

# SMART SOLUTION HAPPY LIFE

SK hynix 2016 Sustainability Report



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## Purpose of Report

The purpose of this Sustainability Report is to share the vision, strategies, and activities involved in sustainability management that SK hynix pursues with its stakeholders and to ensure that their feedback and opinions are incorporated into corporate policies and decision making.

## Reporting Principles and Period

SK hynix has been publishing its Sustainability Report on an annual basis since 2008. This report is published in compliance with the GRI (Global Reporting Initiative) 4.0 and ISO26000 standards. This Report covers the period from January to December 2015 and contains data from 2013 to 2015 to ensure that performance indicator trends can be identified. Certain information prior to 2015 or 2016 that is considered important is included as well. The financial information stated in this report has been prepared in accordance with K-IFRS (Korean International Financial Reporting Standards).

## Reporting Scope

The scope of report extends to all overseas production sites including Wuxi Plant and Chongqing Plant in China, as well as all domestic production sites such as the headquarters of SK hynix Icheon Campus, Cheongju Campus and Seongnam Office. Economic data encompasses information of affiliated companies and part of social and environmental data with a different scope of report is specified separately.

## Approach to Report Assurance

To secure the reliability of sustainability management performance information, SK hynix has been verified by Deloitte Korea which is an independent validation agency. We have underwent the validation procedure conforming with the three principles (materiality, completeness, and responsiveness) of AA1000APS (2008) and Type II has been applied to the environmental and safety performances of our business sites in China (Wuxi, 100% of wafer production) as well as Korea. The result of the validation is shown on pages 93-94.

## Cover Story



To achieve the vision of becoming "the world's best memory semiconductor solution company", SK hynix is practicing innovative and creative management for growth and development, social contribution for sharing and happiness, environment management for win-win growth and coexistence and ethics management for consideration and respect. Beyond "the world's best memory semiconductor solution company", SK hynix will continuously strive to become a responsible and sustainable company leading balanced growth in the environment and society.



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# 2015 SK hynix HIGHLIGHTS

## 01

### Constructed Icheon Campus M14

In August 2015, Icheon Campus M14 was constructed in Gyeonggi-do as the world's largest semiconductor plant. Since construction work had commenced with the construction costs amounting to 2.38 trillion won in July 2014, it took about one year until completion. The two-floor clean room with an area of 66,000m<sup>2</sup> is capable of producing up to 200,000 sheets of 300mm wafers every month. We will continue to expand our production capacity in order to strengthen our market status in global markets.



## 02

### Activities of the Industrial Health Verification Committee

SK hynix is operating an Industrial Health Verification Committee, which consists of external health experts, civil groups and representatives from the labor union. The Committee is conducting 127 tasks to create a future-oriented industrial safety and health system.



## 03

### Operating the Wage Sharing Program

SK hynix and its labor union are jointly operating the Wage Sharing Program to share part of their wage increase with suppliers. We are endeavoring to improve the working conditions for suppliers' employees.







## 04

### Included in DJSI World for six consecutive years

SK hynix has been included in DJSI World, which is an indicator of corporate financial performances, environmental/social values, and sustainability, for six consecutive years, as an outstanding global corporation.



## 05

### Organized the BCP System in Wuxi Campus, China

In order to swiftly respond to accidents and disasters, SK hynix organized the ISO 22301-based Business Continuity Planning (BCP) System for its domestic business sites in 2014 and at the Wuxi Campus, China, in 2015. Now we are able to protect our customers from various disasters and emergencies and secure business continuity.



## 06

### Joined the CDP Hall of Fame for three consecutive years for the first time in Korea

SK hynix has been maintaining the Gold Club status for three consecutive years since it first joined the Hall of Fame in 2013 for its continuous efforts to reduce greenhouse gases, save energy, expand carbon labeling, and develop eco-friendly products.

## CEO MESSAGE

SK hynix will establish a  
foundation for sustainable  
growth based on  
technology leadership.



May 2016  
President & CEO of SK hynix,

**Park Sung-wook**

Dear respected stakeholders,

By publishing the ninth sustainability report, I am glad to introduce SK hynix's sustainability management aiming for challenges and changes. Through this report, SK hynix has been endeavoring to improve its corporate competitiveness and to fulfill its social and environmental responsibility.

Despite the rapidly changing global market and growing competition, SK hynix achieved sales of 18.8 trillion won and operating profit of 5.3 trillion won in 2015, the best performance for three consecutive years. In addition, we have been included in DJSI World for six consecutive years and have been selected by CDP in the Leaders Club of Carbon Management Hall of Fame for three consecutive years. Not being satisfied with such achievements, we, as a semiconductor leader, will do our best to become a more trustworthy and respectable company.

To achieve this, we are making efforts to create eco-friendly and safe campuses based on our responsibility for the environment, human health, and safety. We are conducting various forms of research to reduce the environmental impact on all production processes. Especially in the semiconductor process, we are applying advanced technology to improve energy efficiency, developing eco-friendly products, and endeavoring to acquire carbon labeling certification for major products.

In addition, we are focusing on constructing a safe working environment for employees at SK hynix and employees of suppliers. We are conducting various safety-training programs to respond to unexpected situations and accidents, and seeking to secure objectivity and professionalism by operating the Industrial Health Verification Committee consisting of stakeholders from various groups and academic circles.

Based on our management philosophy of win-win growth and sharing, we are striving for a healthy coexistence with our suppliers and communities as a member of society. We are aiming for win-win growth with our suppliers through various programs such as the technology performance sharing system, and are encouraging them to practice humanity, environmental, and society-centered management. We are conducting technology-centered social contribution activities fitting the corporate characteristics in the local community, and supporting global sustainability standards such as UN Global Compact, Universal Declaration of Human Rights, and Electronic Industry Citizenship Coalition (EICC).

SK hynix will keep strengthening its technology leadership as a foundation for sustainable growth and seek new challenges in order to gain stakeholders' trust through contribution to economic development, social contribution, and ethics management. Your continuous support and concern in all our endeavors will be highly appreciated.

With many thanks.

# COMPANY PROFILE

## Semiconductors are the growth engine of the IT industry and our future.

Semiconductors are a foundation for the IT industry. SK hynix is a semiconductor manufacturer that produces system semiconductors, such as CIS, and memory semiconductors, including DRAM and NAND Flash, required for mobile devices, computers, and other IT devices. Since we succeeded in the pilot production of 16Kb SRAM for the first time in Korea in 1984, we have been strengthening our market status by producing the first, smallest, fastest, and lowest-voltage semiconductors.

We are making efforts to suggest innovative memory semiconductor solutions, in line with a paradigm change in the IoT world. SK hynix is aiming for sustained growth based on advanced technology and profitability-centered management.

SK hynix has four production facilities in Wuxi and Chongqing, China as well as domestic business sites in Icheon and Cheongju. As a global company, SK hynix also operates sales subsidiaries in ten countries including the U.S., U.K., Germany, Singapore, Hong Kong, India, Japan, Taiwan and China, and four R&D subsidiaries in Italy, U.S., Taiwan and Belarus.

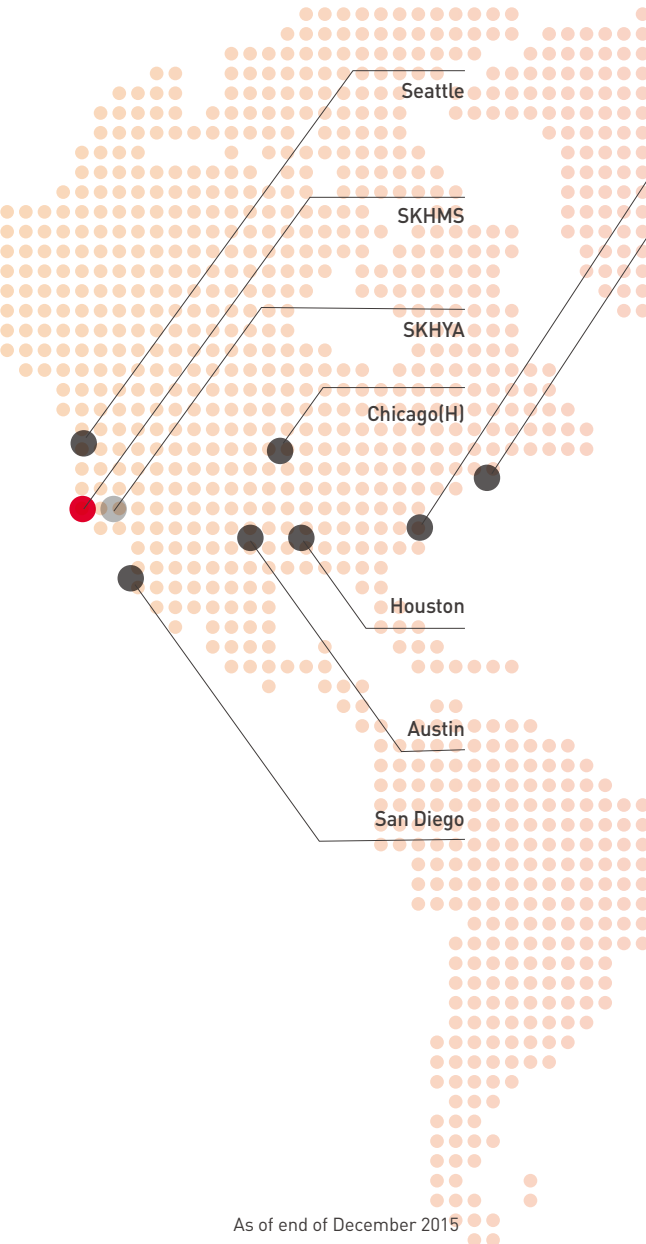
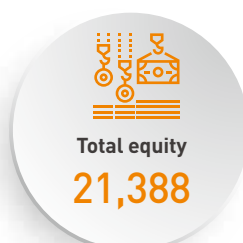
### Company profile

(As of end of December 2015)

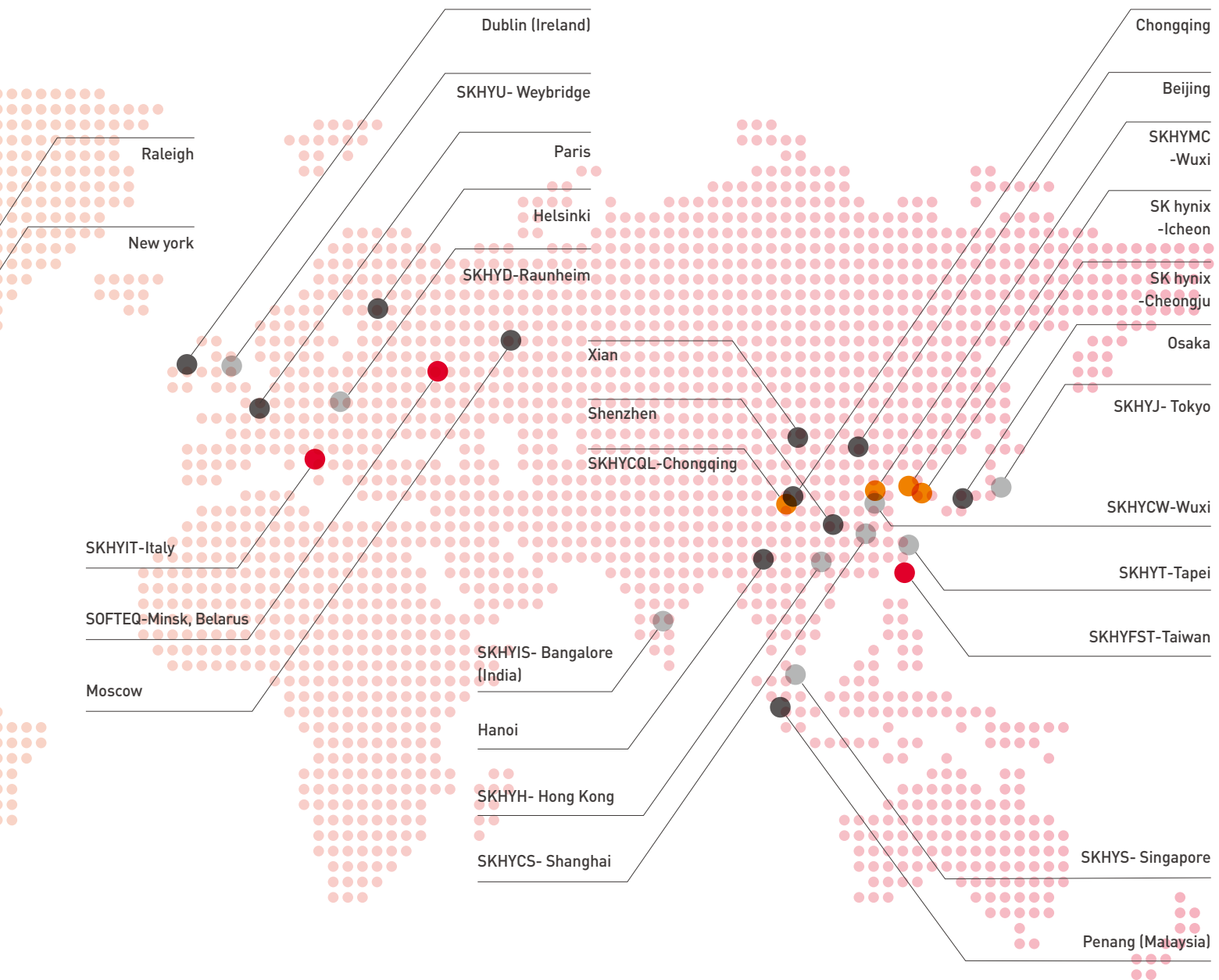
<b>Company name</b>	SK hynix
<b>CEO</b>	Park Sung-wook
<b>Date established</b>	February 1983
<b>Area of business</b>	Manufacture and sales of semiconductor devices
<b>Address of headquarters</b>	2091, Gyeongchung-daero, Bubal-eup, Icheon-si, Gyeonggi-do, South Korea
<b>Products and services</b>	Memory semiconductor   DRAM, NAND Flash, MCP (Multi-Chip Package), etc. Non-memory semiconductor   CIS (CMOS Image Sensor), etc.

Unit: 1 billion won

As of end of December 2015







## GLOBAL NETWORK

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## BUSINESS AT A GLANCE

# DRAM

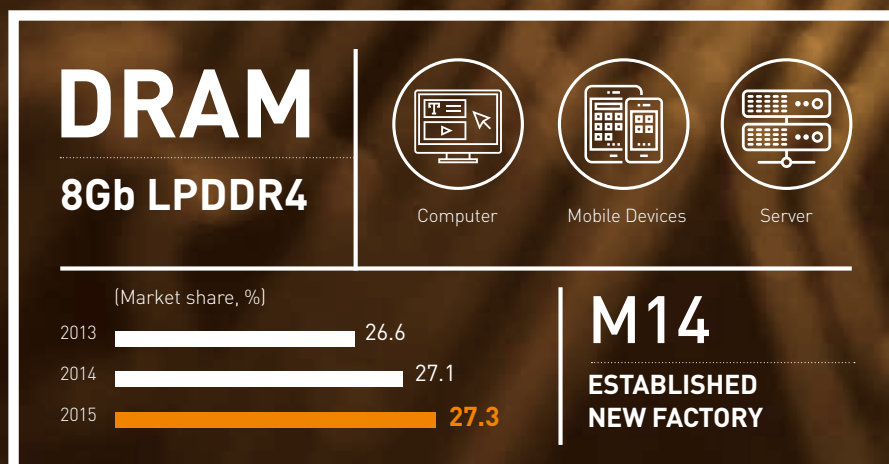
In 2015, SK hynix realized a high-speed, low-power, and large-capacity memory solution by applying its 8Gb LPDDR4 in smart phones for the first time in the industry. SK hynix secures the industry's best level of nano fabrication technology through continuous research and development. In addition, we maximize customer satisfaction with our DRAM products through a strict quality assurance process.

DRAM is volatile memory used as a main memory of smart phones, tablets, PCs, and servers. In the past, the DRAM market used to greatly depend on the demand for PCs. However, demand for DRAM is now increasing due to the growing significance of high-performance, low-power products resulting from a recent increase in mobile products. As a result, business fluctuations are significantly less compared to the past.

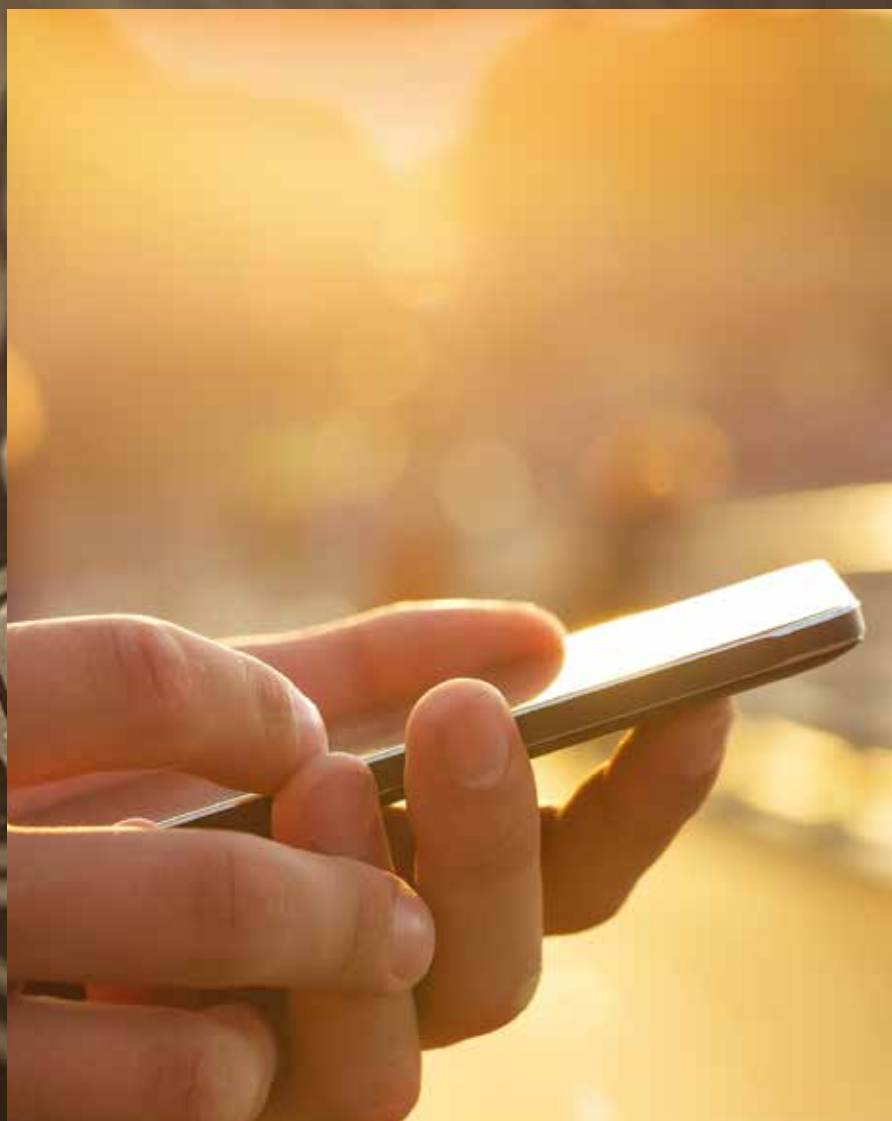
SK hynix newly constructed the Icheon M14 Plant to increase its production capacity. In addition, we are maintaining our world-class nano fabrication technology through innovative research and development. Through these processes, we will improve our price competitiveness and expand the DRAM semiconductor market by supplying optimized products.

## MARKET SHARE FOR DRAM

In 2015, the DRAM market has been creating stable profits since the industrial structure was reorganized in the previous year. SK hynix first applied the 20-nano 8Gb LPDDR4 to the latest premium smart phone model. In addition to such performances, we aim to proactively develop and produce low-power high-performance products in 2016.









# NAND FLASH

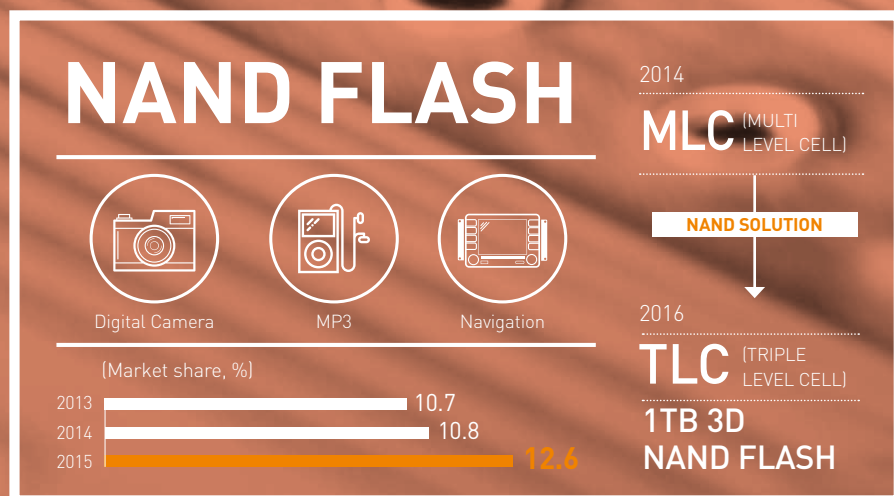
NAND Flash is non-volatile memory suitable for saving huge volumes of information. Therefore, it is widely applied to digital cameras, USB drives, MP3 players, vehicle navigations, SSDs (Solid State Drive), smart phones, tablet PCs, and other mobile devices.

Recently, the demand for high-capacity products such as TLC (Triple Level Cell) and 3D NAND Flash has been increasing. The market requires increasingly larger volumes of compact, high-capacity, and high-speed products.

In line with a rapidly changing market environment, SK hynix has been producing 16-nano MLC (Multi Level Cell) since 2014. Based on our cost reduction process through TLC and 3D technology, that overcomes the limitations in the processing, we aim to increase our market share in the NAND Flash market by supplying the best NAND solutions that satisfy customer demands.

## MARKET SHARE FOR NAND FLASH

Based on its advanced NAND Flash technology, SK hynix is developing and producing a wide range of applied convergence products, such as eMCP (embedded MCP), eMMC (embedded Multi Media Card), UFS (Universal Flash Storage), and SSD, that are used in mobile devices and servers. This year, we aim to increase our market share, launching a variety of TLC and 3D NAND products.







# CIS

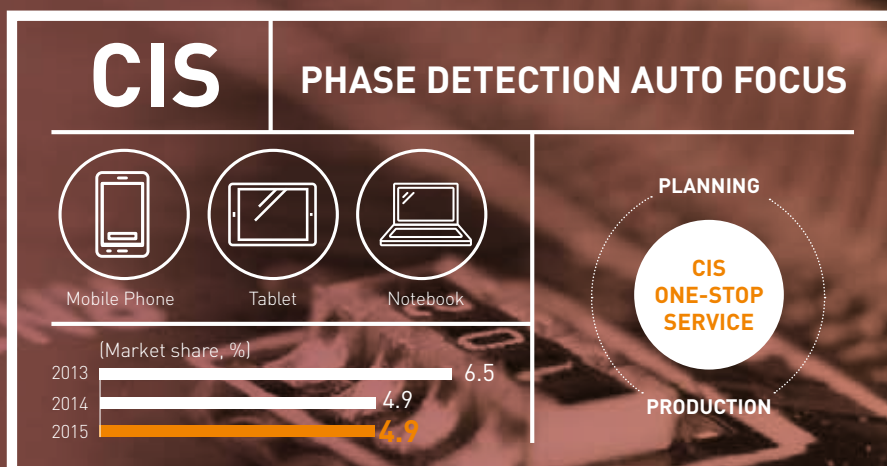
A CMOS Image Sensor (CIS) is SK hynix's main non-memory semiconductor used for smart phone camera modules. Since acquiring Siliconfile, a CIS design company, in 2014, we have constructed a one-stop manufacturing system encompassing CIS design and product development.

SK hynix developed and is producing 8.0 megapixel and 13.0 megapixel BSI (Backside Illumination) products for the qualitative growth of its CIS business. In particular, we are leading advanced technology by developing products equipped with a 13.0 megapixel phase detection auto focus device. We will increase market share in the CIS industry based on our memory semiconductor manufacturing technology competitiveness.

## MARKET SHARE FOR CIS

[Unit: %]

Maintaining an annual growth rate of 10% since 2013, the CIS market is expected to be valued at \$13 billion by 2018. We narrowed the technology gap by replacing the preexisting products with high-performance products. In the future, we will expand our market share based on high-performance products.







# ECONOMIC PERFORMANCE AND DISTRIBUTION

## Market trends

In 2015, the growth of the global semiconductor market has slowed due to various reasons such as decreasing demand for electronics, a strong dollar in some regions, and an increase in stocks. The average selling price of DRAM has fallen due to an oversupply, and the NAND Flash market keeps expanding due to growing demand for mobile devices and SSD. Although the demand for memory semiconductors will continuously increase with the internet-based development of digital devices, mobile devices, smartization, automobiles, medical devices, and industrial devices, the memory market is expected to grow even more due to its limited supply.

## Major financial achievements and distribution of economic performance

In 2015, SK hynix achieved sales of 18.8 trillion won, an increase of 9.8% year on year. Despite the decreasing prices of DRAM and NAND Flash due to low demand in the overall market throughout the year, we achieved operating profits of 5.336 trillion won and a net income of 4.324 trillion won by introducing nano fabrication technology and increasing the production of higher value-added products such as mobile devices and servers. SK hynix shares economic value, which is created from business activities, with stakeholders and proactively invests in pioneering of the global market and developing new technology to seek future growth.

## Summary of creating economic performances

(Unit: 1 billion won)

Item		2013	2014	2015
Income Sheet	Sales	14,165	17,126	18,798
	Gross margin	5,301	7,664	8,283
	Operating profit	3,380	5,109	5,336
	Gross margin	3,075	5,048	5,269
	Corporate tax	202	853	946
	Net income	2,873	4,195	4,324
	Total assets	20,797	26,883	29,678
Balance Sheet	Total borrowings	4,550	4,175	3,819

Total borrowings = Short-term borrowings + Current portion of long-term debts + Corporate bonds + Long-term borrowings



## VALUE CREATION AND DISTRIBUTION BY STAKEHOLDER

SK hynix shares its economic values created through business activities with various stakeholders including shareholders, suppliers, employees, and communities.

### Distribution of economic performance

(Unit: 1 million won)

Stakeholder	Item	2013	2014	2015
Employees	Wages	1,732,695	2,164,619	2,188,297
	Retirement allowance	125,495	143,432	150,932
	Welfare benefits	280,729	327,693	377,818
Local Communities	Tax and dues	240,396	883,689	983,471
	Donation	3,222	16,111	55,131
Suppliers	Material cost	1,986,556	2,033,215	2,471,643
	Consumables/Repair expenses, etc.	2,748,091	2,885,088	3,337,555
	Processing costs paid to subcontractors	952,457	1,018,075	982,419
Company	Reservation value	2,872,857	3,976,769	3,970,593
Shareholders and investors	Interest expenses	256,623	170,363	118,505
	Dividends	-	218,401	353,001

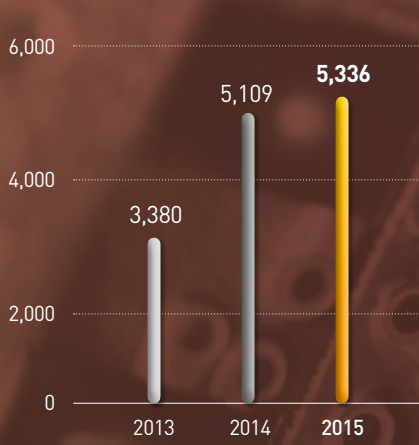
### Sales

(Unit: 1 billion won)



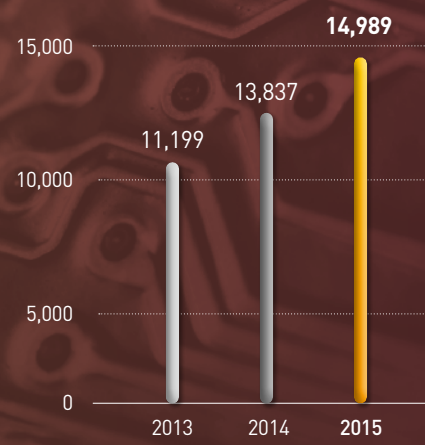
### Operating profit

(Unit: 1 billion won)



### Distribution of economic performance

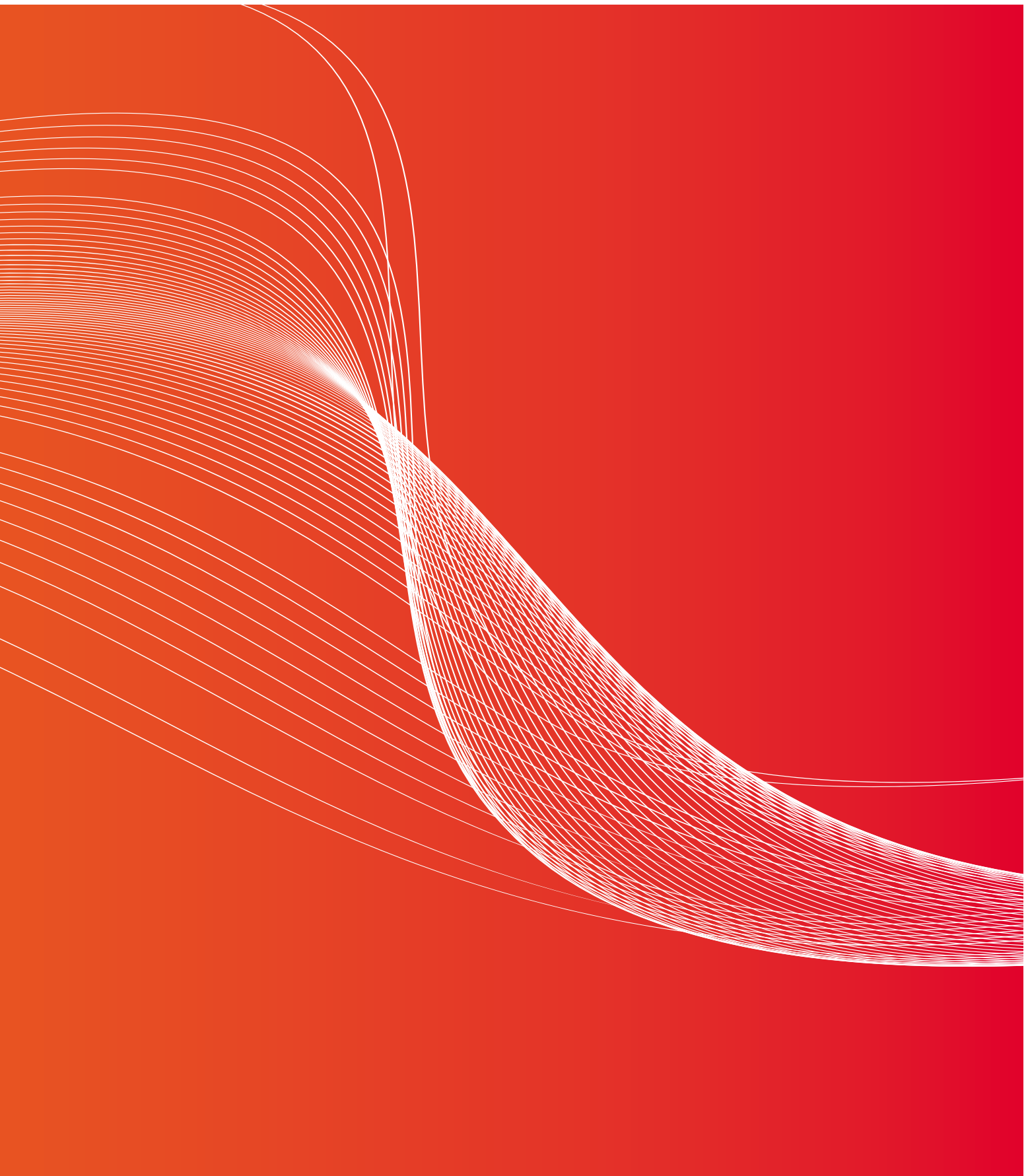
(Unit: 1 billion won)





# CORPORATE GOVERNANCE

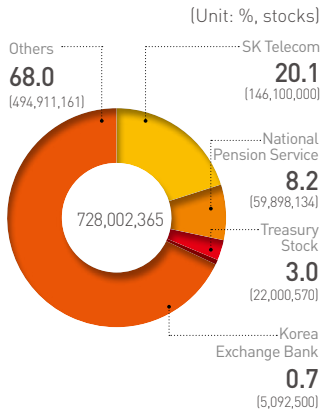
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# SHAREHOLDER STATUS & OPERATION OF THE BOARD OF DIRECTORS

## Composition of shareholders

As of end of December 2015



## Current state of shareholders

SK hynix executed an initial public offering on December 26, 1996, and took the company public on the Korea Stock Exchange. Currently, SK Telecom is the largest shareholder by owning 20.1% of the entire stock, increasing paid-in capital and acquiring old shares on February 14, 2012. As of December 31, 2015, the number of listed shares of SK hynix was 728,002,365.

## Composition of Board of Directors

The Board of Directors of SK hynix is the highest decision-making authority of SK hynix's corporate governance structure. The board consists of nine directors, including four executive directors and five non-executive directors. SK hynix also operates two subcommittees, an Audit Committee and a Non-executive Directors Recommendation Committee, to secure professionalism in the decision-making process and to operate the Board of Directors more efficiently. With the aim of reinforcing the independence of the Board of Directors and to establish a transparent and sound governance structure, the number of non-executive directors is maintained at 50% or above out of nine directors.

## Independence, transparency and professionalism in appointing a director

In order to appoint executive directors and non-executive directors, consultation at a general meeting of shareholders is required. Candidates for executive directors are selected by recommendation at the Board of Directors' meeting, while those for non-executive directors are selected by recommendation at the Non-executive Directors Recommendation Committee. To secure independence for non-executive directors, which is stipulated in the Korean Commerce Code, SK hynix strictly complies with legal grounds for disqualification of non-executive directors. In addition, the company appointed three management experts, one financial expert, and one semiconductor expert as its executive directors in , all of whom with professional knowledge and plenty of field experience in their respective areas, order to secure professionalism and diversity. The company has also conducted various education support activities such as providing information on major current management issues and latest industrial trends on a regular basis to enhance the industrial understanding of non-executive directors and to strengthen professionalism.

## Executive Directors

(As of end of March 2016)

Name	Experience	Job title
Lim Hyung-kyu	<ul style="list-style-type: none"> <li>President &amp; CEO, Samsung Advanced Institute of Technology</li> <li>President of Samsung Strategic Planning New Business Team</li> <li>(Current) Vice Chairman, IC Technology &amp; Growth, SK SUPEX Council</li> </ul>	-
Park Sung-wook	<ul style="list-style-type: none"> <li>Director engineering / Vice president, hynix Manufacturing America</li> <li>Senior Vice President, Memory Research Center, SK hynix</li> <li>Executive Vice President at SK hynix</li> <li>(Current) CEO &amp; President of SK hynix</li> </ul>	<ul style="list-style-type: none"> <li>Chairman of the Board of Directors</li> <li>Non-executive Directors Recommendation Committee</li> </ul>
Kim Joon-ho	<ul style="list-style-type: none"> <li>Executive Officer and Chief Prosecutor, Ministry of Justice</li> <li>Vice President of Ethics Management Div., SK Ltd. &amp; Head of Ethics Management Divisional Group, SK Holdings, Co., Ltd.</li> <li>President of GMS, SK Telecom</li> <li>(Current) President &amp; Head of Corporate Center, SK hynix</li> </ul>	-
Park Jeong-ho	<ul style="list-style-type: none"> <li>Business Development Director, SK Telecom Co., Ltd.</li> <li>CEO/President, SK C&amp;C Co., Ltd.</li> <li>(Current) CEO &amp; President of SK Group</li> </ul>	-

## Non-executive Directors

(As of end of March 2016)

Name	Experience	Job title
Kim Doo-kyung	<ul style="list-style-type: none"> <li>Director General, Financial Markets Division and Currency Issue Division, Bank of Korea</li> <li>Vice President, Korea Federation of Banks</li> <li>Advising Professor of Korea Banking Institute</li> </ul>	<ul style="list-style-type: none"> <li>Audit Committee Chairman</li> </ul>
Park Young-june	<ul style="list-style-type: none"> <li>Research Associate, IBM U.S.</li> <li>Senior Researcher, Gold Star Semiconductor</li> <li>(Current) Professor of Electrical Eng., Seoul National University</li> </ul>	<ul style="list-style-type: none"> <li>Non-executive Directors Recommendation Committee Chairman</li> </ul>
Kim Dai-il	<ul style="list-style-type: none"> <li>Assistant Professor, Economics Department, Rice University</li> <li>Research Fellow, Korea Development Institute</li> <li>(Current) Professor of Economics, Seoul National University</li> </ul>	<ul style="list-style-type: none"> <li>Audit Committee Member</li> </ul>
Lee Chang-yang	<ul style="list-style-type: none"> <li>Head of Industrial Policy Division, Ministry of Commerce, Industry and Energy</li> <li>(Current) Professor at KAIST Business School</li> </ul>	<ul style="list-style-type: none"> <li>Audit Committee Member</li> </ul>
Choi Jong-won	<ul style="list-style-type: none"> <li>Fair Trade Commission Policy Evaluation Staff</li> <li>Dean of the Graduate School of Public Administration, Seoul National University</li> <li>Chief of Management Evaluation Agency of Public Agencies under the Ministry of Strategy and Finance</li> <li>(Current) Professor, Seoul National University, Graduate School of Public Administration</li> </ul>	<ul style="list-style-type: none"> <li>Audit Committee</li> <li>Non-executive Directors Recommendation Committee</li> </ul>



## Advanced operation of the Board of Directors

SK hynix establishes an advanced operation system of the Board of Directors by utilizing IT technology. Directors obtain corporate information including financial information, material for meetings, and sales data from the BOD Site operated by SK hynix. In addition, all directors can participate in a meeting and perform their job without constraints over time and place by utilizing the network and video conference system with IT devices and security, which are provided by the company. In 2015, BOD meetings and committee meetings were held eight times and ten times, respectively, actively operated meeting with a high attendance rate of non-executive directors was 95.2%. The Board of Directors of SK hynix constantly strives to maintain a system at the global compliance level by changing various systems and regulations regarding management and industry (fair trade, subcontracting, etc.) and monitoring and supplementing the current status of the company.

## Operation of Non-executive Directors Committee

SK hynix operates the Non-executive Directors Committee, which is composed of only non-executive directors. This committee implements prior deliberations and assertively shares various opinions regarding the proposed agendas and relevant issues. These efforts help the management make decisions and significantly contribute to enhancing the independence and professionalism of the Board of Directors. Further, the committee secures fairness, objectivity and legitimacy in the procedure of making transactions by checking contents of the business transaction of the affiliates in the group in advance.

## Communication with the Board of Directors

The Board of Directors communicates with stakeholders through internal and external communication channels. The BOD swiftly provides shareholders and stakeholders with management information by announcing major management decisions immediately.

In addition, the Board of Directors communicates with employees smoothly by using intranet bulletin boards and various proposal systems in which anyone at the company can suggest various ideas to the CEO and receive answers.

### Subcommittee under the Board of Directors

(As of end of December 2015)

Name	Composition	Authority	Agendas for 2015
Audit Committee	Four non-executive directors	Accounting and business audit of the company / Appointment of external auditors	<ul style="list-style-type: none"> <li>· Inspection of the internal accounting management system and accounting audit report</li> <li>· Decision-making of the internal monitoring system and audit performances</li> <li>· Agreement for the appointment of personnel in charge of the internal audit division</li> </ul>
Non-Executive Directors Recommendation Committee	<ul style="list-style-type: none"> <li>· Two non-executive directors</li> <li>· One executive director</li> </ul>	Recommending and examining candidates for non-executive directors in accordance with relevant legislations, articles of association and regulations of the Board of Directors	Recommendation of candidates as non-executive directors and support for directors' activities

### Remuneration of the Board of Directors

(As of end of December 2015)

Category	Person	Total amount of payment (1 million won)	Average amount of payment for each person (1 million won)	Category	Person who receives the highest remuneration (a) (1 million won)	Average value of remuneration for employees (b) (1 million won)	Ratio (a/b)
Executive directors	3	2,661	887				
Non-executive Directors	5	410	82				
Total	8	3,071	384	Remuneration (Annual income and incentives)	1,549	91	17

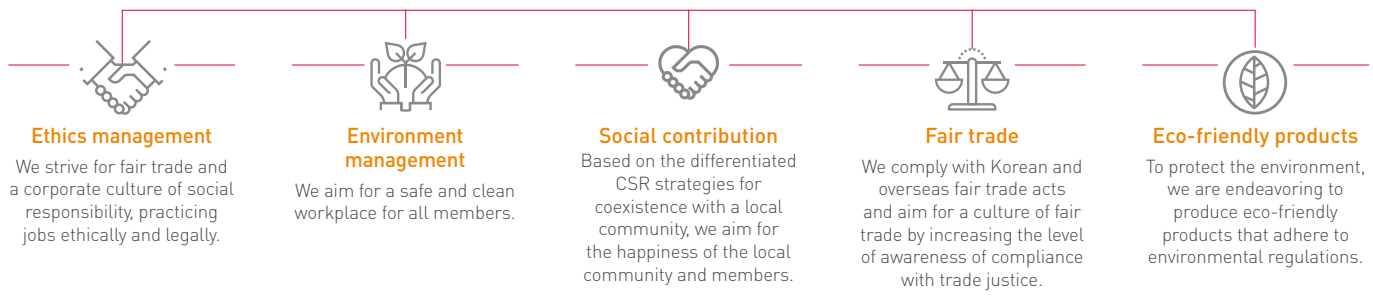
# SUSTAINABILITY MANAGEMENT GOVERNANCE

## Principles and strategies for sustainability management

With the goal of becoming the 'the world's best memory semiconductor solution company', SK hynix is aiming for sustainability management. Respecting human rights and the environment, we are maximizing the values for stakeholders and building trustworthy relationships as part of the ultimate goals of sustainability management.

### Corporate Social Responsibility

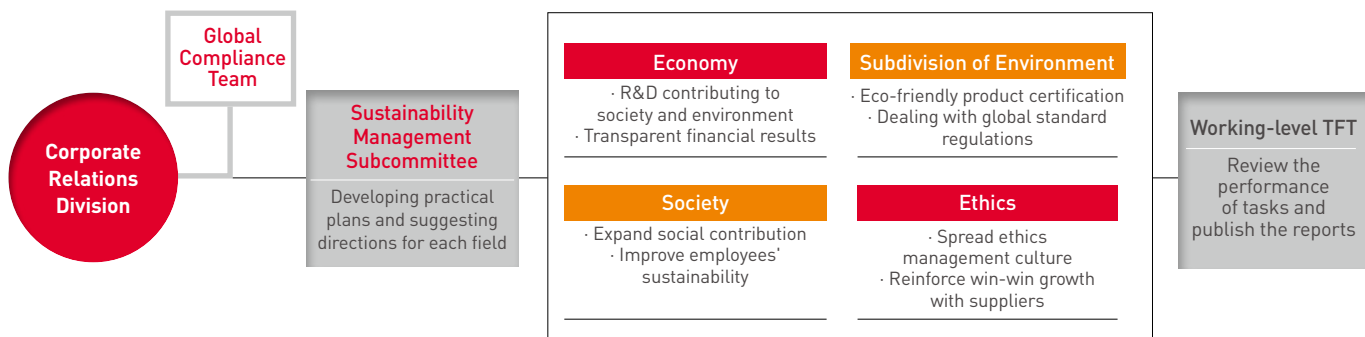
With the aim of becoming the 'the world's best memory semiconductor solution company', SK hynix has established a system for sustainability management and has drafted and implemented detailed initiatives.



## Operation of sustainability management governance

The Sustainability Management Subcommittee of SK hynix plans and manages the company's sustainability management by developing practical plans and suggesting directions. In particular, the subcommittee is monitoring the sustainability performance of ethics management, fair trade, eco-friendly products, social contribution, etc. In addition, the subcommittee operates the working-level TFT of sustainability management and pursues developing the corporate sustainability management by setting and carrying out tasks of each relevant department. Furthermore, the subcommittee shares the management activities in social and environmental aspects with employees by sharing sustainability trends, DJSI performance and developing sustainability reports.

### Sustainability management governance



## STAKEHOLDER ENGAGEMENT

SK hynix defines major stakeholders as customers, employees, shareholders/investors, suppliers, local community and government/NGO. By operating various communication channels considering the characteristics of each stakeholder, the company collects opinions and shares SK hynix's sustainability management issues with stakeholders.





## SUSTAINABILITY MANAGEMENT GOALS AND PERFORMANCES

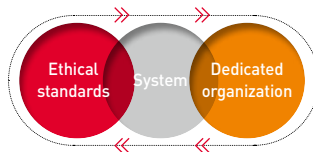
Sustainability management goals	Performance for 2015	Level	Plan for 2016
<b>Employees</b>			
Fostering talent and raising competitiveness	Developed 650 smart cookie modules	●	Pre-group education and Wuxi FAB Improving technology competency for localization
Improving the welfare programs for employees	Operated leadership programs for executives, team leaders, part managers, etc.	●	Improved leadership programs for each rank
Spreading a culture of fair trade	Granted agricultural products to encourage employees to purchase eco-friendly agricultural products	●	Vitalizing the welfare portal
	Published Global Compliance Guidebook and distributed Monthly Compliance Letters	●	Reinforcing internal evaluations
<b>Safety</b>			
Strengthening the Safety Management System	Supported suppliers' acquisition of KOSHA & OHSAS (21 suppliers)	●	Extending support for suppliers' acquisition of KOSHA & OHSAS
	Reinforcing the safety management system of the overseas business sites(Installed additional CCTVs and improved emergency broadcasting systems, etc.)	●	Replacing old sprinklers
	Constructed an integrated disaster prevention center, firefighting facilities, explosion-proof facilities, oxygen meters, etc.	●	Completing short-term management goals
Reinforcing the evacuation ability of suppliers stationed in SK hynix	Provided emergency training (cafeteria staff and the employees of suppliers)	●	Providing emergency training (all suppliers' employees stationed in SK hynix)
Reinforcing the hygiene management system	Completed the Industrial Safety and Health Committee	●	Completing the short-term management goals
<b>Environment</b>			
Expanding carbon labeling certified products/low-carbon certified products	Expanded low-carbon labeling certified products (Goal: 15 products, Completed: 14 products)	●	Expanding low-carbon labeling certified products (15 products certified so far)
Securing initiatives regarding water resources management	Conducted an ecosystem impact evaluation	●	Conducting an environmental impact evaluation once every three years and disclosing the results
	Extended the recycling of waste IPA to the Cheongju Campus	●	Completing the mid/long-term management goals
Action on conflict minerals	Completed the 2015 on-site due-diligence based on EICC guideline targeted at supply chain	●	Conducting the 2016 on-site due-diligence
Reinforcing energy management	Acquired ISO 50001 for Cheongju Campus	●	Completing the mid- and long-term management goals
	Introduced high-efficiency equipment (Replaced high-efficiency M10B chillers and installed LED lights)	●	Introducing additional high-efficiency facilities
<b>Suppliers</b>			
Win-win growth and fair trade agreement	Provided more support to secondary suppliers (Industrial Revolution 3.0)	●	Operating the win-win payment system to improve the payment conditions between the primary and secondary suppliers
Constructing the EICC promotion system for suppliers	Strengthened the supplier consulting system (Constructed a verification system of an external agency)	●	Extended the application range
<b>Local Communities</b>			
Happiness Sharing Fund	Expanded the Happiness Sharing Fund (2,740 million won/3,750 people → 3 billion won/4,502 people)	●	Extending the Happiness Sharing Fund and its beneficiaries
Increasing support for the vulnerable	Opening of Icheon Branch of Happy Plus Nutritious Meal Support	●	Conducting new welfare services for the elderly
<b>Sustainability management</b>			
Reinforcing the ethics management system	Published "Ethics Management Knowledge in-Q&A: 50 Questions, 50 Answers"	●	Construction of the ethics management portal
	Constructed a mobile environment for ethics education	●	Completing the short-term management goals
Strengthening the BCP system	Extended Wuxi FAB BCP certification	●	Extending Chongqing FAB BCP certification
Reinforcing the human rights management system	Operation of the wage sharing program	●	Constructing the human rights risk assessment system

# ETHICS MANAGEMENT

## Organizations for ethics management



## Ethics management system



### Ethical standards

- Management philosophy of SK Group, Ethics Guide
- Declaration of Ethics Management, Code of Ethics and Practice Guidelines
- CEO's message for Ethics management

### System

- Ethics education for prevention
- Pre-inspection system
- Reporting system (Protection of informants, Report compensation system)

### Dedicated organization

- Ethics Management Committee in the group
- Ethics Management Division
- HR organization

## Policy and organization for ethics management

SK hynix aims to become renowned as a respectable and trustworthy memory semiconductor company based on its ethics management and transparent corporate culture. We are endeavoring to spread our ethics management activities to all suppliers who work with SK hynix as well as our members. In addition, we formed the Ethics Management Division, which is an independent ethics management organization under the CEO in order to secure the independence of ethics management. The Ethics Management Division is preventing and monitoring unethical behavior, operating report channels, and strengthening its corporate ethics management system through ethics education.

## Code of ethics and ethics management system

SK hynix is operating the SK hynix Code of Ethics to encourage transparent and rational decision-making and to increase the level of awareness about ethics. In 2015, the SK hynix Code of Ethics, consisting of the Declaration of Ethics Management, the Code of Ethics, and the Practice Guidelines, was revised (the 9th revision), considering domestic and overseas ethics trends. In this revision, we added domestic legal regulations, such as the prohibition of submission, the extended limitation range of the receipt of financial/material benefits and gratuities, and the protection of personal information. We also specified the ethics management system and the main agents of the Code of Ethics according to the global standards. Furthermore, we reflected the enhanced SK Group Code of Ethics by adding the whistleblower protection policy and the revised unethical behavior prevention system, and specified the cases of sexual harassment and proper social media utilization based on preexisting counseling, reporting, and penalty cases. For overseas employees, we translated the SK hynix Code of Ethics into English, Chinese, and Japanese. Moreover, we have published the "Ethics Management Knowledge in-Q&A: 50 Questions, 50 Answers", in order to help employees make the right decision when faced with an ethical dilemma.

## Operation of the reporting system

SK hynix is operating an online reporting system via its official website so that all stakeholders can report or seek consultation about SK hynix-related ethical issues. In order to protect the identities of whistleblowers and people who help out with investigations from retaliation, we specify the relevant contents in the regulations. In 2015, a total of 155 cases were reported. Among them, in-depth investigations were conducted for 64 unethical issues and 88 employees were disciplined.

## Construction of the ethics management portal

SK hynix continues to upgrade its ethics management system in order to mitigate risk and improve the level of awareness about ethics by reorganizing its ethics management system. As part of such efforts, we are constructing an IT-based ethics management portal as an internal control system. We secured data for risk analysis and constructed the self-inspection system to prevent potential ethical risks through more efficient self-inspection and monitoring. In addition, we integrated the preexisting IT systems for ethics management in order to improve outdated functions and address shortcomings. We are providing customized workplace-specific services for the convenience of users. The ethics management portal was launched in April 2016.

## Cyber Reporting System (Unit: case)

Category	2013	2014	2015
Total reports for Cyber Reporting System	182	216	155
Valid reports for Cyber Reporting System	62	101	64
Measures for unethical practices <sup>1)</sup> [person]	17(54)	25(47)	22(66)

1) Severe disciplinary action (Light disciplinary action)

## Ethics education (Unit: hour)

Category	2013	2014	2015
Hours for ethics education	18,039	8,340	8,230 hours of offline education 20,985 hours of online education
Hours for ethics management for each person	0.78	0.40	1.05

## Ethics management education

With the ethics education system created for autonomous ethics management by its employees, SK hynix is operating customized ethics education programs according to organizations, classes, and job characteristics. In 2015, we provided online education to all employees and extended education channels for PCs and mobiles to improve access. Furthermore, we have held nine meetings for ethics leaders as a means to educate on ethics guidelines to fortify the ethical guidelines optimized for each organization through training.

# GLOBAL COMPLIANCE

## Global compliance program

SK hynix strictly complies with international laws and regulations regarding anti-trust/anti-corruption policies, conflict minerals, strategic items, information protection, and supply network management. In order to achieve this, we are operating the Global Compliance Program that was designed in consideration of the nature of the semiconductor industry and what impact it would have on the overall work process. We have recently founded the Global Compliance Team so as to strengthen our responsiveness to a global market environment and continue to upgrade the program. The Global Compliance Team mitigates potential compliance risks in advance and enables fair competition. Noncompliance with international laws and regulations may lead to a loss of customer trust as well as monetary losses. Therefore, we will continue to strengthen our compliance management system.

## Construction of the anti-trust monitoring system

As the market is rapidly changing and becoming progressively more competitive, the need for fair competition is now more important than ever. As a result, in 2015, we intensively reinforced our anti-trust monitoring system. In particular, we conducted strict monitoring of overseas business sites, regular monitorings were carried out and in-house/external experts provided professional anti-trust training. We will continue to strengthen our ability in compliance and practice through continuous monitoring and various education programs.

## Publication of the compliance guidebook

We have published the Compliance Guidebook in order to help our employees monitor and resolve compliance risks during work. We also translated the Guidebook into English and Chinese for foreign employees. The Guidebook contains detailed guidelines and courses of action regarding anti-trust/anti-corruption policies, information protection, supply network management, and conflict minerals. SK hynix will periodically revise the Guidebook, considering internal and external environmental changes, and continue to provide education, and conduct PR to strengthen our competitiveness in compliance.

## Strategic item management

SK hynix complies with the strategic item export control laws that have been enacted to protect public safety and prevent products, services, information, and technology from being provided to terrorists and ensure public safety. We are managing exports and imports in accordance with the SK hynix export and import guidelines and our Export Control Committee deals with strategic item selection, review, monitoring, internal audit, education, and promotion. In 2016, we will construct a computer system to improve work efficiency and strengthen our management system. In addition, we will minimize business risks through continuous monitoring, employee education, and PR.

## Internal social/environmental inspection of Chongqing Assembly & Test Site

SK hynix conducts internal inspections of its domestic and overseas business sites in order to raise the level of regulation to above the social and environmental standards. In 2015, we conducted an inspection on the Chongqing Assembly & Test Site by applying the SK hynix Code of Conduct. In addition, we reviewed internal documents and interviewed employees and onsite workers by applying the EICC process. Inspection results revealed that education and monitoring need to be improved in order to increase the level of awareness about EICC, whereas the preexisting systems and policies of the business site meet the legal regulations. According to the Corrective Action Plan (CAP), we have improved upon the shortcomings of the items that required improvement and verified these results.



We are reducing management risks through timely resolution of patent disputes and monitoring patents to prevent any disputes from arising. In the future, we aim to minimize management risks by strengthening our ability to respond to patent disputes and conducting proactive preventive activities.

## BCP Framework

Strengthening awareness and competitiveness for BCP



## Establishing a system for business continuity planning

SK hynix Business Continuity Planning (BCP<sup>1)</sup>) was established to protect customers from a variety of disasters and emergencies and to carry on with business. Based on ISO 22301, the BCP applied to Icheon Campus, Cheongju Campus, and Wuxi Campus secured business continuity for rapid responses, restoration, and early business normalization. In July 2015, we constructed the BCP system in Wuxi Campus, China. As of 2016, we have been constructing the BCP system in Chongqing Campus.

1) Business Continuity Planning, BCP

A management system for normalizing the overall business by minimizing damages and restoring business within a target period, in case of an actual disaster or accident

## BCP framework

SK hynix's BCP activities are composed of four steps: Analysis, Preparation, Planning, and Test. These refer to the repeated work processes. Each process is performed at least once a year in order to strengthen the effectiveness of BCP.

### Analysis

#### Monitoring

SK hynix has been continuously monitoring and analyzing major changes in a business environment that may affect its business continuity. The monitoring targets include the factors that may disrupt business from the viewpoint of BCP.

#### Risk Assessment, RA

SK hynix conducts regular analysis and evaluation of risk factors that may affect its business. As a result of surveys conducted by domestic and overseas disaster/accident management organizations such as the National Fire Protection Association (NFPA), the Emergency Events Database (EM-DAT), the Federal Emergency Management Agency (FEMA, US), and the National Emergency Management Agency (NEMA), a total of 52 risk factors were found. Among them, we have selected BCP management targets and applied them to our BCP.

#### Business Impact Analysis, BIA

SK hynix conducts regular impact analysis and evaluation on its company-wide unit businesses so as to select the priorities for restoration. In the event that the business is disrupted, we distinguish necessary resources for restoring MTPD, RTO, and MBCO, by conducting a qualitative and quantitative evaluation.

#### Maximum Tolerable Period of Disruption, MTPD

This refers to a maximum tolerable period of disruption, in the event that specific work is disrupted. The MTPD of each work was calculated by analyzing major financial factors of the company to measure the impact of work disruption.

#### Recovery Time Objective, RTO

This is the target time required for normalizing the business. The RTO was calculated through a qualitative and qualitative evaluation on the allowable time within tolerable impacts and losses.

#### Minimum Business Continuity Objective, MBCO

This refers to the minimum level of business continuity (production capacity) that can be restored within the recovery time objective (RTO). The company and its executives define the goals and establish BCP strategies and resources in order to achieve them.

### Preparation

SK hynix establishes a strategy for business normalization based on the works and necessary resources analyzed in the analysis stage (RA and BIA). BCP strategies contain equipment/device restoration, purchase, procurement, HR management, crisis communication, and securing temporary office space.

## Planning

SK hynix's business continuity plans consist of Company, Campus, and Division. Each plan specifies the predefined procedures for swift response and restoration, in the event that business is disrupted by an accident or disaster. Each plan is regularly updated on the basis of the results of an internal inspection and drills.

**Company** | The Company BCP refers to the BCP management regulations that define the company BCP system, organizations, management activities, and its practice.

**Campus** | The Campus BCP specifies the roles, responsibilities, and business restoration procedures that should be performed by the General Control Room and other organizations in case of an emergency.

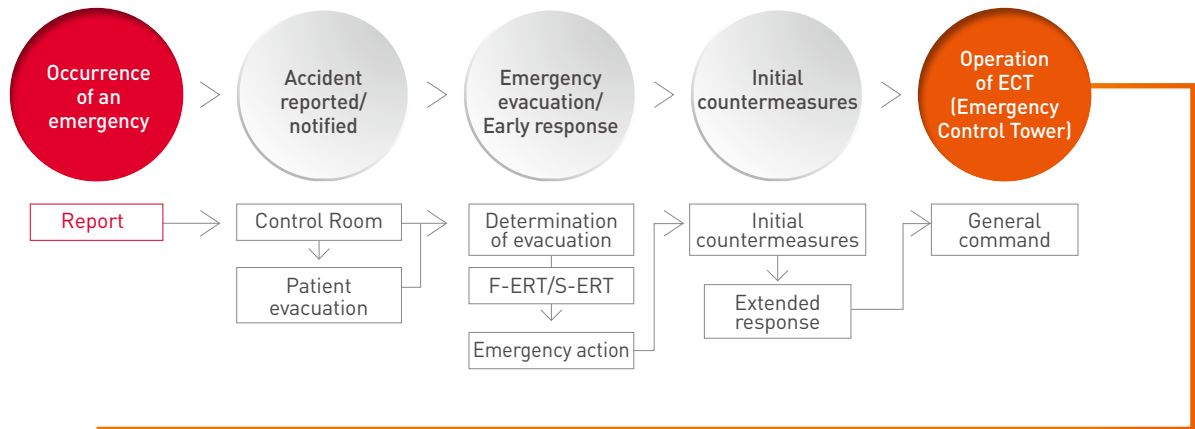
**Division** | The Division BCP defines the roles, responsibilities, and business restoration procedures of each division.

## Test

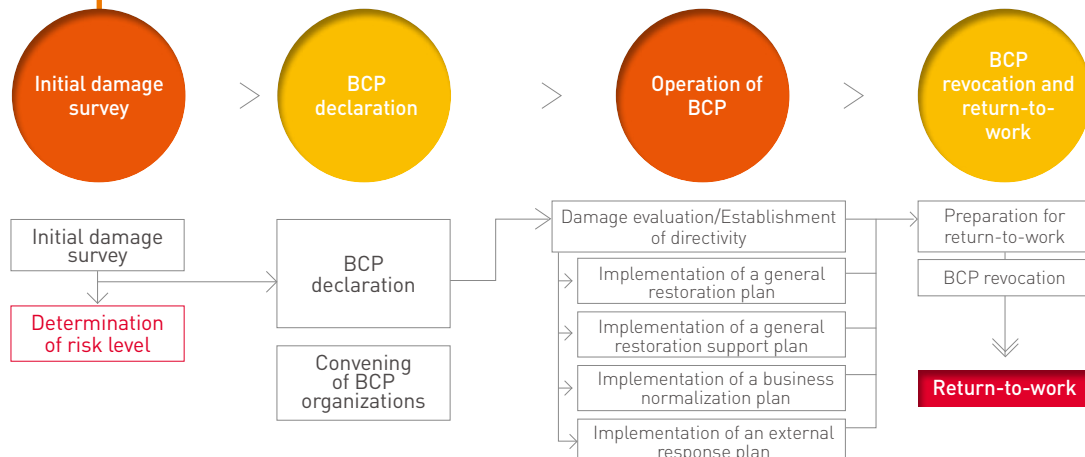
BCP staff of each division review the suitability, adequacy, and effectiveness of the business continuity plan at regular intervals. In addition, they verify the effectiveness of the business continuity plan and conduct a company-level and division-level drill on a regular basis in order to raise awareness among employees, and to clearly define the roles and responsibilities of individuals, in case of an emergency. Through a drill, all divisions and employees become acquainted with the plan according to predefined procedures and verify/improve the effectiveness of the manual. Executives ultimately review the results of an internal inspection and drill in an effort to improve the business continuity plan and the BCP management system.

## BCP procedure

### Emergency response



### Operation of BCP

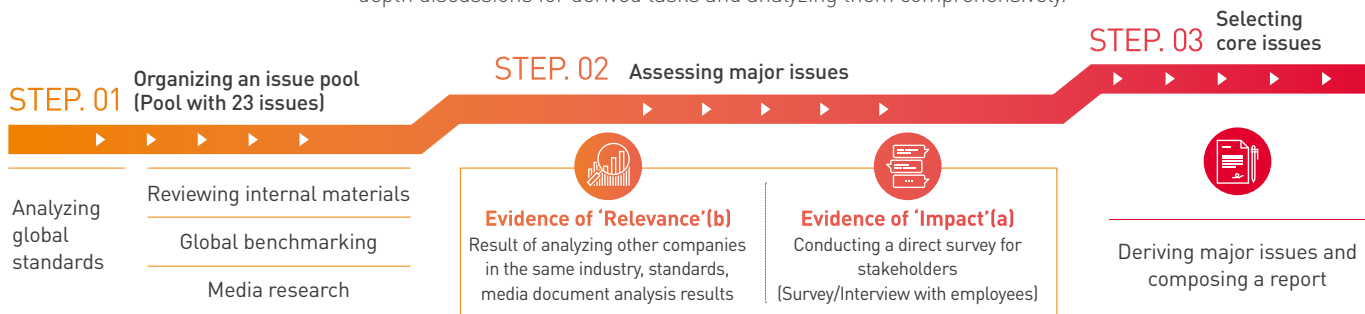




# MATERIALITY TEST

## Procedure for materiality test

Based on the following systemized methods for the materiality test, which considers the overall impact on the corporation, SK hynix selects issues which are deemed to be important by internal and external stakeholders, and applied these issues to the company's sustainability report. The company has collected opinions of various stakeholders by conducting a survey for major stakeholders and interviews with external experts. The company determined priorities in the reported issues by implementing in-depth discussions for derived tasks and analyzing them comprehensively.

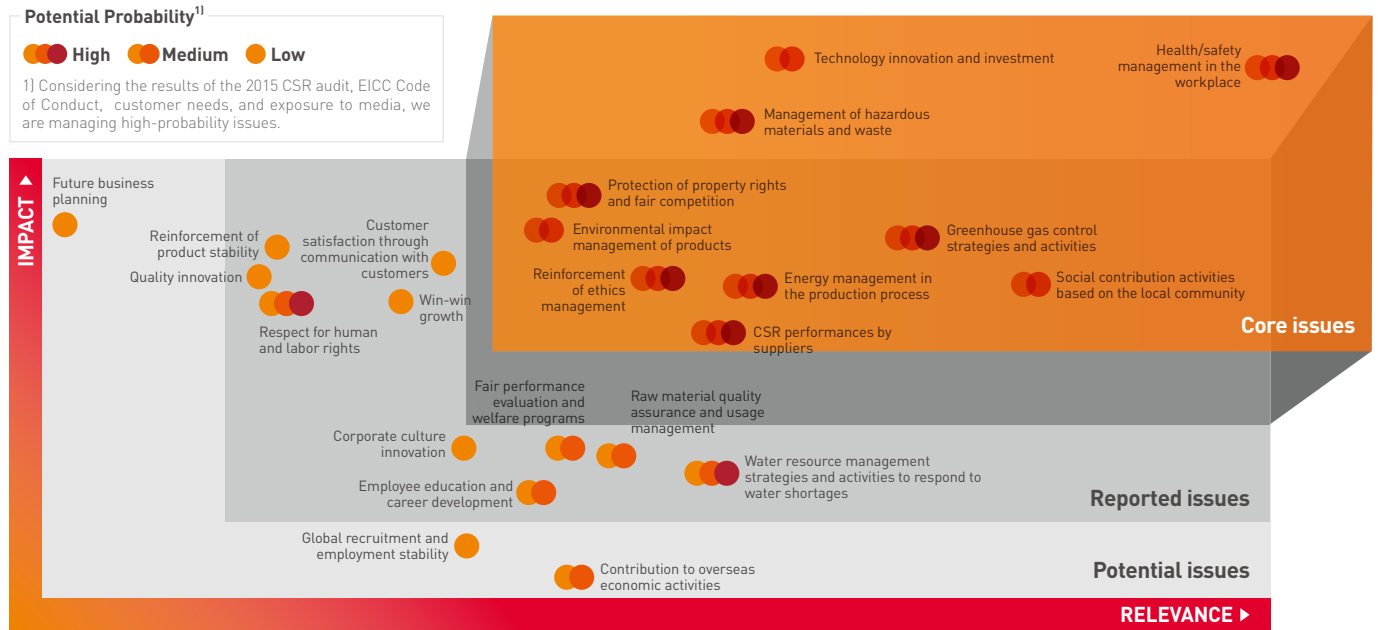


## Materiality Issues for Long-Term Value Creation

Core issues	Influences on stakeholders (a)	Correlation with SK hynix (b)
Technology innovation and investment	<ul style="list-style-type: none"> <li>Developing products considering market and customer needs</li> <li>Improving shareholders' values and investment expectation using the growth engine</li> </ul>	<ul style="list-style-type: none"> <li>Meeting customer needs and creating financial opportunities through diversification and integration</li> <li>Technology innovations for strengthening product competitiveness</li> </ul>
Protection of property rights and fair competition	<ul style="list-style-type: none"> <li>Improving corporate values by developing patents</li> <li>Complying with the local government's regulations on intellectual property rights</li> <li>Improving suppliers' financial values by developing joint patents</li> </ul>	<ul style="list-style-type: none"> <li>Securing the growth engine by managing patents and preoccupying future technology</li> <li>Improving fair competition and corporate reputation by protecting intellectual property rights</li> <li>Ensuring growth by developing joint patents with suppliers</li> </ul>
Health/safety management in the workplace	<ul style="list-style-type: none"> <li>Creating a safe work environment and preventing disease for our and suppliers' employees and suppliers</li> </ul>	<ul style="list-style-type: none"> <li>Preventing accidents and diseases that may cause financial losses (penalties and processing delays) or harm corporate reputation</li> <li>Investment standards of external evaluation agencies such as SRI</li> </ul>
Greenhouse gas emission control strategies and activities	<ul style="list-style-type: none"> <li>Participating in global initiatives such as CDP</li> <li>Complying with government regulations including the emission trading system</li> </ul>	<ul style="list-style-type: none"> <li>Reducing costs that may be incurred by various regulations such as the emission trading system, etc.</li> <li>Creating profits by securing emission rights</li> </ul>
Energy management in the production process	<ul style="list-style-type: none"> <li>Taking part in energy reduction activities in the community</li> <li>Improving corporate values by reducing energy in the manufacturing processes</li> </ul>	<ul style="list-style-type: none"> <li>Reducing power consumption and costs in the production FAB field by developing low-power semiconductor production equipment</li> </ul>
Environmental impact management of products	<ul style="list-style-type: none"> <li>Satisfying customer needs for low-power/eco-friendly products, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Pre-occupying the market and increasing profits by developing future technology that meets product efficiency regulations</li> </ul>
Management of hazardous materials and waste	<ul style="list-style-type: none"> <li>Reducing environmental impact on the local community</li> <li>Creating a safe working environment for our employees and employees of suppliers</li> </ul>	<ul style="list-style-type: none"> <li>Preventing a negative impact on corporate reputation and financial losses (penalties and handling costs) that may result from an environmental accident</li> <li>Reducing waste disposal costs by recycling waste resources</li> </ul>
CSR performances by suppliers	<ul style="list-style-type: none"> <li>Improving financial and non-financial values through win-win growth</li> </ul>	<ul style="list-style-type: none"> <li>Improving productivity by strengthening the competitiveness of suppliers through technology and financial innovation, education, and recruiting</li> </ul>
Social contribution activities based on the local community	<ul style="list-style-type: none"> <li>Supporting the growth of the local community</li> <li>Resolving global community issues based on SDG</li> </ul>	<ul style="list-style-type: none"> <li>Improving corporate reputation through social contribution activities</li> </ul>
Reinforcement of ethics management	<ul style="list-style-type: none"> <li>Developing an ethical mindset among our employees and employees of suppliers</li> <li>Proactively reporting and handling internal unethical practices</li> </ul>	<ul style="list-style-type: none"> <li>Preventing financial losses (penalties) and a negative impact on corporate reputation that may result from unethical practices such as leakage of personal information and bribery</li> </ul>

## Result of materiality test

SK hynix selected a total of ten issues and prioritized them to be reflected in the report, considering the impact on stakeholders, business, and relevance with sustainability management.



Principles and strategies	2015 Major Performances	Mid/Long-term goals	Report of business cases
<ul style="list-style-type: none"> <li>Strategies for technology innovation</li> <li>Policy and system for quality management</li> </ul>	Issue 1. Creating Corporate Values through Quality Innovation	<ul style="list-style-type: none"> <li>Strengthening R&amp;D cooperation with affiliated involved in ICT, energy, and chemistry</li> <li>Reinforcing the quality verification system and improving quality by removing potential risk factors</li> </ul>	35, 37
<ul style="list-style-type: none"> <li>Patent portfolio system</li> <li>Patent support principle and system for suppliers</li> </ul>	Issue 2. Building a Safe Working Environment	<ul style="list-style-type: none"> <li>Strategic patent management</li> <li>Minimizing patent disputes</li> </ul>	36
<ul style="list-style-type: none"> <li>Emergency response system to prevent the spread of accidents</li> <li>Safety management system for suppliers</li> <li>Operation of the Industrial Health Verification Committee and mid/long-term projects</li> </ul>	Issue 3. Responding to Climate Change	<ul style="list-style-type: none"> <li>Strengthening inspection on safety and health risk factors</li> <li>Vitalizing F-ERT and strengthening the ability to respond to emergencies</li> <li>Supporting suppliers so that they can improve their safety and health management competency</li> </ul>	39-41
<ul style="list-style-type: none"> <li>Response to climate change and the emission trading system</li> </ul>	Issue 4. Reducing Environmental Impact	<ul style="list-style-type: none"> <li>Timely response to the emission trading system by developing greenhouse gas reduction technology</li> <li>Saving energy by introducing high-efficiency facilities</li> <li>Strengthening employees' energy management capability</li> </ul>	43-45
<ul style="list-style-type: none"> <li>Energy efficiency strategies during processes</li> </ul>	Issue 5. Win-Win Growth with Suppliers	<ul style="list-style-type: none"> <li>Acquiring global LCA certification</li> <li>Developing low-power products</li> </ul>	43-45, 49
<ul style="list-style-type: none"> <li>SK hynix FACTOR h<sup>2</sup> system</li> </ul>	Issue 6. Social Contribution Based on Scientific Technology	<ul style="list-style-type: none"> <li>Expanding resource recycling by developing more waste recycling companies</li> <li>Strengthening removal of emissions from the emissions sources</li> </ul>	44, 45, 49
<ul style="list-style-type: none"> <li>Chemical substance management system</li> </ul>	Issue 7. Social Contribution Based on Scientific Technology	<ul style="list-style-type: none"> <li>Expanding partnership by expanding the members of the Win-Win Growth Committee</li> <li>Constructing a win-win growth ecosystem by expanding technical, management, and financial support</li> <li>Improving social and environmental impact management in the supply chain and expanding consulting services</li> </ul>	47, 48
<ul style="list-style-type: none"> <li>Win-win growth strategy and road map</li> <li>Conflict minerals response policy</li> </ul>	Issue 8. Social Contribution Based on Scientific Technology	<ul style="list-style-type: none"> <li>Expanding support for the vulnerable and strengthening the fund operation system considering social influences</li> <li>Reviewing eco-friendly social contribution activities suited to global trends</li> </ul>	51-53
<ul style="list-style-type: none"> <li>SK hynix's social contribution principle and system</li> </ul>	Issue 9. Social Contribution Based on Scientific Technology	<ul style="list-style-type: none"> <li>Expanding support for the vulnerable and strengthening the fund operation system considering social influences</li> <li>Reviewing eco-friendly social contribution activities suited to global trends</li> </ul>	55-59
<ul style="list-style-type: none"> <li>The code of ethics, the ethics management policy, and its system</li> </ul>	Governance. Ethics management	<ul style="list-style-type: none"> <li>Upgrading the level of ethics management</li> </ul>	25

# VALUE CREATING ACTIVITIES





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# 01

## CREATING CORPORATE VALUES THROUGH QUALITY INNOVATION

### WHY THIS ISSUE IS MATERIAL

As digital devices change to mobile/smart devices and automobiles, medical devices, and industrial equipment are being developed based on IoT, and the standard products for commercialization are becoming more diversified and integrated. Accordingly, the competition paradigm shifts from price competitiveness through facility investment and productivity improvement to product values based on R&D. Furthermore, intensifying competition results in frequent patent disputes. Therefore, it is important to minimize risks for patent disputes and to secure excellent products so as to maintain corporate reputation.

### 2015 PERFORMANCE

- R&D cooperation with an external research institute
- Operation of a systematic product development cycle considering quality, production costs, and commercialization
- Construction of a patent portfolio
- Construction of an internal system to strengthen strategic patent management

### HOW WE APPROACH & MANAGE

SK hynix focuses on developing future semiconductor technology in order to raise product competitiveness. To lead market trends, we are developing products by identifying and presenting specifications that meet customer needs. We are continuously developing new products and securing future semiconductor technology so as to raise our competitiveness in response to a rapidly changing market environment. Our company has become a first mover in technology by developing advanced patent management for the protection of relevant technology and reinforced responses for potential conflicts. SK hynix will further promote future technology and establish our status as a leading company in the semiconductor market.

### FUTURE ACTION

- Strengthening patent management
- Minimizing patent disputes

### INTERVIEW

As the Director of the Future Semiconductor Development Project Team, we are conducting academia-industrial joint research with SK hynix. In cooperation with SK hynix, we are studying the synthesis, design, and properties of matters that can be used for future memory semiconductors. Our research subjects are generally focused on long-term technology issues, which cannot be performed by a company. Our joint research has a positive effect on both SK hynix and the academic world. The academic world can foster researchers specialized in semiconductors through various projects, and the company can secure manpower that is well experienced in memory semiconductors. The researchers can refine their ability and expertise and eventually become employees of companies such as SK hynix. Academia-industrial joint research creates synergy effects for both SK hynix and the college. SK hynix obtains quality research performances and human resources and we are able to foster researchers by securing research funds.

Recently, many latecomers, especially Chinese companies, are catching up with the leading semiconductor companies. The important thing for SK hynix, at this time, is to maintain the gap in technology with the latecomers. SK hynix needs to develop 10-nano DRAM semiconductors, 3D NAND Flash products, and next-generation memory technology and start mass production as soon as possible. We don't know what kind of memory products will lead the market in the future. Therefore, we need to be ready to respond to emerging memory technologies.

Professor Son Hyun-chul (Yonsei University)

## 01-1

## Innovating R&D Infrastructure and Processes

### Open innovation

Customer needs for high-capacity and high-performance products cause semiconductor manufacturers to focus on scaling down and performance improvement. However, scaling down technology has already reached its limits and it becomes more and more difficult to develop such technology by themselves. SK hynix is cooperating with its suppliers in order to develop future semiconductor manufacturing devices. From the early stages of development, we are proactively sharing data with our suppliers and supporting them through a systematic support system. In addition, we are recruiting talents and conducting activity exchange with suppliers, colleges, and research institutes in order to develop new materials. In the long term, we will strengthen our cooperation system so as to create synergy effects using the excellent R&D abilities of the SK Group-affiliated energy and chemical companies.

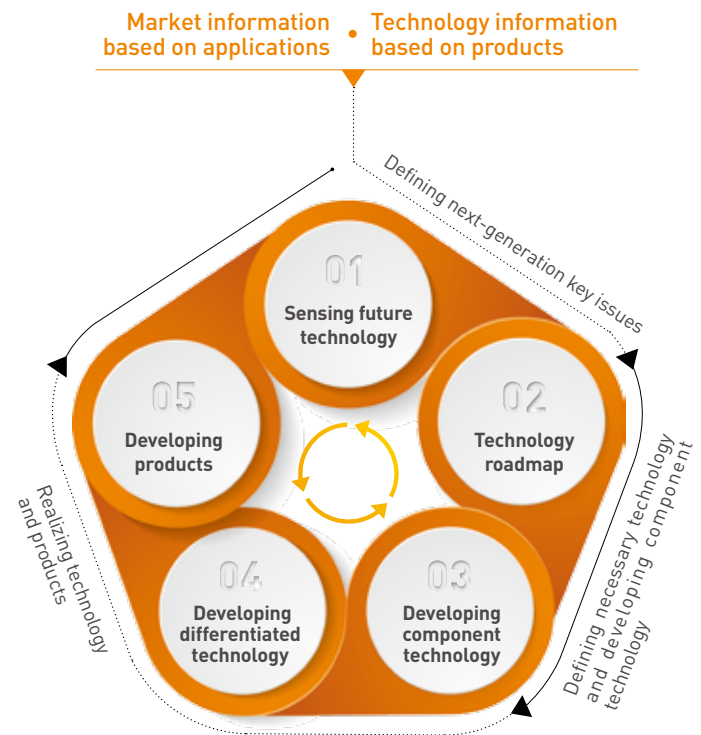
### Considering quality, production costs, and commercialization from the development stage

The ultimate goal of R&D is to secure profitability. To achieve this, we are developing products, considering quality, production costs, and commercialization from the early stage of development, with the goal of early product launch through timely commercialization. In addition, we are endeavoring to reduce production costs by minimizing the use of high-priced processes and materials through cost management by unit process. The manufacturing processes are highly relevant to product quality. Therefore, we evaluate the suitability of a process at the very beginning and prevent quality issues in advance. Furthermore, we cultivate a sense of ownership and responsibility of employees through the process responsibility system.

### Operating a systemic product development cycle

SK hynix is leading the memory semiconductor industry by continuously developing new products. The R&D cycle is mainly composed of component technology development, technology development, and product development. First, we develop differentiated technology by reviewing new structures, materials, and processes for next-generation products. Then, we select essential technology by assessing its value; develop core products and spin-off products. In order to more aggressively respond to changes in the market and technology, we are operating a competitive product development cycle, and developing a product development environment through organic cooperation between organizations.

### Product development cycle



### Strengthening the quality issue response system for China

In order to resolve quality issues at the outset and secure customer trust whenever a quality issue arises in the rapidly growing Chinese market, we operate a local module with the head office. Using this module, we are improving quality for Chinese customers and strengthening the local support system through more proactive support and cooperation. As a part of our strategies to stabilize quality, we are conducting customer-oriented quality intelligence (QI) activities where the usage environment and conditions of customers are reflected in product development and commercialization.

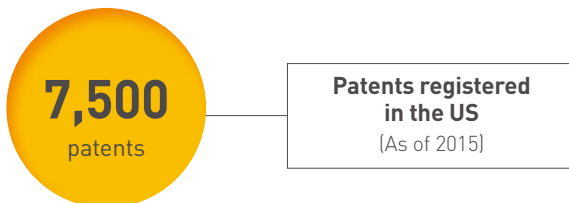


## 01-2

## Strengthening Strategic Patent Management

### Making a patent portfolio

SK hynix is constructing a patent portfolio in order to strengthen its patent competitiveness and pre-occupy future technology. To secure patents of the undeveloped fields from the outset, we are operating a variety of patent development programs for cooperation with the R&D Division at the product planning stage. We encourage our employees to develop new products and register a patent by giving a performance-based bonus. As of 2015, SK hynix registered 7,500 patents in the US. We are proactively developing new technology and patents. We aim to construct a wider patent portfolio and improve our patent competitiveness by focusing on future technology patents that can be applied to our products.



### Improvement of the patent search and analysis system

To strengthen the usage of in-house patent information, we are expanding our DB of the patent search and analysis system and improving its search function. Through this process, we can improve the efficiency of patent development by supporting the patent-related activities of the R&D Division. By diversifying the usage of the patent search and analysis system, we will maximize our patent development ability.

### Reinforcement of patent education for employees

We are providing patent education to employees in order to improve their patent-related competencies. In-house and external patent experts are providing offline patent education to R&D employees. In addition, external patent experts provide online lectures.

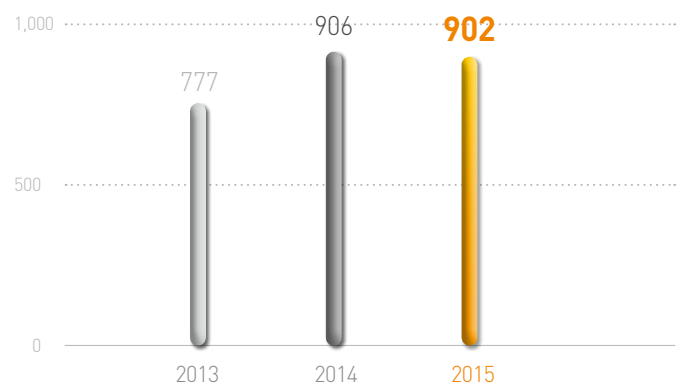
### Support for suppliers' patent activities

In 2010, SK hynix constructed the patent support system for suppliers. Since then, we have been disclosing our patent and utility model technology regarding semiconductor devices and raw materials to our suppliers, and providing free patent transfer in real time. In 2014, we participated in the technology sharing system, led by the Ministry of Trade, Industry & Energy, for the first time among leading Korean companies and continued to supply our patents for free. In 2015, we transferred 21 patents to six suppliers and small/medium-sized companies at no cost.

Furthermore, since 2011, we have been identifying difficulties and suggesting appropriate solutions to the suppliers through the patent consulting program. In 2015, we shared our patent management strategies and patent dispute prevention plan with three companies. In addition, we are providing patent costs for a joint patent, which is being developed with a supplier, and allowing for a patent license through the Daejeon Center for Creative Economy & Innovation. We will make efforts to construct an environment for win-win growth by extending our support.

### No. of patents registered in the US

(Unit: case)



\* The number of patents registered in 2013 and 2014 may vary depending on the holding period and transaction.

## 01-3

## Major R&D Performances

### 36-layer 128Gb MLC



This is the first product applied with 3D layering technology, which is emerging as a next-generation technology in the NAND Flash field. 36-layer 128Gb MLC, which has excellent characteristics and high reliability is expected to greatly contribute to increased sales, especially in the mobile market.

### 1x-nano 2nd Client SSD



We have developed Client SSD equipped with 1x-nano NAND Flash. With our channel-oriented products equipped with TLC NAND Flash, we improved price competitiveness compared to the preexisting SSD products equipped with MLC NAND Flash. In addition, the growing sales in the channel market as well as the OEM market are expected to improve the profitability of the SSD business.

### 1x-nano 1st PCIe Client SSD



This 1st Client SSD is equipped with a PCIe controller and 1xNano NAND Flash. Following SATA, we have established a foundation for entering the PCIe SSD market. An expanded lineup for SSD is expected to attract more customers.

### 1x-nano 1st UFS2.0



We have developed UFS 2.0 equipped with 1x-nano NAND Flash. As we have launched our products in the recently growing UFS market from the outset, we are expecting that our product competitiveness will become even stronger in the high-end market.

### 2ynm-class 6Gb LPDDR3



We have improved the profitability of this product by shifting to nano fabrication technology. It is expected to increase sales through high-end smart phones and LPDDR3 products for tablet PCs.

### 1xnm PCIe NVMe Client SSD



We have developed Client SSD equipped with PCIe NVMe Interface. As the consumer market is shifting from SATA to NVMe, this product is expected to increase our market share.

### 1x-nano 2nd eMMC5.0



We have developed eMMC 5.0 equipped with 1x-nano NAND Flash. Compared to preexisting products, we improved the continuous writing and performance maintenance functions and reflected additional components to the next-generation eMMC5.1 functions. It is expected to improve profitability in the mid-high market.

### 1xnm SATA Client SSD



We have developed the 3rd SATA Client SSD equipped with 1xnm NAND Flash. We applied controllers with a better error correction ability than the previous SATA controller model. This product is expected to extend the TLC NAND Flash market and eventually improve profitability.

# 02

## BUILDING A SAFE WORKING ENVIRONMENT

### WHY THIS ISSUE IS MATERIAL

Due to a series of recent accidents, the safety of business sites has become a prime concern of employees, local communities, and local governments. The Korean and Chinese governments require stricter safety regulations and inspection standards and the local communities strengthen their health/safety standards. In addition, customers have continuously requested safety measures. Due to the nature of the semiconductor industry, the health care of employees is becoming a social issue. Safety and health issues may affect not only financial factors, including penalties and process delays, but also non-financial factors, such as its reputation or brand, which makes it into one of the core elements in corporate management.

### FUTURE ACTION

- Strengthening the special inspection process for risk factors
- Improving pre-operation inspection and SHE qualification

### HOW WE APPROACH & MANAGE

SK hynix has established its KPI indexes and relevant strategies to create a safe working environment and prevent safety accidents. We are striving to establish an environment for health and safety through its TF team so as to comply with environmental safety regulations.

### 2015 PERFORMANCE

- Support for suppliers in constructing a safety system
- Reinforcement of the system for responding to safety accidents such as chemical/gas leakage
- Reinforcement of safety and health management through the Industrial Health Verification Committee

### INTERVIEW

I'm the Chairman of SK hynix Industrial Health Verification Committee. The Industrial Health Verification Committee, an independent organization separated from the company, aims to identify the safety and health issues of the semiconductor industry and derive socially acceptable solutions. The Committee consists of two SK hynix employees, two labor union members, and seven external experts. External experts comprise of medical, environmental, epidemiological, and legal experts, and civic group members who have an abundance of experience in the semiconductor industry. To be a completely independent organization, labor union members who have proactively participated in labor union activities have joined the Committee. In addition, its own research team helps the Committee state its opinions based on reasonable grounds. SK hynix meets all legal standards of health and safety. However, as a global leading semiconductor company, we need a better safety health system. Therefore, the Industrial Health Verification Committee established a goal of resolving the past issues and developing a future-oriented industrial safety and health system, instead of simply investigating the correlation between jobs and diseases. We have derived 127 improvement tasks in the three fields: 1) Environmental and chemical substances management and issue prevention, 2) Individual health care, and 3) the welfare programs for employees' health. We reflected the opinions of various stakeholders such as our employees, executives, labor union members, media, civic groups, politicians, and Banolim (the group for victims of occupational diseases). There are 127 tasks aimed to remove the fundamental causes of disease and help employees suffering from illness, instead of just blaming the company. Of course, a huge amount of time and costs will be spent to resolve all issues. These are goals that are ultimately aimed at increasing the sustainability of the company and all its partners. However, we will endeavor to have a world-class industrial safety and health system.

Professor Jang Jae-yeon (Ajou University)



## 02-1

# Strengthening the Safety Management System

### Investment in a safety and health environment

Since 2014, SK hynix has increased investment in a safety and health environment in order to prevent serious accidents and reduce legal risks regarding a safety and health environment. In 2015, we have invested 130.4 billion won to improve the ability to respond to emergencies by constructing an integrated disaster control center, fire-fighting facilities, explosion-proof facilities, SHE computerization system, industrial water-wastewater treatment infrastructure, air treatment facilities, oxygen meters, etc. In 2016, we will continue to extend our investment to create a safe working environment by reconciling with the management situations.

### Reinforcing the safety management system of the overseas business sites

To prevent major environmental safety accidents and reduce relevant legal risks, we are investing in a safety environment. In 2015, we improved our accident prevention and responded ability by installing additional CCTVs and improving the emergency broadcasting systems with an investment of 16.2 billion won. In 2016, we are planning to replace outdated sprinkler pipes.

## 02-2

# Efforts to Improve the Suppliers' Safety

We are making efforts to strengthen the competitiveness of suppliers for sustainable and win-win growth. We evaluate the level of safety/health, labor practices, human rights, and social influence of the primary and secondary suppliers in order to reward and support their improvements.

### KOSHA & OHSAS consulting for suppliers

We help suppliers acquire KOSHA and OHSAS certification by providing costs, conducting risk assessments, management system diagnosis, and internal inspection, and providing education programs for internal inspector training and SHE goal-setting. As of 2015, a total of 21 suppliers have become certified for KOSHA 18001 and OHSAS 18001.

### SHE evaluation and reward for suppliers

We are endeavoring to improve the safety of suppliers and prevent safety accidents in cooperation with our suppliers. We hold regular meetings (monthly), workplace inspections (daily and quarterly), working environment measurement/assessments (semiannual), risk assessments (yearly), and SHE evaluations (semiannual), and award excellent suppliers.

### Strengthening the safety management system of suppliers: Support for onsite risk management of suppliers

We are providing our suppliers with risk assessment education and technology on the target, procedure, type, method and things to consider during risk assessment. An evaluation group consisting of three employees with at least three years of experience, conducts a risk assessment on each work process. For a work process with a risk level of 9 or higher, the involved employees establish an improvement plan to reduce risks. In addition, the results of a risk assessment are utilized for safety and health activities, and we conduct post-management. Considering the results, we supported their regular meetings, improved monitoring activities, competency enhancements, working environment measurements, infrastructure improvement, and maintenance.

## 02-3

## Making an Effort to Reinforce On-site Safety

### Reinforcing the emergency response system to prevent the spread of accidents

A failure in an initial response to a minor accident may lead to a serious accident. Although SK hynix used to emergency situations or crisis within workplace by operating the S-ERT (Special-Emergency Response Team) in order to respond to emergencies, there were limits in responding in a professional manner due to a lack of knowledge of facilities and equipment. To overcome such limits, we plan to form an F-ERT (FAB-ERT) consisting of employees who are well informed of each business site. The F-ERT, consisting of full-time employees stationed in the business site and are well informed of the plant layout, can respond to an emergency at the outset. In addition, they can use the emergency contact list as soon as possible and determine an evacuation plan. They can effectively respond to an emergency by reporting the situation to the central control room. As a result of a test, accident was prevented from spreading through precise and swift early response and the F-ERT arrived at the accident scene three minutes earlier than the S-ERT did and responded to the accident from the outset. We are providing education and training on fire, explosions, chemical/gas leakage, and dangerous processes, in order to strengthen the F-ERT system. The divisions involved in dangerous substances or processes mandatorily participate in education. As the cooperation between the F-ERT and the S-ERT is important for an emergency response, they are conducting joint training to reduce the response time.

### Operating the safety index system

SK hynix is operating the Safety Index System to raise the safety awareness and standards of the business sites. Each division conducts a self-assessment for major safety management factors and practices safety activities accordingly. In 2015, we achieved an average safety score of 95.1. We will enhance the safety level of the company and our suppliers by applying the Safety Index System to them.

The average score of the safety index in 2015

# 95.1

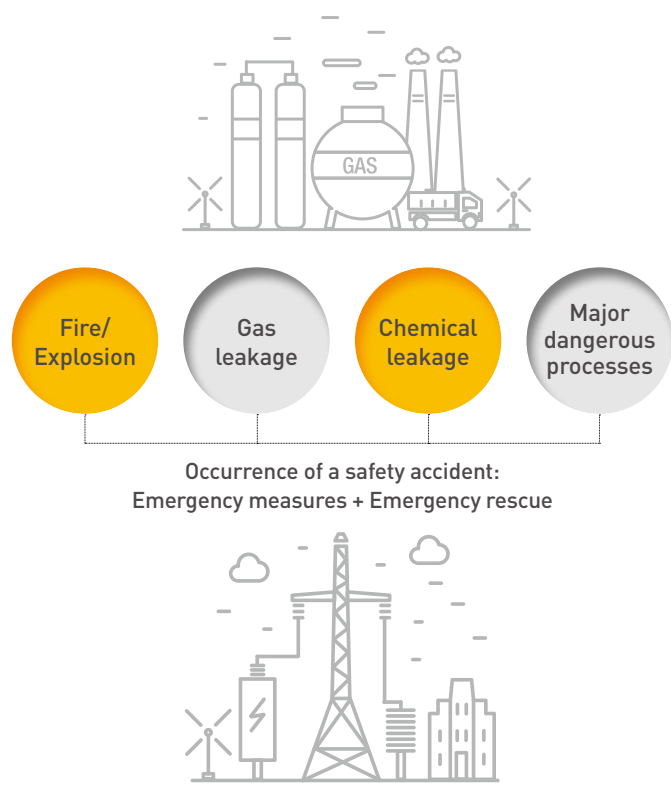
### Response to the leakage of water-reactive substances

The 2015 Tianjin explosions, which occurred due to an inadequate response to water-reactive substances, killed over 150 people<sup>1)</sup>. Although many people are well informed of the dangers of water-reactive substances, many businesses still don't have a systematic fire/leakage countermeasure plan and necessary equipment. SK hynix verified the appropriateness of the scenario to respond to the leakage of water-reactive substances. First of all, we are conducting risk assessment on the ten dangerous processes and water-reactive substances and developing a training and response scenario by SVHC (Substance of Very High Concern). In addition, we introduced new equipment to respond to the leakage of chemicals and gases and provided employees with training about detailed instructions. We are also conducting regular inspections on the chemical storages. Furthermore, we conducted an inspection on 17 suppliers that produce dangerous chemicals. In addition to compliance with environment/safety regulations and laws, we inspected their emergency response systems, fire-fighting facilities, employee safety education, and MSDS (Material Safety Data Sheet) and protective gear management.

1) Water-reactive substance

A substance that may cause an ignition or heat when mixed with water

### Major education/training



02-4

Reinforcing Health Management









Enhancing the health of SK hynix employees

The closing hour of business of the in-house clinic has been extended from 5:30pm to 10:00pm. When there was a possibility of mass infection such as MERS, we installed thermal cameras at the entrances of the buildings and did not allow any patients suffering from high fever to enter a building. In accordance with government responses, we took swift and proper actions for crisis management.

Enhancing the health of the suppliers' employees

As part of our win-win growth policy, we provided workers with special checkup costs and harmful factor selection and provided and health care guidelines for special checkup items. In addition, we opened our in-house clinic and physiotherapy clinic for them.

Activities for health management of employees in 2015

 <div>Supporting female health management and education programs</div>	 <div>Psychological consultation center</div>	 <div>Health checks for employees and providing medical support</div>	 <div>U-WELLNESS A health promotion and web-based health management program</div>	 <div>High-blood pressure clinic</div>	 <div>Obesity clinic</div>	 <div>Non-smoking policy</div>	 <div>First aid training</div>
Conducting fetal and maternal health improvement activities by targeting pregnant women	Operating "Mind Strolling," a psychological consultation center to secure harmony in body and soul for company employees	Health check program and providing medical services	A program offering group exercise for three sessions (12 weeks) over a year	Trial operation of high-blood pressure clinic service with health planners	Regularly operating an obesity clinic for employees with high levels of obesity	Operating a year-round, non-smoking clinic	Operating training programs for performing CPR and using automatic defibrillators
<ul style="list-style-type: none"> <li>· Providing iron and folic acid supplements</li> <li>· Prenatal education for expectant mothers</li> <li>· Health programs for single women</li> <li>· Campaign for preventing breast cancer</li> </ul>	<ul style="list-style-type: none"> <li>· One-on-one consultation with professional psychological consultants,</li> <li>· A program for managing mental crises</li> <li>· Education for mental health, and managing work-related stress</li> </ul>	<ul style="list-style-type: none"> <li>· Adding cerebrovascular and cardiovascular/ reproduction toxicity tests among items for health check,</li> <li>· Special medical lectures by professional doctors</li> </ul>	<ul style="list-style-type: none"> <li>· Analyzing physical conditions</li> <li>· before and after operating a program and identifying improvements,</li> <li>· improving exercise habits</li> </ul>	<ul style="list-style-type: none"> <li>· One-on-one consultations between health planners and employees,</li> <li>· comparing health improvements, and conducting education for improving lifestyle habits</li> </ul>	<ul style="list-style-type: none"> <li>· Providing medical consultation,</li> <li>· Exercise education</li> <li>· Providing medical information</li> </ul>	<ul style="list-style-type: none"> <li>· Expanding health education</li> <li>· Non-smoking areas</li> </ul>	<ul style="list-style-type: none"> <li>· Placing automatic defibrillators in each building,</li> <li>· Operating relevant training programs</li> </ul>

Activities of the Industrial Health Verification Committee

SK hynix Industrial Health Verification Committee has been investigating, verifying, and improving occupational disease issues related to semiconductor manufacturing for the past year. With a total of 11 members consisting of seven academic experts and four labor union representatives, the Industrial Health Verification Committee has verified the domestic working environment, health impact, and health management system with about 50 external health researchers. Last November, the Committee announced at a press conference that the working environment and disease have no causal relationship. However, we decided to accept the Committee's suggestion in order to fulfill our social responsibility. Our Comprehensive Support & Compensation System is subject to all production workers who have worked for SK hynix for more than one year, retired employees, suppliers' employees, and their children. All types of cancer that may be related to the semiconductor industry, such as thyroid, brain tumor, stomach cancer, prostate cancer, rectal cancer, pancreatic cancer, ovarian cancer, leukemia, multiple myeloma, and lung cancer, are included in the compensation. Furthermore, we will make efforts to create a safe and clean working environment by resolving the 127 improvement tasks suggested by the Committee and improving/constructing the JEM (Job Exposure Matrix).



# 03

## RESPONDING TO CLIMATE CHANGE

### WHY THIS ISSUE IS MATERIAL

With growing concern from the international society over climate change including COP 21, the Korean government has also reinforced the environmental regulations through the GHG emissions target management system and the emission trading system. The semiconductor industry consumes a huge amount of energy including electricity. Therefore, an increase in energy costs may lead to an increase in production costs. Abnormal weather conditions cause problems with precision instruments used for semiconductor production, which may cause a decrease in sales due to quality issues. Moreover, more and more customers want low-power products. If our products don't meet the certification standards of the customers, we cannot supply the product to the customers or our sales may be delayed.

### FUTURE ACTION

- Reducing energy by introducing high-efficiency facilities
- Strengthening the ability of employees to manage energy

### HOW WE APPROACH & MANAGE

We are creating a foundation to proactively respond to climate change and introducing technology for reducing greenhouse gas emissions. We are developing low-power, high-capacity, and high-performance products by dealing with higher customer and market demands for eco-friendly products. In addition, we will contribute to spreading low-carbon green management in the industry by supporting suppliers and supply chain to establish policies for better coping with climate change.

### 2015 PERFORMANCE

- Construction of an energy usage monitoring and management system
- Reinforcement of energy efficiency by improving the workplace and processes
- Development of eco-friendly products and environmental assessment
- Dispersing a low-carbon corporate culture to its members
- Responding in a timely manner to the emission trading system by developing the greenhouse gas reduction technology
- Developing more low-power products

### INTERVIEW

The Korea Environmental Industry Technology Institute is operating a variety of certification systems regarding the environmental impact of products and services. Certification aims to establish a sustainable production and consumption system by delivering our eco-friendly technology to consumers. SK hynix is operating LCA for most of its products. As a result, its major products are certified for carbon/environmental certifications such as DRAM, NAND Flash, etc. Continuously operating and developing the LCA system, the company can manage risks through an immediate response to the needs of reducing environmental loads. In addition, the company can participate in new certification systems such as Water Footprint or Product Environment Footprint without investing additional resources. Such efforts to improve products' environmental impact enables an immediate response to international environmental certifications and regulations such as the EU's Product Environment Footprint (PEF). Therefore, for SK hynix, it is important to obtain certification for environmental performances from a third-party governmental agency. In addition to obtaining LCA and environmental certification for its products, it is important to widely promote its performance to stakeholders through the sustainability report and other PR materials. In particular, SK hynix needs to emphasize its environmental aspects by disclosing environmental information such as its B2B production.

President **Kim Man Young** (Korea Environmental Industry Technology Institute)

## 03-1

# Activities for Reducing GHG Emissions and Energy

## Energy management through high-efficiency M14 design

Based on its know-how on energy reduction accumulated over the years through energy reduction TF, SK hynix has designed the M14 as a differentiated energy high efficiency building. Through the construction of the building, it succeeded in maximizing energy reduction and improve company image through operating a green building. For M14's energy high efficiency electric facility, systems such as the LED lighting, mechanical spot lighting, high efficiency inverter and high efficiency cooling system were applied.

## Implementing monitoring activities for energy use

SK hynix is monitoring energy usage based on its energy management goals. To obtain reliable data, we are conducting a real-time monitoring system for energy usage with the measuring instruments installed on steam pipes, utilities, and manufacturing equipment. At our Icheon Plant, we control energy usage based on monitoring data by energy source. In 2016, we aim to check energy usage by plant using the integrated IT management system and use its data to reduce energy usage. Analyzing the energy usage of the processes and facilities, we will find an optimal environment and maximize energy efficiency.

## Extending the certification of ISO 50001

SK hynix is extending the certification of ISO 50001 as a tool for reducing energy costs and responding to greenhouse gas regulations. After first acquiring certification for Icheon FAB in 2014, we added certification for Cheongju FAB in 2015. We are operating the energy reduction TFT for sustainable energy management and reporting our energy management goals and performances to the executives. Based on the reported information, we established CEO-level energy management policies and 14 energy processes. In addition, we documented them and established corporate regulations to encourage employees to practice them.

### Strengthening the energy efficiency of the processes

SK hynix is improving energy efficiency through operational optimization, high efficiency, and production equipment optimization.

#### Operational optimization

We are improving energy efficiency by constructing the FAB Line and optimizing the utilities. As part of our efforts, we have reduced a huge amount of energy through Plant M14 and CDA, which started operation in 2015. In addition, we are endeavoring to optimize the operation of the preexisting chillers and operating the Energy Inspector System to remove energy-wasting factors.

#### High efficiency

Chillers account for the largest part of the total energy usage of SK hynix. In particular, energy usage of the chillers greatly increases in the summer. To resolve this issue, we have been investing in chillers since 2012. In 2015, we replaced the outdated chillers with high-efficiency M10B chillers and installed LED lighting to improve energy efficiency.

#### Production equipment optimization

With the slogan of "Energy Reduction by Us", all production-related divisions are endeavoring to reduce energy. In 2015, we introduced high-efficiency chillers and other high-efficiency facilities, and conducted a variety of activities to save wasted electricity such as introducing high efficiency facility and turning off the power of idle equipment.

Development and operation of the CO<sub>2</sub> calculator

SK hynix developed and introduced a CO<sub>2</sub> calculator on our website in order to promote its low-power products to stakeholders. The CO<sub>2</sub> calculator shows the reduction amount of greenhouse gas emissions with the tree planting effects and cost reduction effects, compared to previous models. As a result of research, it was found that greenhouse gases were reduced by 31,186kg with the 2ynm-class 4Gb DDR3 (based on 1,000 units) compared to the previous model, the 40nm-class 4Gb DDR3. Anyone who is interested in our products can use the CO<sub>2</sub> calculator found on our website.

Response to the emission trading system

After the Paris Agreement, the entire world, including both developed countries and developing countries, need to participate in reducing greenhouse gas emissions. As a result, the emission trading system<sup>1)</sup>, which went into effect in Korea in 2015, became more binding and is expected to put a heavier burden on the companies. SK hynix, as a corporation subjected to the emission trading system, is subject to the emission trading system. With our energy/greenhouse gas reduction TFT, we are reducing greenhouse gas emissions. To minimize the purchasing costs of emission rights (for excessive emissions), we are developing/operating greenhouse gas reduction devices (scrubber) measurement technology and our TFT is conducting various activities. We will proactively respond to the emission trading system by introducing more greenhouse gas treatment facilities and low-power facilities and constructing a world-class low-carbon business environment.

1) Emissions trading system

The government grants companies the right to emit greenhouse gases. The companies may also purchase or sell their emission rights considering their marginal abatement costs.

03-2

Developing Eco-friendly and Energy-efficient Products

Obtaining certification for Environmental Declaration of Products

SK hynix has been extending certified products since 2013. Environmental Declaration of Products is a certification system operated by the Korea Environmental Industry Technology Institute that is affiliated with the Ministry of Environment. In this certification system, the environmental impact occurring during the entire production processes is quantified and evaluated. In 2015, we obtained certification for the 2ynm-class 4Gb DDR3. This eco-friendly product reduced greenhouse gas emissions by 24% and resource consumption by 22% compared to the product certified in 2013.

Certification

Product | 2ynm-class 4Gb DDR3 SDRAM  
Date of acquisition | May 29, 2015  
Certification authority | The Korea Environmental Industry & Technology Institute



Scope of influence	Result <sup>1)</sup>	Unit
Global warming	3.84E-01	kg CO <sub>2</sub> eq
Eutrophication	9.02E-04	kg PO <sub>4</sub> <sup>3-</sup> eq
Acidification	8.71E-04	kg SO <sub>2</sub> eq
Impact on the ozone layer	1.46E-07	kg CFC11 eq
Resources consumption	2.22E-03	kg Antimony eq
Creation of photochemical oxides	1.51E-04	kg C <sub>2</sub> H <sub>4</sub> eq

1) The results of calculating the emissions of a substance during production

Result of carbon labeling in major products for each technology

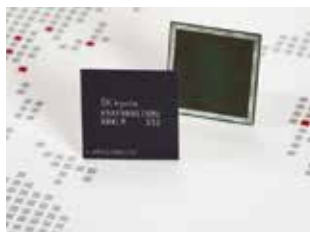
(Unit: kg CO<sub>2</sub>eq)

Scope of influence	Result	Unit
DRAM	Computing Memory	2ynm 4Gb DDR3
	Mobile Memory	2ynm 8Gb LPDDR4
NAND	Flash Memory	1xnm 64Gb NAND

## Expanding low-carbon mobile products

SK hynix has expanded certified products each year after acquiring carbon labeling certification for our products in 2009, an industry first. In 2015, SK hynix obtained carbon label certified certification for the 2ynm-class 8Gb LPDDR3/LPDDR4. Low carbon label certified certification is a certification for products that reduce GHG emission through low-carbon technology. This certified product is widely used as a memory chip for mobile devices. Its greenhouse emissions have been reduced by 33%, compared to the previous model.

### Low-carbon labeling certification



2ynm-class 8Gb  
LPDDR3/LPDDR4  
Certified for low-carbon labeling



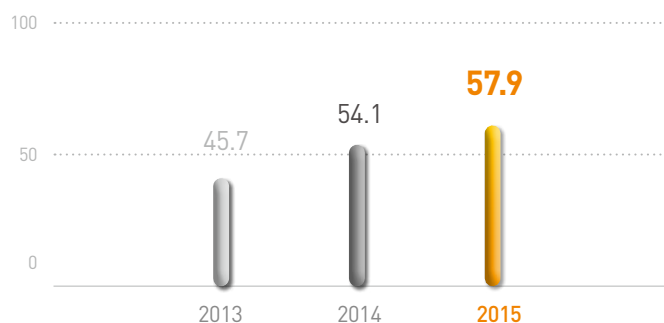
Reduce greenhouse gas  
emissions by 33% compared to  
the previous model

## Increasing carbon labeling certified products/ low-carbon certified products

Since the carbon labeling certification system was implemented in 2009, SK hynix has acquired carbon labeling certification for major products. In 2015, the company achieved a total of 14 certified products.

### Rates of certification compared to domestic products

(Unit: %, Based on the domestic  
business operations)



## 03-3

# Spreading Internal and External Awareness of Climate Changes

## Creating low-carbon corporate culture

SK hynix is operating the energy reduction TF, a company-wide energy management tool. For company-wide efforts beyond the utility-centered energy reduction activities, the energy reduction TF arranges financing, establishes the energy reduction goals, and conducts various activities to raise employee awareness of energy. In 2015, the energy reduction TF obtained ISO 50001 to show that the company is managing energy consumption regularly. We are providing regular education, holding workshops, awarding excellent cases, and conducting a campaign for energy saving.

In addition, to save energy, we encourage employees to dress lightly in summer. We allow employees to wear shorts and avoid suits from early June to late August. We encourage a cool style in summer for employee health and fashion. In addition, we are operating the Energy Inspector System. Energy Inspectors patrol business sites to monitor energy consumption.

## Five Commandments for Saving Electricity

01. Maintaining adequate indoor temperatures in the summer  
(26-28°C)
02. Turning off lights
03. Pulling out the plug of electronic appliances
04. Walking instead of using elevators
05. Turning off PCs and monitors

## Joining the CDP Hall of Fame for three consecutive years for the first time in Korea

SK hynix joined the Hall of Fame for attaining the best status of the Gold Club, selected by the CDP (Carbon Disclosure Project) Korea Committee, for three consecutive years. CDP refers to the sustainability indexes used to evaluate the corporate strategies to respond to climate changes, communication, and emission reduction goals. As of this year, we have maintained our Gold Club status for three consecutive years, due to our continuing contribution to reducing greenhouse emissions and energy consumption, expanding low-carbon labeling, developing eco-friendly/high-efficiency products, and raising awareness about climate change.



## 04

REDUCING  
ENVIRONMENTAL IMPACT

## WHY THIS ISSUE IS MATERIAL

As the Toxic Chemical Substances Control Act and Act on Registration and Assessment of Chemical Substances began to take effect since 2015, the standards for the management of chemical substances by business operators have become stricter. After a series of recent chemical leakage accidents, the overall social concern about hazardous chemicals is growing. New semiconductor technology and scaling down in general generated new types of waste and required new recycling technology. Moreover, our customers demand new countermeasures to reduce environmental impact. Environmental accidents may hurt the company's reputation and cause huge financial losses. Therefore, environment management becomes more and more important.

## HOW WE APPROACH &amp; MANAGE

SK hynix is endeavoring to construct an advanced chemicals and waste treatment system and reduce internal and external environmental impact. We are operating a monitoring system for the entire processes to secure the safe management of hazardous chemicals and waste. In addition, we are striving to achieve zero accidents and optimization of recycling resources from pre-registration for delivery to resource recycling for shipping out. To prevent environmental issues, we try to find and remove potential causes in advance.

## 2015 PERFORMANCE

- Strengthened a system for managing the amount of chemical substances used
- Reduced waste through recycling resources
- Constructed an environmental pollutant discharge monitoring/management system

## FUTURE ACTION

- Recycling more resources by exploring new waste recycling companies
- Strengthening separated discharge from the discharge sources
- Acquiring global LCA

## INTERVIEW

Since SK hynix concluded an MOU for improving water quality and restoring the ecosystem of Jukdang Stream with the Ministry of Environment, the Icheon city government, and the Han River Protection Headquarters, has been conducting various activities. SK hynix, the Ministry of Environment, and the city of Incheon determined the directivity of the activities, provided financial resources, and conducted various purification activities with staff from the Han River Protection Headquarters. SK hynix is striving to maintain the wastewater quality at Grade 1 and prevent water pollution in Jukdang Stream and neighboring waters. However, as such efforts and performances are not widely informed to stakeholders, SK hynix needs to widely promote its efforts and performances through various means such as the Sustainability Report and proactively communicate with local communities about environmental issues.

Representative **Cho Tae Kun** (Han River Protection Headquarters, Icheon Branch)

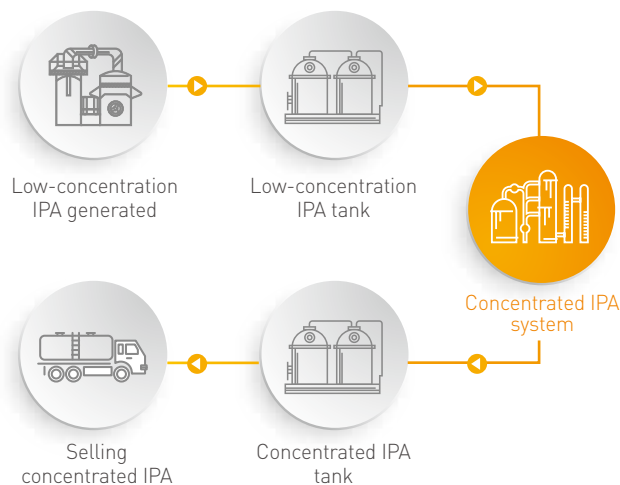
## 04-1

## Activities for Reducing Environmental Impact

### Improving the recycling rate to reduce waste

SK hynix is endeavoring to increase its recycling rate by practicing separate collection and using waste as resources. As part of our efforts, we installed a concentrated evaporation system to treat low-concentration Isopropyl Alcohol (IPA) for selling, instead of contracting out. In 2015, we reduced low-concentration IPA emissions by 29,430 tons and saved 3.76 billion won. We aim to extend the IPA concentrated evaporation system and reach the annual reduction of 66,000 tons, with a savings of 7.9 billion won.

#### Concentrated IPA System



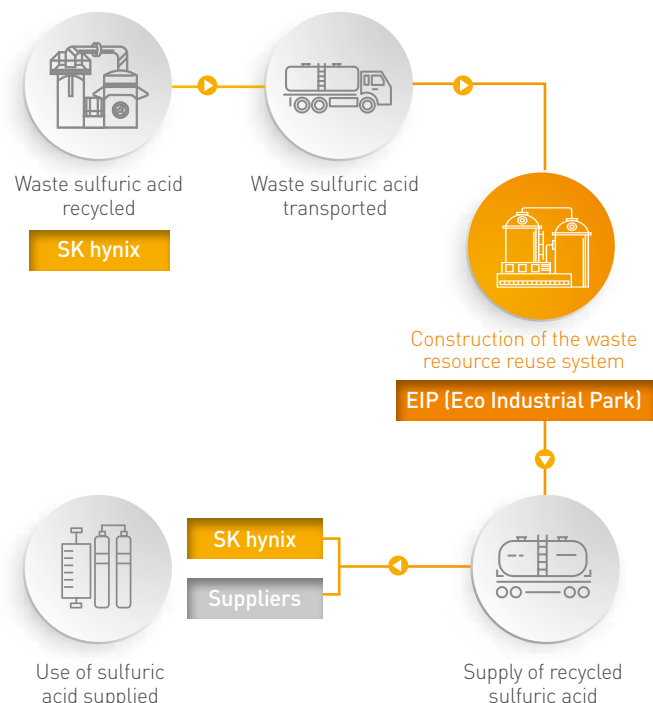
### Development of water risk management guidelines

SK hynix developed water risk management guidelines. In these guidelines, we analyzed the general information regarding water risk management, global initiatives and countermeasures of leading global companies. In addition, they help the company recognize that water management offers risks and opportunities for the present and future, and suggests detailed tasks for systematic water management.

### Construction of the waste resource reuse system

In cooperation with the EIP (Eco Industrial Park) project team, we have constructed a waste resource reuse system. With this system, we are increasing recycling rate and minimizing pollution by providing waste to other companies as raw materials or energy. In 2015, a total of 15,788 tons of waste sulfuric acid were recycled by us and our suppliers, to contribute towards establishing a resource-circulatory industrial complex in which the environment and the industry coexist.

#### Waste resource reuse system



### Reinforcement of the chemicals management system

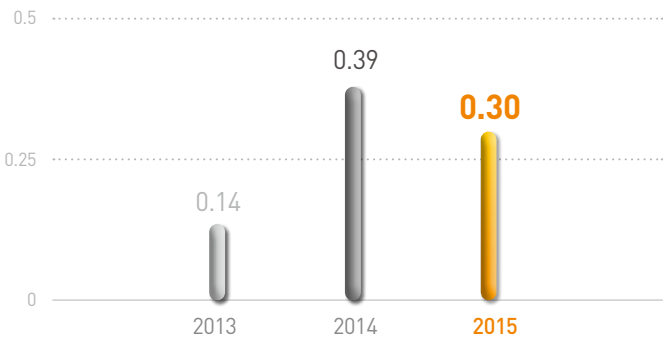
SK hynix is operating the chemicals pre-assessment system to minimize the use of toxic substances and the environmental impact. As the Toxic Chemical Substances Control Act and Act on Registration and Assessment of Chemical Substances began to take effect in 2015, we have been managing chemicals according to the strengthened standards. To prevent chemical accidents of neighboring small and medium-sized companies and improve our countermeasure ability, we composed a council with other companies. As part of the council's activities, we hold a meeting, visit the business sites, share information, and conduct a joint drill in preparation for leakage of harmful chemicals. Since 2016, we have been operating a local council consisting of chemical experts and local representatives of Gyeonggi Province and the city of Icheon to communicate with local communities and discuss chemicals management, cooperative plans, and development directivity.

Biodiversity management

As the use and discharge of chemicals increase, the water management system shifted from a human-centered paradigm to a coexistence-centered paradigm. SK hynix discharges hazardous materials after degrading them below a certain safety level using its wastewater treatment plant. We conducted an environmental impact assessment on water fleas in the neighboring waterways (Jukdang Stream, Bokha Stream, and Namhan River). As a result of an environmental impact assessment on water fleas conducted in 2015, the toxic unit was found to be 0.3, which does not affect the ecosystem of the streams. All employees are participating in the "One Company and One Stream Purification Activity" campaign. We conducted purification activities for Jukdang Stream. We will fulfill our social responsibilities for environmental protection.

Current status of eco-toxicity management

(Unit: Toxic Unit)



Water fleas: Species subject to toxicity evaluation

04-2

Overseas Business Sites' Activities for Reducing Environmental Impact

Water resource saving and wastewater treatment

Wuxi FAB of China is conducting various activities to save water resources and minimize the discharge of water pollutants. We are trying to reduce the usage of water by improving the unit process capacity of the Membrane Bioreactor (MBR) system and recycling wastewater. Wastewater is separately discharged by its pollution property after being processed at the waste treatment facility. As company standards, which are 60% stricter than legal standards, are applied to discharged wastewater, SK hynix strives to preserve the environment of the discharging stream. In 2016, we will improve our wastewater treatment facilities.

Reduction of waste through the reuse of waste sulfuric acid

SK hynix's overseas business sites are endeavoring to increase the reuse rates of waste. They reduced 4,946 tons of waste sulfuric acid and saved treatment costs by 800 million won last year by reusing waste sulfuric acid as water treatment chemicals for the wastewater treatment facilities. We will keep reducing waste generation by reusing it at our in-house wastewater treatment facilities.



Campaign to reduce environmental impact in Chinese business sites

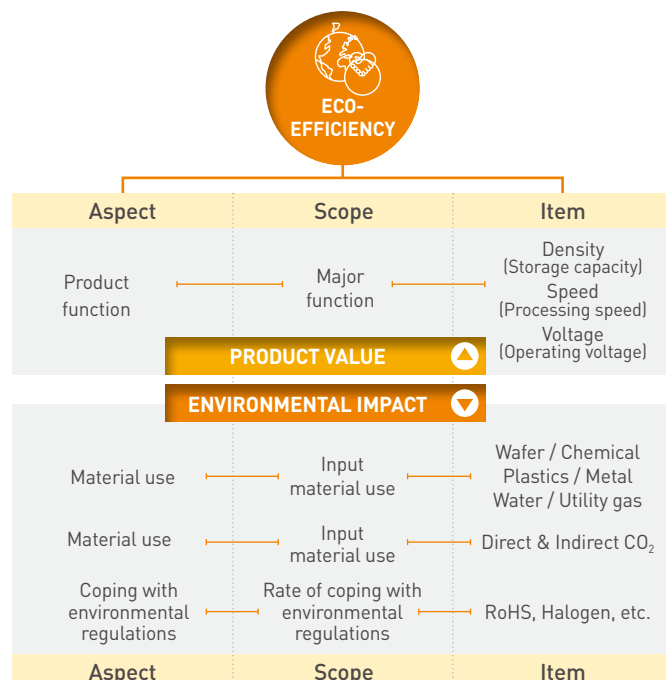
## 04-3

## Reducing the Environmental Impact of Products

### Assessing the product's environmental impact and economic value

Since SK hynix developed Eco-efficiency in 2008, it has been conducting an annual eco-efficiency evaluation. Eco-efficiency is a tool to evaluate the product value and a degree of environmental impact reduction. The product value indicates the level of improvement in major functions of products, and the degree of environmental impact reduction includes the amount of used materials and GHG emissions. In 2015, we achieved Factor 6.42 by developing nano technology, optimizing the processes, and saving energy. This means that the reduction in environmental impact and the improved values for products have increased by 6.42 times compared to 2008, which is 28% higher than the original goal of Factor 5. This is one of the results of our efforts to continuously improve our product performances and environmental merits.

#### Eco-efficiency



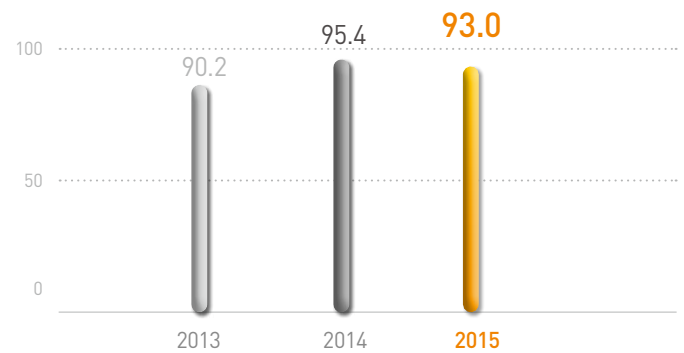
\* Please visit our website (<http://www.skhynix.com/kor/sustain/prdEnvlmpact.jsp>) for further information on eco-efficiency.

### Expanding the scope of LCA-applied products

SK hynix has established the LCA (Life Cycle Assessment) computing system to expand assessment for the entire process to measure the environmental impact of major products and minimize the components. In 2015, the company achieved 93% of the LCA assessment rate based on domestic business sites. In 2016, we will expand the scope of LCA implementation to both the process and the equipment and provide it both to customers and internal and external stakeholders with transparent results of the entire assessment process.

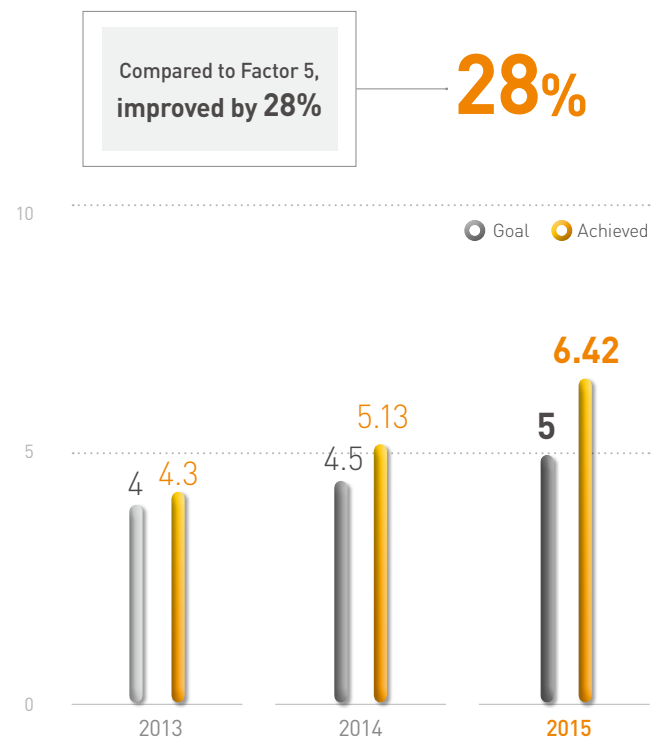
#### LCA application rate based on domestic sites

(Unit: %)



\* LCA evaluation standards based on production

#### SK hynix FACTOR h<sup>2</sup> evaluation results





# 05

## WIN-WIN GROWTH WITH SUPPLIERS

### WHY THIS ISSUE IS MATERIAL

Most of the semiconductor production processes require cooperation with suppliers. Therefore, it is important to strengthen the competitiveness of suppliers and improve their productivity. The Korean government has placed win-win growth as a priority in national policy and requested for win-win growth between large companies and suppliers. In addition, more and more global investors and evaluation agencies require the management and improvement of human rights, environment, and labor. Our major customers also ask us to identify and improve the risks of the supply network. Now win-win growth and support for CSR activities of suppliers are important in strengthening our competitiveness.

### FUTURE ACTION

- Strengthening a partnership by expanding the members of the Win-Win Growth Committee
- Fund support program for next-generation technology development projects

### HOW WE APPROACH & MANAGE

SK hynix has established and executed win-win growth strategies in connection with the company's management philosophy. To establish a foundation for long-term win-win growth with our suppliers, we are creating an industrial ecosystem based on a culture of win-win growth. We are conducting various support activities in line with the government policies for technology, management, and finance. In addition, we are creating synergy effects in cooperation with our Win-Win Growth Committee.

### 2015 PERFORMANCE

- Provided suppliers with support for technology, patents, management, and finance to strengthen their competitiveness
- Constructed a win-win growth ecosystem encompassing the secondary suppliers
- Increased communication with suppliers
- Operating the win-win payment system to improve the payment conditions between the primary and secondary suppliers
- Establishing SK Employment Foundation to resolve youth unemployment

### INTERVIEW

Youngchang Chemical Co., Ltd. has been supplying chemicals and electronic materials to SK hynix since 2004. SK hynix provided us full support for mutual cooperation and win-win growth as our good business partner. We received a lot of help from SK hynix and its Win-Win Growth Academy in preventing a dispute over intellectual rights through its free patent transfer system, technology development through the patent license system, technology defense through technology deposit, financial accommodation and credit guarantee through win-win growth funds (insurance), support for employment through its employment foundation program, interns and competency reinforcement of new employees, management consulting for the secondary and tertiary suppliers, and improving our productivity through the SK Mutual Growth Academy. In addition, their consulting services improved the CSR risks and clarified our social and environmental responsibilities. We expect SK hynix to keep making efforts to raise awareness of suppliers regarding global standards, provide online/offline education to suppliers, and cooperate with its primary, secondary, and tertiary suppliers and subcontractors.

Sales Director **Jin Hyun Kyun** (Youngchang Chemical Co., Ltd.)

## 05-1

## Support for Strengthening Competitiveness Of Suppliers

### Technical support to strengthen competitiveness

SK hynix is conducting joint development with its suppliers in order to strengthen their competitiveness and increase their sales. SK hynix and its suppliers are strengthening their purchase competitiveness by jointly developing equipment and components, which can be imported. In 2015, they jointly developed 311 items and continue conducting joint development today. In addition, SK hynix is operating various support programs for technology development of small and medium-sized suppliers including provision of major parts and capitals. To that end, in 2015, SK hynix provided 1,386 sheets of pattern wafers for free to small and medium-sized pattern wafer suppliers who develop light exposure equipment.

### Financial support system

SK hynix is providing various types of financial support to its suppliers. We raised 150.5 billion won, including the deposit of 77.5 billion won, for the Win-Win Growth Fund in order to support its suppliers with low-interest rates. In 2015, we provided 98.8 billion won as support funds to our suppliers. As part of our strategy to foster the system semiconductor and equipment producers, we raise funds in partnership with the semiconductor industry and operate the Semiconductor Producer Funds and Network Loan for small and medium-sized companies. In addition, we contributed to easing the burden of suppliers for payment by increasing the number of payments from twice to three times a month and shortening payment periods. In particular, we help stable management and welfare improvement for suppliers by providing payments early before national holidays.

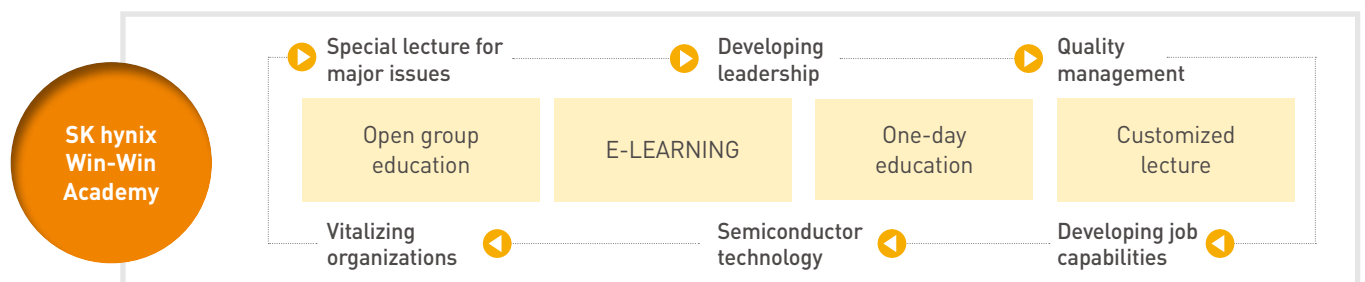
### Educational support system

Continuous education and training for employees are essential to strengthening the corporate competitiveness. SK hynix is providing various educational support programs to our suppliers who don't have enough financial resources for education. We are holding a CEO seminar and providing an MBA program for middle managers in order to improve management competencies of CEOs and the strategic, accounting, financial, marketing, and HR competencies of the middle management. In addition, we operate the Win-Win Academy to strengthen the job competencies of suppliers' employees. In 2015, 6,682 employees of our suppliers participated in the CEO seminar, the MBA program for middle managers, and the Win-Win Academy programs.

### SK Employment Foundation to resolve youth unemployment

Recruiting talents and fostering them are one of the most important issues of small- and medium-sized businesses. SK Group and SK hynix are operating the SK Employment Foundation Program in order to provide talents to small and medium-sized businesses. We provide young talents an opportunity to experience various educational and occupational programs through internships, and operate the human resources support program for small and medium-sized businesses. In 2015, we provided financial support to small and medium-sized suppliers for the education and training of 101 interns. We will provide continuous support through 2017.

### Roadmap for strengthening job capabilities of suppliers



## 05-2

## Establishing the Ecosystem for Win-Win Growth

### Expanding the win-win growth through the support program for the primary and secondary suppliers

SK hynix is endeavoring to construct a sound management ecosystem by extending its support targets from the primary suppliers to the secondary and tertiary suppliers. To improve the competitiveness of the industrial ecosystem, we conducted Industrial Innovation Movement 3.0. From 2013 to 2017, we will use 3.5 billion won to provide facilities to our secondary suppliers and consult them regarding their management, processes, and production technology. In addition, we established a system to monitor the payments from the primary suppliers to the secondary suppliers in order to improve the payment conditions for the secondary suppliers. In 2015, 28 primary suppliers and 67 secondary suppliers participated in this system. The various incentive systems of primary suppliers greatly improved the management conditions of the secondary suppliers.

### Reinforcement of the subcontractor management system

To seek win-win growth and coexistence with suppliers and emphasize trade fairness, SK hynix is monitoring the signing of fair trade contract, expansion of fair subcontractor policies and inspection and issues regarding adherence to legal obligations. In particular, we are inspecting if our divisions are dealing with subcontractors justly and providing our employees with education on subcontractor trade policies, methods, and regulations. In addition, we are monitoring unfair practices such as price reduction, order canceling, rejection of receipt of an order, etc. In 2015, we inspected and improved the in-house subcontracting policies of the headquarters and overseas production sites (Chongqing Assembly & Test Site and Wuxi FAB).

## 05-3

## Reinforcing Communication with Suppliers

### Expanding communication channels with suppliers

SK hynix has continuously communicated with suppliers for win-win growth. With this aim in mind, the company has implemented various activities for the CEOs of 50 major suppliers, including general meetings by the Win-Win Growth Council, regular meetings with each division, meetings for executives and presidents, and Win-Win Growth Day. For Win-Win Growth Day with the presidents of the council, the company has strived to reinforce strategic partnerships and enhance pride for suppliers of SK hynix, by selecting and awarding the best suppliers with remarkable performances in technology innovation, win-win growth and environment, and the safety sectors. Through the Environmental Safety and Health Committee, the company shares various opinions with suppliers in the industrial complex regarding major issues in the environmental safety and health sectors on a monthly basis. In 2015, we visited 65 small and medium-sized suppliers and listened to their challenges with business operations.



### Operation of the wage sharing program

Since 2015, SK hynix has been operating the wage-sharing program to improve the working conditions of suppliers' employees. As a result, we created a win-win case where we could grow along with our stakeholders, instead of focusing on improving the working conditions such as wages and welfare. SK hynix Labor Union first delivered 0.3% of their wage increase by 3.1% to the suppliers' employees and SK hynix sent the same amount of money as well. A total of 6.6 billion won was sent to 4,700 employees from 10 suppliers.

## Win-win Growth Program

05-4

Category	Program	Cumulative Performance (2011~ 2015)	Overview
Technology support	Equipment localization	Import substitution effects of 76.1 billion won	Localizing imports in cooperation with suppliers
	Free patent transfer	103 patents transferred	Transferring our patents to suppliers at no cost to strengthen their technology competitiveness
	Patent consulting	18 suppliers	Patent attorneys and consulting by patent experts to improve the intellectual property management ability of suppliers
	Technology deposit system	44 cases	Protecting suppliers' technology by depositing funds to the Win-Win Growth Foundation
	Support for pattern wafers	1,386 sheets	Supporting small and medium-sized suppliers that develop pattern wafers using light exposure equipment
Management support	Management doctor system	10 suppliers	Management consulting by the Management Advisory Group affiliated to the FKI Center for Large and Small Business Cooperation
	Win-Win Academy	6,487 people	Job education, leadership education, and e-learning for suppliers' employees
	Support for suppliers' employment	5 people	Participating in the job fair with suppliers, providing some costs of the event, and providing job opportunities to talents
	SK Employment Foundation	101 people	Providing internship education costs, personnel expenses, and training costs for employees of small and medium-sized suppliers
	CEO seminar for suppliers	117 people	Providing lectures in various fields (management, economics, humanities, society, etc.) to CEOs of suppliers
	MBA for middle managers	78 people	Education of strategy, accounting, finance, marketing, HR, and organization for strengthening middle managers
	Industrial Innovation 3.0	2.1 billion won	Consulting for improving the productivity of the secondary suppliers (A total of 3.5 billion won)
	Win-win payment system	Established in 2015	The primary-secondary suppliers payment monitoring system
Financial support	Win-Win Growth Fund <sup>1)</sup>	Scale: 150.5 billion won Performance: 98.8 billion won	Raising funds from banks and providing small and medium-sized suppliers operational/facility funds at low rates
	Win-Win Growth Insurance <sup>1)</sup>	Scale: 9.6 billion won Performance: 1.8 billion won	Collecting bonds and providing loans when a primary supplier goes bankrupt as part of the financial support program for the secondary suppliers
	Semiconductor Fund <sup>1)</sup>	Scale: 15 billion won Performance: 13.1 billion won	Indirect equity investments in promising small and medium-sized semiconductor companies
	Network Loan	3.6 billion won	Determining the credit line based on the performances and providing loans without any material evidence

1) As of the end of December 2015



# 06

## SOCIAL CONTRIBUTION BASED ON SCIENTIFIC TECHNOLOGY

### WHY THIS ISSUE IS MATERIAL

Recent social contribution activities have been carried out not only for donations, but also for addressing issues in the local community based on the company's values and capabilities in the direction of achieving win-win growth by supporting the development of the local community. Recently, the international society has been seeking education, industrialization, innovation, and economic development in order to realize the sustainable development goals (SDG). In particular, scientific technology is not only the key to national and local development but also an important growth engine. As internet-based applications in fields such as automobiles and medical devices develop and become more diversified, social contribution activities based on scientific technology become increasingly important for the development of both companies and local communities.

### HOW WE APPROACH & MANAGE

To create values through a sustainable virtuous circle, SK hynix has been practicing differentiated CSR activities and strategies considering its business characteristics. In addition, we are supporting disadvantaged children and young students by encouraging their dreams and hopes. We are also conducting sincere and practical business in local communities.

### 2015 PERFORMANCE

- Established a monitoring and management system for effective social contribution activities
- Supported young scientists and artists considering our business characteristics
- Volunteered in local communities and supported social enterprises

### FUTURE ACTION

- Expanding support for the vulnerable
- Supporting the gray areas as well as children and young students:
- Planning to launch the welfare business for the elderly in 2016
- Reviewing eco-friendly social contribution activities suited to global trends
- Strengthening funding transparency

### INTERVIEW

As a global leading semiconductor company, SK hynix is conducting various social contribution activities in local communities. The company donated Onnuri Gift Certificates for the vulnerable and greatly contributed to revitalizing the local economy, including traditional markets. Furthermore, the company is providing various support programs such as Do Dream Scholarship of the Happiness Sharing Fund for children from low-income families. Social contribution activities of the companies lead to the mutual development of businesses and society. Based on "noblesse oblige", SK hynix is taking the lead in social contribution. We are expecting SK hynix to grow as the world's leading semiconductor company while still contributing to the welfare of Icheon.

Team Leader Jeong Ha-guk (Icheon City Hall Welfare Policy Division)

## 06-1

## Strategic Social Contribution Activities

With the mission to make social contributions as “Company Creating Happiness with the Local Community through Sharing,” SK hynix has carried out various sincere sharing activities by focusing on regions where business sites are located. The Happiness Sharing Fund has become part of the company’s unique sharing culture: funds are raised by employees’ voluntary participation and one-on-one matching donation. The fund is considered an excellent social contribution case as it is created by voluntary participation of employees. As of the end of December 2015, 85.5% of the total employees, i.e. about 17,800 employees, are participating in the fund. This fund supports disadvantaged children and young students, specifically for the fostering of talents and for basic welfare. Since we were incorporated into SK Group, we have been conducting social value creation activities such as social businesses and SK Pro Bono<sup>1)</sup> as well as direct support. To revitalize the local economy, we donate Onnuri Gift Certificates and conduct various other support activities. We will keep on finding disadvantaged areas, supporting businesses that maximize social values, and conducting sincere social contribution activities.

1) SK Pro Bono

A volunteer group consisting of SK employees. Based on their professional knowledge and abilities, they provide free management, marketing, legal, financial, and accounting consulting to social enterprises and public organizations.

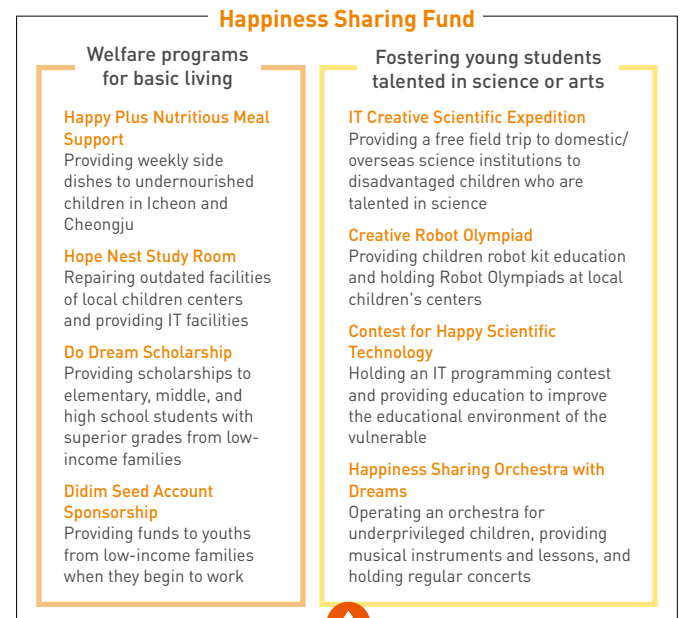
### Monitoring social contribution performances

SK hynix has secured transparency in the Happiness Sharing Fund, which is raised by voluntary participation, by operating the year-end committee and conducting financial audits. We check whether funds are suitably used for the original purpose of the project and whether there are any other sectors where more funds can be obtained through regular monitoring by the Community Chest of Korea, which is entrusted to operate the fund. The company also provides vests, vehicles, and expenses through the Happiness Sharing Fund website when employees perform voluntary activities. It also monitors the current state of voluntary activities by checking advanced plans and follow-up results. To increase the transparency of the funds, we will conduct a funds audit twice a year and disclose the audit results to our employees.

### Beneficiaries of Happiness Sharing Fund

Category	Project	No. of beneficiaries (people)	Category	Project	No. of beneficiaries (people)
Basic welfare	Happy Plus Nutritious Meal Support	1,060	Fostering talent	IT Creative Scientific Expedition	112
	Do Dream Scholarship	928		Creative Robot Olympiad	309
	Hope Nest Study Room	450		Contest for Happy Scientific Technology	1,213
	Didim Seed Account Sponsorship	330		Happiness Sharing Orchestra with Dreams	100
Subtotal		2,768	Subtotal		1,734
Total					4,502

### Mutual development with local communities and creating social values

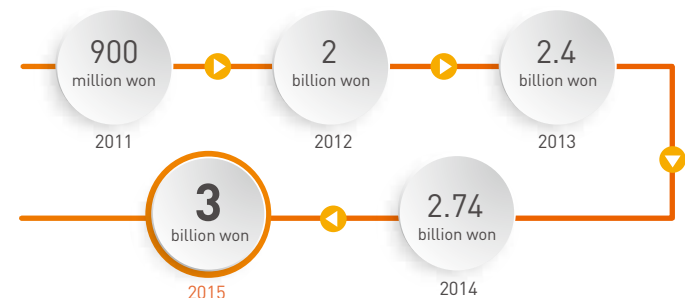


Happiness  
Sharing  
Volunteer  
Group

Happiness  
Sharing  
Event

Volunteering activities for employees and communication with local communities to establish a foundation for Happy Sharing

### Current status of collection of Happiness Sharing Fund

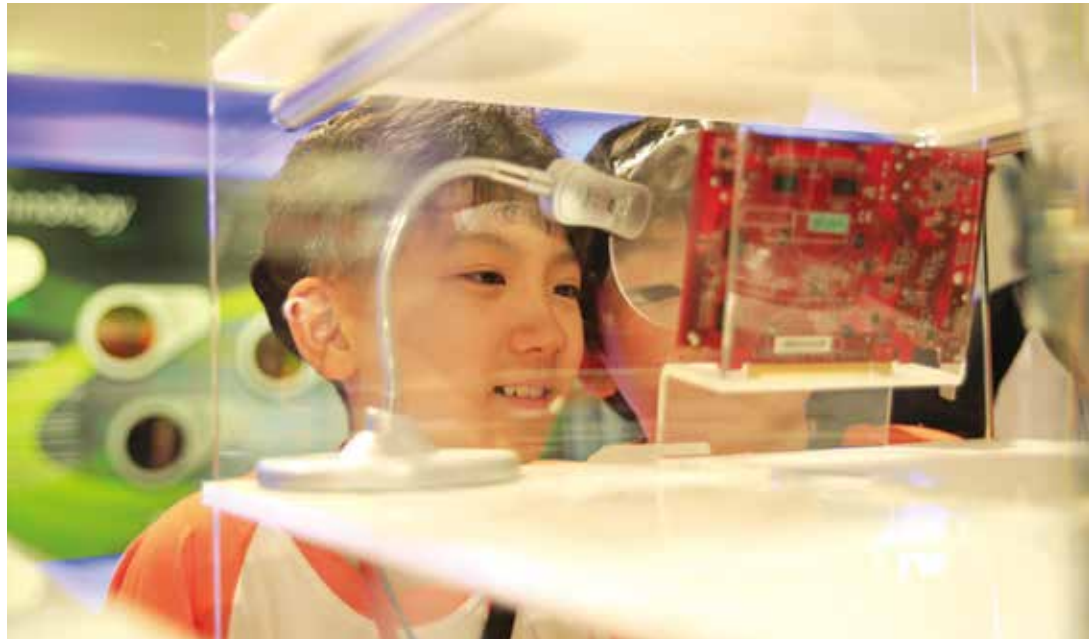


## 06-2

## Fostering Children Talented in Science and Arts

### IT creative scientific expedition

SK hynix operates the IT Creative Scientific Expedition to provide IT education to children and young people from low-income households, and to encourage them to become competitive scientists. The IT Creative Scientific Expedition consisting of elementary and middle school students talented in science includes visits to domestic and overseas IT companies and research institutes, including SK hynix, and provides IT education. One of the expedition members said, "I will become an IT expert and work for SK hynix when I grow up." We will develop more scientific education programs and scholarships as well as field trip programs. We will expand our support for children talented in science so that they can become Hynsteins in the future.



### Creative robot olympiad

SK hynix provides science education and robot kits to help children from low-income households who are talented in science to grow as scientists in the future. We are providing robot kits and programming classes at the regional children center to develop their interest in science and find their talents. By holding a year-end contest, we have also recognized children's creativity and passion for science and create an opportunity for them to participate in future official robotics competition both inside and outside the country. In 2015, we held a Robot Olympiad similar to the World Robot Olympiad to develop competencies of children and inspire them. One of the participants said that he is studying hard to enter science high school, become a scientist, and invent a robot that can help the elderly. We will keep helping talented young students grow to become new Hynsteins<sup>1)</sup>.

1) Hynstein

A word made by combining hynix + Einstein, signifying the willingness of SK hynix to foster future talent for the scientific sector



### Contest for happy scientific technology

SK hynix holds an engineering program IT Solution contest which can be helpful for the socially disadvantaged by finding creative IT talent. Since the contest was first launched at the end of 2014, it has been held in four sectors, including child protection, senior welfare, living convenience for the disabled, and space exploration for middle and high school students and undergraduates (graduates). The company provides education and devices to allow participants to develop consolidated solutions between hardware and software by using the Raspberry Pi<sup>1)</sup>, a miniature single-board PC. In line with the era of IoT (Internet of Things), the contest was held as Korea's first and largest IT contest. Nowadays, many students avoid natural science and engineering. Through the contest, we increased interest in IT science and made the contest as a nationwide social contribution program through the sponsorship of the Ministry of Science, ICT, and Future Planning. The contest has a significant meaning in the sense that it provided young people with an opportunity to commercialize their ideas. We will increase our interests in resolving social issues by developing new ideas.

#### 1) Raspberry Pi

A miniature single-board PC made by the Raspberry Pi Foundation, a British science education charity, to provide computers for children in third-world nations.



### Happiness sharing orchestra with dreams

SK hynix provides orchestra education and music lessons to encourage the dreams of musically talented students who find it difficult to develop their skills due to a lack of cultural exposure in their daily lives. Focusing on the regional children's center, the company organized an orchestra and provided musical instruments and personal lessons by selecting talented children through auditions. The Icheon and Cheongju Municipal Government has signed an MOU with SK hynix to provide children with the overall educational necessities such as practice rooms and transportation. Many children who participated in Happiness Sharing Orchestra with Dreams emotionally stabilized and enhanced their self-esteem and social skills. As a result of such efforts, a student who received support from this program was accepted to an arts high school after four months. Another student entered a college of music. In addition, Geum Nan-se, a world-famous conductor, oversaw popular orchestras performed with the Happiness Sharing Orchestra with Dreams, and our joint performances were reported in media. We will do our best to provide more opportunities to children.



## 06-3

## Mutual Development with Local Communities and Creating Social Values

### Happiness sharing volunteer group

SK hynix organizes the Happiness Sharing Volunteer Group, a team-based voluntary group with all employees, to perform voluntary activities on a regular basis. The Happiness Sharing Volunteer Group visits social welfare facilities for the elderly, the disabled, and children and shares their pain. Its members proactively conduct education volunteerism, cultural property protection, and environmental purification activities. One in particular is Junior Engineering Class. The members visit elementary school in Icheon to teach simple principles of engineering and demonstrate a scientific experiment. This program is well received by children and local communities in Icheon, which has a poor scientific education environment. The Happiness Sharing Volunteer Group consists of 97 units. In 2015, a total of 5,200 people volunteered for a total of 21,000 hours. A person serves for an average of 4.4 hours are served in a local community. SK hynix is encouraging its employees to participate in volunteer work by acknowledging volunteer work as working hours and providing support funds. In addition, the company has reinforced our volunteering capabilities by appointing volunteer leaders in charge of voluntary activities and holding regular workshops.

2015		
97 units	5,200 people	Around 21,000 hours
Volunteer activities	Volunteer workers accumulated	Hours
794 times/year (No. of volunteer activities)		

### Happiness sharing event

SK hynix has held the SK hynix Happiness Sharing Event to communicate and achieve unity with the local community. SK hynix held the SK hynix Happiness Sharing Event to communicate with local residents. In addition, we provided Onnuri Gift Certificates as part of our efforts to cooperate with local communities. The SK hynix Happiness Sharing Event has become a popular local event. We will try various ways to communicate with local communities.

### Support for independent basic living

In addition to support for local communities, SK hynix is endeavoring to create social values. Supporting the opening of Happy Meal Icheon Branch, which is one of the representative social enterprises, we helped the vulnerable and improved autonomy of individuals by stimulating the job market. At Cheongju Campus we conducted various social enterprise activities. We will spare no efforts to create social values.

### Happy Plus Nutritious Meal Support

To solve the problem of nutritional deficiency and imbalance among children, SK hynix pays weekly visits to low-income households in Icheon and Cheongju to provide them with a few dishes that will last a week. In addition, SK hynix and its Happiness Sharing Volunteer Group shares its sincerity and love with local communities.

### Hope Nest Study Room

SK hynix provides clean study rooms in local children's centers so that disadvantaged children can study in a clean and sanitary environment. We improved the IT environment and provided an eco-friendly study area for local residents. We will keep providing support so that children can follow their dreams.

### Do Dream Scholarship

SK hynix provides Do Dream Scholarships to children who have the talent and passion to pursue a dream but have financial difficulties so that they can follow their dreams. The scholarships are generally provided for the education of children as many children as possible and occasionally used for improving the living conditions of disadvantaged children.

### Didim Seed Account Sponsorship

Through the Didim Seed Account Sponsorship, SK hynix provides aid to young people who are 18 or younger and from low-income families or social welfare facilities in pursuit of an independent adult life. We will keep supporting them so that they can thoroughly adjust to society.

### Communication with local communities and coexistence activities

SK hynix is constructing a trust network with various stakeholders to improve the coexistence with local communities. Apart from the Happiness Sharing Fund via the Community Chest of Korea and a donation of 9.8 billion won in Onnuri Gift Certificates over three years, we have been conducting various social contribution activities with local governments. When MERS spread throughout Korea, we donated blood and participated in various events to combat the national crisis. In addition, we provided the elderly with tteokguk on New Year's Day, took pictures of them, and conducted various volunteer activities. We will keep making efforts to communicate with our stakeholders and local communities.

## 06-4

## Social Contribution Activities of Overseas Business Sites

### Volunteer work and donation of Wuxi FAB, China

SK hynix Wuxi FAB is conducting various social contribution activities to build the trust of local communities and create a culture of success. They are conducting quarterly volunteer activities to protect water resources in Wuxi and supporting the underprivileged, including the elderly living in a nursing home. In 2015, a total of 523 Wuxi FAB employees participated in volunteer work for a total of 1,932 hours. The total social contribution costs, including donations, are about 130 million won (720,000 yuan). For their contribution to local communities, they received the Best Service Organization Prize from the Wuxi Guidance Commission on Building Spiritual Civilization in 2014 and the Ecological Civilization Prize from the Wuxi Environmental Protection Commission in 2015.

#### Social contribution activities of Wuxi FAB, China

Activities	Target and theme	Category	Description
One-to-one sisterhood program	The elderly	Nursing home	<ul style="list-style-type: none"> <li>Regular visits</li> <li>Disinfection and insect-proof activities</li> <li>Cooking with employees</li> </ul>
	Children	Orphanage	<ul style="list-style-type: none"> <li>Helping children with cerebral palsy develop life ability</li> </ul>
		School for the disabled	<ul style="list-style-type: none"> <li>Speaking education for deaf children</li> </ul>
Volunteer Program	Environment	Water protection	<ul style="list-style-type: none"> <li>Promoting the awareness about water protection</li> <li>Cleaning Lihu, Lake Tai</li> <li>Environmental protection of Lake Tai</li> </ul>
Donation	Item donation	Donation to the underprivileged students	<ul style="list-style-type: none"> <li>Donating winter items to school for the disabled</li> </ul>
	Money donation	Development of local communities of China	<ul style="list-style-type: none"> <li>Donating for the development of Wuxi</li> <li>Donation for the development of Korea-China arts</li> <li>Donations to the shops and schools</li> </ul>



A visit to school for the disabled



Donation of winter items to school for the disabled



Promotion of the awareness about environmental protection



Environmental protection of Lake Tai

The background of the page is a solid green color. Overlaid on this are several thin, white, wavy lines that create a sense of motion and depth, resembling a stylized landscape or a series of overlapping planes.

# PERFORMANCE REVIEW





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# QUALITY MANAGEMENT

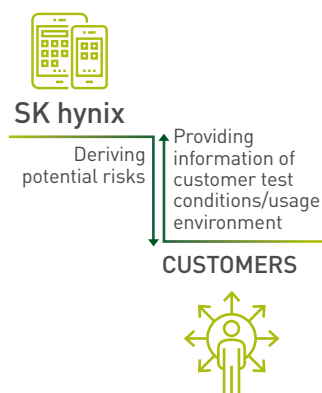
## Quality Innovation for Customer Satisfaction

### Policy and system for quality management

SK hynix continues a company-wide quality management to provide customers with the highest quality of products that surpasses the level required by the customers. We have established a quality improvement process through customer-oriented Quality Intelligence (QI) activities. In addition, we have established high-quality standards using a variety of evaluation methods. We have constructed a quality verification system in response to new types of customer applications. We are endeavoring to secure customer trust by constructing statistical data-based quality analysis infrastructure and an IT system for accident prevention and quality issue detection.

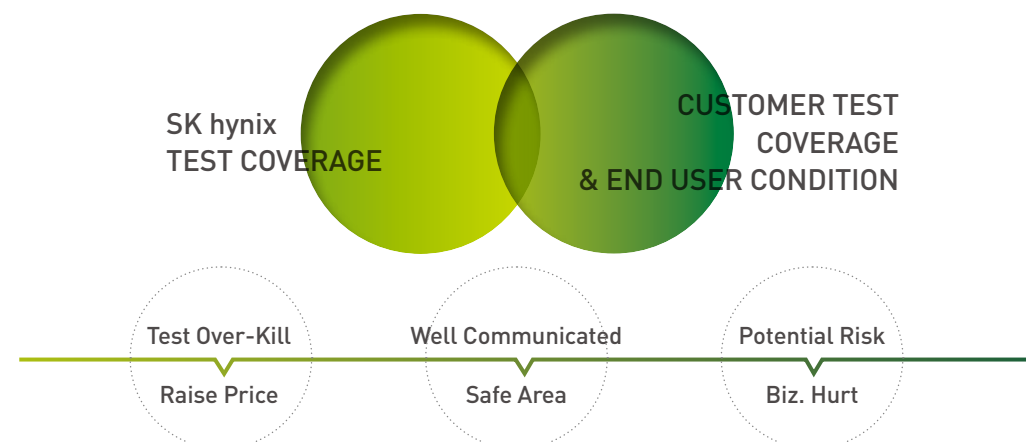


### Reinforcing product stability



### Quality improvement by removing potential risks

SK hynix is conducting various QI activities in order to respond to the changes in a user environment and customer applications and improve quality. After understanding the usage conditions through communication with customers, we conduct a quality risk assessment (QRA). The deducted risks are preemptively reflected to improve quality. We give customers feedback on the verified quality risks. In cooperation with customers, we remove potential field risks for prevention. In addition, we secure VOC (Voice of Customer) every year for customer satisfaction. Based on this, we improve quality and strengthen our support system.



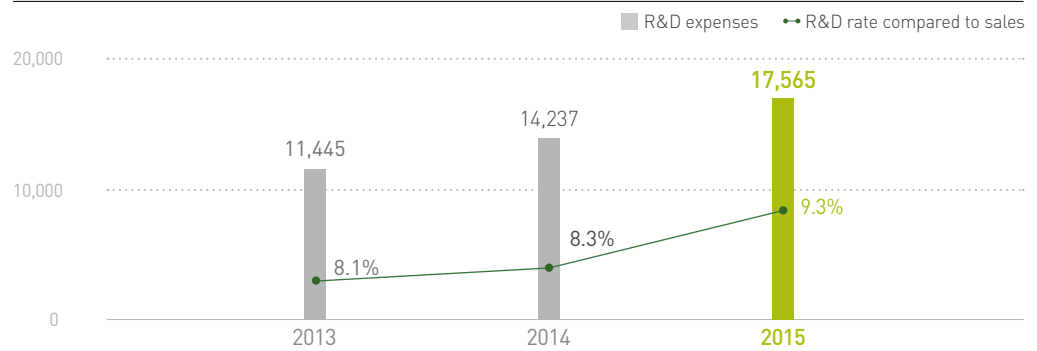
## Technology Innovation

### Strategies for technology innovation

Levels of performance and quality demanded by customers have become more diversified and advanced, and the gap in technology and cost competitiveness between leaders and followers is gradually expanding. Under these circumstances, it has become important to establish technology development strategies based on technological innovation and secure business competitiveness. SK hynix believes that the source of creating corporate competitiveness comes from creative research and development (R&D) performances, so the company strives to establish R&D strategies based on the Future Technology Research Institute. We have checked advanced future technology in various countries by establishing overseas technology centers and introduced the EVA+ (Economic Value Added Plus) Achievement To-be Model to innovate working methods.

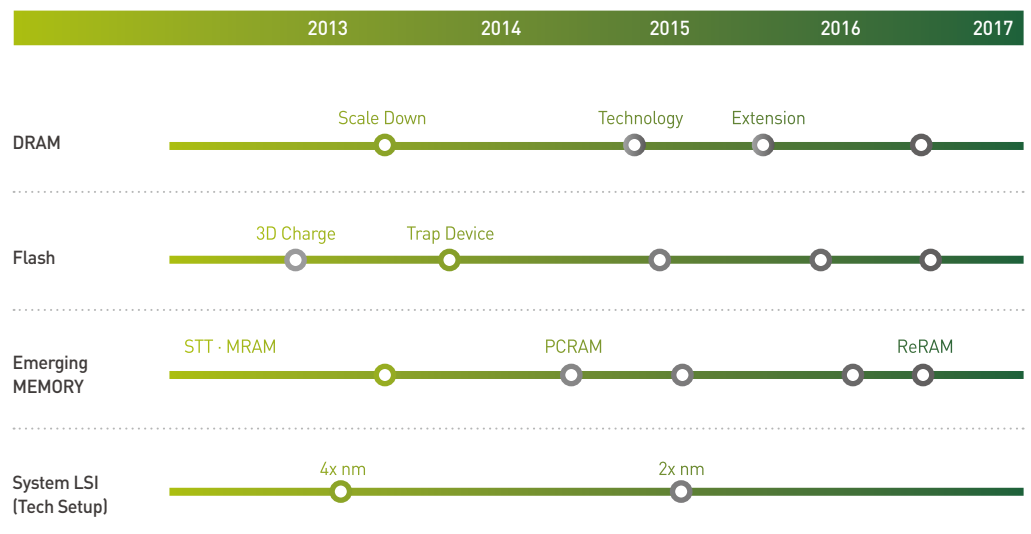
### R&D expenses

(Unit : 100 million won)



### R&D performances

SK hynix has intensively invested in the future semiconductor R&D sector to improve technical skills. With this aim in mind, in 2015, the company made great efforts to develop technical skills by investing 1.7565 trillion won in R&D. We are developing various technologies encompassing precedent studies and product development of memory/non-memory products.



# SUPPLY CHAIN RESPONSIBILITY

## Strategies for Win-win Growth

### Strategies and roadmap for win-win growth

SK hynix expands its win-win growth activities because we value the need to maintain a win-win relationship with suppliers in the memory semiconductor industry. We created a roadmap involving secondary suppliers which included performance-sharing policies, industry innovation 3.0, and win-win growth insurance and then, with this built-in reliability, we pursue win-win growth activities.



### Win-win growth organization

Since 2009, SK hynix has been operating the Win-Win Cooperation Team in charge of managing win-win growth activities under the purchasing division. This team has been strengthening capabilities and building trust between large companies and suppliers. With the aim of transparent operation and maximized effects, the team signed an "Agreement for Win-Win Growth and Fair Trade" with the Fair Trade Commission and has been reporting their compliance activities to the commission every year.

### Performances for the win-win growth in 2015

SK hynix provided a total of 141.4 billion won to its suppliers, and the investments are increasing every year. As part of its policies to strengthen the capabilities of small and medium-sized companies and to narrow the gap between small-sized, medium-sized, and leading companies, we selected several companies for win-win growth and supported them in finance, technology, and management. In addition, we are operating the Win-Win Growth Committee for continuous partnership with the cooperative companies.

### Performances for the win-win growth

Category	Unit	2013	2014	2015
Total amount for supporting the win-win growth <sup>1)</sup>	100 million won	868	1,042	1,414
Number of suppliers agreeing upon the win-win growth	Number	50	55	60
Number of member suppliers for Win-Win Growth Committee	Number	50	50	50

1) Total amount for supporting win-win growth: equipment localization costs + pattern wafer support + costs for Industrial Revolution 3.0 + Semiconductor Fund + loan support costs for Win-Win Growth Fund, Network Loan, and Win-Win Growth Insurance

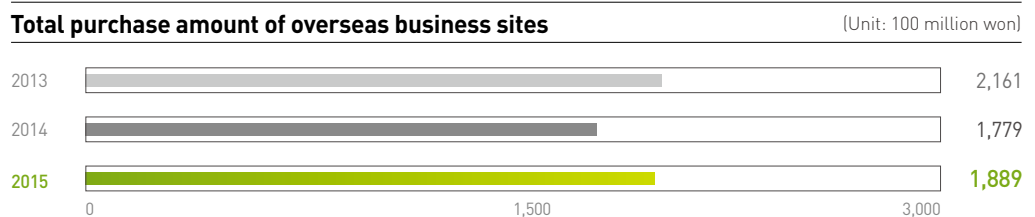
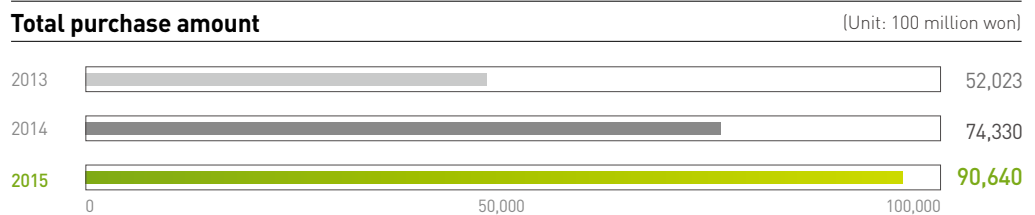
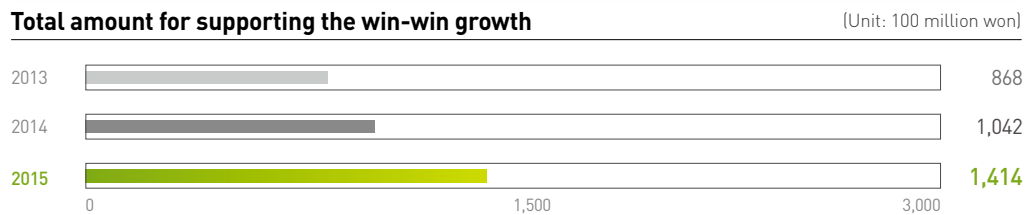
## Current status of suppliers and transactions

SK hynix puts a great deal of efforts to lead win-win growth as a global leader in the semiconductor industry. In 2015, the number of major suppliers dealing with SK hynix was 677. The total amount of purchases from suppliers in 2015 amounted to 9.06 trillion won (Equipment: 39%, Raw materials: 24%, Infra-structure: 21%, and Spare parts: 14%). In addition, we are encouraging the purchase of local products with the aim of sharing corporate performances with the local community.

### Current status of supplier transactions

Category	Unit	2013	2014	2015
Number of suppliers <sup>1)</sup>	Each	590	631	677
Total purchase amount <sup>2)</sup>	100 million won	52,023	74,330	90,640
EQUIPMENT	100 million won	19,105	29,346	35,652
RAW MATERIAL	100 million won	16,977	18,701	21,533
INFRASTRUCTURE	100 million won	5,098	13,936	19,030
SPARE PARTS	100 million won	8,682	10,568	12,536
Purchase amount of overseas business sites <sup>3)</sup>	100 million won	2,161	1,779	1,889

1) The transaction amount of 500 million won and over    2) Excluding IT, outsourced, and security transactions  
3) Based on Wuxi and Chongqing operations





## CSR performances by suppliers

### Social and environmental impact management in the supply chain

SK hynix manages potential risks regarding the sustainability management in the supply chain by assessing human rights, labor, and environmental performances of suppliers, and lays the foundation for sustainable win-win growth. We will keep expanding the target suppliers. Also, we share the "SK hynix Code of Conduct for Suppliers" to impart the duty of the EICC Code of Conduct for spreading the Code to the entire supply chain. We will extend the target of a self-assessment and on-site inspection so that our suppliers can have a sustainability system by complying with the regulations and fulfill their social responsibility. In 2015, we increased the number of suppliers subject to an on-site EICC inspection to 15.

#### Status of impact management in the supply chain

Category		Unit	2013	2014	2015
CSR self-assessment by suppliers	Domestic	Case	0	101	69
	Overseas	Case	0	23	0
Suppliers signing the agreement for compliance with the EICC		Number	1,186	1,278	1,856
Suppliers for on-site due-diligence based on EICC guideline		Number	10	13	15
Rate of suppliers for which human rights and labor performances were assessed		%	2.4	2.4	0.8
Rate of suppliers for which environmental performances were assessed		%	2.4	2.4	0.8

### Strengthening the assessment system for supporting suppliers

For sustainable win-win growth with suppliers, SK hynix is endeavoring to improve their capabilities in quality, technology, reliability, labor, human rights, ethics, and safety/health/environment. To achieve this, we are spreading the EICC and customer standards to our supply network. All suppliers are participating in creating an environment for sustainable win-win cooperation by signing a basic contract agreement and an agreement for compliance with the Code of Conduct every year. To practically improve their capabilities, we select several suppliers every year and provide CSR education, on-site inspections, and verification.

### Social and environmental on-site audit using the EICC tool and consulting for suppliers

In 2015, we evaluated the CSR of 15 major suppliers using the Self Assessment Questionnaire (SAQ) of EICC. After an inspection, we established a CSR consulting plan for the four suppliers that were considered high-risk and 15 suppliers considered as strategically cooperative relationships. Although the consultation was earlier provided by in-house experts, we started providing it via external experts from 2015. Our consulting system applies the SK hynix Code of Conduct that was prepared considering the external evaluation trends and standards. We will continue to help our suppliers find the causes of issues and improve themselves.

## Action on Conflict Minerals

2010-2012 Managing the status of conflict mineral use

2013-2014

- Establishing the integrated management system for conflict minerals
- Establishing the survey system
- Promoting expansion of CFS certification based on smelters

2015-2017 Extending an on-site due-diligence

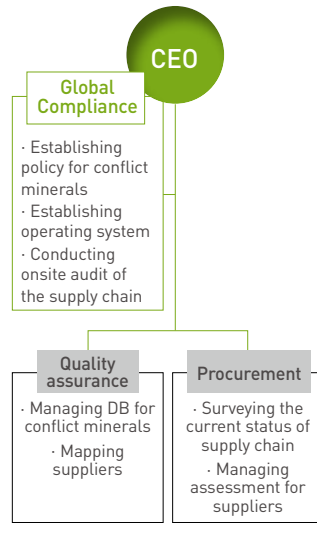
## Policy for dealing with conflict mineral resources

As SK hynix fully understands the social significance in restricting the use of conflict minerals, the company has systemically responded by refusing to use conflict resources in production processes. We have been conducting regular surveys since 2010. In addition, we constructed an integrated conflict mineral management system through the Conflict Mineral TFT's activities conducted till 2014. In 2014, we transferred the tasks of policy establishment and supply network inspection, which were conducted by the Ethics Management Team, to the Compliance Group in order to strengthen the conflict mineral regulation system. From 2015, we have been endeavoring for a transparent report of conflict minerals based on the cooperation between the Purchasing Group, Compliance Group, and QM Group. In 2015, we educated purchasing managers and QM managers with regard to the modifications and regulations according to the 2015 CMRT<sup>1)</sup> revisions. This education is part of our efforts to maintain the professionalism of staff involved in the conflict mineral operation system and to improve work efficiency.

1) Conflict Minerals Reporting Template (CMRT) : A tool to report or collect the information of the place of origin of conflict minerals

### Operating system

[As of 2015]

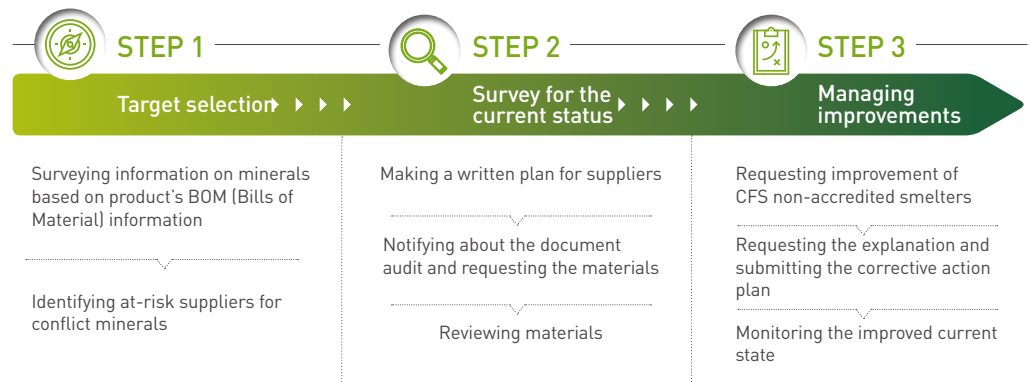


## Due-diligence and consulting

SK hynix selected suppliers requiring monitoring based on a database for information of subsidiary materials to control hazardous substances. As a result of conducting an inspection for the 89 suppliers based on the CFSI<sup>1)</sup> standards, it was found that none of them used raw materials produced in the ten conflict countries including the Democratic Republic of the Congo and the nine countries adjacent to it. As of the date of the inspection, we found some non-CFS-accredited smelters or smelters that were working on CFS<sup>2)</sup>. We recommended the suppliers to conduct business with CFS-certified smelters or the smelters to acquire certification. To spread the proactive restrictions on conflict minerals, we provided consulting and conducted an inspection on the current usage of conflict minerals and the conflict mineral management system of the 15 major suppliers, in cooperation with external agencies. As a result of an inspection, it was found that one of our equipment suppliers received minerals from a smelter located in a conflict area. However, it was found that its products were not supplied to SK hynix. After an inspection, we asked the supplier to establish a conflict mineral management system and to do business with another smelter of the supply network.

1) Conflict Free Sourcing Initiative (CFSI)

2) Conflict Free Smelter (CFS) certification: Certification for smelters that does not use any conflict minerals



## Action on Conflict Minerals

### Improving suppliers' awareness and conducting education

To determine the country of origin for used minerals, a great deal of effort and expenses are spent; since the entire process, from smelter to the supply chain, needs to be inspected and managed. Under these circumstances, SK hynix has found and executed optimal strategies in strengthening cooperation and building better business relationships with suppliers, based on a mutual understanding about the risks of using conflict minerals. Through these efforts, global trends for conflict mineral regulation are being shared through newsletters sent to all suppliers, as well as sharing and conducting education for our operational strategies for conflict minerals. In 2015, we provided consulting to 15 suppliers and will expand education to enhance their awareness on conflict minerals.

### Expanding CFS certification

In 2015, SK hynix conducted a survey to identify the current status of CFS certification for suppliers. We requested them to maintain/renew CFS or acquire certification again. As a result of a survey, it was found that the CFS of some suppliers had expired, and all of them acquired certification again in 2015. In addition, we checked non-certified companies based on the integration and separation data of smelters provided by CFSI. We confirmed that all companies are certified for CFS. In 2016, many new products including HBM2 will be launched and our supply network will change. Therefore, we will keep checking for the use of conflict minerals of the new supply network and expand CFS certification.



## Conflict Minerals

Conflict minerals regulated by the U.S. Securities and Exchange Commission (SEC) refer to four minerals (tin, tantalum, tungsten, and gold) which are mined from conflict areas, including the Democratic Republic of Congo (DRC) and adjacent countries. These countries cause various social issues such as environmental pollution and human rights issues such as violating the human rights of local residents and exploiting labor by the government army or rebels in the process of mining minerals. As the "Dodd-Frank Wall Street Reform and Consumer Protection Act," which includes provisions on regulating conflict minerals, took effect in July 2010, global companies in the electronics industry have been urged to more aggressively respond to these current situations.



# TALENT MANAGEMENT

## Talent Recruiting

SK hynix puts great efforts into achieving employment competitiveness by believing in the philosophy that "people" are the best assets of a company. The company has recently carried out recruitment activities by focusing on the R&D sector to ensure our competitiveness in the future. In addition, it has introduced and continuously supplemented and developed industry-academia programs to educate newly employed manpower over the mid and long-term. As of the end of December 2015, the rate of job creation by SK hynix is 3.4%, and turnover rate is 2.1%.

### Current status of employment

Category	Unit	2013	2014	2015
Rate of job creation <sup>1)</sup>	%	1.6	9.0	3.4
Number of laid off employees <sup>2)</sup>	People	3	1	1
Turnover rate <sup>2)</sup>	%	3.0	2.6	2.1

1) (Number of employees for the year – Number of employees for the previous year)/Number of employees for the previous year\*100

2) Based on domestic market

### Current status of employees

Category	Unit	2013	2014	2015
Number of employees	People	24,683	26,903	27,813
Executives and technical office positions (male)	People	8,124	9,277	9,907
Executives and technical office positions (female)	People	1,888	2,275	2,422
Production employees (male)	People	5,139	5,538	5,725
Production employees (female)	People	9,524	9,791	9,648
Contract employees (male)	People	0	5	22
Contract employees (female)	People	8	17	89
Rate of permanent workers	%	99.9	99.9	99.6
Number of senior employees <sup>1)</sup>	People	28	36	46
Average job duration <sup>2)</sup>	Years	9.3	9.7	10.2

1) People of the age of 55 and over with more than one year of employment

2) Based on headquarters



Current status of employees in each region and overseas recruitment

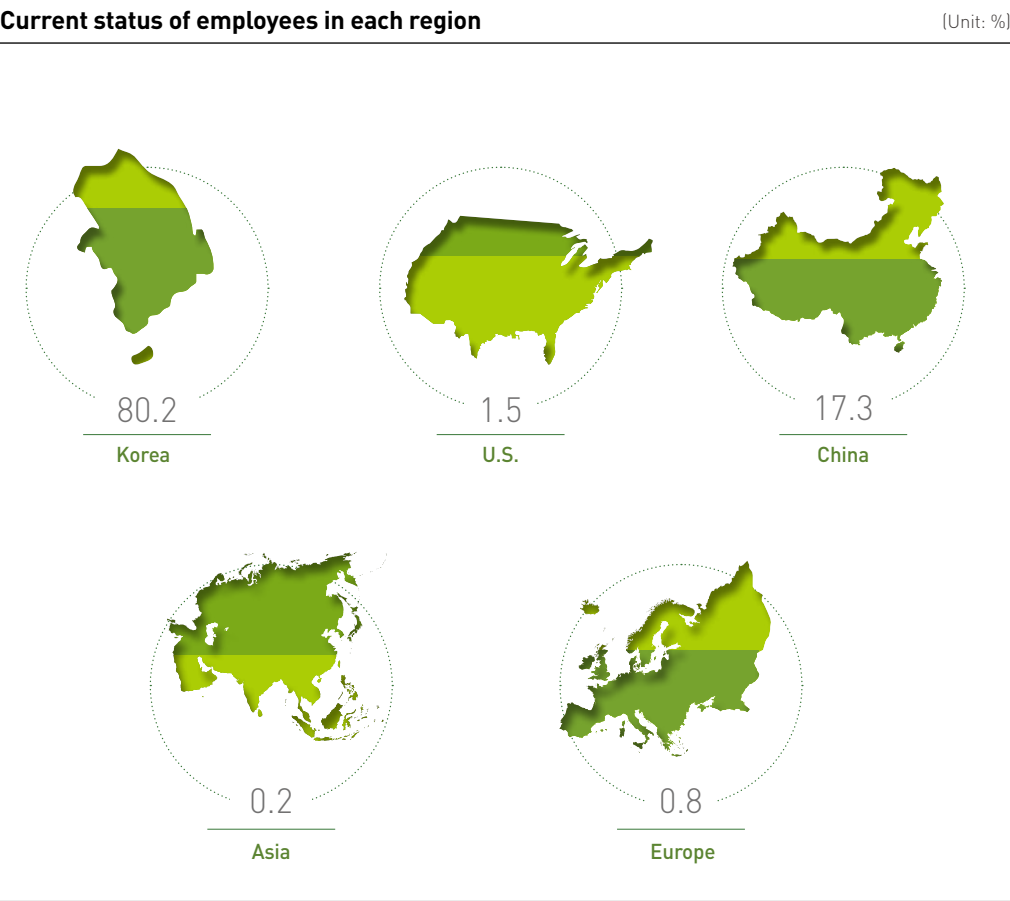
SK hynix has conducted recruitment by utilizing overseas business sites to secure global talents. In particular, with the aim of recruiting talent in the next-generation strategic sectors (SoC/SSD/Mobile), the company has secured core talent by accepting recommendations from external recruitment agencies and employees.

Current status of employees in each region

(Unit: people)

Category	2013	2014	2015
Korea	20,698	21,558	22,291
U.S.	285	395	432
China	3,534	4,693	4,818
Asia <sup>1)</sup>	69	46	47
Europe	97	211	225

1)Excluding Korea, India, Singapore and Japan



## Fostering Talent

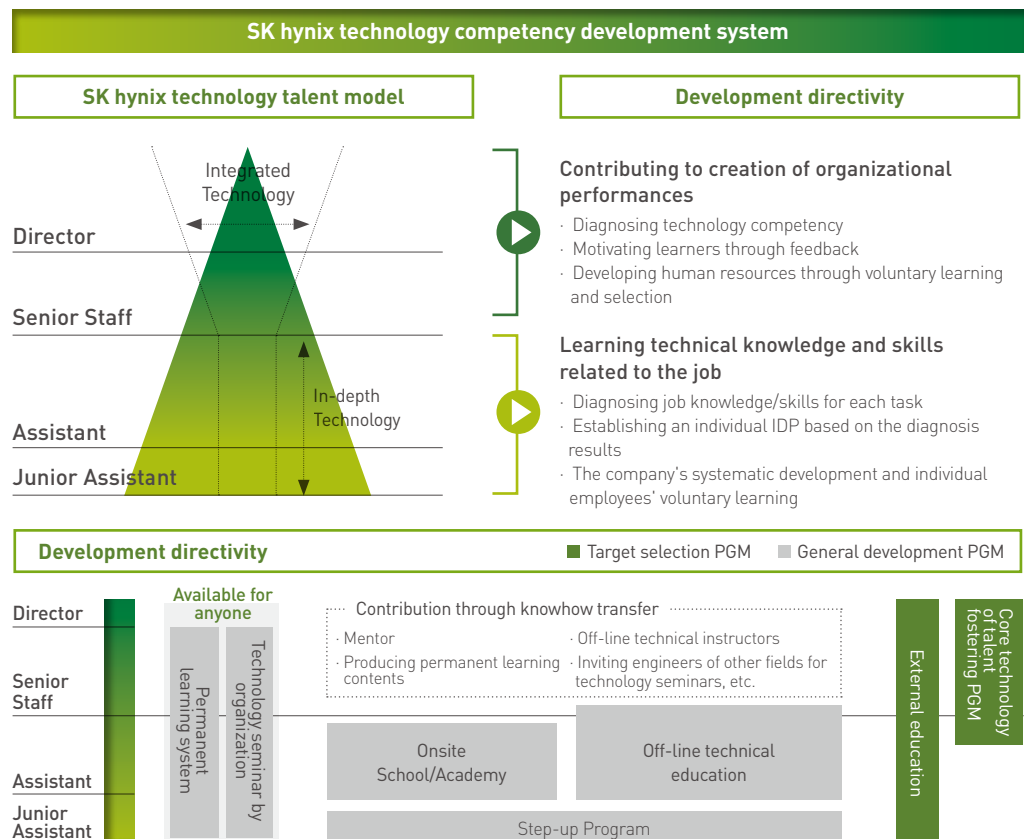
### System for fostering talent

SK hynix has focused on reinforcing basic characteristics of each sector such as leadership, management, and globality from all the way up from leaders down to the employees to adhere the nature of the semiconductor industry. In order to strengthen employees' technology competency, we have reorganized our talent fostering system considering the characteristics of the semiconductor industry and the roles of each position. We encourage our employees in voluntary education so that junior assistants and senior assistants conduct company-centered systematic fostering activities and senior staff and directors can conduct selective education activities. In addition, we are endeavoring to vitalize an on-site fostering program considering technology characteristics, an increasing difficulty in technology, and segmentalized jobs. Furthermore, we are endeavoring to provide various HRD solutions so that employees can study and learn technical knowledge anytime they want.

### Education performance (Based on domestic status)

Category	Unit	2013	2014	2015
Total number of employees for education	People	94,358	161,988	304,200
Hours/person	Hours/person	54	64	58
Investments per person	1,000 won/person	720	920	676

### Technology competency development system

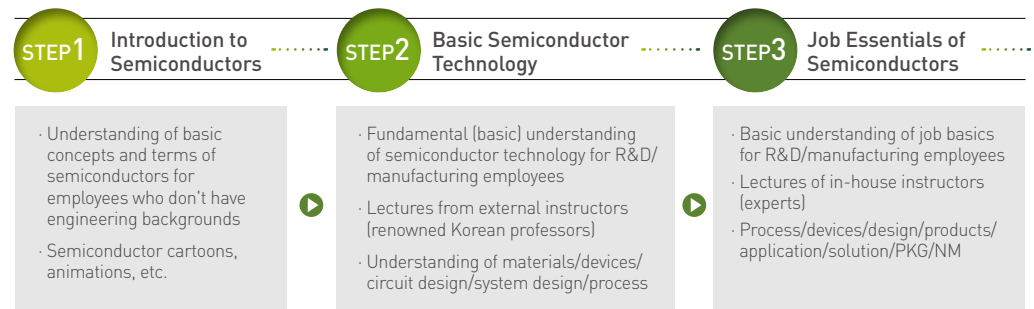


## Reinforcement of Employees' Capabilities

### Developing employees' knowledge in semiconductors by introducing digital contents (Smart Cookie)

To keep up with rapidly developing advanced technology in the semiconductor industry, it is important to develop employees' capabilities. Satisfying the employees' demands for technology education, we developed 20-minute online digital contents (Smart Cookie). We are providing approximately 650 types of contents in three fields: Introduction to Semiconductors, Basic Semiconductor Technology, and Job Essentials of Semiconductors. Since we launched the service in April 2015, 52,000 employees have taken the courses so far. This service will be used for group training, localization of Wuxi FAB, and phased technology transfer from the headquarters. In addition, we will introduce SK Mobile Academy so that our employees can study whatever they need anywhere and at any time. This service has been well received by employees who commute by shuttle bus. The service reached 320,000 log-ins within one year.

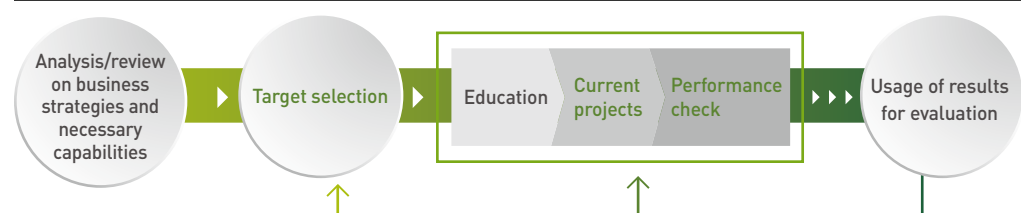
#### Developing 650 smart cookie modules



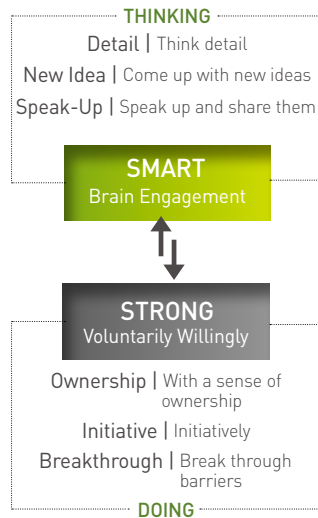
### Opening of the STA (Strategic Tech Academy)

The source of the market competitiveness of the semiconductor industry shifts from process-based technology expansion to higher value-added product development and new markets. Accordingly, we need to secure future technology of flash solutions, mobiles, and system IC based on the preexisting memory business. In addition, we need to develop our capabilities through proper selection of "Make & Buy" and establish a development system after analyzing a gap between the current and goal levels. By deducting the core technology and sectors by strategic fields that require education, we opened the STA, which consists of several project-centered programs. To foster competent human resources that are talented in core technology, a small group is formed of ten employees. The programs are a form of learning that is an extension from routine work. The programs vary from two-week courses to six-month courses. In 2015, the first year of the course, the STA operated with the following goals: development of high-performance products, securing competitiveness in solution products, overcoming the limitations of scaled down technology, and securing of beyond memory readiness. We will continue to expand our educational fields.

#### STA Process



### Working attitudes and behavior in VWBE



### Reinforcing leadership and followership

The powers of execution and strategies have a great effect on the company's overall performance. As many companies have similar level of strategies, performance depends on the company's power of execution. The power of execution rests with the leadership of a leader and the followership of members. SK hynix is aiming to develop the power of execution by strengthening their leadership and followership capabilities. To achieve this, all employees will have an attitude of VWBE (Voluntarily Willingly, Brain Engagement) and practice "Smart & Persistent" management.

### Strengthening leadership of supervisors

SK hynix's leaders have started practicing "Smart & Persistent" management. Under the assumption that "Once a leader changes, the employees will also follow suit," SK hynix is promoting changes through the leadership of leaders. By establishing four virtues in leadership, we are raising the expected level of leadership, from part leaders to team leader, team leaders to executives such as the director of the group or head office, and executives to the CEO. In particular, we tried to increase the influence of leaders on employees and share our strategies by holding workshops by rank (executives, team leaders, section managers, etc.) and conducting leadership programs, in order to reinforce the leadership of managers. In addition, we listened to the opinions of employees regarding managers through leadership diagnosis. Through leadership diagnosis, we analyzed the gap between the leadership levels of the participant and other employees and help him/her realize what he/she needs to develop leadership.

### CbA (Challenging but Achievable) Leadership

#### Pursuing perfection in work

Presenting high and ambitious goals

#### Taking Initiative in Leadership

Consistency in words and behavior

Leading by himself or herself

Taking initiative with sincerity



### Why Leadership

#### Developing understanding in background/purpose of jobs

Presenting the direction from a big picture perspective  
Making efforts to develop understanding for jobs and expectations

#### Two-way Leadership

Communication with employees respecting their opinions

With consideration Promoting communication with employees

### Followership of employees

#### CbA Followership

Aiming for the best standards

- Setting high goals and standards for dealing with jobs by oneself
- Overcoming limitations to succeed in work

#### Two-way Followership

Constructive communication in all directions

- Thinking from and understanding the perspective of leaders and other people
- Expressing one's own proactive opinions first

#### Taking an Initiative Followership

Executing tasks first for oneself

- Changing and improving conditions from one's own position
- Relating with and engaging in situations proactively

### Realizing followership of employees

SK hynix recognizes that company performance can be significantly affected depending on the kind of "followership" that the majority of the employees (followers) follow in the semiconductor industry, which tends to undergo numerous changes. In consideration of this, the company is enhancing creativity of employees and execution power and reinforcing followership by conducting workshops to create continuous performance and enact improvements to realize the "Smart & Persistent" standard. Through this workshop, employees have become aware of the necessity of "VWBE (Voluntarily Willingly Brain Engagement) Followership," and based on these changes, three kinds of followership have been established.

### Expanding leadership education for production workers

The company conducted "company-wide workshops for departmental and team leaders" to help them more effectively carry out their roles as leaders. SK hynix also defined roles and implementation measures to develop stronger mindsets and better work environments as on-site leaders, as well as shared the current state of company management.



## Fair Compensation Upon Performance

### Performance management system

SK hynix suggests objectives related to the corporation's strategic directions, conducts a fair evaluation, and provides compensation to employees accordingly. e-HR, a new performance management system, was developed in 2013 and has been in operation ever since. e-HR maximizes the performance of the organization by connecting performance goals to the individual and organizational level. Constant coaching and communication were conducted to achieve goals and systemic support is provided to ensure a fair evaluation.

### Fair performance evaluation

General evaluations are given yearly for technical office positions to clearly judge individual job performance. To ensure a fair evaluation, a general evaluation is composed of a half-yearly or quarterly job performance assessment, an annual capability assessment, and a ranking assessment by employees. The performance evaluation is given to the production employees and technical office positions under Level 5. Ten indicators including job-related knowledge, drive, and communication skills are used to evaluate individual abilities, and the evaluation results are reflected in the promotion process.

### Reasonable compensation for performance

SK hynix provides reasonable compensation depending on the results of performance of employees without any unfair discrimination based on gender, education, or religion. With regards to individual compensation, performance evaluation determines basic wage increase depending on assessment rankings and it also applies different levels of additional compensation. PI (Productivity Incentive) and PS (Profit Sharing) are awarded in addition to individual salaries. PS is commensurate with individual evaluations in order to place emphasis on performance. On the other hand, the average wage of the newly hired production employee is 210% of the minimum legal wage and is paid equally, regardless of gender.

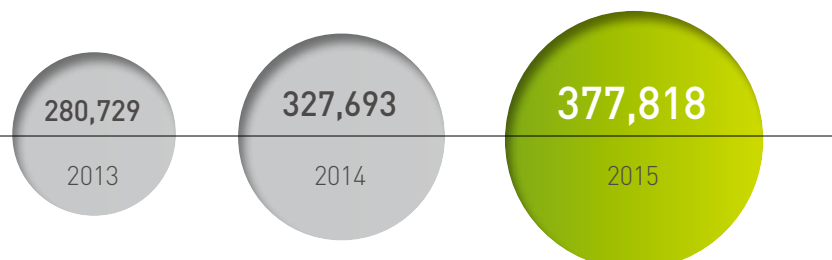
## Corporate Culture

### Welfare benefits for employees

With the belief that "Creating the best performance should begin with the satisfaction of employees as internal customers," SK hynix provides various welfare systems to allow employees to have a stable and leisurely life, such as support for living stability, work convenience and recreation. The company operates Hywel, a welfare portal by SK hynix for selective welfare, to encourage employees to receive benefits from the company's welfare system conveniently and use various welfare contents through points. In addition, we provide Agricultural Product Points so that employees can purchase eco-friendly agricultural products.

Welfare  
expenses

(Unit: 1 million won)



## SK hynix's welfare programs

### Support for life and safety



SK hynix largely divides employee's household expenses into family events expenses, medical expenses, educational expenses, and private pension. We provide expenses when a family event occurs and also for funeral items and necessary manpower for a funeral. We also provide medical expenses for employees and their families. In addition, we provide all educational expenses until a child graduates college (Educational expenses in Korea). In addition, we support private pension for employees.

#### For Family Events (Expenses, Holidays, and Flowers)

Payment for family events and holidays where family events occur

#### Funeral Support Service

Support by way of funeral expenses and goods for condolences

#### Medical expenses

Support of medical expenses for employees, spouses, and family

#### Medical Checkup

Medical checkup system operated for employees and their families

#### Tuition Support

Support of tuition fees for children's middle, high school and college  
Payment of congratulatory money when children enter kindergarten, elementary, middle and high school

#### Private Pension

Assistance in individual pension and insurance payments for stable retirement

#### Award for long-term employment

Payment of prize money and vacation for employees with five years' of continuous employment, every five years

#### Support system for disaster recovery

Support by way of expenses to members of families upon the occurrence of a disaster

### Support for stable livelihood and work convenience



To ease the discomfort of employees, we operate shuttle buses between metropolitan areas, Icheon Campus, and Cheongju Campus. In addition, we provide dormitories and corporate housing and operate cafeterias for free. Furthermore, we are operating a wide range of health care facilities, sports facilities, and convenience facilities including an in-house clinic, dental clinic, physiotherapy clinic, gym, wedding hall, shopping mall, bank, etc.

### Support for recreation



We are operating various recreation support systems so that employees can get enough rest through leisure activities. In a partnership with resorts and theme parks, our employees can use various recreational facilities at reasonable prices. In addition, the in-house travel helpdesk provides travel information and services.

### Support for hobbies



SK hynix In-house Culture Center provides various programs for employees and their families in order to satisfy their needs for culture and develop their knowledge. About 40 in-house clubs are operating autonomously, and we are providing generous support to their ongoing activities.

### Counseling



We are operating the legal information center and the tax affairs information center to help employees with their legal and tax issues. In the legal information center or the tax affairs information center, employees can receive advice on their legal or tax issues. In addition, the wedding counseling center provides single employees with information on weddings and helps them to economically plan for their wedding ceremony.

## Corporate Culture

### Retirement pension

SK hynix operates the Defined Benefit (DB)<sup>1)</sup> retirement pension system to help employees prepare for a stable income after their retirement. As of the end of 2015, a total of 546.1 billion won is being handled.

1) DB: As Defined Benefit retirement pension, it is a system where retirement benefits, which are received at the time of retirement, are determined in advance by working institution and average wage.

#### Current status of retirement pension

(As of the end of December 2015)

Category	Unit	DB
Managed expenses	100 million won	5,461
Subscribed employees	People	21, 074

### Maternity protection program

SK hynix is operating various maternity protection programs to prevent female employees from stopping their career due to pregnancy and childbirth. The company allows use of available child-care leave for female employees. The "child-care leave automatic switch system" is implemented in connection with maternity leave. Also, when pregnant employees work a shift, they are given a two-hour break and the "DoDami Room" is provided as a special place for them to rest. Postpartum help and discounts in visiting ob/gyn clinic are also available.

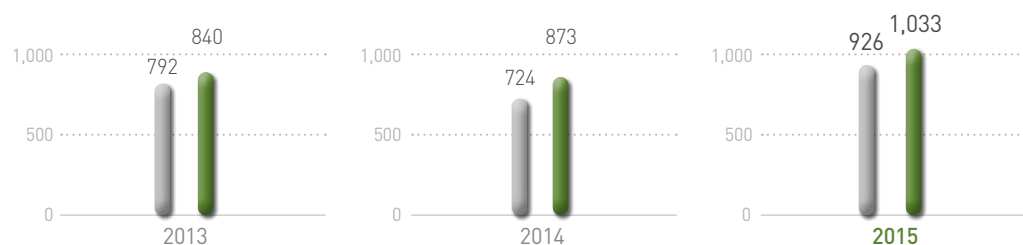
#### Current status of maternity leave and child-care leave

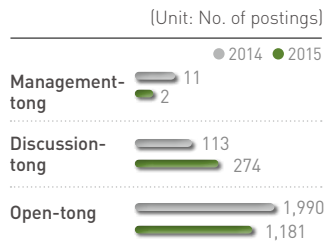
Category	Unit	2013	2014	2015
Rate of returning to work after child-care leave	%	96	95	97
Number of employees using maternity leave	People	792	724	926
Number of employees using child-care leave	People	840	873	1,033
Subsidy for child-care leave	1,000 won	656,720	898,279	623,291
Rate of working for 12 months and more after returning to work	%	95	89	90

#### Number of employees using maternity leave, number of employees using child-care leave

(Unit: people)

● Number of employees using maternity leave ● Number of employees using child-care leave





## Hi-tong



## “Hi-tong” as an in-company anonymous communication website

To encourage smooth communication between employees, SK hynix is operating “Hi-tong” as an in-company anonymous communication website. In 2014, Hi-tong renewed its bulletin boards, including nickname policy revisions, strengthened its anonymity, and improved the real-time management system. After the renewal of the bulletin boards, all suggestions and inquiries are immediately transferred to a relevant division for two-way communication. In Discussion-tong, where employees can freely discuss a theme, the number of postings in 2015 increased by 142% year on year. Hi-tong became an important communication channel that exchanges opinions and improves employee satisfaction and loyalty to the company. We will continue to make efforts to ensure smooth communication between employees.

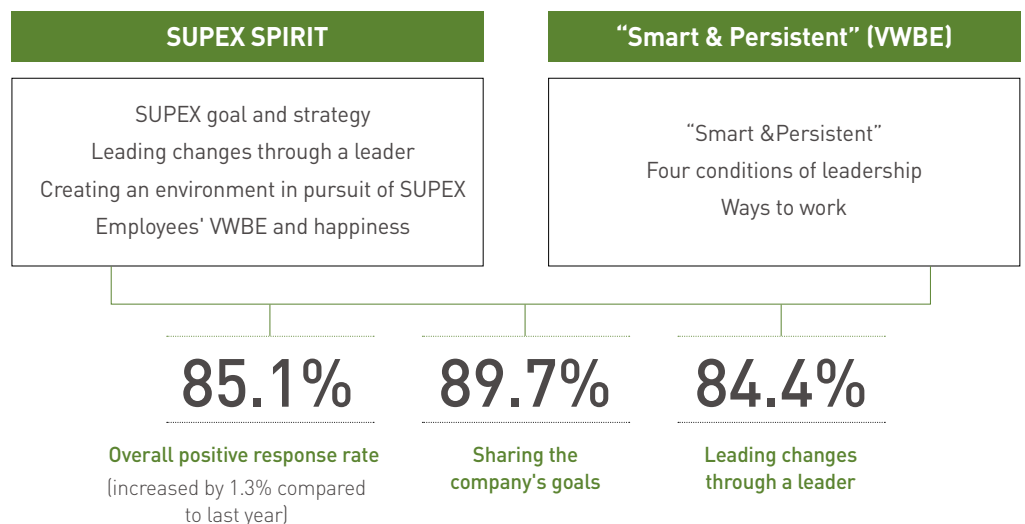
## Operation of the global business center to strengthen global competence

SK hynix’s overseas sales amounts to more than 90% of its total sales. An ability to communicate with foreign partners greatly affects the company’s overall performance. SK hynix is operating the Global Business Center to develop global competencies of employees and provide customized services to divisions responsible for overseas business. Firstly, the Global Business Center is developing the language proficiency of employees through global communication education and customized programs. Its major programs include the intensive language course and the sojourning employee course. Secondly, the Center provides interpretation and translation services for technical documents, presentation materials, and business letters in order to help facilitate smooth communication with foreign partners.

## “SK hynix Culture Survey” for changing an organizational culture

SK hynix conducts the “SK hynix Culture Survey” to derive meaningful results and carry out business in a proper direction while making changes in corporate culture. Through this diagnosis, the current state of “Smart & Persistent” for executing changes is checked, as well as reinforcing SUPEX Spirit and creating a desirable corporate culture by establishing measures for improvement.

### Assessment items for SK hynix Culture Survey



## Corporate Culture

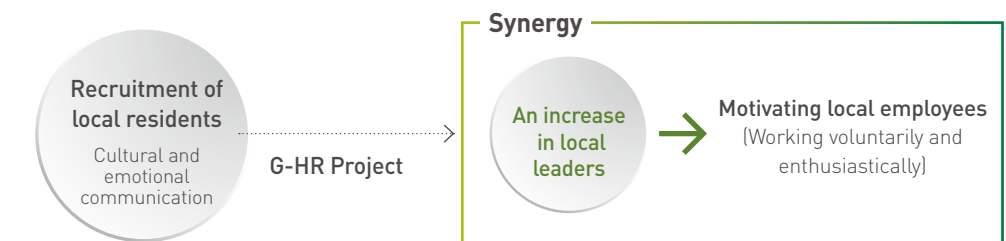
### Operation of junior board

SK hynix has been operating the Junior Board and expanding its roles. Since 2015, it has been used to develop an organizational culture and spread HR partnerships and SKMS. SK hynix is helping the members of the Junior Board play their role as a supporter of the company's systems and policies, and grow as a future leader. In 2015, the Center conducted a GWP questionnaire, collected feedback about reorganization, held a meeting with the Director of the Corporate Culture Division, established an improvement plan of the Future Technology Research Institute, and participated in various business activities. The Center will avidly contribute to improving the company's overall performance.

### Programs to establish local corporate culture

SK hynix established a plan for determining local corporate culture from 2014 to 2016. The company recruits and appoints local people as on-site leaders who are well aware of the local culture and sentiment instead of employees from headquarters. To help local employees develop sufficient leadership capabilities, we carried out the "GHR Project" and made greater efforts in fostering local leaders by making localization plans for each corporate affiliate by 2016. With successful localization, there are high expectations that all employees will carry out their work voluntarily and willingly as they develop greater motivation and have "visions for development." Increasing the number of local leaders is also expected to create a synergy effect. The company will continuously carry out localization by focusing on local leaders, and expand jobs and positions that will be available for localization by 2016.

### Establishment of a local corporate culture



### Operating programs for adapting local culture

To reinforce the adaptability of newly appointed sojourning workers and dispatched employees at the early stage of appointment, SK hynix provides education and local living guidelines that cover the local personnel system and treatment, educational system, housing and visa issuance, industrial security, and ethics management. In addition, we support employees to easily and swiftly obtain an understanding of local conditions through programs that introduce local political, economic, social, and cultural situations.



# HUMAN AND LABOR RIGHTS

## Approach to human rights management

SK hynix established and announced the "Human Rights & Labor Policy of SK hynix" based on people-oriented management. This policy is composed of main text and detailed guidelines. In particular, it states a total of eight major items such as respecting human rights, prohibition of forced labor, prohibition of child labor, labor by underage employees, working hours, wages, prohibition of discrimination, and freedom of association. It has reflected the willingness to implement global standards regarding human rights and labor by encompassing EICC, UN Global Compact and etc. SK hynix has prepared the report in accordance with the UN Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights; Ruggie Framework, the Dhaka Principles for Migration with Dignity, and the UN Guiding Principles Reporting Framework. We are endeavoring to spread advanced human rights and labor policies to our employees, overseas business sites, and suppliers.

## Human rights management inspections

SK hynix conducts human rights management inspections on its suppliers in order to practice human rights management and manage potential risks regarding human rights. In 2015, we conducted human rights management inspections on 15 suppliers in accordance with the EICC VAP. Based on the results of the inspections, the suppliers who received an inspection established an improvement plan and conducted improvement activities. In addition, we will share and spread excellent case studies with other suppliers.

## Inspection procedure



## Employee diversity and prohibition on discrimination

SK hynix prohibits all forms of discrimination on the grounds of gender, educational background, and religion, and respects the diversity of employees. As of 2015, SK hynix has 15,654 male employees accounting for 56.3% and 12,159 female employees accounting for 43.7%. The ratio of female managers is 14.9% this year and continuously growing.

## Employment of social minorities

Category	Unit	2013	2014	2015
Ratio of female	%	46.3	44.9	43.7
Ratio of female managers <sup>1)</sup>	%	14.3	14.9	14.9
Number of employees with disabilities	People	117	120	152

1) (Female managers and above + Female supervisors)/[Company-wide managers and above + Supervisors of production employees]\*100

## Voluntary Employment

SK hynix prohibits all forms of forced labor such as involuntary contracts and slave labor and applied the same principles to its suppliers. We translate local contracts into various languages so that foreign employees can understand it. In addition, we don't retain any IDs and personal documents of our and suppliers' employees. In addition, we respect employees' basic rights including freedom of movement, according to employment regulations.

Recently, the number of foreign workers has been greatly increasing, especially among small and medium-sized suppliers. SK hynix is prohibiting forced labor of foreign workers and complying with the Dhaka Principles for Migration with Dignity. Excessive charges that are incurred during the course of employment of foreign workers may cause various types of forced labor. In the principle of SK hynix, all expenses that are incurred for employing foreign workers should be paid by suppliers and any brokerage fees should not be charged to workers.

## Child and Youth Labor

According to the International Labor Organization (ILO, 2012), 168 million children, accounting for 11% of the total population of children of the world, are engaged in child labor<sup>1)</sup> (child exploitation). Among them, about 7%, corresponding to 12 million children, are working at factories. Due to the dangerous working environment of factories, about 22,000 children are killed every year. Child labor is emerging as a serious international issue.

We strictly prohibit child labor at any stage of production. We do not permit the labor of children younger than the legal age. In our programs including training, we comply with all labor acts and regulations. In case of workers aged under 18, we prohibit any night work and overtime work, which may threaten their health and safety.

In principle, we do not allow any form of child labor throughout our entire supply network. In all production stages of suppliers, any form of labor by children younger than the legal age is not permitted. If any child worker is found, we send the child worker back to his/her home and advise the supplier to provide educational and financial support.

We continue to monitor our suppliers if they have any child workers. As a result of an inspection conducted in 2015, no instances of child labor were found. In addition, we conduct regular inspections to avoid conflict minerals produced by illegal child labor.

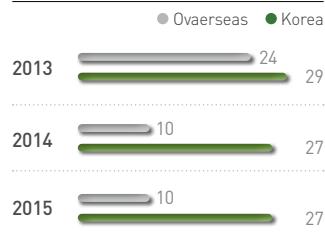
1) The term "child" applies to all persons under the age of 15 years, under the age of completion of compulsory schooling, or the national minimum age for full-time work. (GRI G4 Guidelines)



## Humane Treatment

### Hours of education on prevention of sexual harassment

(Unit: minutes/people)



## Wages and Benefits

### Education on prevention of sexual harassment

SK hynix constructed a sexual harassment report channel in order to strictly respond to and eliminate sexual harassment issues. We increased the number of the in-house report boxes to 47 as an offline channel and newly created an online channel using pop-up windows and banners of the website. The reported sexual harassment cases are thoroughly investigated and disciplinary actions may be taken accordingly.

### Management of security guards in consideration of human rights

To protect the company's assets including business confidential information, SK hynix appoints and places security guards 24-hours a day with a three-group and two-shift system outside business sites and at the entrance of each building. These security guards conduct their jobs in accordance with a security manual based on the company's internal regulations and participate in various education programs such as job, service, industrial safety and sexual harassment on a regular basis in order to improve job skills. Also, the company strives to reinforce capabilities and provide motivation through capability assessments and awards for the best security guards.

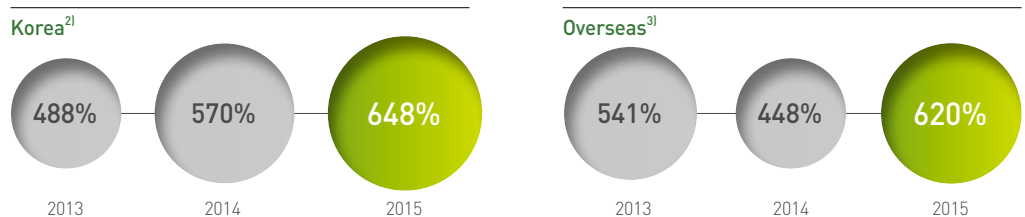
### Wages of employees

According to the World Bank, approximately one billion people in the world are living each day with less than the equivalent of 1,000 won. Extreme poverty destroys basic human rights and leads to a variety of social conflicts. Based on local laws, SK hynix pays statutory wages and provides social security systems and welfare benefits. We pay statutory wages for regular and overtime working hours and retain all evidential documents such as pay slips and other relevant documents. The average wages that SK hynix paid to employees in 2015 are above the statutory minimum wage. The company prohibits the imposition of fines caused by illegal activities, as well as unreasonable wage deduction or reduction. Furthermore, we comply with all tax regulations and laws of the local governments. In 2015, we did not violate any tax laws and regulations.

### Performance evaluation/compensation

SK hynix provides reasonable compensation depending on the results of employees' performance without any unfair discrimination based on gender, education, or religion. With regard to individual compensation, performance evaluation determines basic wage increase depending on assessment rankings and it also applies different levels of additional compensation. In addition, we distribute business performances to our suppliers in various ways such as guaranteeing supply quantity and compensating costs.

### The average wage of employees compared to the statutory minimum wage<sup>1)</sup>



1) Based on monthly pay 2) Icheon and Cheongju Campus 3) Wuxi and Chongqing Campus

## Working Hours

According to the Employment Outlook 2015 of the Organization for Economic Cooperation and Development (OECD), the annual working hours of Korean people are 2,057 hours, which ranks third among all OECD-member countries and 1,796 hours longer than the OECD average. On the other hand, the labor productivity of Korea was \$29.90, 25th among the 34 OECD-member countries (the Korea Productivity Center, 2015). However, its long working hours did not lead to high productivity. Extremely long working hours cause health and safety issues such as overwork, depression, stroke, and heart disease.

SK hynix is establishing proper principles and systems so that employees can work efficiently within limited hours, complying with local labor laws and regulations. We limit the weekly working hours to 60 hours and employees should have at least one day off per week. Our e-HR system informs employees of their regular working hours, overtime-working hours, and overtime allowance. We provide employees with a day off on national holidays, maternity leave, sick leave, and vacation and guarantee a 10-minute break for every 50-minute work. In particular, when pregnant employees work a shift, they are given a two-hour break and the "DoDami Room" is provided as a special place for them to rest. We are endeavoring to reflect employees' requests in management after consultation with the labor union.

### Operation of the flexible working hour system

SK hynix is operating the flexible working hour system so that employees can determine and select their own working hours in consideration of their personal and family situations. Thanks to the flexible working hours system, pregnant employees can adjust their working hours depending on their health conditions. This system helps our employees maintain a balance between work and personal life.

### Working hours

Category	Unit	2013	2014	2015
Annual working hours <sup>1)</sup>	Hour	2,116	2,119	2,028
Average weekly working hours <sup>2)</sup>	Hour	40.7	40.7	39.0
No. of users on a flexible working hour system <sup>3)</sup>	People	122	439	1,667

1) Annual hours of work per employee (Business sites in Korea and China)

2) Weekly average of work hours per employee (52 weeks/year)

3) Focusing workers, pregnant employees, and flextime workers

## Labor-management Relations Based on Coexistence

SK hynix guarantees the three labor rights: the right to organize, the right to bargain collectively, and the right to act collectively. With the spirit of “No Sa Bul Ui (The company and the labor union are intertwined and cooperate with each other.)”, SK hynix has established cooperative labor management relations based on labor-focused principles, mutual trust and respect. Through a smooth communication between the labor union and the company, we are sharing major business issues, legal labor-management issues, and management information. Our labor-management relations based on a spirit of coexistence has continued for 33 years since the foundation.

### The current status of the labor union

Category	Domestic		Overseas
	Icheon	Cheongju	Wuxi
Employees who are eligible to join the labor union (people)	7,208	5,040	3,132
Subscribed employees (people)	7,070	5,010	3,129
Labor union enrollment rate (%)	98.1	99.4	99.9

\* To be established in Chongqing in the second half of 2016

### Labor-management communication

SK hynix is operating various consultation channels to resolve major labor-management issues, handle employees' complaints, and improve their overall welfare. Every year, the labor union holds collective bargaining to determine wage increases and improve working conditions. We have been conducting reasonable and cooperative bargaining, and continuing a non-dispute tradition since our foundation. In the collective bargaining effort that took place in 2015, we discussed the implementation of the win-win wage-sharing program to improve the working conditions for our employees and employees of suppliers. In addition, we created a system to resolve various labor-management issues by systematizing the four-stage labor-management discussion channel.

### Four-stage labor-management discussion channel

Category	Contents
(1st stage) Weekly labor-management meeting	Channel for sharing labor-management issues
(2nd stage) Monthly task division meeting	Handling on-site complaints and delivering management issues and messages
(3rd stage) Quarterly labor-management council	Channel for discussing labor-management issues by business site
(4th stage) Central labor-management council	Channel for discussing company-wide labor-management issues

Based on a spirit of coexistence, our CEOs frequently hold labor-management meetings, such as the Operation Presentation and the Production Performance Presentation. In particular, we introduced the High Level Meeting, which is a labor-management communication channel to share information on internal and external management issues. Based on open communication, we are able to practice open management and transparent management and form a bond of sympathy for social responsibility.

### Labor-Management Meeting

Category	Contents
Production Performance Presentation	Sharing information of monthly production, research, and sales performances
Management Presentation	Sharing quarterly management performances
High Level Meeting	Sharing internal/external management issues

We will extend labor-management communication channels and continue a no-dispute tradition based on our cooperative labor-management relations. Furthermore, we will create cooperative values through our value-creating relations.



# SAFETY, HEALTH AND ENVIRONMENT MANAGEMENT

## Responding to Climate Change

### Governance for coping with climate change

SK hynix operates the SHE Management Committee, the highest decision-making institution with regard to safety and health environment, in response to the rising need for environment management amidst the rapid climate change. The committee discusses and determines important policies and strategies regarding environment management such as responding to the government-led energy target management system and goals for reducing GHG emissions. The SK hynix strives to reduce PFCs emissions, constructs and expands the greenhouse gas inventory, and establishes a mid and long-term roadmap to respond to climate changes and reduce greenhouse gas emissions. Every quarter, we inspect the greenhouse gas reduction goals, review the progress and performances of responses to climate changes, and report the results to our executive branch.

### Risk and opportunities

Using a risk management system, SK hynix identifies risks that pertain to internal/external greenhouse gas regulations, product environmental regulations, low electricity products, GHG emissions, yellow dust and typhoons. We analyze the potential financial losses and the effects of each risk on business activities and establish proper countermeasures. In addition, using the Environment Safety Integrated System, we manage and assess risks in operating facilities and assets with regards to climate change.

Category	Risk factors	Opportunities	Response of SK hynix
Emission trading system	If greenhouse gas reduction costs are charged on an electricity bill in the power generation field, an increase in costs is expected due to a raise in electricity billing. According to the duty to report greenhouse gas emissions (submission), greenhouse gas inventory should be created every year and verified by a third party.	If we secure greenhouse gas reduction technology (increasing energy efficiency), we may generate extra profits by securing emission rights.	<ul style="list-style-type: none"> <li>· Building and verifying the greenhouse gas inventory</li> <li>· Developing greenhouse gas measurement technology</li> <li>· Developing greenhouse gas/energy reduction items (TF activities)</li> <li>· Managing Energy Management System ISO50001</li> </ul>
Fuel/energy taxes and regulations	If governmental regulations on energy materialize, SK hynix's energy costs required to produce semiconductors which use a huge amount of energy (including electricity) will greatly increase.	If low-power semiconductor production facilities are developed and supplied, power consumption of production FAB, which accounts for a majority of the total power consumption of the company, will decrease.	<ul style="list-style-type: none"> <li>· Carbon labeling &amp; Environmental declaration of products</li> <li>· Eco-efficiency</li> <li>· CO<sub>2</sub> Calculator</li> </ul>
Product labeling regulations/standards	If we don't meet the customer's product certification standards, we will not be able to sell the products to a customer or it will be delayed.	If we develop future technology that meets product efficiency regulations, we may preoccupy the market and increase sales profits.	<ul style="list-style-type: none"> <li>· Strengthening cooperative operation</li> <li>· Providing integrity education to employees</li> <li>· Strengthening the non-memory business (developing CIS products)</li> </ul>
Abnormal climate	The likelihood of loss in sales will increase due to product quality issues and an increase in problems with precise equipment used for semiconductor production.	As uncertainty and complexity increase due to abnormal climate, the sales from non-memory semiconductors are expected to increase.	<ul style="list-style-type: none"> <li>· Central monitor equipped with uninterruptible power supplies</li> <li>· Introducing the ring system and strengthening the audit system</li> <li>· Creating a double track power system</li> </ul>
Abnormal climate change and resource depletion	In the event that a typhoon causes a blackout, it may lead to serious damages (disuse, decreasing production yield, etc.) on products and generate direct and indirect losses.	A possibility of creating profits using the RPS system regarding new and renewable energy promotion policies	<ul style="list-style-type: none"> <li>· Developing high-performance and low-power products, planning products, and improving the supply network management process</li> </ul>
Changes in customer behavior	If we don't supply low-power products (requiring advanced technology) to customers, it will cause delay in sales and our market share will decrease.	Expecting an increase in sales and the market share resulting from a proper response and preoccupation of low-power products	
Corporate reputation	According to the results of a sustainability evaluation (an important guideline for investments) regarding a response to climate change, the market share and share prices may fall.	According to the results of a sustainability evaluation (an important guideline for investments) regarding a response to climate change, the market share and share prices may increase.	<ul style="list-style-type: none"> <li>· Expanding communication channels with stakeholders</li> </ul>

## An analysis on greenhouse gas emissions

SK hynix's greenhouse gas emissions are increasing every year, despite its consistent efforts. As more high-performance and high-integration products are being developed, lightness, thinness, shortness, and compactness grow in importance. In addition, as more state-of-the-art products are being produced and energy-guzzling production equipment are applied for nano fabrication technology, the number of processes increases. Indirect greenhouse gas emissions account for a greater percentage of the total emissions than direct emissions.

### GHG emissions

(Unit: tCO<sub>2</sub>eq)

Category		2013	2014	2015
Korea	Total	3,432,697	3,770,180	4,142,085
	Scope 1	1,028,478	1,233,789	1,280,212
	Scope 2	1,838,372	1,975,772	2,187,572
	Scope 3	565,847	560,619	674,301
Overseas	Total	1,053,424	1,176,691	1,255,113
	Scope 1	322,972	411,178	445,318
	Scope 2	730,452	765,513	809,795

### GHG emissions per basic unit

(Unit: tCO<sub>2</sub>eq/m<sup>2</sup>)

Category		2013	2014	2015
Korea	Scope 1	3.58	4.21	3.98
	Scope 2	6.40	6.74	6.83
Overseas	Scope 1	2.74	3.41	3.63
	Scope 2	6.20	6.35	6.60

### Energy use

(Unit: TOE)

Category		2013	2014	2015
Korea	Total	930,356	995,936	1,101,881
	LNG	28,879	26,728	26,577
	Electricity	859,399	933,341	1,035,632
	Steam	42,078	35,867	39,672
Overseas	Total	232,969	242,958	252,261
	LNG	2,496	3,072	3,135
	Total	210,794	221,802	229,454
	Steam	19,679	18,084	19,672

### Energy use per basic unit

(Unit: TOE/m<sup>2</sup>)

Category		2013	2014	2015
Korea	Total	3.24	3.71	3.41
	LNG	0.1	0.1	0.08
	Electricity	2.99	3.48	3.21
	Steam	0.15	0.13	0.12
Overseas	Total	2.43	2.09	2.06
	LNG	0.03	0.03	0.03
	Electricity	2.2	1.9	1.87
	Steam	0.21	0.16	0.16

\*Domestically includes Icheon Campus and Cheongju Campus and overseas includes Wuxi Campus.

## Water Resource Management

### Water resource risk management

As uncertainty increases due to water shortages, water pollution, and climate change and the growing interest in water risk among stakeholders, water risk management is increasingly becoming important. The semiconductor industry requires a huge amount of industrial water. SK hynix optimizes water use and minimizes water risks by improving its water management capability. In particular, we participated in WRMP<sup>1)</sup> held by the CDP Korea to construct a water risk management framework, strategies, and guidelines. In the second year of WRMP, we quantified water risks and analyzed water risks of domestic and overseas business sites. We are endeavoring to establish a foundation for reflecting water risks in the management decision-making processes.

1) Water Risk Management Program (WRMP): A program for the companies' effective responses to domestic and overseas water regulations and evaluations to prevent water risks and practice sustainability management

### Establishing infrastructure for water resource management

In addition to managing a stable supply of water in the production process, we are monitoring the current status of water resources supplied to SK hynix to minimize the risks with regard to a lack of water resources. In addition, we emphasize the reuse of water resources and the discharge of wastewater by considering not only the value of water supply in the process, but also the impact of discharging wastewater into the ecosystem. We created a water supply cooperation system with K-water in 2011 and signed a contract to supply 20,000 tons of water per day in November 2013. Through mutual cooperation with the local water supply office, we operate an emergency response system to ensure supply of water in case of an emergency.

### Recycling of water resources

SK hynix is conducting water resource saving activities and operating a wastewater reuse system in order to conserve water resources and minimize the discharge of water pollutants. In 2013, we optimized the time for cleaning semiconductor wafers and recycled wastewater in the process. In 2014, we established a system for recycling PKG wastewater (2,000 tons/day). We will continue to expand our wastewater reuse system in stages.

#### Participation in water resource initiative



CDP Water is a global initiative that asks the companies with high water consumption to disclose information on behalf of investors. SK hynix has been dealing with CDP Water since 2012. Through this process, we are disclosing water management information and improving our ability to respond to water risks.

### Water supply and reuse

[Unit: 1,000m<sup>3</sup>]

Category		2013	2014	2015
Water supply	Total	45,654	51,570	56,116
	Icheon	18,181	20,405	22,253
	Cheongju	15,294	17,714	18,945
	Wuxi	12,179	13,451	13,999
	Chongqing	-	-	919
Water reuse	Total	14,297	17,819	17,488
	Icheon	4,683	5,670	5,248
	Cheongju	4,531	6,507	6,047
	Wuxi	5,083	5,642	6,193
	Chongqing	-	-	0
Water reuse rate (Unit: %) <sup>1)</sup>	Total	25.9	28.7	26.4
	Icheon	22.7	24.8	21.7
	Cheongju	24.1	29.9	26.2
	Wuxi	32.1	32.4	33.9
	Chongqing	-	-	0

1) Calculation formula for water reuse rate: Water reuse / (Water reuse + Wastewater discharge)

## System and performances for wastewater management

SK hynix discharges wastewater, in compliance with legal standards. SK hynix has established and operated Tele Monitoring System (TMS), which can identify the concentration of pollutants in discharging wastewater on a real-time basis. Also, the company discloses information on wastewater treatment in a transparent manner by sending information on pollutants in discharged wastewater on a real-time basis through TMS to the Korea's Ministry of Environment. The company discharges generated wastewater by separating it based on pollution characteristics and processing it at each appropriate wastewater treatment facility. As company standards, which are 50-80% stricter than legal standards, are applied to discharged wastewater, SK hynix strives to preserve the environment for the discharging stream.

### Wastewater

Category	Unit	2013	2014	2015
Wastewater	Total amount of wastewater	40,941	44,227	48,857
	Icheon	15,930	17,183	19,086
	Cheongju	14,268	15,288	17,075
	Wuxi	10,743	11,756	12,051
	Chongqing	-	-	645
Wastewater per basic unit	Total	7.9	7.1	7.3
	Korea	8.0	7.1	7.3
	Overseas	7.6	7.1	7.2

\*Domestically includes Icheon Campus and Cheongju Campus and overseas includes Wuxi Campus and Chongqing Campus. (Including Chongqing Campus from 2015)

### Current status of water quality management at each business site

(Unit: mg/l)

Category		2013	2014	2015
Chemical Oxygen Demand (COD)	Icheon	4.3	4.2	4.1
	Cheongju	4.8	5.2	6.5
	Wuxi	27.1	14.2	11.0
	Chongqing	-	-	12.7
Biochemical Oxygen Demand (BOD)	Icheon	3.6	3.8	2.5
	Cheongju	7.6	4.6	6.2
	Wuxi	9.2	13.8	9.0
	Chongqing	-	-	2.9
Total nitrogen (T-N)	Icheon	20.9	20.0	18.7
	Cheongju	16.7	16.0	19.2
	Wuxi	30.6	9.8	11.2
	Chongqing	-	-	1.9
Fluorine (F) <sup>1)</sup>	Icheon	1.0	1.2	0.7
	Cheongju	7.2	7.4	7.2
	Wuxi	4.8	4.7	4.3

1) Chongqing does not have fluorine concentration measurement results because it does not have fluorine discharge sources.

## Air Quality Management

### System for managing air pollutant emissions

SK hynix conducts real-time monitoring activities for overall complex odor and air pollutants to prevent secondary damages in advance due to emission of air pollutants from business sites. In 2015, we found the causes of odors and took proper action to remove them by using a odor monitoring system. Through accredited measurement companies, the company examines internal and external air pollutants and optimizes processing efficiency in the last stage of the prevention facilities.

### Reducing the amount of air pollutant emissions

In its earnest efforts to realize a completely clean workplace, SK hynix has achieved a reduction in the amount of fluorine compounds, the leading pollutant in the semiconductor industry. In 2015, the annual emission of fluorine compounds from the Icheon and Cheongju Campus amounted to 9.5 tons, a remarkable reduction of 17% compared to 2014 (11.4 tons). To ensure continuous reduction in the emissions of fluoride compounds, the company established guidelines for monitoring and SK hynix is operating the total quantity system of fluoride compound discharge at each site based on its fluoride compound discharge monitoring system and management standards. In addition, we have replaced outdated prevention facilities including the multi-stage treatment system and maximized treatment efficiency through precise management of the last stage of the prevention facilities.

#### Air pollutant emissions per basic unit: Icheon

(Unit: g/cm<sup>2</sup>)

Category	2013	2014	2015
SOx	0.007	0.005	0.005
NH <sub>3</sub>	0.006	0.005	0.005
NOx	0.023	0.037	0.032
HF	0.007	0.006	0.004
HCl	0.003	0.001	0.002

#### Air pollutant emissions per basic unit: Cheongju

(Unit: g/cm<sup>2</sup>)

Category	2013	2014	2015
SOx	0	0.002	0
NH <sub>3</sub>	0.002	0.003	0.004
HF	0.003	0.003	0.003

#### Air pollutant emissions per basic unit: Wuxi

(Unit: g/cm<sup>2</sup>)

Category	2013	2014	2015
SOx	0.002	0.001	0.001
NH <sub>3</sub>	0.008	0.005	0.001
NOx	0.001	0.001	0.0001
HF	0.002	0.003	0.0005
HCl	0.012	0.005	0.002

#### Air pollutant emissions concentrations: Chongqing

(Unit: mg/m<sup>3</sup>)

Category	2013	2014	2015
SOx	-	-	22.0
NOx	-	-	70.3
HF	-	-	1.6
HCl	-	-	9.6

\* Unit-based calculation is not possible for Chongqing Assembly & Test Site which is a post-processing site. The Plant commenced operations in 2015.



## Resource Use and Waste Management

### Activities to reduce waste generation

SK hynix manages waste generated in each process depending on its treatment methods. We have achieved 94% in domestic reuse rate. In 2015, there was no major violation case<sup>1)</sup> regarding waste. In addition, we conduct follow-up assessment and provide education on a regular basis for waste processing companies to deal with waste in a transparent and legal manner. The total amount of waste has slightly increased compared to 2014, due to an increase in construction waste and metal waste (general waste) as M14 was newly established.

1) A major violation case refers to a legal violation case which causes social and environmental issues in the management process and was levied 10,000 U.S. dollars or more in penalties

#### Resource utilization

(Unit: 1 million won)

Category	2013	2014	2015
Total amount of raw materials used	3,137,653	3,286,339	3,953,565
Wafer <sup>1)</sup>	474,310	418,717	409,078
Lead Frame & Substrate <sup>1)</sup>	151,105	179,535	221,538
PCB <sup>1)</sup>	118,213	123,286	139,940
Others <sup>1)</sup>	1,197,617	1,260,828	1,635,075
S/P, minor materials <sup>2)</sup>	1,196,408	1,303,973	1,547,934

1) Raw materials 2) Storage products

#### Utilization ratio of recyclable materials

(Unit: %)

Category	2013	2014	2015
300mm	3.0	4.0	2.8
200mm	1.7	5.0	1.9

#### Current status of domestic waste

Category	Unit	2013	2014	2015
Total amount of generated waste	ton	121,652	114,945	142,345
General waste	ton	65,384	48,582	75,490
Designated waste	ton	56,268	66,363	66,855
Recycled waste	ton	117,150	110,776	134,162
Recycling rate	%	96	96	94

#### Current status of overseas waste

Category	Unit	2013	2014	2015
Total amount of generated waste	ton	33,801	43,509	46,761
General waste	ton	9,577	17,704	18,812
Designated waste	ton	24,224	25,805	27,949
Recycled waste	ton	23,780	30,089	27,772
Recycling rate	%	70	69	59

\* 2015 waste generation data: Including Chongqing Campus

## Current Status of Safety and Health Management

### Industrial Safety and Health Committee

SK hynix has formed the Industrial Safety and Health Committee to prevent risks and health hazards for employees at business sites. The Committee, consisting of the same number of members from the labor union and the company of ten or less members including the representatives of the labor union and the company, discusses important issues regarding industrial safety and health. A quarterly plenary meeting is held at Icheon Campus and Cheongju Campus. We improve the safety and health environment for employees by holding a separate subcommittee. In 2015, the Committee conducted musculoskeletal disease prevention activities by improving safety protective equipment and manufacturing processes.

### Operating a system for preventing human error

SK hynix has operated a human error prevention system to prevent accidents, which are caused by unsafe activities by employees. We have drawn and supplemented activity items by organizing TF at the PKG production sector and established and applied SHFG (SK hynix Human Factors Guideline) as a guideline for personnel factors at business sites. In addition, we have applied the Behavior Based Safety (BBS) Program to semiconductor equipment technology and reflected it in the work standards. We are monitoring the procedures when supervising work.

### Smart management system

In order to prevent fires and extinguish them at the outset through efficient fire-fighting facility management, we are operating the Smart Management System. We are maintaining safe fire-fighting facilities by creating a process for checking mobile firefighting facilities and carrying out real-time examinations, searching historical records and data computing management.

### Safety and health system

Based on KOSHA 18001 and OHSAS 18001, SK hynix has been operating the company's safety and health system systematically, and has minimized safety accidents. Through environmental improvements to reinforce on-site safety management and prevent accidents, the company has maintained a safety management system that meets global standards, secured and fostered exemplary specialized manpower for safety and health and conducted practical on-site preventive activities for safety accidents.

### Current status of safety and health performance and accidents

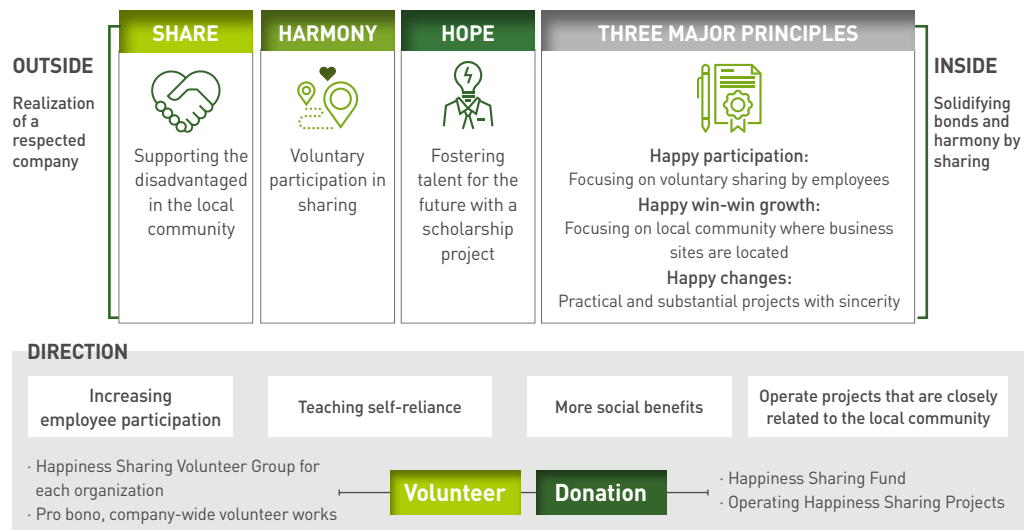
Category	Unit	2013	2014	2015
Number of employees for supporting health check-ups <sup>1)</sup>	People	20,388	24,627	22,903
Expenses for supporting health check-ups	100 million won	35	45	48
Rate of industrial accidents	Icheon	%	0	0.02
	Cheongju	%	0	0.06
	Wuxi	%	0.05	0.03
	Chongqing	%	-	-

as of the date of accidents

## CREATED SOCIAL CAPITAL

### Social Contribution Performances

SK hynix is conducting various social contribution activities such as fostering future talent and volunteer work for coexistence with local communities. With the belief that the development of the local community leads to the continuous development of a company, we are raising funds for the development of the regions where business sites are located. In consideration of our business performances this year, we have increased social contribution investments by as much as three times compared to 2014 in order to fulfill our social responsibilities and duties. In addition, the Happiness Sharing Fund composed of the voluntary participation of employees and the 1-on-1 support of the company, is continuously increasing (2.7 billion won in 2014 → 3 billion won in 2015). Considering the nature of our business, in 2015, we carried out various social contribution activities such as Junior Engineering Class and Creative Robot Olympiad as well as cleaning and environmental purification.



### Current status of participation in volunteer activities by employees (domestic)

Category	Unit	2013	2014	2015
Total hours for participating in volunteer activities	Hour	29,640	19,060	21,114
Number of employees participating in volunteer activities	People	9,210	6,282	5,218
Number of those participating	Number	1,097	890	794
Hours each employee participated in volunteer activities	Hour	1.52	0.90	1.01
Participation rate	%	47	30	25

### Current status of social contribution activities

Category	Unit	2013	2014	2015
Investments for social contribution <sup>1)</sup>	100 million won	44.9	168.9	563.0
Total contributions	100 million won	32	161	546.8
Contributions in cash <sup>2)</sup>	100 million won	8.8	20.9	477.9
Cash value of volunteer activity in working hours <sup>3)</sup>	100 million won	4.2	3.2	3.7
Number of participants in Junior Engineering Class	People	433	461	438

1) Company donations + employees' donations + social contribution budgets    2) Cash donations among the total amount of donations    3) The average hourly wage in 2015: 17,933 won

# APPENDIX



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## Independent Assurance Statement

## 2016 Independent Assurance Statement to SK hynix

### Introduction

We are commissioned to carry out the assurance engagement of the 2016 Sustainability Report (the 'Report') of SK hynix (the 'Company').

### Scope of Assurance

As stated in the Report, the Company is responsible for all content within the Report in respect of the GRI Sustainability Reporting Guidelines. It is the responsibility of the Company's management to establish and maintain appropriate performance management and internal control systems from which the reported sustainability information is derived. Our responsibility is to perform a limited assurance engagement and to express a conclusion on the work performed.

A limited assurance engagement is substantially less in scope than a reasonable assurance engagement, and consequently does not enable us to obtain assurance on all significant matters that we may become aware of in a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance conclusion. This statement has been prepared solely for the Company in accordance with the terms of our engagement. We do not accept or assume responsibility to anyone other than the Company for our work, or for the conclusion we have reached in the assurance report.

### Independence and procedures performed

Our performed the engagement in accordance with Deloitte's independence policies, which cover all of the requirements of the IFAC (International Federation of Accountants Code of Ethics). There were no events or prohibited services provided which could impair that independence and objectivity in the provision of this engagement.

We conducted our engagement based on the International Standard on Assurance Engagements (ISAE) 3000 Assurance Engagements other than Audits or Reviews of Historical Financial information, issued by the International Auditing and Assurance Standards Board, and also AA1000AS(Moderate level, Type1 (Type 2 criteria apply only to the environment, safety and health-Icheon, Cheongju and Wuxi FAB)). The standards require that we comply with applicable ethical requirements, including independence requirements and that we plan and perform the engagement to obtain limited assurance about whether the Report is free from material misstatement.



## Conclusion

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Based on the procedures performed, as described below, nothing has come to our attention to indicate that the Report is not presented fairly, in all material respects, in accordance with the reporting criteria.

## Inclusivity

The Company operates communication channels with key stakeholders and we are not aware of any key stakeholder that has been excluded from dialogue in the Report.

## Materiality

The Company conducts a materiality test in determining material issues and we are not aware of any material aspects concerning its sustainability performance which have been excluded from the Report.

## Responsibility

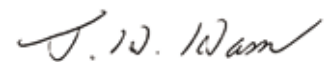
The Company applies reporting scope, boundary and temporal criteria. In terms of criteria mentioned above, we confirm that the Report is suitable for stakeholders to assess sustainability performance.

## Recommendation

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Without prejudice to our conclusions presented above, we believe the following matters can be considered for improved sustainability reporting. We recommended to set quantitative goal and internal & external reporting system for sharing key sustainability goals. In addition, we recommended to improve the internal monitoring process for its key sustainability analysis. Such process shows stakeholders that the Company is systematically and effectively managing sustainability issues.

May 25, 2016  
Deloitte Korea



Representative & CEO | Ham Jong-ho

## Independent Auditor's Report

The Board of Directors and  
Shareholders of SK hynix

February 17, 2016

The auditor has audited the consolidated financial statements of SK hynix Inc. These consolidated financial statements include the current financial statement as of December 31, 2015 and December 31, 2014, the profit and loss statement in the report period which ends at the same period, the change in equity, the cash flow statement, and the summary of significant accounting policy, and other explanatory information.

### Management's Responsibility for the Financial Statements

The management has the responsibility for not only writing these financial statements and marking them fairly, in accordance with K-IFRS, but also dealing with internal control, which is deemed as being necessary in writing the financial statements without significant distortions due to dishonesty and errors.

### Auditor's Responsibility

The auditor is responsible for expressing an opinion for the financial statements based on the executed audit. The auditor implemented audit in accordance with Korea's standard for accounting audits. This standard requires the auditor to comply with ethics requirements, and to plan and execute the audit to ensure reasonable conviction that the financial statements have no significant distortions.

An audit includes execution of procedure to acquire evidence of prices and costs in the financial statements and audit for announcement. Selection of procedure can differ depending on the judgment of an auditor, including assessment of risks for marking significant distortions in the financial statements due to dishonesty and errors. In estimating these risks, the auditor considers internal control with regard to writing the financial statements and marking them fairly by a company to design the appropriate audit process. However, this is not about expressing an opinion for the purpose of internal control. Audit includes not just assessment for overall indication of the financial statements but also appropriateness of accounting policy, which is applied by the management to write the financial statements, and rationality of accounting estimates derived by the management.

The auditor believes that the acquired evidence for the audit is sufficient and appropriate evidence for an opinion on the audit.

### Opinion for Audit

From the viewpoint of the auditor, the company's financial statements fairly denote SK hynix and its subsidiaries' current financial condition as of December 31, 2015 and December 31, 2014, and financial performances and cash flow in the reporting period, which ends on the same day, with the perspective of significance in accordance with K-IFRS.



(27F, Gangnam Finance Center, Yeoksam-dong) 152, Teheran-ro,  
Gangnam-gu, Seoul Samjong KPMG CEO Kim Kyo-tae

\* This audit report is effective as of the day of publishing the report (2/17/2016). In the period from the day of releasing the audit report to when the report is read, incidents or situations that can have a significant impact on the company's attached financial statements may occur and lead to an amendment of this audit report.



## Greenhouse Gas Verification Report

### Scope of Verification

The annual GHG emissions for the 2015 calendar year inclusive. The physical scope is limited within the boundary of Domestic Area for SK hynix Co., Ltd. GHG emissions for Scope 1 (Direct emissions), Scope 2 (Indirect emissions) and partially Scope 3 (Indirect emissions from logistics, waste dispatch & disposal, business trip and employee commuting) as defined in WBCSD/WRI GHG protocol Chapter 4 "Setting Operational Boundaries"

### Data Verified

GHG Emissions for Scope 1 (Direct emissions) and Scope 2 (Indirect emissions) for the 2015 calendar year are as follows.

Category	Business site	Icheon Campus	Cheongju Campus	Seoul Office	Bundang Campus	Sub total
Direct emissions [Scope 1]		294,443	314,101	167	85	608,796
Indirect emissions [Scope 2]		1,156,759	1,027,812	991	2,010	2,187,572
Optional information (used NF <sub>3</sub> )		181,699	489,717	-	-	671,416
<b>Total (tCO<sub>2</sub>e/y)</b>		<b>1,632,901</b>	<b>1,831,630</b>	<b>1,158</b>	<b>2,095</b>	<b>3,467,784</b>

GHG emissions of Scope 3 (Indirect emissions from logistics, waste dispatch & disposal, business trip and employee commuting) for the 2015 calendar year are as shown below.

Category	International transport (export)	International transport (import)	Business trip	Waste treatment	Employee commuting	Total
tCO <sub>2</sub> e/y	46,953	17,528	2,860	597,847	9,113	674,301

### GHG Criteria & Protocols used for Verification

The verification was performed at the request of SK hynix Co., Ltd. using the following:

- GHG-Energy Target Management Operating Guidelines (Act No. 2014-186) - Revised Oct 2014
- The GHG Protocol of the WBCSD/WRI - Revised March 2004
- IPCC Guideline for National Greenhouse Gas Inventories - Revised 2006
- ISO14064 Part 1 & 3 - Issued 2006
- BSI GHGEV Manual (KM007, R 5)

The standard confidentiality principle of BSI Group Korea is applied to all verification activities.

### Verification Opinion

As a result of the verification in accordance with the protocols and the best practices listed above, it is the opinion of BSI that:

- The verification was conducted to provide reasonable verification in accordance with the GHG Energy Target Management Scheme,
- No material misstatements in the GHG emission calculations were detected, related records were maintained appropriately, and
- The data quality was considered corresponding to the international key principles for GHG emissions verification

For and on behalf of BSI: Managing  
Director Issue: 31/03/2015

Managing Director Korea, **JogHo Lee**

# GRI Index

## 1. General index

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	G4-4	Core	The primary brands, products, and services	•	10-15
	G4-5	Core	The location of the organization's headquarters	•	8, 9
	G4-6	Core	The number of countries where the organization operates, and names of countries where either the organization has significant operations or is specifically relevant to the sustainability topics covered in the report	•	8, 9
	G4-7	Core	The nature of ownership and legal form	•	20
	G4-8	Core	The markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries)	•	8-15
	G4-9	Core	Scale of the organizations	•	8, 16, 17, 69
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	G4-19	Core	List of all the material Aspects identified in the process for defining report content	•	30, 31
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	G4-29	Core	Date of most recent previous report (if any)	•	2
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	G4-31	Core	Provide the contact point for questions regarding the report or its contents	•	2
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	G4-35		Report the process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees	•	22
	G4-36		Report whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental and social topics, and whether post holders report directly to the highest governance body	•	22
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	G4-42		Report the highest governance body's and senior executives' roles in the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental and social impacts	•	22
	G4-43		Report the measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental and social topics	•	22
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	G4-49		Report the process for communicating critical concerns to the highest governance body	•	20, 21
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	G4-51		Report the remuneration policies for the highest governance body and senior executives	•	21
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	G4-EN18	Greenhouse gas(GHG) emissions intensity	•	85	6.5.5
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Aspects	Index	Description	The 3rd party's verification	Page	ISO 26000
Equal Remuneration for Women and Men	G4-LA13	Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms	•	81	6.3.7, 6.3.10, 6.4.3, 6.4.4
Supplier Assessment for Labor Practices	G4-LA14	The rate of new suppliers that passed an labor assessment	•	66-68	
	G4-LA15	Significant actual and potential negative impacts and measures for labor practices in the supply chain and actions taken	•	66-68	
Labor Practices Grievance Mechanisms	G4-LA16	Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms	•	25	6.3.6
<b>Human Rights</b>					
Investment	G4-HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	•	25, 81	6.3.5
Non-discrimination	G4-HR3	Total number of incidents of discrimination and corrective actions taken	•	79	6.3.6, 6.3.7, 6.3.10, 6.4.3
Freedom of Association and Bargaining	G4-HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	•	83	6.3.3, 6.3.4, 6.3.5, 6.3.8, 6.3.10, 6.4.5, 6.6.6
Child Labor	G4-HR5	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	•	80	
Forced or Compulsory Labor	G4-HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	•	80	
Security Practices	G4-HR7	Percentage of security personnel trained in the organization's human rights policies or procedures that are relevant to operations	•	81	
Indigenous Rights	G4-HR8	Total number of incidents of violations involving rights of indigenous peoples and actions taken	•	79	6.3.4, 6.3.6, 6.3.7, 6.3.8, 6.6.7, 6.8.3
Assessment	G4-HR9	Total number and percentage of operations that have been subject to human rights reviews or impact assessments	•	66, 79	6.3.3, 6.3.4, 6.3.5
Supplier Human Rights Assessment	G4-HR10	The rate of new suppliers that passed human rights assessment	•	66-68	
	G4-HR11	Significant actual and potential negative human rights impacts in the supply chain and actions taken	•	66-68	
Human Rights Grievance Mechanisms	G4-HR12	Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms	•	25	6.3.6
<b>Society</b>					
Compliance	G4-S08	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations		2015 Business Report, 316,317	4.6
Supplier Assessment for Impacts on Society	G4-S09	The rate of new suppliers that passed a social impact assessment	•	66	
	G4-S010	Significant actual and potential negative impacts on society in the supply chain and actions taken	•	66	
Grievance Mechanisms for Impacts on Society	G4-S011	Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms	•	25	6.3.6, 6.6.1-6.6.2, 6.8.1-6.8.2
<b>Product Responsibility</b>					
Customer Health and Safety	G4-PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes	•	0 cases	4.6, 6.7.1-6.7.2, 6.7.4, 6.7.5, 6.8.8
Product and Service Labeling	G4-PR3	Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant products and services subject to such information requirements	•	44, 45	6.7.1-6.7.2, 6.7.3, 6.7.4, 6.7.5, 6.7.9
	G4-PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcome	•	0 cases	4.6, 6.7.1-6.7.2, 6.7.3, 6.7.4, 6.7.5, 6.7.9
	G4-PR5	Results of surveys measuring customer satisfaction		62	6.7.1-6.7.2, 6.7.6
Marketing Communication	G4-PR6	Sale of banned or disputed products	•	67, 68	
	G4-PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcome	•	0 cases	4.6, 6.7.1-6.7.2, 6.7.3
Customer Privacy	G4-PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	•	25	6.7.1-6.7.2, 6.7.7
Compliance	G4-PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	•	0 cases	4.6, 6.7.1-6.7.2, 6.7.6

## UNGC

SK hynix abides by the ten principles of the UN Global Compact in the areas of human rights, labor, the environment and anti-corruption. We reflect global standards for sustainability management and stand firmly through our will to carry out socially responsible management, to carry out our social responsibility, and our role as a global sustainability management corporate leader representing Korea.

Category	Principle	Major activities	Page
Human Rights	Businesses should support and respect the protection of internationally proclaimed human rights	Approach to human rights management / Ethics management education, education on prevention of sexual harassment, Social and environmental impact management for the supply network / Responses to conflict minerals: Inspection and consulting	25, 66-68, 79, 81
	and make sure that they are not complicit in human rights abuses.	Human rights management: Human rights management inspection / Human rights management: Management of security guards considering human rights	79, 81
Labor	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining through practices such as	Human rights management: Labor-management relations based on coexistence	83
	the elimination of all forms of forced and compulsory labor;	Human rights management: Voluntary employment	80
	the effective abolition of child labor; and	Human rights management: Child and youth labor	80
	the elimination of discrimination in respect of employment and occupation.	Human rights management: Employee diversity and prohibition on discrimination / Talent management: Talent employment / Human rights management: Wages and benefits	69, 70, 79, 81
Environment	Businesses should support a precautionary approach to environmental changes;	Environmental risk management / Climate change crisis and opportunities	27, 84
	undertake initiatives to promote greater environmental responsibility; and	Activities for reducing greenhouse gas and saving energy / Activities for reducing environmental impacts	39, 43, 44, 47-49, 86-89
	encourage the development and diffusion of environmentally friendly technologies.	Activities of overseas business sites for reducing environmental impact / Investment in a safety and health environment	
		Development of eco-friendly and energy-saving products / Reduction of environmental impacts of products	44, 45, 49
Anti-corruption	Businesses should work against corruption in all its forms, including extortion and bribery.	Ethics management / Global compliance	25, 26

## SDGs

SK hynix is endeavoring to achieve the sustainable development goals (SDGs) proposed by the US for the sustainable development of international society. The detailed goals are as shown below. Visit the website (<https://sustainabledevelopment.un.org>) for further information.

no.	SDGs	Activities	Page
Goal 1.	End poverty in all its forms everywhere.	Distribution of economic performances and social contribution activities at overseas business sites	16, 17, 59, 81
Goal 3.	Ensure healthy lives and promote well-being for all at all ages.	Strengthened health management, greenhouse gas reduction and energy saving activities, air environment management, environmental impact reduction, resources use and waste management, water resource conservation, wastewater treatment, and wastewater management system and performances	41, 43, 47, 48, 87-89
Goal 4.	Ensure inclusive and quality education for all, and promote lifelong learning	Sustainability management governance, sustainability management tasks, talent fostering	22, 24, 71
Goal 5.	Achieve gender equality and empower all women and girls.	Maternity protection program, employee diversity, prohibition of discrimination, performance evaluations, and rewards	76, 79, 81
Goal 6.	Ensure access to water and sanitation for all.	Reduction of environmental impacts, biodiversity management, water saving, wastewater treatment, water reuse, wastewater management system and performances, and resource use and waste management	46-48, 86-89
Goal 7.	Ensure access to affordable, reliable, sustainable and modern energy for all	Responding to climate change	43-45
Goal 8.	Promote inclusive and sustainable economic growth, employment and decent work for all	Distribution of economic performances, reinforcement of health management, responses to climate change, development of eco-friendly and energy-saving products, reducing environmental impacts of products, supplier CSR performances, talent employment, talent fostering, maternity protection programs, employee diversity, prohibition of discrimination, performance evaluations and rewards, child/youth labor, voluntary employment, human rights management, resource recirculation activities, and water reuse	16, 17, 41, 43-45, 49, 64-66, 69-71, 76, 79-82, 86, 89
Goal 9.	Build resilient infrastructure, promote sustainable industrialization and foster innovation.	Creation of corporate values through quality innovations, investments in a safe and healthy environment, activities for reducing greenhouse gas and saving energy, reduction of environmental impacts, and customer quality management	34-37, 39, 43, 46-48, 62
Goal 10.	Reduce inequality within and among countries.	Responding to climate change	81
Goal 11.	Make cities inclusive, safe, resilient and sustainable.	Investments in a safe and healthy environment, activities for reducing greenhouse gas and saving energy, and reduction of environmental impacts	39, 43, 46-48
Goal 12.	Ensure sustainable consumption and production patterns.	Investments in a safe and healthy environment, development of eco-friendly and energy-saving products in response to climate change, activities for reducing greenhouse gas and saving energy, reduction of environmental impacts, water saving, wastewater treatment, reducing environmental impacts of products, win-win growth, water reuse, wastewater management system and performances, air environment management, resource recirculation activities, and resource use and waste management	39, 42-45, 46-49, 64-68, 86-89
Goal 13.	Take urgent action to combat climate change and its impact.	Investments in a safe and healthy environment and responses to climate change An analysis on greenhouse gas emissions	43-45, 84, 85
Goal 14.	Conserve and sustainably use the oceans, seas and marine resources.	Investments in a safe and healthy environment and win-win growth	39, 47, 48, 86-87
Goal 15.	Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss.	Investments in a safe and healthy environment, biodiversity management, and win-win growth	39, 48
Goal 16.	Promote just, peaceful and inclusive societies.	Operation of shareholders and the Board of Directors, ethics management, global compliance, "Hi-tong" as an in-company anonymous communication website, employee diversity, prohibition of discrimination, performance evaluations and rewards, child/youth labor, management of safety guards considering human rights, humane treatment, and labor-management relations based on coexistence	20, 21, 25, 26, 77, 79-81, 83
Goal 17.	Revitalize the global partnership for sustainable development.	Investment in a safe and healthy environment	39

## Awards, Recognitions and Association Memberships

### Corporate Award Status

No	Awards and recognitions	Organization	Affiliation	Title		Date
1	Job creation	The Ministry of Employment and Labor	CEO	SK hynix CEO, Park Sungwook	Gold Tower Order of Industrial Service Merit	December 15, 2015
2	Export tower for Trade Day	Ministry of Trade, Industry and Energy	Group		15 billion dollars	December 7, 2015
3	Merit for Trade Day	Ministry of Trade, Industry and Energy	Manufacturing Technology	Engineer Lee Junsuk	Presidential Citation	December 7, 2015
4	Merit for Trade Day	Ministry of Trade, Industry and Energy	SK hynix Greater China	Vice President Cho Wonsang	Prime Minister Award	December 7, 2015
5	National Quality Award	Ministry of Trade, Industry and Energy	Manufacturing Technology	Director Park Wan-bok	Quality Master	November 18, 2015
6	National Quality Award	Ministry of Trade, Industry and Energy	Manufacturing Technology	Director Park Gyeong-su	Minister Award	November 18, 2015
7	Award for Semiconductor Day	Ministry of Trade, Industry and Energy	Manufacturing Technology	Director Lee Daehee	Committee Chair Award	October 29, 2015
8	Award for Semiconductor Day	Ministry of Trade, Industry and Energy	Future Technology Research Institute	Director Lee Haejung	Minister Award	October 29, 2015
9	Award for Semiconductor Day	Ministry of Trade, Industry and Energy	DRAM R&D	Vice President Cho Joohwan	Minister Award	October 29, 2015
10	Award for the Semiconductor Day	Ministry of Trade, Industry and Energy	NAND R&D	Research Fellow Cho Myoungkwan	Presidential Citation	October 29, 2015
11	Merit for Invention Promotion on the Invention Day	Ministry of Trade, Industry and Energy	Difussion Team, Future Technology Research Institute	Director Yeom Seungjin	Prime Minister Award	May 19, 2015
12	Merit for Science Day	Ministry of Science, ICT and Future Planning	Future Technology Research Institute	Executive Vice President Hong Sungjoo	Innovation Award (Order)	April 21, 2015
13	Merit for Science Day	Ministry of Science, ICT and Future Planning	DRAM R&D	Director Lee Changsoo	Minister Award	April 21, 2015

Category	Association
MARKETING	SEMI (Semiconductor Equipment and Materials Institute, Inc)
PRODUCTION	The National Quality Award, Korea Standards Association (Icheon and Cheongju), Korean Association for Radiation Application, Korean Environmental Management Association, Korea Occupational Hygiene Association, Korea Chemicals Management Association, Chungbuk Association of Environmental and Engineering, Chungbuk Branch of Environment Preservation Association
RESEARCH	Korea Invention Promotion Association, Korea Chemicals Management Association, Chungbuk Association of Environmental and Engineering, Chungbuk Branch of Environment Preservation Association, Korea Invention Promotion Association, Korea Intellectual Property Association, The Institute of Semiconductor Test of Korea, JEDEC (Joint Electron Device Engineering Council), UFSA (Universal Flash Storage Association), SATA-IO (Serial ATA International Organization), TCG (Trusted Computing Group), PCI-SIG (Peripheral Component Interconnect Special Interest Group), SNIA (The Storage Networking Industry Association), T13, NVMe, T10, UNH-IOL, KMEPS (The Korean Microelectronics and Packaging Society), Korea Industrial Technology Association, MIPI (Mobile Industry Processor Interface), Consortium of Semiconductor Advanced Research, Institute of Electronics and Information Engineers, Si2 (Silicon Integration Initiative), Embedded Software System Industry Association, SiWEDS (Silicon Wafer Engineering and Defect Science), VCCI (Voluntary Control Council for Interference), National Academy of Engineering of Korea
SUPPORT (REQUIRED)	Icheon Chamber of Commerce and Industry, Korea Electric Engineers Association (Icheon and Cheongju), Korea Fire Safety Association (Icheon), Korea Industrial Safety Association (Seongnam Branch), Cheongju Chamber of Commerce and Industry, Korea Fire Safety Association (Cheongju), Korea Industrial Safety Association (Chungbuk Branch), Korean Association Occupational Health Nurses, Federation of Korean Industries, Korea Semiconductor Industry Association
SUPPORT (ARBITRARY)	Korea AEO (Authorized Economic Operator) Association, Korean Customs Logistics Association, Korea Integrated Logistics Association (KILA), Korea Forum of Chief Information Officers, Korea International Trade Association, Korean Association for Industrial Technology Security, Korea Employers Federation, Emergency Planning Team of MOTIE, Korea Fair Competition Federation, WSTS, Institute for Industrial Policy Studies Yoon-Kyung SM Forum, UNGC (UN Global Compact) Korea Network, EICC (Electronic Industry Citizenship Coalition), Korea Listed Companies Association, Korea IR Service, Chungbuk Employers Federation, Chungcheong Green Business Council, OpenPOWER Foundation, GSA (Global Semiconductor Alliance), Gyeonggi Employers Federation, UN SDGs Association, Korea IoT Association, Institute of Internal Auditors, Korea Quality Master Association

# SMART SOLUTION HAPPY LIFE

SK hynix 2016 Sustainability Report

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This is our Communication on Progress  
in implementing the principles of the  
United Nations Global Compact and  
supporting broader UN goals.

We welcome feedback on its contents.

