

Advanced Semiconductor Manufacturing Corporation Limited

# 2017 Sustainability Report

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	Content Index of Environmental, Social and Governance Reporting Guide Issued by SEHK

# **About This Report**

# Time Frame

From January 1, 2017, to December 31, 2017, partial contents are beyond the above time frame.

# **Publication Cycle**

The sustainability report of Advanced Semiconductor Manufacturing Corporation Limited is an annual report and published on an annual basis. This report is the second sustainability report of Advanced Semiconductor Manufacturing Corporation Limited.

# **Guidance for the Report**

This report is developed with reference to the *Environmental, Social and Governance Reporting Guide* issued by the Stock Exchange of Hong Kong Limited ("SEHK") and the *Sustainability Reporting Guidelines* ("G4") issued by the Global Reporting Initiative ("GRI").

# **Confirmation and Approval**

This report is released upon approval by the Board of Directors.

# **Explanations on Short Names**

For ease of presentation, Advanced Semiconductor Manufacturing Corporation Limited is expressed as "the Company" in the report.

# **Explanations on Data**

Historical data cited in this report is the final statistical data. In case of any discrepancy between financial data and annual report, the latter shall prevail. Unless otherwise stated, Renminbi is used in this report as functional currency.

# **Publication Form**

The sustainability report of Advanced Semiconductor Manufacturing Corporation Limited is in Chinese and English. Please log in http://www.asmcs.com for the electronic version.

# **Contact Information**

Secretary Office to the Board of Directors of Advanced Semiconductor Manufacturing Corporation Limited.

# 1. A Message from Senior Management

2017 was a year of great success for the Company. With the excellent performance of the semiconductor market in the world and the vigorous encouragement of integrated circuits ("IC") development in China, operating and production indicators of the Company in 2017 have reached a record high or one of the highest levels in its history, which making the Company profitable for the eighth consecutive year. With the continuous improvement in its operation and management capabilities, the Company is flourishing day by day.

Over the past 30 years, the Company has never forgotten its fundamental responsibilities as a corporate citizen. The Company insists on carrying forward the enterprise culture of "innovation and result orientation, ownership and problem solving, service and customer orientation, cooperate and win-win", regards social responsibilities as foundation of the its long-standing, and undertakes the responsibilities of a listed company in terms of creating value for shareholders, persisting in technological innovation, improving environmental management, promoting employee growth and carrying out charitable activities.

The Company adheres to innovative technology and product quality management to provide customers with high-quality products and services. In the professional analog IC market, the Company has always been a reliable technology and capacity provider. Regarding the success of customers as its own achievements, the Company provides customers with advanced technology, adequate capacity, stable quality and excellent customer service, so as to enable its customers to strengthen their competition advantage in the market by adopting the Company's products and services.

The Company continues to improve its environmental management, saves energy, reduces emissions, and actively copes with climate change. After years of exploration and trial, the Company has gradually established integrated measures from macro to micro and from management to implementation. Moreover, it improves the system of energy management and resource management continuously promotes energy conservation, emission reduction and environmental improvement measures, and explores more ways and channels for energy use, in order to devote itself to continually minimize its negative impacts on the environment throughout the overall process of production and service.

The Company regards employees as its most important asset, assisting employees to maintain the balance between their physical and mental health and their work as well as to grow together with the Company. Based on the interests of all employees, the Company designs a benefits system to meet the needs of employees and increases team cohesion with rich and diversified training and employee care activities. The Company actively enhances the ability of emergency rescue, reduces accident rate and strives to create a safe and hygienic occupational environment.

The Company sticks to the concept of harmonious development with the neighboring communities, in order to participate in the community construction and practice its corporate social responsibilities. The Company concerns philanthropy, cares for vulnerable groups, and corrects its own social responsibility attitudes. By effectively combining company resources and employee's strength, the Company itself not only focuses on education of vulnerable groups, subsidization for people in poverty and trouble, and caring for the elders and widows, and also organizes and encourages its employees to participate in public services and charitable activities, such as voluntary blood donation, traffic assisting, community support and so on.

In 2018, the Company will celebrate the 30th anniversary of its founding. As a significant milestone in its history, the Company will continue to improve its business operation and management of sustainable development, strengthen cooperation with all parties, and make persistent efforts to grow together with the "IC" industry, so as to make new contributions to achieving sustainable development.

In the end, the Company really appreciates you for reading the 2017 Sustainability Report and look forward to your feedback.

# 2. About Us

# **Company Profile**

Advanced Semiconductor Manufacturing Corporation Limited was initially incorporated as Shanghai Philips Semiconductor, a Sino-Holland joint venture established in 1988, which was renamed as Advanced Semiconductor Manufacturing Corporation Limited in 1995, reorganized into a foreign-invested joint stock company in 2004, and listed on SEHK main board in 2006.

The Company is a large-scale IC wafers manufacturer, located at Caohejing Hi-Tech Park in Xuhui District Shanghai. At present, the Company possesses wafer production lines of 5-inch, 6-inch and 8-inch, with a leading dedicated analog foundry focusing primarily on the manufacture of analog IC, power management chips. The Company has an annual production capacity of 628,000 8-inch equivalent wafers, being the pioneer in manufacturing automotive-specific analog chips, IGBT chips in China. With nearly thirty years of experience in wafers manufacturing, leading edges in analog IC process technology and facilities and through introduction, digestion, absorption and innovation, the Company has passed a series of certification relative to the quality, environment and information security management system standard namely ISO 9001, VDA 6.3 (Grade A), ISO/TS 16949, ISO 14001, ISO/IEC 27001, etc., and also has a leading position in the analog foundry field.

# **Core Values**

# **Our Mission**

To provide service and create wealth with innovative technologies and high quality manufacturing capabilities for our shareholders, customers, partners and employees.

# **Our Vision**

To become the world's best wafer manufacturer of analog and power products focusing on the special application areas.

# **Our Values**

- Innovation and Result Orientation
- Ownership and Problem Solving
- Service and Customer Orientation
- Cooperate and Win-Win

# **Corporate Governance**

As a company listed in the Stock Exchange of Hong Kong Limited in 2006, it actively builds diversified and decisive governance structure and well-organized and enforceable management structure, and strives to operate based on internationally recognized standards of effective corporate governance so as to obtain satisfactory and sustainable shareholder returns.

## **Governance Structure**

The Company has established a governance organization of juridical person with separate determination, execution, and supervision, coordinated operation and effective checks and balances, and forms a diversified board structure. The management of the Company is responsible for the implementation of the decisions made by the board of directors. The four committees of the Board of Director have clear division of power and responsibilities. Each of them performs its own duties and operates independently, and forms an operating mechanism coordinated and counterbalanced with power agency, decision-making agency, supervision agency and executing agency mutually.

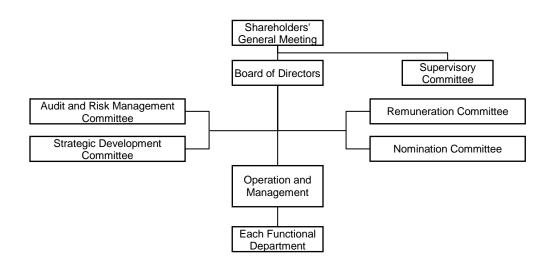


Figure 2.1 Corporate Governance Structure

The shareholders' general meeting is the highest decision-making body, and shall exercise voting rights on the Company's operation policy, investment, financing, profit distribution and other major items based on the rules of procedure for the shareholders' general meeting.

The Board of Directors shall be responsible to the shareholders' general meeting and exercise the decision-making power for the business of the Company, with specific duties and responsibilities including: to convene shareholders' meetings and report work to the shareholders' general meeting; to execute the resolutions passed by the shareholders' general meeting; to decide on the Company's business and investment plans; to formulate the Company's final accounts, dividend and bonus distribution scheme, and plans for increasing or decreasing capital stock; and exercises other powers, functions and responsibilities specified by the Company's Articles of Association.

The Supervisory Committee shall be responsible to the shareholders' general meeting and maintain the interests of shareholders and the Company by inspecting the Company's financial status and supervising the performance of the Board of Directors and the management layer.

(For details of introduction to the Board of Directors, the Supervisory Committee and the senior management personnel, please refer to: <u>http://www.asmcs.com/eninvestor.asp?id=55</u>)

#### Integrity and Compliance

The Company adheres to the principle of integrity management. The Company formulated anti-fraud, anti-corruption, anti-money laundering policies and business atmosphere from the top down, emphasizes on employee's honesty and integrity in business, and is committed to maintaining high levels of transparency and accountability throughout the Company. Employees or any third party are forbidden to seek improper or illegal benefits for the individuals or the Company by fraudulent. In order to strengthen the awareness of consciously abiding by the rule and effective supervision, the Company regularly organizes training for new recruits, which emphasize the basic principle, importance and measures of reporting and monitoring of anti-fraud and anti-corruption. In addition, the methods of reporting and the protection of whistleblowers are also specified in corporate code of conduct.

#### **Fair Competition**

The Company strictly abides by the market operation specification of anti-unfair competition and anti-monopoly, the *Anti-monopoly Law of the People's Republic of China*, the *Company Law of the People's Republic of China*. The Company boycotts organization or employee behaviors of colluding with potential competitors and anticompetitive effects in the market. In 2017, the Company had no legal cases regarding unfair competition or violation of monopoly law. The Company will continue to strictly implement the market promotion with legal compliance, and realize the sustainable development of enterprise and industry.

# Main Honors

Some of the honors the Company has awarded in the past five years:

- The "China HK Securities Golden Bauhinia Award" as the Best Small and Medium-sized Listed Companies in 2013;
- The title of "Two-star Integrity Enterprise" in Shanghai in 2014;
- The title of "Certified Enterprise Technical Center of Shanghai" in 2015;
- The First "Longwan Cup" Corporate Social Responsibility Cases Solicitation (Promotion) Activities in Xuhui district as the "Excellent Example Award" in 2015;
- The title of "Three-star Integrity Enterprise" in Shanghai in 2015;
- The "China Golden Hong Kong Securities Awards" as the Best Investor Relations Management in 2016;
- The title of "Four-star Integrity Enterprise" in Shanghai in 2016;
- The "China Golden Hong Kong Securities Awards" as the Best Investor Relations Management Listed Company in 2017;
- The title of "Five-star Integrity Enterprise" in Shanghai in 2017; and
- A "Good Grade" at the "Assessment of Certified Enterprise Technical Center of Shanghai" in 2017.

# 3. Sustainability Management

In 2017, the Company made many efforts in the sustainable development management, such as further optimizing sustainable development management, continuously improving the Company's welfare system, resource management system and stakeholders communication, promoting satisfaction of employees, shareholders, customers and partners, and playing a greater role in the sustainable development of the society.

During the reporting period, each related department of the Company arranged the specialist to collect and report the related environmental, social and governance ("ESG") data. The Board Secretary's Office summarized the data and report to the Board of Directors on a regular basis, so as to help the Board of Directors evaluate and set suitable and effective environmental, social, and governance risk management and internal control system.

# **Stakeholders Engagement**

Effective participation of stakeholders is essential to the Company's sustainable development. Keeping full communication with stakeholders can help the Company correctly evaluate the influence of their own decisions, truly understand stakeholders' concerns, timely respond to stakeholders' demands, and adjust the development direction.

Stakeholders	Expectations and Requirements	Communication and Response
Government and Regulatory Authority	Compliance operations Pollution prevention Paying taxes Promotion of the local economy	Regular submission of information Regular conversation with regulatory authorities
Shareholders	Return of profits Growth potential Compliance operations Production safety	Corporate announcements Shareholders' general meetings On-site investigation Regular reports
Customers and Partners	Integrity High-quality product & service Product R&D	Business communication Customer feedback
Industry	Formulating industry standards Promoting the development of relevant industries Anti-conflict minerals	Communicating with local labor department Participating in industry forum Investigation and exchange visits
Employees	Occupational health Salary and welfare Career development Humanistic care	Employee Congress Organizing activities Letters and visits Suggestion box
Community	Improving neighborhood community environment Supporting public service for neighborhood community	Neighborhood community communication meeting Exchange visits
Media	Open and transparent information	Corporate website Corporate announcement Interviews

Table 3.1 Communic	ations with Stakeholders
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# Materiality Analysis of Sustainable Development

To identify the Company's key risks and opportunities of sustainable development, the Company thoroughly analyzes material issues every year. The material issues of sustainable development this year were identified based on the Company management's advice, internal and external experts' suggestions, multi-media information analysis, peer companies benchmarking nationally and internationally, and the *Environmental, Social and Governance Reporting Guide* of SEHK etc. In 2017, the Company identified 16 issues of sustainable development from the fields of environment, labor, operation and others.

#### Environment

Solid waste management

Resource use

The impact of company operation on natural resources

# Operation

- Integrity and compliance
- Corporate governance
- Production safety

Production R&D and product quality

- Customer service
- Suppliers management
- Intellectual property management

#### Labor

Employees' rights and interests

Employee training and development

Employee safety and health

Others
Charity
Industrial chain development
Stakeholders communication

On the basis of the materiality matrix from the stakeholders' questionnaire, annual material issues of the Company were identified with comprehensive consideration of the contribution to sustainable development, stakeholders concerns and the needs of company strategy development. The Company designed the questionnaire for stakeholders and senior management with the method of anonymous questionnaire survey. It identified 16 sustainable development issues by the importance to stakeholders and the importance to the Company. In this way, the annual sustainability report's key contents of disclosure were determined to respond to stakeholders' requirements and meet the significant principle of the SEHK. Stakeholders questionnaire had covered nine types of stakeholders, including the government and regulatory authority, customers, partners, suppliers, community representatives, the media, employees, shareholders, and investors, a total of 312 questionnaires were collected and 9 questionnaires from senior management.

Through the questionnaire survey, the Company also obtained advice from various stakeholders for the Company's sustainable development, covering various topics like information disclosure, policy support, operations management, and employee benefits and so on. These contents would be regarded as the important reference of formulating related work plan, in order to achieve targeted response in the future. The Company will continue to carry out the stakeholder communication, including questionnaire survey, and gradually enrich communication channels and forms, learn the development trend of stakeholder needs, fully improve enterprise's comprehensive development strategy, the internal management system and sustainable development framework, finally realize the win-win development.

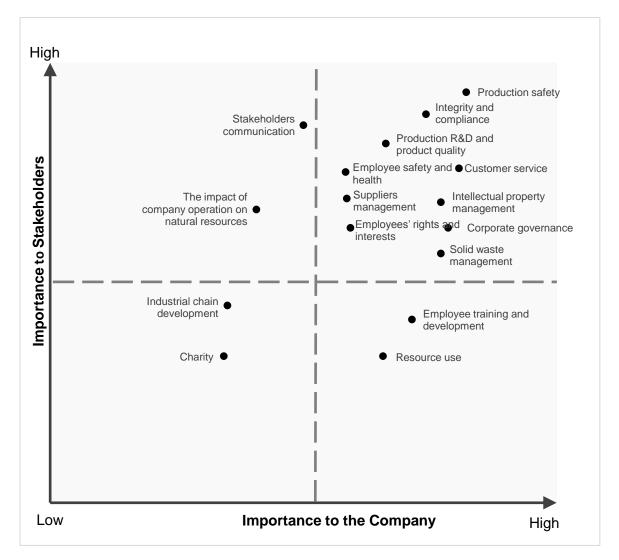


Figure 3.1 Materiality Matrix in 2017

# 4. Being Professional and Reliable, Creating "Wafer" Brilliance

The Company is committed to providing products and services with high quality to customers all over the world, insisting on the leading direction of customer first and becoming a reliable partner of customers. To ensure customer satisfaction, the Company promises to continuously improve the quality of products and services through full participation, and to pursue "zero defect" of each process. To achieve this goal, the Company requires the spirit of accountability, and pursuing excellence.

# **Corporate Management:**

The Company has obtained a series of certifications relative to the quality and information security management system including ISO 9001, ISO/TS 16949, ISO/IEC 27001, etc., and strengthens the enterprise itself and supply chain management with formal documents, including:

- Specifications for Business Ethnics of ASMC
- Intellectual Property Protection and Information Security Management Procedure
- Guidelines for Conflict-Free Metals
- Management Requirements for Social Responsibilities of Suppliers

# **Corporate Performance:**

- R&D Expenditure of the Company was RMB27.057 million in 2017; and
- The rate of withdrawal in 2017 was significantly lower than 2016.

# **Commitments to Technology Development**

With nearly 30 years of chip manufacturing experience and advanced technology equipment and strict quality management system, the Company has a leading position in the field of analog IC and the power management foundry through introduction, digestion, absorption and innovation. The Company adheres to provide quality products and services for shareholders, customers, employees and partners with innovative technology and advanced manufacturing capability. Technology development and protection is the core content to ensure the sustainable development of the Company. In 2017, the Company spent a total of RMB27.057 million in research and development. The Company attaches great importance to the protection of customers' confidential information and its own intellectual property. It has made important measures in intellectual property protection and information security management.

- As for system documents, the Company formulated the Intellectual Property Protection and Information Security Management Procedure, aims to prevent customer intellectual property ("IP") and intellectual property from loss, improper use, unauthorized disclosure and embezzlement in the implementation of the information security management system ("ISMS") standard;
- As for manufacturing, the Company set code name for customer's production technology to protect the confidential information. Only the Company's designated personnel are allowed to use the data of customer's design and product. Only when a customer made instructions, the Company would start to produce wafers and would dispose the wafers that does not need to be delivered under the supervision of relevant customer, to perform multiple security system;
- As for employee training, the Company conducts IPR protection training for all employees including current employees and new recruits, and makes semi-annual assessment for engineers in the Process Integration Department, Technology Development Department and Quality Engineering Department and other key personnel in departments and completes the "Semi-annual Review Table for IPR Protection of Key Personnel", in which the assessment shall be executed by the department manager, and the assessment result shall be validated by the information security group;
- As for supplier's management, the supplier shall be included in the category of intellectual property management and shall be classified according to the different information classification of the supplier.

At the same time, the Company performs strict protection measures for technical solutions, proprietary process and product data provided by customer, such as signing agreements with customers, employees, suppliers, to prevent the loss, improper use, unauthorized disclosure or embezzlement of customer intellectual property and the Company intellectual property.

# **Strict Product Quality Control**

Adhering to the philosophy of "being responsible and pursuing excellence", the Company has formulated the *Quality Policy*, and it is committed to providing quality products to customers with strict quality control. Under the guidance of industry standards, the Company introduces advanced foreign management mechanism and inspection technology, establishes a well-developed internal management system to meet the needs of customers, and passes the ISO 9001, ISO/TS 16949 and ISO/IEC 27001 management systems.

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ISO 9001	ISO/TS 16949	ISO/IEC 27001	ISO 14001

Figure 4.2 Management System Certificates

The Company attaches great importance to on-site management, focusing on the cleaning and inspection of each equipment in workshop, measures of tracking each failure point, handling validation of each abnormal lot, effect validation of each abnormal event, and tracking of environmental correction in each corner of the factory area. The Company assigns relevant engineers to deepen into the front line to check each link one by one according to the quality requirements.

At the same time, based on the quality system and customer requirements, the Company adopts the "8D" Problem Solving Procedure, and provides a methodical and effective process for solving the problem.

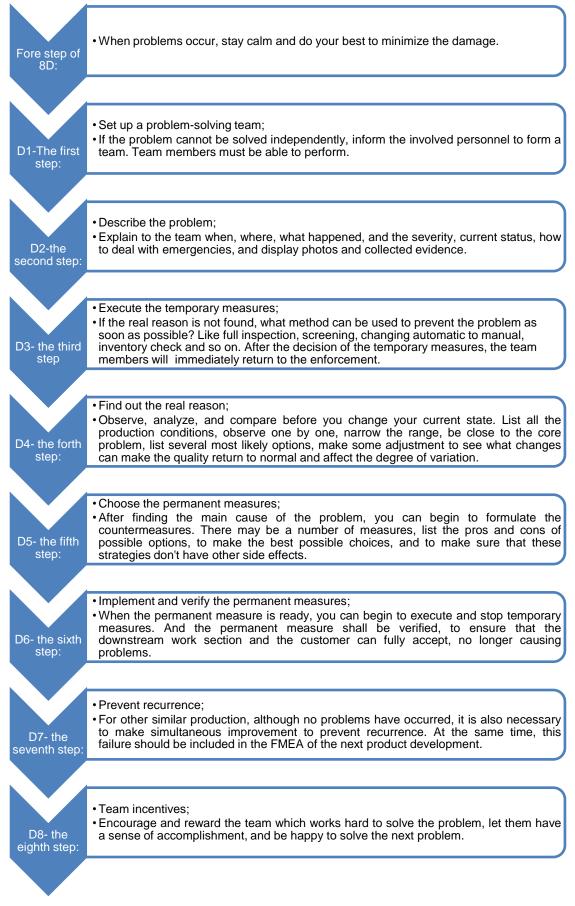


Figure 4.3 "8D" Problem Solving Procedure

The implementation of these steps can objectively identify, define, and solve problems and prevent the recurrence of same or similar problems, and ensure that the process flow is standardized documented.

Through constant efforts, the Company has performed excellently in quality production in 2017. In 2017, there were no product quality recall case, and the rate of wafer return was reduced by 0.2% compared to 2016.

# **Creating Customer Values**

The Company continuously improves the enterprise's ability and quality, taking the customer as the center to serve customers, to meet the needs of customers to the greatest extent, to provide advanced technology, sufficient capacity, stable quality and excellent logistics services for customers, and establish long-term relationship with customers. The Company demand good service for all internal and external customers, and believe that customers' success is our success. Customers can enhance their competitive advantage in the market by adopting our products and services.

The Company focuses on the manufacturing of analog IC, power management chips. It operates comparatively full and advantageous process product lines (5", 6" and 8"), such as Bipolar, BCD, HVCMOS, BiCMOS, IGBT, MOSFET (VDMOS/Super Junction), Diode (TVS/SBD), those products are widely used in various fields.

The Company has professional sales and customer technical support teams to coordinate with internal technical R&D and production factories to customers, providing customers with satisfactory products according to customer's requirements of production plan for manufacturing product category, processing technology, pricing mechanism, manufacturing and delivery of related products, so as to realize its effective communication with customers and ensure timely and effective implementation of the production requirements from customers.

The Company also established a comprehensive customer satisfaction mechanism. The Customer Satisfaction Survey and Customer Request Processing Program was formulated to handle customer's written formal complaints and customer's other formal request, at the same time as the main management tool of continuous improvement of customer satisfaction to make the customer's needs and opinions correctly reflected in the Company, and take effective improvement measures. The management conducts quarterly satisfaction questionnaires for customers, which includes new product research and development, product quality and reliability, deliver on time, business service quality, complaint handling, etc., to fully understand the expectations and requirements from customers and enhance the communication with customer.

# Sustainable Supply Chain

With putting forward of the sustainable development ideas, the Company has closer attention to sustainable development, and has turned its concern into many related fields, including sustainable supply chain management which is aim to select or evaluate supplier relationship based on economic factors and puts forward the environmental, social and moral factors.

# **Management of Suppliers**

The Company formulated a series of system and regulation for supplier management. The Company's requirements for suppliers were stipulated in *Requirements for Supplier of ASMC*, including the performance of the quality system requirements, social responsibility requirements, code of conduct in the electronics industry, according with the Congo conflict-free metal policy, business continuity ability, and the requirements of controlling environmental hazards and the requirements of the supply chain security, etc.

In the process of choosing a new raw material supplier (silicon and non-silicon wafer), the Company has strict requirement about the quality of the suppliers, respectively formulated Assessment of New Production Material Suppliers Selection, and Freeze Table of Supplier's Application for Change, and Self-evaluation Form of New Production Materials Suppliers to inspect the new raw material suppliers thoroughly. For current raw material suppliers (silicon and non-silicon wafer), the Company shall evaluate them with the Mark Sheet of Production Material Suppliers, including:

- Suppliers shall have the qualifications related to the scope of business involved;
- Suppliers shall respect human rights;
- Suppliers shall implement labor protections for female workers in pregnancy, menstrual or breast-feeding period according to the laws and regulations;
- Suppliers shall provide operating environment meeting laws and regulation;
- Suppliers shall have full-time or part-time Environment Health Safety ("EHS") management personnel as well as excellent EHS management system;
- Suppliers shall obtain all necessary environmental permits (such as pollutant discharging license), and monitor, control and process wastes (including toxic and hazardous wastes) according to the requirements of relevant laws and regulations before emission or disposal; and
- Suppliers shall reduce or eliminate all types of consumptions (including water and energy) at the sources so as to achieve the purpose of preventing pollution and saving resources.

In terms of supplier relationship maintenance, the Company has made many initiatives in 2017. In April 2017, the Quality Department, Purchasing Department and Engineering Department jointly visited the supplier site, reviewed the local suppliers of isopropyl alcohol, and conducted a comprehensive review according to the ISO system. At the same time, the Company will attend the supplier conference in March 2018, and fully visit the market to have depth of communication with peer companies, to listen to the forum lecture of new technological frontier, to explore more economic and sustainable cooperation opportunity.

#### **Management of Conflict Minerals**

"Conflict Minerals" refers to tin, tantalum, tungsten, gold and other mineral which is originated in the Democratic Republic of the Congo ("DRC") and neighboring countries. These minerals sales income may provide financial support to local ongoing armed conflict. The Company believes that the profits gained from the eastern DRC illegal mining may cause violation of human rights, and also concern that the illegal production of metal will flow into the electronics industry supply chain.

The Company attaches great importance to conflict minerals and takes action to respond. The Company neither procure nor support to use conflict minerals, and formulates the *Guidelines for Conflict-Free Metals,* which is required all suppliers and their upstream ones to provide corresponding evidence to confirm that they would never use minerals in conflict areas. Suppliers shall develop a non-conflict metal strategy and framework to implement due diligence and corresponding management systems. Due diligence activities include but not limited to, review of supply chain, supply chain back to the mine site, analysis of mineral's origin and other documents review, making sure that the products provided for the Company do not contain the DRC conflict metals.

Over the past few years, several industry groups have been working to provide transparency and root records of raw materials from conflict zones in DRC. The Company fully support these work and the citizenship coalition agreement of electronic industry and will continue to focus on the question of conflict minerals, working with business partners to actively seek sustainable solutions to deal with such problems.

# 5. Protecting our Environment, Blossoming "Wafer" Brilliance

The Company, following the national and international environmental policy and trend, sees environmental protection as key one of its social responsibilities. Since 2015, the Paris Climate Agreement launched the global issue of how to cope with climate change after 2020, the Company pays more and more attention to the influence of climate change on the enterprises, and to climate change, shortage of energy, natural resource depletion and environment pollution challenges. The Company continuously boosts policies and measures to promote energy conservation and emissions reduction and environment improvement, explores more ways and channels of energy utilization, and is committed to continuously reducing adverse impacts on the environment in the whole process of production and service.

# Management:

In 2014, the Company obtained ISO 14001 Certificate issued by French Quality Certification Authority BVQI and registered in United Kingdom Accreditation Service ("UKAS"). The Company developed four principles for initiating environmental protection activities:

- Complying with all relevant environmental laws, regulations and requirements;
- Putting pollution prevention on the top priority and attaching importance on pollution control as well;
- Sustainably renewing and improving environmental management system and policy; and
- Being open and transparent to the public.

# Performance:

- Total carbon dioxide emission was 0.28% lower than benchmark in 2017; and
- Total water consumption was 2.36 % lower than water consumption benchmark in 2017.

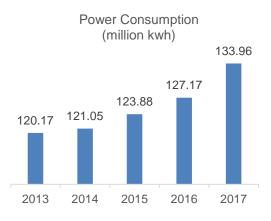
# **Resource Management**

The Company attaches great importance to the challenges of global energy shortage and the depletion of natural resources. On energy and resources integration management, specialized departments are appointed by the Company to analyze the usage of energy and resources and the passing rate on a regular basis. After years of exploration and work, integrated measures are gradually established from macro to micro, from management to implementation, to improve the system of energy and resource management, guide the Company to deal with the global energy shortage and the depletion of natural resources.

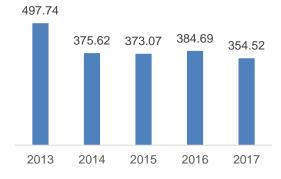
## **Management of Energy Efficiency**

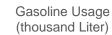
The Company's energy management system starts with setting goals and guidelines, energy efficiency goals involving energy procurement, measuring, statistics, management of consumption quota are set at the beginning of this year. And then two levels of energy management architecture including the leading group and working group for energy saving are set up to implement the goals. The top-down supervision and bottom-up feedback are combined to adjust tasks. In this way, the efficient use of energy and urge energy-saving can be achieved at overall level. The energy management system of the Company has been basically completed, implementing refined management of energy in production control, measuring product consumption per unit. Corresponding goals were set annually so as to realize standardization of energy management and improve enterprise overall efficiency.

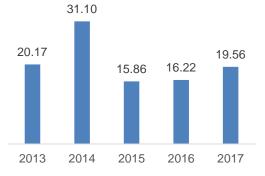
As a large-scale IC chip manufacturing company, the main energy consumption is electric power, other energy consumption includes natural gas, gasoline, and diesel and so on. Under the control of the effective energy saving management measures and system, per unit energy consumption is decreasing. In 2017, the Company's total power consumption is 133.96 million kWh, per unit output power consumption is 0.69 kWh/m<sup>2</sup>, compared to the latest per unit consumption standard value of 0.75 kWh/m<sup>2</sup> proposed by Shanghai Industrial Energy Efficiency Guide (2016 edition), it achieved and exceeded the international advanced standard value. The comprehensive energy consumption is 16.94 thousand tons standard coal equivalent, and the integrated energy consumption of per unit product is 86.02 grams of standard coal equivalent per square centimeter. The comprehensive energy consumption of unit products in 2017 is 23.14% lower than that of the previous year, which greatly increases the efficiency of energy using.



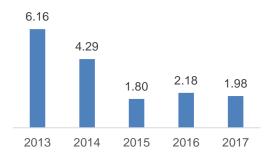
Gas/ Natural Gas Consumption (thousand m<sup>3</sup>)

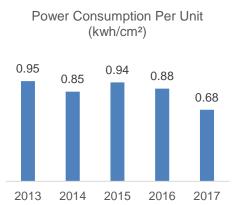




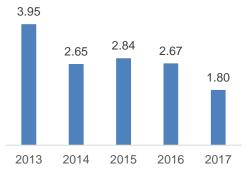


# Diesel Usage (thousand Liter)

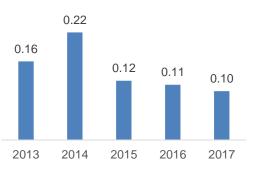




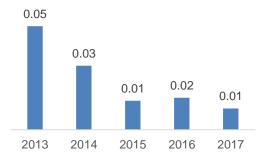
Gas/ Natural Gas Consumption Per Unit (Liter/cm<sup>2</sup>)

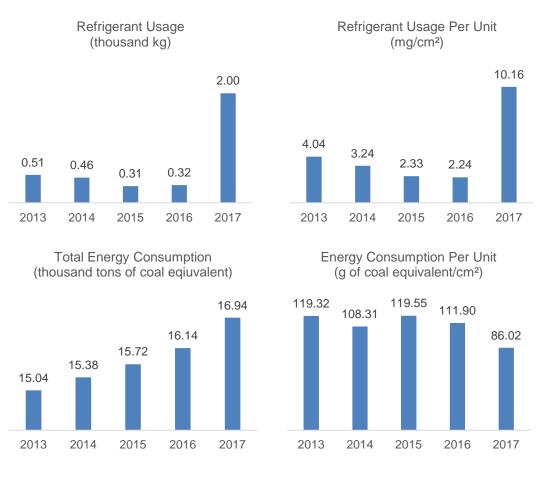


Gasoline Usage Per Unit (ml/cm<sup>2</sup>)



# Diesel Usage Per Unit (ml/cm<sup>2</sup>)





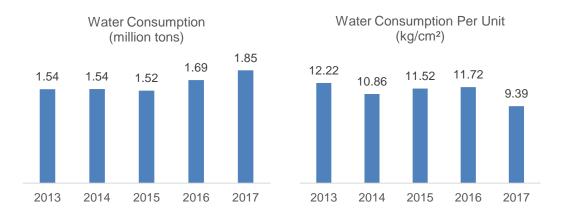
Notes:

- 1. Compared to 2016, the Company's annual output grew by 36.41% in 2017. The production, resource consumption and waste emissions are closely linked, so the amount of related indicators of energy use is also increased, the amount of per unit product energy consumption is decreasing.
- In 2017, refrigerant consumption rises higher than last year. In May 2017, No. 2 heat recovery unit's copper tube ruptured, the Company conducted repairing and checking in time and replaced refrigerant 2000 kg. The Company dehydrated the waste refrigerant, recovered the refrigerant of 800 kg.

#### Management of Water Resources

In the process of semiconductor manufacturing, a large amount deionized ultra-pure water is needed as cleaning agent, thus tap water is massively used in the semiconductor industry. As one of the largest domestic professional IC foundry production companies, it has been committed to rational use of water resources. Regular maintenance and inspection for water system in factory areas are required, and special maintenance team will regularly check the factory pipelines.

In 2017, the total water consumption of the factory is 1.85 million tons, and per unit output water consumption is 9.39 kg/cm<sup>2</sup>, and per unit water consumption is 19.88% lower than that of the previous year.



#### Note:

Compared to 2016, the Company's the annual output in 2017 grew by 36.41%. The production, resource consumption and waste emissions are closely linked, so the amount of related indicators of water consumption is also increased. However, the amount of per unit product water consumption is decreasing.

In 2017, the Company carried out effective waterway maintenance and water conservation work. Within two months from November, the emergency water tank was used to overcome the difficulty of water supply cutoff and shutdown, given chance to check and repair factory waterways, realize the effective water-saving improvement:

- 10 tons of water per day, 3,600 tons of water per year can be saved, and RMB18,000 of economic benefit can be achieved by using water balance to check the underground leakage point.
- The reasons for the deviation of the water volume of the first and second pipe network were basically found, which was estimated to save about 200 tons of water per day and 72,000 tons of water per year, and the economic benefit is about RMB360,000.

# **Reducing Emissions**

The Company strictly complies with the *Law of the People's Republic of China on Prevention and Control of Water Pollution, Technical Policy on Urban Sewage Treatment and Pollution Control* and other relevant laws, regulations and policies, invested tens of millions money to build waste water and gas treatment facilities. Through the operation of relevant facilities, industrial waste water and gas emissions are far below the national emission standards. To actively regulate emissions, the Company also pays attention to reduce the pollutants from the sources, reduces and eliminates the pollution of each link from the production, maintenance to product use through the upgrading process, improving facilities, strengthening management.

# Management of Waste Gas, Waste Water and Solid Waste

The Company adopts the process of activated carbon's adsorption to solve the semiconductor manufacturing industry's low concentration and large emissions of waste gas. The organic waste gas produced by related equipment in each production line was gathered by the closed negative pressure exhaust collection system and shifted to activated carbon adsorption filter processing. The Company strictly controls the emissions indicators, and ensure the emission of waste gas could meet the standard and compliance.

The Company's waste water mainly comes from the washing waste water in the process of production which meets the national sewage drainage standard after processed by sewage treatment station. The content of Chemical Oxygen Demand ("COD") and ammoniacal nitrogen is extremely low after that.

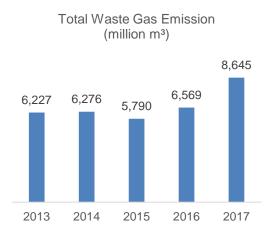
The Company established the waste management system, specifying all produced waste shall be classified collected, stored temporarily in fixed place, and finally delivered to the manufacturer with relevant qualifications for treatment. The Company also required all waste manufacturers to obtain required qualification and reach the Company's evaluation score for them before being signed. The main hazardous waste in production process is organic waste (including isopropyl alcohol), others contain very small amount of resin, waste acid, waste alkali, etc. Waste consignment manifest system shall be implemented when transfer the hazardous waste, and it will be reported to the local environmental protection department for approval.

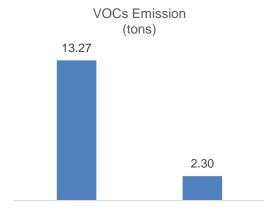
The Company continues to strengthen the systematic management of solid waste in 2017, and take the following main measures:

- The renovation of hazardous waste, electronic waste and waste solvent warehouses has been sustained for 45 days and cost about RMB500,000. The outdated storage warehouse is transformed into a standard processing warehouse including full set of fire extinguishing facilities, emergency treatment collection pool of chemical waste liquid leakage and so on.
- The optimization of hazardous waste treatment process ranges from the registration of hazardous waste's storage, registration form of outsourcing processing to setting up a full set of document process for hazardous waste generation, transfer, storage, registration form of entrust delivery. In this way, each link of the hazardous waste is documented and in charge.

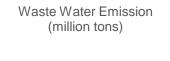
In 2017, the Company's waste gas emissions were 8,645 million cubic meters, and Volatile Organic Compounds ("VOCs") emission was 2.30 tons. Due to the use of waste gas treatment devices, VOCs emission was significantly reduced compared to 2016, waste water discharge was 1.66 million tons. Total non-hazardous waste discharged 0.88 million liters and hazardous waste discharged 512.98 tons. The non-hazardous waste discharged of unit products was 0.44 ml/cm<sup>2</sup> and the hazardous waste discharged of unit products was 2.61 g/cm<sup>2</sup>.

49.40

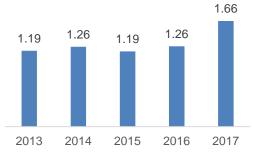


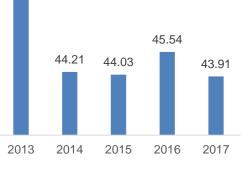


2016



2017





Waste Gas Emission Per Unit

 $(m^{3}/cm^{2})$ 

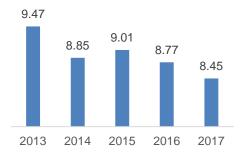
VOCs Emission Per Unit (mg/cm<sup>2</sup>) 92.00 11.70

2017



2016

Waste Water Emission Per Unit (kg/cm²)

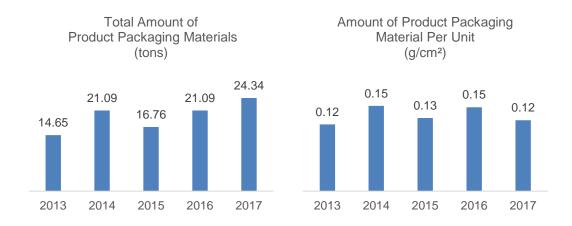


Notes:

 Compared to 2016, the Company's the annual output in 2017 grew by 36.41%. The production, resource consumption and waste emissions are closely linked, thus the emissions of related indicators of waste gas and water are also increased. However, the emission of per unit product waste gas and waste water is decreasing.

#### **Green Packing**

The Company wants to minimize the use of natural resources. In order to save energy, reduce pollution and save the cost of production, it made efforts to reduce the use of packaging materials and adopt green packaging. Green packaging refers to the sustainable packaging that is environmentally sound and harmless to human health and can be reused and recycled. The Company has been recycling the packaging materials for many years. As for the packaging materials that can't be reused but can be recycled waste packaging materials, such as paper packing, are collected and processed at the scene by the contracted firm assigned by the Company specialized personnel, and then processed by the contracted firm assigned by the Company regularly. In 2017, the consumption of packaging materials was 24.34 tons, and per unit output package consumption was 0.12 grams per square centimeter, declined 15.45%, compared to 2016.



#### Note:

Compared to 2016, the Company's the annual output in 2017 grew by 36.41%. The production, resource consumption and waste emissions are closely linked, thus the total amount of related indicators of packaging materials is also increased. However, the amount of per unit product packaging material is decreasing.

# **Coping with Climate Change**

Since China formally submitted "Intended Nationally Determined Contribution" to the United Nations in 2015, active response to climate change and reduction of carbon emissions become one of the key working contents to realize the enterprises' value and strengthen corporate social responsibility for all walks of life. As a member of the microelectronics industry, faced with the large consumption of greenhouse gases ("GHG") hydrofluorocarbons ("HFCs"), perfluorocarbons ("PFC") and large consumption of power and water, the Company actively explores and uses new energy, carrying out enterprise's carbon audit, implementing energy conservation and carbon reduction in policy and practice thoroughly. It also earnestly implemented the strategies of national development for low carbon economy, and made a practical exploration of the national target of greenhouse gas emissions reduction.

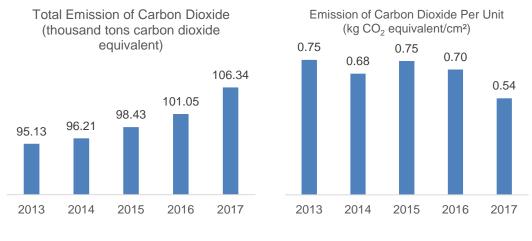
# **New Energy**

The Company's solar photovoltaic power generation project was put into construction since 2015. The photovoltaic power generation tiles were installed on the roof of the factories, with a total installed capacity of 1 megawatt and tiles' area of 4,923 square meters. In March 2016, the project was formally connected to the grid. In 2017, the maintenance and improvement increased the solar efficiency. More than RMB10 million were invested in the project. As at 31 December 2017, the solar photovoltaic project has generated about 1.52 million kWh of power, equivalent to saving 186.48 tons of coal equivalent, or 1,148.67 tons of carbon dioxide equivalent.

# **Carbon Disclosure**

The Company's GHG monitoring has been carried out spontaneously since 2011. The leading group of carbon audit and the working group of carbon disclosure administrates the data of carbon emission which comes from three major categories of direct emissions, energy indirect emissions and other indirect emissions, and six classifications of enterprise's GHG. The Company further clarified the method of GHG quantification, and set up the coefficient table of emission and the calculation table of GHG accordingly, and established the GHG emission inventory.

Through effective management of GHG, the Company's emission of GHG declined for three consecutive years per unit production. The emissions of GHG in 2017 was 106.34 thousand tons of carbon dioxide equivalent, GHG emissions of per unit production was 0.54 kg carbon dioxide equivalent per square centimeter, declined 22.86% compared to 2016.



Note:

Compared to 2016, the Company's the annual output in 2017 grew by 36.41%. The production, resource consumption and waste emissions are closely linked, thus the total amount of related indicators of carbon dioxide emission is also increased. However, the amount of per unit product carbon dioxide emission is decreasing.

# 6. Harmonious Society Transferring "Wafer" Brilliance

In the process of carrying out all business, the Company adheres to the concept of sustainable development, respects for human rights and ensures employees with fairness and equity. The Company provides a safe and healthy working environment for its employees and encourages them to participate in communities' service. Besides, the Company, employees and communities make an alliance and pay special attention to the investment on poverty alleviation, study assistance and city's public construction as to promote the development of the harmonious society together.

# Management

The Company formulates a series of standard of behavior, institutional norm and programmed workflow, which effectively aim at recruitment and employment, training and development and occupational security of employees. It provides guarantees for employees' corresponding rights and interests.

# **Recruitment and Employment**

- Employment criterion of "No child labor, Freely chosen, Non-discrimination, Freedom of association";
- Recruitment process of prohibition for employees under 16 years old; and
- Approval process of avoiding distributing employees between 16-18 years old to work with health and safety risks.

# Training and Development

- Training Management Procedure
- Management Regulations for Master Guiding Apprentice

# **Occupational Health of Employees**

- Management and Approval Regulations of High-risk Operations
- PPEs Management Regulations
- Risk Identification and Control Procedure
- Manual of EHS Department
- EHS Safety Inspection Operation Instruction
- Safety Inspection Procedure
- Health and Safety Management Procedure

# Performance:

- At the end of 2017, total number of employees is 1,372 persons;
- Total training hours of employees in 2017 was 27,586 hours; and
- Amount of investment in public welfare in 2017 was RMB42,700.

# Cohesion of Team

The Company always regards its employees as the most precious property, which is also the core strength to forge the world-leading semiconductor fabrication corporation. Under the leading of this core idea, the Company recruits its employees in a diversified method and cultivates comprehensive talents with various skills, which is not only the essential guarantee to achieve the Company's economic benefit, but also one of the most important subject of sustainable development's realization.

# **Recruitment and Employment**

The Company mainly develops its recruitment through the channels of campus recruitment and social recruitment. Referring to the main factory in Shanghai, the Company actively takes in local employees and supports local construction. To the talents with professional skills and administrative talents, the principles of *employ people who are qualified in accordance of their talent* should always be followed in the process of recruitment and always put the best match for the Company as the first in recruitment work. The Company will strictly enforce *Labor law of the People's Republic of China, Labor contract law of the People's Republic of China* and some other related laws, regulations and clauses.

The Company strictly complies with national regulations, and adheres to the employment criterion of no child labor, freely chosen, non-discrimination, freedom of association. The Company formulated a series of recruitment management methods and employment measures to prohibit employing employees under 16 year old or distributing employees between 16-18 years old to work with health and safety risks. The Company forbids and doesn't support any penal servitude or forced labor, treats every employee with fair and justice respect, avoids discriminations based on the gender, race and religion or for other reasons, respects employee's rights to join the Trade Union, and encourages its employees to communicate with management and make any reasonable suggestions.

By the end of 2017, the Company had total employees of 1,372.



Mainland China, 1368 below, 597

Age of 31 to 50, 672

32

The committee of the trade union in the Company is elected by the congress of trade union. The members of the committee are regarded as the organizers, constructer and participants of the correlated activities, representing all employees to maintain their rights and interests, and improve their political consciousness and cultural quality as well. The whole employee communication conference of the Company was held twice respectively in March and August. In the conferences, the questions put forward by employees were replied on the spot and the special column for employee conference memoirs was constructed in the Company's Intranet so as to record employees' proposals or suggestions and their corresponding solutions.

The internal consulting hotline of the Company is a significant communication channel for employees to put forward rationalization suggestions. The Company holds employee communication conference regularly, combines acquaintance from top-down and feedback from bottom-up, solve problems for employees with multi-modes and multi-channels, and delivers its corporate culture and spirits to employees. From 2014 to 2016, the Company had answered 55 questions in total consulted by employees through hotline and answered 14 more questions in 2017.

The Company's satisfaction survey is carried out at regular intervals each year since the system was implemented from 2008. Following technological innovation, the methods of investigation mainly include intranet, WeChat platform and paper questionnaire at present. The Company's satisfaction survey plays a positive and effective guiding function on the understanding of employees' development program, the formulation of corporate strategies, compensation and welfare and the improvement direction of working environment.

# **Employee' Training System**

The Company establishes and completes a series of training system and training management system for its employees. On the one hand, it aims to help its employees promote their knowledge and skills and conform to the job requirements now and in the future, which devotes to the improvement of the Company's overall working efficiency and whole competitiveness and guarantees its sustainable development. On the other hand, it also normalizes how to apply continuous investment to exert a profound influence on its employees' development of professional career through training and educational programs, which can benefit both the Company and its employees.

In 2017, employee training the Company provided:

- New employees' training: according to the number of induction every week, 26 new employees' training in total was carried out, which involves 6 departments and 9 program instructions.
- Specialized knowledge training: the Company sufficiently mobilized its inward and outward resources and organized vocational training on 7 programs one after another, included engineer annual refreshment.

In 2017, the fraction of coverage of the Company's employee training reached 100% for 6 years successfully. Compared to 2016, the total training attained 27,586 hours in 2017, which declined 10.13%. The main reason to the decline is integration and systematization work in terms of the Company's training in 2017, which elevated the quality of training and redesigned the training courses.

#### Promotion

The development of employees in the Company is presented as the promotion of their personal value, which means more than the promotion of their ability. It also includes great occupational reputations gained through excellent performance and noble professional integrity, and more development space achieved by abundant experience and outstanding professional level. Based on sufficient consideration of employees' specialty, background and their preference, the Company sets 4 promotion and development access for different employees, which actually delivers them sense of belonging and sense of trust.

Performance evaluation is an important management process of the Company, which drives employees to give full play to their subjective initiative and endeavor for the realization of the Company's performance objectives. Through performance evaluation and performance management process, the Company and its employees can communicate with each other, which offers them a chance to know the Company's anticipation to employees, employees' position statement and the year's working objectives. All above align employees' working objective with the target of the Company/ department/ team; accelerate the accomplishment of their working objective, which directly or indirectly help the team/ department/ company reach the goal, propose continuous improvement and form performance culture.

From the aspect of performance evaluation, the Company designs detailed and effective executive standard based on its own condition, which guarantees there are legal basis and rules for employees in their practical operation.

# **Safety Production**

The Company formulates a series of management measures to preserve employees' health. Starting from precaution, the cultivation of all employees' safety production awareness, the constant improvement of employees' production environment, timely transformation of the in-plant discarded and dangerous equipment and facilities and comprehensive safety production training for all employees, the Company tries to form normalized safety production. In 2017, no person in the Company died due to work and the loss of working days due to work-related injury was 60 days.

# Safety Management System

By tightly sticking the safety policy of law-abiding, prevention oriented, risk control and continuous improvement, the Company has a contingency plan for possible fire, chemicals leakage, toxic gas leakage and other emergencies. A 24-hour emergency center and an emergency response team with more than 120 persons were set up. There are annual drill plan, and emergency drill of various emergencies, such as evacuation, chemicals leakage, fire, and using of special equipment. The Company also works with relevant authorities including fire brigade, environmental protection agency and other governmental emergency squads to carry out joint exercises to improve the emergency response ability of the Company and minimize the loss after accidents.

In 2017, the Company passed the Grade B qualification of new edition safety standardization. The EHS department of the Company built an emergency response center to effectively cope with company's emergency. 13 selected capable personnel from the Company are ceaselessly on duty in 24 hours with 3 people each shift. Emergency response center monitors life-support system and fire alarming equipment for 24 hours. Once emergency occurs, the center can lose no time to start its emergency rescue on the basis of preset program, and undertake the command function of emergency at beginning stage as well.

The Company carries out the third-party inspection and assessment work regularly based on national requirements. Besides health examination, the Company checked its fixed fire-fighting equipment and lightning protection devices in 2017.

## **Building a Miniature Fire Station**

For the normalization of voluntary fire fighting team's construction, the Company made efforts to improve the ability of self-examination, self-correction ability and self-defense and self-rescue. The Company recruited 22 voluntary firemen and established its own miniature fire station equipped with firemen, apparatus, and fighting capacity' at the beginning of 2017 among whom are 2 EHS fire engineers, 8 EHS safety officers, 8 securities, 1 engineer of power fire-fighting system and 1 safety engineer for handling special gas. In the miniature fire station, firemen are on duty for 24 hours, and each shift has at least 3 people. After receiving the fire report, firemen on duty will verify it rapidly and launch fire extinguishing procedure. Putting the principle of arriving within 2 minutes' into action, they need to bring back a report to central control room as soon as a fire has been confirmed. If fires are much more serious, they need to request supports immediately and the sustaining team members should wear fire suits and fire-fighting apparatuses to the site and call 119 to ask for help as well. The miniature fire station has been brought into the public security fire control command system, receiving deployment of public security and fire control department and participating into fire extinguishment in the neighboring zones.

## **Occupational Health**

The Company pays great attention to its employees' occupational health. In order to guarantee their health and to prevent, control and eliminate occupational disease and hazards, the Company developed occupational health management procedures in accordance with the relevant provisions of the *Law of the People's Republic of China on Prevention and Control of Occupational Diseases*, the *Labor Law of the People's Republic of China* and other laws and regulations and technical standards and in combination of them and its practicalities. The Company identifies all job positions that may contact occupational hazard factors and therefore defines them as special positions. For all employees at special positions, the Company provides occupational health check-up in each stage of pre-service, in-service, transfer and departure, and establishes the individual occupational health surveillance archives.

Regarding to occupational health protection, the Company in 2017 mainly took two control measures: engineering control and management control.

Categories	Objects	Management and Control Measures
Engineering Control	Hazardous gas	Installation of exhaust equipment to guarantee that hazardous gas will not be let out when leakage happens.
	Magnetic field, radiation factors	Installation of metal backboards to shield equipment and installation of safety chain to brake equipment immediately once the backboards opened.
	GC and VMB environment influence	Installation of poison gas monitoring system, which contains 565 detection points to trace gas concentration of environment, automatically closes upstream air supply and trigger sound-light alarming devices so as to evacuate people promptly.
Management control	Prevention Management and Control	In the proceeding of PM and some other operation which may contact with some occupational hazardous factors, it is required to wear individual protection device in accordance with regulations
		In the areas which possibly contact with some occupational hazardous factors, it is required to post warning signs with occupational hazardous factors
	Monitoring and investigation	According to national regulations, the Company should make an occupational health examination for those employees who get involved in occupational hazardous factors at each stage of pre-service, in-service, transfer and departure.
		The third-party will be organized annually to test the physical and chemical occupational hazardous factors in the Company's operation areas and the test report will be publicized on working spots.

Table 6.1 Measures for Occupational Health
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In October 2017, the Company invited the Radiological Research Institute of Fudan University and Shanghai Chemical Occupational Disease Prevention Hospital to carry out the annual occupational health examination for 439 employees who exposed to occupational hazardous factors. So far, there has been no occupational disease case since the Company operated.

In December 2017, the Company invited Shanghai Jianke Inspection Co. Ltd to have an on-spot inspection to the Company's physical and chemical occupational hazardous factors, and all results met the national standards.

#### Safety Training and Education

The Company establishes a complete EHS management system, which guides safe production and safety routing inspection work so as to protect employees' health and life safety. The Company carries out various safety education training for employees, including safety orientation for new employees, education for safety rules and regulations of the Company, safety training of Three Levels", professional training for special position, service with certificates, production safety skills training and daily safety production education.

In 2017, 439 people in total joined the safety training organized and the safety education training time reached 6,744 hours. Total loss of working days due to work-related injury of all employees was 60 days.



# **Care for Employees**

Headed by the trade union, the Company actively fulfills its promise of caring for employees and organizes a series of activities in multi-forms and with many participants, such as innovation studio of employees, Love Mummy Hut, dating party for the singles, poverty relief and warmth delivery, family reunion dinner and so on, Such activities provide every employee with concerns and cares from the Company. Moreover, the Company can get to know employees' reasonable needs and solve their confusion both in life and work through these activities, which helps the company become all employees' cozy and harmonious home.

# Work and Life Balance

The Company advocates employees to have a colorful life to improve corporate cohesion.

# **Innovation Studio**

Chufeng Innovation Studio ("Studio") was founded by employees from the Company's human resources department and legal department, whose concept was "innovation and result orientation, ownership and problem solving, service and customer orientation, cooperate and win-win". Taking all employees' benefits as the start point, the Studio will seek welfare and well-being for employees through their professional human resource and legal knowledge.

At present, the team is developing a project of semiconductor chipmakers (senior level) training for national professional qualification, which is organized and declared by the Company in alliance with Shanghai Integrated Circuit Association. According to the occupational standard of semiconductor chipmakers' professional work, the team develops corresponding training and identification as to construct the cultivation and evaluation program of high-skilled talents base. The Company establishes cultivation and development platform for semiconductor industry talent, apply professional knowledge and make use of various resources for the sake of corporate employees' benefits.





# Pujiang Team-Building Activity

In order to enrich employees' spare time, strengthen friendship among colleagues and elevate teams' cohesion, the Company successfully held the 2017 team building activity from October 2017 to November 2017. 850 employees from different departments actively took part in tourism activities, including: visiting Chongming Eco-island, Shanghai Disneyland, and the Highest Building of Asia "Shanghai Center" and night cruise in the Huangpu River. The Company pays special attention to providing comfortable and friendly working environment to its employees and gives them sufficient rest time to relax their mind and body through the team building activities, which can further inspire their enthusiasm, initiative and passion for work.



# Love Mummy Hut

Love Mummy Hut (or the Orange Ribbon), is one of women workers' care series programs --Rainbow Flower, developed by female employee committee of Shanghai' Federation of Trade Union. To respond to the call, the Company established Love Mummy Hut program and aimed at providing a private, neat, comfortable and safe rest area for women workers in their pregnancy and lactation. It offered them humane and warm services for professional women on their special physiological stages.

Formally applied in July 2017, the program was officially launched in October 2017 after approved by Shanghai Federation of Trade Unions. Love Mummy Hut was open to female employees at phase III in the Company. In the Hut, signs and posters were put up, and breast feeding instruction, maternity magazines, refrigerators, purifiers, heaters and sofa were all equipped. All above offer women workers in request assistance and care.

#### Meet Employees' Needs

The Company sees every employee as family member and offers the needy employees various aids which give them the warmth of the Company. Employees' urgent needs, are met immediately under the support of the Company.

## **Delivery of Warmth in the Spring Festival**

The Company cares for needy employees actively and concerns employees who work overtime in the production line. Before the 2017 Spring Festival, members of trade union respectively paid a home visit to 39 employees from 11 departments.

Warmth delivering in the Spring Festival activity is a kind of responsibility and obligation for the Company to care for its employees. Although the special awards are limited, it delivered a good will of the Company, which further promoted employees' sense of belonging and cohesion.

# **Delivery of Cool in Hot Days**

On 18 July 2017 and 20 July 2017, the Company's sent articles of heatstroke prevention to front-line workers and comforted front-line workers living in apartment. On 21 July 2017, the Company visit employees working under high temperatures and carefully inquired them about their work and health. Based on the premise of guaranteeing the quality and schedule of their work, front-line employees were reminded to make self-adjustment under high temperature, prevent heat stroke and pay attention to their safety. The Company required heads of relevant departments to put heatstroke prevention work into practice. According to the practical working condition, the Company arranged proper operation so as to ensure front-line workers safety in high temperature season and provide them harmonious and comfortable working environment.

# Caring for Needy Employees

The Company always regards its employees as family members. It cares for the needy employees and provide them every possible assistance and concern. In their daily work, the Company actively collect the needy employees' information from different departments and condole the ones with temporary difficulties, such as employees who get sick or give birth to baby in hospital. Referring to the employees who get serious disease, the Company will launch a compensation application for them and give them subsidy funds according to their actual problem. To those employees or their immediate family members who suffer from misfortune or die, the Company will offer special awards and attend the memorial ceremony to condole relevant people.

## **Organizing a Party for Retired Employees**

On the Double Ninth Festival, the Company organized a party to thank those retired employees. As a people-oriented company, it attached importance to the concern of employees and gave great acknowledgement to employees who contributed their youth to the Company. By the party, the Company wished them health and to enjoy a long and happy life.

# **Engagement in Community**

The Company always insists a concept of mutual benefits with its neighbors, by actively establishing cooperative relationship with neighboring communities, focusing on charity, caring for vulnerable groups, fulfilling its social responsibilities and encouraging its employees to participate into volunteer activities. The activities organized and advocated by the Company include: education aids, blood donation, condolence on the Double Ninth Festival, traffic control volunteers, etc.

In 2017, the Company donated RMB 42,700 for philanthropy and served communities as volunteers for 40 hours.

## **Education Aids in Neighboring Communities**

In order to construct a harmonious and pleasant environment for neighboring communities autonomy and multilateral participation, the Company positively develops poverty alleviation activities in neighboring communities and formed pair education aid with poor children. In 2017, the Company formed pair education aid with a 14-year-old poor child, a 7-year-old child whose parents had divorced and living with his grandmother, and a child whose mother suffered from breast cancer and their life was really hard respectively. The Company not only offered economic assistance to these children until they finish their school education, but promised to take care of their daily life and healthy growth all the time. The Qingbei Community, Hongmei Street, sent the Company two banners with *love delivery to neighboring communities, pair education aid to transmit warmth* and *poverty alleviation and education aid* to spread love in community to express the recipients' gratitude in community.

#### Education Aid in Tibet

In June 2017, an education aid initiative of A Beautiful Book House in the Summit Project in Sajia County, Tibet was launched by the Corporate Social Responsibility Alliance" of Hongmei Street. Federation of Trade Union of Hongmei Street and the Party Building Service Center of Hongmei Street Community. Employees of the Company actively made a response by totally raising 121 books and donating RMB 8,700.

The Company keeps a healthy and favorable mutual help relationship with Hongmei Street neighboring communities. Hongmei Street regularly communicated with the Company and made their suggestions on production environment optimization with the Company; and correspondingly the Company actively participated into activities held by street communities. The initiative of library donation to Tibet areas was also a charitable project concerned and invested constantly by the Company, which was also a part of the active development of social public benefit construction program.

# **Traffic-control Volunteers Program**

For the further promotion of socialist civilization mutually constructed by police and the public, the Company signed the agreement of police and the public mutual construction with the Fourth Traffic Police Detachment in Xuhui District of Shanghai Public Security Bureau. The Company needed to cooperate with the Fourth Detachment to manage the daily traffic work. In June 2017, the volunteers of the Company came to the intersection of Yishan Street and Hongmei Street and assist the maintenance of traffic order. The volunteer team earned great acknowledgement of the Company. At the same time, the Company actively expanded more channels to contribute neighboring communities to realize its corporate social responsibilities.

#### **Condolence on the Double Ninth Festival**

On 25 October 2017, the Company launched the condolence activity for the 2017 Double Ninth Festival with Shaji Village, one of the pairing support poverty alleviation targets, and brought holiday greetings for the aged over 65 year in Shaji Village and Caoiing Village, Jinshan District. The Company vigorously carries forward the traditional virtues of respecting the seniors and caring for the young. More than actively developing the love education-aid program, the Company constantly pays attention to the elderly who have devoted their whole life to society. The Company always insists human oriented care, helps the difficult group get material improvement and commits itself to the delivery of more emotional communication and concern to society, which is also one of the requirements that performed by the Company to its own social responsibility.

## **Blood Donation**

On 13 November 2017, more than 30 employees from different departments rolled up their sleeves and joined the blood donation to save people. The Company energetically advocates its employees to participate in social public benefit construction and regards its development should be established on all humans' contribution in any single way. Blood donation activity is not just a strength devoted to society, it helps employees get some relief in the realization of their values at spare time. In the following work, The Company will continue to encourage its employees to join the blood donation and spread their good will.

# Appendix

	Environmental, Social and Governance Indicators	Page
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A1.1	The types of emissions and respective emissions data.	P26
A1.2	Greenhouse gas emissions in total (in tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P29
A1.3	Total hazardous waste produced (in tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility)	P26
A1.4	Total non-hazardous waste produced (in tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P26
A1.5	Description of measures to mitigate emissions and results achieved.	P25
A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	P25
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A2.3	Description of energy use efficiency initiatives and results achieved.	P21
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A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	P21-P28
B. Social		
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<b>B7</b> Anticorru	otion	
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