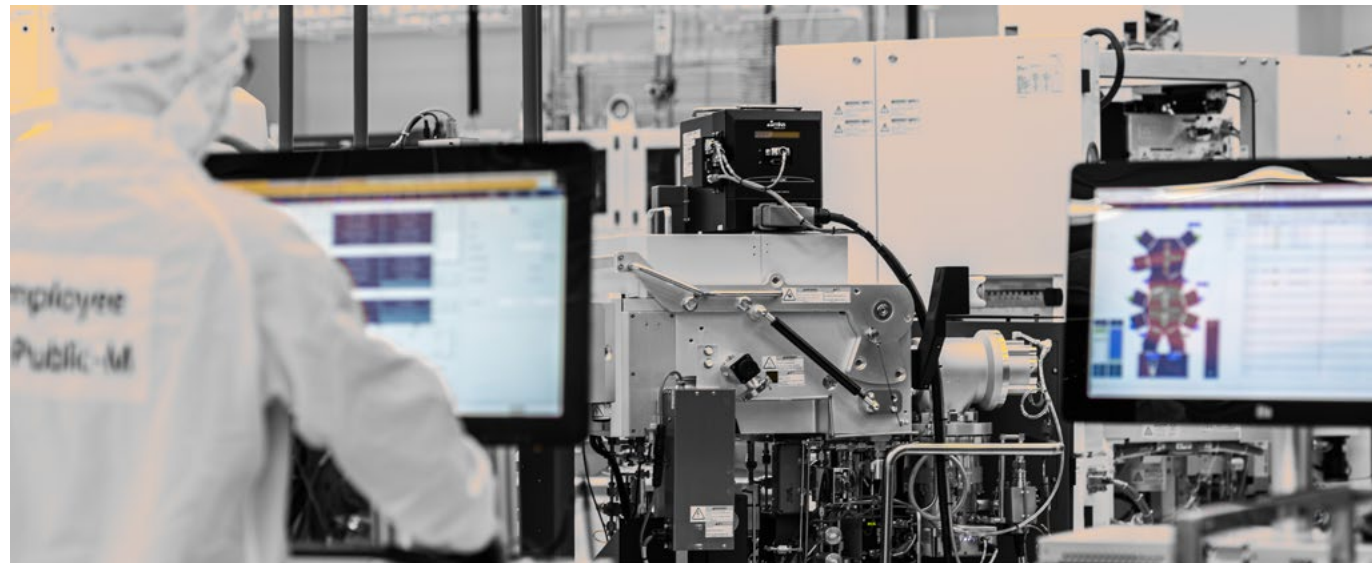


# Occupational Health and Safety

## Healthy and Safe Work Environment

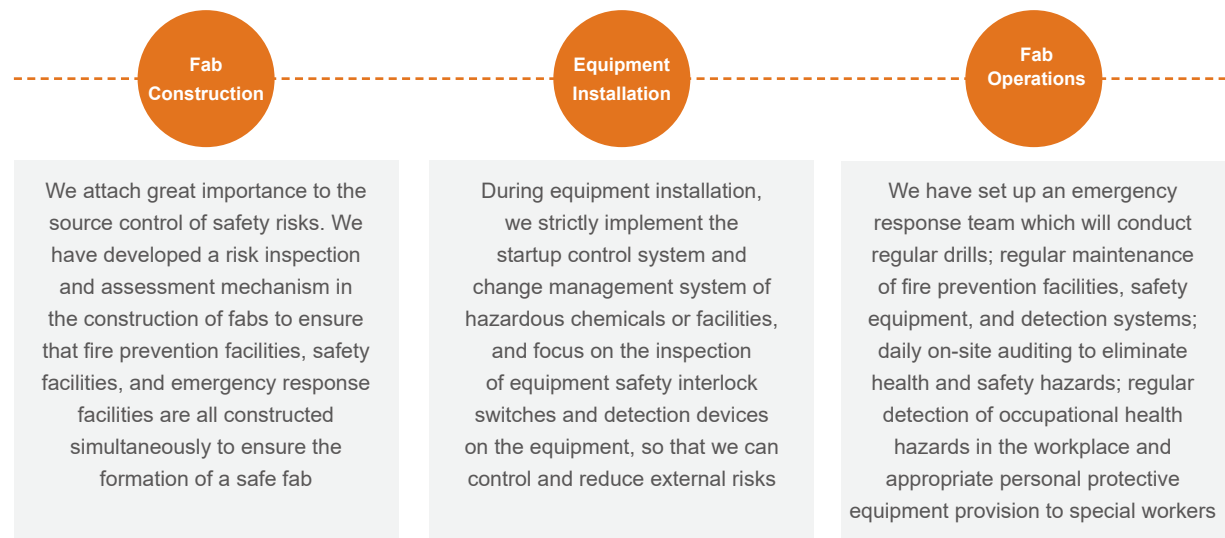
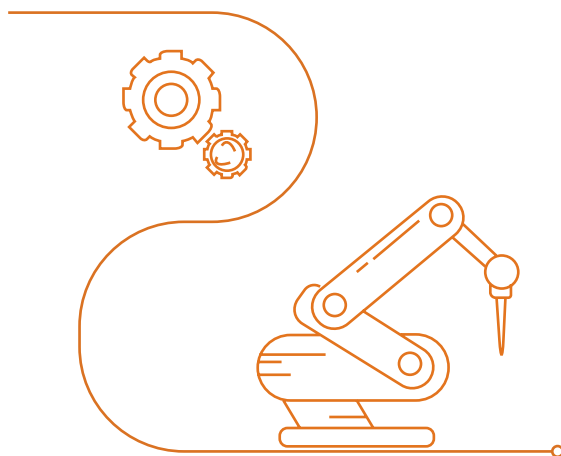
We care about the occupational health and safety of employees. Since the founding, we have applied the occupational health and safety management system in the Company which will be audited by a third party annually to ensure effective operation. Also, we provide sufficient funds to ensure occupational health and safety every year. For example, in 2020, we invested nearly RMB 360 million in this area.

We comply with over 100 applicable occupational health and safety laws and 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*.



## Risk Identification, Management and Control

Risk identification, management and control system were established to oversee all processes.





## 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 2020, the Company organized a total of 4,810 employees to participate in the occupational health examination, with occupational physical examination and health records covering 100%.

In 2020, SMIC continued to develop the target of zero major fire accidents and ensured achievement of the target by implementing no-notice exercises, fire risk inspection and other management projects. The goal was achieved successfully.

### List of Drills

| Year | Disaster Relief Drill |              | Evacuation Drill |              | Surprise Drill   |              |
|------|-----------------------|--------------|------------------|--------------|------------------|--------------|
|      | Number of Drills      | Participants | Number of Drills | Participants | Number of Drills | Participants |
| 2018 | 165                   | 4,018        | 76               | 14,420       | 48               | 2,115        |
| 2019 | 185                   | 6,425        | 80               | 16,134       | 59               | 2,938        |
| 2020 | 179                   | 6,293        | 91               | 12,561       | 37               | 2,325        |

### All kinds of health and safety training (unit: person time)

| Years | ERT basic training | ERT advanced training | New employee ESH training | Contractor ESH training | PPE training | Fire safety | Use of fire extinguishers | ESH basic knowledge training | System coordinator training | ESH professional knowledge training | Occupational health related training |
|-------|--------------------|-----------------------|---------------------------|-------------------------|--------------|-------------|---------------------------|------------------------------|-----------------------------|-------------------------------------|--------------------------------------|
| 2018  | 1,996              | 1,880                 | 5,232                     | 15,788                  | 3,583        | 13,538      | 7,275                     | 3,629                        | 1,685                       | 5,629                               | 451                                  |
| 2019  | 1,444              | 1,421                 | 4,629                     | 18,973                  | 3,240        | 12,162      | 6,144                     | 3,878                        | 573                         | 8,230                               | 1,467                                |
| 2020  | 2,856              | 2,796                 | 4,866                     | 21,571                  | 4,496        | 10,789      | 6,450                     | 4,142                        | 409                         | 5,285                               | 1,789                                |

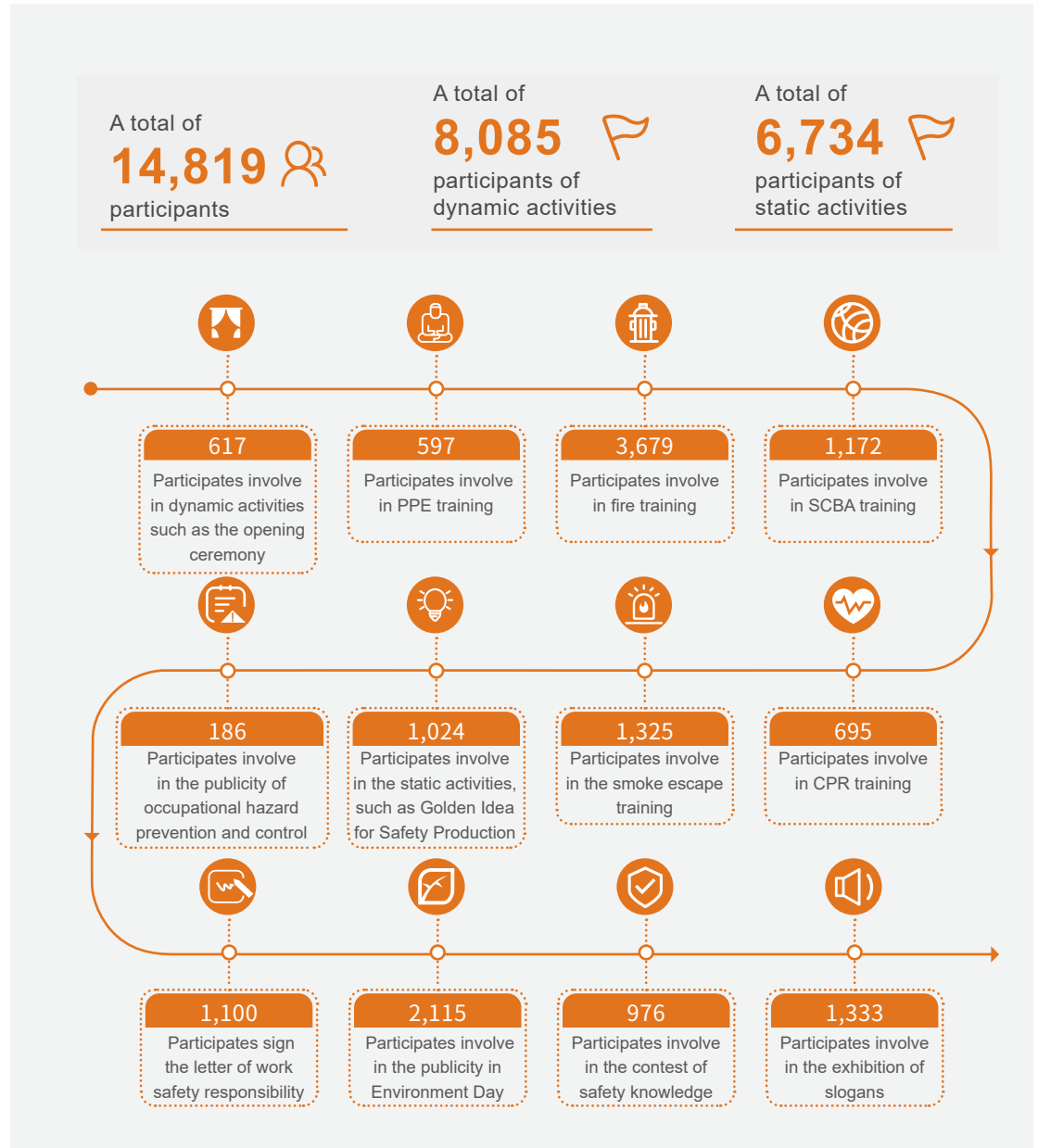
ERT: Emergency Response Team ;PPE: Personal Protective Equipment

## Rewards for Safety



## Safety Month Activities

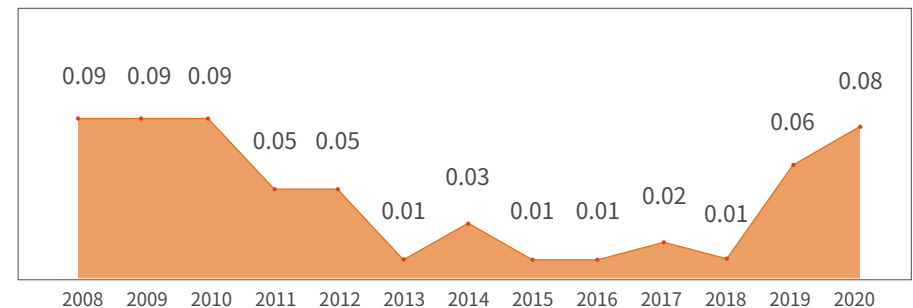
In June 2020, the 17th Safety Month event was held simultaneously at all SMIC sites. The Company management attached great importance to the event and attended the opening ceremony, which not only enhanced the employees' safety awareness but also simultaneously improved their safety skills. Safety Month activities include dynamic and static activities; the former including Self-Contained Breathing Apparatus (SCBA) training, firefighting training, fire hose training, cardiopulmonary resuscitation (CPR) training, etc. and the latter including safety knowledge contests, posters, safety culture photography, displaying of posters, etc.





We record work-related injuries according to the standards set forth by OSHA and our recordable incident rate has always been lower than the average rate in the industry. However, the recordable incident rate of 2020 was a little higher than usual and we have investigated these injury incidents, analyzed them and made corrections. So far, all preventive measures are being put into practice. We will continuously try to reduce the recordable incident rate to maintain the good health of our employees.

Recordable Incident Rate Curve



Remark: Recordable injury rate = Injuries recorded as required × 200,000 / total working hours (based on injury rate per 100 persons)

## Care for Physical and Mental Health of Employees

### Health Center

SMIC has health centers in the fabs and living quarters (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 arranges a number of courses to promote health, to improve the employees' awareness of "focusing on health and emphasizing 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 a 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 retraining each year, and organizes a CPR competition during each Safety Month event. 1,689 attendees participated in CPR training in 2020.

### 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. As the COVID-19 epidemic continuously spread across the world and periodically resumed in certain areas of Mainland China in 2020, the health center of SMIC constantly focused on the epidemic and released information related to the epidemic on the principle of "preventing the introduction of COVID-19 and strictly controlling the outbreak in Mainland China", while providing precise medical suggestions for the Company, caring for employees, answering their questions and ensuring prevention and control of the epidemic scientifically. In 2020, SMIC won its battle of COVID-19 prevention and control with no employees infected.





## COVID-19 Prevention for Safeguarding the Safety of our Employees

In early 2020, after the COVID-19 epidemic 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. Insisting on the people-oriented principle, the Company always prioritizes the safety of our employees in epidemic prevention and control. With the close cooperation between different departments and the implementation of epidemic prevention and control measures, all of SMIC's fabs maintained normal operations and no employee was infected by the COVID-19 epidemic in 2020.



Catering group

- Supply set meal for simplifying and accelerating the dining process;
- Have staggered meal times and extended serving time;
- Conduct inspections during mealtimes;
- 1-meter separation intervals in queues and seating during mealtimes;
- Option to buy food at convenience stores with meal cards.



Cleaning group

- Spray disinfectant in the public areas 3 times per day, and for frequently used areas, such as elevators and toilets, 4 times per day;
- Clean and disinfect the dining tables and chairs after every meal;
- Provide napkins in the elevators and elevator halls for avoiding cross-infection;
- Disinfect vehicles in affected areas;



Health Center

- Distribute anti-epidemic masks to employees on a regular basis;
- Keep informed on the developments of the epidemic domestically, and report information timely;
- Create a daily epidemic reporting policy for employees;
- Provide consultation on physical and mental health-related to the epidemic;
- Organize the staff to carry out nucleic acid testing and vaccination.



Guard and shuttle service group

- Temperature measurement is taken at the staff entrance, and only those whose temperature is under 37.3°C can enter;
- During rush hours, the staff shall queue up in 1 meter intervals to clock in;
- The staffs must wear facial masks in the shuttle buses which shall be disinfected two times per day and ventilated by opening the front and back windows;
- On weekends, we increase 6 buses for staff living in our dormitories and reduce the passengers in each bus to avoid cross-infection.



Vendor management group

- The vendors staying on site will receive temperature checks after the host-employee confirms their visitor application via the WeChat declaration form. Up to now, more than 3.16 million visitors have been screened and registered;
- Vehicles from affected areas may enter the Company premises only after being disinfected, and the attendants in such vehicles may enter only if wearing protective suits and safety goggles after the approval of the sponsor-employee and approved temperature measurement.

## Care for Employees during COVID-19 epidemic

At the beginning of the epidemic, the work of the Company's labor union and health center was carried out in an orderly and efficient manner, completing a full inspection of the Company to ensure that no staff is infected. The timely emergency plan and comprehensive epidemic prevention and control measures reassured the employees of the Company, which not only helped to create a safe and supportive working environment for our employees but also safeguarding the health of our employees as a priority.

### Care for the Employees from Affected Areas

From February to April 2020, more than 90 employees returned to work from Hubei, some who lived in dormitories in Tangzhen for quarantine. Considering their necessities, the labor union prepared food, including milk, nuts, and biscuits, and letters of condolence for them.

On March 30, 2020, the labor union of SMIC (Shenzhen) and the general affairs office brought warmth and gifts to the employees from the affected areas to express our care and understanding.



### Care for the Returning Employees

From February to April in 2020, the labor union made over 60 follow-up phone calls to the quarantined employees, and expressed concern for their wellbeing after returning to work. Meanwhile, the Psychological Care Department kept constant contact with the employees and provided 24-hour online consulting to comfort and provide timely assistance to them.



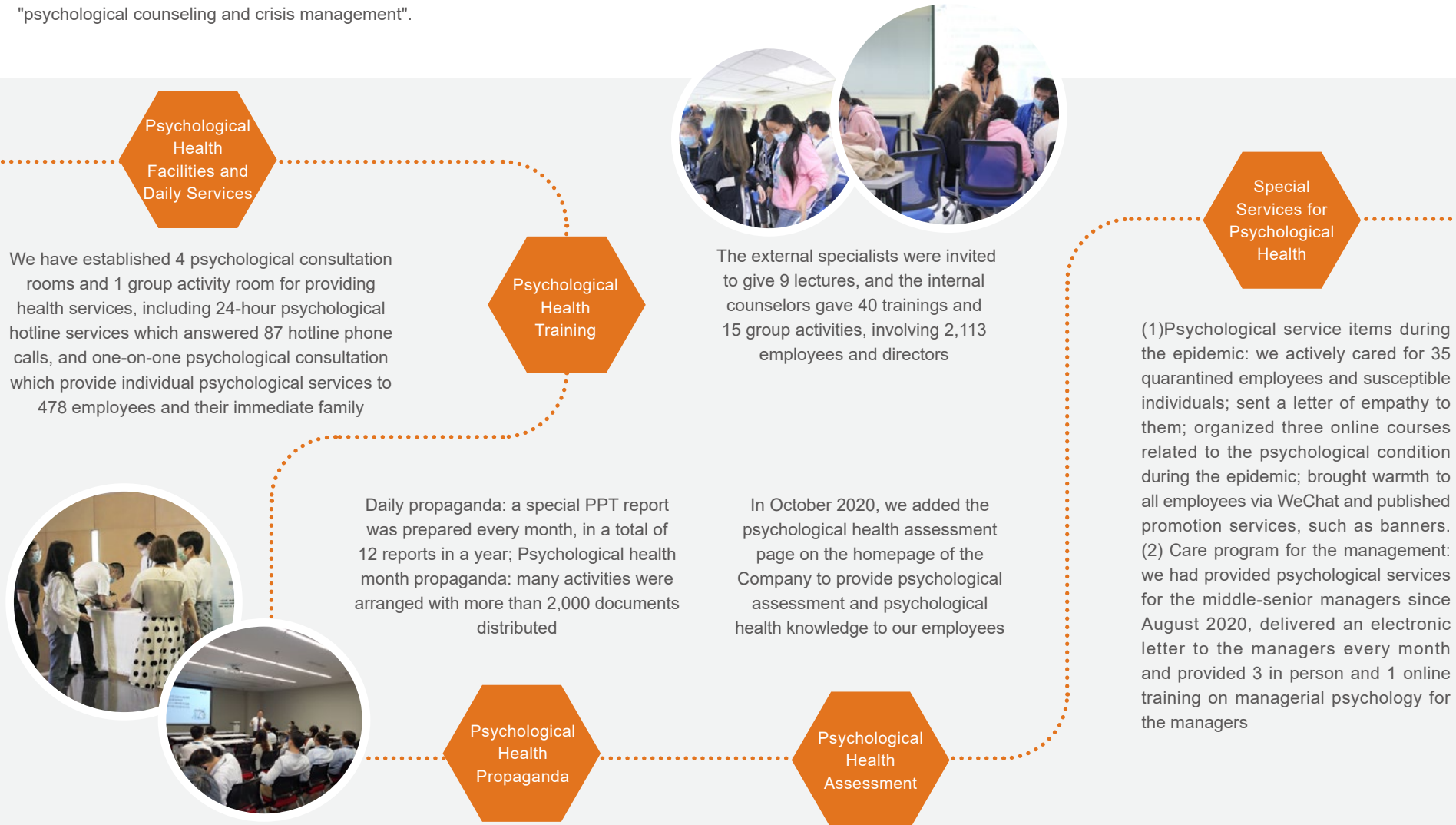
### Distribute Facial Masks for all Employees

The fight against the COVID-19 epidemic is an ongoing battle. We cannot lower our guard, and individual protection is the top priority. The labor union distributed facial masks for members of the labor union; each member receiving ten masks to ensure that employees could work healthily, smoothly and successfully.



## Psychological Crisis Prevention and Assistance

To prevent psychological crises from harming the safety of employees, the Company, and society, a psychological consultation room was established by the Company to provide 24-hour online assistance for our employees, which based on relevant standards was equipped with a professional psychological counselor. In 2020, the psychological consultation room continuously completed its "three-level defense system for the psychological crisis", including "psychological survey before employment", "psychological survey after employment" and "psychological counseling and crisis management".

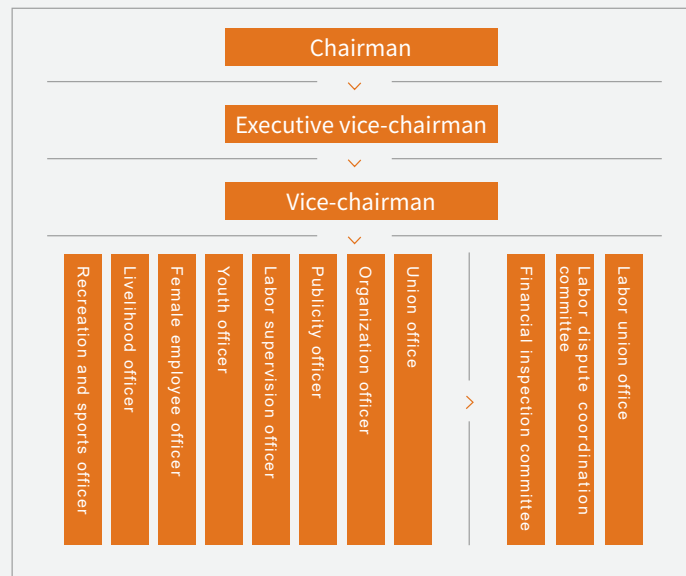


# Wonderful Life

## Democratic Management

We have set up a 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 deputy CEO, and the executive vice-chairman, vice chairman, and union members are representatives from each department. Employees are free to join the Union.

SMIC strictly performs its function of maintenance, construction, participation and education to serve its employees wholeheartedly. We always insist on our beliefs and ideals, spreading our national spirit, exciting enthusiasm for work and devoting ourselves to development and innovation to improve our ability to support the development of the Company in a cohesive and innovative manner.



Labor Union Structure

In 2020, the Labor Union demonstrated concern for employees' lives and sought 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

SMIC strictly performs its functions to serve our employees wholeheartedly, while enriching employees' lives and strengthening the cohesion of the Company through diverse activities.

### "SMIC Dream, Blooming Youth" Fall Sports Games in 2020

"SMIC Dream, Blooming Youth" Fall Sports Games in 2020 was held on September 8, 2020 in a unique format. To ensure safety and health and reduce external risks during the epidemic, the labor union held the event in the fab in the form of small-scale sports games, in order to provide the opportunity for our employees to participate in sports activities and improve their physical fitness. Apart from the group games, the labor union also organized a "Swipe your card day" activity for all employees, with unique games and various programs. Every participant in the sports games won generous prizes.







#### Social Meetup for Young Singles

On November 1, 2020, the labor union of SMIC held an activity for young employees with the labor union of Renji Hospital. On September 23 of the year, the labor union of SMIC (Shenzhen) organized over 20 single employees to participate in the first party themed "Meet You Here" held together with Comix Group, Unilumin Group and Kaizhong Precision Tech. During the party, our employees took their first steps in seeking happiness and love through various activities, such as afternoon tea and mini-games.



#### Recreational Sports Associations and Activities

To encourage our employees to participate in recreational sports and other activities, we have established many associations based on employees' interests and needs. There are a dozen associations such as the running association, football association, and photography association. We also have exciting events each year, such as table tennis, basketball and running competitions. These activities enrich employees' lives, motivate them, and enhance team cohesion.



#### Smiling Photo Collection Activity for the Children of SMIC's Employees

On June 1, 2020, Children's Day, to memorialize the 20 anniversary of SMIC, SMIC (Tianjin) held a smiling photo collection activity to celebrate Children's Day by expressing our greetings and best wishes to them.



#### Singers

SMIC (Beijing) and SMNC successfully held a fierce singing contest, Singers, on September 16, 2020. Busy schedules cannot take away the passion for music, and the roaring machine cannot drown out the high notes of youth. When we are occupied with reports, lines of lyrics suddenly come to our minds, and when we have endless meetings, we may casually hum melodies we love. It is time to set yourself free, put aside work, pressure and tiredness, to open your musical heart and sing enthusiastically.



#### Year-end and New Year's Gala of SMIC (Shenzhen) in Yongshu Island of Shenzhen

The year-end and 2020 New Year's Gala themed "SMIC's Hope in Xiping Mountain" of SMIC (Shenzhen) was jointly held by SMIC (Shenzhen) labor union and the fab at the Park Lane Harbour residential community in Yongshu Island on December 20, 2020, to present awards to outstanding contributors and recognize their contributions to the implementation of the 2019 Yongshu Island Plan.



#### Donations

From April 20 to 24, 2020, SMIC (Tianjin) assisted in the crucial battle of relieving poverty in impoverished areas and organized and promoted employee donations.

On September 23, 2020, SMIC (Beijing) helped the vineyard of Taiyang Village School to sell unsold grapes.

As New Year's approached, on December 19, 2020, SMIC (Beijing) delivered school supplies and winter clothing to the impoverished children in La Zi Gou Village.

## Various Festival Activities

On the premise of preventing and controlling the epidemic and ensuring the safety of our employees, we organize various colorful and positively themed activities for different festivals to enrich the lives of our employees and strengthen the cohesion of the Company. Apart from the traditional festivals, such as Lantern Festival and Mid-autumn Festival, we also arrange activities for special days, such as 3.8 Women's Day and Secretary's Day.



### Party at New Year's Eve

To show care to employees that were on duty on New Year's Eve, SMIC particularly held a New Year's Eve party. 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 Labor Union.



### Women's Day Wishes

We presented flowers to female employees on March 8, 2020, which is also a tradition of SMIC on International Women's Day.



### Sweet-Flavored Zongzi on Dragon Boat Festival

During the Dragon Boat Festival, each SMIC site delivered gift packs to all employees to celebrate the festival. Based on striving to serve our employees, SMIC seeks to develop the labor union into a "staff family" through such activities and to bring family-like care and blessings to our employees.

### Bright Moon · Moon Cake for SMIC's Mid-autumn Festival and National Day

Our greatest wish is to create a family-like Mid-autumn Festival for our employees. Thus, each SMIC site distributed moon cakes on the holiday to thank employees for their contribution to the Company, while displaying the cohesion of SMIC.



## Convenient and Caring Living Services and Facilities

### Shanghai Living Quarter

#### SMIC (Shanghai) Zhangjiang Living Quarter

SMIC (Shanghai) Zhangjiang Living Quarter covers an area of 276,000 m<sup>2</sup> and can house over 2,500 employees and their families. It is about 1.4 km away from the fab and easy for employees to walk, bicycle, or take free shuttles there. The SMIC (Shanghai) Zhangjiang Living Quarters dormitories have 3,031 beds and house 2,031 people, with its occupancy rate reaching 67%. The living quarter also has children's activity center, ground garage, commercial building, and other service facilities. Employees can have access to membership at the nearby Maibo Sports Center at a discount.

#### SMIC (Shanghai) Tangzhen Living Quarter

SMIC (Shanghai) Tangzhen Living Quarter is about 7 km away from the Company. Phase I construction covers an area of more than 70,000 m<sup>2</sup> with 16 high-rise residential buildings taking over 130,000 m<sup>2</sup> 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 quarters currently houses about 3,100 people. Among 1,100 family apartments, 1,034 of them are occupied with an occupancy rate of 94%; among 431 dormitories which offer 1,492 beds, 925 people are housed, with an occupancy rate of 62%. The living quarters also has a children's activity center, large underground garage, ground garage, commercial building, and other service facilities. To meet the needs of more employees, the newly construction of Phase II living area in Tangzhen will be put into use in the second half of 2021.



### Beijing Living Quarter

#### SMIC (Beijing) Living Quarter provides accommodation for the Company's employees

At present, it serves about 3,348 people with 232 original apartments in Phase I, 135 newly-built apartments in Phase I and its occupancy rate is 96%; among 371 one-bedroom apartments, 352 of them are occupied with an rate of 95%; among 1,732 beds in collective dormitories, 1,605 people are housed with an occupancy rate of 93%.

#### Yongkang Apartments & Youth Apartment for Renting

To meet more first-line workers' needs for accommodation, the collective dormitories in Yongkang Apartments & Youth Apartment for Rent have 1,837 beds and now houses 1,682 people with an occupancy rate of 92%.

#### White-Collar Worker's Apartments/Public Rental Units

White-collar Worker's Apartments/Public Rental Units are for married employees in Beijing. In 2020, we had developed 87 white-collar worker's apartments and public rental units to house employees and their families.

#### Collective Dormitory

In 2020, due to the expansion of production, the increasing number of recruitments at SMIC North in Beijing spurred the demand for dormitories. In order to reasonably allocate the Company's resources and meet employees' actual needs of housing after the expansion, the collective dormitory in SMIC (Beijing) Living Quarter was remodeled. Thus, 84 collective dormitories and 294 beds were added, which has been put into use in February 2021.





## Tianjin Living Quarter

### SMIC (Tianjin) Living Quarter

It provides accommodation for the Company's employees. At present, it serves about 1,330 people; among 167 apartments, the occupancy rate is 100%; 986 beds in collective dormitories house 865 people with an occupancy rate of 87%.

### Lejing Living Quarter

To meet more first-line workers' needs for accommodation, collective dormitories in Lejing Living Quarter have 192 beds and now house 130 people with an occupancy rate of 68%.

## Shenzhen Living Quarter

### Apartment for Talents

There are 302 rooms with an occupancy rate of 100%.

### Haiyu Dormitory

There are 730 beds, which house 518 people, with an occupancy rate of 71%.

## Every Living Quarter in SMIC Makes On-going Efforts to Improve Living Environment and Facilities



### Providing Water Supply Station of Nongfu Spring

In order to facilitate access to purified water for the residents of Tangzhen Living Quarters, self-service water supply stations offered by Nongfu Spring at the south gate of the quarters were introduced in 2020.



### Building New Reception Room

In April 2020, new reception rooms were built on floors of 2, 4 and 6 at Building 6 Zhangjiang living quarters to provide convenient space for employees to rest after work.



### Updating Maintenance

We fix water leaks in the employee apartments of Zhangjiang Living Quarters, replaced old equipment, waterproofed the bathroom, and maintained and updated other facilities.



### Adding Facial Recognition System

In order to ensure the safety of residents, SMIC (Shanghai) Tangzhen Living Quarter added a facial recognition system at the two entrances of the community.



### Reconstructing Barrier-Free Facilities

The Neighborhood Committee of SMIC (Beijing) Living Quarter offered funds to reconstruct 22 barrier-free facilities in front of the entrance for different units and renovated handrails, ramp tiles, and floor tiles.



### Extending Garbage Sorting Stations

According to the requirements of the *Regulations of Beijing Municipality on the Management of Domestic Waste*, the wastes generated are sorted and managed in a unified manner. The expanded waste sorting station have been put into use, which is convenient to reduce the pollution from residents and responds to the call of the government.



### Adding More Parcel Lockers

To help employees collect express parcels, SMIC (Beijing) Living Quarter installed 4 sets of parcel lockers, and accumulatively installed 7 sets of parcel lockers on both sides of the front door of SMIC Hall.



## Epidemic Prevention and Control Measures in Living Quarters of SMIC

### Number of employees quarantined/observed

| Plant                   | Employees Quarantined at Home | Employees observed |
|-------------------------|-------------------------------|--------------------|
| Shanghai Living Quarter | 118                           | 434                |
| Beijing Living Quarter  | 355                           | 110                |
| Tianjin Living Quarter  | 59                            | 102                |
| Shenzhen Living Quarter | 65                            | 106                |

### Cleaning and Disinfection

The public areas in the buildings were cleaned and disinfected twice a day, and the elevator were disinfected four times a day.



### Access Control

We strictly controlled access and forbade external vehicles from entering areas. We registered personnel and took their temperatures when they entering and exiting the quarters and turned off the vehicle identification system. All vehicles entering the living quarters are subject to the on-board personnel temperature measurement and trunk inspection. We forbade delivery persons and takeout staff to enter the premises. We also setup shelves at the gate of the living quarter to store goods so that deliverymen made no contact with homeowners.



## Food Service

In all fabs, we provide canteens of different sizes according to the number of employees, and we increased food subsidies in June 2020. The cafeteria is operated by different food suppliers, serving both Chinese and western food, to meet the diverse appetites of employees. In 2020, the cafeteria held food festivals and cook-offs all while promoting frugal and healthy eating.

### Advocating Frugal Eating

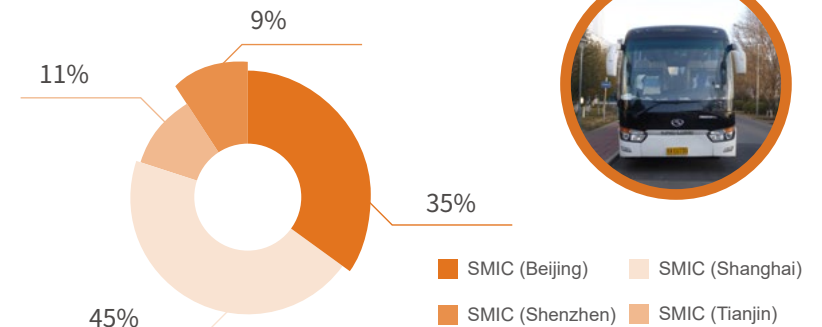
All the restaurants in the fab have carried a "Clear Your Plate" campaign, calling on employees to save food, responding to the national call; supervisors and employees at all levels are actively responding to and participated in that.



## Transportation Services

To better serve our employees, conserve energy, and reduce carbon emissions, we provide free shuttles between fabs, living quarters, and nearby subway stations; most shuttles used are new energy automobiles.

In 2020, we designed a total of 24 regular shuttle routes in each fab for employees, with the total number of passenger rides exceeding 3 million.



## Food Festivals

All cafeterias in fabs 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. Through 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.



Food for Traditional Festival in SMIC (Shanghai) Fabs



Spring Festival Shopping Area in SMIC (Shanghai) Fabs



New Dishes at SMIC (Shanghai) Fabs



Food Festivals in SMSC Fabs



SMSC Introduced Coffee Shop



New Dishes at SMSC Fabs

# Caring for the Environment

SMIC not only focuses on corporate development and economic value creation, but also on environmental protection. Our environment protection policy emphasizes making good use of resources and energy, and reducing emissions, greenhouse gases and hazardous waste. At the same time, we continue to implement improvement measures and practice the concept of sustainable development to reduce the impact on the ecological environment, natural resources and climate change.

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

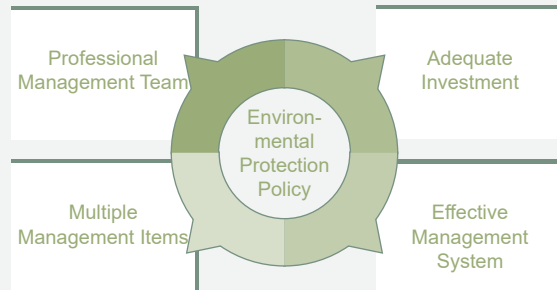




# Environmental Protection Policy and Management

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

## Environmental management framework in SMIC



## Environmental Protection Policy

Since the founding, we have set up the Environment/Safety/Hygiene Department, established the environmental protection management system, and implemented ISO 14001 Environmental Management System as well. We have formulated the environmental protection, safety and health policy with reference to the ISO 14001 Environmental Management System. Following the continual improvement process, we optimized and modified this policy and finally developed our latest management policy as shown by the photo below:



## Environmental Protection Management

In accordance with laws, regulations and standards, and guided by environmental management policies, SMIC has systematically and normatively integrated environmental management practice into overall production and operations in aspects such as organizational structure, document control, operation control, supervision management, and continual improvement by planning, implementing, and operating environmental management projects.

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



## Professional Management Team

SMIC's Environment/Safety/Hygiene Department consists of more than 100 skilled management employees. Each fab has an Environment/Safety/Hygiene Committee that is chaired by the fab head and representatives from various business functions serving as officers on the Committee. The Environment/Safety/Hygiene Committee's power and responsibilities are clearly defined to distinguish from business functions and together they work collaboratively in environmental management projects to ensure the Company achieves certain environmental objectives.

## Adequate Investment

The Company invested more than \$142.06 million in environmental protection in 2020, including operation, renovation, and expansion of treatment facilities, pollution monitoring, and third-party audit on wastewater, waste gas, and waste.

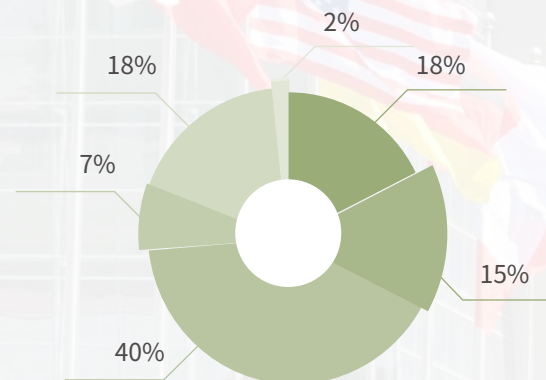


SMIC invested more than \$

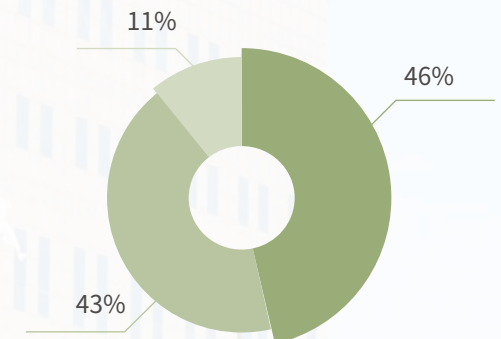
**142.06** million

in environmental protection.

### Investment in Environmental Protection



■ SMIC (Shanghai) ■ SMIC (Tianjin)  
■ SMIC (Beijing) ■ SMIC (Shenzhen)  
■ SMNC ■ SJ Semi



■ Local Scrubber  
■ Central Scrubber  
■ Waste disposal, environmental management and others

## Effective Management System

SMIC implements the ISO 14001 environmental management system, ISO 14064GHG emissions inventory verification system, and the QC 080000 hazardous substances process management system in all fabs. In 2020, water fabs with mature operation continued to improve and were operated effectively and compliantly as required as 100% of them had passed certification by a third party.



100%

of management systems passed third-party certification



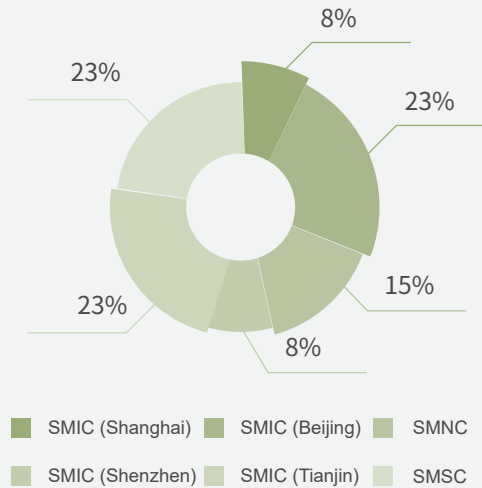
## Multiple Management Items

### Cleaner Production

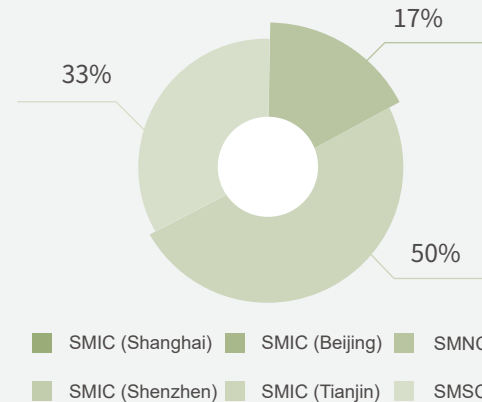
We implement cleaner production measures to minimize or eliminate the impact of operations on human beings and the environment. These measures include reducing pollution sources, improving resource utilization rate, reducing or eliminating pollution in the course of production, maintenance, and product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

SMIC conducts audits on cleaner production every five years as required by the local government and improves the cleaner production scheme according to expert opinions in the audit report. In 2020, we continued to implement 13 cleaner production programs with an investment of about RMB 1.21 million.

### Distribution of Cleaner Production Programs by Quantity

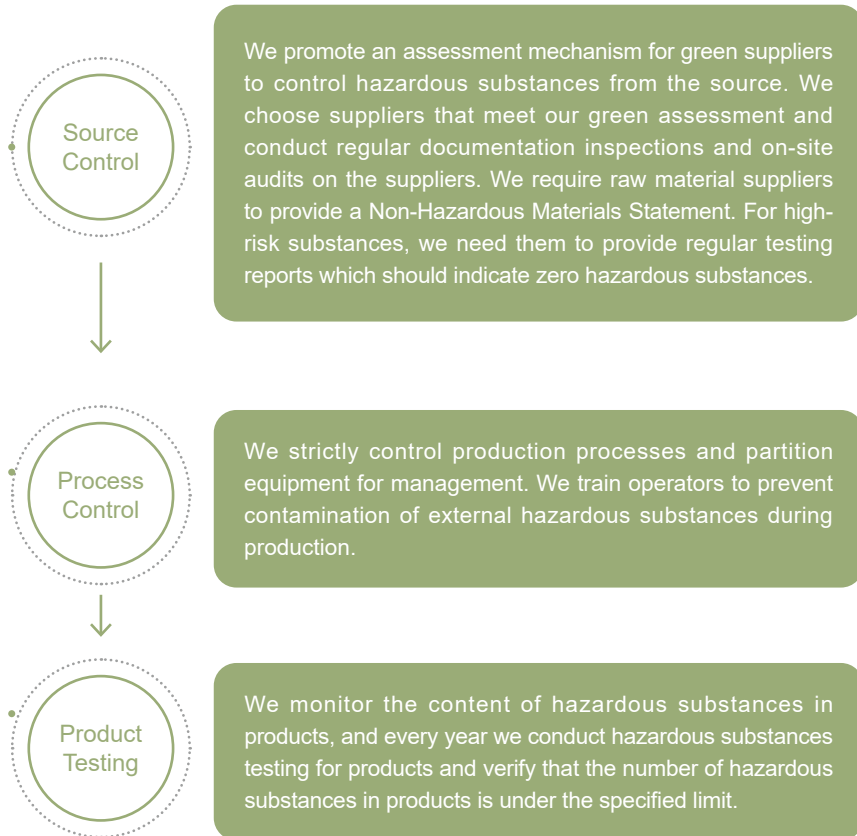


### Distribution of Cleaner Production Programs by Investment



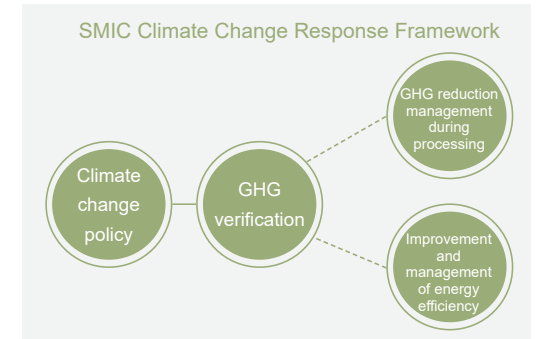
## Green Products

SMIC strictly controls hazardous substances throughout the 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*, Europe Union's RoHS Directive and Sony GP Regulations to ensure our products are green and safe.



## Climate Change and Energy Management

The UN, governments of all countries, society, and enterprises all have attached great attention to the issue of climate change which has caused numerous natural disasters and impacted on the global ecological environment, human life and health, as well as production operations greatly. The issue also draws our concerns to take measures to mitigate climate change.



### Climate Change Policy of SMIC

SMIC proactively assumes its responsibilities to mitigate climate change, makes climate change policy, and directs and implements measures to reduce greenhouse gas emissions. Our company completes the Carbon Disclosure Project (CDP) questionnaire of the Global Environmental Information Research Center every year, which discloses information on climate change related to governance, strategies, risks and opportunities, and financial impact analysis similar to the framework of the Task Force on Climate-related Financial Disclosures (TCFD). We established indicators and targets, and promote corresponding projects to ensure effective response to various climate change risks and opportunities, and to reduce the adverse effects of climate change on finances. The main risks include extreme weather (such as low temperature), carbon trading, etc. The main opportunities include the development of green products and the promotion of green production.

**Target 1:** Participate in the WSC's fluoride greenhouse gas emission reduction target (By 2020, carbon emissions per unit product area is reduced by 30% compared to 2010), and finally we achieved the target in 2020, with an actual reduction rate of 57.4%.

**Target 2:** Production interruptions caused by climate disasters (excluding external factors) is zero, and actual occurrence in 2020 was zero.





## GHG Verification

SMIC carries out verification of GHG under ISO 14064 standards, regularly calculates the GHG emissions of fabs every year to learn the Company's GHG emissions and implement emission reduction measures as scheduled.

In 2020, SMIC produced total GHG emissions of 2,129,257 tons of CO<sub>2</sub> e; and its GHG emissions per 8-inch equivalent wafer mask layer is 0.012 tons of CO<sub>2</sub> e.

CO<sub>2</sub>

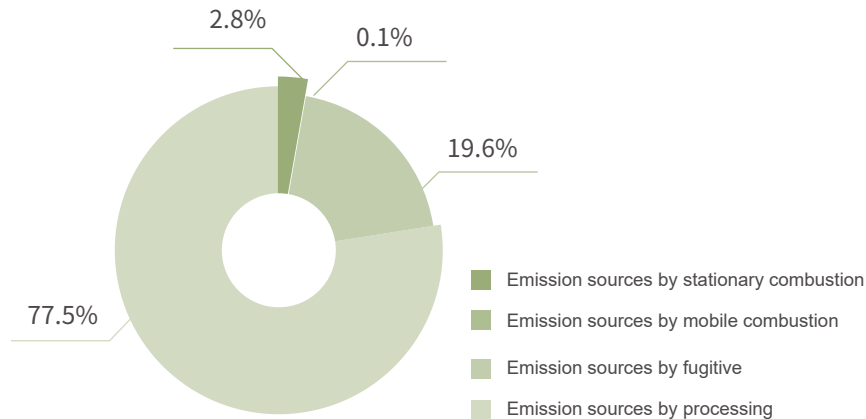
GHG emission per 8-inch equivalent wafer mask layer is

**0.012** tons of CO<sub>2</sub> e

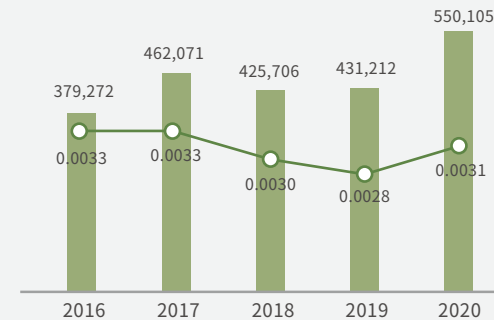


## Direct GHG Emissions

Direct GHG emission sources: Combustion emissions from fossil fuels such as gasoline, diesel and natural gas; chemical vapor deposition associated with dry etching process full fluoride gas emission; Organic waste gas emission from combustion; leakage of refrigerant gas; wastewater treatment emissions; pure water treatment emissions.



### Direct GHG Emissions

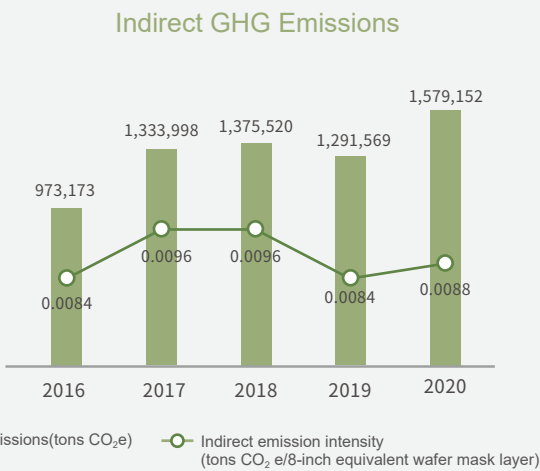
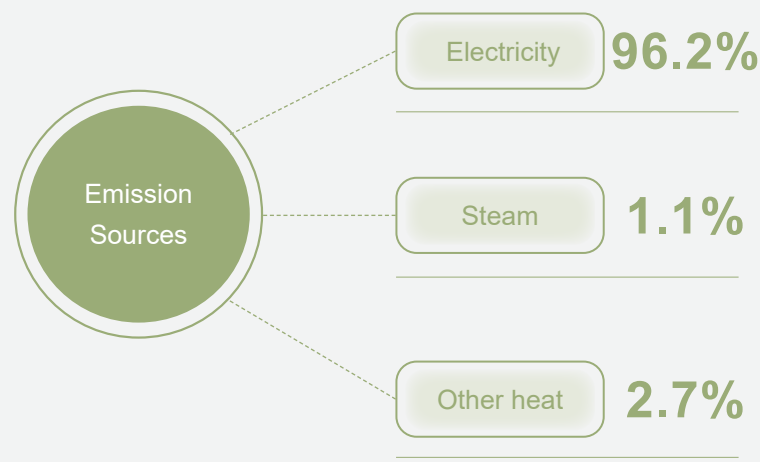


Note: Direct emissions are calculated based on the discharge coefficient and mass balance provided in the 2006 IPCC Guidelines for National Greenhouse Gas Inventories.



## Indirect GHG Emissions

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



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

## PFC Management During Processing

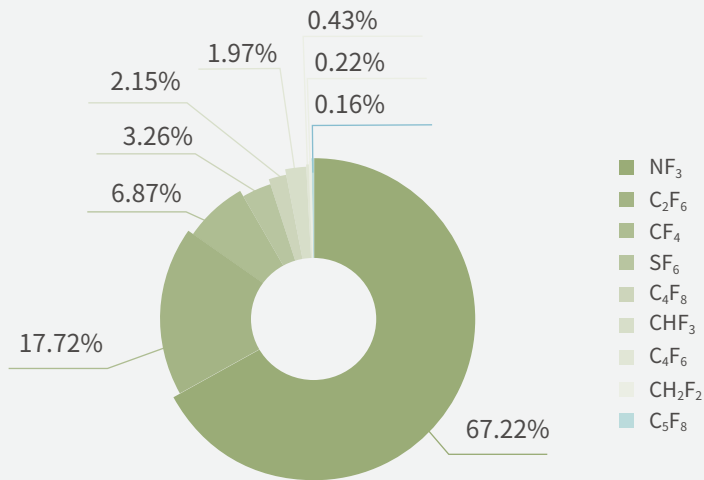
As the governing member of the China Semiconductor Industry Association (CSIA), SMIC proactively participates in events held by the CSIA and the World Semiconductor Council (WSC). We actively cooperate in the PFC emission reduction program initiated by WSC, make efforts to realize the best emission reduction technology advocated by WSC and reduce PFC emissions.

In 2020, the Company used 573 tons of PFC gas and its PFC emissions after processing was 416,667 tons of CO<sub>2</sub>e.

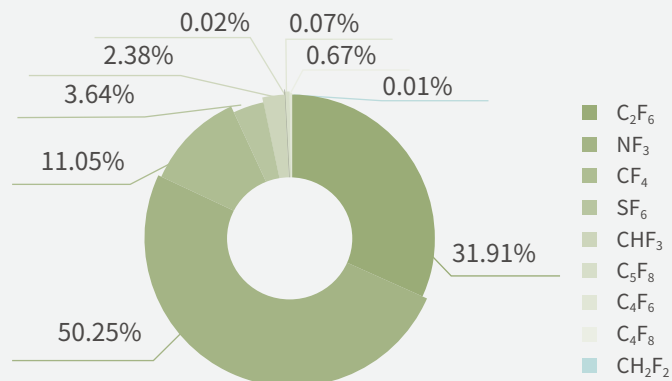
We adopt practices to reduce GHG emissions of PFC gases as follows:

- Optimize processes to reduce the use of PFC
- Use highly efficient local PFC treatment facilities to enhance treatment efficiency

PFC Gas Consumption in 2020



CO<sub>2</sub> Emissions Caused by PFC in 2020



## Energy Management

SMIC proactively responds to the state's call for energy conservation and emission reduction, establishes the energy management team, and continuously implements energy conservation and emission reduction projects, achieving a win-win solution between economic gains and environmental benefits.

### Energy Management Mechanism

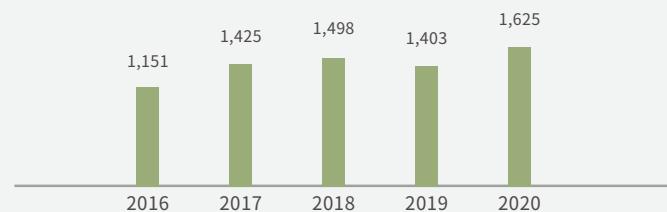
SMIC has built a complete system for energy management in accordance with the ISO 50001 Energy Management System. Through systematic and organizational construction, we implement a three-tier energy management network, adopt an energy management accountability system, and appoint professional energy management agencies or individuals to ensure the implementation of energy management.



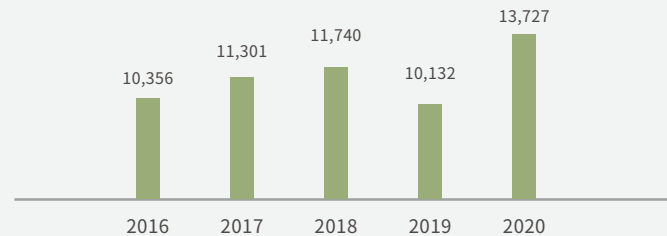
## Energy Consumption

In 2020, the total energy consumption of SMIC was 2,064.74 million kWh, among which, the indirect energy consumption was 1,927.91 million kWh and direct energy consumption was 136.82 million kWh. Indirect and direct energy consumption intensities were 10.72 kWh per 8-inch equivalent wafer mask layer and 0.76 kWh per 8-inch equivalent wafer mask layer respectively. The total energy consumption intensity of 2020 was 11.48 kWh per 8-inch equivalent wafer mask layer, which was about the same with 2019. The Energy consumption of major energy types are as follows:

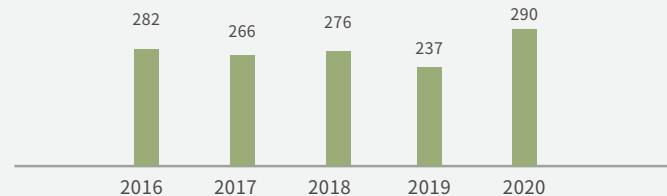
General Electricity Consumption of SMIC (unit: million kWh)



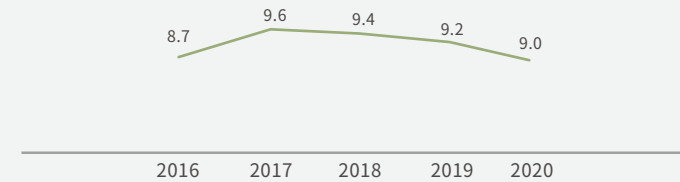
General Natural Gas Consumption of SMIC (unit: km<sup>3</sup>)



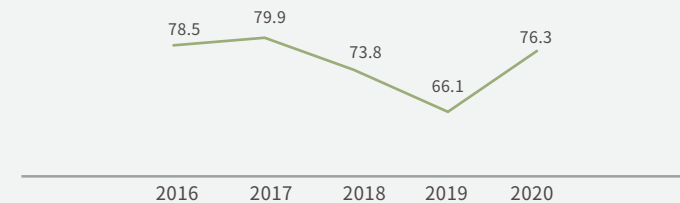
General Steam Consumption of SMIC (unit: kt)



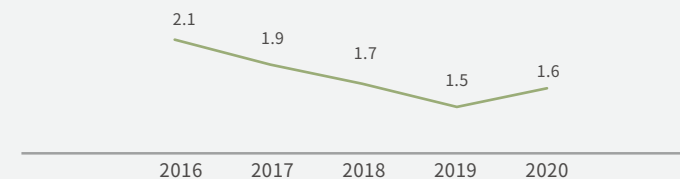
Electricity Consumption Intensity of SMIC  
(unit: kWh/8-inch equivalent wafer mask layer)



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



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

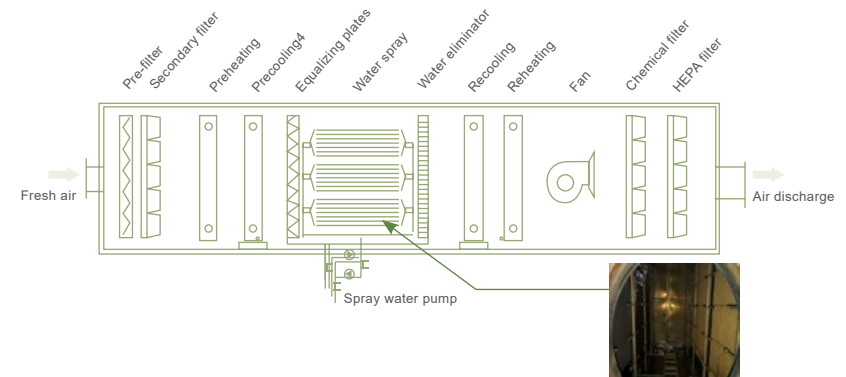


## Major Energy Conservation Projects

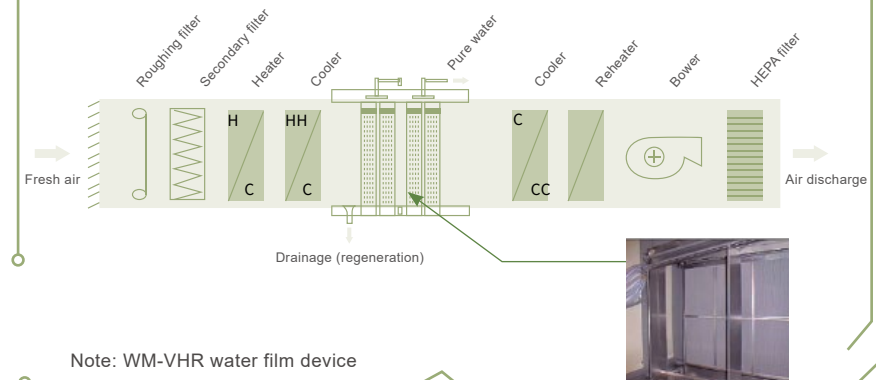
| Fab             | Name of Project   | Project Description  | Performance of Energy Conservation    |
|-----------------|---|--|---------------------------------------|
| SMIC (Shanghai) | Optimization and energy conservation project for the refrigerating machine              | The connected 5C chilled water system of Fab8 P1 and Fab 1 can improve the efficiency of the refrigerating machine. In winter, the refrigerating machine of Fab8 P1 is not turned on, and Fab 1 provides chilled water.  | 725,760 kWh                           |
| SMIC (Shanghai) | Energy conservation technical transformation of the ventilation system                  | The original model of the air washer requires the operations of the water pump, which consumes electric energy; the transformed wet film requires no operations of the water pump, thus saving energy.   | 131,400 kWh                           |
| SMSC            | Steam conservation project  | The heat generated by the heat recovery of the heat-pump refrigerating machine when absorbing 12 degrees chilled water is cooled and dissipated through the cooling tower. This part of the heat is recycled to reduce the consumption of steam.   | 3,787 tons of steam                   |
| SMSC            | Energy conservation improvement and recycling resin with pure water as heat sources     | By adding electric heating water tank, circulating water pump, electric heater and corresponding control system, the heating mode of pure water resin regeneration agent is replaced by electric heating, thus saving the steam consumption.   | 378,870 kWh<br>4,660 tons of steam    |
| SMNC            | Waste heat recovery project for the local scrubber                                      | It is necessary to raise the temperature when raw water is made into ultrapure water during processing. By using the waste heat from the returned water of the local scrubber for raw water heating, the temperature difference in the follow-up process of raw water is reduced, and the cost to use the outsourced heat source falls, as well as the electricity consumption of refrigerating machine for the cooling capacity required by the local scrubber also declines. | 209,851 kWh<br>267 tons of steam      |
| SMIC (Shenzhen) | Energy conservation renovation of the refrigerating machine in the chilled water system | The refrigerating machine system is equipped with the energy conservation control system, frequency converter, sensors and other control components, real-time monitored terminal consumption, refrigeration load and other parameters to optimize the control of the refrigerating machine system, so as to save electricity.   | 2,968,742 kWh                         |
| SMIC (Tianjin)  | Refrigerator renovation   | The original refrigerator has been running for 20 years with high energy consumption and low efficiency. The total refrigeration capacity cannot meet the growing demand for production, and the risk increases. Through capacity expansion, the efficiency of the refrigerator is increased by 12.6%, the output is increased by 1,120 RT, and the operation risk is reduced.   | 12,852,000 kWh                        |
| SMIC (Beijing)  | Installation of frequency converter in air conditioning system                          | VFD is installed in the air conditioning system for energy conservation transformation, which can greatly reduce the electricity consumption and the operating cost of the air conditioning system.  | 676,053 kWh                           |
| Total           |   |  | 8,714 tons of steam<br>17,942,676 kWh |

### Case | Energy Saving Technical Transformation of Ventilation System

Before the renovation, the ventilation system of a clean room in the fab adopted an air washer, which used 15KW water spray pumps and sprinklers to generate spray and to humidify the air.



After the transformation, the original humidification method was changed from air washer to the transformed wet film, without the need to run the spray pump, saving 131,400 kWh energy.



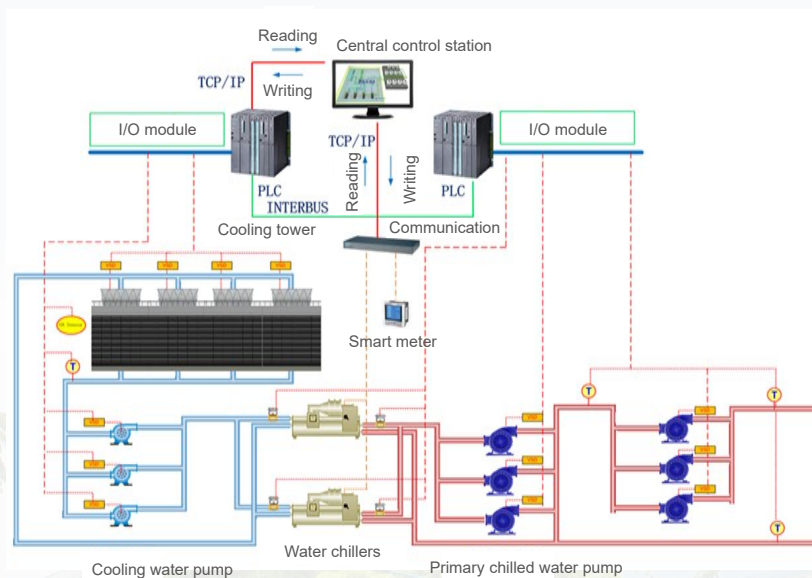
Note: WM-VHR water film device



## Case

## Energy Saving Renovation of Refrigerating Machine in Chilled Water System

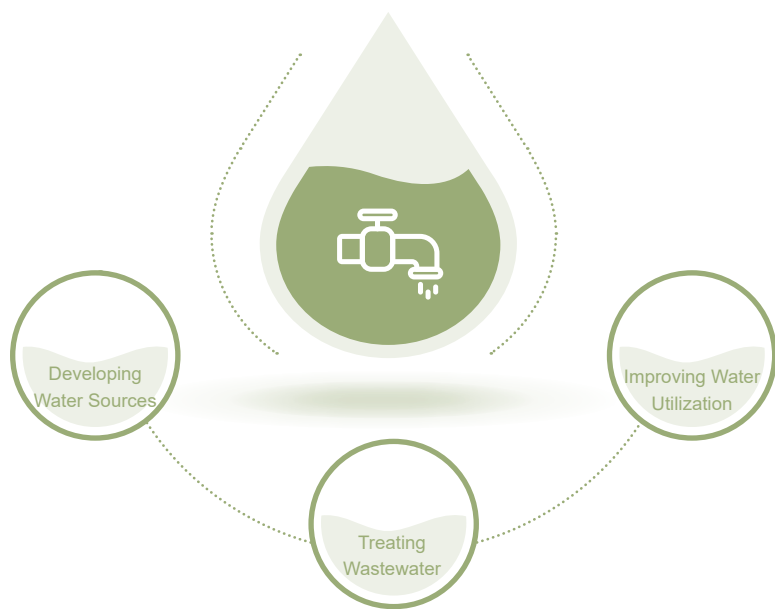
The fab in Shenzhen optimized the chilled water system, the operation efficiency and working condition of the system by installing an energy conservation control system, frequency converter, sensors and other control components on 11 sets of refrigerating water system, monitored terminal consumption, refrigeration load and other parameters in real-time, so as to achieve the purpose of energy conservation. After the energy conservation transformation, the annual electricity consumption was reduced by 8.5-10.2%, saving about 2,968,742 million kwh.





# Water Resource Management

As water resource serves as an indispensable part of the integrated circuit industry, SMIC upholds the principle of rationally utilizing water resources to mitigate the impact on the environment, and puts water resource management into force from three aspects of developing water sources, improving water utilization and wastewater treatment to reduce risks of water resources.



## Developing Water Sources

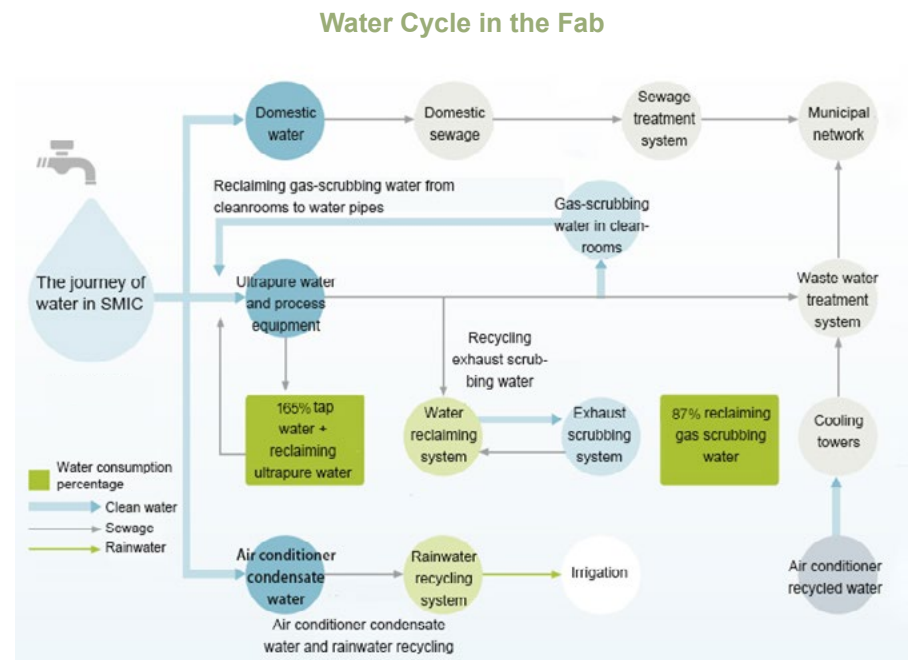
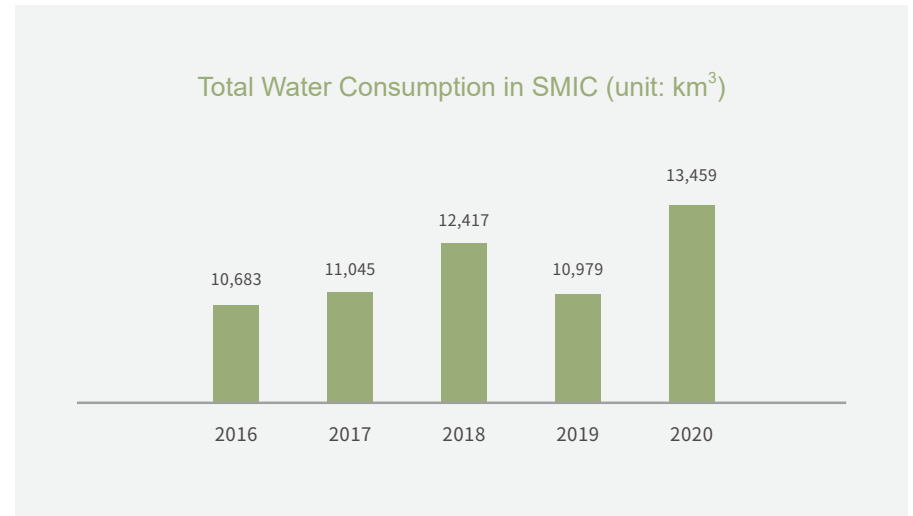
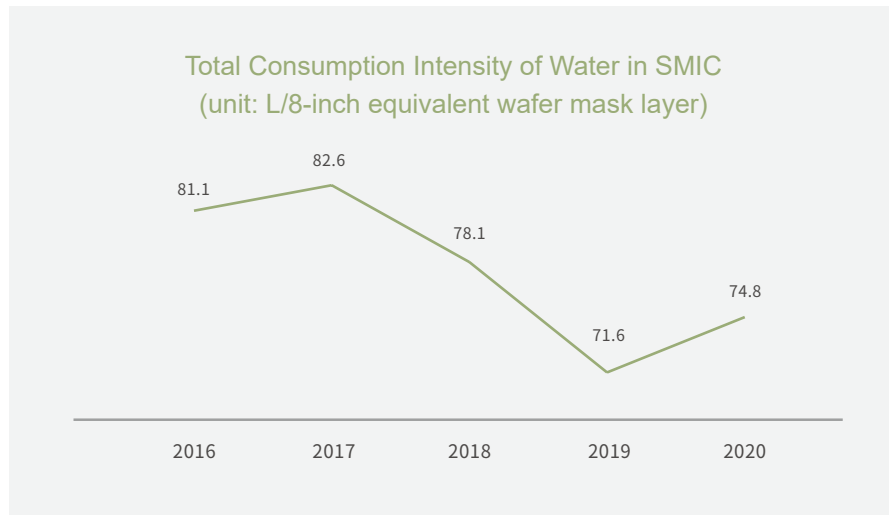
Since fabs of SMIC are built in different areas, and available water resources are different according to local conditions, which are references for us to adopt measures to develop sources. The sources of SMIC include tap water, external reclaimed water (recycled water), condensate from air-conditioner, natural water (rainwater and mountain spring water) and so on.



| Sources of Water Resource                           | Amount (ton) | Percentage (%) |
|---|--------------|----------------|
| External sources (tap water and reclaimed water)    | 15,199,053   | 98.89%         |
| Condensate from air-conditioner                     | 161,355      | 1.05%          |
| Natural water (rainwater and mountain spring water) | 8,876        | 0.06%          |

## Improving Water Utilization

As the proportion of products manufactured with advanced processes is increased and integrated circuit wires are increasingly narrowed, requirements for product cleanliness become higher and water demands increase, as a result of which it is urgent to recycle water. Starting from the reduction of water consumption in the facility system, increase in wastewater reclamation, improvement of the system's water production rate and lower water draining losses, the Company constructs water-saving projects, implements water-saving management measures, improves water utilization and reduces external water source consumption. Data on the Company's water consumption in 2020 are shown in the chart:



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

| Effectiveness of Water Conservation                               | 2016     | 2017     | 2018     | 2019     | 2020     |
|---|----------|----------|----------|----------|----------|
| The average water recycling rate for processing (%)               | 65.46    | 71.16    | 71.81    | 70.77    | 68.08    |
| Ultrapure water consumption (ten thousand tons)                   | 975.24   | 1,099.53 | 1,158.48 | 1,194.03 | 1,430.73 |
| Water consumption from external water sources (ten thousand tons) | 1,061.76 | 1,071.98 | 1,081.31 | 1,097.94 | 1,519.91 |
| Recycled water (ten thousand tons)                                | 1,182.26 | 1,364.94 | 1,522.82 | 1,553.49 | 2,239.69 |
| How many times each drop of water is used                         | 2.11     | 2.27     | 2.41     | 2.41     | 2.47     |

## Major Water Saving Projects in 2020

| Major Water Saving Projects in 2020 |  |   |                        |
|-------------------------------------|--|---|------------------------|
| Fab                                 | Name of Project  | Project Description   | Tap Water Saved (tons) |
| Fab in Shanghai                     | Optimization of Pure Water System                      | the RO flushing time is gradually reduced to 60s, which saves most of the flushing water without affecting the water quality  | 23,360                 |
| Fab in Beijing                      | Drainage Water Recycling System for Ventilation System | In the past, the overflow water used to wash ventilators in Mechanical Engineering Department was directly discharged to the municipal rainwater drainage well. Now, this part of the water is collected and discharged into the LSR system, which can not only recycle this part of water but also reduce the amount of tap water used in the LSR system | 7,300                  |
| Fab in Beijing                      | Optimization of Rainwater Irrigation System            | Instead of tap water, rainwater collected and water from well are used for irrigation in green space  | 3,505                  |
| Fab in Tianjin                      | Acid Wastewater Reuse                                  | DWWA wastewater and wastewater containing phosphorus are recycled to the recovery water system, and the produced water is supplied to the UPW raw water tank, which can reduce the consumption of tap water   | 219,000                |
| Total                               |  |   | 253,165                |

## Wastewater Treatment Classified Management of Wastewater Sources

Classified management of wastewater sources can lead to the best treatment efficiency. In order to achieve the goals of contaminant reduction and recycling, the Company keeps improving its current treatment equipment and setting up new treatment facilities; also, it diverts wastewater from each manufacturing equipment to every wastewater treatment system for initial degradation of the contaminants in the wastewater and then condenses and reuses the wastewater through a recycling system, a double reduction of contaminant concentration. The process wastewater includes hydrofluoric acid wastewater, acidic and alkaline wastewater, grinding wastewater, and high-concentration waste liquid. All the wastewater is classified and well managed from process equipment, and is channeled into 18 diversion systems based on their compositions and concentration.

| Process Wastewater              | Classification of Sources                                    | Recycling System                              | Wastewater Treatment System/ Treatment Methods                            | Recycling and Reuse                          |
|---------------------------------|--|---|---|--|
| Hydrofluoric acid wastewater    | Hydrofluoric acid wastewater                                 | Recycling of exhaust gas scrubbing water      | Hydrofluoric acid treatment system  | Recycling and reuse of tower scrubbing water |
|                                 | Hydrofluoric acid wastewater containing ammonia and nitrogen |   | Ammonia and nitrogen treatment system                                     |  |
|                                 | Scrubbing wastewater during processing                       |   |   |  |
| Acidic and alkaline wastewater  | Acidic wastewater  | Wastewater recycling system                   | Acid neutralizing treatment system  | Sulfuric acid                                |
|                                 | Alkaline wastewater  |   |   |  |
|                                 | Ammonia-containing wastewater                                |   | Ammonia and nitrogen treatment system                                     | Ammonium sulfate                             |
| Organic wastewater              | Domestic wastewater  |   | Domestic wastewater treatment system                                      | Treated water recycling                      |
|                                 | Organic wastewater during processing                         | Wastewater recycling system                   |   |  |
| Grinding wastewater             | Copper-containing grinding wastewater                        |   | Copper-containing wastewater treatment system/breaking sedimentation      |  |
|                                 | Oxidized grinding wastewater                                 |   | Fluorine-containing wastewater treatment system/coagulating sedimentation |  |
|                                 | Heavy metal-containing grinding wastewater                   |   | Fluorine-containing wastewater treatment system/coagulating sedimentation |  |
|                                 | Wafer back grinding wastewater                               | Recycling of wafer back grinding wastewater   | Membrane treatment  |  |
|                                 | Grinding and cleaning wastewater                             | Recycling of grinding and cleaning wastewater |   |  |
| 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  |  |





## Wastewater Discharge and Monitoring

The amount of wastewater discharge highly depends on the consumption of tap water and the amount of recycled water. With an increasing proportion of products that adopt advanced manufacturing processes, the water consumption and wastewater discharge for a single product increase synchronically. We have stepped up the recycling of water resources to reduce wastewater discharge, realizing a 71.6 L/8-inch equivalent wafer mask layer of wastewater discharge for a single product.

| wastewater Discharge   | 2016  | 2017  | 2018  | 2019  | 2020    |
|--|-------|-------|-------|-------|---------|
| Amount of wastewater discharge (ten thousand tons)   | 901.2 | 986.5 | 946.2 | 980.9 | 1,317.0 |
| Amount of wastewater from producing a single wafer mask (liter/8-inch equivalent wafer mask layer) | 68.9  | 70.9  | 64.2  | 64.0  | 71.6    |

The Company uses uninterrupted monitoring devices for water quality and quantity at the outlets of wastewater treatment facilities in each fab to monitor and record changes in water quality and quantity in real-time. In case of any unusual conditions, the devices will respond immediately and appropriately for followed up treatment. Apart from following wastewater discharge standards, we are striving to be environmentally friendly. We have taken measures to cope with chemical oxygen demand (COD) and suspended solid that have direct influences on aquatic life and to reduce the impacts of wastewater discharge on the environment. Please see the monitoring data published by the Company for detailed information:



Treatment facilities for ammonia and nitrogen in wastewater



Domestic sewage treatment facilities



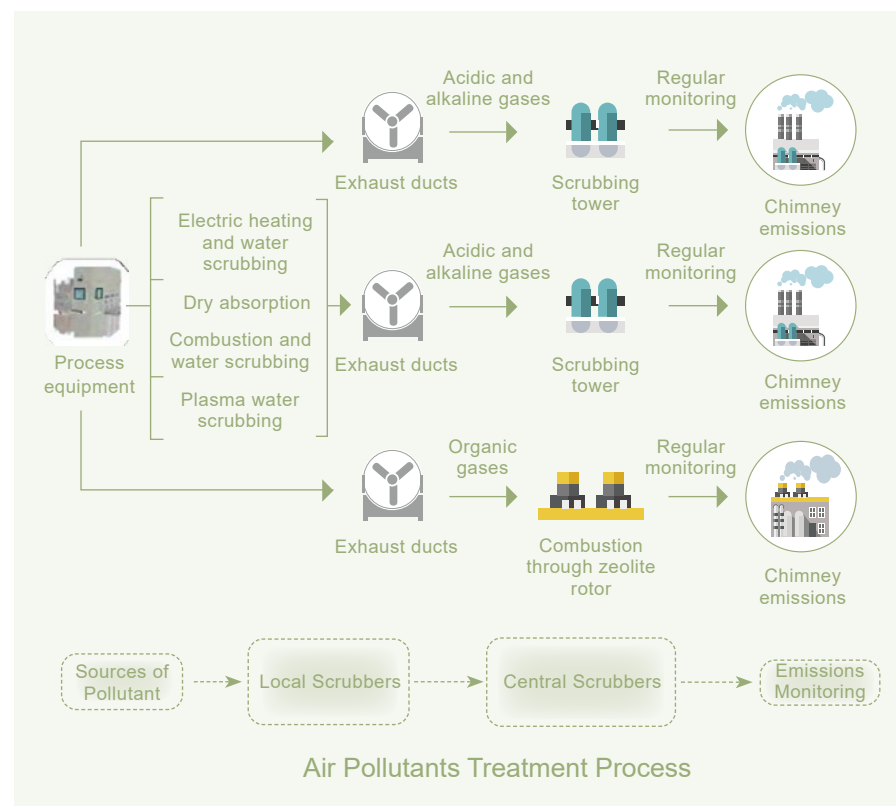
Wastewater reuse and treatment facilities

## Air Pollutants Control

In order to minimize the impacts on air quality in its business locations to the full extent, SMIC pays great attention to the treatment of pollutants in the exhaust gases discharged by the Company.

## Pollutants Treatment

SMIC takes tiered and classified approaches to treat exhaust gases. It adopts a local scrubber and a central scrubber.



## Local Scrubbers

The gas pollutants from equipment include perfluorocarbons (such as  $C_4F_6$  and  $C_5F_8$ ), combustible gases (such as acetylene, boron trichloride 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, SMIC mainly utilizes electric heating and water scrubbing, combustion and water scrubbing, plasma, dry absorption and local scrubber equipment for pre-treatment. Through the local scrubber, 95% of the targeted pollutants can be reduced.

| Type of local scrubber               | Targeted pollutants                                     | Common processing section | Monitoring parameters  |
|--------------------------------------|---|---------------------------|--|
| Electric heating and water scrubbing | Perfluorocarbons, corrosive gases and combustible gases | Diffusion and membrane    | The temperature of reaction furnace, air intake parameters and quantity of circulating water inflow  |
| Dry absorption                       | Toxic gases   | Ion implantation          | Air intake pressure and color of the ball-shaped detectors   |
| Combustion and water scrubbing       | Corrosive gases and perfluorocarbons                    | Dry etching               | Natural gas flow rate, oxygen flow rate, the quantity of circulating water inflow, air intake pressure and temperature inside the combustion chamber |
| Plasma water scrubbing               | Perfluorocarbons, combustible gases and corrosive gases | Dry etching               | Amperage value of electric current, air intake parameters and quantity of circulating water inflow   |



Electric heating and water scrubbing



Dry absorption



Combustion and water scrubbing



Plasma water scrubbing



## Central Scrubbers

After treated through the local scrubber, the exhaust gases are then conveyed into different classifications of main collection pipelines. Acidic exhaust gases enter the central scrubbing tower for acidic exhaust gases while alkaline exhaust gases into the central scrubbing tower for alkaline exhaust gases for further neutralizing treatment; and organic exhaust gases enter the zeolite rotor system for combustion. Through the central scrubber about 95% of the targeted pollutants can be reduced.



Acidic Exhaust Gases Treatment System



Organic Exhaust Gases Treatment System

## Pollutants Discharge Monitoring

After treated through the central scrubber, the exhaust gases are discharged into the atmosphere via exhaust funnels whose heights abide by national standards. In order to verify that the discharge is up to standard, we have engaged third-party agencies in monitoring the exhaust gases discharged through the funnels, finding that all testing results have satisfied national standards. Please see the detailed monitoring data published on our website.



### Exhaust Gas Pollutants

| Name of pollutants   | 2020      |
|--|-----------|
| Total exhaust gas emissions (ten thousand m <sup>3</sup> ) | 6,266,287 |
| Nitrogen oxides emissions (ton)                            | 52        |
| Sulfur dioxide emissions (ton)                             | 6         |
| VOCs emissions (ton)                                       | 26        |

Exhaust Gases  
Discharge Outlets



## Waste Management

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



### Source Control

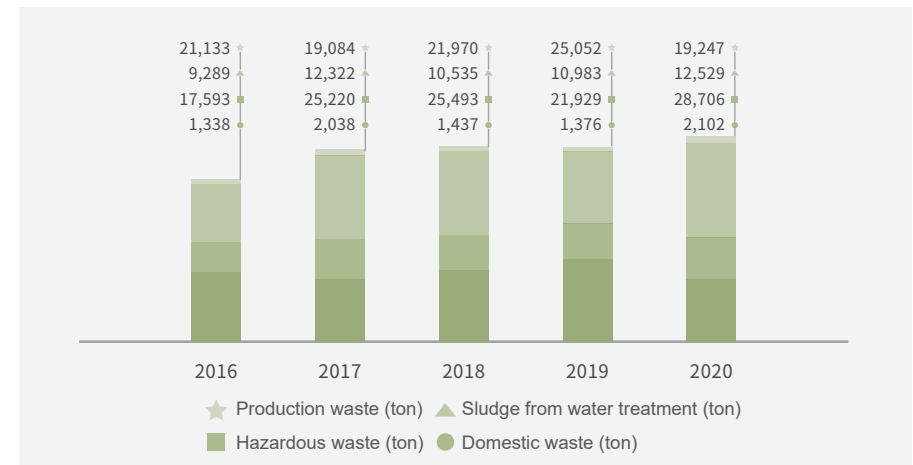
SMIC has been carrying out cleaner production projects to optimize the parameters of raw materials usage, reduce resource consumption, and minimize waste generation at the source of production. We keep exploring possibilities for reusing the waste generated from raw materials through production processes in the fab to maximize the recycling of resources and reduce environmental impacts. When the recycling of resources is unable to be achieved in the fab, we also proactively work with other industries and resort to external strength to tap into the best resource efficiency. Only when appropriate approaches to recycling are impossible will we transfer the waste to qualified waste disposal vendor.

| Main Waste Reduction and Harmless Treatment in 2020 |   |  |
|---|---|--|
| Fab   | Name of Project                         | Project Description  |
| Fab in Shanghai                                     | Recycling and Reuse of EBR Waste Liquid | The original EBR waste liquid was incinerated by a qualified manufacturer with paying. Now after improvement, it is sold to a qualified cooperative manufacturer for recycling, so as to improve the utilization rate of resources, reduce the impact on the environment, and save the costs of treatment.   |
| Fab in Shanghai                                     | Multipurpose Use of Waste Sulfuric Acid | Fab in Shanghai, together with the environmental protection/safety/health department, has reached a multipurpose use project of waste sulfuric acid through multi-party coordination with qualified manufacturers. The project not only improves the rate of resource utilization but also reduces the costs to treat waste sulfuric acid by 50% and mitigate the impact on the environment. |

## Classified Collection and Temporary Storage

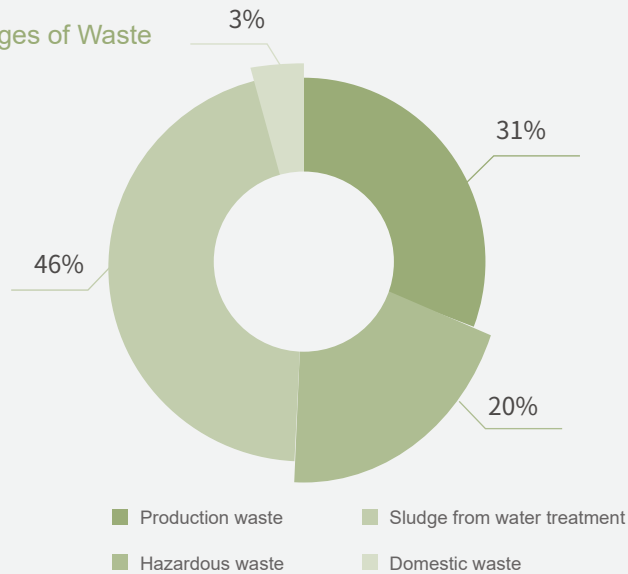
SMIC practices the classified collection and temporary storage based on the characteristics and nature of different wastes. The types of waste include production waste, sewage sludge, hazardous waste and domestic waste. Regarding hazardous waste, we strictly implement relevant control measures.

### Data of Waste Generation

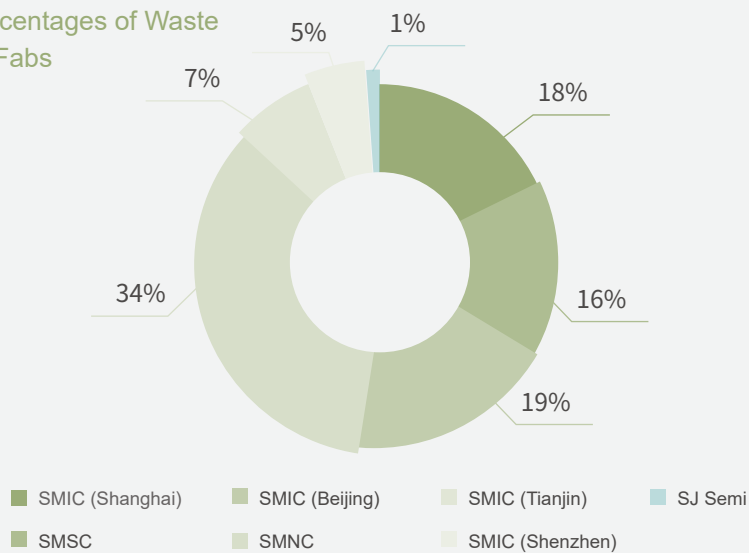




Percentages of Waste



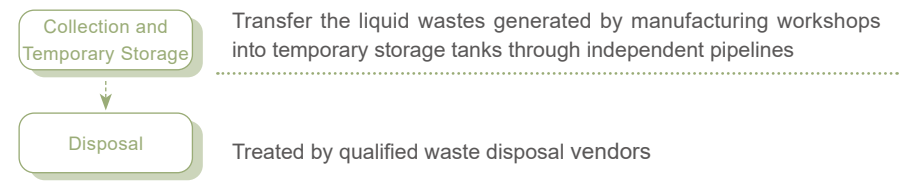
Percentages of Waste by Fabs



## Hazardous Solid Wastes

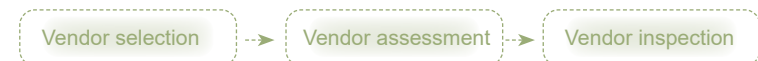


## Hazardous Fluid Wastes



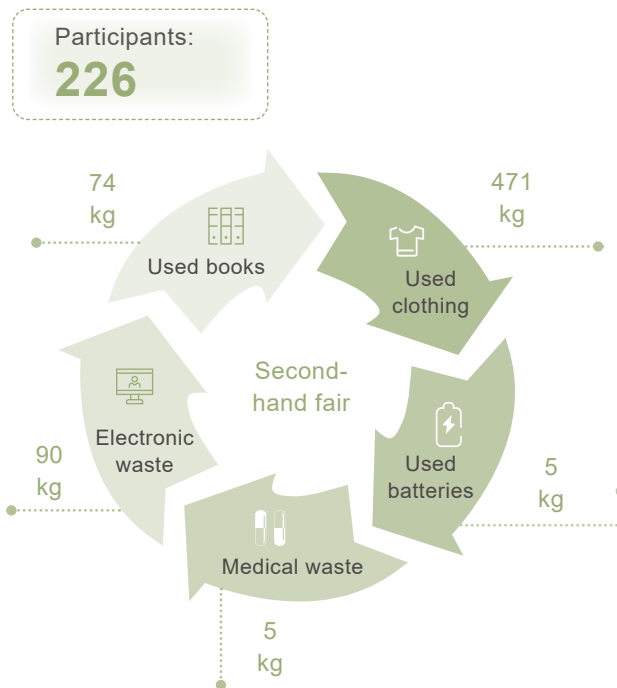
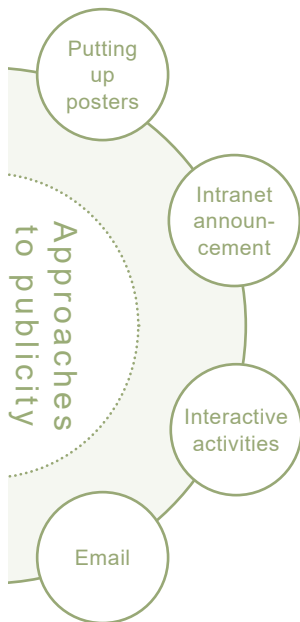
## Management of Waste Disposal Vendors

SMIC conducts strict management of waste disposal vendors. We only sign contracts with those waste disposal vendors that have been accredited by the government and have reached the assessment scores of the Company. During the cooperation, the Environment/Safety/Hygiene Department of the Company carries out on-site inspections or on-board inspections of the vendors and strictly implements the waste transfer form system regarding hazardous wastes.



## Awareness of Environmental Protection

SMIC proactively engages its employees in environmental protection activities, upholding the idea that "everyone carries responsibility for environmental protection" and has organized a variety of activities to strengthen its employees' awareness of environmental stewardship. In 2020, Environment/Safety/Hygiene Department conducted promotions of special themes on environment days, held activities and engaged its employees, and enhanced the employees' awareness of environmental protection.



Number of employees participating in the second-hand fairs from 2014 to 2020

**4,457**



Weight of recycled articles through the second-hand fairs from 2014 to 2020

**20,748** kg



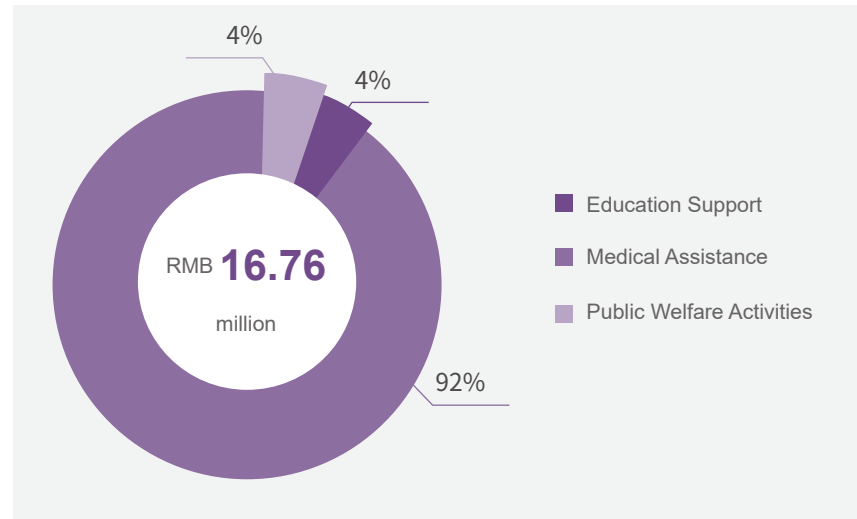
## Caring for Society

Since its establishment in 2000, SMIC has been actively participating in public welfare activities and community services, as well as regional environmental protection. Our policy is to pay attention to the needs of the local community and protect the interests of the community within our capacity. Volunteers from different divisions of the Company and of different ages actively engage in volunteer service activities, bringing warmth to thousands of people. In 2020, we conquered the difficulties of COVID-19 and creatively participated in volunteer service activities, with a total of 11,126 volunteer service hours, achieving the annual target.

- Medical Assistance
- Education Support
- Public Welfare Activities



## Information on Social Donation



SMIC attaches great importance 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 to lead a healthy life. In 2020, SMIC continuously carried out the *SMIC Liver Transplant Program* and other medical aid programs including artificial cochlear implant program, and the newly added the assistance program for Congenital Heart Disease.



## Medical Assistance

### Donation to Fight the COVID-19

In order to support frontline medical staff to fight against COVID-19, in February 2020, the Company, together with its directors and employees, donated RMB10 million in cash and supplies to the frontline fighting the pandemic. The donation was specifically used to support various work related to the prevention and control of COVID-19, personnel treatment, and medical staff protection.



### "SMIC Liver Transplant Program for Children"

On October 29, 2020, SMIC made its eighth donation and contributed RMB 2.33 million to the Program through China Soong Ching Ling Foundation. The cumulative donation of this program has reached RMB 28.93 million. Under the leadership of SMIC, the "SMIC Liver Transplant Program for Children" gradually spread from the semiconductor industry to the whole of society and forming a common mission and responsibility to promote public welfare to benefit society. In 2020, 73 benevolent corporates in the semiconductor industry joined the "SMIC Liver Transplant Program for Children" with a donation of RMB 1.80 million.





By 2020, SMIC Liver Transplant Program for Children has cumulatively received a total donation of more than RMB 28.93 million and saved 530 impoverished children across China.

By 2020, donation received by SMIC Liver Transplant Program exceeded

RMB **28.93** million

Number of unfortunate Chinese children saved

**530**

## Liver Transplant Program

In order to save more poor children who need liver transplants and help more sick children to recover health, SMIC worked with China Soong Ching Ling Foundation (SCLF) again on establishing a special fund to support the impoverished child patients who were waiting for liver transplants at Renji Hospital of Shanghai Jiaotong University School of Medicine. In 2020, SMIC made a total donation of RMB 1.28 million and saved 32 children.

In 2020, donation cumulatively made by SMIC

RMB **1.28** million

Number of children saved through SMIC liver transplant programs

**32**

## Artificial Cochlear Implant Program

The world of those with severe hearing impairment are silent. In order to help such people to restore hearing loss, SMIC has cooperated with China Soong Ching Ling Foundation (SCLF) to fund the poor patients undergoing artificial cochlear implants at the People's Hospital of Dali Bai Autonomous Prefecture, 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 2020, SMIC funded 10 child patients and donated RMB 968,500.

In 2020, donation cumulatively made by SMIC

RMB **968,500**

Number of children saved through SMIC liver transplant programs

**10**

## Congenital Heart Disease Program

All kinds of complicated congenital heart disease surgeries are characterized by young age, high risk and high cost. Even a small heart can bear big dreams, thus children from impoverished families should get the best medical treatment to achieve their dreams of healthy life. SMIC worked with China Soong Ching Ling Foundation (SCLF) and the top "heart engineers" of Shanghai Children's Medical Center to empower these children's dreams with wings of freedom. In 2020, SMIC funded 25 child patients and donated RMB 743,200.

In 2020, donation cumulatively made by SMIC

RMB **743,200**

Number of children saved through SMIC liver transplant programs

**25**

## Education Support

By building schools and providing high-quality educational resources, SMIC has been helping to improve the situation of imbalanced educational resource. We set up scholarship and fellowship to reward those students who demonstrate outstanding academic performance and help impoverished student to achieve their dreams.

### SMIC Private School

Right after its establishment, the Company invested in building the SMIC Private School in order to remove employees' concerns 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 community at large and shared its excellent educational resources.

### Shanghai SMIC Private School

Shanghai SMIC Private School was established in September 2001 with the school campus covering an area of 120 mu, of which nearly 50 mu is green spaces. Accredited by the U.S. Western Association of Schools and Colleges (WASC), it is a non-profit private school that offers schooling from kindergarten to senior high school. It boasts a wide range of teaching, learning and sports facilities and an astronomical observatory.



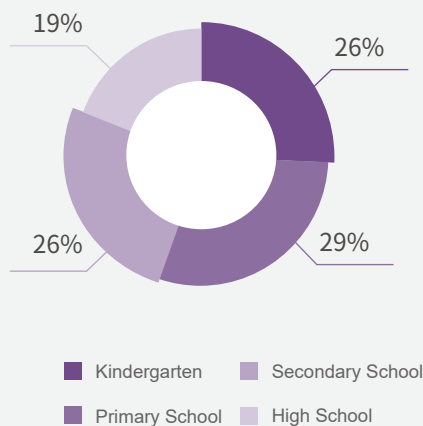
As of 2020, there were 3,200 students from more than 20 countries and more than 500 faculty members, among which, more than one fourth of the latter are from overseas. Shanghai SMIC Private School covers all levels of education from kindergarten to senior high school, including English and Chinese divisions, where the former is taught according to the elementary and secondary school curriculum of the United States, while the latter is taught according to the syllabus prescribed by the Shanghai Municipal Education Commission. In addition, the language 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 senior department of Shanghai SMIC 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).

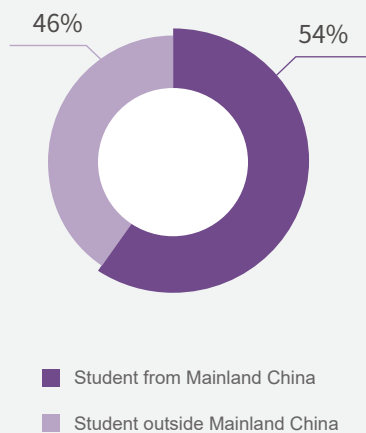
The school has been awarded the honors of "Excellent Primary and Secondary School in China", "National Normal School with Characteristic School-Running", "National Advanced School with Features", "School Featured Projects" and other honorary awards granted by the country and Shanghai educational circles, and won a variety of awards on domestic and foreign disciplines, arts, school newspapers, sports and other competitions. For more information, see the official website of Shanghai SMIC Private School.



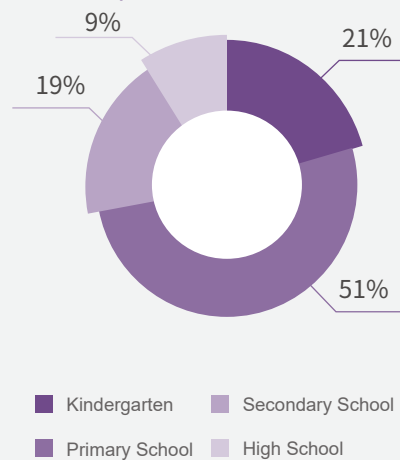
Composition of Faculty



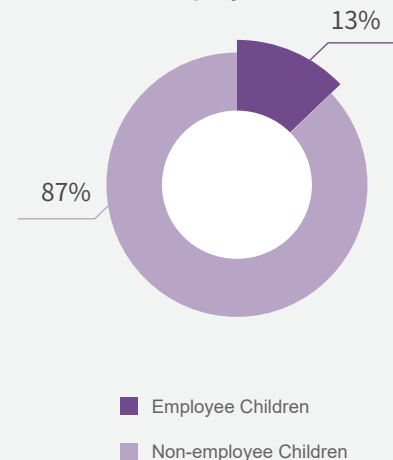
Source of Student



Composition of Students



Ratio of Employee Children





## Secondary School Sports Games

Sports Day is a traditional autumn event at Shanghai SMIC Private School. During the late October 2020, the Sports Day was held while implementing various epidemic prevention and control measures. The students actively participated and displayed their youthful spirit on the field. The Sports Day mainly included competitions such as sprints, long-distance race, long jump, high jump, and tug of war, and fun projects, with staffs also participating as referees and logistic supporters, among other things.



## Reading Week

From October 19 to 23, 2020, the annual Reading Week event was held at the primary school as usual. From *Day for Reading with Cool Friends* to *Day for Reading in the Jungle*, and from *Huaxia Reading Day* to *Vocabulary Show and Non-electronics Reading Day*, each differing theme and in-depth contextual atmosphere enabled the children to immerse into the fun of reading again and again, leading them to love reading, increase their awareness of reading and adding to the fun of reading.



## New Year's Concert

In the cold winter, the students of SMIC brought warmth to the audience with talent shows. Every student of SMIC was able to display their art literacy on the stage, filling the school with breath and notes of art.



## Other Achievements of Shanghai SMIC Private School

- May 2020 | The school passed the annual audit of the Bureau of Education with excellent performance, and for the first time acquired a 3-year consecutive school license qualification
- October 2020 | The English division was visited online by WASC, and received good comments from the committee member
- 2020 | The headquarter of SMIC kindergarten was awarded the honor of "Shanghai High-quality Private Kindergarten"



## Beijing SMIC Private School

Beijing SMIC Private School was founded in the fall of 2005, covering an area of about 30,000 square meters, including school building construction area of nearly 20,000 square meters, with supporting modern teaching, sports facilities and a library occupying 750 square meters. As of 2020, the school had 442 teachers and a total of 2,720 students.

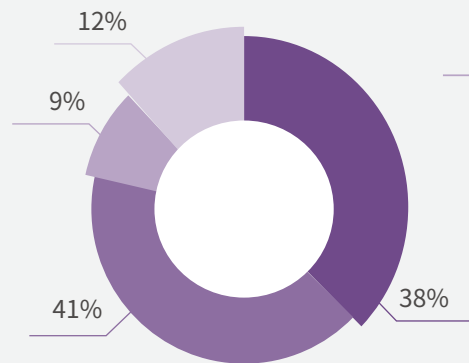
It is a private bilingual school. For more than 10 years, the school has provided education for students based on the idea of "Honor, Excellence, Community, Joy", with holistic education as its aim to develop curriculum by combining Chinese and western elements. The school is committed to developing 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 the official website of Beijing SMIC Private School.



As of 2020, the school had **442** teachers and a total of **2,720** students

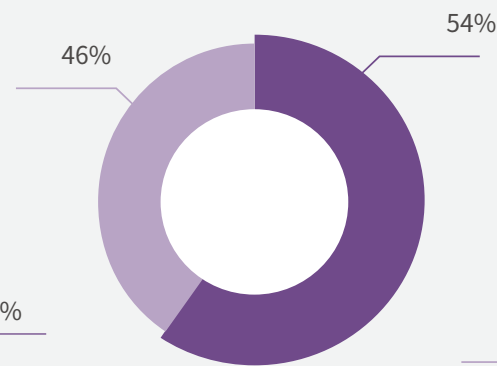


Composition of Faculty



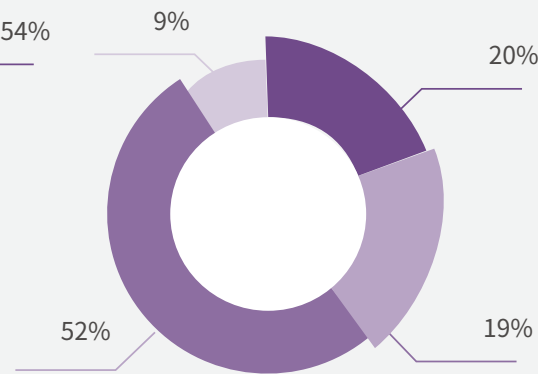
Kindergarten Secondary School  
Primary School High School

Distribution of Students' Nationality



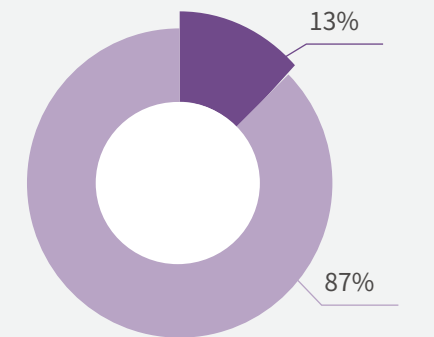
Student from Mainland China  
Student outside Mainland China

Composition of Students



Kindergarten Secondary School  
Primary School High School

Ratio of Employee Children



Employee Children Non-employee Children

## APEC Voices of the Future, Future Leadership Development Base

On 14 October 2020, the 4th International School Annual Meeting and Education Resource Expo was launched at Jinji Lake of Suzhou. After the evening banquet on 15 October, Beijing SMIC Private School was awarded the honor of "APEC Voices of the Future, Future Leadership Development Base". The APEC Voices of the Future aims to cultivate and select 21 best young talents from the APEC economic entities to participate in the APEC Meeting Week with leaders of politicians and entrepreneurs from China and abroad, and participate in the international youth camp of APEC Voices of the Future to contribute to the prosperity and development of Asia-Pacific Region. It is one of the platforms with the greatest capacity to influence the selection and cultivation of young talents. Yuan Yucheng, a student from our high school, was awarded the honor "excellent prize" in the selection finals of APEC Voices of the Future in China.

On November 21, 2020, the 2020 Vision of International Schools Conference of New School Insight Media was held in Beijing. During the past 5 years, New School Insight has been focusing on subdivisions of international schools, and has gradually developed itself into an authority of industry information for international schools, and management and consultancy. On September 3, 2020, the 5th selection of "the most influential principal of international schools" was launched. There were 18 principals shortlisted from 50 nominated principals. After being comprehensively scored on public selection, industry selection, and media selection, 6 principals were awarded the title of "the most influential principal of international schools". Among them, Dr. Zhou Xianming, the director of the Board of Beijing SMIC Private School, was elected.

On 14 and 15 November 2020, the Badminton competition for primary and secondary school students was organized by the Beijing Municipal Education Commission and Beijing Municipal Sports Bureau, which is the highest level of the area. The contestants participated on behalf of their schools. There were about 1,000 contestants from 216 schools, divided into high school, secondary school, and primary school group A and primary school group B, and playing for boy's singles, girl's singles, boy's doubles, girl's doubles and mixed doubles; in addition, the primary schools also set up mixed group competition. Students of our school won 3rd prize for the primary mixed group, 3rd prize for the girl's doubles of primary school group A, 5th prize for girl's singles of primary school group A, and 4th prize for mixed doubles for the secondary school group.

## Scholarship and Fellowship Program

In order to encourage students with excellent academic performance in schools and help them to 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 the China Soong Ching Ling Foundation (SCLF). By 2020, the program had funded 140 students with a total amount of RMB 700,000 yuan. It's expected that the program can help the students to complete their studies and relieve their burden of life.

In 2020, number of students funded by the Scholarship and Fellowship Program

140

With a total amount of

RMB 700,000

the most influential principal of international schools in China



Badminton competition for primary and secondary school students in Beijing

## Public Welfare Activities

### Zhangjiang Fun Run

SMIC gets itself actively involved in local public welfare activities, and has joined the "Zhangjiang Fun Run" for many years. On September 18, 2020, more than 100 employees from SMIC Shanghai participated in the 13th "Zhangjiang Fun Run", running for joy and love together with employees from other companies in Zhangjiang Hi-Tech Park. In the course of the race, participants encouraged and supported each other to make it to the end, fully embodying the spirit of "happiness and mutual assistance" and "perseverance", and showing the style of SMIC members. At the event, SMIC donated RMB 10,000 to charity as a benevolent gift to school for migrant workers.



### Volunteer Blood Donation

Responding to the local government's call, SMIC actively publicizes and organizes unpaid blood donation activities. In 2020, 131 employees from Shanghai fab participated in the unpaid blood donation and made a blood donation amounting to 25,200 ml.



In 2020, the number of employees from Shanghai fab participated in the unpaid blood donation was

**131**

With a blood donation amounting

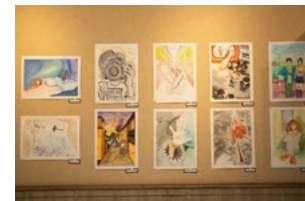
**25,200** ml

## Charity Sales

In December 2020, SMIC Private School in Shanghai held the 17th Charity Sales event. It is a benevolent activity created and inherited by teachers, students, and parents of the school, and it has lasted for 17 years. Through the charity sales of self-made works, the students cultivate good qualities such as kindness, awareness for caring and helping others, and willingness to dedication.

The charity sales included a charity sale and students' market. It closely followed the school's motto ("Honor, Excellence, Community, and Joy"), encouraging students to dedicate love by their efforts, enhancing their awareness of social responsibility, guiding them to help each other when solving problems, and allowing them to experience the importance of team work. During the charity sales at school and online, the children's art work displayed rich imagination and creativity and were filled with love. In addition, the integration of cross-curricular curriculum improved the students' ability to research, calculate, design, communicate, negotiate and cooperate, etc. This year's charity sales market is one of a series of charity sales, as well as a highlight of the activity. The students were both the participants and the leaders. During each part, excellent performance was given throughout the early stages of designing and planning to the late stages of selling.

The activity lasted one month, helping the students express their kindness and learn a good lesson in growth, fully reflecting the old saying, "The rose is in her hand, the flavor in mine". The activity was supported by all of the students, parents, teachers, enterprises and social elites. In 2020, the philanthropic sales raised RMB 420,000 (including RMB 100,000 from the school's donation) which was donated to Zhejiang Xinhua Compassion Education Foundation, Xining Hosteller Family that fosters numerous orphans, and Shanghai Cedar Charity Foundation to help children in need.





## "Be Grateful & Spread Love" Charitable Activity

From November 28 to December 26, 2020, Beijing SMIC Private School held its annual charity activity, "Be Grateful & Spread Love". On November 28, more than 400 primary and secondary school students of the Chinese division carried out a charity run for family. On December 4, the students of the Student Council visited the Children's Aid Foundation's Yizhuang Medical Home. From December 12 to 20, community charity sales of students' works were organized. On December 18, SMIC High School Concert was held. On December 26, the charity performance show was held with online live streaming. With the involvement of kindergarten to high school, the event raised more than RMB 300,000, which has been fully donated to the Children's Aid Foundation's Yizhuang Medical Home and the Beijing Charity Foundation's Child Relief Department.





## "Yi Jia Yi Shan" Clothes Donation Charity Event

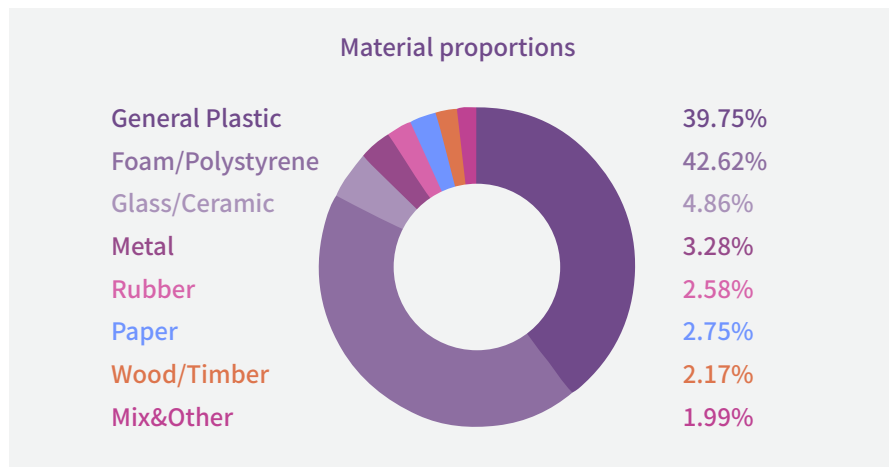
From November to December 2020, all employees of SMIC Tianjin participated in the 3rd "Yi Jia Yi Shan, the clothes are old but still warm" clothes donation charity event. The event raised a donation of about 1,000 kilograms of clothes, which would bring support and hope for the impoverished with our limited strength to solve their supply problems. Through the event, the volunteers learned more about the impoverished group, and SMIC Tianjin strengthened its determination on doing public welfare activities.





## "Pay Attention to the Ocean" - Environmental Protection Activity of Beach Cleanup

On October 31, 2020, SMIC worked with its business partners and organized the "Pay Attention to the Ocean in 2020" beach cleanup activity. 104 volunteers came to Nanhui East Bay and collaboratively got involved in protecting the marine ecological environment. By virtue of collaboration and joint efforts, about 1,708 pieces of garbage that weighed more than 202 kg were collected and cleaned up. Through such concrete actions, we contributed our part and energy to maintaining the sound environment of the ocean.



## Public Welfare Activity Held by Departments

In 2020, each department organized a series of charity and environmental protection activities.





# Appendix

## Summary of Corporate Social Responsibility Indicators in 2020

|           | Performance indicators                                | Units       | Numerical value |              | Performance indicators                      | Units                              | Numerical value |
|-----------|---|-------------|-----------------|--------------|---|------------------------------------|-----------------|
| Econ-omic | Revenue   | Million USD | 3,907.0         | Environ-ment | Total Emissions                             | Million m <sup>3</sup>             | 6,266,287       |
|           | Net Profit  | Million USD | 715.6           |              | Total Amount of NOx                         | tons                               | 52              |
|           | Total Tax Paid (excluding withholding taxes)          | Million USD | 228.0           |              | Total Amount of Sulphur Dioxide             | tons                               | 6               |
|           | R&D Investment  | Million USD | 677.4           |              | Volatile Organic Solvents                   | tons                               | 26              |
| Social    | Employees   | number      | 17,354          |              | Total Greenhouse Gas Emissions              | tons of CO <sub>2</sub> equivalent | 2,129,257       |
|           | Percentage of Female Employees                        | %           | 40%             |              | Total Direct Emissions (scope1)             | tons of CO <sub>2</sub> equivalent | 550,105         |
|           | Labor Contract Signing Rate                           | %           | 100%            |              | Total Indirect Emissions (scope2)           | tons of CO <sub>2</sub> equivalent | 1,579,152       |
|           | Employee Training Coverage                            | %           | 100%            |              | Amount of Hazardous Waste                   | tons                               | 28,706          |
|           | Employee Training Time Per Capita                     | hours       | 16.9            |              | Amount of Production Waste                  | tons                               | 19,247          |
|           | Death Toll Due to Work                                | number      | 0               |              | Amount of Sludge in Water Treatment         | tons                               | 12,529          |
|           | Loss of Working Days Due to Industrial Injury         | days        | 1,080           |              | Amount of Domestic Waste                    | tons                               | 2,127           |
|           | Number of New Occupational Diseases                   | example     | 0               |              | Total Electricity Consumption               | kWh                                | 1,624,790,351   |
|           | Cumulative number of occupational diseases            | example     | 0               |              | Total Natural Gas Consumption               | m <sup>3</sup>                     | 13,727,104      |
|           | Safety Training                                       | times       | 770             |              | Total Steam Consumption                     | tons                               | 289,792         |
|           | Safety Training Attendance                            | person-time | 68,594          |              | Total Water Consumption                     | m <sup>3</sup>                     | 13,458,758      |
|           | Number of Accidents (according to national standards) | time        | 0               |              | Packing Materials Consumption               | tons                               | 390             |
|           | Annual Investment in Safety                           | Million USD | 52.8            |              | Annual Investment in Environment Protection | Million USD                        | 142             |
|           | Social Donation Amount                                | Million RMB | 16.76           |              | Environmental Training                      | times                              | 89              |
|           | Employee Volunteer Service Time                       | hours       | 11,126          |              | Environmental Training Attendance           | person time                        | 13,643          |
|           |   |             |                 |              | ISO 14001 Passing Percentage                | %                                  | 100%            |



## Environmental, Social and Governance Reporting Guide of Hong Kong List Rules Appendix 27

| ESG Guide Number           | Guidance Notes   | Content or Description of the Report                                       | Page       |
|----------------------------|--|--|------------|
| Scope A: Environment       |  |  |            |
| Scope A1: Emissions        |  |  |            |
| General Disclosure         | General Disclosure Of Information on:<br>(a) the policies; and<br>(b) compliance with relevant laws and regulations that have a significant impact on the issuer             | Care for the Environment<br>Environmental Protection Policy and Management | P86<br>P87 |
| KPI A1.1                   | Types of emissions and respective emissions data   | Air Pollutants Control   | P101-102   |
| KPI A1.2                   | Direct and energy indirect greenhouse gas emissions (in tons) and, (where appropriate), intensity (e.g., per unit of production volume, per facility).                       | Greenhouse Gas Verification  | P91        |
| KPI A1.3                   | Total hazardous waste produced (in tons) and, where appropriate, intensity (e.g., per unit of production volume, per facility.)  | Waste Management   | P103       |
| KPI A1.4                   | Total non-hazardous waste produced (in tons) and, where appropriate, intensity (e.g., per unit of production volume, per facility.)  | Waste Management   | P103       |
| KPI A1.5                   | Description of emission target(s) set and steps taken to achieve them.   | Air Pollutants Control   | P101-102   |
| KPI A1.6                   | Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.                             | Waste Management   | P103       |
| Scope A2: Use of Resources |  |  |            |
| General Disclosure         | Policies on the efficient use of resources, including energy, water and other raw materials.   | Care for the Environment<br>Environmental Protection Policy and Management | P86<br>P87 |
| 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   | P94        |
| KPI A2.2                   | Water consumption in total and intensity (e.g., per unit of production volume, per facility)   | Water Resources Management   | P98        |
| KPI A2.3                   | Description of energy use efficiency target(s) set and steps taken to achieve them.  | Main Energy Saving Projects  | P95        |

| ESG Guide Number                      | Guidance Notes   | Content or Description of the Report                                       | Page       |
|---------------------------------------|--|--|------------|
| KPI A2.4                              | Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them. | Main Water Saving Projects   | P99        |
| KPI A2.5                              | Total packaging material used for finished products (in tons) and, if applicable, with reference to per unit produced.                               | Corporate Social Responsibility Indicators Summary                         | P118       |
| The Environment and Natural resources |  |  |            |
| General Disclosure                    | Policies on minimizing the issuer's significant impact on the environment and natural resources.   | Care for the Environment<br>Environmental Protection Policy and Management | P86<br>P87 |
| KPI A3.1                              | Description of the significant impacts of activities on the environment and natural resources and actions taken to manage them.                      | Energy Management  | P93-96     |
|                                       |  | Water Resources Management   | P97-100    |
| B: Social                             |  |  |            |
| Employment and Labor practices        |  |  |            |
| Scope B1: Employment                  |  |  |            |
| General Disclosure                    | Information on:<br>(a) the policies; and<br>(b) compliance with relevant laws and regulations that have a significant impact on the issuer           | Safeguarding of Right and Interests  | P63        |
| KPI B1.1                              | Total workforce by gender, employment type, age group and geographical region.   | Talent Structure   | P62        |
| KPI B1.2                              | Employee turnover rate by gender, age group and geographical region.   | Retention  | P65        |
| B2: Health and Safety                 |  |  |            |
| General Disclosure                    | Information on:<br>(a) the policies; and<br>(b) compliance with relevant laws and regulations that have a significant impact on the issuer           | Occupational Health and Safety   | P71        |
| KPI B2.1                              | Number of deaths due to work   | Summary of Corporate Social Responsibility Indicators                      | P118       |
| KPI B2.2                              | Lost days due to work injury.  | Summary of Corporate Social Responsibility Indicators                      | P118       |
| KPI B2.3                              | Description of occupational health and safety measures adopted, how they are implemented and monitored   | Occupational Health and Safety   | P71-72     |



| ESG Guide Number                   | Guidance Notes  | Content or Description of the Report | Page |
|------------------------------------|---|--------------------------------------|------|
| 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           | P69  |
| KPI B3.1                           | The percentage of employees trained by gender and employee category (e.g., senior management, middle management).   | Career Development Booster           | P69  |
| KPI B3.2                           | The average training hours completed per employee by gender and employee category.  | Career Development Booster           | P69  |
| B4: Labor Standards                |   |                                      |      |
| General Disclosure                 | Information on:<br>(a) the policies; and<br>(b) compliance with relevant laws and regulations that have a significant impact on the issuer                          | Safeguarding of Right and Interests  | P63  |
| KPI B4.1                           | Description of measures to review employment practices to avoid child and forced labor.   | Safeguarding of Right and Interests  | P63  |
| KPI B4.2                           | Description of steps taken to eliminate such practices when discovered.   | Safeguarding of Right and Interests  | P63  |
| Operating Practices                |   |                                      |      |
| Scope B5: overview of supply chain |   |                                      |      |
| General Disclosure                 | Policies on managing environmental and social risks of the supply chain.  | Supply Chain Overview                | P58  |
| KPI B5.1                           | Number of suppliers by geographical region.   | Supply Chain Overview                | P58  |
| KPI B5.2                           | Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored. | Supplier Access                      | P58  |
|                                    |   | Supplier Assessment and Evaluation   | P59  |
| B6: Product Responsibility         |   |                                      |      |
| General Disclosure                 | Information on:<br>(a) the policies; and<br>(b) compliance with relevant laws and regulations that have a significant impact on the issuer                          | Product Quality Management           | P54  |

| ESG Guide Number               | Guidance Notes   | Content or Description of the Report       | Page     |
|--------------------------------|--|--|----------|
| KPI B6.1                       | Percentage of total products sold or shipped subject to recalls for safety and health reasons.   | Customer Evaluation and Complaint Handling | P56      |
| KPI B6.2                       | Number of products and service-related complaints received and how they are dealt with.  | Customer Evaluation and Complaint Handling | P56      |
| KPI B6.3                       | Description of practices relating to observing and protecting intellectual property rights.  | IPR (Intellectual Property Protection)     | P45      |
| KPI B6.4                       | Description of quality assurance process and recall procedures.  | Product Quality Management                 | P54      |
|                                |  | Customer Evaluation and Complaint Handling | P56      |
| KPI B6.5                       | Description of consumer data protection and privacy policies, how they are implemented and monitored.  | Customer Information Protection            | P50      |
| B7: Anti-corruption            |  |  |          |
| General Disclosure             | Information on:<br>(a) the policies; and<br>(b) compliance with relevant laws and regulations that have a significant impact on the issuer   | Business and Ethics                        | P39-40   |
| 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 Investigations          | P41      |
| KPI B7.2                       | Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.   | Ethics Hotline and Investigations          | P41      |
| Community                      |  |  |          |
| Scale 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. | Care for Society                           | P106-107 |
| KPI B8.1                       | Focus areas of contribution (e.g., education, environmental concerns, labor needs, health, culture, sport).  | Care for Society                           | P106     |
| KPI B8.2                       | Resources contributed (e.g., money or time) to the focus area.   | Care for Society                           | P106-107 |

## Future Prospects

Looking forward to 2021, opportunities and challenges coexist. On the one hand, the rise of new formats, new models and new applications, such as AI and Internet of things, drives demand for chips. At present, worldwide foundry capacity remains tight, customer demand is growing, but capacity expansion cannot keep up. On the other hand, the Company still faces the impact of uncertainties from the U.S. "Entity List", the delivery time of equipment procurement will be longer than in the past, and the progress of capacity building may not be as expected. Although we cannot completely control the irresistible external factors, we can cultivate new opportunities amidst crisis, open new frontiers in the changing landscape, and explore a more suitable path for SMIC's sustainable development.

While continuing to operate legally, we will:

- Continue to closely cooperate and communicate with suppliers, clients and relevant governmental departments to promote the Export Licensing applications, make every effort to guarantee the continuity of operation as well as expending production capacity so that the clients demand can be met.
- Continue to deepen reform, optimize the Company governance system, and improve the working efficiency of employees;
- Continue to implement regular epidemic prevention and control so as to create a healthy, safe and humane working and living environment for employees
- Continue to promote projects on energy conservation and emission reduction, respond to the appeals for achieving carbon peak and carbon neutralization, and to implement the responsibility of environmental protection
- Continue to participate in public welfare activities and charity donation projects to contribute to the society

In the future, the Company will continue to uphold to the concept of "caring for people, caring for the environment, caring for society", fulfilling its promise to stakeholders in compliance with the law, and adhering to a sustainable development while forging ahead.

## Comments and Advice

This report is the 12th annual corporate social responsibility report issued by SMIC to the public. To continue improving our social responsibility management, implementation ability, and level of our social responsibility, we would greatly appreciate your opinion and advice. Please help to answer the relevant questions raised in the feedback form and choose one of the following ways to contact us.

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1.Your overall assessment of SMIC's CSR report is?

☐ Good ☐ Somewhat good ☐ Neutral ☐ Bad

2.What topics do you care most about in the report?

☐ Innovation management ☐ Occupational Health and Safety  
☐ Vocational development ☐ Supply chain management

☐ Climate change and energy management ☐ Customer service  
☐ Charity ☐ Others

3.Do you think this report can reflect the significant economic, social and environmental impact of SMIC?

☐ Yes ☐ Neutral ☐ No ☐ I do not know

4.What do you think of the clarity, accuracy and completeness of the information, data and indicators disclosed in this report?

☐ High ☐ Somewhat high ☐ Neutral

☐ Somewhat low ☐ Low

5.What aspects of the report do you think need to be improved?

☐ Page design ☐ Length of reports ☐ Topic coverage  
☐ Format of publication/media

Welcome to give your comments and suggestions on SMIC CSR and this report:

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