SMIC

2018
SMIC

**CORPORATE SOCIAL
RESPONSIBILITY REPORT**

Introduction

This report is the tenth CSR report publicly released to the society by Semiconductor Manufacturing International Corporation (SMIC), which describes the principles SMIC adheres to in practicing its corporate social responsibility and the work it has done in 2018. The report covers the economic, environmental and social sustainable development issues of concern to key stakeholders.

Reference Standards

This report is developed based on the Environmental, Social and Governance Reporting Guide contained in Appendix 27 of the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited (SEHK), with reference to the major principles in Global Reporting Initiative(GRI)'s Sustainability Reporting Standards (GRI Standards), Economics Division Chinese Academy of Social Sciences' Chinese CSR Reporting Guide (CASS-CSR4.0), China Federation of Industrial Economics(CFIE)'s Guidance on Social Responsibilities of Industries(CSRI-China), Chinese Electronics Standardization Association (CESA) SJ/T 16000-2016 Guidance on Social Responsibility of Information and Communication Technology Industry, and ISO26000:2010 Guidance on Social Responsibility.

Reporting Scope

The reporting scope of this report includes SMIC, its subsidiaries and major shareholding companies and is consistent with the organization scope of SMIC's Annual Report. For the convenience of expression, Semiconductor Manufacturing International Corporation may be expressed as SMIC, "we" or "the Company". In addition, the "state" and "government" without full name in the report refers to People's Republic of China and its administrative organs.

Reporting Period

The reporting period of this report is from January 1 to December 31, 2018. To make the report more readable, some parts or data are dated back to previous years.

Release Cycle

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

Description on Report Editing and Data Source

Members of the "CSR Committee" act as the report editors and provide information and data on CSR related businesses of all functional departments. The data are compiled, edited and revised by the CSR Department of the company, and then reviewed and confirmed by the members of the "CSR Committee". At last, a third party is invited for report rating.

Release Form

This report is released in both paper and electronic formats and is available in Chinese (both traditional and simplified) and English versions. The electronic version of the report is available at the website of SMIC (www. smics.com).

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Chairman Message

Dear readers:

The year of 2018 marks the 18th anniversary of SMIC's founding and the 10th anniversary of the CSR report. Global political and economic landscape became complex in the year. As the growth rate of integrated circuit industry slowed down under the influence of smartphone saturation and trade friction, and the end of 2018, cyclical slack season came, the industry faced great pressure and challenges. In this context, the company kept on working hard to deepen the reform and accumulate strength. With the hard work and solidarity of all SMIC staff, the company still made remarkable progress in 2018.

Technology is the core competitiveness of integrated circuit manufacturing enterprises. In 2018, SMIC invested more than $550 million in technology research and development, much higher than the industry average. Our 28 nm HKC+ has gone into mass production successfully with yield reaching up to the industry standards; the most advanced 14 nm FinFET technology in mainland China is advancing rapidly and has entered the stage of customer introduction. We have also made technological breakthroughs in the field of segmentation and have always been the preferred partner for customers in mainland China. We remained committed to focus on advancing technology, establishing platforms and building partnerships, going all out to provide competitive services for our customers. In 2018, SMIC achieved sales revenue of $3.36 billion, up 8.3% from 2017.

In 2018, we kept meet the hardships ahead with courage and continued to make sweeping changes, trying to achieve more standardized corporate governance and more efficient staff output by adjustment and optimization of the organizational structure. The essence of the reform is to enhance the competitiveness of the company and lay a solid foundation for the development of the next stage, with the focus placed on the responsibility for stakeholders such as employees, shareholders and customers. We will continue to uphold the spirit of "adhering to the mandate of renovation" and work with all staff to overcome the difficulties and further accelerate the pace of deepening reform.

No matter how the outside world changes or how uncertainty mounts up, SMIC will always stick to the CSR strategy of "Caring for people, the environment, and society". By relying on the CSR Committee and working with many other functional departments, SMIC will integrate the idea of sustainable development into all aspects of business operation and work together with partners to perfect the ecological chain of the IC industry. In 2018, we accelerated the construction of Shanghai Tangzhen SMIC Garden Phase II project, continuously improved the quality of the cafeteria, and actively carried out staff care projects, as we seek to deliver an ideal place where the majority of employees could live and work in peace and contentment. We actively promoted green production. With concerted efforts of all departments, we have completed 15 environmental protection projects, including 13 energy-saving projects and 2 water-saving projects, saving 4,826,434 kWh of electricity and 29,301 tons of water in total. We keep on advocating low-carbon travel and build a paperless office environment, trying to achieve the goal that "everyone cares about environmental quality and participates in environmental protection".

The "SMIC Liver Transplant Program for Children" launched by SMIC has been implemented for more than six years, and we have donated 21 million yuan together with our industry partners, helping 385 children with liver diseases from financially-challenged families to regain their lives. We keep organizing many social public welfare activities every year to encourage employees to participate actively and enhance their public welfare awareness. By the end of 2018, employees had offered volunteer services for up to 19,277 hours during the year, making their contribution to building "beautiful scenery and harmonious society". We have received the CSR award for the fifth consecutive year granted by Mirror Post Hong Kong, and continued to be listed in the Hang Seng corporate sustainability benchmark index enterprises. We are keenly aware that sustainable development will never end. In the process of pushing for advanced technology and building a world-class company, we always attach top priority to abiding by the bottom line and principles, and fulfilling our responsibilities to all stakeholders.

As the saying goes, "everything must be only done then been understood profoundly", we will try to be better corporate citizens in the new year, and continue to promote activities in the three key areas of "personnel care", "environmental protection" and "social contribution". Together with all stakeholders, we will continue to make new strides. Please continue to pay attention to SMIC. We will spare no effort to achieve a better future with the goal of continuous growth.

Dr. Zhou Zixue, Chairman
June 2019

Core Values

◉ **Vision**

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

◉ **Mission**

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

◉ **Value**

Integrity

We will be honest, defend important principles, commit to our words, and be responsible towards how our behavior influences the company and society.

Customer Service

We will take the initiative to understand and fulfill the customer's needs with the premise of following the company's information security policies and set up a long term win-win partnership with them.

Quality

We will conform to quality standards and carry out each task with a mindset on total employee participation, putting quality first and continual improvements.

Execution

We standardize processes and follow strict disciplines. We will meet our goals through rigorous planning, efficient execution, detail following up and timely problem resolution.

Innovation

We will foster innovation continuously and actively carry out product technology R&D, increasing productivity and optimizing work procedures.

Team

We are all members of one SMIC team. Company goals will be achieved by cooperation between disciplines, all taking the proper ownership and accountability while understanding each other's role and challenges for success.
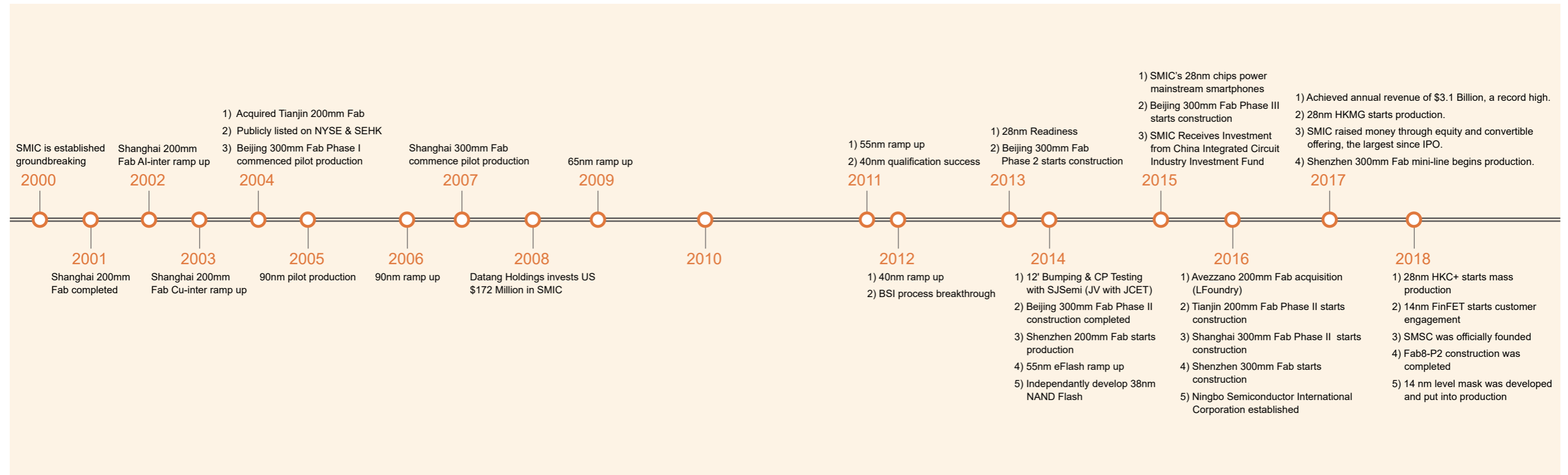
01 About SMIC

General Introduction

Market Position

Products and Services

Finance and Taxation Information

SMIC MILESTONES

SMIC is established groundbreaking
2000

2001
Shanghai 200mm Fab completed

2002
Shanghai 200mm Fab Al-inter ramp up

2003
Shanghai 200mm Fab Cu-inter ramp up

2004
1) Acquired Tianjin 200mm Fab
2) Publicly listed on NYSE & SEHK
3) Beijing 300mm Fab Phase I commenced pilot production

2005
90nm pilot production

2006
90nm ramp up

2007
Shanghai 300mm Fab commence pilot production

2008
Datang Holdings invests US $172 Million in SMIC

2009
65nm ramp up

2010

2011
1) 55nm ramp up
2) 40nm qualification success

2012
1) 40nm ramp up
2) BSI process breakthrough

2013
1) 28nm Readiness
2) Beijing 300mm Fab Phase 2 starts construction

2014
1) 12' Bumping & CP Testing with SJSemi (JV with JCET)
2) Beijing 300mm Fab Phase II construction completed
3) Shenzhen 200mm Fab starts production
4) 55nm eFlash ramp up
5) Independantly develop 38nm NAND Flash

2015
1) SMIC's 28nm chips power mainstream smartphones
2) Beijing 300mm Fab Phase III starts construction
3) SMIC Receives Investment from China Integrated Circuit Industry Investment Fund

2016
1) Avezzano 200mm Fab acquisition (LFoundry)
2) Tianjin 200mm Fab Phase II starts construction
3) Shanghai 300mm Fab Phase II starts construction
4) Shenzhen 300mm Fab starts construction
5) Ningbo Semiconductor International Corporation established

2017
1) Achieved annual revenue of $3.1 Billion, a record high.
2) 28nm HKMG starts production.
3) SMIC raised money through equity and convertible offering, the largest since IPO.
4) Shenzhen 300mm Fab mini-line begins production.

2018
1) 28nm HKC+ starts mass production
2) 14nm FinFET starts customer engagement
3) SMSC was officially founded
4) Fab8-P2 construction was completed
5) 14 nm level mask was developed and put into production

1.1 General Introduction

Semiconductor Manufacturing International Corporation ("SMIC"; SEHK: 981) was established in mainland China in 2000. As of today, SMIC has maintained to be as one of the leading IC pure-play foundries in the world and the largest China-based pure-play foundry. SMIC provides wafer foundry and technology services from 0.35-micron (μm) to 14-nanometer (nm) to customers worldwide.

SMIC offers one-stop solutions ranging from IC design enablement and IP development services, mask making to wafer manufacturing, wafer sorting, wafer probing, wafer bumping, turnkey services, and assembly and final testing through a strong network of established partners. With complete foundry solutions, SMIC is committed to help customers to shorten time-to-market in the most cost effective way.

Headquartered in Shanghai, China, SMIC has established manufacturing and service bases worldwide. SMIC has a 300mm (12") wafer fabrication facility (fab) and a 200mm (8") mega-fab in Shanghai; a 300mm mega-fab and a joint venture 300mm (12") fab for advance nodes in Beijing; a 200mm (8") fab in Tianjin another 200mm (8") fab in Shenzhen; and a joint venture 300mm (12") wafer bumping joint venture in Jiangyin, China. In 2016, SMIC acquired the majority of shares of LFoundry, a 200mm fab located in Avezzano, Italy. In 2018, SMIC had a total of 253.3 kWPM (thousands Wafers Per Month) 200mm (8") installed capacities and 88kWPM 300mm (12") installed capacities.

SMIC has sales and customer service offices in China, the U.S., Europe, Japan, Taiwan, and a representative office in Hong Kong. Throughout SMIC's global locations, SMIC offers seamless services and support to its customers worldwide. With a commitment to excellence, SMIC has been consistently delivering quality products and services to world class Integrated Device Manufacturers (IDMs) and Fabless IC design companies, and system companies. IC products that SMIC manufactured for customers are widely used in communication, computing, consumer, automobile, industrial and related applications.
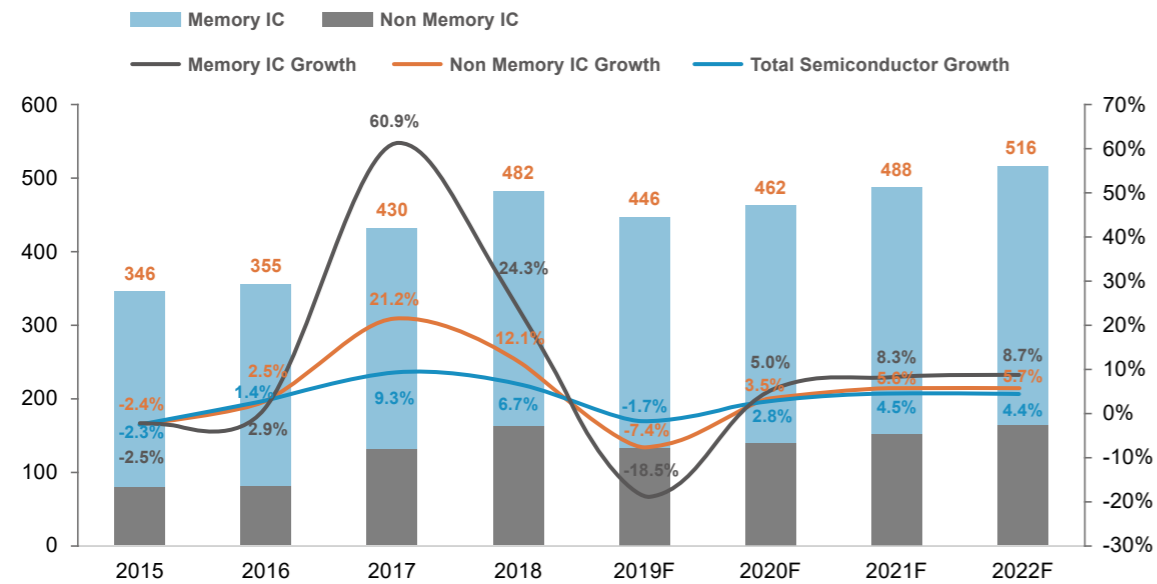
1.2 Market Position

1.2.1 Global Semiconductor Market

According to IHS Markit, the worldwide semiconductor revenue in 2018 was estimated to be $482Bn, with annual growth rate of 12.1%. Memory products and non-memory products were estimated to grow by 24.3% and 6.7% respectively.
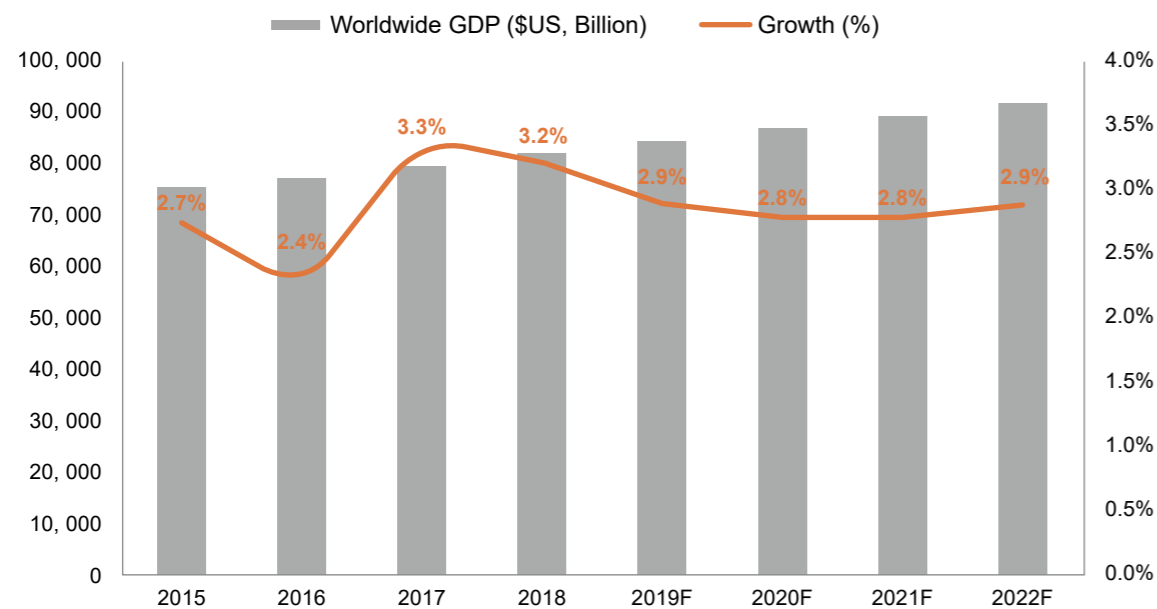
Global Semiconductor Revenue Forecast by Device Type
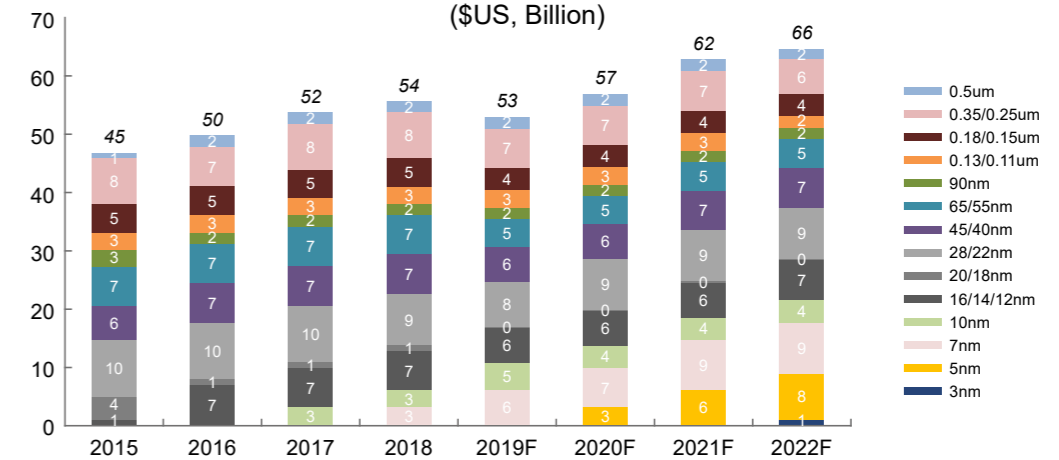($US, Billion)

Data Source: IHS Markit, AMFT, 1Q19, Team Analysis

For the foundry industry, IHS Markit estimated the revenue of the pure-play foundry market was $54.4B in Y18, with an annual growth of 4.0%. The huge amount of capital spending required for high volume wafer fab facilities at advanced nodes makes the vertical IC design and manufacturing model and IDM companies' adoption of an outsourcing strategy to be more certain, along with the ongoing growth of the semiconductor market, and will contribute to the long-term growth of the foundry market. It's expected that the pure-play foundry market will reach $66.1B in 2022, with a 2018-2022 Compound Annual Growth Rate (CAGR) of 5.0%.

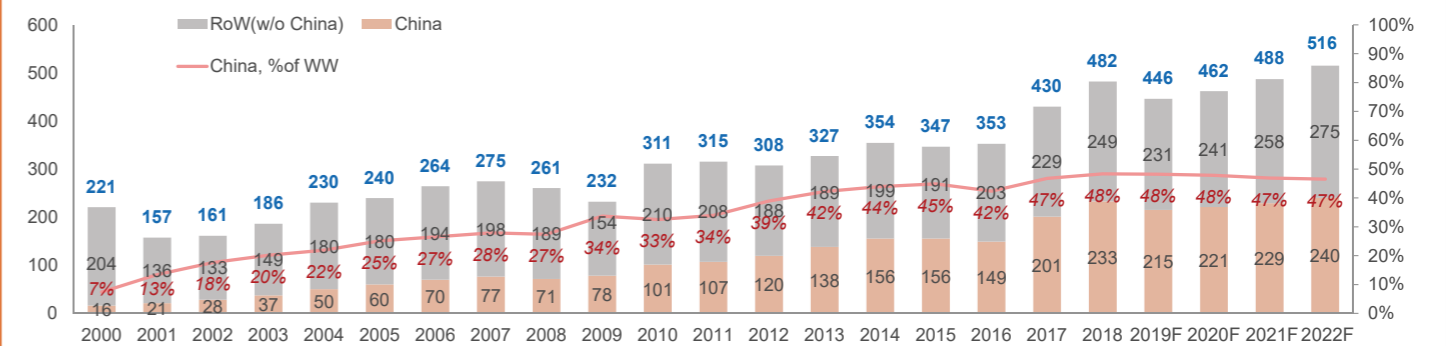**Global Pure-Play Foundry Revenue Forecast**
($US, Billion)

Data source: IHS Markit, Pure-Play Foundry Market Tracker, 1Q19, MKT Analysis

Looking forward, the global economy will keep positive growth, with a GDP annual growth rate of around 2.9%. As before, the overall performance of the semiconductor industry will be closely tied to the global economy.

1.2.2 China Semiconductor Market

With the high concentration of electronics production related industries, China continues to have the number one semiconductor demand in the world. In 2018, the worldwide semiconductor revenue reaches $482Bn, with YoY rate of 12.1%. The main market-driven applications include mobile communication, 5G, IoT, AI, Automotive and industrials. China represents 48% of global semiconductor market shares. Local brands and IC designers continues to thrive.
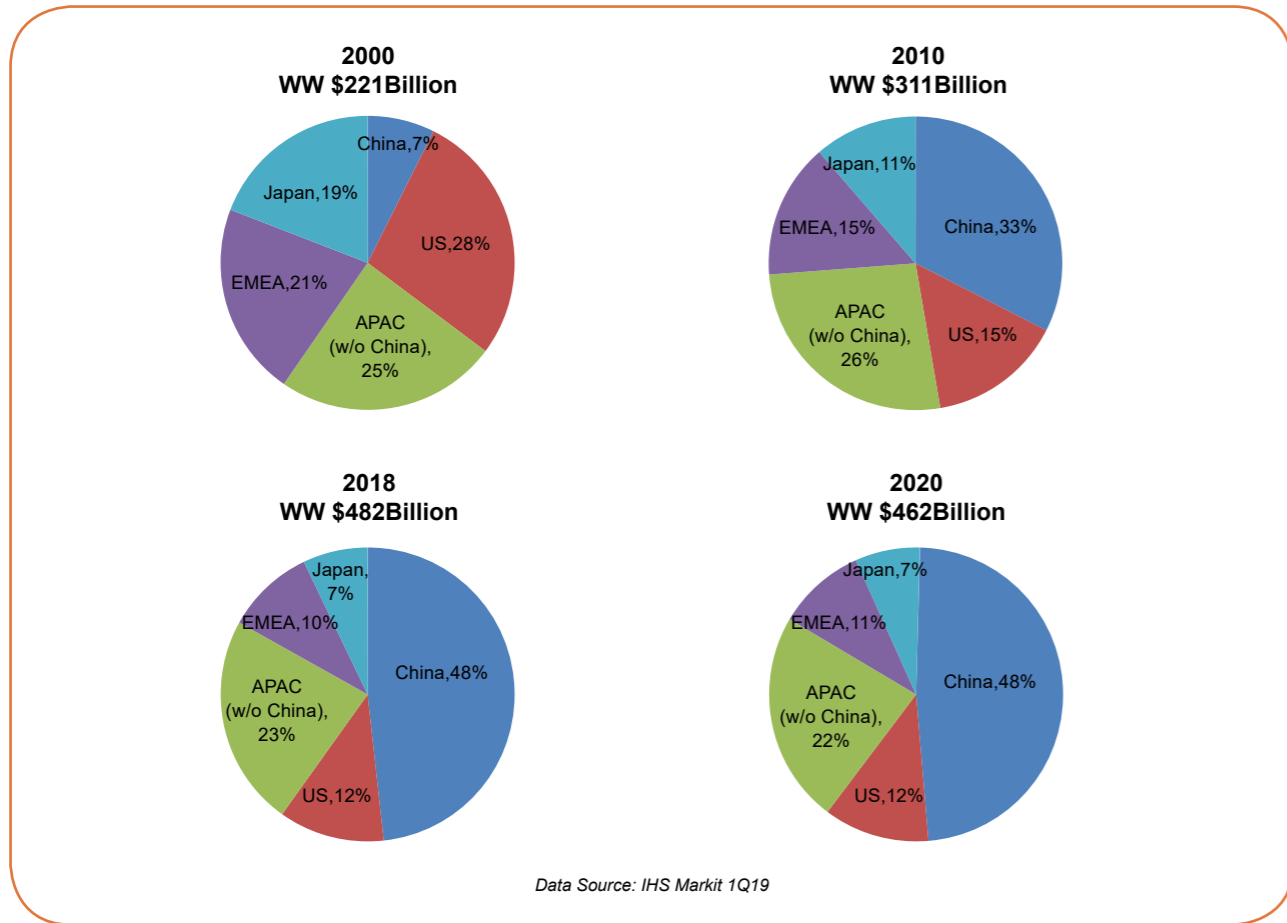

Worldwide GDP & Growth Forecast

Data Source: IHS, Feb. 2019

Global Semiconductor Revenue Forecast by Region
($US, Billion)

Data Source: IHS Markit 1Q19

2000
WW $221Billion

China,7%
Japan,19%
EMEA,21%
APAC (w/o China), 25%
US,28%

2010
WW $311Billion

Japan,11%
EMEA,15%
APAC (w/o China), 26%
China,33%
US,15%

2018
WW $482Billion

Japan, 7%
EMEA,10%
APAC (w/o China), 23%
China,48%
US,12%

2020
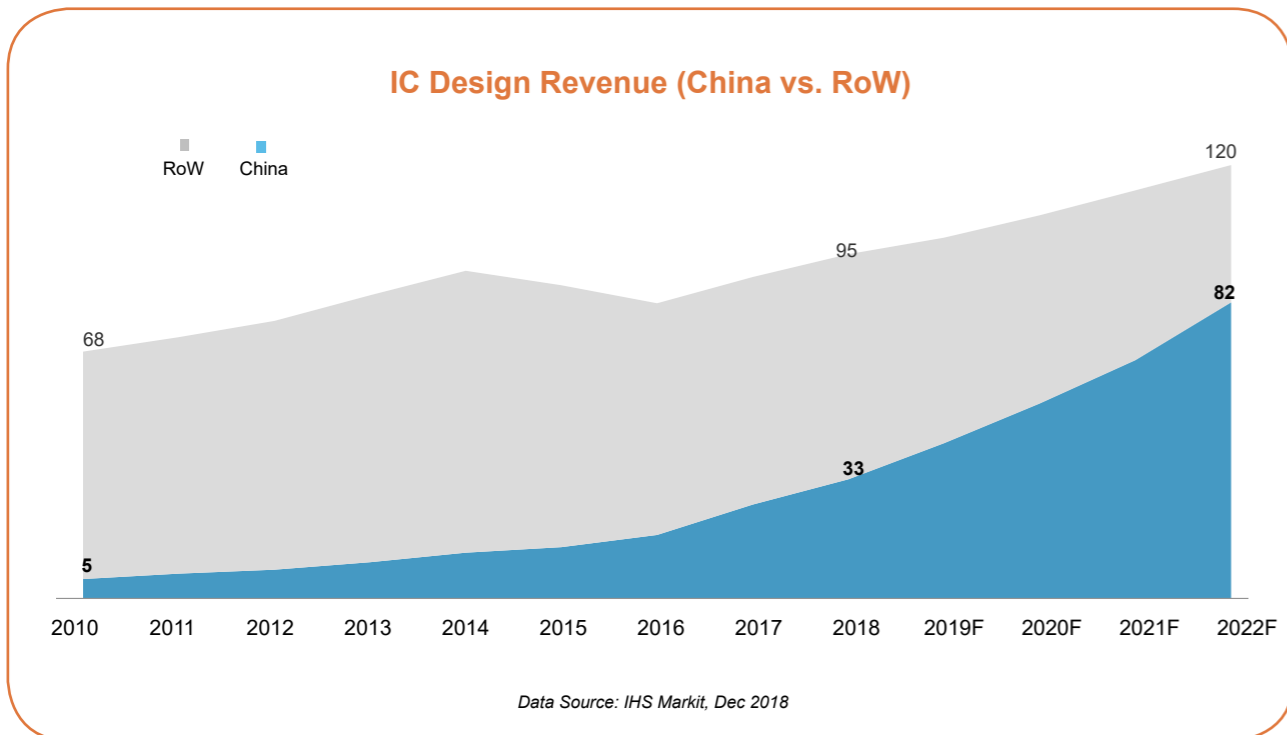**WW $462Billion**

Japan,7%
EMEA,11%
APAC (w/o China), 22%
China,48%
US,12%

Data Source: IHS Markit 1Q19

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

IC Design Revenue (China vs. RoW)

RoW   China

120
95
68
82
33
5

2010 2011 2012 2013 2014 2015 2016 2017 2018 2019F 2020F 2021F 2022F

Data Source: IHS Markit, Dec 2018

The traditional electronics market includes Automotive, Computer, Communication, Consumer, and Industrial. Most of these end products now incorporate the concepts of Internet of Things (IoT), Artificial Intelligence (AI), Deep Learning (DL), Machine Learning (ML), etc., which are expected to bring in new opportunities for the semiconductor industry with various requirements for ICs, such as high density, low power consumption, and high-speed related features.

In 2017, the Chinese government launched its "Development Plan for the New Generation of Artificial Intelligence" and "3-Years Action Plan to Accelerate the New Generation of Artificial Intelligence Industry (2018-2020)". Four key missions include:

(I) Develop smart products, such as Connected Vehicles, Smart Robotics, Drones, Medical Imaging Diagnostics, Video/ Imaging Identification, Voice Interaction, Smart Translation System, Smart Home, etc.,

(II) Prioritize the development of Smart Sensors, Neural Network Chips, Open-source Platforms, etc. to lay a solid foundation for the software and hardware needed by the AI industry,

(III) Deepen developments on Smart Manufacturing, encourage the application of AI technology in industry,

(IV) Build up Resource Libraries, Standards, IP Service Platforms, Smart Internet Infrastructure, and other public supporting systems, to perfect and develop the implementation of AI.

Mobile/5G   **IoT**   **Automotive / Industrial**   **Infrastructure**

Mobile/5G	IoT		Automotive / Industrial	Infrastructure
• 5G / LTE	• LPWAN/NB-IoT	• Smart Grid	• ADAS	• HPC
• AMOLED	• Smart Home	• Smart Farming	• V2V, V2I, V2X	• SCM
• Bio-Sensing	• Smart Wearable	• Smart Industrial	• Autonomous Driving	• Cloud Storage
• 3D-CIS	• Smart Medical	• Security	• Radar, Sensor Hub	• Optical Transport Network (OTN)
• Modular structure	• Smart Logistics	• M2M	• EV / HEV	• AI (Cloud)
• Quick / Wireless Charging	• Smart City	• Smart Dusts	• AI (Edge)	
• AR/VR		• AI (Edge)		
• AI (Edge)				

The implementation of this initiative will bring vast opportunities for the electronics and semiconductor industries. Being in China and as a critical part of the semiconductor and electronic ecosystem, SMIC plays an integral role as the up-stream technology supplier for many semiconductor, electronics, and system partners.

1.2.3 SMIC's Competitive Advantages

SMIC is one of the few pure-play foundries in the world capable of offering a complete portfolio on both mature and advanced wafer manufacturing process technologies. SMIC has process technologies, ranging from 0.35-micron (μm) to 28-nanometer (nm) in mass production, and 14nm FinFET technology under development. In 2018, SMIC was ranked as the 5th largest pure-play foundry in the world and had approximately 5.3% of market share according to Gartner's analysis. SMIC has several competitive advantages which are listed in, but not limited to, the below points:

- We offer one-stop service on both advanced technologies and specialty technologies.
- We continuously invest in R&D, IP development, and ecosystem building.
- We maintain a high utilization rate compared to the industry's global utilization rate.
- We are the largest pure-play foundry in China with a complete product portfolio.
- We are the most preferred foundry by Chinese IC Designers.
- Our proximity to the China market, the largest and fastest growing region of electronic manufacturing and consumption.
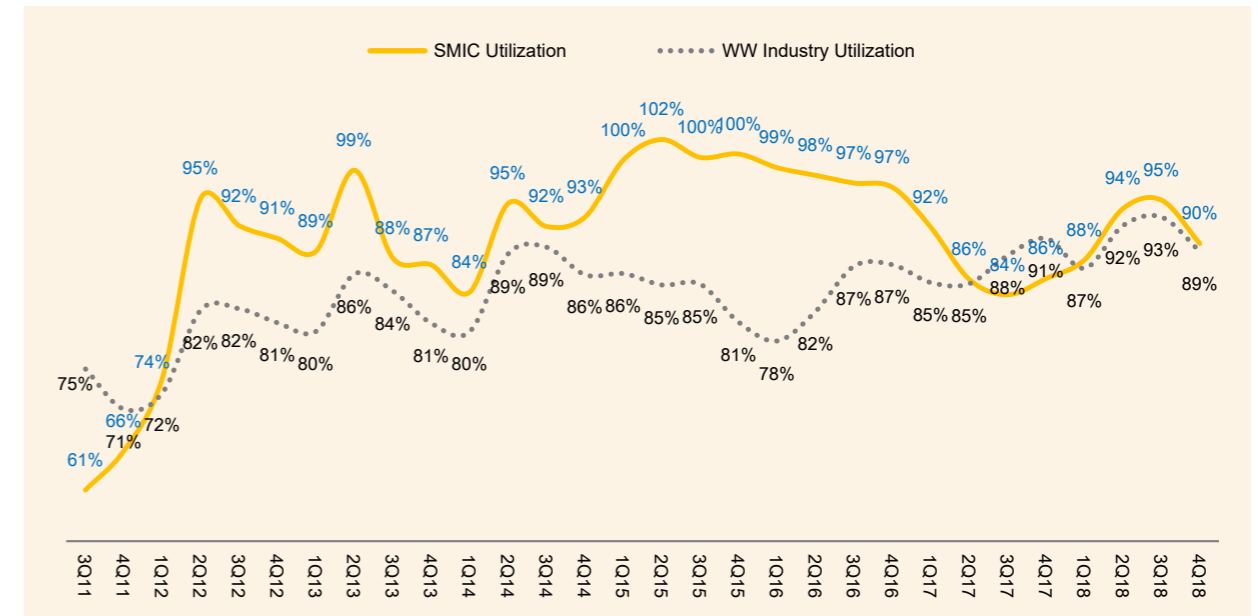

SMIC is one of the few companies that could offer advanced node solutions

Data Source: ARM, SMIC internal studies, 4Q18

SMIC has improved its overall business operations through increasing its fabs' utilization rates and outperforming the industry on utilization rate.
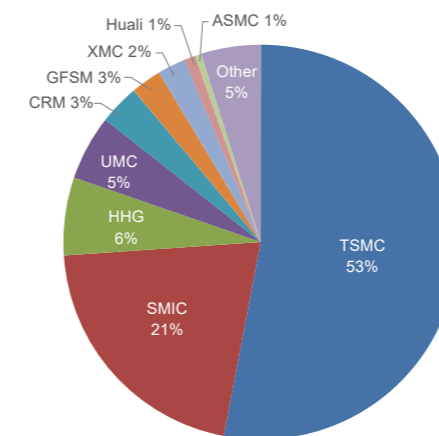


SMIC Outperforms Industry on Utilization Rate

Data Source: IHS Feb. 2019, SMIC Company data

Over the past decade, SMIC has been the number one pure-play foundry in China. In Y18, SMIC's estimated market share in China region was about 20.9%. With its strong market position and proximity to China, numerous world class IC design companies have selected SMIC as their ideal foundry partner in China. SMIC has been selected by local Chinese IC design companies as their most preferred pure-play foundry in China in the past consecutive years. SMIC continues to win customers' trust and partnerships through providing quality products and service to help customers to shorten time-to-market, offering value-added innovations on differentiated mature and advanced technologies, and building strategic partnership with customers for the China and worldwide markets.
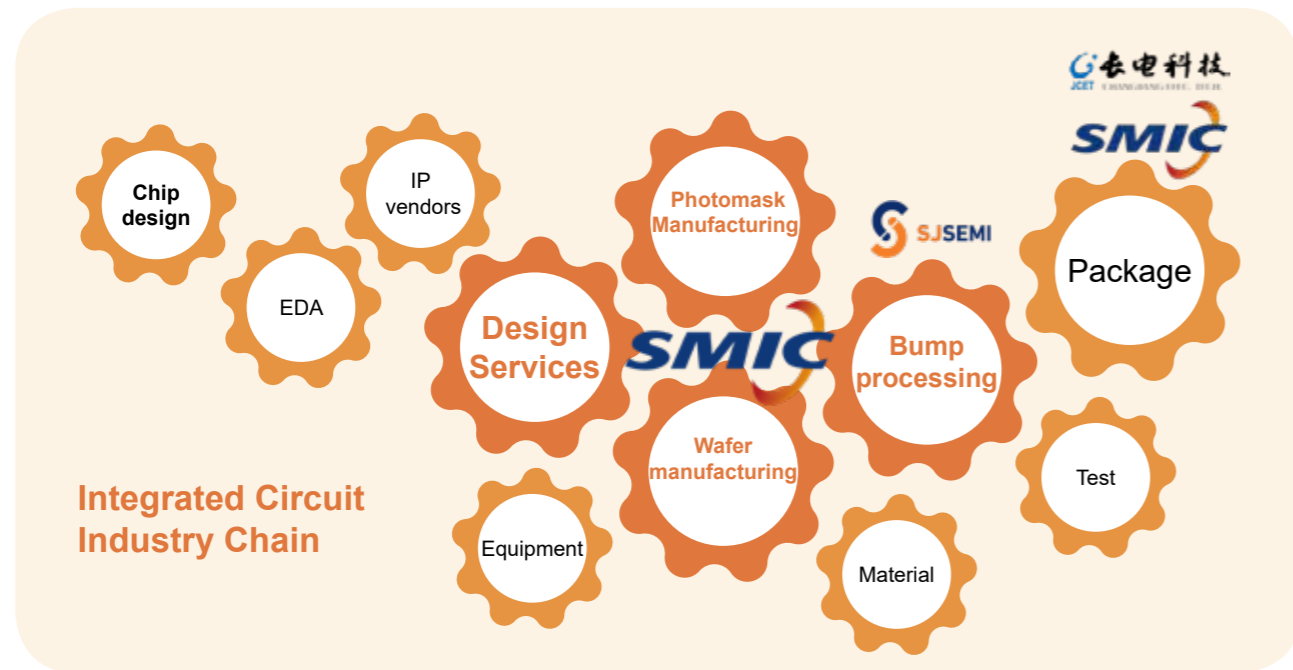

Chinese Foundry Market Share Y18   **Worldwide Foundry Market Share Y18**
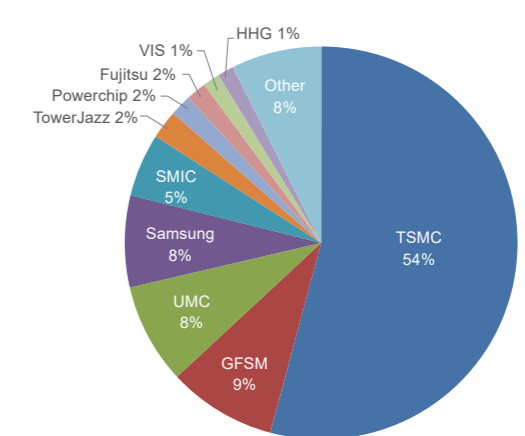
Data Source: IHS China, 2018

1.3 Products and Services

Integrated Circuit Industry Chain

1.3.1 Technology Portfolio

SMIC is focused on balancing the developments of mature and advantaged technologies. Currently, SMIC offers a comprehensive product and technology portfolio.

SMIC Technology Portfolio

- Release/In Production
- Major Focus (in development)
- Future Plan
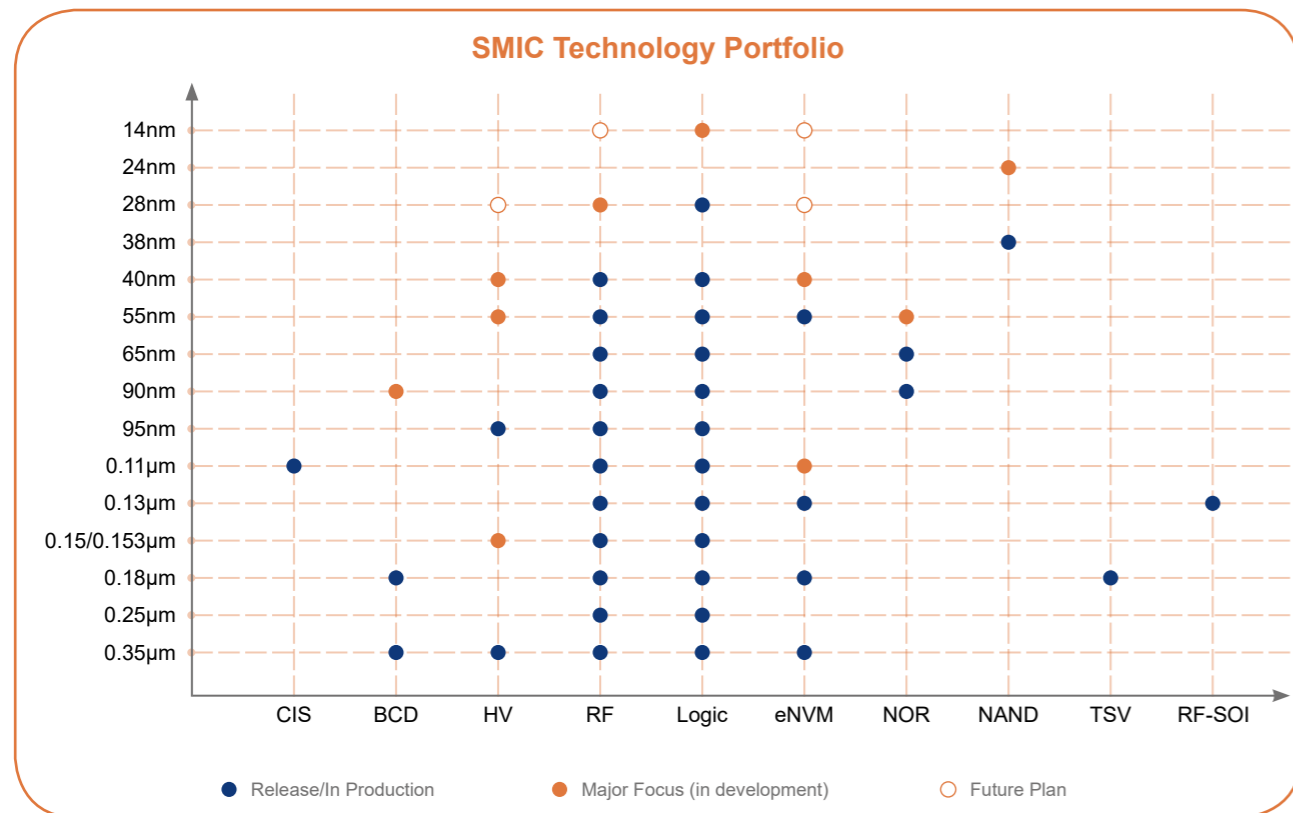
SMIC technology portfolio comprises Logic, Mixed-Signal/RF, ULP (Ultra-Low-Power) devices, high-voltage/BCD, IGBT, non-volatile memory (NVM, such as NOR Flash, NAND Flash, and emerging memories), embedded NVM (eNVM such as eFlash, eEE-PROM, OTPROM), Display Driver IC (DDIC), Touch Control IC (TCIC), CMOS Image Sensors (CIS), Fingerprint Sensors, MEMS, TSV/3DIC, WLSCP, and related foundry solutions at various technology nodes.

1.3.2 IC and Application Scopes

In general, SMIC's foundry solutions are applied in related fields as shown in the table below. More than 80% of SMIC's revenue comes from communication and consumer sectors with driving applications such as smartphone/feature phones, tablets, DTV, STB, smartcards, DSC/DV, home appliances, memory storage, consumer electronics, etc.

IC and Application Scopes

Category	Applications
Power Management	○ PMIC, PMU, Discrete Power
Wire-line Communication	○ Flash Controller, USB, Bridge IC, TCON, Audio, Video
Image & Display	○ Image & Display
MCU	○ Touchpad controller, MCU
Smart Card	○ Financial Card, Bank Card, ID Card Transportation Card, ePassport, et.
Wireless Connectivity	○ Wi-Fi, Bluetooth, GPS, AM/FM, NFC, etc.
Mobile Computing	○ Mobile Phone, Tablets, Application Processors, Baseband, SoC
Memory	○ NOR Flash, NAND Flash, eNVM
Digital Home	○ TV, Set-Top Box, Game Consoles, Projector
Smart Everything	○ IoT, Wearable, Smart Home, etc.
Automotive	○ Infotainment, ADAS, Pre-installed, After Sales Market, etc.

1.3.3 IC Services

IP Development Service & Design Service	SMIC offers a vast and diverse portfolio of semiconductor intellectual property (IP) blocks from 0.35μm to 28nm to support the design needs of customers. SMIC's design services support customers' designs for production, using proven technologies to allow improvements in chip complexity, performance and functionality, while reducing power consumption and optimizing die size. SMIC's services minimize chip design risk and shorten products' time-to-market.
Mask Making Service	SMIC's mask shop provides mask manufacturing service for SMIC's foundry customers and other fabs and institutions. Currently, SMIC has China's largest and most advanced mask making facility with 0.50μm to 28nm in production and also with 20nm and 14nm capabilities. Equipped with state-of-the-art equipment and tools, the facility offers binary masks and phase shift masks complete with optical proximity correction (OPC). Both 5"×5" and 6"×6" reticles are available for G-line, I-line, DUV and ArF steppers and scanners.
Multi Project Wafer (MPW) Service	SMIC's Multi-Project Wafer (MPW) program 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 0.18μm to 28nm on a regular basis.
Wafer Probing and Testing Services	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 build repair and maintain epoxy probe cards up to 16 DUTs as well as low-leakage probe cards.
Bumping Service	Bumping is a necessity for wafer yield testing of advanced front-end IC manufacturing technologies and is the basis of the 3D wafer level packaging technology development. SMIC can offer 8" bumping service in-house and also founded a joint venture with JCET for 12" bumping and related testing service. SMIC's bumping line is capable of lead-free solder bump processing, redistribution layer (RDL), WLCSP processing, and Die Processing Services (DPS). The solder bumping processes are compatible with both Al and Cu pads. This service can be used on products such as SoC, RF devices, and high performance ICs that require flip chip or wafer-level chip scale packaging. DPS, which takes either bumped or WLCSP products from wafer form into die form (including processes such as testing, die saw and tape & reel), is also offered for customers who require backend services.

1.4 Finance and Taxation Information

1.4.1 Financial Performance

In 2018, SMIC made another splendid achievement in business operation and the operating revenues reached another historical high. The revenues reached $3,360 million in the full year of 2018, an increase of 8.3% over the same period; the gross margin was $746.7 million, with the net profit margin accounting for 2.3%. The profit attributable to Owners of SMIC was $134.1 million. See the annual report for more financial information: http://asia.blob.euroland.com/press-releases-attachments/1131978/HKEX-EPS_20190329_003444231-0.PDF

Main Financial Indicators

Financial Index	2015	2016	2017	2018
Revenue (million USD)	2,236.4	2,914.2	3,101.2	3,360.0
Growth Rate (%)	13.5%	30.3%	6.4%	8.3%
Profit attributable to Owner of the Company (million USD)	253.4	376.6	179.7	134.1
Profit Growth Rate of Owner of the Company (%)	65.7%	48.6%	-52.3%	-25.4%
Return on Equity of Owners of the Company (%)	6.8%	9.1%	3.5%	2.5%
Assets Liabilities Ratio (%)	41.1%	46.6%	43.6%	38.1%
R&D Input (million USD)	237.2	318.2	427.1	558.1
Ratio of R&D Input to Revenue (%)	10.6%	10.9%	13.8%	16.6%

Operating Revenues

2017
- China (incl. Hong Kong)
- USA
- Eurasia

2018
- China (incl. Hong Kong)
- USA
- Eurasia

2017
- Computing
- Consumer
- Communication
- Auto/Industrial
- Others

2018
- Computing
- Consumer
- Communication
- Auto/Industrial
- Others

2017
- 0.35μm
- 0.18μm
- 0.13μm
- 90nm
- 55/65nm
- 40/45nm
- 28nm

2018
- 0.35μm
- 0.18μm
- 0.13μm
- 90nm
- 55/65nm
- 40/45nm
- 28nm
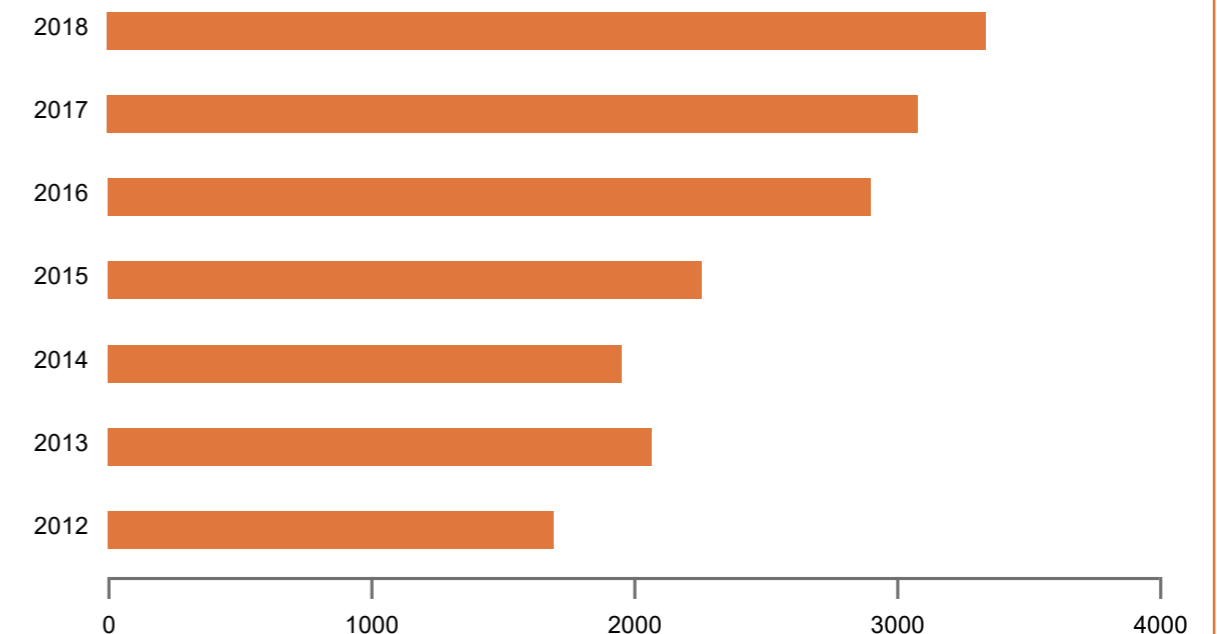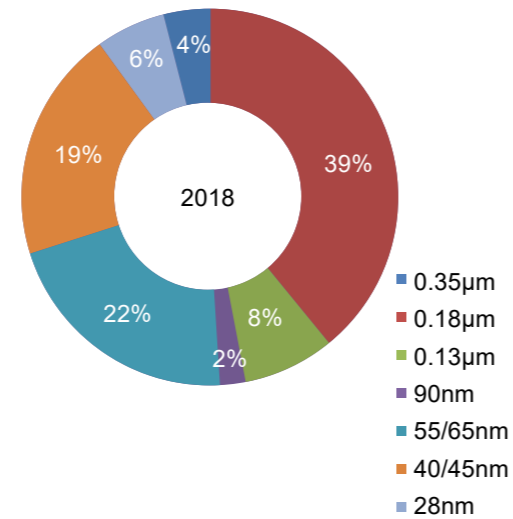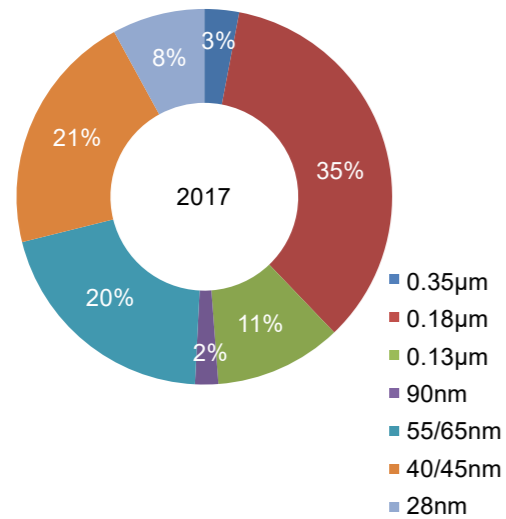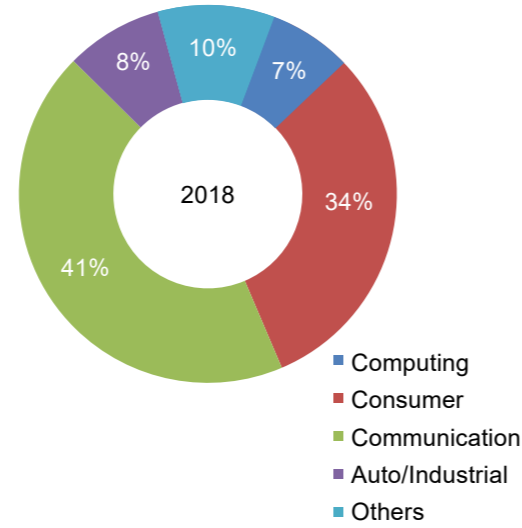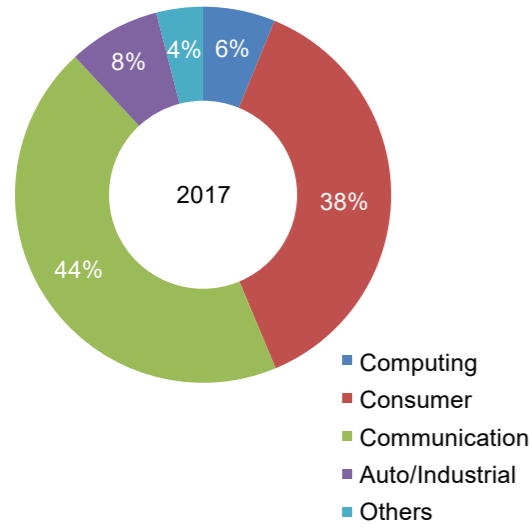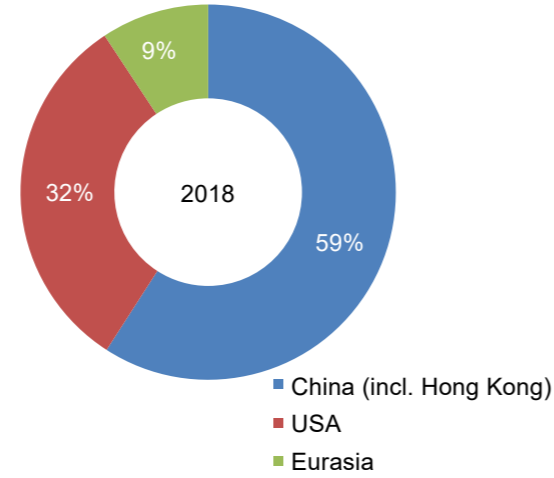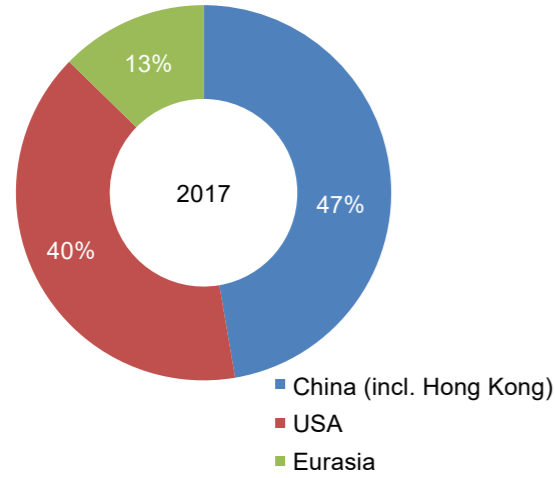
1.4.2 Tax Policy

SMIC's tax management follows the principle of abiding by tax laws and regulations, and paying taxes in good faith and reasonably. To act in line with these principles, specific actions are taken as follows:

- Establish a pre-forecast and evaluation mechanism, integrate tax management into the company's business decisions and daily business management activities to examine and weigh the impact of taxes;

- The company and the tax management personnel, on the basis of strictly abiding by tax laws, regulations and policies of the state, carry out tax work in accordance with the actual business operation of the enterprise and perform tax payment obligations in accordance with law;

- Continuously strengthen tax management, optimize tax management process, strengthen department cooperation to effectively prevent, control and reduce risks in the process of tax management.

In 2018, SMIC paid taxes amounting to $53 million in total, more than 99% was paid in China.

Tax Information

Tax Index	2015	2016	2017	2018
Total Tax (million USD)	56	38	31	53
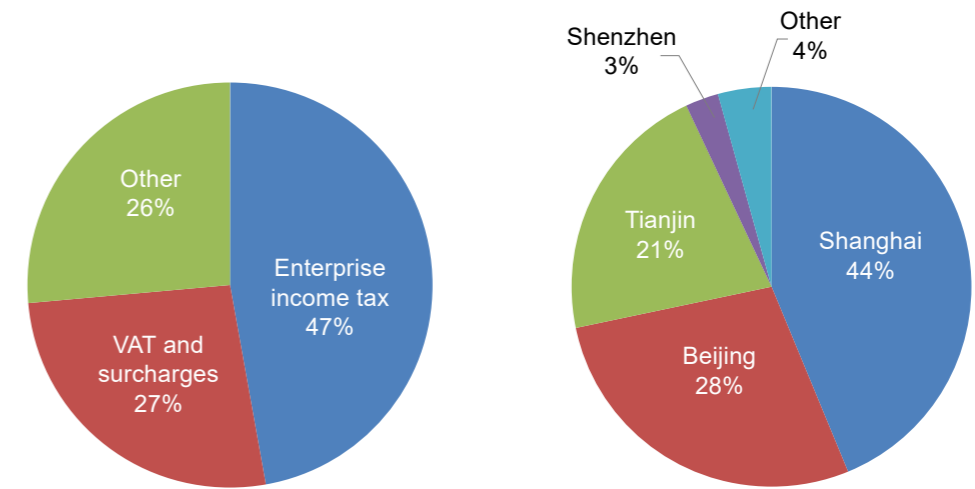
02 Governance for Sustainable Development

CSR Management

Corporate Governance

Innovation Management

Customer Service

Supply Chain Management

2.1 CSR Management

2.1.1 CSR Policy

As an 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 all the laws, rules, and regulations of the countries where we operate.

In addition to obeying the letter and mandates of such laws, we seek to promote their spirits. Through our CSR Program (http://www.smics.com/site/responsibility_social), we hope to advance social, environmental, and ethical responsibility according to internationally recognized standards. In short, we intend to remain worthy of our inclusion in the Hang Seng Corporate Sustainability Index Series as a company that has "attained a high standard of performance in the environmental, social and corporate governance areas" (http://www.hsi.com.hk/HSI-Net/).

To achieve these goals:

1. We declare our support for Responsible Business Alliance (formerly the Electronic Industry Citizenship Coalition®) Code of Conduct (http://www.responsiblebusiness.org/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 (http://www.smics.com/uploads/ethic_codebusiness_tc.pdf), 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 (http://www.smics.com/site/about_ESH).

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

(Visit http://www.smics.com/site/responsibility_social to get access to the original document signed)

Responsible Business Alliance

In 2013, SMIC started to assess the environmental, health, safety, labor and ethical management of the company and its factories by relying on the responsible business alliance online risk assessment (RBA-ON) system, and develop the continuous improvement plan for the existing risks. In 2018, the company and its plants were rated at low risk upon assessment; we will continue to make improvement and try to keep the risk at a lower level as far as possible.

Besides adhering to the RBA Code itself, SMIC also required suppliers to comply with the Code and fulfill the social responsibility, with an undertaking signed with key suppliers. According to the implementation performance of suppliers, we conducted on-site audit on major domestic suppliers in 2018, and once again promoted the Code.

United Nations' Sustainable Development Goals

In 2018, SMIC continued to integrate some of the requirements of the "United Nations' Sustainable Development Goals" and "China's National Plan on Implementation of the 2030 Agenda for Sustainable Development" into CSR management. According to the company's operating conditions, SMIC set control targets in 9 areas including "gender equality", "quality education", "climate action" and "responsible consumption and production".

2.1.2 CSR Management Mechanism

SMIC has set up CSR Committee to promote CSR management projects and achieve the objectives in the CSR policy. The Committee is under the leadership of the Board, where the Co-CEO acts as Chairman, Senior Vice President of Corp. support level 1 organization serves as Vice Chairman, and representatives elected by functional departments hold the position of members of the Committee, who jointly promote CSR work. The Committee holds job meetings regularly on a monthly basis to review CSR related issues and periodically reports the progress of CSR work to the company management.

Main responsibilities of CSR Committee: develop the CSR development outline, set and promote to achieve the company's CSR objectives, supervise implementation of the CSR in various functional departments, study, discuss, plan and promote to address CSR related issues, so that the work complies with the law, to achieve the sustainable development targets of the company and embody the care for people, environment and society.

Organizational Structure of CSR Committee
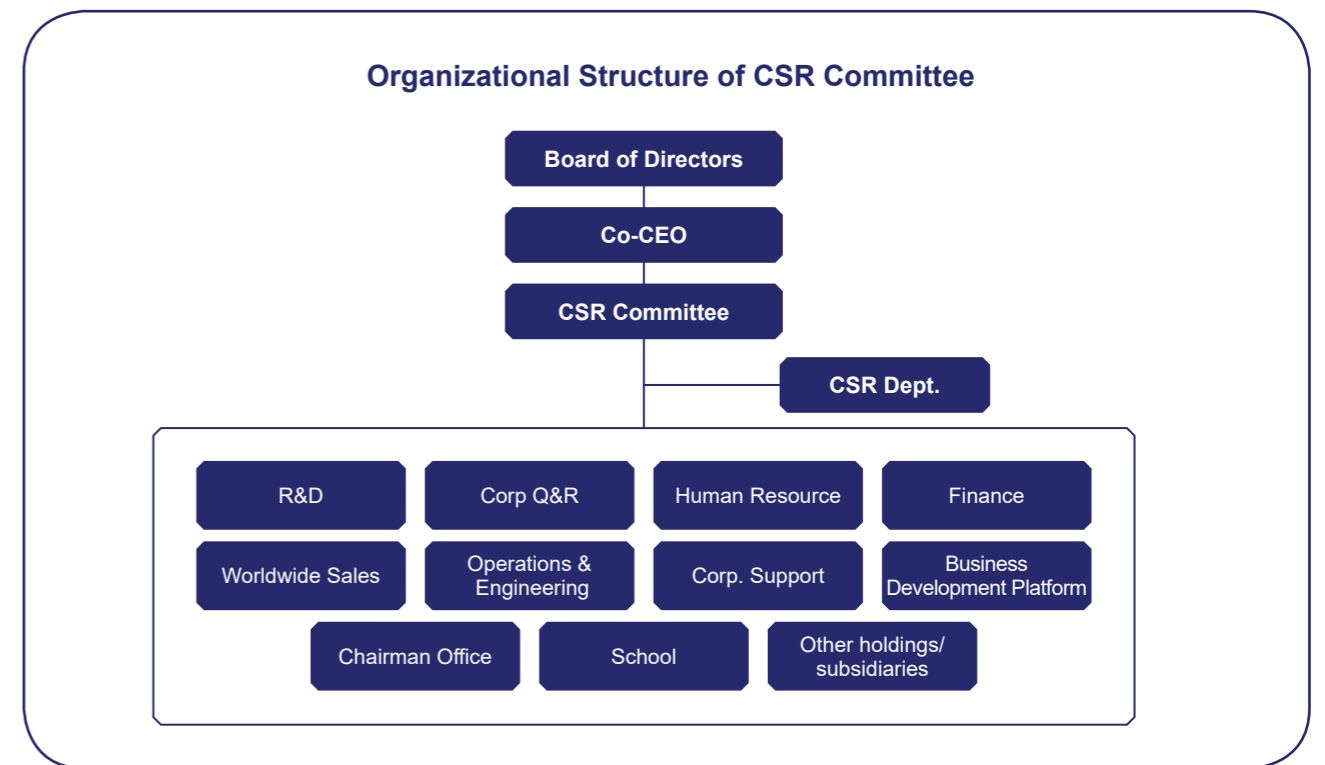
2.1.3 Interactions with Stakeholders

• 2.1.3.1 Stakeholders

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

Diagram of Stakeholders
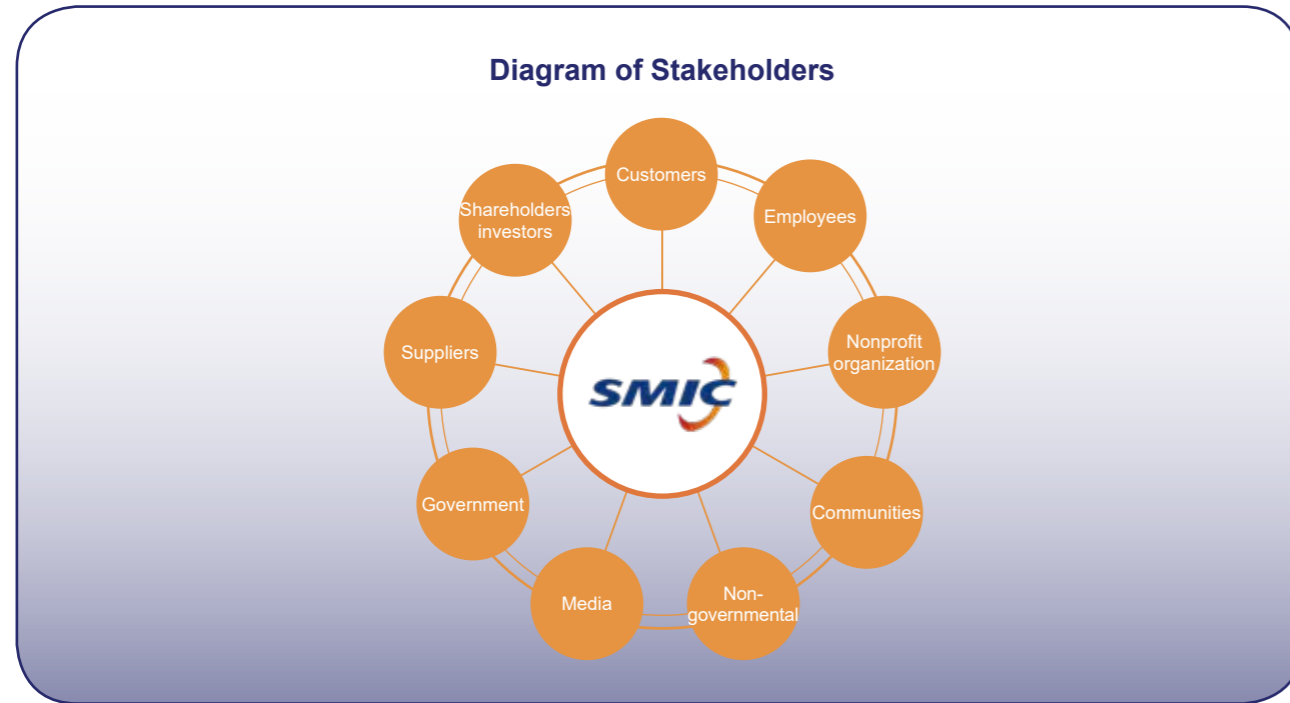
• 2.1.3.2 Communication with Stakeholders

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 concerned topics	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	Stakeholder communication results verification	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.

Communication with Stakeholders in 2018

| Stakeholder	Communication Targets	Channel/ Form of Communication	Topics of Concern	Actions in 2018
Employees	• Whole staff	• Staff Communication Meeting • All User e-Mail • Intranet • Ethics hotline • SMIC magazine	• Employee benefits • Future growth potential • SMIC competitive strengths in industry • Talents retention • Staff training and education • Physical and mental health of employees • Personal career development of employees Labor union • Corporate governance	• 4 quarterly staff meetings • Annual corporate games • Establishment of Tang Town SMIC Living Quarter • Talent contest • Photography contest • All club events and sports competitions • Culture promotion activities • Volunteer public welfare activities
Shareholder/ Investor	• Shareholder • Investor • Analyst • Financial & economic media • Hong Kong Stock Exchange • New York Stock Exchange	• Annual general meeting (AGM) • Extraordinary general meeting (EGM) • Quarterly Earning Release and Webcast • Global investment institutions conferences • Non-deal roadshow • Communication via face-to-face meetings, telephone and E-mail, regular feedback collection • Meeting and communicating with financial media regularly • Release of annual and semiannual reports, disclosure of information requested by U.S. Securities & Exchange Commission (SEC), corporate social responsibility report, aperiodic news published on company website	• Semiconductor outlook • SMIC competitive strengths in industry • Future growth potential • Continued improvement in profitability • Corporate strategy • Chinese government's support for industry and company • Chinese market outlook • Changes with top executives • R & D goals and progress • China-US trade friction	• 1 AGM • 4 EGMs • 4 investor conferences • 32 NDRs meetings • 27 seminars of investment institutions • near 500 meetings (including telephone conferences)
Customers	• Sales/technical support team • Quality control department	• Semi-annual customer satisfaction survey • Quarterly customer business / quality / technical review meetings	• Customer service and satisfaction • Innovation management • SMIC competitive strengths in industry • Green products • Confidential information protection • Conflict minerals management • Responsible Business Alliance (RBA)	Completed 2 semi-annual customer satisfaction surveys and related action plans • Convened 4 quarterly business review meetings • Held 4 quarterly quality review meetings • Held 4 quarterly technical assessment meetings • Convened 1 annual technical seminar • Answered 103 customer questions on conflict minerals management • Responded for 41 times to EICC related customer investigations
Suppliers	• Raw material suppliers	• Rating, on-site audits, supplier surveys	• Quality, price, delivery and service • Corporate governance • Supply chain management • Pollution prevention • Conflict minerals management • Regulatory compliance"	• Semi-annual rating: concerning quality, price, delivery, service, pollution prevention, etc.; • On-site supplier audit: concerning corporate governance, supply chain management, regulatory compliance, etc.; • Questionnaire survey for suppliers: concerning conflict minerals management, corporate governance, regulatory compliance, etc.
Government	• National and local governments • National and local industry associations	• Documents, meetings (orientation meetings, lectures), interviews	• Future growth potential • Semiconductor outlook • SMIC competitive strengths in industry • Pollution prevention • Continued improvement in profitability • Innovation management	• Regularly published SMIC briefings to all levels of government departments • Received visits and inspections by all levels of government, reporting status of the company • Disclosed pollutant emission data on the company's website • Participated in policy propaganda meetings, symposiums, situation forecast meetings, market promotion meetings and so on
Media	• Print media: newspapers and magazines • Electronic media: Network, WeChat, TV, radio	• Press release • Interviews and special reports • Press conference • Social media release	• SMIC competitive strengths in industry • Future growth potential • Continued improvement in rofitability • Innovation management • Social participation • Employee benefits	• Establish a spokesperson system and media interview process, and formulate media attention Q&A, a unified, clear media delivery company philosophy and message
Community/ Nonprofit Organizations	• Nursing home • Orphanage • Public welfare organization • Living quarter	• Regular visits • Participation in public welfare activities • Environmental protection campaigns	• Social participation • Pollution prevention • Employee participation • External cooperation • Regulatory compliance • Biodiversity Protection"	•Visited nursing home for 6 times • Visitedorphanage for 3 times • Organized a public welfare activity of protecting biodiversity • Held several times second-hand goods recycling activities in the living quarter

- **2.1.3.3 Concern Management**

- **Collect**: take Environmental, Social and Governance (ESG) Reporting Guidelines, Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS- CSR 4.0), Guidance on Social Responsibility of Information and Communication Technology Industry, GRI Sustainable Development Report Standard (GRI Standard), ISO 26000:2010 Guidance on Social Responsibility and other standards as reference to pick out concerns of stakeholders and give feedback with the stakeholders.

- **Integrate**: evaluate, select and organize appropriate survey concerns of stakeholders.

- **Analyze**: survey the concerns of stakeholders, evaluate and analyze the survey results, and prioritize the concerns.

- **Review**: report the survey results to the CSR Committee for review and report to the company management.

Topics collection · Topics integration · Topics analysis · Topics review — **Topics Management**

- **2.1.3.4 Analysis of Concerns**

In 2018, SMIC conducted a survey on concerns of employees, suppliers, customers, governments, media, non-profit organizations, communities and other stakeholders by means of questionnaires to assess how much attention the stakeholders lavish on related concerns, and formed a matrix of concerns through comprehensive analysis.
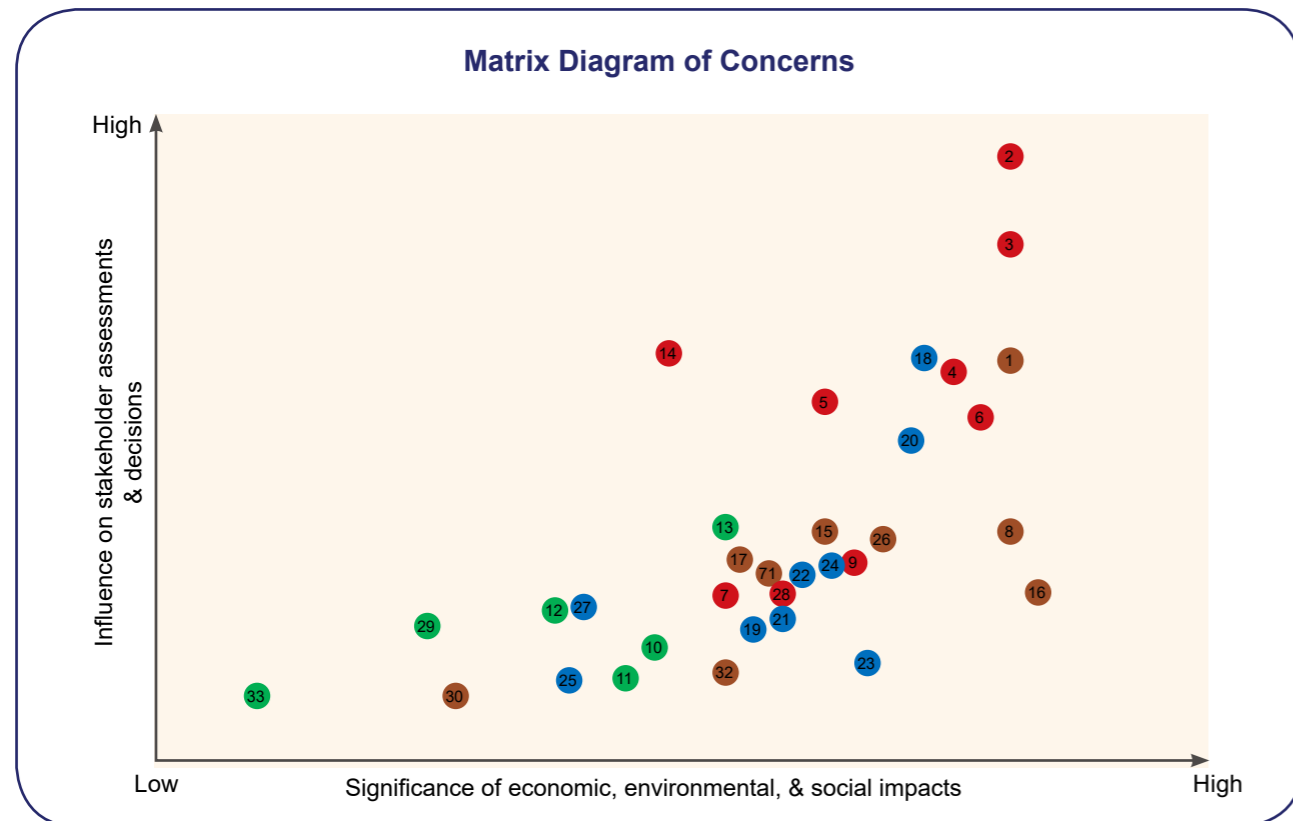
Environmental Aspects	Social Aspects
10 Water Resource Management	18 Talent Retainment
11 Resource Consumption Management	19 Employee Engagement
12 Global Climate Change	20 Compensation and Benefits
13 Pollution Prevention	21 Employee Training & Education
29 Green Products	22 Employee Career Development
33 Biodiversity Protection	23 Occupational Safety and Health
	24 Employee's Physical and Mental Well-being
	25 Labor Union
	27 Social Participation

Economic Aspects	Corporate Governance
2 Company's Competitiveness	1 Corporate Governance
3 Future Growth	8 Classified Information Protection
4 Continuous Increase of Profit	15 Code of Ethics and Business Conduc t
5 Innovative Management	16 Compliance with r egulations
6 Customer Service and Satisfaction	17 RBA (Resposible Business Alliance)
7 Communication of Interest Related Parties	26 Human Right s and Labor Law Compliance
9 External Cooperation	30 Conflict Minerals Control
14 Semiconductor Prospect	31 Risk Management
28 Supply Chain Management	32 Anti-corruption

2.1.4. External Cooperation and Role

SMIC actively participates in industry development and contributes its own strength.

Matrix Diagram of Concerns

Director Unit of China Semiconductor Industry Association	Vice President Unit of China Information Technology Industry Federation	Member Unit of Association for Health Promotion and Education in China	Member Unit of High End Chip Alliance	Member Unit of National Fire Protection Association	Member Unit of China Quality Management Association for Electronics Industry	Member Unit of China Occupational Safety and Health Association
Member Unit of Association for Health Promotion and Education in China	Member Unit of Green Factory Promotion Alliance of China	Member Unit of Beijing Association of Environmental Protection Industry	Member Unit of Beijing Fire Protection Association	Member Unit of Beijing Association of Safe Production	Member Unit of Beijing Association of Green Manufacturing Industry Alliance	Member Unit of Beijing Association of Safe Production
Vice President Unit of Shanghai Integrated Circuit Industry Association	Member Unit of Shanghai Association of Enterprises with Foreign Investment	Member Unit of Shanghai Pudong Association of Enterprises with Foreign Investment	Vice President Unit of Environmental Protection Association of Shanghai Pudong New Area	Member Unit of Shanghai Fire Protection Association	Member Unit of Tianjin Safe Production Management Association	Member Unit of Wuxi Precursor Chemical Industry Association

2.1.5 CSR Awards

• 2.1.5.1 Hang Seng Corporate Sustainability Index Series

In 2018, SMIC was selected as a constituent of the Hang Seng Corporate Sustainability Index Series for the eighth consecutive years, which is made up of constituent stocks with sustainable development as its core investment. The elected listed company must be a high achiever in all aspects of environmental, social and corporate governance. See www.hsi.com.hk/HSI-Net for more.

• 2.1.5.2 "Outstanding CSR Award" from Mirror Post Hong Kong

In 2018, SMIC attended the "Seventh Outstanding CSR Award for Regions Across the Straights" sponsored by Mirror Post Hong Kong and again received the "Outstanding CSR Award", which was the fifth consecutive year for SMIC to receive this award.

• 2.1.5.3 Top 50 for CSR Governance in Information and Communications Technology Industry

In 2018, SMIC was awarded the honor of Top 50 for Social Responsibility Governance in Information and Communications Technology Industry, fully recognized by our achievements in CSR governance.

2.2 Corporate Governance

2.2.1 Governance Mechanism

SMIC has always adhered to the principle of transparent operation with focus on shareholder equity, and taken a sound, effective board as the basis of corporate governance. Under this principle, the Board of Directors of the company authorizes the committees established under it to assist the Board in performing its supervisory responsibilities. The organizational bylaws of the committees are subject to approval by the Board and the Chairmen of the committees regularly report their activities and resolutions to the Board.

• 2.2.1.1 Board of Directors

The Board of Directors is accountable to the shareholders of the company and directs and oversees the company's affairs in order to enhance shareholder value. The Board actively participates in and is responsible for determining the company's overall strategy, setting corporate purposes and objectives, monitoring the achievement of the relevant purposes and objectives, monitoring the company's financial performance and accounting establishment, formulating corporate governance practices and policies, and reviewing the company's internal control and risk management system on its own or through various board committees. The management of the company is responsible for the implementation of the company's overall strategy and day-to-day operation and management. The Board may contact the senior management of the company to discuss inquiry of the management information.

The management responsibilities of the Board include:

(1) Develop and review SMIC's policy and implementation of corporate governance;

(2) Review and supervise the training and continuing professional development of directors and senior managers;

(3) Review and supervise the company's policies and implementation to comply with legal and regulatory requirements;

(4) Develop, review and monitor the company's conduct code as well as other policies and procedures to make it applicable to employees and directors.

Composition of the Board as of December 31, 2018:

Organizational Structure of the Board

Board

Executive Directors	Non-executive Directors	Independent Non-executive Directors
Zhou Zixue	Chen Shanzhi	Fan Ren Da
Zhao Haijun	Zhou Jie	William Tudor Brown
Liang Mong Song	Ren Kai	Lau Juen-Yee
Gao Yonggang	Lu Jun	Chiang Shang-yi
	Tong Guohua	Cong Jingsheng

Audit Committee　Compensation Committee　Nomination Committee　Strategic Advisory Committee

28.6%　35.7%　35.7%

● Executive Directors
● Non-executive Directors
● Independent Non-executive Directors

14%　43%　43%

● 40 to 49 years old
● 50 to 59 years old
● 60 years old and above

Audit Committee, Compensation Committee, Nominating Committee and Strategic Advisory Committee are under the Board, and they shall act within their own area of responsibility. The following table provides the positions held by members of the Board in these committees as of December 31, 2018:

Positions of Board Members in Committees

Board Member	Position			
	Audit Committee	Compensation Committee	Nomination Committee	Strategic Advisory Committee
Zhou Zi Xue	-	-	Chairman	-
Gao Yonggang	-	-	-	-
William Tudor Brown	Member	Chairman	Member	Member
Tong Guohua	-	Member	-	-
Zhao Haijun	-	-	-	-
Chen Shanzhi	-	-	-	Chairman
Lu Jun	-	-	Member	-
Lau Juen-Yee	-	Member	Member	Member
Fan Ren Da	Chairman	-	Member	-
Liang Mong Song	-	-	-	-
Zhou Jie	Member	Member	-	-
Ren Kai	-	-	-	Member
Chiang Shang-yi	-	Member	-	-
Cong Jingsheng	-	-	-	-

Audit Committee

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 announcement, and the related disclosure;(2) compliance of the company with the laws and regulations;(3) qualification, independence, salary and employment period of the independent auditor; and (4) effectiveness of the internal audit and risk control of the company. The committee regularly reports to the Board at the quarterly meeting and meets with SMIC's external auditors at least four times a year. See http://www.smics.com/uploads/Audit%20Committee%20Charter.pdf for more information.

Compensation Committee

Responsibilities of Compensation Committee include: (1) approve and supervise the implementation of the company's total compensation plan for the management team, evaluate the performance of the company's Chief Executive Officer, determine and approve its remuneration, and review the results of the Chief Executive Officers evaluation of the performance of the company's other executive officers; (2) determine the remuneration packages of executive Directors and make recommendations to the board on the remuneration of non- executive Directors; (3) administer and periodically review and make relevant recommendations to the Board regarding the long-term incentive compensation or equity plan made available to the directors, employees and consultants;(4)review the compensation philosophy, strategy and principle of the executive officers; (5) review, approve and monitor new and existing employment, consultancy, retirement and severance agreements for directors, executive officers and other officers of the company;(6) ensure proper supervision of the company's human resources policy; and (7) review established policies to fulfill the responsibilities of the company in ethical, legal and human resources. The Compensation Committee reports to the Board at its quarterly meeting.See http://www.smics.com/uploads/20170418e.pdf for more information.

Nominating Committee

Nominating Committee ensures that the Board has an effective size, structure and composition to meet the company's strategy and shareholders' benefit. The responsibilities of the Nomination Committee include: (1) reviewing the structure, number and composition of the board of directors at least annually;(2) monitoring the implementation of the board diversity policy; (3) identifying qualified individuals who can serve as directors and selecting nominations as a director to advise the board of directors;(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 Committee regularly reports its resolutions and presents its recommendations to the Board. See http://www.smics.com/uploads/20130814173201001715491_en.pdf for more information.

Strategic Advisory Committee

Functions, responsibilities and competencies of Strategic Advisory Committee include: (1) evaluate and consider strategy options;(2) help and participate in discussions with potential strategic partners on any strategic options; and (3) present recommendations to the Board and the company regarding any strategy option.

- 2.2.1.2 Other Governance Departments

Internal Audit

As the daily work organization under the Board, Internal Audit cooperates with SMIC's management team to assist Audit Committee of the Board in assessing operational risks, and is committed to supporting and supervising the management team to improve the company's risk management, internal control and corporate governance systems. Internal Audit prepares an audit and resource demand plan based on risk assessment each year, which is reviewed and approved by the Audit Committee. In addition to the plan, Internal Audit inspects and investigates based on significant risk issues identified by management team. The audit results are reported to the Chairman and Co-CEO on a quarterly and full-year basis. The audit report summary is reported to the Audit Committee on a quarterly basis.

Based on the above job responsibilities and plans, Internal Audit will audit the company's work practices, procedures and the effectiveness of internal controls. At the time of the audit, Internal Audit may at any time request the relevant departments to cooperate, review all required records, view all property on site and contact all relevant personnel. After the audit is completed, Internal Audit will provide relevant management team with analysis, assessment, information and recommendations for strengthening internal control and preventing risks. The relevant manager of the company will be informed of any deficiencies raised by Internal Audit and follow up the implementation of the corrective actions. For more information: http://www.smics.com/uploads/internalauditcharter.pdf.

Compliance Office

Compliance Office oversees and executes (1) professional and commercial conducts of the company and its employees in accordance with Business Conducts and Ethics of the company; (2) the company's anti-fraud policy, investigation of any fraud and reporting to the Audit Board; and (3) compliance of insider trading, in accordance with the company's insider trading policy.

2.2.2 Risk Management

According to the enterprise risk management – comprehensive framework of the Committee of Sponsoring Organization (COSO) under the Treadway Committee, SMIC has established a corresponding enterprise risk management system, to assess the likelihood of their occurrence and impact of the identified risks on the whole company and determine the different risk levels and corresponding measures, to ensure that the relevant risks are monitored.

The Risk Management Committee, composed of eight divisions, is primarily responsible for formulating the corporate-level risk policies and supervising the effectiveness of risk management. And the Risk Management Communication Committee, which is comprised of representatives designated by all functional divisions, is responsible for the implementation of the risk assessment plan and follow-up tracking. When necessary, a special task team will be set up to carry out risk control activities on the basis of actual needs. It assists the Board in identifying, analyzing and assessing the overall corporate risks and monitoring the risk management system to ensure the effectiveness of the risk management projects. According to the corporate governance code, the management confirms the effectiveness of the system with the Audit Committee under the Board on an annual basis and the Chairman of the Audit Committee reports the results at the meeting of directors. The Board is ultimately responsible for ensuring that the Group maintains a robust and effective risk management and internal monitoring system, and supervises the continuous monitoring of these systems by the management.

Risk management measures taken by SMIC are as follows:

- Identify risks, such as macro/external risks, operational risks, strategic risks, legal risks and financial risks, etc.;
- 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;
- Design, operate and monitor internal control systems to reduce and control related risks; and
- Monitor risk early warning indexes and report risk management results for major risks.

Risk Management Framework

Three lines of defense

Function Dept.	Risk Management Committee and Risk Management Communication Committee	Internal Audit Dept. under the board of directors and the audit committee
Manage and be responsible for risk	Assess, monitor, communicate and report on corporate risk	Assess and supervise to ensure the effectiveness of the risk management system

By such approach, the major risks SMIC identified and put under monitoring in 2018 include, but not limited to, the following:

1. Cyclical characteristics of semiconductor manufacturing industry;
2. Fluctuations in the purchase price of raw materials;
3. Fluctuations in global financial markets and currencies;
4. Failure to keep up with the pace of technology migration; and
5. Difficulty in attracting and retaining technical and managerial personnel.

2.2.3 Information Disclosure

• 2.2.3.1 Disclosure Policy

Disclosure Committee of SMIC develops and implements the company's information disclosure policy and procedure, and reviews the compliance of timely information disclosure of the company. The disclosure policy applies to all employees and consultants, the Board of Directors and the authorized spokespersons of SMIC. The disclosure policy covers all documents and statements disclosed by or on the behalf of SMIC in different forms. This mechanism helps to ensure the accuracy of our reports.

• 2.2.3.2 Shareholder Communication Policy

SMIC distributed information to shareholders through various publications and online platforms, including annual general meetings (AGMs), extraordinary general meetings (EGMS), quarterly ER webcast, annual reports and interim reports published in stock exchanges in New York and Hong Kong, and briefings and press releases submitted to the US and Hong Kong stock exchanges. In addition, our Investor Relations has arranged a number of meetings and conference calls with investors, so that they have a better understanding of SMIC's latest developments, development strategies and directions. In 2018, among the semiconductor companies in Asia (except Japan), SMIC was selected as the most honored company by the Institutional Investor magazine. We are committed to providing timely, accurate and fair information to our stakeholders. We also provide convenient online access for our potential investors and other interested parties. Most of the information above can be accessed from the corporate web site and the SECs website of the stock exchange. See http://www.smics.com/uploads/20120326006.pdf for more information.

2.2.4 Business Conduct and Ethics

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

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

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

In order to promote integrity and eliminate fraud, especially in the areas of commercial bribery, conflict of interest, intellectual property and information security, the Company held a "Commitment to Integrity and Self-Discipline" conference in December 2018 in which all supervisors took oath and signed an integrity commitment letter. Subsequently, all SMIC employees also signed the integrity commitment letter as a commitment from each person to observe the highest standard of ethical conduct, and maintain integrity and self-discipline.

• 2.2.4.1 Insider Trading Policy

In accordance with Hong Kong and U.S. securities law, the insiders of the Company are prohibited from abusing company information for personal gain or from dealing in company stock during blackout periods. Our Ethics Code outlines the key requirements of company policy and securities law, these requirements are enforced by our Compliance Office.

- 2.2.4.2 Anti-Fraud Policy

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

- 2.2.4.3 Anti-Bribery Policy

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

- 2.2.4.4 Ethics Hotline and Investigation

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

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

The number of corruption lawsuits filed against SMIC or its employees during the reporting period (2018) is zero.

- 2.2.4.5 Training

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

2.2.5 Protection of Confidential Information

SMIC adheres to the idea of ensuring the best interests of the company, its shareholders, customers, suppliers and employees, and attaches great importance to the protection of its own 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 Security Administration

Information Asset Classification:
- Top Secret
- Confidential
- Restricted
- Internal

Security Control:
- Physical Control
- Administrative Control
- Technical Control

Key Elements of Info Security Management:
- People • Process • Technology

Goal of Security:
- Confidentiality
- Integrity
- Availability

30% Technology, 70% Management
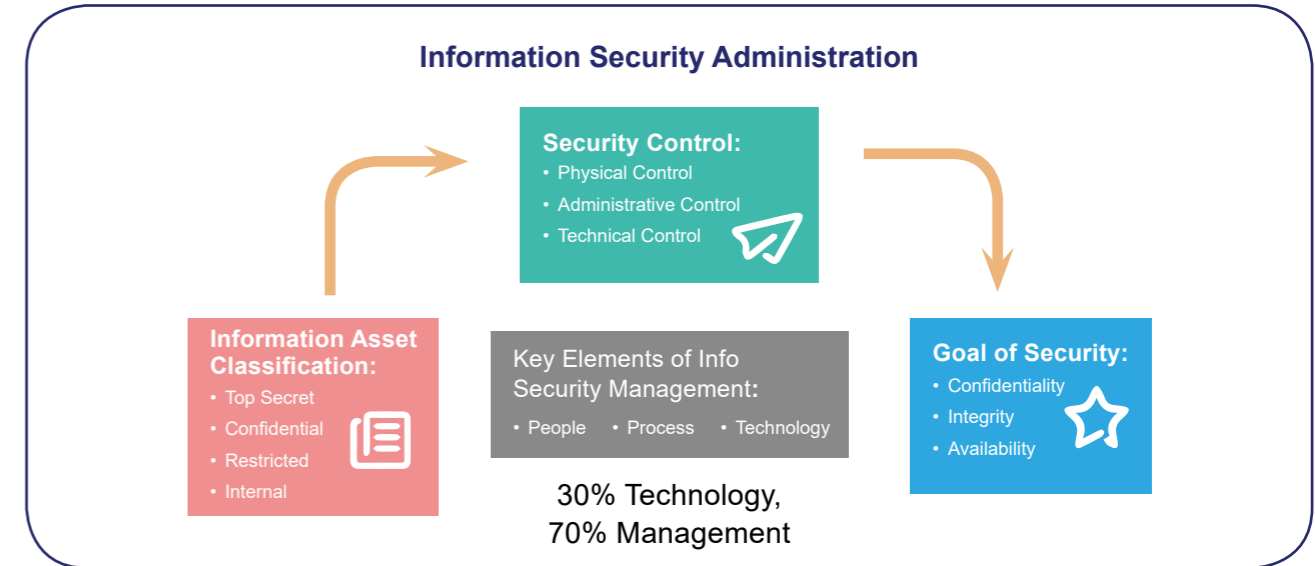
- 2.2.5.1 Information Management Mechanism

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 policy.

Information Management Mechanism

CIPP Policy
Physical Security
Company
FAB Security
Data Security
Personal Information Security
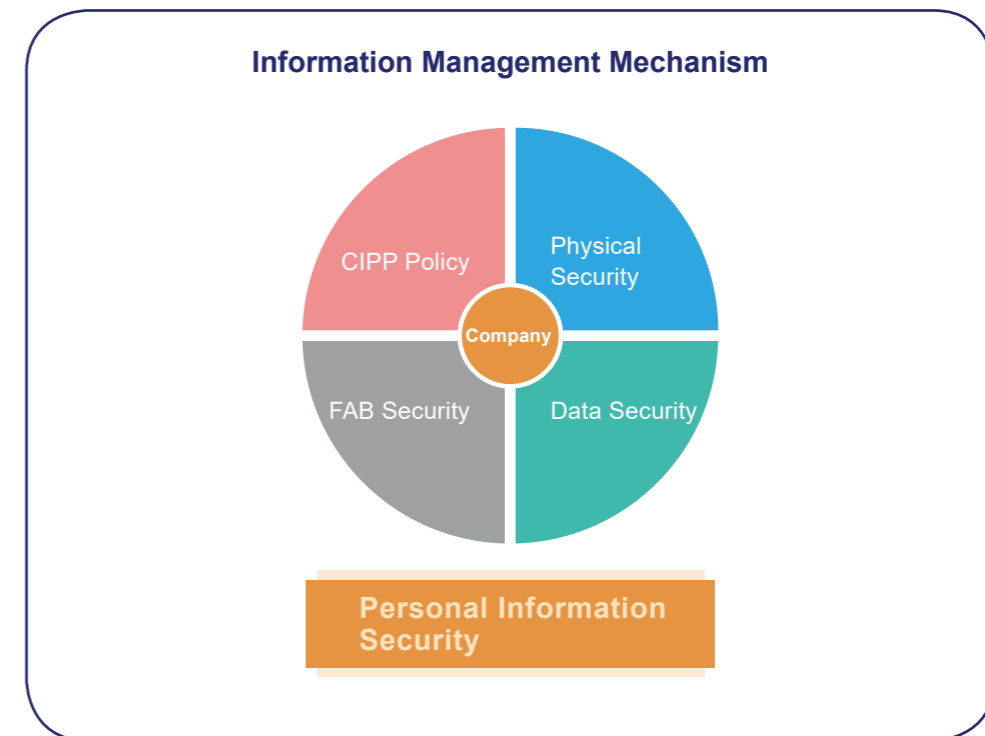
• 2.2.5.2 Comprehensive Technical Control and Monitoring System

By continuously strengthening 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.

• 2.2.5.3 Security Awareness Education and Promotion

In 2018, the Company intensifies comprehensive and in-depth information security promotion for its employees. In the form, the company spread the information security policy to the employees on an irregular basis in mail, information security communication and other forms. And the company continuously optimized information security release window to publish information security related work, providing a centralized display platform to help employees get the whole picture of company's information security policy. In order to ensure the effectiveness of the publicity, the company also set up a hierarchical publicity system: all divisions selected backbones as officers for information security, the officers are trained first in the form of concentrated face-to-face instruction, and then they carry out propaganda work in their own divisions.

• 2.2.5.4 Customer Information Protection

SMIC attaches great importance to protection of customer information, privacy and intellectual property. Customer information is at the highest level of information control and shall be put under control in all round, to ensure security of the customer information.
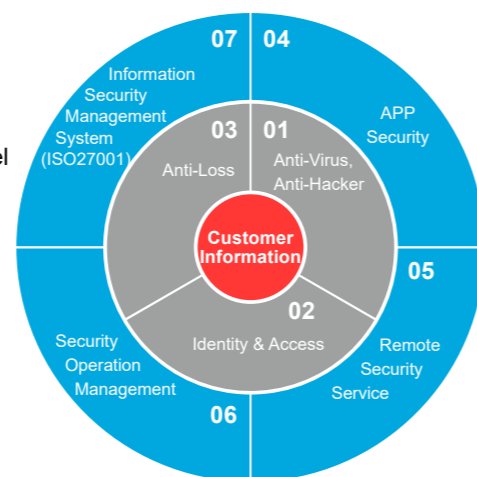
2.2.6 Compliance Management

• 2.2.6.1 Export Compliance Management

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

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

(1) Export compliance policy statement	(6) Management of equipment, spare parts and raw materials
(2) Responsible personnel and their duties	(7) Audit
(3) List of rejected persons	(8) Employees training plan
(4) Screening process	(9) Custody of documents
(5) Technology control plan	(10) Non-compliance reporting process

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. Meanwhile, our ICP compliance is verified in regular audits by vendors and government officials.

• 2.2.6.2 Conflict Mineral Compliance Management

There are serious human rights and environmental problems in mining rare metals such as cassiterite, black tungsten, tantalum and gold in Congo and its surrounding countries and regions, and most of the mining activities in these areas are related to the armed groups (financed) in conflict, leading to long- term instability in these areas and the "conflict mineral" got its name. These metals may be widely used in information and communication technology (ICT) products.

SMIC sets up a working group on conflict mineral management and develops strong conflict mineral management policies and procedures to ensure effective management of conflict minerals. The working group on conflict minerals management is composed of Legal, Supply and Purchasing Management, Customer Engineer, Corporate Social Responsibility and other divisions, which jointly develop and promulgate conflict mineral policy, establish a management supervision system, require all relevant suppliers to provide evidence meeting the requirements of conflict mineral management, and achieve regulatory compliance through close communication with suppliers. Based on the US law (Chapter 1502, Dodd-Frank Act) and the rules of SEC--the U.S. on conflict mineral disclosure and guided by the due diligence framework of the organization for economic cooperation and development (OECD), conflict mineral management policies and procedures are taken to conduct due diligence on suppliers to ensure the legitimacy of these metals by using the due diligence tools of the Responsible Mining Initiative (RMI) and the Global e-Sustainability Initiative (GeSI).

The key to conflict mineral management is to effectively manage suppliers and ensure that all links in the supply chain conform to the conflict mineral management requirements. In 2018, SMIC conducted due diligence on all relevant suppliers in strict accordance with the requirements of conflict mineral management. The due diligence was conducted based on the Conflict Minerals Reporting Template (CMRT) created by the Responsible Minerals Initiative and the Global e-Sustainability Initiative. Supplier 100% responded to conflict minerals reports and provided evidence to demonstrate compliance with the conflict minerals management requirements.

And SMIC actively assists customers in the implementation of due diligence for conflict minerals. According to customer's request, we have given more than 100 replies to conflict minerals reports in time, which shows that we manage the conflict minerals effectively and make sure the smelter 100% meets the management requirement.

Conflict Minerals Control Mechanism
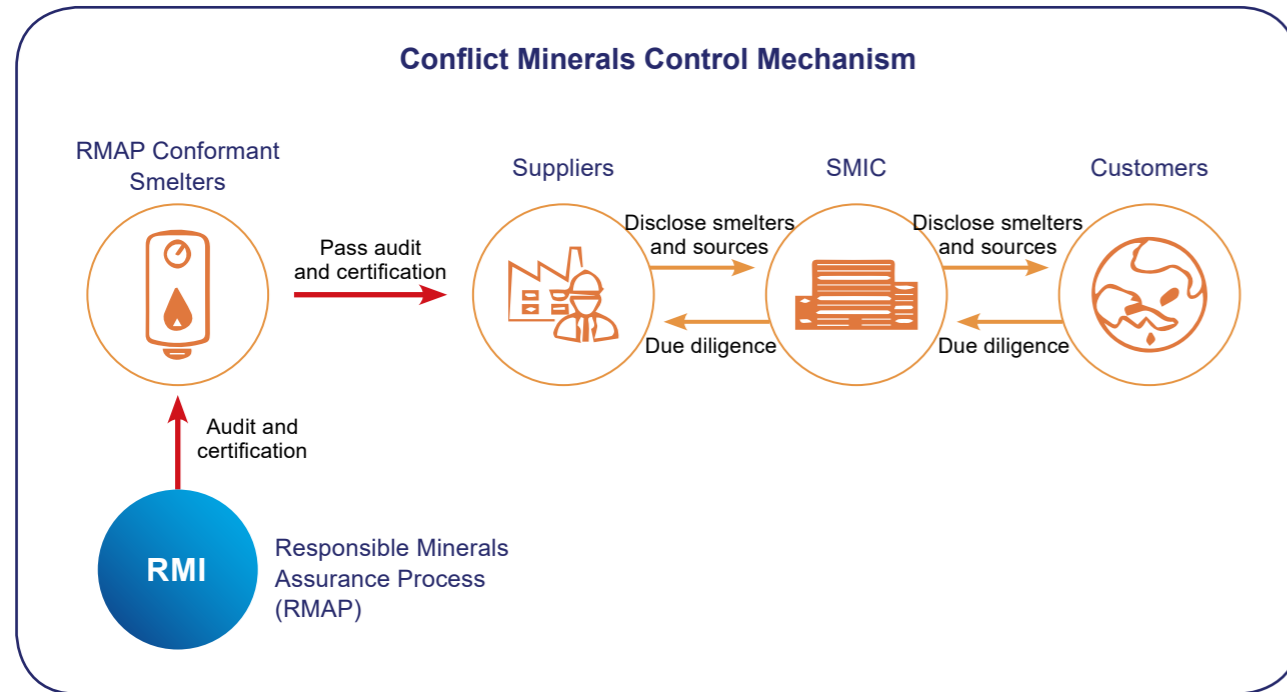
2.2.7 Management System

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

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

• 2.2.7.1 ISO 9001 Quality Management System

Since 2002, all of the company's factories have passed the ISO 9001 certification, and developed a quality management system for planning, execution, check and action under the guidance of ISO 9001, to ensure the quality of design, development, production and service. See http://www.smics.com/uploads/ISO9001.pdf for details of the certificate.

Management system certificate-ISO9001

• 2.2.7.2 TL 9000 Supply Chain Directives

Based on ISO 9001 certification, TL 9000 certification focuses on the quality management system for customers in telecommunication industry, and emphasizes the integrity of supply chain directives. Our factories in Shanghai, Beijing, Tianjin and Shenzhen have passed this certification successively since 2005. See http://www.smics.com/uploads/TL9000.pdf for details of the certificate.

• 2.2.7.3 IATF 16949 Defect Prevention

On the basis of ISO 9001 certification, IATF 16949 certification focuses on the quality management system for customers in the automotive industry, and aims to eliminate defects existing among automotive supply chains and provides quality assurance for end customers. See http://www.smics.com/uploads/IATF16949-all%20site.pdf for details of the certificate.

Management system certificate-TL9000

Management system certificate-IATF 16949

• 2.2.7.4 OHSAS 18001 Occupational Health and Safety Management System

SMIC has established a health and safety management system under the guideline of OHSAS 18001 since 2003, to provide employees with a safer and healthier workplace and protect the company's assets. See http://www.smics.com/uploads/20190520%20 OHSAS%2018001%20All.pdf for details of the certificate.

• 2.2.7.5 ISO 14001 Environmental Management System

The company passed ISO 14001 environmental management system certification in 2002. In the light of this international standard, we have established environmental management system to implement measures to reduce pollutant emissions, cut energy and resource consumption. See hhttp://www.smics. com/uploads/20190520%20ISO%2014001%20 2019%20All.pdf for details of the certificate.

Management system certificate-OHSAS 18001

Management system certificate-ISO 14001

- 2.2.7.6 ISO 14064 Greenhouse Gases Validation and Verification

The company recognizes the severity of the global climate change problem and takes measures to address it. In June 2010, our factory in Shanghai became the first foundry passing ISO 14064 certification in mainland China and other factories also followed it to establish the management system. We assess greenhouse gas emissions, and take energy-saving measures to reduce greenhouse gas emissions to comply with this standard. See http://www.smics.com/uploads/ISO%2014064%20All.pdf for details of the certificate.
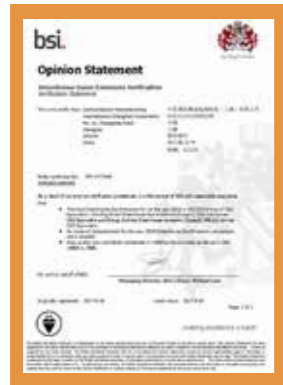
- 2.2.7.7 QC 080000 Hazardous Substances Management System

Since December 2006, SMIC established Hazardous Substances Management System. All plants had passed QC 080000 certification to ensure that we followed the Restriction of Hazardous Substances (RoHS) in electronic and electrical equipment. See http://www.smics.com/uploads/20190520%20QC%20 080000%20ALI.pdf for details of the certificate.

Management system certificate-ISO 14064

Management system certificate-QC 080000

- 2.2.7.8 ISO 27001 Information Security Management System

The company gives priority to the security of customer information and establishes a comprehensive information security management system with the guidance of ISO 27001 information security management system, including three parts, namely, employee management, information technology applications, rules and policies. See http://www.smics.com/uploads/iso27001.pdf for details of the certificate.

Management system certificate-ISO 27001

2.3 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.

2.3.1 Innovation Mechanism

Focusing on in-house development, SMIC has established a Level 1 R&D organization and has been continuously investing in technology innovation and intellectual property. SMIC, employing more than 2,000 R&D workers, spent $558 million for research and development in 2018, which accounted for 16.6% of the total revenue.

In addition to in-house development, SMIC also actively develops technical cooperation and technical services with vendors and partners. Based on our advanced process, we worked closely with equipment and material companies to improve and verify IC equipment or materials. The activities provided platform and technical support for those equipment and key materials vendors and supplies, and help the industry to improve the localization of equipment and materials.

SMIC also cooperates with a number of famous universities and research institutes to carry out Industry-University-Research Collaboration at the technology node. The cooperation units include Institute of Microelectronics of Chinese Academy of Sciences, Institute of Microsystem of Chinese Academy of Sciences, Peking University, Tsinghua University, Fudan University, Zhejiang University, and Shanghai ICRD center,IMEC etc.

In order to cultivate more outstanding talents for IC industry, SMIC launched the School-Enterprise Cooperative Education Platform Plan, which includes a master's degree program jointly established with the University of Chinese Academy of Sciences for the purpose of cultivating IC engineers, and training for graduate students and undergraduate students from Shanghai Jiao Tong University, Fudan University, Zhejiang University, Xidian University, Tianjin University, Shanghai University and Datang University, etc.

2.3.2 Innovation Achievements

- 2.3.2.1 Patent Achievements

By the end of 2018, SMIC had a cumulative 15,440 patents filed and 8,981 patents granted.

SMIC is one of the companies with the largest number of patents granted

■ Filed ■ Granted

2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018
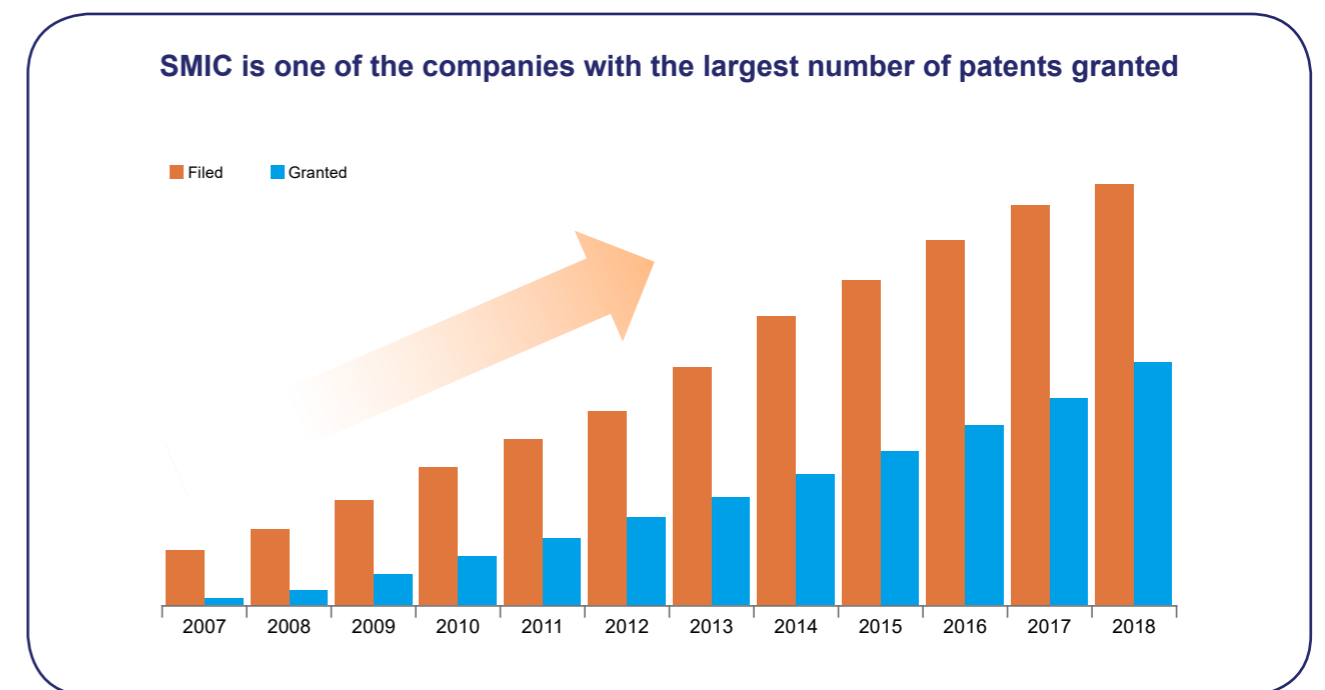
- 2.3.2.2 Technology Achievements

In 2018, SMIC achieved remarkable technology achievements.

In terms of advanced technology, 28nm HKC+ achieved a landmark progress and went into the mass production successfully, with yield reaching up to the industry standards; the most advanced 14 nm FinFET technology in China is advancing rapidly at a speed breaking the Company's R & D record and has entered the stage of customer introduction. It is expected to realize risk mass production in 2019. The first 14nm optical mask in China, from the release of key equipment PO to the output, took less than a year, breaking the industry record; in 2019, we will be able to fully provide customers with 14nm mask manufacturing services. We have also made technological breakthroughs in the field of segmentation and have always been the preferred partner for customers in mainland China.

In terms of special technology, SMIC continued to develop new special process technologies for use in Internet of Things (IoT), Cloud Computing, Smart Devices, and in other future technologies such as PMIC, RF/Wireless technologies, RFSOI, CMOS imaging sensor(CIS), MEMS/sensor, embedded memories and TSV-based CSP technology.

2.4 Customer Service

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

2.4.1 Customer Service Strategy

SMIC is committed to providing customers with superior services and achieving common success through a number of strategies:

- Help customers shorten the time-to-market by providing quality products and services.
- Continuously invest and provide value-added innovation with differentiated mature and advanced technology.
- Continue to serve as a gateway for customers to succeed in the Chinese market, establish and strengthen strategic partnerships with customers and various players in the semiconductor and electronic ecosystems to gain access to and penetrate the Chinese and global markets.

Servicing Customers with Commitments for Excellence
• Provide quality products and services to help customer to short time to market
• Offer value-added innovation on differentiated mature and advanced technology
• Build strategic partnerships for the China and worldwide markets

SMIC has a suitable executive management team that leads the company forward and promises to ensure the trust of customers with extraordinary quality. Relying on excellent manufacturing, technology and service delivery, SMIC has strong confidence in the implementation of the customer service strategy. With excellent quality, SMIC continues to strive for customer success by providing high-quality and competitive services and technologies. SMIC works with customers and partners to create inspiration to achieve future development and innovation.

Customer Service Advantage

- Experienced Teams
- Quality, Service, Speed, Precision

The Right Team

Manufacturing Excellence
- #1 Foundry in China mainland
- Proven Records
- Complete Eco-System
  - Shorten Time to Market

The Right Market
- Your Partner in China
- Local Access
- Application Driven

Technology Span & IP Investment
- Enriched IP Portfolio & Strict IP Protection
- Wide Tech Span with Value-added Service Mature & Advanced Technologies

2.4.2 Customer Service System

Professional sales and customer engineering teams of SMIC in Shanghai, Beijing, Tianjin, Shenzhen, Taiwan, California, Milan, Tokyo and other regions in the world can provide global customer service. These teams collect customer needs and coordinate resources between the internal R & D division and the production services sector in a timely manner to provide one-stop service for customers, including prophase investigation, IP custom, Process Design Kit, photo-mask manufacturing, product manufacturing and construction of back-end test package platforms. And SMIC also provides customers with customized product services to help customers improve their market competitiveness and shorten time-to-market, so as to achieve the long-term common development of the company and its customers.

Distribution of Customer Service Teams

USA San Jose · China Beijing · China Tianjin · China Headquarters Shanghai · China Shenzhen · Japan · Taiwan · Hong Kong

- Headquarters and Fab Locations
- Customer Service Office
- Representative Office
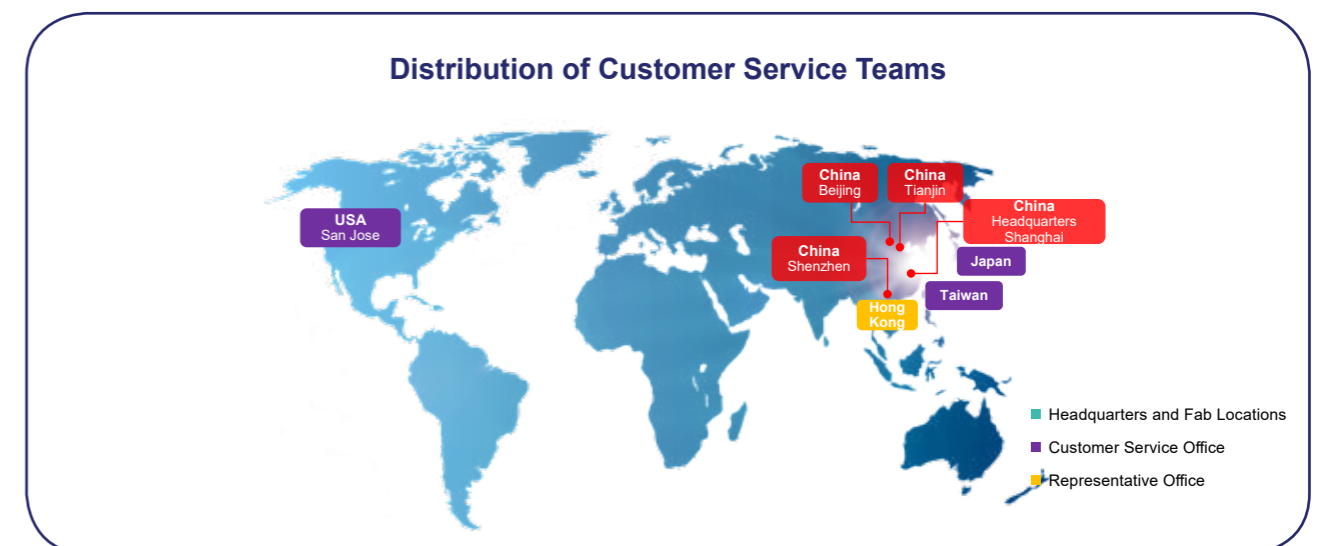
Adhering to the concept of providing customers with the best quality service, SMIC updates the technology platform to adapt to market trends and meet the needs of customers at different times with customers at the center. In 2018, the company held Executive Summits in Shanghai and Xinzhu in succession, and enhanced the feelings with customers to have a deeper mutual understanding through high-level exchanges.

In addition, SMIC also takes initiative to participate in international and domestic important industry activities. SMIC can be seen in SEMICON, ICCAD and IC China as well as other industry exhibitions.

Executive Summit in Shanghai

Executive Summit in Xinzhu

Booth in IC China

Booth in ICCAD

The "SMIC-NOW" online service system provided by SMIC plays a crucial role in communicating with customers about their products, by which customers can easily access to the technical platform information files, design service information, import new product requirements and processes, and tape out new products directly based on this platform. And this system also provides customers with real-time production reports, so that customers can have instant control over the information on their own photomasks and products at each step from order placement to shipment, as well as corresponding product quality reports. As an important hub for communication with customers, the "SMIC-NOW" system keeps collecting customers' online feedback, so that relevant responsible persons can take active countermeasures and make continuous improvement. In 2018, we basically completed the test of the new version, which will presented to customers with a new look.

A link to SMIC-NOW-customer online service platform is available on the official website of SMIC: http://www.smics.com/#section1

Login interface
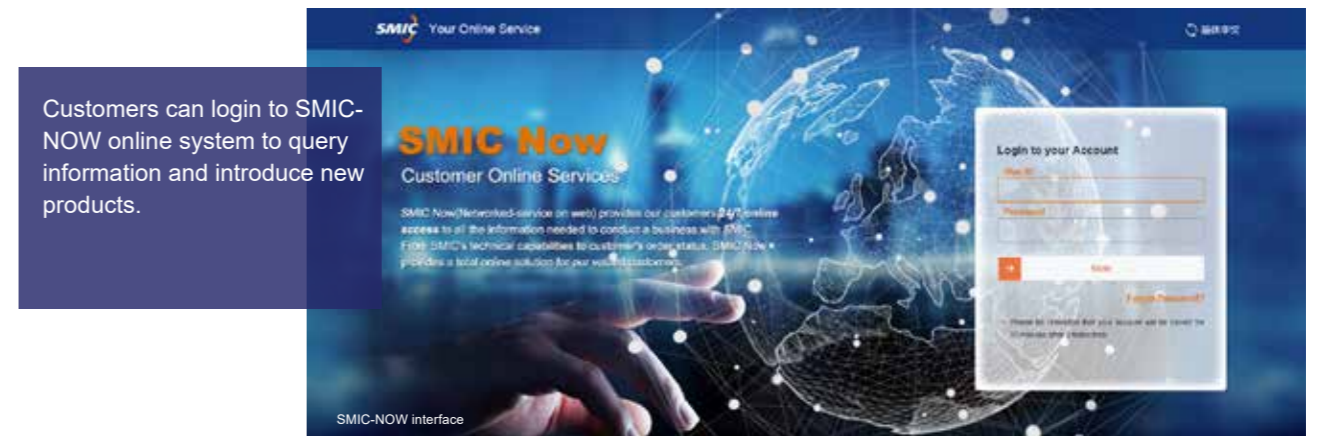
SMIC-NOW interface

Customers can login to SMIC-NOW online system to query information and introduce new products.
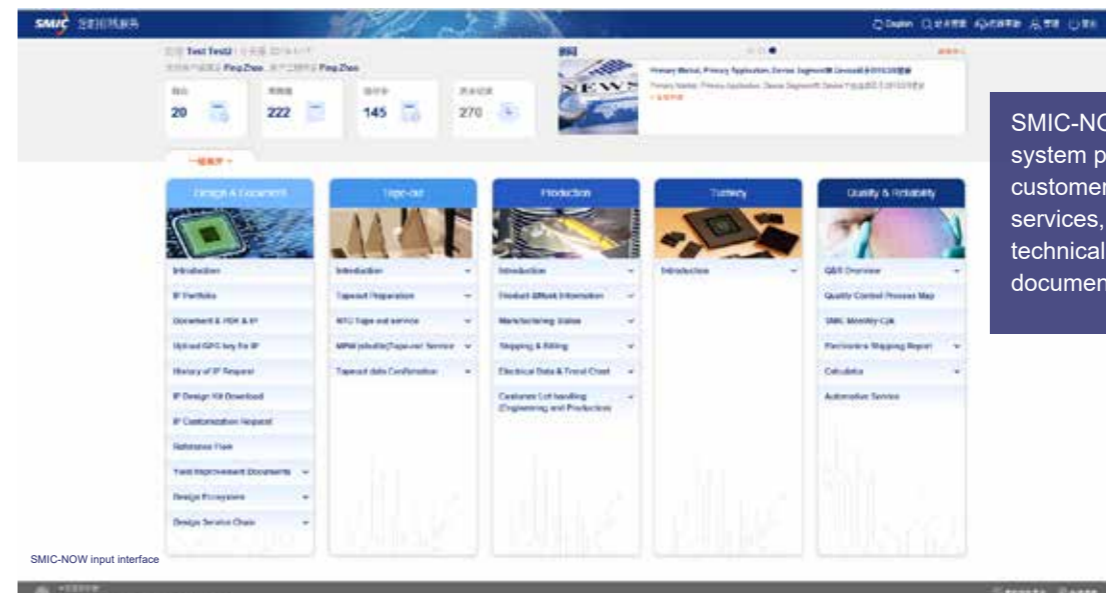
SMIC-NOW input interface

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

2.4.3 Customer Product Quality Management

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

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

• Adopt the concept of "one factory", that is, optimize the equipment and process parameters in each factory in order to achieve the same product quality standards and yield requirements.

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

Overall Control of Product Quality

Legend:
IQE: Incoming Quality Engineering (Including Incoming Quality Control and Supplier Quality Assurance)
WLRC: Wafer Level Reliability Control   OQA: Outgoing Quality Assurance   SPC: Statistical Process Control
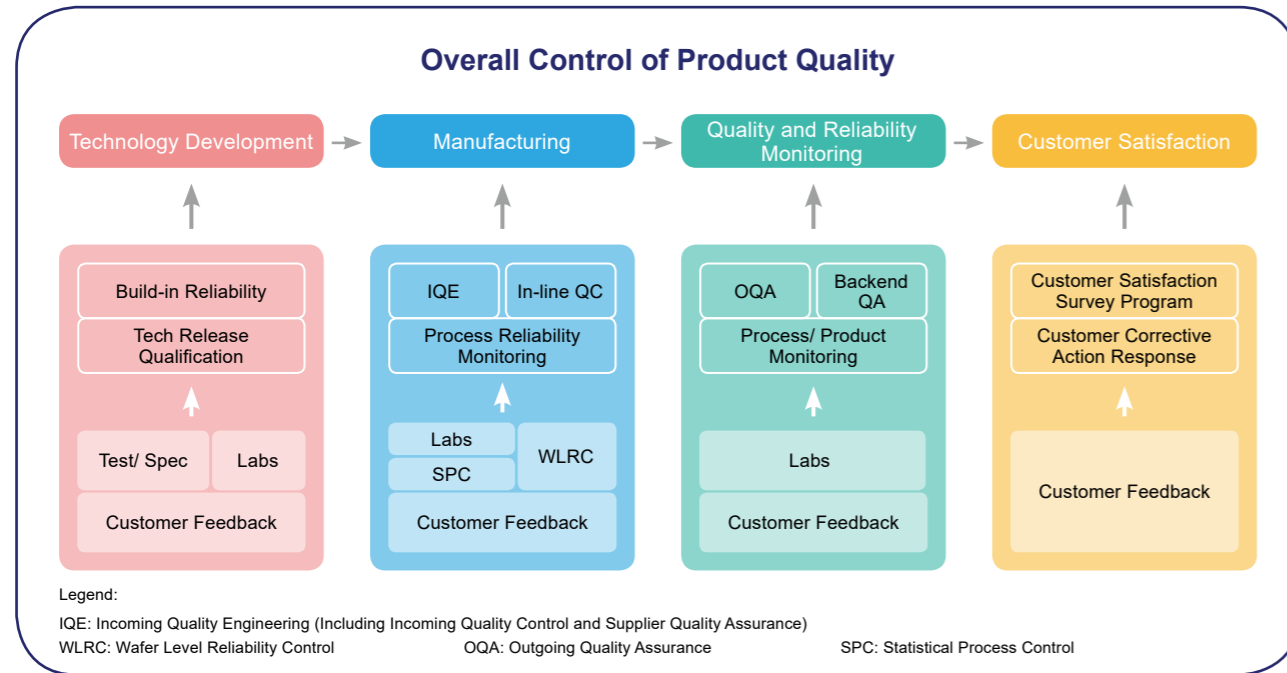
2.4.4 Customer Evaluations and Complaints Handling

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 the recurrence of similar incidents. In 2018, a total of 6 customer complaints were received, down 70% over 2017, which were handled in a timely manner according to the customer complaint handling process.

SMIC sets up product quality verification and product recall procedures and handle nonconforming products in accordance with the procedure, so as not to have a negative impact on customers.

And we control product safety and health risks based on QC 080000 system, so that products meet the relevant international and domestic regulations and customer requirements. In 2018, no products sold were recalled for safety or health reasons.

2.4.5 Customer Satisfaction

In 2018, SMIC continued to improve customer satisfaction survey mechanism. Every six months, the quality management team conducted customer satisfaction survey. The contents of the survey covered new product development, product quality and reliability, on-time delivery, business service quality, complaint handling and so on.

Customer satisfaction assessment elements
- Capacity, Production Cycle & Delivery
- Design Service
- Yield
- Sales Support
- Quality Control System
- Technology R&D
- Process/ Product Reliability
- Mask Service & Technology
- Fab Ability Performance
- Customer Engineering Services
- System, Interface (SMIC NOW)

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

With unremitting efforts and improvement in terms of product quality and reliability, production capacity, service quality, productivity and manufacturing cycle, SMIC won a high level of customer satisfaction in 2018. In the future, we will continue to work hard to further meet the needs of the market and customers.

Level of Customer Satisfaction

Customer Satisfication Level (%)

2011: 73%
2012: 73%
2013: 80%
2014: 83%
2015: 79%
2016: 78%
2017: 86%
2018: 89%

2.5 Supply Chain Management

2.5.1 Supply Chain Overview

Located in the middle of the whole IC industry, IC manufacturing is connected with upstream and downstream sectors. As a large local Chinese enterprise, SMIC has a wide range of procurement, covering production equipment, parts for production equipment maintenance, raw materials for production, plant facilities, fire facilities and engineering, professional services and other categories. Based on the concept of cooperation with suppliers, the company makes great efforts to help improve the CSR management ability in the supply chain and reduce the risks brought to us by the supply chain, thus guaranteeing stable manufacturing operation and ensuring the service quality for our customers.

Distribution of Raw Material Suppliers

2015
- 11.3%
- 25.3%
- 9.4%
- 29.2%
- 20.6%
- 4.2%

Chinese Mainland
US
Europe
Japan
Taiwan area
Others

2016
- 12.5%
- 25.6%
- 8.7%
- 27.0%
- 22.5%
- 3.8%

Chinese Mainland
US
Europe
Japan
Taiwan area
Others

2017
- 12.4%
- 25.7%
- 7.4%
- 26.1%
- 24.0%
- 4.5%

Chinese Mainland
US
Europe
Japan
Taiwan area
Others

2018
- 13.5%
- 19.7%
- 8.1%
- 29.7%
- 22.3%
- 6.6%

Chinese Mainland
US
Europe
Japan
Taiwan area
Others

In order to support local supply of the raw materials, SMIC keeps on working with local raw material suppliers to continuously strengthen evaluation of local materials and enlarge local purchasing amount and proportion. In 2018, the procurement amount of local raw materials reached $113.792 million, accounting for up to 16.72% of the total, which promoted construction of the local semiconductor industry chain.

Procurement Amount and Proportion of Local Raw Materials

Legend:
- Local Meterial Usage AMT(kUSD)
- Local Meterial Ratio(%)

Year	Local Meterial Usage AMT(kUSD)	Local Meterial Ratio(%)
2011	20,977	7.63%
2012	30,174	8.83%
2013	42,090	11.09%
2014	52,370	13.34%
2015	69,105	15.36%
2016	80,433	15.95%
2017	76,870	15.71%
2018	113,792	16.72%

2.5.2 Local Supply Chain Support

SMIC actively supports the development of the local supply chain, and the proportion of mainland Chinese suppliers in the raw material supply chain is increasing year by year, from 9.1% to 13.5%.

And the Company actively participates in special projects of domestic equipment and materials to raise the local procurement ratio of equipment and its raw materials, indirectly creating employment opportunities.

Type	Achievement
Domestic Equipment	Equipment scope: covering 0.35 micron ~ 28 nanometer equipment Results: successfully verified 25 process types, accounting for 13%, covering 35.6% of process types
Domestic Material	Material scope: covering 0.35 μm ~ 14 nm material Results: successful verification of 112 materials, accounting for 14.7% of all materials

2.5.3 Supplier Management Mechanism

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

• 2.5.3.1 Supplier Admittance

SMIC has developed an access assessment mechanism for new/alternative suppliers. The departments involved in the supplier admittance assessment include Q&R organization, Environmental/Safety/Hygiene Division, CSR Division, Procurement Division, and user organizations, etc., which carry out assessment in areas such as product quality parameters, supplier quality management system, supplier environmental/safety/ hygiene management, labor human rights 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 in approved vendor list (AVL).

• 2.5.3.2 Supplier Evaluation

* Supplier Quality and Business Evaluation

In order to monitor the supply chain risk, SMIC has established an evaluation mechanism for contracted suppliers. 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, etc. For items failing to reach the standards, the supplier must provide a plan for improvement and make improvement within a certain period of time.

Supplier Assessment Results for 2018

- 70-80 Score
- 80-90 Score
- >90 Score

4.5%
17.1%
78.4%

Comparison of Supplier Assessment Results between 2018 and 2017

> 90 Score: 78.4% (2018), 48.3% (2017)
80-90 Score: 17.1% (2018), 43.3% (2017)
70-80 Score: 4.5% (2018), 7.5% (2017)
60-70 Score: 0% (2018), 0.8% (2017)
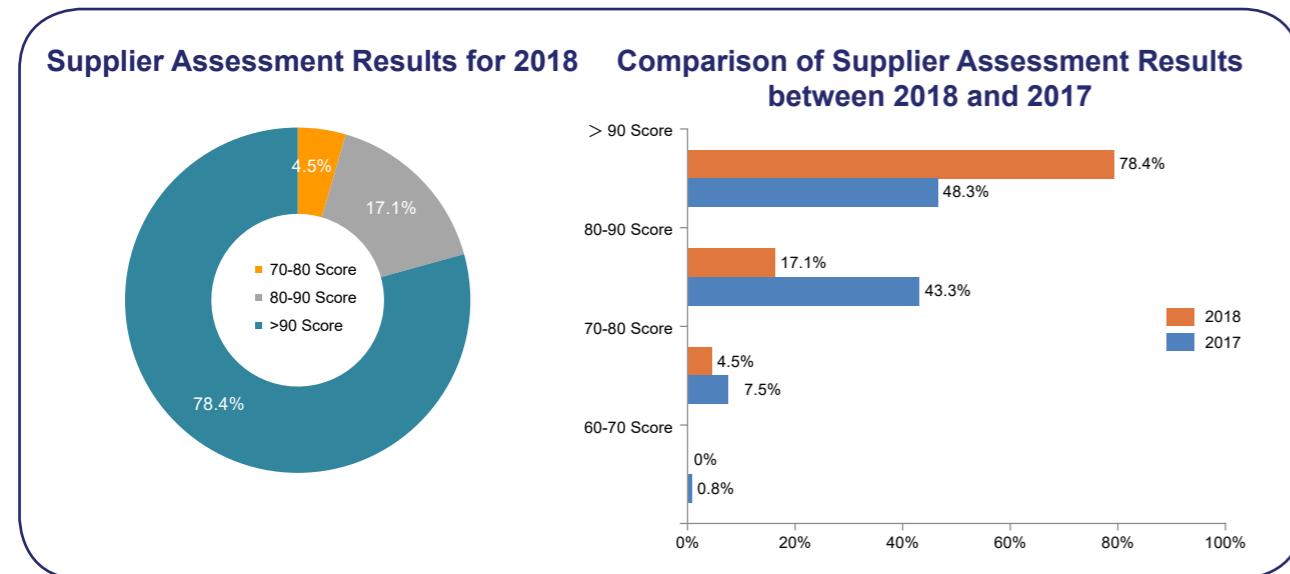
2018
2017

The supplier performance improved significantly in 2018 over the previous year, with suppliers scaled over 90 points increasing by nearly 30% and those between 60 and 70 points decreased from 0.8% to 0%.

* Evaluation of Suppliers' Sustainable Operation

In order to ensure long-term and stable business cooperation with suppliers, SMIC carries out a sustainable operation survey for all suppliers who provide raw materials in the current year and assesses the suppliers' sustainable operation conditions. The survey focuses on:

• Establishment of risk assessments (earthquakes, floods, IT system paralysis, terrorist attacks, etc.) and periodic reassessment of risk, performance of control over the assessed high risk factors;

• Establishment of site recovery, capacity transfer and supply recovery plans with regular drills for disaster response;

• Whether the business continuity plan is prepared and regularly reviewed by senior management representatives;

• Establishment of warning and notification mechanism for supply interruption;

• Consideration of perfection of business continuity management performed by suppliers in procurement;

In 2018, more than 40 major raw material suppliers 100% responded to the survey and reached satisfactory standards.

• 2.5.3.3 Supplier Capability Improvement

SMIC attaches great importance to grow together with suppliers, especially the factory contractors. In order to improve the contractors' safety construction level and reduce the operational risk in the factory, the Environment/Safety/Hygiene Division provides construction safety training for all operators, covering: (1) safety site construction knowledge

and requirements; (2) SMIC environmental protection/safety/hygiene regulations; (3) safety essentials for 9 high-risk operations (including hot works, fall protection, fire system impairment operations, hazardous piping cutting operations, special machinery operations, gas detectors isolation operations, fire detectors isolation operations, confined space operations and excavation work); (4) construction accident case sharing and so on. Only those operators who pass training are allowed to work in the construction site. The training improved the safety construction ability of the supplier operators, while reducing the risks brought by external factors to the Company. In 2018, there were no major safety accidents happening to contractors in the factory.

In order to increase the communication and interaction with the contractors, learn from each other and make progress together, SMIC sets up a contractor communication meeting and excellent contractor selection system, calls annual contractor communication meeting and conducts the selection of excellent contractors. Through the meeting, SMIC sums up the contractors' annual safety construction results, shares the contractors' experience in environmental protection, safety and hygiene, summarizes major contractor accident lessons, and gives commendation to outstanding contractors.

In 2018, SMIC selected 16 outstanding contractors from 149 major contractors and spread these outstanding contractors' experience summary in environmental protection, safety and hygiene management to all contractors, to enhance the contractors' safety management level and reduce safety accidents and injuries.

List of ESH Excellent Contractors

Contractor name	Nominating Plant	Contractor name	Nominating Plant
Edwards Technologies Trading (Shanghai) Co., Ltd.	Shanghai	Tokyo Electron (Shanghai) Ltd.	Beijing
Canon Optical Equipment Services (Shanghai) Co., Ltd.	Shanghai Shenzhen	Uniquetek International Corporation	Beijing Shenzhen
ASML (Shanghai) Co., Ltd.	Shanghai	Beijing Kanken Environmental Protection Equipment Co.,Ltd.	Beijing
Shanghai Youzhu Industrial Co., Ltd.	Shanghai	MURATEC (Shanghai) Co., Ltd.	Tianjin
Hexagon Tower (Tianjin) Technology Co., Ltd.	Shanghai	Tian Huo (Jiashan)Semiconductor Exhaust Industry Co., Ltd.	Tianjin
Greenstar (Beijing) Environmental Protection Technology Co., Ltd.	Beijing	Xie Wei IC Equipment (Shanghai) Co., Ltd.	Tianjin
Beijing Jingyi Automation Equipment Co.,Ltd.	Beijing	Shanghai Jingsheng Precision Machinery Co., Ltd.	Shenzhen
Beijing Le Sheng Precision Instrument and Equipment Installation Service Co., Ltd.	Beijing	Dainippon Screen Electronics (Shanghai) Co., Ltd.	Shenzhen

Contractor Recognition Meeting for Excellent ESH Performance

03 Caring for Employees

Employee Overview

Safeguarding of Rights and Interests
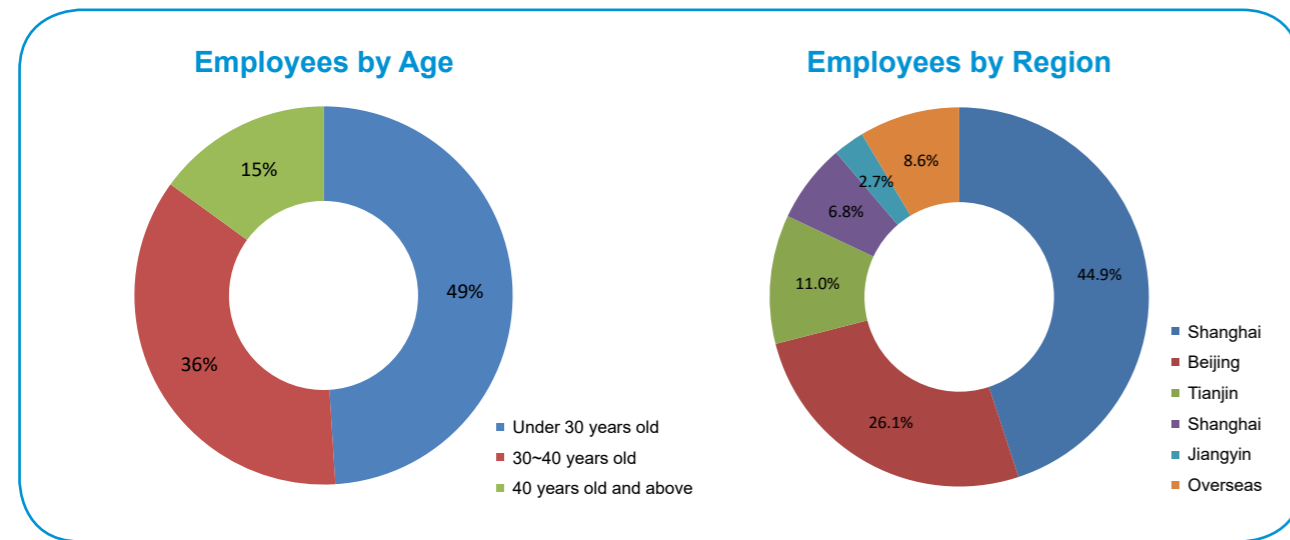
Career Development

Occupational Health and Safety

Employee Life

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

3.1 Employee Overview

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

In 2018, the total number of employees reached 18,015, including 2,000 foreign employees from 28 countries and regions, and including 9,906 males and 8,109 females, where female supervisors accounted for 27% of the management. In 2018, SMIC recruited 4,421 new employees. In addition, welcome to the disabled is also a consistent policy of SMIC, and we provide them with the necessary assistance as far as possible.

Employees by Age

- 49% Under 30 years old
- 36% 30~40 years old
- 15% 40 years old and above

Employees by Region

- 44.9% Shanghai
- 26.1% Beijing
- 11.0% Tianjin
- 6.8% Shanghai
- 2.7% Jiangyin
- 8.6% Overseas

3.2 Safeguarding of Rights and Interests

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

Based on the 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.

3.2.1 Recruitment Policy

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

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

3.2.2 Remuneration and Benefits System

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

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

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

- SMIC living quarter (LQ);
- Free commuting shuttle and meals;
- Various club activities;
- Fitness leisure facilities near the Company;
- Discounts provided by surrounding businesses, etc.

3.2.3 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:

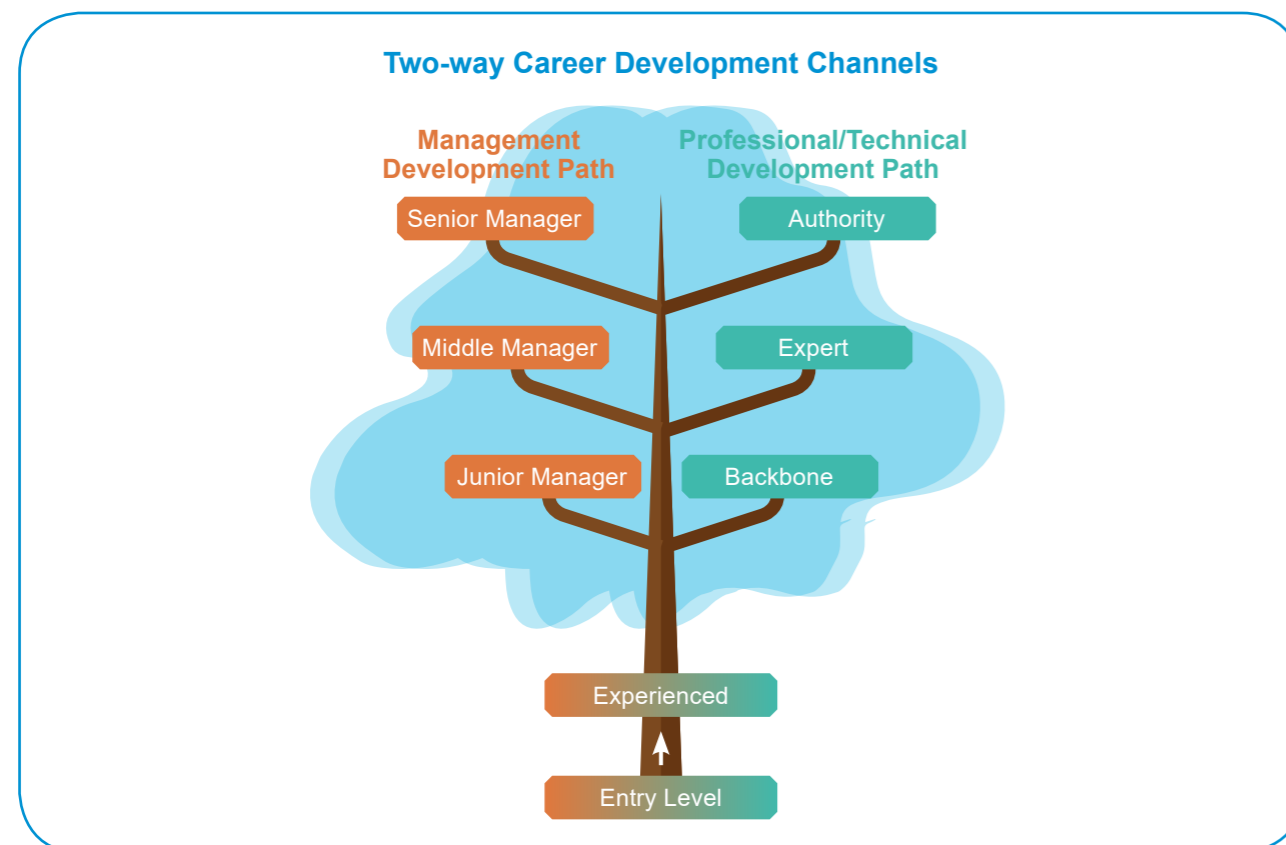| Award Name	Award Purpose
Chairman Special Retention Award	To motivate teams and individuals to promote revenue growth and cost optimization by adopting innovative concepts
Long Service Employee Award	To appreciate senior employees' long- term devotion and commitment to the company

3.3 Career Development

SMIC is concerned about the career development of its employees, and it has established reasonable paths for development, provided comprehensive support resources and developed a special retention system.

3.3.1 Career Development Paths

• 3.3.1.1 Two-way Career Development Channels - Management and Technology

SMIC has established two-way career development channels for both management and technical talents, and has provided appropriate institutional assurance and incentives to meet the common development needs of employees and companies.

Two-way Career Development Channels

Management Development Path
- Senior Manager
- Middle Manager
- Junior Manager

Professional/Technical Development Path
- Authority
- Expert
- Backbone

- Experienced
- Entry Level

• 3.3.1.2 Vertical Development Channel--Promotion

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

• 3.3.1.3 Horizontal Development Channel--Job Transfer

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

• 3.3.1.4 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.

3.3.2 Career Development Booster

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

• 3.3.2.1 Employee Training

The company provides targeted training for different levels of employees, such as induction training for new employees, capacity development projects for middle and middle-senior managers, sets up multi- dimensional training contents, such as corporate culture, professional skills, general skills and management and leadership development, etc., carries out training in diversified forms, such as face-to-face, on-the-job training, job rotation, study group, reading group, knowledge base, etc. In 2018, the company provided 464,047 hours of training for employees at all levels, 30.3 hours per capita, covering 321,755 person-times, and a total of 214 person-times received the title of internal outstanding trainer.

Training Types

Management, Leadership and Development Skills
- Managerial Capacity Development Project
- Line Manager Management Skills
- Cross Department Cooperation Conflict Management
- Team Management、Performance Managemenr
- Efficient Authorization、Excitation......

Professional Skills
- Research Development Manufacturing
- Quality and Reliability
- Engineering Applied Statistics
- Safety and Environmental Protection......

General Skills
- Project Management
- Communication and Interpersonal Relationship
- Speech Skills
- Problem Solving
- Time Management......

New Employee Orientation Training
- Company Introduction
- Enterprise Culture
- Human Resources
- Rules And Regulations......

- Workplace Etiquette
- Professional Competitiveness
- Effective Communication......

Employee Training

New employee training camp

Technical training students' quality development

Middle and senior management workshop

Special training for talent echelon construction

• 3.3.2.2 Online Learning Platform

In order to facilitate the employees to learn at any time, the company sets up an online learning platform E-learning, covering 990 courses, including the most advanced semiconductor technology knowledge at home. To adapt to the development of the employees in the new era, the company in 2018 upgraded the training management system to integrate existing resources and provide employees with rich curriculum contents, enhance the system functions in all aspects, improve the learning experience of employees to meet their learning needs and improve the company's learning efficiency.

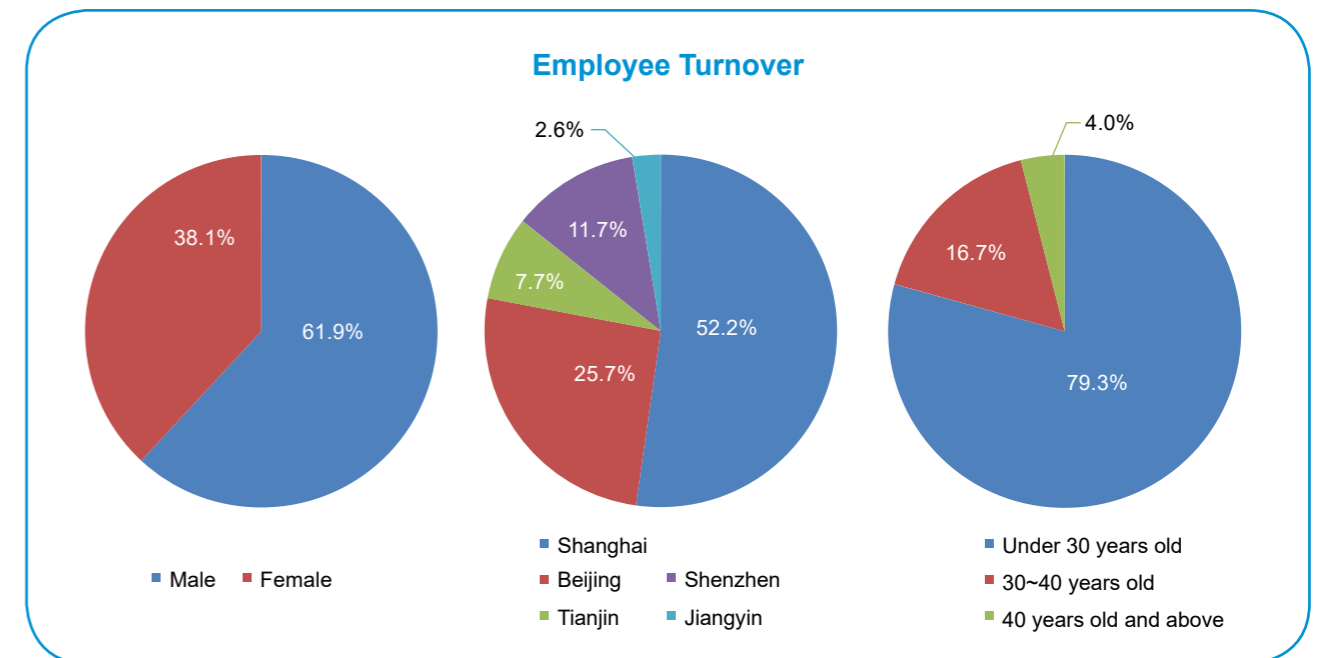### • 3.3.2.3 Further Education Program

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

Bachelor degree in on-the-job education

3.3.3 Talent Retention

Employees are the most important assets of the company. In addition to providing competitive salaries and benefits as well as a wide range of career development channels, we also seek to retain outstanding employees by building our corporate culture, advocating open communication, caring for physical and mental health and implementing targeted retention plans.

The employee turnover rate in 2018 was 22%, and that in Shanghai accounted for about 50% of the total. The employee turnover is detailed as follows:

Employee Turnover

- 38.1% Female
- 61.9% Male

- 2.6%
- 11.7% Shenzhen
- 7.7% Tianjin
- 25.7% Beijing
- 52.2% Shanghai
- Jiangyin

- 4.0% 40 years old and above
- 16.7% 30~40 years old
- 79.3% Under 30 years old

Legend:
- Male
- Female
- Shanghai
- Beijing
- Tianjin
- Shenzhen
- Jiangyin
- Under 30 years old
- 30~40 years old
- 40 years old and above

• 3.3.3.1 Cohesion Enhancement

SMIC continues to carry out a variety of activities to deepen the construction of corporate culture to promote the implementation of corporate culture in the work, such as holding retrospective summing- up meeting on practice of executive values, producing advertising videos for value micro-films, organizing corporate culture photography competition, publishing corporate culture briefings, and incorporates the value behavior performance in the performance evaluation, so as to let employees take the value as a guideline in the work and form a unified value system within the company, which has enhanced the cohesion and competitiveness of the company and created a good corporate image.

Corporate culture construction

• 3.3.3.2 Advocacy of Open Communication

SMIC establishes company quarterly communication conference attended by the Chairman, CEO, managers at all levels and employees representatives, grass-roots employees communication meeting attended by engineers, manufacturing assistant communication meeting attended by front-line production employees, technical trainee communication meeting and other communication meetings covering all levels of employees, and opens an email to ensure smooth communication. In 2018, a total of 36 different types of communication meetings were held.

Communication Meetings

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

We also communicate with the employees who submit application for resignation and overcome shortcomings in the enterprise policy and management system based on their candid and objective opinions, to promote the benign development of the company. In 2018, we communicated with the departing employees through face-to-face interview or on telephone, and the interview rate reached over 85%.

• 3.3.3.3 Retention of Manufacturing Assistants

Manufacturing assistants (MAs) account for the largest percentage in the company as the most basic employees. SMIC has been implementing the manufacturing assistant retention plan since 2012. In 2018, we continued job evaluation, new environment integration, shaping good character, festival care and other projects.

Retention Programs of Manufacturing Assistants

Retention Program	Description
Job Evaluation	To reduce turnover due to mismatch between personal characteristics and position requirements, and to screen emotional high-risk candidates to reduce accident rates, the MA candidate-position matching measurement project was launched across the board.
New Environment Fit-in	Help newcomers to quickly get familiar with the surrounding environment, understand the psychological process of adapting to a new job, and learn about health knowledge in shift work, and solve their psychological problems as they are being emplyed, 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 2018, we carried out various kinds of psychological training seminars for MAs. We added various books at restroom on the Mid-Autumn Festival to rich their spiritual world, and orgnized the activities of visiting nursing homes in the Double Ninth Festival.
Festival Care	We visited the staff quarters in the Spring Festival of 2018.The "Spirit of Mind" was released on the company's website bulletin board to cared for MAs on the Women's Day, Mid-Autumn Festival, National Day, Christmas and other holidays.

3.4 Occupational Health and Safety

SMIC has always been concerned about the occupational health and safety of its employees. At the beginning of its establishment, the Company established the occupational health and safety management system (OHSAS 18001), which is subject to third-party audit on an annual basis to ensure effective operation. In March 2018, health and safety factors were controlled in a systematic way in accordance with the new occupational safety and health management system (ISO 45001). And adequate special funds for professional health and safety are granted each year. In 2018, the capital invested was over RMB 160 million.

We abide by more than 100 occupational health and safety related laws, regulations and standards, including Law of the People's Republic of China on Prevention and Control of Occupational Diseases, and Law of the People's Republic of China on Work Safety.

3.4.1 Healthy and Safe Working Environment

• 3.4.1.1 Risk Identification and Control

SMIC established a whole-process risk identification and control system.

(1) In the factory construction phase, the company attaches great importance to the control of the source of safety risks, establishes a risk assessment and evaluation mechanism for the new factory, ensures synchronous construction of fire facilities, safety facilities and emergency response facilities, and ensures establishment of safe plant;

(2) In the equipment installation phase, the company strictly implements the dangerous chemicals or facility start control system and the change management system, with focus on checking the equipment safety interlock devices and detection devices to control and reduce the import of external risks;

(3) In the factory operation phase, the company establishes an emergency response organization to carry out regular exercise and regular maintenance of fire facilities, safety devices, detection systems, daily on-site audit to eliminate health and safety risks in time; regularly detects occupational hazards in the workplace and provides appropriate personal protective equipment for the employees at special posts.

• 3.4.1.2 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 2018, the Company organized a total of 5,498 employees to participate in the occupational health examination, with occupational physical examination and health records covering 100%.

In 2018, SMIC continued to develop the target of zero major fire accident and ensured achievement of the target by implementing no-notice exercises, cross-plant risk control conference, fire risk inspection and other management projects. The goal was achieved successfully.

Health and Safety Training Summary

Year	ERT Basic Training	ERT Advance Training	New employee ESH training	Contractor ESH training
2016	2,183	1,932	6,445	24,409
2017	2,499	1,937	3,109	19,872
2018	1,996	1,880	5,232	15,788

*ERT：Emergency Response Team；ESH：Environment/Safety/Hygiene

List of Drills

Year	Rescue Drill		Evacuation Drill		Surprise Drill	
	Times	Number of Participants	Times	Number of Participants	Times	Number of Participants
2016	281	5,905	72	18,052	77	2,015
2017	241	4,797	66	14,902	53	1,401
2018	165	4,018	76	14,420	48	2,115

SCBA Competition in Safety Month

Rescue Drill

In June 2018, factories of SMIC organized Safety Month activities at the same time. The Company management attached great importance to the activities and attended the opening ceremony, which enhanced the employees' safety consciousness and simultaneously improved their safety skills. Safety Month activities fall into dynamic and static activities, the former including SCBA training, firefighting training, fire hose training, CPR training, etc. and the latter including safety knowledge contests, posters, safety culture photography, displaying of posters, etc. The factory in Beijing also received local government awards.

Safety Month Achievements

A total of 14,973 participants

A total of 12,300 participants of dynamic activities

A total of 2,673 participants of static activities

1,591 — Various safety knowledge contests
1,082 — Posters, slogans, photography
4,661 — Fire training
2,721 — SCBA training
1,683 — CPR training
3,829 — Evacuation drill
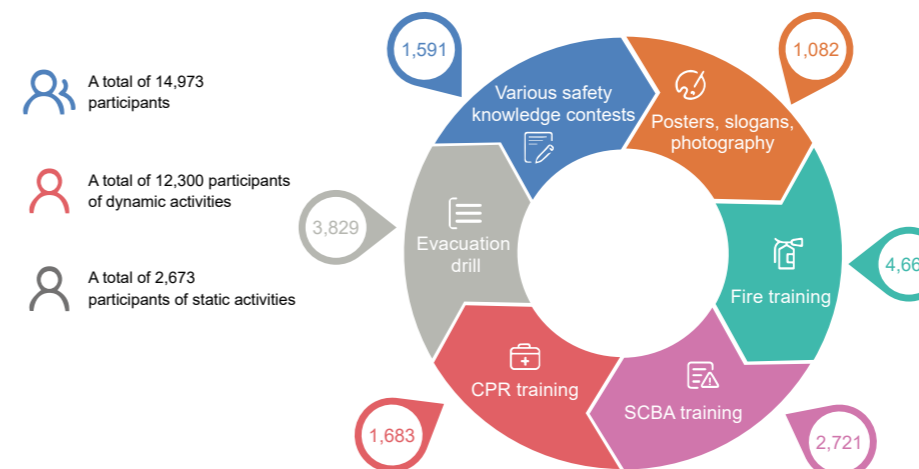
SMIC records injuries in accordance with the OSHA standard and the recordable work injury rate remains at a lower level in the industry. In 2018, with the joint efforts of all departments, the injury rate remained at an all-time low; we will continue to work to reduce the recordable work injury rate and achieve the ultimate goal of zero.

Recordable Injury Rate

• Injury Rate (IR): Number of recordable injuriesx200,000/Total number of work hours, (per 200,00 work hours)
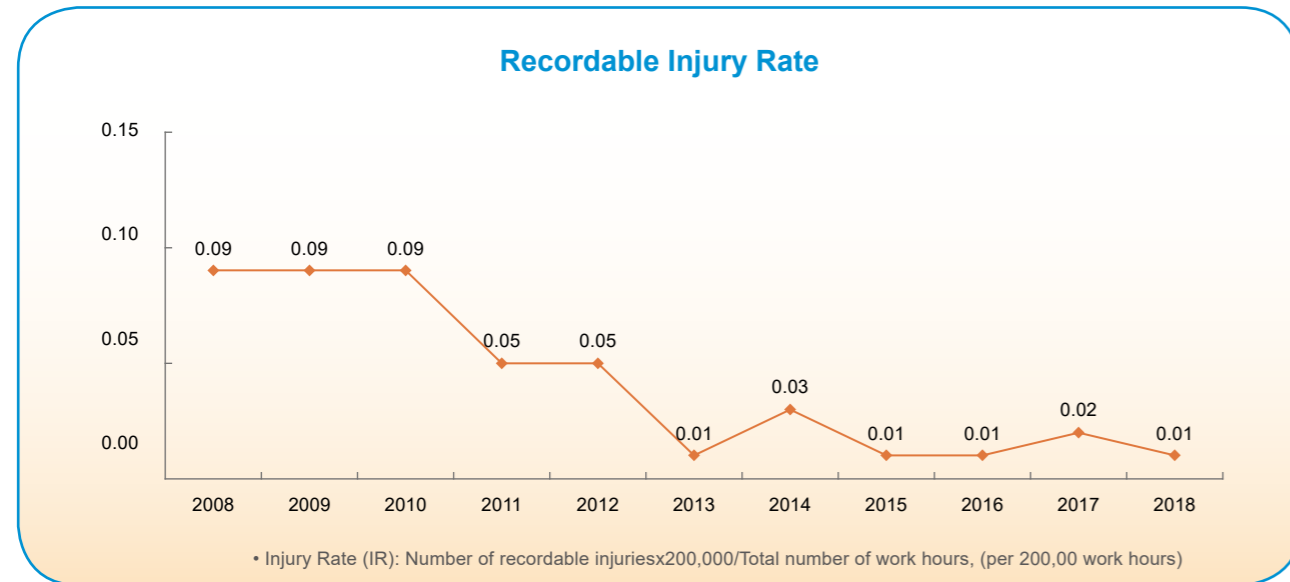
3.4.2 Care for Physical and Mental Health of Employees

• 3.4.2.1 Health Center

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

• 3.4.2.2 CPR Training

In order to improve the first aid awareness of employees, the company has established cardiopulmonary resuscitation (CPR) as a regular training program and offered the public training course on CPR in the health center. The company arranges a certain percentage of employees (including engineers, operators, secretaries, etc.) to receive CPR training and rehabilitation each year, and carries out CPR competition in the Safety Month event. There were 2,492 in total attending CPR training in 2018.

• 3.4.2.3 Infectious Disease Prevention and Control

Prevention and cure of infectious diseases is the basic factor for constructing a harmonious society, so as a member of society, SMIC actively participates in the prevention and control of infectious diseases with a bounden duty. The health center arranges new employees to be vaccinated against measles, and puts the employees with infectious diseases such as hepatitis and tuberculosis under unified management with regular visits. In 2018, a total of 543 were vaccinated against measles and 65 were vaccinated against meningitis.

CPR competition

Measles vaccine

• 3.4.2.4 Psychological Crisis Defense and Assistance

In order to prevent employees from serious psychological problems endangering themselves, the company or the society, SMIC has set up a psychological consultation room with a 24-hour psychological assistance hotline, where professional psychotherapists treat all types of psychological crisis cases in a timely manner to improve the mental health of employees. In 2018, individual psychological counseling services were provided for more than one hundred cases of employees and their immediate families, covering all aspects of the EAP services.

SMIC continues to improve its own psychological crisis defense system. In 2018, SMIC continued to improve the three-level defense process and system from "entry psychological screening", "psychological crisis prevention by early finding, early diagnosis and early treatment" to "psychological crisis management".
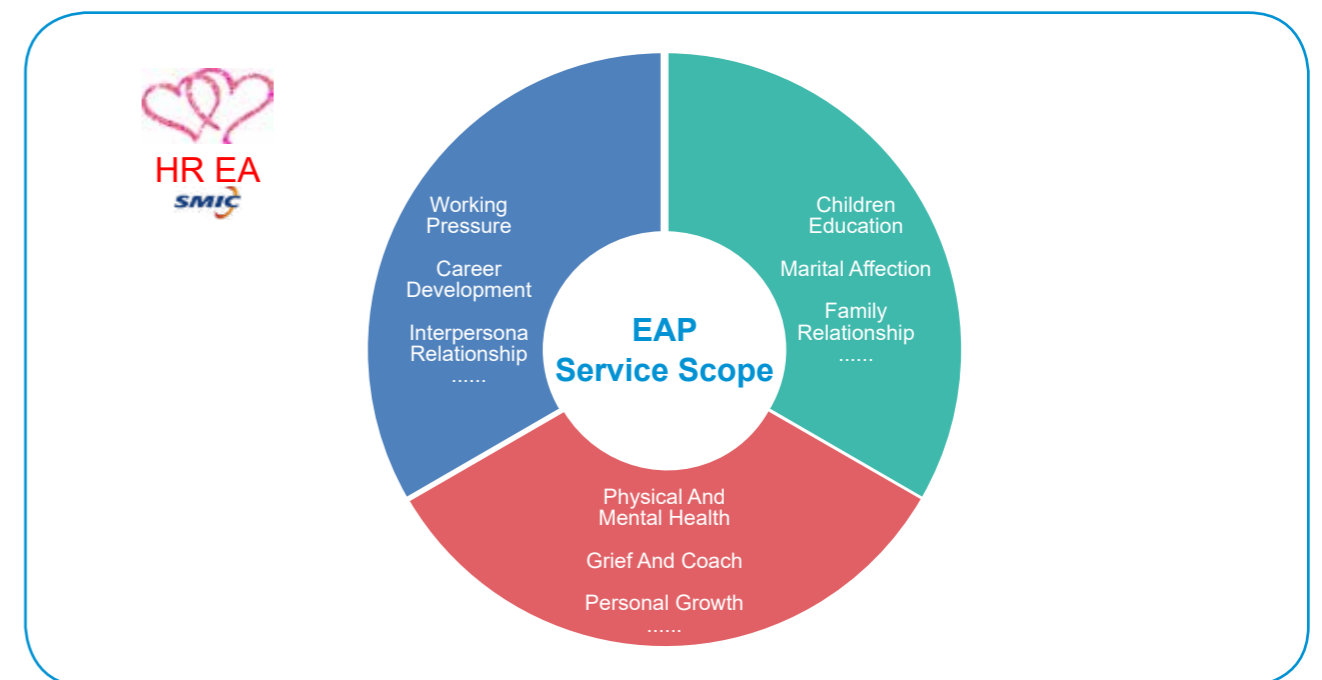
In addition, SMIC has set up a mental health volunteer team and provides regular training so that volunteers can further play a role in caring for the mental health of their colleagues in the Company, especially in the departments.

- ## 3.4.2.5 Loving Mommy Room

In 2018, the company set up Loving Mommy Room, to provide warm environment and facilities for mothers returning from maternity leave, so that female workers feel special care.
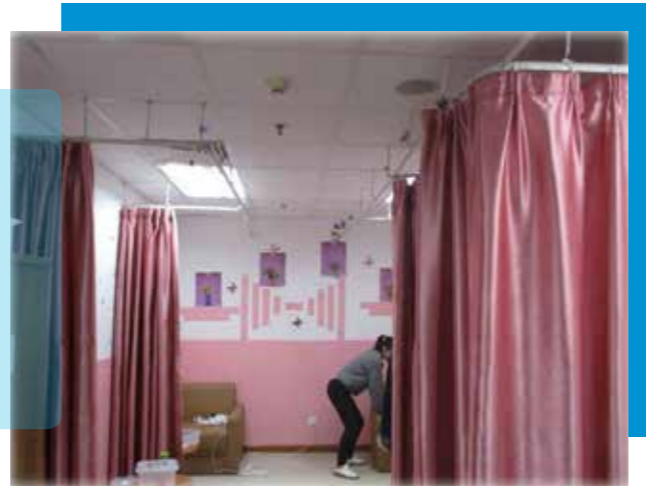
3.5 Employee Life

3.5.1 Democratic Management

SMIC establishes labor unions, formulates labor union management regulations, implements democratic management and safeguards the legitimate rights and interests of employees in accordance with the national regulations. The labor union is composed of the Chairman, the Vice Executive Chairman, the Vice Chairman, the labor union members and the labor union office commissioners. The Chairman of the labor union is held by the Vice President, while the Vice Executive Chairman, the Vice Chairman, the labor union members are composed of representatives from all divisions, and the employees join the labor union at their will.

In 2018, the labor union promoted employees to participate in the science and technology innovation and skill contest, elected and granted award to advanced collectives and model workers, and carried out other activities related to the company business, 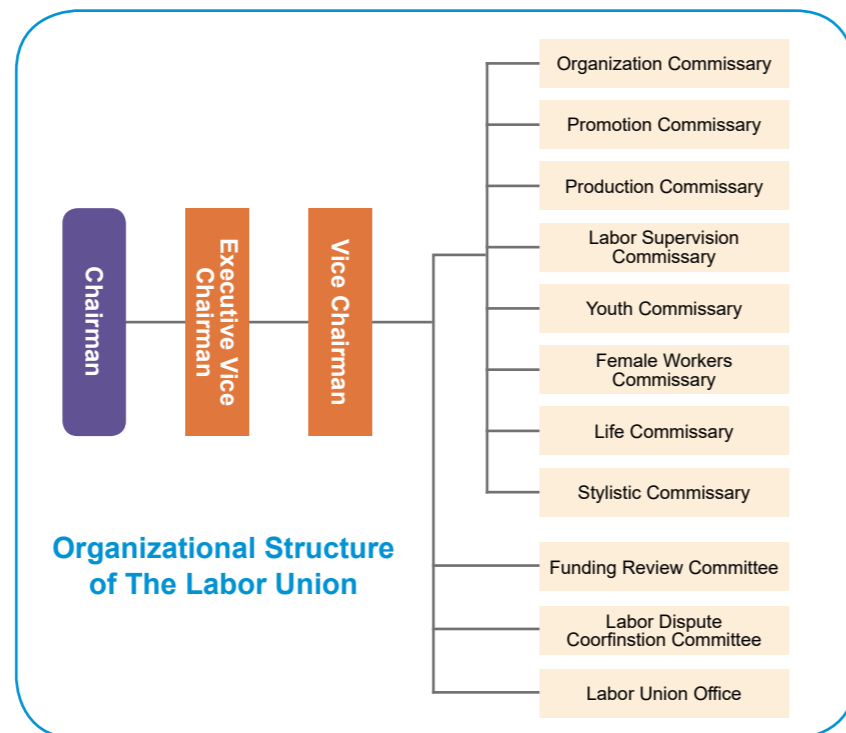besides giving care to the employees' life and harmonizing the labor-capital relationship; it also organized cultural and sports activities and built the talent demonstration platform to enrich the employees' amateur life.

Chairman — **Executive Vice Chairman** — **Vice Chairman**

- Organization Commissary
- Promotion Commissary
- Production Commissary
- Labor Supervision Commissary
- Youth Commissary
- Female Workers Commissary
- Life Commissary
- Stylistic Commissary
- Funding Review Committee
- Labor Dispute Coorfinstion Committee
- Labor Union Office

Organizational Structure of The Labor Union

3.5.2 Colorful Activities

SMIC advocates a healthy and colorful employee lifestyle, to show the employees style while enhancing the cohesion of the company.

- ## 3.5.2.1 2018 Annual Meeting - Oscars Big Screen Audiovisual Symphony Concert

To promote the construction of corporate culture and enrich the life of employees, Shanghai factory of SMIC held a symphony concert with the theme of ""SMIC" Pattern ,New Imagination" during the New Year of 2018, which cultivated taste and improved artistic accomplishment of employees, while enhancing their cohesion.

- ## 3.5.2.2 Sports Meeting

In golden autumn of 2018, Shanghai factory and Beijing factory of SMIC solemnly held autumn sports meetings with the theme of "Working Together Towards the "SMIC" Era", in line the corporate culture construction of the Company. In the games such as radio exercise, group tug-of-war and fun relay, contestants showed the spirit of bravery and solidarity, in line with the principle of "Friendship First, Competition Second".

• 3.5.2.3 Family Day

On August 25, 2018, Tianjin factory of SMIC held the fourth Family Day event, presenting wonderful fun games and artistic performances, bringing employees a sense of cool in the hot late summer.

• 3.5.2.4 Photography Contest

In May 2018, SMIC launched the second "In SMIC" themed corporate culture photography contest and the employees actively participated in the activity, with over 200 pieces of excellent works received from more than 50 colleagues, highlighting the beauty of SMIC, increasing employees' love for the company, and enhancing cohesion among employees.

• 3.5.2.5 Skill Contest

In 2018, Shanghai factory of SMIC organized employees to participate in the skill contest and advanced individual selection organized by the local government on technologies. SMIC team won Outstanding Achievement Award for Rational Proposals in Shanghai, Employee Advanced Operation Innovation Award in Shanghai, Second Prize of Shanghai Staff Innovation Talent Award and Gold Award for Outstanding Invention in the 30th Shanghai Excellent Invention Selection.

• 3.5.2.6 Youth Fellowship - Daming Mountain Hiking and Networking

To stabilize young employees and make connections for them, the trade union of SMIC actively organized and participated in internal and external youth fellowship activities in 2018.

• 3.5.2.7 Various Festival Activities

SMIC organizes activities on traditional festivals such as the Lantern festival, Dragon Boat festival and mid-Autumn festival, and it also organizes special activities for specific employees groups on special festivals such as Women's Day, Secretary Day and birthday parties.

Birthday party

Secretary Day

Mid-Autumn festival

Women's Day

Lantern festival

• 3.5.2.9 Cultural and Sports Association Activities

SMIC has established a number of cultural and sports associations in factories. The labor union jointly organizes various activities with the cultural and sports association. These association activities enrich the amateur cultural life of employees, while greatly mobilizing the enthusiasm of employees and enhancing their cohesion, so that employees have higher spirits to serve the Company.

Billiards Association

Football Association

Basketball Association

Badminton Association

Photography Association

Bike-riding Association

Running Association

3.5.3 Considerate and Convenient Life Service Facilities

• 3.5.3.1 SMIC LQ

Shanghai LQ

The Zhangjiang LQ in Shanghai covers an area of 276,000 square meters, meeting living requirements of more than 2,500 employees and their family members. With a distance of about 1.4 km from the factory, it is convenient to go to work on foot, by bike or on the free shuttle. In 2018, SMIC continued to improve the accommodation environment for frontline employees, by renovating outdoor walls, indoor walls, washrooms and toilet facilities.

Employee dormitory renovation

The Tang Town LQ in Shanghai is about 7 km away from the company. Tang Town LQ Phase I covers an area of more than 70,000 square meters, where there are 16 high-rise residential buildings, with a building area of more than 130,000 square meters, including 1,100 apartments and 431 dormitories. Apartments and dormitories are well-decorated and equipped with basic furniture, which can meet the housing requirements of about 4,500 employees and their family members. The life park also has a children's activities center, large underground garages, ground garages, commercial buildings and other service facilities. In 2017, employees and their family members moved in.

In 2018, the construction of SMIC Garden Phase II in Tang Town started. The total investment of the project is RMB 710 million, covering an area of 71,000 square meters, expected to build more than 1500 apartments and staff dormitories of 60 and 80 square meters. On October 17, 2018, the project was approved for Civilized Construction Site in Pudong New Area as a whole. On December 26 of the same year, Building 18 was approved for the Quality Structure of Pudong New Area Construction Project.

Tang Town LQ - Phase II

Beijing LQ

Beijing LQ

The LQ in Beijing is 2.6km away from the company and it is suitable for walking or riding a bike from the LQ to the factory.As of 2018, the LQ (including Phase I/Phase II) offered 513 apartments, 371 single apartments and 482 staff dormitories, with a total of 3,689 employees and their families moving in, including 1,484 employees in the dormitory.

To meet the needs of the Company's development, SMIC rented 265 apartments from the white-collar apartment in Beijing Development Zone in 2018 to solve the living problems of employees.

Tianjin LQ

The LQ in Tianjin is about 3km from the company with 3 apartment buildings and 1 dormitory building, covering a total construction area of 32,914 square meters. As of 2018, Tianjin LQ offers 231 apartments and 165 staff dormitories with a total of 1,289 employees and their families moving in, including 508 employees in the dormitory.

White-collar Apartment in Beijing Development Zone

LQ Facilities

There are restaurants, convenience stores, fitness centers and other multi-functional living and leisure facilities in the LQ.

Service facilities

• 3.5.3.2 Dining Service

In all factories, the company establishes canteens in different sizes according to the number of employees and provides food and beverage subsidies. The canteens are operated by different catering suppliers and offer a variety of food and beverage services such as Chinese food and western food to meet the diverse needs of employees. In 2018, the canteens continued to hold food festivals and culinary competitions, while promoting economy and healthy food.

Catering environment

Healthy Dining

Promote healthy diet, gradually reduce the use of edible salt, edible oil and soy sauce by month.

Control sources of the food ingredients and designate base food brands; strictly control the use of food additives.

Carry out food material acceptance and management, publish three certificates of meat and quarantine records of vegetables in the management group on a daily basis for mutual supervision.

Promote the "Clean Plate Campaign", optimize self-help and buffet dinning to effectively save food in terms of food selection.

Food Festival Activities

In May 2018, the restaurant of Tianjin factory held the "Folk Customs, Life Nourishing and Fine Food" themed food festival, featured to showcase the folk culture of Tianjin, while advocating the new concept of healthy and nutritious food. The food festival regulated the dining atmosphere of employees, enriched their dining experience, while establishing a bridge for good communications with food and beverage manufacturers, to improve the quality of food and beverage services.

Photo of the food festival

In May 2018, the restaurant of Shenzhen factory launched a series of food festival activities with the theme of "Maternal Love Thanksgiving", so that employees were enlightened by Chinese filial piety pictures and texts on the scene while enjoying fine food. In the activity, there was a special area for all employees to make wishes for their mothers and relatives. When they wrote down their wishes for their families and prayed for health and happiness, they took part in lucky draw happily for dinning.

Maternal love thanksgiving themed food festival activity

• 3.5.3.3 Transportation Service

To better serve employees, save energy and reduce carbon emissions, the company offers a free shuttle service between the factory and the life park or the nearby metro station, and the new energy shuttles are used in most cases. In 2018, the total number of person trips by shuttle reached nearly 3 million.

To solve the problem of insufficient parking places, the space parking system was completed and put into use in Shanghai factory of SMIC in 2018, which is composed of seven floors, offering nearly 1,000 parking spaces.
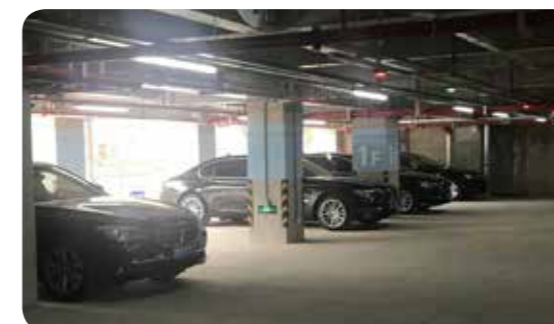
04 Caring for Environment

Environment Protection Policy

Environment Protection Management

Greenhouse Gas Management

Energy Management

Water Resources Management

Air Pollution Prevention and Control

Waste Management

Environment Protection Awareness

SMIC lays emphasis on the development of enterprises and the creation of economic value, while highlighting environmental protection and utilization of energy resources. We take continuous improvement measures to fulfill environmental responsibility and insist on sustainable development.

4.1 Environment Protection Policy

SMIC attaches great importance to environmental protection management. At the beginning of its establishment, the Company set up an environmental, safety and occupational health management department and established an environmental protection management system. In 2001, the Company passed the ISO 14001 environmental management system certification, followed by the OHSAS 18001 occupational health management system certification. SMIC established the environmental protection, safety and health policies based on ISO 14001 environmental management system and OHSAS 18001 occupational health and safety management system. Based on the continuously improved concept, by optimizing and revising the policy, SMIC gradually develops the following new management policies:

4.2 Environmental Protection Management

Under the guideline of environmental management systems, laws, regulations and standards, SMIC systematically and normatively integrates the environmental management practice into the whole process of production and operation in the areas such as organizational structure, document control, operational control, supervision and management, improvement and enhancement, by planning, implementing and operating environmental management projects.

4.2.1 Management Team and Capital Investment

SMIC sets up a separate environmental management sector consisting of members with professional environmental management knowledge and skills. The environmental management sector works with other functional divisions to jointly implement environmental management projects with clear responsibilities, to ensure the realization of environmental objectives and make sure that ISO 14001, ISO 14064, QC 080000 and other environmental management systems run effectively.

In 2018, the Company invested about $200 million for operation, reconstruction and expansion of the environmental protection facilities for waste water, waste gas and waste materials, as well as pollutant monitoring and third party audit of the environmental management system.

4.2.2 Cleaner Production

In order to minimize and even eliminate the impact of the production process on humans and the environment, we

implement cleaner production measures. These measures include reduction of pollution sources, increase of resource utilization, reduction and elimination of pollution in the links from production and maintenance to product use.
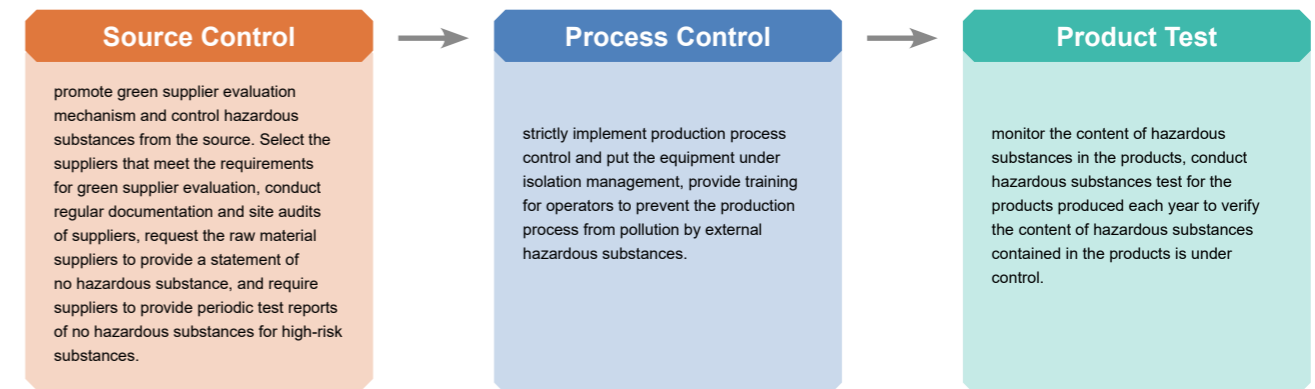
In accordance with regulatory requirements, SMIC regularly implements cleaner production audits and implements cleaner production improvement plan according to the expert audit suggestions. In 2018, SMIC implemented 39 cleaner production improvement programs with an investment of more than RMB 28.52 million.

4.2.3 Green Factory

Tianjin factory of SMIC actively participates in the selection of advanced green manufacturing models organized by the Ministry of Industry and Information Technology. In November 2018, Semiconductor Manufacturing International Corporation (Tianjin) won the title of the third batch of green factories with outstanding green environmental protection achievements, advanced green manufacturing process and splendid standardized system management, after self-evaluation by Tianjin factory, evaluation by third-party evaluation organizations, evaluation and confirmation by provincial authorities in charge of industry and information technology, as well as expert demonstration and publicity, etc. It is the second factory of SMIC to be awarded the title after 2017 when Semiconductor Manufacturing International Corporation (Beijing) received the title.

4.2.4 Green Product Governance and Control

In accordance with QC 080000 hazardous substances control system, SMIC controls hazardous substances risks in the whole production process, so that the products meet the Management Methods for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products, EU RoHS/REACH, Sony GP standards and other domestic and international hazardous substances control standards, to reach the green product level.

Source Control	Process Control	Product Test
promote green supplier evaluation mechanism and control hazardous substances from the source. Select the suppliers that meet the requirements for green supplier evaluation, conduct regular documentation and site audits of suppliers, request the raw material suppliers to provide a statement of no hazardous substance, and require suppliers to provide periodic test reports of no hazardous substances for high-risk substances.	strictly implement production process control and put the equipment under isolation management, provide training for operators to prevent the production process from pollution by external hazardous substances.	monitor the content of hazardous substances in the products, conduct hazardous substances test for the products produced each year to verify the content of hazardous substances contained in the products is under control.

4.3 Greenhouse Gas Management

The climate change caused by greenhouse gas emissions has a great impact on the global ecological environment, human life and health and economy, so it is an environment issue receiving great concern from the United Nations, governments, society and business circles. SMIC has also attached great importance to it and has taken relevant measures.

4.3.1 Climate Change Policy

SMIC is actively responsible for mitigating climate change, and it develops climate change policies and implements the measures to reduce greenhouse gas emissions.

4.3.2 Verification of Greenhouse Gases

In accordance with international standard ISO14064, SMIC establishes a greenhouse gas verification mechanism. It calculates the greenhouse gas emissions in the operating factory on a regular basis each year, to acquire the company's greenhouse gas emissions and implement emission reduction measures as planned.

Total greenhouse gas emissions increased by 0.3% in 2018 to 1,801,226 tons, but the greenhouse gases emitted by each 8' wafer equivalent photomask were down by 2.6%, that is, the intensity of emissions was down by 2.6%.

• 4.3.2.1 Direct Emissions of Greenhouse Gas

Direct greenhouse gas sources: combustion of gasoline, diesel, natural gas and other fossil fuels, perfluorinated compounds gas in the process of chemical vapor deposition and dry etching, organic exhaust combustion, refrigerant fugitive emissions, wastewater treatment system emissions and pure water system fugitive emissions, etc.

Direct Emissions of Greenhouse Gas
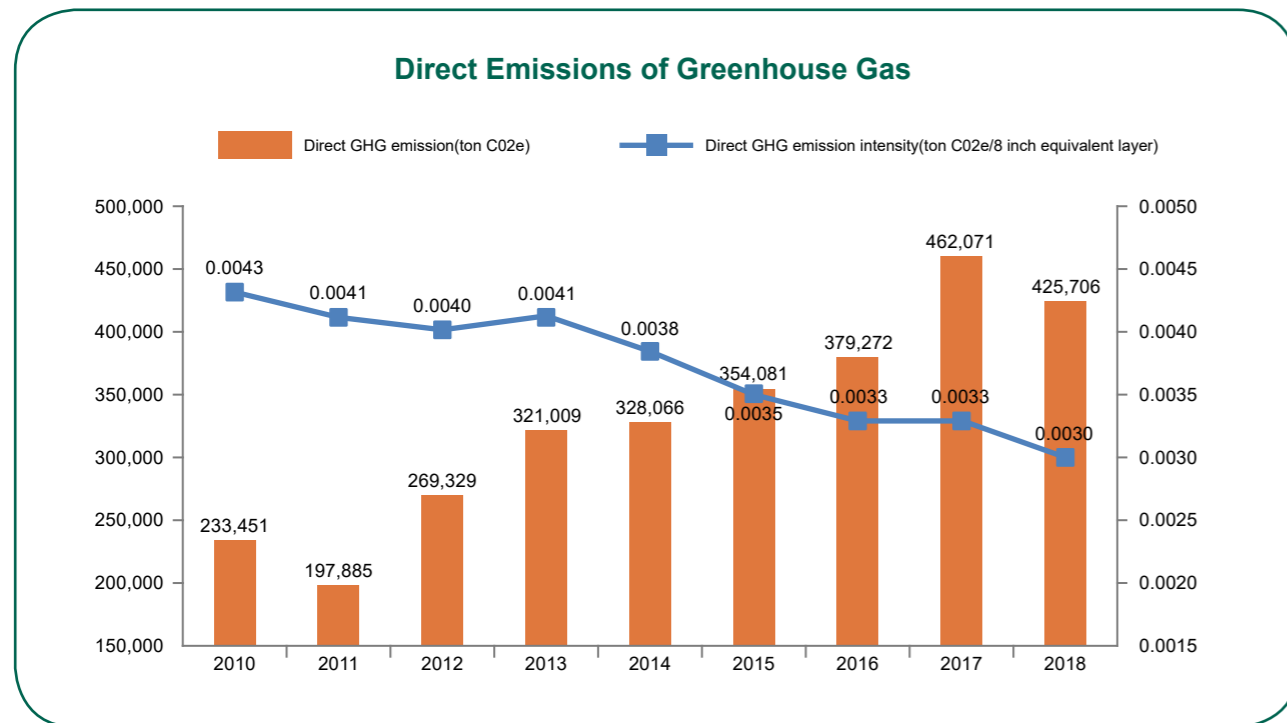
• 4.3.2.2 Indirect Emissions of Greenhouse Gas

Indirect greenhouse gas sources: greenhouse gas emissions of outsourced power, steam, heat and other energies.

Indirect Emissions of Greenhouse Gas
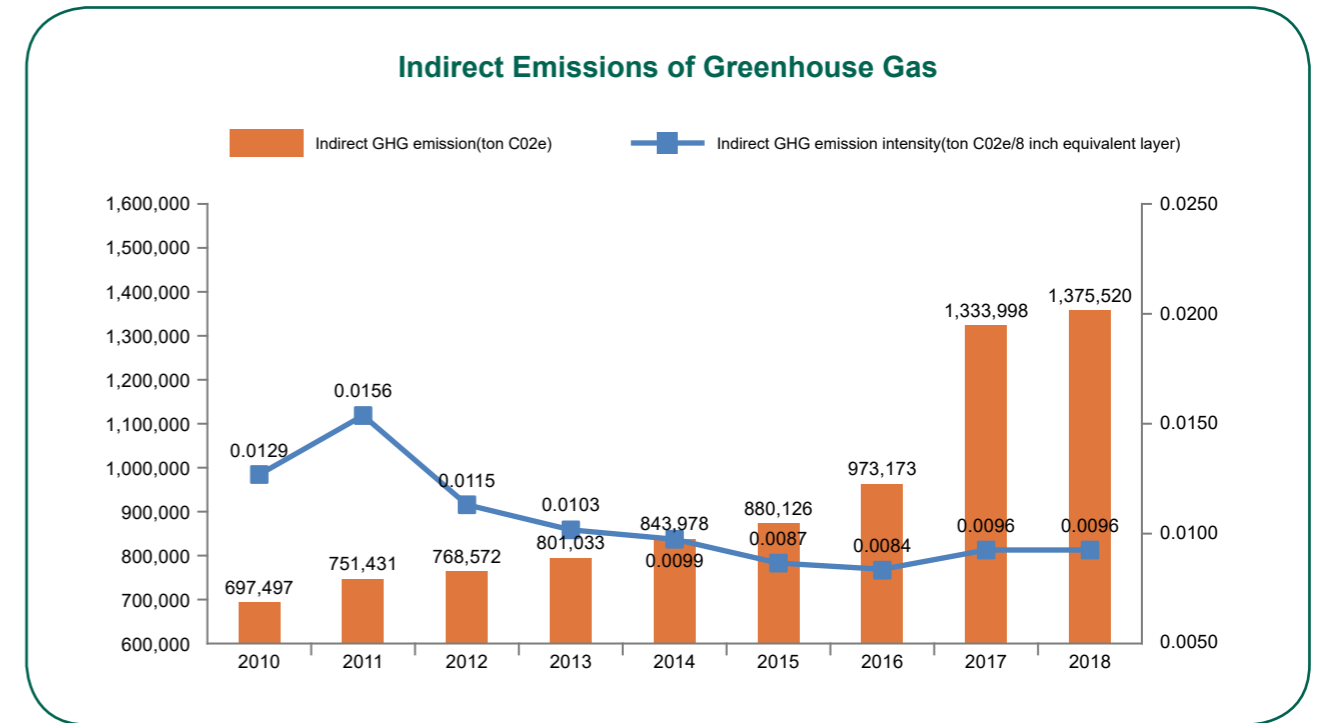
• 4.3.2.3 Perfluorinated Compounds Greenhouse Gas Emissions

As an important member of China Semiconductor Industry Association, SMIC provides annual perfluorinated compounds greenhouse gas emission information to the Association, which then report it to the World Semiconductor Council (WSC). SMIC is actively implementing the agreement developed by WSC on voluntary greenhouse gas emission reduction of perfluorinated compounds (PFC), trying to implement the best practice emission reduction technology advocated by WSC and reduce the emission of PFC greenhouse gas.

2018 PFC Gas Consumption Information

2018 Equivalent co2 from PFC Emission Information
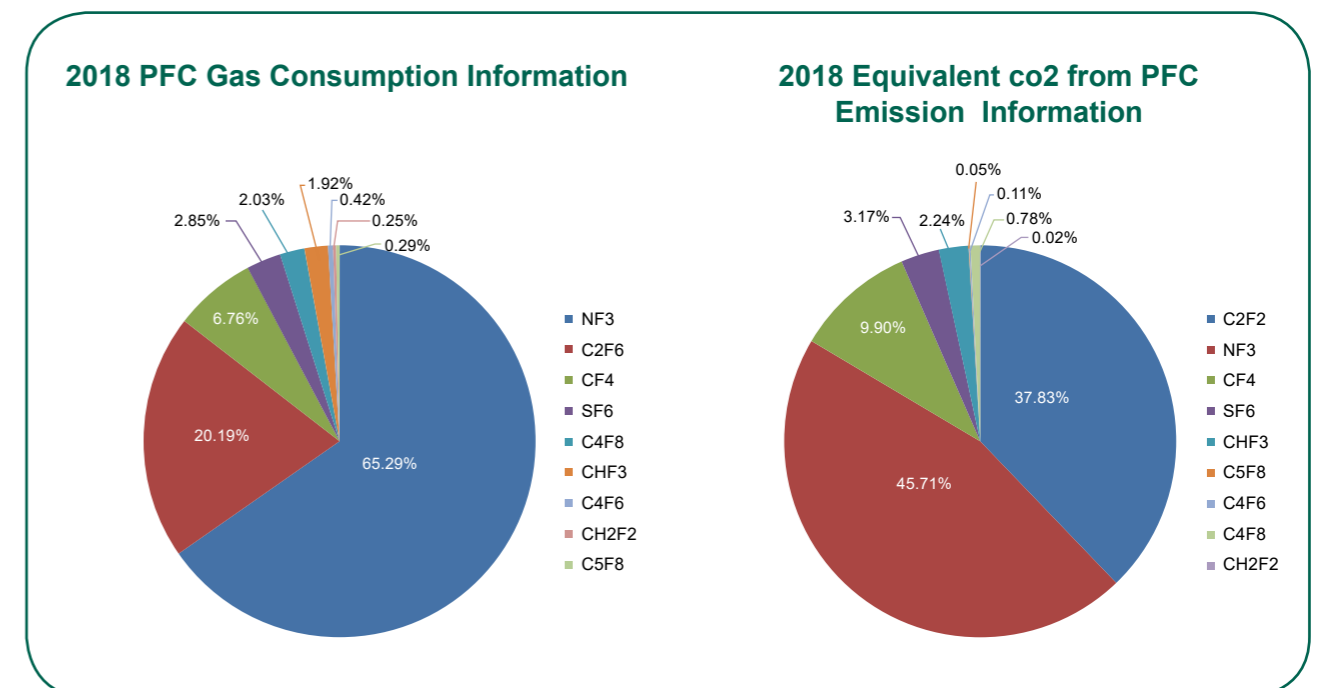
4.4 Energy Management

SMIC actively responds to national energy-saving and emission reduction calls, establishes energy management organizations and continues to implement energy-saving and emission reduction projects, achieving a double win for economic and environmental benefits.

4.4.1 Energy Management Mechanism

SMIC set up Energy Conservation Committee to promote power management, where the Co-CEO served as Chairman of the Energy Conservation Committee and took overall charge of energy-saving related work. The members of the Committee include the departments of Facility(FAC), Fabrication(FAB), Operation Enhancement(OE), Environment/Safety/Health(ESH) in each site. Besides, a sound energy management system was established to implement three-level energy management networks, practice the energy management post responsibility system, establish full-time energy management agencies and full-time managers for energy management, to ensure the implementation of energy management in both system and organizational construction.
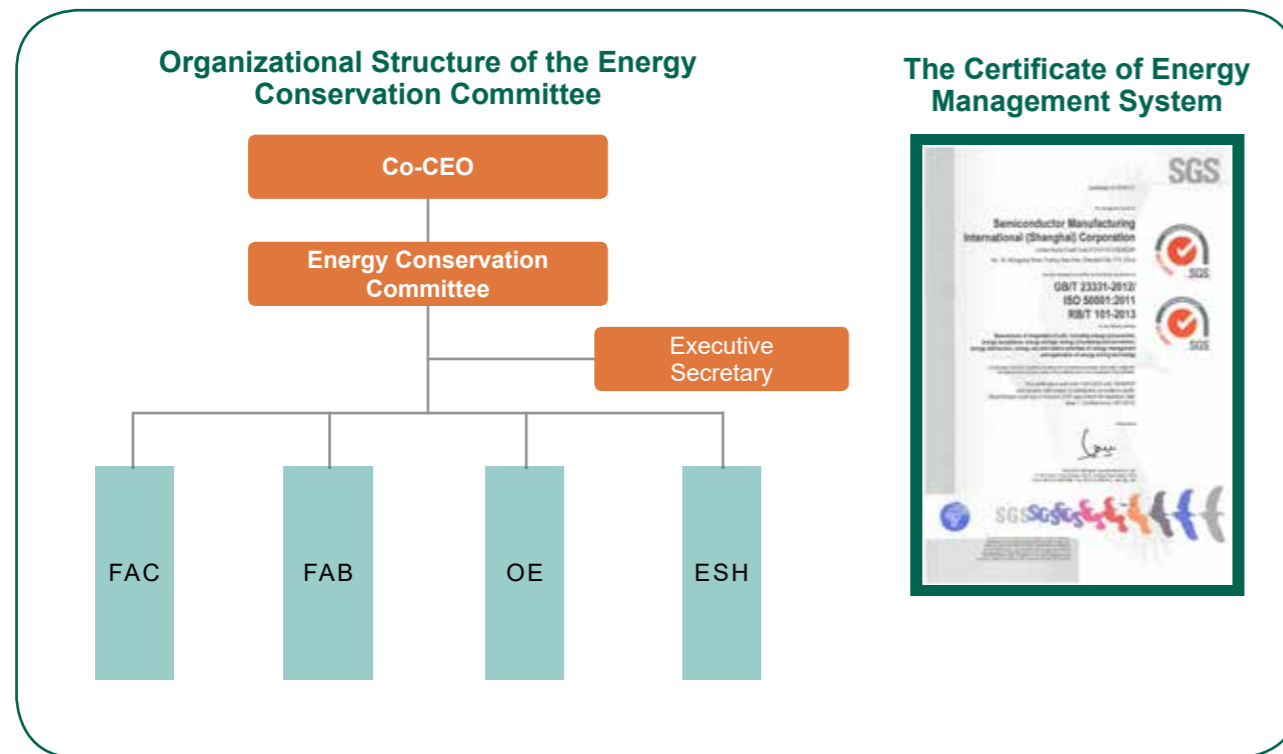
Organizational Structure of the Energy Conservation Committee

- Co-CEO
- Energy Conservation Committee
- Executive Secretary
- FAC | FAB | OE | ESH
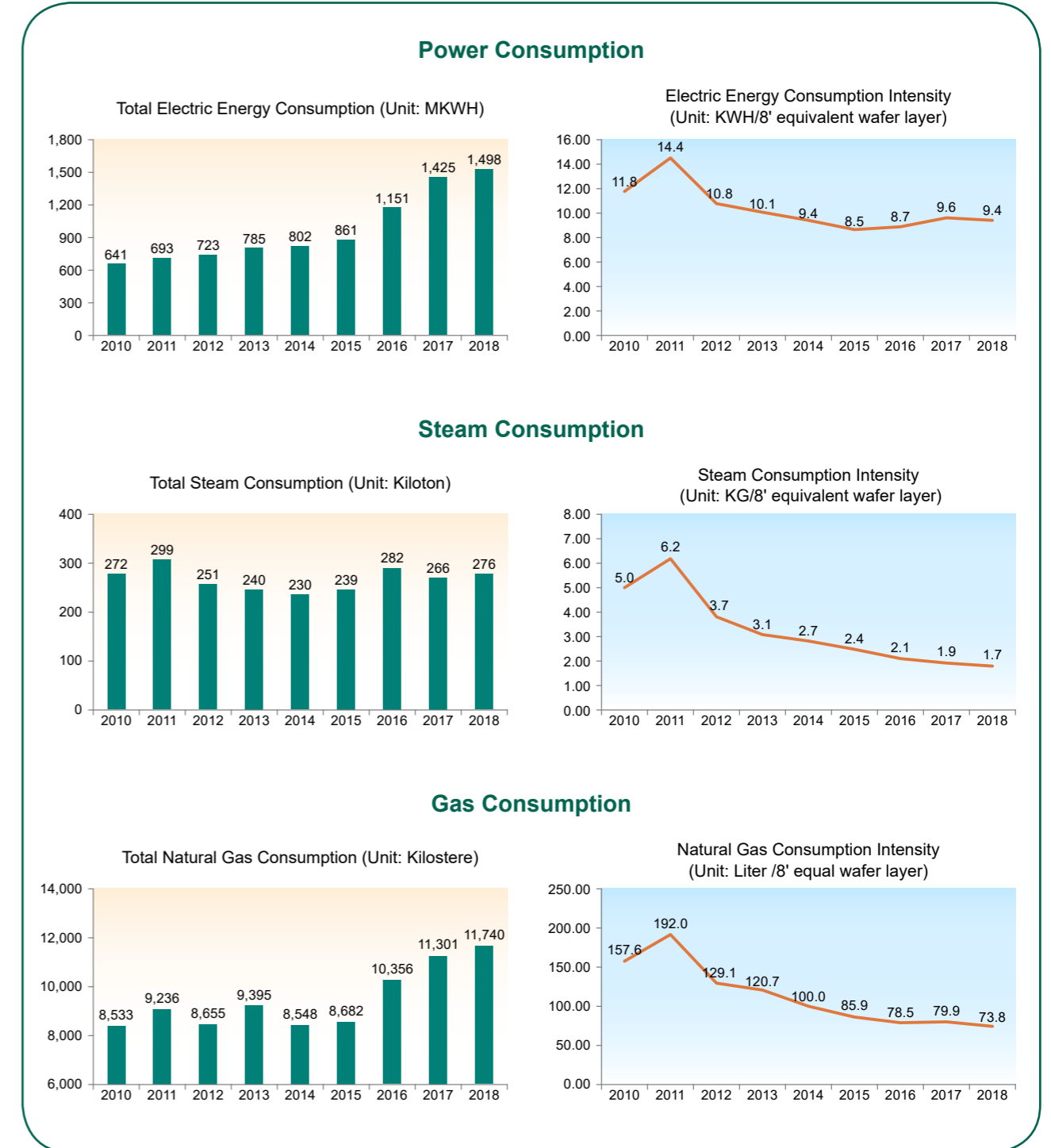
The Certificate of Energy Management System

The Energy Conservation Committee holds working meetings on a regular basis each month to discuss energy management related issues, including reviewing the implementation of energy saving plans for the past month, analyzing energy consumption trends or causes of anomalies, demonstrating outstanding energy saving cases and sharing them in all factories, implementing energy contract management, and actively cooperating with suppliers to achieve win-win.

As of 2018, Shanghai, Beijing and Tianjin factories established the energy management system in accordance with the national standard GB/ T23331-2012, to further strengthen energy management.

4.4.2 Consumption of Energy

Compared with 2017, as the new fab was in the ramp-up phase, some of the total energy consumption has increased significantly in 2018, but the energy consumption per unit of output has steadily declined.

Power Consumption

Total Electric Energy Consumption (Unit: MKWH)

Year	Value
2010	641
2011	693
2012	723
2013	785
2014	802
2015	861
2016	1,151
2017	1,425
2018	1,498

Electric Energy Consumption Intensity (Unit: KWH/8' equivalent wafer layer)

Year	Value
2010	11.8
2011	14.4
2012	10.8
2013	10.1
2014	9.4
2015	8.5
2016	8.7
2017	9.6
2018	9.4

Steam Consumption

Total Steam Consumption (Unit: Kiloton)

Year	Value
2010	272
2011	299
2012	251
2013	240
2014	230
2015	239
2016	282
2017	266
2018	276

Steam Consumption Intensity (Unit: KG/8' equivalent wafer layer)

Year	Value
2010	5.0
2011	6.2
2012	3.7
2013	3.1
2014	2.7
2015	2.4
2016	2.1
2017	1.9
2018	1.7

Gas Consumption

Total Natural Gas Consumption (Unit: Kilostere)

Year	Value
2010	8,533
2011	9,236
2012	8,655
2013	9,395
2014	8,548
2015	8,682
2016	10,356
2017	11,301
2018	11,740

Natural Gas Consumption Intensity (Unit: Liter /8' equal wafer layer)

Year	Value
2010	157.6
2011	192.0
2012	129.1
2013	120.7
2014	100.0
2015	85.9
2016	78.5
2017	79.9
2018	73.8

4.4.3 Main Energy Saving Projects in 2018

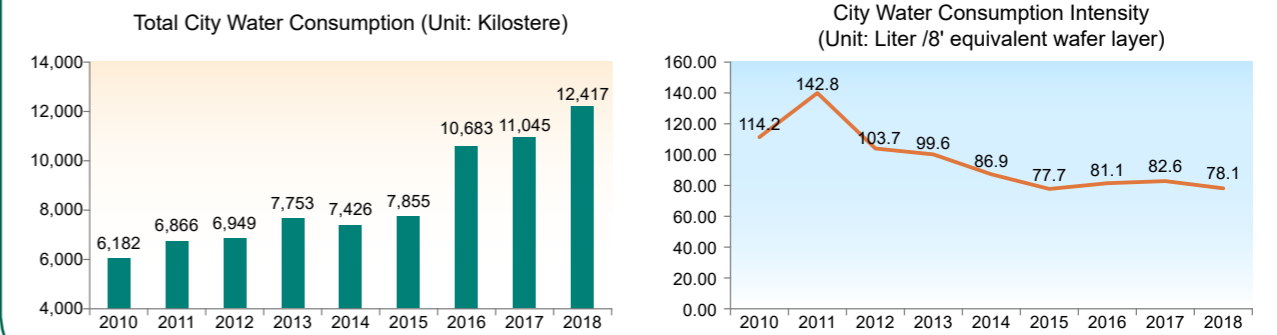| Main Energy-saving Projects in 2018			
Plant	Project Name	Brief Description of Project	Energy-saving Performance
Shanghai	Lighting System Renovation Project	14,000 lamps was replaced from 37-watt fluorescent tubes to 10.5-watt LED tubes in SO1 and SO2 office area to meet lighting requirements and save energy.	Power: 1,602,720 kWh
Beijing	Gas Energy Saver Project	The high-frequency resonance generated by the strong magnetic field rod, the far-infrared ray and the nano-catalyst coating and the natural gas fuel analysis group can achieve the effect of refining the molecular group, and the refined molecular group can fully cooperate with the agent (oxygen) after entering the combustion chamber of the VOC equipment to improve combustion efficiency.	Natual gas: 37,857.4 stere
Beijing	Steam Condensate Heat Recovery Project	In winter, the demand for heat energy was large, and the steam condensate (90°C) had a large amount of water. The plate heat exchanger absorbs the residual heat of the condensed water and heats the UPW raw water to reduce the amount of steam required for the UPW raw water heating.	Steam: 3,086.7 tons
Beijing	Hot Pump - Chiller Renovation Project	A Hot Pump - Chiller was added to fully recover the heat in the chilled water, and the recovered heat was reused for hot water return water heating to reduce the amount of steam required for hot water heating.	Steam: 6,403 tons
SJ Semi	Lighting System Renovation Project	The lamp of the original lighting system was gradually replaced with an energy-saving LED tube (220 pieces), so that the lamp power was reduced from 18 watts to 8 watts, and the service life was increased from 6,000 hours to 30,000 hours, thereby saving energy.	Power: 8,030 kWh
SJ Semi	Process Vacuum System Renovation Project	The two water ring power frequency engine were upgraded into one variable frequency main engine. After the transformation, the operating power will be reduced from 30 kW to 15 kW, saving energy.	Power: 131,400 kWh
Shenzhen	Office Air-condition Control System Renovation Project	The 590 FCU thermostats in the office will be transformed from fixed speed, constant temperature and personnel start-stop to centralized control of temperature and running time to improve energy efficiency and reduce energy consumption.	Power: 1,702,570 kWh
Shenzhen	HPM7/CW7 Energy Saving Reconstruction Project	Install VFD (Variable Frequency Drive) on 6 OAHU devices of GHVAC system in HPM7/CW7 to reduce the operating frequency of the equipment from 50 Hz to 40-45 Hz, saving energy	Power: 91,713 kWh
Shenzhen	CIF3 Heating System Optimization Project	After testing, when the ambient temperature exceeds 18 degrees, the chlorine trifluoride cylinder heating system was turned off, and the single machine needs were still met. In 2018, the heating system was turned off for 9 months.	Power: 124,922 kWh
Shenzhen	Lighting System Renovation Project	1000 lamps was replaced from 36-watt fluorescent tubes to18-watt LED tubes in PMD office area to meet lighting requirements and save energy	Power: 58,320 kWh
Shenzhen	Wastewater Reuse System Energy Saving Reconstruction Project	The aeration of the wastewater reuse system was changed from a 35kW blower aeration to a compressed dry air (CDA) aeration (CDA was free of charge) to save energy.	Power: 391,147 kWh
Shenzhen	CMP Wastewater System Renovation Project	Save energy by changing delivery method from pump to overflow between the buffer tank and the raw water adjustment tank in the CMP wastewater system.	Power: 7,800 kWh
Tianjin	Process Cooling Water (PCW) System Renovation Project	The passivated heat exchanger plates were cleaned to improve the sealing state, improve heat transfer efficiency, and save operating costs.	Power: 707,812 kWh
Total			Power: 4,826,434 kWh Natual gas: 37,857.4 stere Steam: 9,489.7 tons

4.5 Water Resources Management

SMIC's factories are located in different areas, where there are differences in the conditions of the available water resources. We measure local conditions and implement management measures to conserve water resources.

4.5.1 Consumption of Water Resource

SMIC builds water-saving projects and implements water-saving management measures to achieve the goal of reducing running water consumption, improving water resources utilization and reducing wastewater discharge. The company's water resources consumption data of 2018 is as shown in the following table.

Consumption of Water Resource

Total City Water Consumption (Unit: Kilostere)

Year	Value
2010	6,182
2011	6,866
2012	6,949
2013	7,753
2014	7,426
2015	7,855
2016	10,683
2017	11,045
2018	12,417

City Water Consumption Intensity
(Unit: Liter /8' equivalent wafer layer)

Year	Value
2010	114.2
2011	142.8
2012	103.7
2013	99.6
2014	86.9
2015	77.7
2016	81.1
2017	82.6
2018	78.1

4.5.2 Main Water Saving Projects in 2018

Main Water Saving Projects in 2018			
Plant	Project Name	Brief Description of Project	Saved City Water (ton)
SJ Semi	Cleaning Wastewater Recycling Project	The general cleaning wastewater is collected and treated for the cooling tower to reduce the city water consumption of the cooling tower.	14,400
Shenzhen	UPW System Optimization Project	By extending the ACF backwashing cycle from 2,880 min to 4,320 min, backwashing was reduced 183 times per year, thereby reducing water usage.	14,901
Total			29,301

4.5.3 Water Pollutant Control

According to the nature of production wastewater, SMIC constructs a number of waste water treatment facilities to treat production wastewater and domestic sewage, so that discharged wastewater meet national or local standards. Besides, we strictly implement wastewater discharge monitoring requirements to conduct real-time or regular monitoring of the concentration of pollutants in wastewater to ensure that all wastewater meets discharge standards. For specific monitoring data, see the information published on: http://www.smics.com/site/about_ESH.

Ammonia Nitrogen Wastewater Treatment Facility

Domestic Sewage Treatment Facility

4.6 Air Pollution Prevention and Control

In order to minimize the impact on the air quality of the operation site, SMIC attaches great importance to the treatment of the company's exhaust gas.

SMIC treats the waste gases generated in production by classifying and grading them. The Company employs two-level waste gas treatment including tool point treatment and central treatment. In the production process, the waste gas emitted from the tool point is first treated by the local waste gas treatment system to meet the stipulated standards and then sorted into the main pipes for exhaust gas collection. The main pipes for exhaust gas collection fall into acidic, alkaline, organic and general types, where acidic and alkaline waste gas respectively enters the acid and alkaline central washing tower via the main pipes, while organic waste gas enters the zeolite runner system for burning. The waste gas processed by the central system is discharged into the atmosphere by the exhaust pipe conforming to the requirements of the State. To verify emission compliance, we regularly entrust third party agencies to monitor emissions and all test results meet national requirements. For specific monitoring data, see the information published on: . http://www.smics.com/site/about_ESH.

VOC Treatment System

Exhaust Gas Collection

Exhaust Gas Outlet

Central Treatment Equipment

Local Treatment Equipment

Emission Data of Exhaust Gases

Data Name	2018
Total Emission of Exhaust Gas(10,000 cubic meters)	3,962,201
Emissions of Nitrogen Oxides (ton)	74
Emissions of Sulfur Dioxide (ton)	19
Emissions of Volatile Organic	35

4.7 Waste Management

SMIC establishes a sound waste management system and strictly complies with the national regulations in treatment of the produced waste.

4.7.1 Waste Management Procedure

Classify
- subdivide the waste produced in the workshop into acidic, alkaline, toxic, oxidizing, self-ignitability, flammable and general substances, which are distinguished with the recycling buckets in different colors

Collect
- collect the classified waste substances on a daily basis

Store
- transport the collected waste to the hazardous waste warehouse for temporary storage;
- transport the waste liquid produced in the workshops to the temporary waste tank by an independent pipeline

Treat
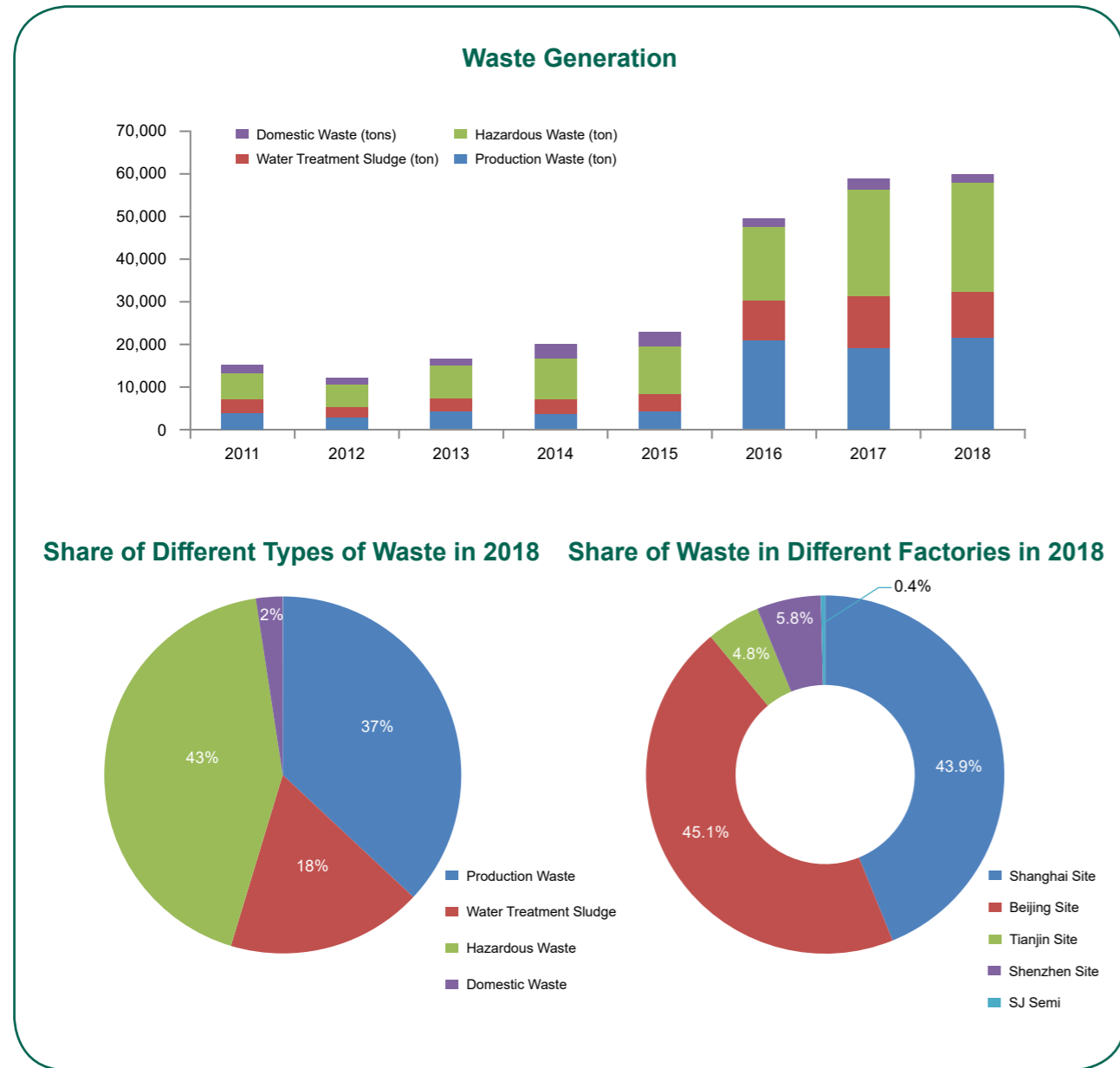- deliver the waste to the vendors with hazardous waste treatment qualification

Storage Tank of Liquid Waste

Waste Warehouse

4.7.2 Vendor Management

The waste treatment plants must be under strict management and all waste treatment vendors need to have a government-approved qualification and meet our company's waste management evaluation scores to sign the contract. During the cooperation, the Environment, Safety and Health Division will conduct on-site or vehicle-following examination for the waste treatment vendors. For hazardous waste, strict implementation of the waste transferring table system is required. Production of various types of waste in 2018 is as follows:

Waste Generation

Legend:
- Domestic Waste (tons)
- Hazardous Waste (ton)
- Water Treatment Sludge (ton)
- Production Waste (ton)

Share of Different Types of Waste in 2018

- Production Waste 37%
- Water Treatment Sludge 18%
- Hazardous Waste 43%
- Domestic Waste 2%

Share of Waste in Different Factories in 2018

- Shanghai Site 43.9%
- Beijing Site 45.1%
- Tianjin Site 4.8%
- Shenzhen Site 5.8%
- SJ Semi 0.4%

4.8 Environmental Protection Awareness

In 2018, SMIC continued to hold thematic advocacy activities in different forms to enhance employees' awareness of environmental protection, by posting posters, sending initiative mails to all employees, displaying promotional documents on the company's internal website during the environmental protection festival, as well as organizing second-hand market and special events.

- Publicize "World Water Day" on March 22, 2018 to call on all staff to save water

- Publicize "World Earth Day" on April 22, 2018 to call on all staff to practice low-carbon life and save resources

- Publicize "Car Free Day" on September 22, 2018 to advocate green travel, reduce CO2 and harmful exhaust emissions

- Hold a series of second-hand market special events in each factory of SMIC in 2018 to promote reclamation of used articles and encourage waste recovery

Second-hand Market

A total of 574 participants

- Waste book — 44 kg
- Old clothes — 1,137 kg
- Used batteries — 15 kg
- Waste medicine — 21 kg
- Electronic waste — 560 kg

Second-hand Market

05 Caring for Society

Charity and Public Welfare

Education Support

5.1 Charity and Public Welfare

Since its establishment in 2000, SMIC has been actively involved in public welfare activities and community services, and participated in regional environmental protection. Volunteers from different divisions of the company and at different ages are actively involved in volunteer service activities, bringing warmth to thousands of people. In 2018, the number of volunteer services reached 19,277 hours, achieving the annual target.

5.1.1 SMIC Liver Transplant Program for Children

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

On June 13, 2018, SMIC donated RMB 2.4 million to the Program through China Soong Ching Ling Foundation for the sixth time, with a cumulative donation of RMB 13.5 million. Under the influence of SMIC, "SMIC Liver Transplant Program for Children" has been spread from the semiconductor industry to the whole society and become a common mission and responsibility to promote public welfare and benefit the society. In 2018, 84 loving companies in the semiconductor industry joined the "SMIC Liver Transplant Program for Children" with donation of RMB 1.87 million.

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

SMIC Co--CEO Zhao Haijun (right)handed over the donation cheque to China Soong Ching Ling Foundation Director Tang Jiuhong

Group photo of SMIC Honorary Chairman Zhang Wenyi (fifth from right), the Foundation leaders, Renji Hospital leaders and families of the helped children

As of the end of 2018, the "SMIC Liver Transplant Program for Children" raised donated funds over RMB 21 million, helping 385 poor children from all over the country be rescued and treated, and regain a new life.

5.1.2 Zhangjiang Fun Run

SMIC get itself actively involved in local public welfare activities, and has joined in "Zhangjiang Fun Run" for many years. On September 14, 2018, more than 60 employees from SMIC factory in Shanghai participated in the 11th "Zhangjiang Fun Run" outreach, running for joy and love together with more than 2000 employees from other companies in Zhangjiang Hi-Tech Park. In the course of the game, participants encouraged and supported each other to make it to the end, fully embodying the

"happiness and mutual assistance" and the "perseverance" spirit, and showing the style of SMIC members. At the event, SMIC donated RMB 10,000 to charity as a love gift for the migrants' school.

5.1.3 Shanghai Public Welfare Partnership Day

From September 15 to 16, 2018, SMIC participated in the eighth Shanghai Public Welfare Partnership Day held at Shanghai Public Welfare Xintiandi Park. The event, we showed the public welfare achievements, popularized the knowledge about IC manufacturing and publicized the idea of "making public welfare a way of life".From September 15 to 16, 2018, SMIC participated in the eighth Shanghai Public Welfare Partnership Day held at Shanghai Public Welfare Xintiandi Park. The event, we showed the public welfare achievements, popularized the knowledge about IC manufacturing and publicized the idea of "making public welfare a way of life".

5.1.4 Visits to the Nursing Home

SMIC employees volunteer to help the elderly, pay regular visits to the nursing home, help them do daily nurse and cloth washing, etc., and chat with the elderly, and sometimes present their own self-programmed programs for the elderly in their spare time.

5.1.5 Volunteer Blood Donation

SMIC responds to local government's call and actively publicizes and organizes unpaid blood donation activities. In 2018, 124 employees from Shanghai factory participated in the unpaid blood donation and made a blood donation amounting to 26,000 mL.

5.1.6 Charity Sales

In 2018, SMIC Shanghai Private School held the 15th large-scale charity sales, which is increasingly concerned about and supported by the surrounding communities and enterprises by providing items for charity sale free of charge. On December 8, a grand charity show was performed in Shanghai Children's Art Theater with charity sales, lasting nearly 4 hours. The charity sales and show received a positive response from teachers and students throughout the school, who all participated in the event. On the day of the event, there were 1,350 participants in total including performers, workers and spectators. A total of RMB 445,000 of donation money was raised from ticket revenue and on-site auctions. All the money was donated to 4 charity organizations to help children in poor mountainous areas, children left behind, and other vulnerable groups to improve their living conditions and complete their education.

We hope that in 2019, there will be more teachers and students joining in the event, especially newcomers, to further exert the influence of the charity show and sales.

5.1.7 The "Love Is Everywhere" Charity Bazaar

From December 15 to 22, 2018, SMIC Beijing Private School organized the parent-child football match, second-hand market, garden carnival and charity shows. The students made items for charity sale by hands, visited enterprises and communities, and sold articles in stores, raising up to RMB 300,000, all of which was donated to the "Wonder Love Home" and the Love Blue Sky Rehabilitation Center, to help poor children and orphans suffering from "osteogenesis imperfecta". By 2018, SMIC Beijing Private School had donated more than RMB 1.2 million to charity organizations through charity sales.

5.1.8 Giving Tree

The Giving Tree Project aims to provide love gift bags containing winter clothing, toys and school supplies for school-age children of the migrant workers. SMIC Shanghai Private School has been involved in the project for many years. In 2018, a total of RMB 226,939 was raised for the purchase of love gift bags. The Giving Tree team of SMIC Shanghai Private School donated 650 love gift bags to the migrant children and teachers in Shanghai or surrounding cities.

5.1.9 Tree Planting Activity in Inner Mongolia

Tree planting activity in Inner Mongolia is a joint program launched by "Root and Bud" association and the Environmental Protection Club of SMIC Shanghai Private School, which responds to the government's call to fight against desertification and protect the environment. It was the 12th year for SMIC Shanghai Private School to participate in the program and the Environmental Protection Club raised money to fund more than 3,000 trees. Students together with teachers went to Inner Mongolia to plant the trees, where students received environmental education in the real environment.

5.1.10 Charity Week

On April 23-27, 2018, CSC Charity Week of SMIC Shanghai Private School promoted various social issues of concern through various activities, advertisements, exhibitions, etc., and promoted various charity projects inside and outside the school to enable more teachers, students and parents to participate in. This year's charity week event promotion topics include: smuggling, environmental issues, orphan care, disabled and left-behind children, refugee assistance, etc.

5.1.11 "Charity" Environmental Protection - Shanghai Local Species Conservation

On May 5, 2018, SMIC organized "Charity" Environmental Protection - Shanghai Local Species Conservation jointly with its partners. More than 70 volunteers came to the Shanghai local species conservation base in the wilderness to participate in ecological protection. In the activity, one group of volunteers cleaned the dead branches, leveled the land, collected wild roses, transplanted Shanghai native aquatic plants and collected snails, built ladders for frogs and put aquatic organisms, while the other group learned how to grow and appreciate meaty plants. All volunteers had a clear division of labor under the professional explanation and guidance, who worked in unity and helped one another. After working against the wind and rain, we successfully completed the event as planed in the end, making their contributions to the protection of local biodiversity.

5.1.12 Department Public Welfare Activities

In 2018, all factories and departments spontaneously organized a series of charitable and environmental protection public activities.

Clothing donation in Tianjin factory

Book donation in Tianjin factory

5.2 Education Support

5.2.1 SMIC Private Schools

In its early days, SMIC invested in SMIC Private Schools in order to address the employees "family considerations" over their children's education. The school provides education based on the idea of "character first, striving for excellence, embrace the world, and happy growth". In the early days, the schools mainly served the children of the employees. With the success in education and acceptance by the society, the schools are open to the public to share quality education resources. They are well received and praised by the employees and the local community.

• 5.2.1.1 SMIC Shanghai Private School

SMIC Shanghai Private School was founded in September 2001, covering an area of 120 mu, including a greening area of nearly 50 mu. It is a nonprofit private school which has received certification by Western Association of Schools and Colleges (WASC) and provides education covering stages from kindergarten to senior high school, equipped with a variety of teaching, sports facilities and an astronomical observatory.
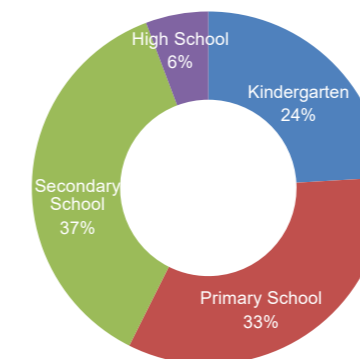
As of 2018, there were 2,945 students from 25 countries and nearly 400 faculty members, half of whom are overseas. SMIC Shanghai Private School covers all levels of education from kindergarten to senior high school, including English and Chinese divisions, where the former is taught according to the elementary and secondary school curriculum of the United States, while the latter taught according to the teaching material outline prescribed by the Shanghai Municipal Education Commission. In addition, the language center of the school provides students with first-class training in English, Chinese and a third foreign language.

SMIC Shanghai 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 high division of SMIC Shanghai Private School offers American Advanced Placement (AP) courses, and it is also a test center authorized by the Advanced Placement (AP) test and the Scholastic Aptitude Test (SAT).
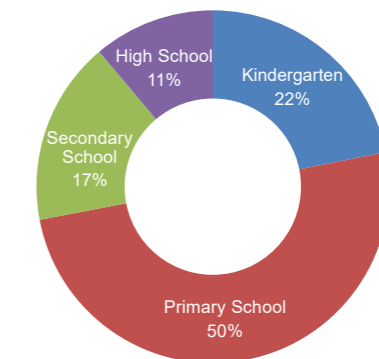
The school was awarded the honors of "Excellent Primary and Secondary Schools in China", "School-Running Characteristic Normal School in China", "Advanced School with Characteristics in China", "Featured Project School" and other honorary awards granted by the State and Shanghai education circles, and won a variety of awards in domestic and foreign disciplines, arts, school newspapers, sports and other competitions.
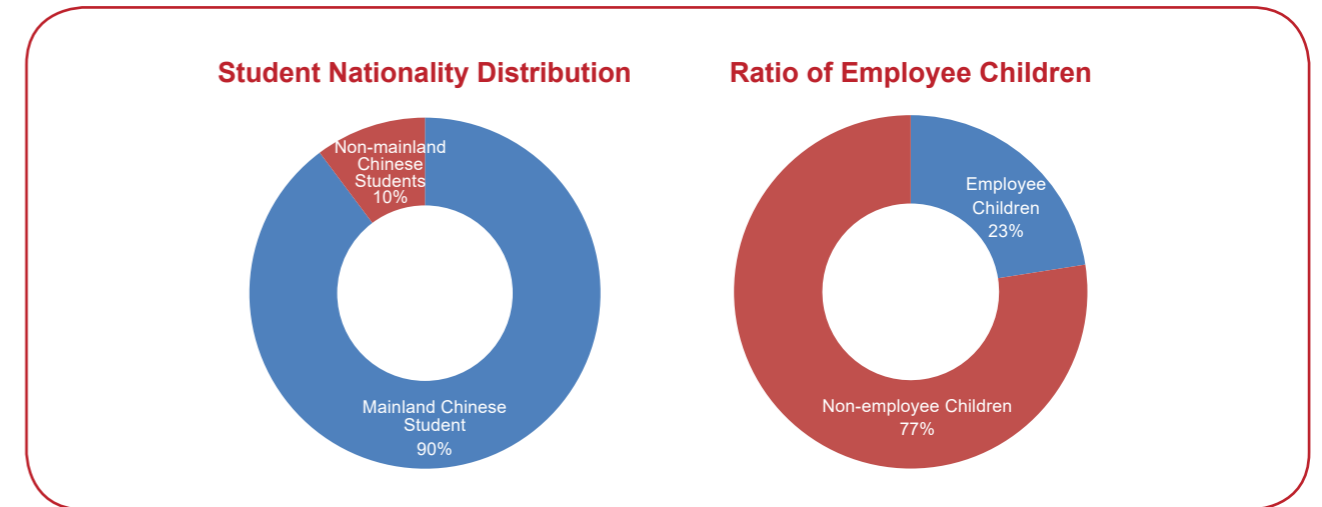
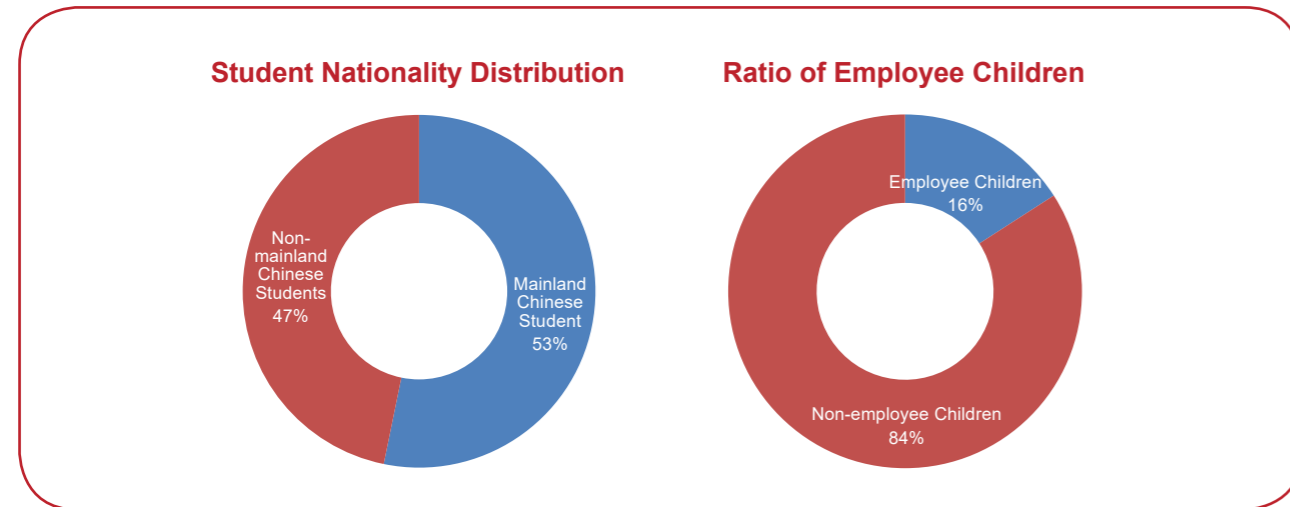See https://www.smicschool.com/ for more.

Composition of Faculty

High School 6%
Kindergarten 24%
Secondary School 37%
Primary School 33%

Composition of Students

High School 11%
Kindergarten 22%
Secondary School 17%
Primary School 50%

Student Nationality Distribution

Non-mainland Chinese Students 47%

Mainland Chinese Student 53%

Ratio of Employee Children

Employee Children 16%

Non-employee Children 84%

Student Nationality Distribution

Non-mainland Chinese Students 10%

Mainland Chinese Student 90%

Ratio of Employee Children

Employee Children 23%

Non-employee Children 77%

- 5.2.1.2 SMIC Beijing Private School

SMIC Beijing 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. In order to further meet the requirements of employees and society, a senior high division was added in September 2018. As 2018, the school had more than 436 teachers (including 80 foreign teachers) and a total of 2,423 students.

It is a private school with distinctive bilingual characteristics. For more than 10 years, the school has provided education for students based on the idea of "character first, striving for excellence, embrace the world, and happy growth", 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, please visit http://www.bjsmicschool.com/.

Composition of Faculty

High School 7%

Secondary School 15%

Primary School 38%

Kindergarten 40%

Composition of Students

High School 3%

Secondary School 9%

Primary School 49%

Kindergarten 39%

5.2.2 Variety of Featured School Activities

- 5.2.2.1 Cultural and Artistic Activities

International Day

The International Day is a traditional activity of SMIC Private School over the years, which attracts many visitors from outside and the community in May every year. Children in the activity sing along with and dance to their native traditional music to welcome their parents and other visitors in a cheerful atmosphere. The wonderful performances of the children, the carefully prepared classroom arrangement, the amazing handicrafts and a rich variety of gourmet dishes all leave a deep impression on the visitors.

Classics Reading

In March 2018, the Chinese Track of senior middle section in SMIC Shanghai Private School held the annual school-based curriculum series show of classics reading - readings of classical poetry and beautiful articles. A total of 11 classes attend the activity and the reading contents cover excellent poetry and prose created at all times and in all over the world, as well as the works of their own. The students can perceive classics and accept the influence of culture in reading, to create a good atmosphere of "scholarly campus".
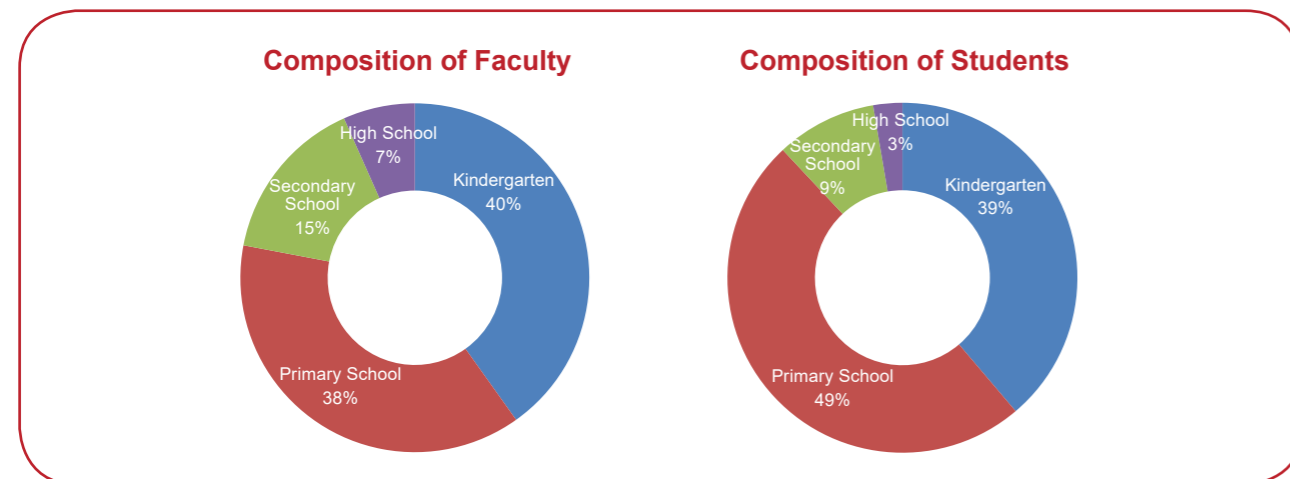
Parade in Vocabulary-costumes

In October 2018, students from the English Track of primary section in SMIC Shanghai Private School participated in a large fantasy-filled parade in vocabulary-costumes. Students used a variety of props and costumes to dress themselves according to a word they choose. The parade in vocabulary-costumes allows the children to experience the joys in learning and inspires their endless creative abilities.

Chorus

On June 15, 2018, the Choir of SMIC Beijing School held a performance in the school hall.

• 5.2.2.2 Sports Activities

Sports Meeting

On October 12, 2018, SMIC Shanghai Private School held a sports meeting. The sports meeting shows the youth style of the students, which exercises physical strength, activates life, carries for ward personality and harvests joy. By holding a sports meeting, the school further promotes the pursuit of the goal of "physical and mental health"

Swimming Competition

On September 15, 2018, SMIC Shanghai Private School held a swimming competition on campus. Nearly 400 participants from Grade 1-10 were grouped to participate in 25-meter breaststroke, 25-meter freestyle, 50-meter breaststroke, 50-meter freestyle, 50-meter backstroke, 50-meter butterfly stroke, totaling six games. The standard, graceful strokes of the contestants won a marvel from the teachers and parents. After fierce competition, the games finally came to a successful end and the contestants made a proud achievement.

Aerobics Competition

On June 15, 2018, the aerobics team of SMIC Beijing Private School won the "Primary School Aerobics Dance" fourth place in Beijing Sports Cup Aerobics Competition.

Prospect

Looking ahead to 2019, the growth of the global semiconductor industry will slow down or even enter a downturn due to increasing uncertainties in the international political and business environment, but the IC industry in China will still maintain the momentum of rapid development. And with the rapid development of artificial intelligence (AI), Internet of Things, 5G and other applications, the society will become more and more intelligent, which could not be achieved without support of chips. In this special period when there are challenges and opportunities at the same time, the company needs to reshape its R & D, production and operation with new vision, new thinking and new strategy. We have firm confidence in achieving orderly development and get fully prepared for it.

✦ Accelerate the pace of deepening reform, optimize the company's management model and improve the efficiency of employees;

✦ Increase investment in R & D, accelerate to catch up with the advanced technology nodes and continue to expand all technical platforms;

✦ Keep creating a healthy, safe and humanized working and living environment for employees.

✦ Stick to green development, promote energy conservation and emission reduction, and practice the corporate environmental responsibility;

✦ Organize social activities for public good and encourage employees to participate actively, to contribute to social harmony.

In the future, SMIC will build the overall competitiveness of the company based on its stronger reform, stronger R & D execution and more considerate customer service, continue to fulfill its commitment to stakeholders and keep moving forward on the path of sustainable development.

Appendix 1

SMIC Awards in 2018

Winner	Name of Award	Issuing Authority
Semiconductor Manufacturing International Corporation	Best Strategic Partner	SILEAD INC.
	Best Delivery Award	Huawei
	Excellent Supplier	GigaDevice
	Best Wafer Foundry Award	Giantec Semiconductor Corporation
Semiconductor Manufacturing International (Shanghai) Corporation	Ankang Cup" Excellent Model Enterprise	Shanghai Pudong New Area Trade Union, Shanghai Pudong New Area Safety Production Supervision Administration
	Zhangjiang Science City Environmental Design Exhibition Honor Award	Zhangjiang Hi-Tech Park
	Advanced Individual in Fire Protection Work	Pudong New Area Fire Safety Committee
	Strategic Supplier	Bright Power Semiconductor Co., Ltd
	Top 20 Outstanding Contributions to Science and Technology Innovation in Pudong New Area in 2018	Shanghai Pudong New Area People's Government
Semiconductor Manufacturing North China (Beijing) Corporation	Health Promotion Demonstration Enterprise	China Health Promotion and EducationAssociation Enterprise Branch
	Safety Month - Excellent Organization Award	Beijing Economic-Technological Development Area Safety Supervision Bureau
	Safety Month - Excellent Team Award	Beijing Economic-Technological Development Area Safety Supervision Bureau
	Safety Month - Advanced Individual	Beijing Economic-Technological Development Area Safety Supervision Bureau
	Advanced Unit of Fire Protection Work	Beijing Economic-Technological Development Area Fire Safety Committee
	Green Factory Demonstration Enterprise	The Ministry of Industry and Information Technology
Semiconductor Manufacturing International (Beijing) Corporation	"Ankang Cup" Competition Excellent Organization Award	Beijing Economic-Technological Development Area Safety Supervision Bureau
	Hidden Danger Management Demonstration Enterprise	Beijing Association of Chemical Industry
	Second Prize of Safety Knowledge Competition	Beijing Economic-Technological Development Area Safety Supervision Bureau
	Safety Production Emergency Management Demonstration Pilot Enterprise	Beijing Economic-Technological Development Area Safety Supervision Bureau
	Safety Month - Best Promotion Award	Beijing Economic-Technological Development Area Safety Supervision Bureau
	Safety Month - Excellent Team Award	Beijing Economic-Technological Development Area Safety Supervision Bureau
	Safety Month - Advanced Individual Award	Beijing Economic-Technological Development Area Safety Supervision Bureau
Semiconductor Manufacturing International (Tianjin) Corporation	Advanced Unit for Safe Production	Tianjin Xiqing Economic-Technological Development Area Management Committee
	Green Factory	The Ministry of Industry and Information Technology
SJ Semiconductor (Jiangyin) Corporation	Demonstration Enterprises of Integration of Informatization and Industrialization	Jiangyin Industry and Information Bureau
	Intelligent Workshop	Wuxi Economic and Information Committee
	Top Ten Intelligent Manufacturing Advanced Enterprises	Jiangyin People's Government
	Top Ten Software and IoT Enterprises	Jiangyin People's Government
	Technology Innovation Enterprise	Jiangyin High-tech Zone Management Committee
	Foreign Investment in Advanced Enterprises	Jiangyin High-tech Zone Management Committee
	Effectively Invest in Advanced Enterprises	Jiangyin High-tech Zone Management Committee
	Intelligent Manufacturing Advanced Enterprise	Jiangyin High-tech Zone Management Committee
	Emerging Industry Advanced Enterprises	Jiangyin High-tech Zone Management Committee
	Foreign Trade Import and Export Advanced Enterprise	Jiangyin High-tech Zone Management Committee

Appendix 2

Index of Environmental, Social and Governance Reporting Guide

ESG Guide Number	Guidance Notes	Report Content or Instructions	Page
A. Environmental			
Aspect A1: Emissions			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions,discharges into water and land, and generation of hazardous and non-hazardous waste.	4.1 Environment Protection Policy	P84
KPI A1.1	The types of emissions and respective emissions data.	4.6 Air Pollution Prevention and Control	P92
KPI A1.2	Greenhouse gas emissions in total (in tonnes) and, where appropriate,intensity (e.g. per unit of production volume, per facility).	4.3.2 Verification of Greenhouse Gases	P86
KPI A1.3	Total hazardous waste produced (in tonnes) and, where propriate, intensity (e.g. per unit of production volume, per facility).	4.7 Waste Management	P92
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	4.7 Waste Management	P92
KPI A1.5	Description of measures to mitigate emissions and results achieved.	4.6 Air Pollution Prevention and Control	P92
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	4.7 Waste Management	P92
Aspect A2: Use of Resources			
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	4.1 Environment Protection Policy	P84
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).	4.4.2 Consumption of Energy	P88
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	4.5.1 Consumption of Water Resource	P90
KPI A2.3	Description of energy use efficiency initiatives and results achieved.	4.4.3 Main Energy Saving Projects in 2018	P89
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	4.5.2 Main Water Saving Projects in 2018	P91
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	2018 CSR Index Summary	P112
Aspect A3: The Environment and Natural Resources			
General Disclosure	Policies on minimising the issuer's significant impact on the environment and natural resources.	4.1 Environment Protection Policy	P84
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	4.4 Energy Management 4.5 Water Resources Management	P88 P90
B. Social			
Employment and Labour Practices			
Aspect B1: Employment			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	3.2 Safeguarding of Rights and Interests	P60
KPI B1.1	Total workforce by gender, employment type, age group and geographical region.	3.1 Employee Overview	P60
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	3.3.3 Talent Retention	P65
Aspect B2: Health and Safety			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	3.4.1 Healthy and Safe Working Environment	P68
KPI B2.1	Number and rate of work-related fatalities.	3.4.1 Healthy and Safe Working Environment	P68
KPI B2.2	Lost days due to work injury.	3.4.1 Healthy and Safe Working Environment	P68
KPI B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	3.4.1 Healthy and Safe Working Environment	P68
Aspect B3: Development and Training			
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	3.3.2 Employee Career Development Booster	P63
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management,middle management).	3.3.2 Employee Career Development Booster	P63
KPI B3.2	The average training hours completed per employee by gender and employee category.	3.3.2 Employee Career Development Booster	P63
Aspect B4: Labour Standards			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	3.2.1 Recruitment Policies	P61
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	3.2.1 Recruitment Policies	P61
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	3.2.1 Recruitment Policies	P61
Operating Practices			
Aspect B5: Supply Chain Management			
General Disclosure	Policies on managing environmental and social risks of the supply chain.	2.5.1 Supply Chain Overview	P53
KPI B5.1	Number of suppliers by geographical region.	2.5.1 Supply Chain Overview	P53
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	2.5.3.1 Supplier Admittance 2.5.3.2 Supplier Evaluation	P55 P56
Aspect B6: Product Responsibility			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	2.4.3 Customer Product Quality Management	P51
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	2.4.4 Customer Evaluations and Complaints Handling	P52
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	2.4.4 Customer Evaluations and Complaints Handling	P52
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	2.2.5.4 Customer Information Protection	P42
KPI B6.4	Description of quality assurance process and recall procedures.	2.4.3 Customer Product Quality Management 2.4.4 Customer Evaluations and Complaints Handling	P51 P52
KPI B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	2.2.5.4 Customer Information Protection	P42
Aspect B7: Anti-corruption			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	2.2.4 Business and Ethics	P39
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.	2.2.4.3 Anti-Bribery Policy	P40
KPI B7.2	Description of preventive measures and whistle-blowing procedures,how they are implemented and monitored.	2.2.4.3 Anti-Bribery Policy	P40
Community			
Aspect B8: Community Investment			
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	5 Caring for Society	P97
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	5.1 Charity and Public Welfare 5.2 Education Support	P98 P103
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	5.1 Charity and Public Welfare 5.2 Education Support	P98 P103

Appendix 3

2018 Corporate Social Responsibility Index Summary

	Performance indicators	Numerical value
Economic	Operation Revenue (Million USD)	3360.0
	Profit attributable to Owner of the Company (Million USD)	134.1
	Total Tax (Million USD)	53
	R&D Investment (Million USD)	558.1
Environment	Total Emissions (Million m3)	3,962,201
	Total Amount of NOx (tons)	74
	Total Amount of Sulphur Dioxide (tons)	19
	Volatile Organic Solvents (tons)	35
	Total Greenhouse Gas Emissions (tons of CO2 equivalent)	1,801,226
	Total Direct Emissions (scope1, tons of CO2 equivalent)	425,706
	Total Indirect Emissions (scope2, tons of CO2 equivalent)	1,375,520
	Amount of Hazardous Waste (tons)	23,525
	Amount of Production Waste (tons)	23,003
	Amount of Water Treatment Sludge (tons)	11,479
	Amount of Domestic Waste (tons)	1,437
	Total Power Consumption (kWh)	1,497,975,305
	Total Natural Gas Consumption (m3)	11,740,379
	Total Steam Consumption (tons)	276,364
	Total City Water Consumption (m3)	12,416,834
	Packing Materials Consumption (tons)	309
	Annual Environmental Protection Investment (Million USD)	200
	Environmental Training (times)	42
	Environmental Training Participants (persons)	10,081
	ISO 14001 Passing Percentage(%)	100%
Social	Employees (number)	18,015
	Proportion of Female Employees(%)	45%
	Labor Contract Signing Rate (%)	100%
	Employee Training Coverage (%)	100%
	Employee Training Time Per Capita (hours)	30.3
	Death Toll Due to Work (number)	0
	Loss of Working Days Due to Industrial Injury (days)	53.5
	Number of New Occupational Diseases (example)	0
	Cumulative number of occupational diseases (example)	0
	Safety Training (times)	771
	Safety Training Participants (persons)	52,039
	Number of Accidents (according to national standards)	0
	Annual Safety Investment (Million USD)	23
	Social Donation Amount (10 Thousand Yuan)	315.5
	Employee Volunteer Service Time (hours)	19,277

Appendix 4

Report Evaluation and Recommendations

This report is SMIC's 10th Social Responsibility Report released to the public. In order to keep enhancing our management on social responsibilities and improving our ability and level on fulfilling social responsibilities, we are looking forward to your opinions and suggestions. We earnestly ask you to complete the questions in the feedback form and send it back by any of the following means:

- E-Mail: qingyu_yang@smics.com
- Mailing address: No. 18 Zhang Jiang Road, Pudong New Area, Shanghai
- Addressee: CSR Department   Postcode: 201203

Online evaluation by scanning
the above code with mobile

1. Your general evaluation on SMIC's corporate social responsibility report is?

□ Good   □ Relatively good   □ Average   □ Bad

2. What issues in the report are most concerned by you?

□ Future Growth Potential   □ Employee's Physical and Mental Health   □ Talent Retention

□ Pollution Control   □ Resource Consumption   □ Others

3. Do you think if this report can reflect SMIC's influences on the economy, society and environment?

□ Yes   □ Average   □ No   □ No idea

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

□ High   □ Relatively high   □ Average   □ Relatively low   □ Low

5. What should be improved in this report?

□ Page layout   □ Report length   □ Issue coverage   □ Form of release

You are appreciated to give opinions and suggestions on SMIC's e orts on corporate social responsibility and this report:
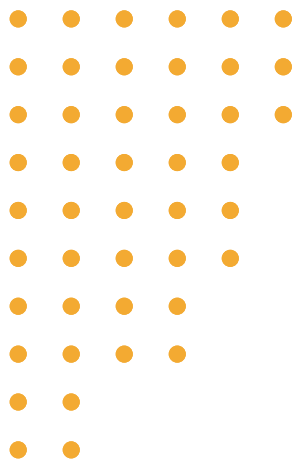
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