

History of the TOK Group Pioneering the Future with Microprocessing Technology

Create a Wave of Inspiration within Society

In 1940, the founder of TOK, Shigemasa Mukai, successfully produced high-purity potassium hydroxide for the first time in Japan. With quality better than imported products, the Company's potassium hydroxide was used in batteries for hard hat lights thanks to its superior safety and portability compared with previous sulfuric acid batteries. These hard hat lights supported the coal mining industry, which was key to Japan's recovery after World War II.

TOK's "monozukuri" have been passed down through the generations since its establishment while creating products that inspire customers based on the founder's principles of "challenge ourselves to develop products that may entail difficulties but are useful to society and are not offered by other companies" " building our business around high purity products," and "developing advanced technological capabilities."

東洋電機 向井定生 愛自他自

Reap what you sow: the motto of TOK founder Shigemasa Mukai
"Do it yourself. Own the results of what you do, whether this resulted in profit or loss"



Developed TMMR (Permanent photoresist for MEMS).

Developed CFPR BK series (LCD color filter manufacturing pigment dispersion-type negative Photoresist for black matrix).



We achieved domestic production of the Ohkaseal (potassium silicate) used in the manufacturing of cathode-ray tubes for television. The cost reductions contributed to the explosive spread of television.

First manufacture of TSMR-8800 (high resolution positive photoresist for VLSI production)
*Enabled resolution for process rules below 1.0 μm

Listed in the First Section of Tokyo Stock Exchange.



Started manufacturing OMR81 (negative photoresist for semiconductors).

First manufacture of OFPR (nation's first positive photoresist for semiconductors).

First manufacture of OAPM-300 (world's first fully automatic sheet plasma etching machine)



Started as TOKYO OHKA RESEARCH LABORATORY.

1940

1955

1967

1968

1972

1977

1936

Reorganized as a joint-stock company, TOKYO OHKA KOGYO CO., LTD.

Built Sagami plant (present Sagami Operation Center).

※ made a change of the sales amount an image.

Scope of our Business



Developed TAPM (High function film).

Established TOK

ADVANCED MATERIALS CO., LTD.

2003

2008

2012

2014

2017

Built Tongluo plant of TOK TAIWAN CO., LTD.



TWM / TWR series
Developed Zero Newton®



Special adhesive material and coating machine for Zero Newton®

Adoption to an ESG-related index



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Editorial Policy ~What We Wish to Communicate through This Report

The TOK Group aims to increase corporate value through CSR and actively contribute to the advancement of a sustainable society. The CSR Report 2018 has been published to verify CSR activities in fiscal 2017 and promote communication with stakeholders. The report discloses information on efforts we consider particularly important among our various initiatives. We look forward to receiving your honest feedback, which we will use to further improve our CSR initiatives as well as this report. This report can also be read on our website.

Scope of Data Collection

This report covers only the domestic business activities of the TOK Group, which is made up of a total of nine companies (as of December 31, 2017) comprising TOKYO OHKA KOGYO CO., LTD., its subsidiaries, and its equity method affiliates. TOKYO OHKA KOGYO CO., LTD. is indicated as TOK (the Company).

Applicable Period

In principle, the report covers fiscal 2016 (April 1, 2016 to March 31, 2017), but also contains some information about activities conducted in fiscal 2017.

* Due to a change in fiscal year-end, the fiscal year ended December 31, 2017 was an irregular nine-month period in Japan, and 12 months overseas.

Reference Guidelines

Environmental Reporting Guidelines 2012, published by the Ministry of the Environment Sustainability Reporting Guidelines ISO 26000: 2010 – Guidance on Social Responsibility, released by the Japanese Standards Association GRI/Standards

Date of issue: July 2018

Date of next issue: July 2019 (tentative)


Corporate Data

Corporate Name: TOKYO OHKA KOGYO CO., LTD.
Established: October 25, 1940
Headquarters: 150 Nakamaruko, Nakahara-ku, Kawasaki, Kanagawa Japan
TEL: 044-435-3000 (Main number)
FAX: 044-435-3020 (Main number)
Paid-in capital: ¥14,640 million (As of December 31, 2017)
President: Ikuro Akutsu
Number of employees: 1,611 (Consolidated / As of December 31, 2017)
Net sales: ¥92,411 million (Consolidated / Fiscal year ended December 31, 2017)

Business offices and sites: Japan: 8 / Overseas: 9
Corporate group: Subsidiaries: 4 / Overseas subsidiaries: 5
Businesses: Manufacture and sales of manufacturing materials, mainly photoresists and high purity chemicals for photolithography process of semiconductor and liquid crystal display, processing equipment for semiconductor and liquid crystal display manufacturing, and inorganic and organic chemicals

TOK's CSR website

<https://www.tok.co.jp/csr>



Leveraging our human skills and technological capabilities, coupled with “monozukuri” DNA that has been passed down through the generations, TOK will contribute to society in its own unique way while increasing social value and corporate value at the same time.

President & Chief Executive Officer

Ikuo Akutsu

Our history as a technology-driven company

As described in the History of the TOK Group on page 1, our founder’s commitment to “challenge ourselves to develop products that may entail difficulties but are useful to society and are not offered by other companies” has been passed down since the Company was established in 1940. This spirit has allowed us to provide products and technologies that are the first of their kind in Japan, the world, and the best in the world.

For example, OSR is a negative photoresist the Company developed in 1972 and it had amazing resolution for the time. OSR was highly regarded and used in the production of ultra-high-frequency semiconductor devices for the Intelsat weather satellite and Kiku scientific satellite. TOK was asked by the Ministry of International Trade and Industry (now METI) to commercialize a new polymer developed by one of its research institutes, and this became OSR. Through repeated trial and error, TOK was able to live up to the expectation that “if we ask TOK, they will be able to figure it out.”

With the passage of time, technologies have advanced on the cutting edge to today, where exquisitely designed circuits are miniaturized down to 10nm line widths (process rules) for semiconductor chips. As a global leader in cutting-edge fields, the TOK Group will continue to provide the world’s finest products and services backed by the accumulated technologies and expertise befitting a technology-driven company.

TOK’s corporate culture and CSR

Overcoming challenges to provide unique products requires trying every possible idea without giving up. Instead of aiming to turn the tables with the brilliant discovery of one genius, team players set their sights on victory, and each member spares no effort doing their absolute best in their individual roles. Sample evaluations are an example. TOK thoroughly cycles through testing to the point of being called “honest to a fault,” but it is these down-to-earth efforts behind the scenes that have allowed TOK to call itself an R&D-driven company. It is also the source of the TOK Group’s capabilities and strengths, a part of the DNA that has been passed down throughout its history.

Sparing no effort, doing what needs to be done, and producing results that inspire our stakeholders are the foundations of CSR at TOK.

Win-Win CSR that increases both social value and corporate value

There are two sides to CSR, namely risk management and the creation of business opportunities. Through such activities, TOK strives to increase social value and corporate value at the same time.

Sustainable Development Goals (SDGs) also incorporate this thinking. For example, the TOK Group’s

high-quality products (hereinafter, “materials”) satisfy customers and generate earnings, and they also create value for society, where the final products that use these materials lead to environmental benefits in the form of energy and resource conservation, as well as greater convenience for customers. Maintaining a healthy work environment is a part of risk management. By going one step further and maintaining a work environment that harnesses diversity and motivates employees, the entire organization is energized and earnings (i.e., corporate value) improve as a result.

CSR at the Group is based on a solid foundation of risk management, and I believe it is very important for CSR initiatives to emphasize win-win outcomes.

Sincere and proactive approach to social responsibility in corporate activities

Having achieved an overseas sales ratio of about 75%, risk management at the TOK Group must naturally be conducted on a global basis. In 2015, the Group launched the GMS (Group Management System) Project with the aim of reducing risk, including at overseas sites, and improving corporate value. To bind Group companies through the GMS, we came up with the TOK Group Documents as a compilation of new Group policies and other information in October 2017. This project is currently being carried out by the GMS Committee. We aim to further strengthen these management systems through the PDCA process.

TOK engages in Responsible Care (RC) activities to ensure conformity with the EHS (environment, health and safety) in all processes, from the development of chemical substances to their disposal and recycling (see page 31). EHS management is also a part of GMS management functions. As a company that handles hazardous chemicals, TOK recognizes EHS management as a pillar of its corporate activities, and will endeavor to maintain and improve its global management system through collaboration with the GMS Committee.

Human resource management is also a part of the management functions of GMS. In this context, TOK is taking on work style reforms in a bid to improve corporate value. The Internet has become a more effective tool for

work, now that advanced semiconductors have improved data processing speeds and increased data capacity, and this has translated into a wider variety of work styles without being restricted by time or place. TOK has been advancing work style reforms, such as encouraging employees to use all of their paid leave and introducing a flextime scheme. In the fiscal year ended December 31, 2017, the ratio of used paid leave was 77%, much higher than the manufacturing industry average of 55%. Over the past five years, the amount of overtime work has steadily declined as well. As a company deeply involved in building infrastructure as mentioned above, TOK is concentrating on initiatives with a view to creating new work styles.

Value creation through “monozukuri” unique to TOK (core business)

High-performance computers that can process huge volumes of data have enabled sharp growth in cloud computing and social networking services, such as Instagram and other smartphone apps, and this has stimulated the semiconductor market. The Group is also positioned to benefit from robust market conditions by supplying the cutting-edge materials needed to produce large-capacity data servers that fulfill this demand.

In the near future, AI, deep learning, autonomous vehicles, and IoT are likely to take off in earnest. A massive volume of high-performance semiconductor devices will be used across a broad swath of society, including social infrastructure and healthcare fields, and play a key role in solving various social issues. As one of the global market share leaders in ArF excimer laser photoresists for cutting-edge processes, the TOK Group will respond to these trends in society by concentrating efforts more than ever on the microprocessing technology including EUV (Extreme Ultraviolet) photoresists, as well as development of eco-friendly products that further contribute to energy and resource conservation.

At the TOK Group, we are working together in unison to contribute to society in a way that is unique to TOK, leveraging our human skills, technological capabilities and “monozukuri” DNA that has been passed down as “a company that aims to create inspiration.”

tok's business overview

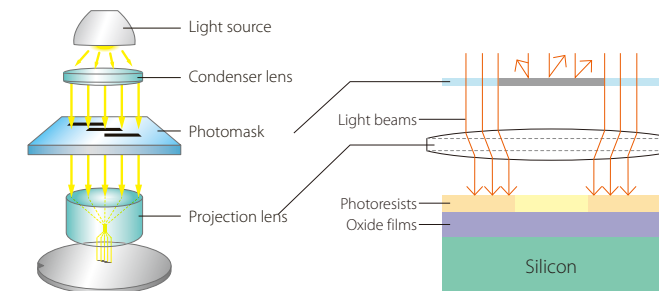
IC chip manufacturing processes and examples of TOK product applications

The TOK Group has developed innovative microprocessing technology and related materials for various fields to this day backed by its core photolithography and high purification technologies.

Exposure process in semiconductor manufacturing

A short wavelength laser beam is used with a photomask to create a pattern (a design) on a silicon wafer coated with photoresist. The areas of the photoresist that are exposed to the light undergo a chemical reaction*. Photomasks are several times larger than the actual chip size, so a lens is used to focus the light down to a fraction of the original size and project the real dimensions onto the silicon wafer.

* In negative photoresist, the photoresist exposed to light is left behind. In positive photoresist, the photoresist exposed to light is removed.



Material Business

Electronic Functional Materials

Photoresist

Widely used materials indispensable for the microprocessing of devices including semiconductors, LCDs, and other electronic products

High-density integration materials

Packaging photoresists and MEMS materials compatible with multilayer stacking accompanying advances made in semiconductor microprocessing

Photoresist Photolithography Relative Chemicals



Materials for Shrink Process



High-Purity Chemicals

High-Purity Chemicals

Developing solutions, cleaning solutions, rinsing solutions, thinners and other chemicals with world-leading high purity

Inorganic and organic chemicals

Chemicals used in a wide range of industries

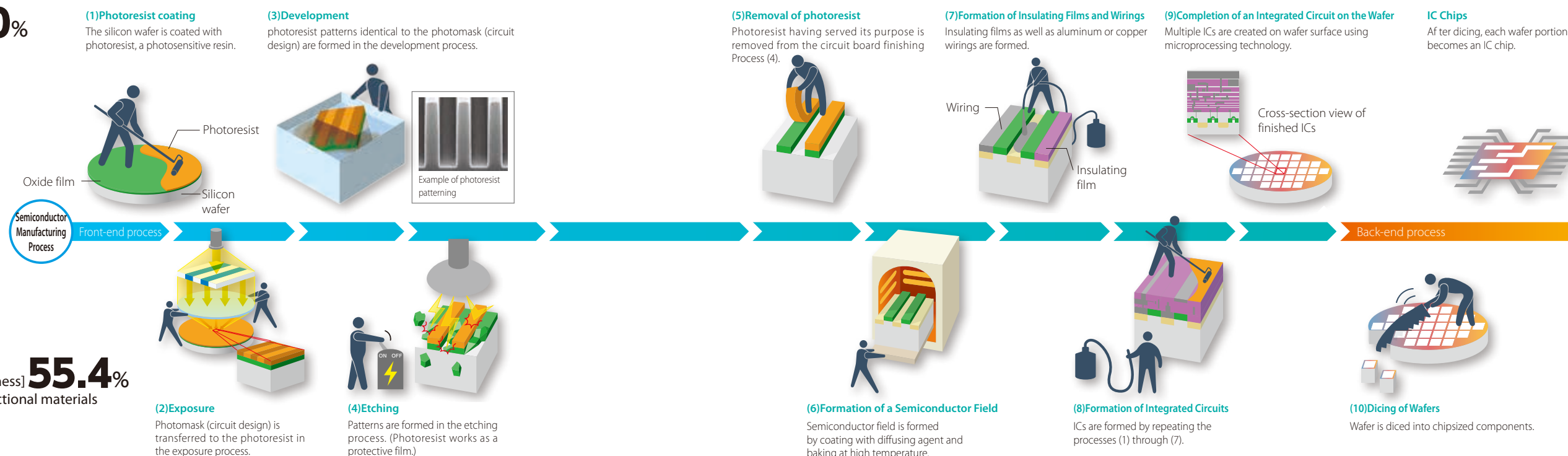
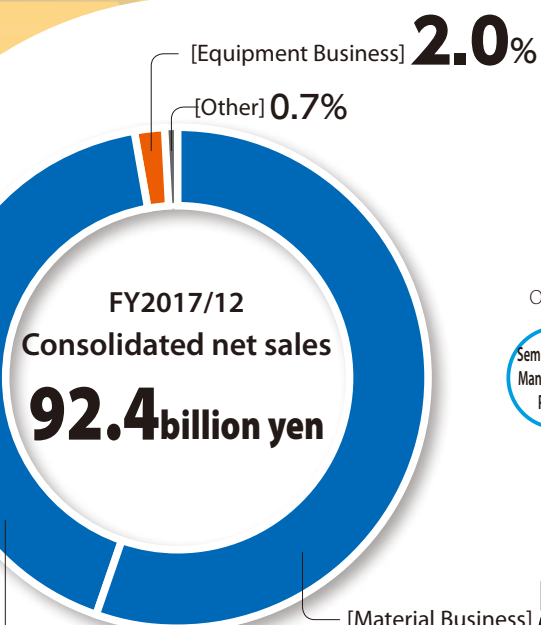
High Purity Chemicals Cleaning solutions / Thinner / Developing solution



Spin-On Diffusion Source



Interlayer Insulating Film



Equipment business

Process equipment

Semiconductor manufacturing equipment

TOK's Zero Newton wafer handling system that enables significant increases in efficiency of the 3D packaging process of semiconductors

LCD panels manufacturing equipment

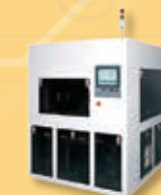
Various types of process equipment including UV curing machines used to manufacture flexible displays, coating machines that can achieve high-precision performance, and coating machines for R&D



Process equipment for semiconductors
Coating machines "CS series"
Spin coaters with high functionality offering superior cost performance.



Development automatic dilution system
"TAS-1000"
Chemical supply system that automatically conduct dilution and concentration controlling, focusing on the cost advantage of using a large volume of developing solution.



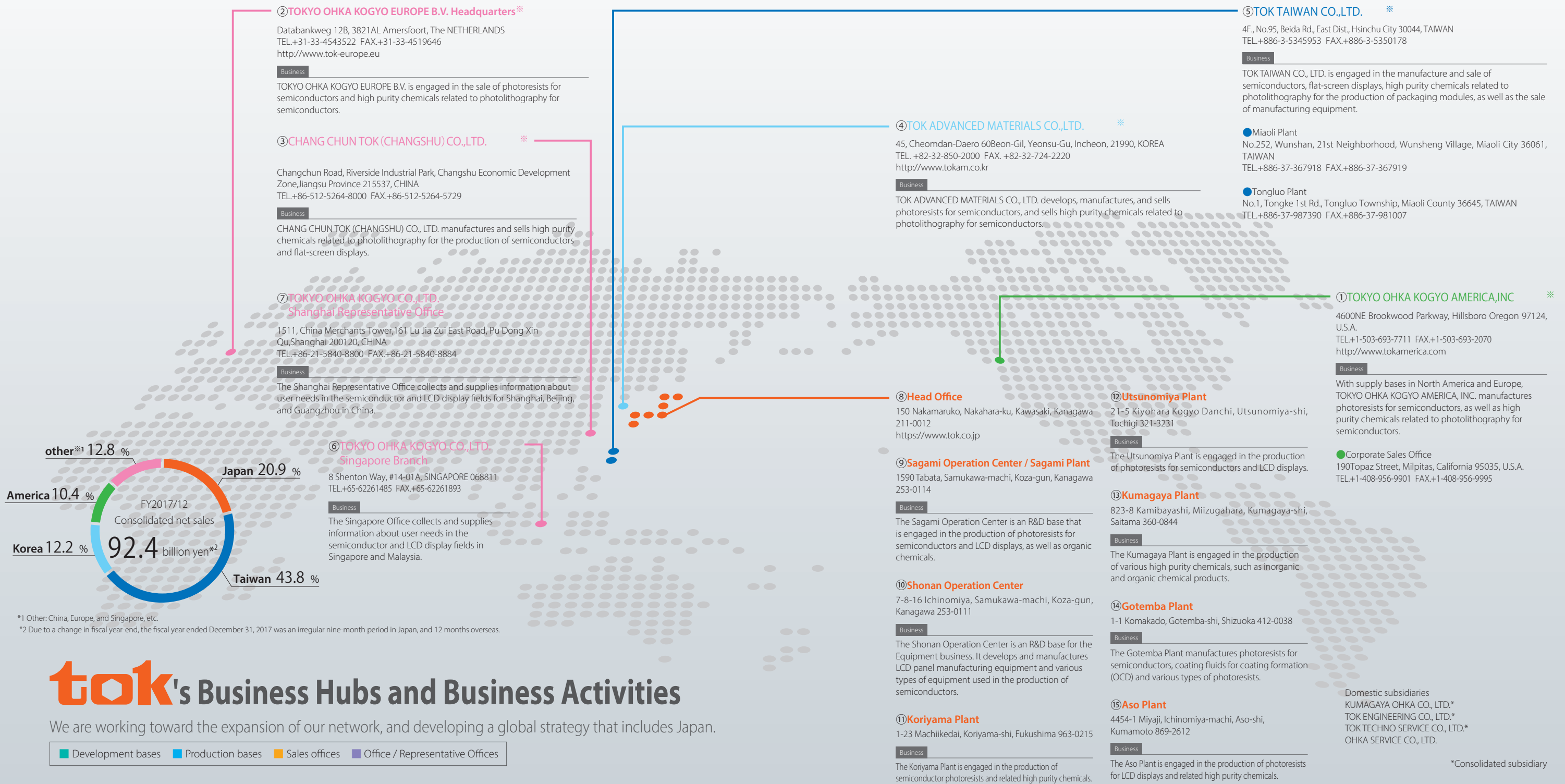
Developing machines
"CSH series"
Automatic developing machines for single wafer processing with excellent production efficiency.



Vacuum UV hardening machines
"TVC-8000 series"
Equipment to improve heat resistance, etching property, and plating resistance



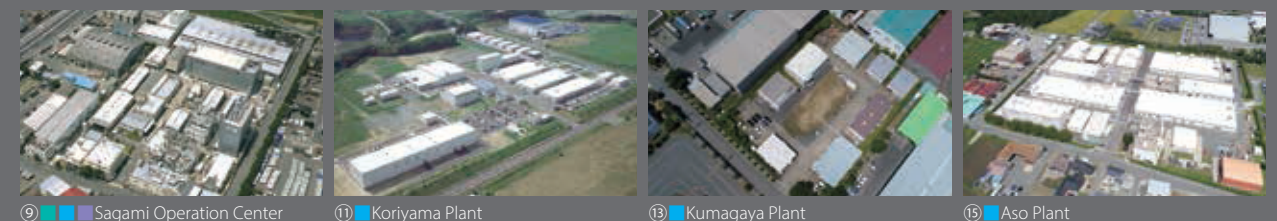
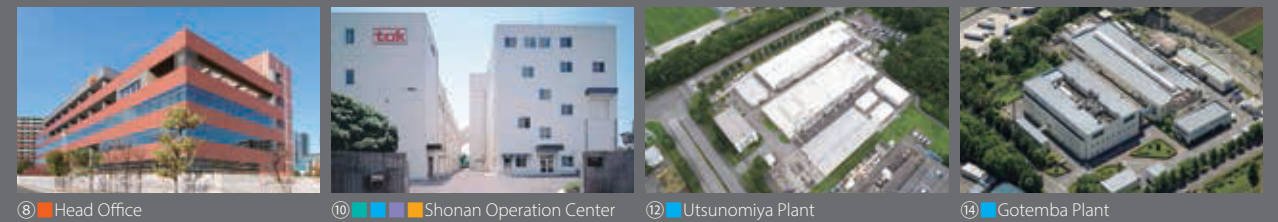
Plasma asher
"TCA series"
Downstream-type single-wafer ashing system



Overseas



Japan





tok Group's CSR

CSR entails initiatives to sincerely and proactively fulfill social responsibilities through corporate activities, and at the same time, it can also be a driving force for improvements in corporate value throughout the value chain, from procuring raw materials to producing and supplying products. The TOK Group adopts a win-win approach by aiming to improve both social value and corporate value through CSR. TOK engages in unique CSR initiatives as a company that creates inspiration.



Principles Behind Our CSR

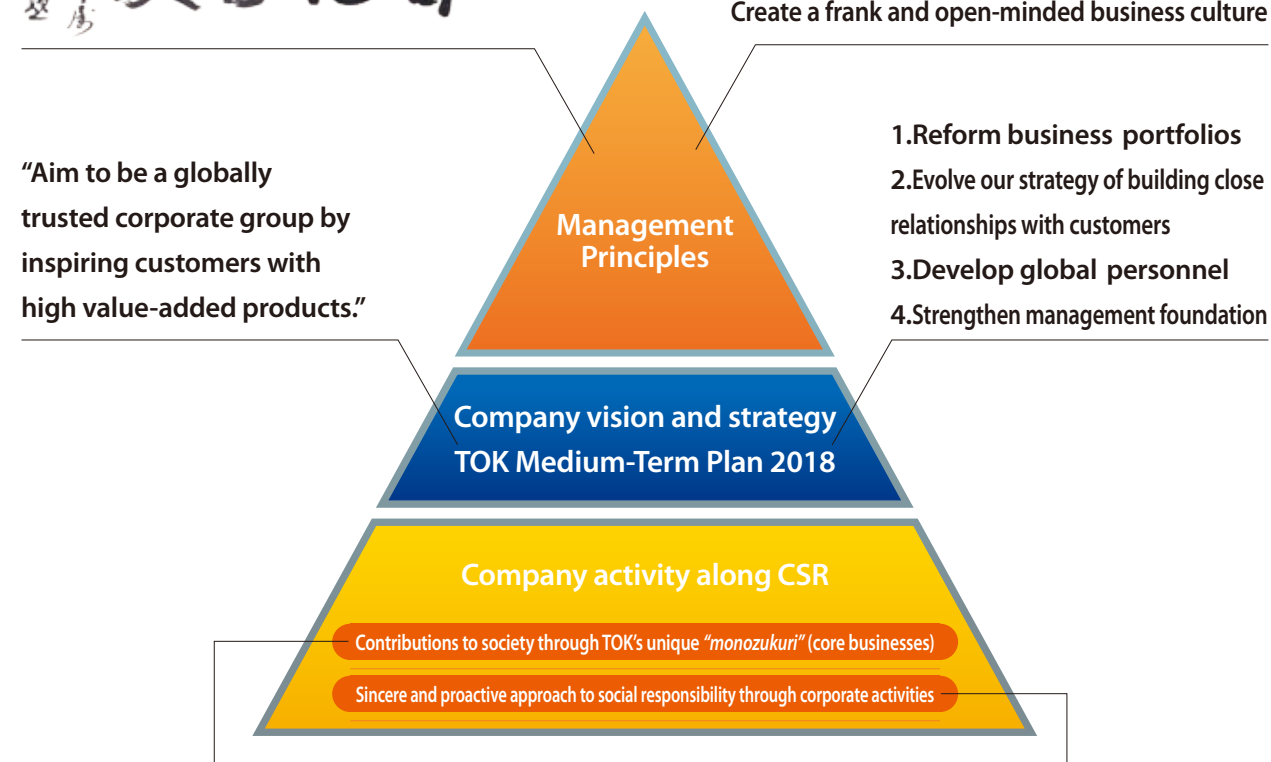
As a key fundamental of the Group, the management principles sound a call to "Contribute to society" by striving to "Continue efforts to enhance our technology," and "Raise the quality levels of our products," which are useful to society. Most importantly, the management principles state that we should contribute to society through our core business as a company that develops innovative technologies. To this end, the principles state that we should strive to create a frank and open-minded business culture that encourages people to not be afraid of failure and to reap what you sow (the Company's founding spirit). These principles are also embodied in the corporate vision of the TOK Medium-Term Plan 2018.

"Reap what you sow:" the motto(P1)



"Aim to be a globally trusted corporate group by inspiring customers with high value-added products."

Continue efforts to enhance our technology
Raise the quality levels of our products
Contribute to society
Create a frank and open-minded business culture



Contributions to society through TOK's unique "monozukuri" (core businesses)

As an advanced chemicals company, TOK aims to **improve corporate value** including earnings and social reputation through "monozukuri" unique to TOK (technologies, products, and services), as well as contribute to **the resolution of social issues**.

Sincere and proactive approach to social responsibility through corporate activities

TOK takes a sincere and proactive approach to fulfilling its social responsibilities through corporate activities. Moreover, the Company aims to **improve corporate value** through corporate activities across the entire value chain.

SDGs (Sustainable Development Goals) "No one will be left behind"

At the United Nations Sustainable Development Summit held in 2015, member nations unanimously adopted the "2030 Agenda" based on the idea that "No one will be left behind." This agenda established 17 Sustainable Development Goals for the international community to eradicate poverty by 2030 and realize a sustainable society.

The main idea behind the SDGs is to "Correct inequality at the global level" between developed countries and developing countries.

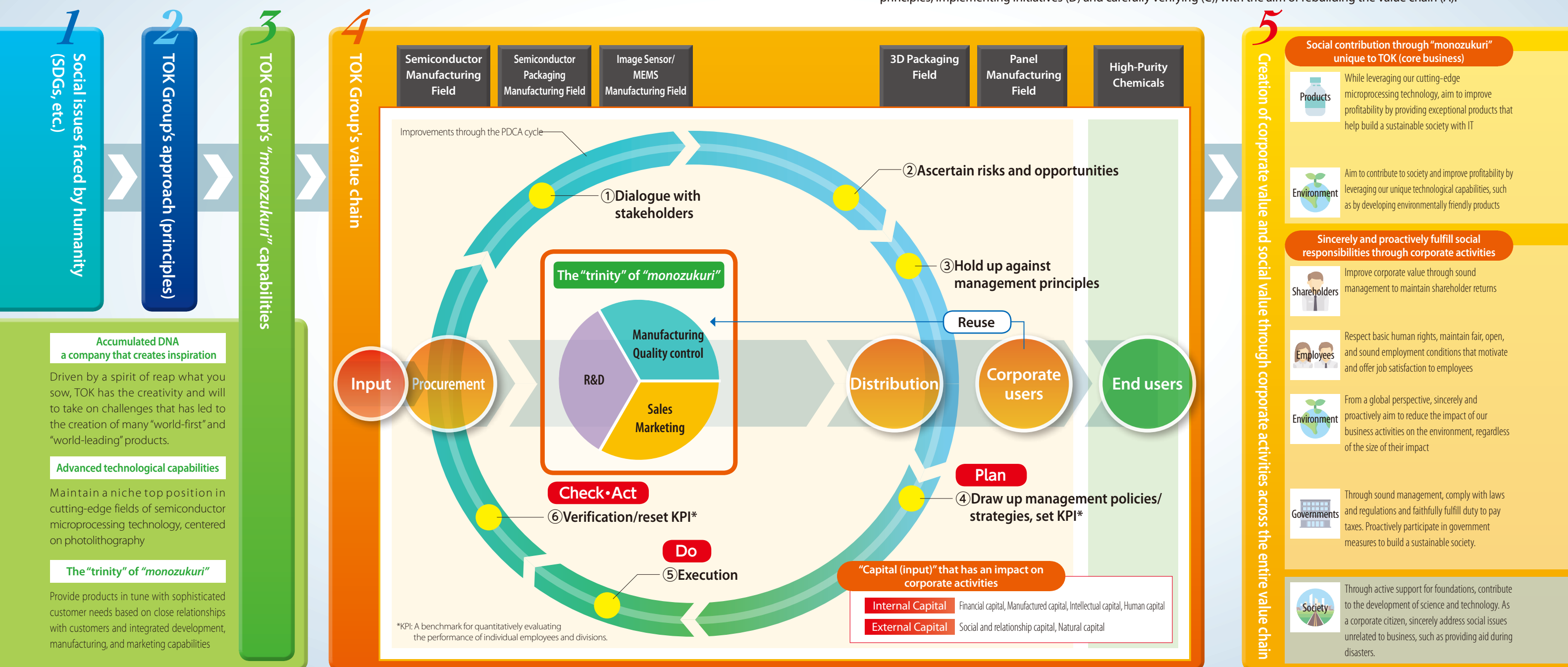
The 2030 Agenda also calls upon companies to incorporate this effort into their activities and for senior management to spearhead related initiatives. TOK agrees with the purport of the SDGs, and will always keep this in mind when advancing company-wide strategies.

SUSTAINABLE DEVELOPMENT GOALS 17 GOALS TO TRANSFORM OUR WORLD

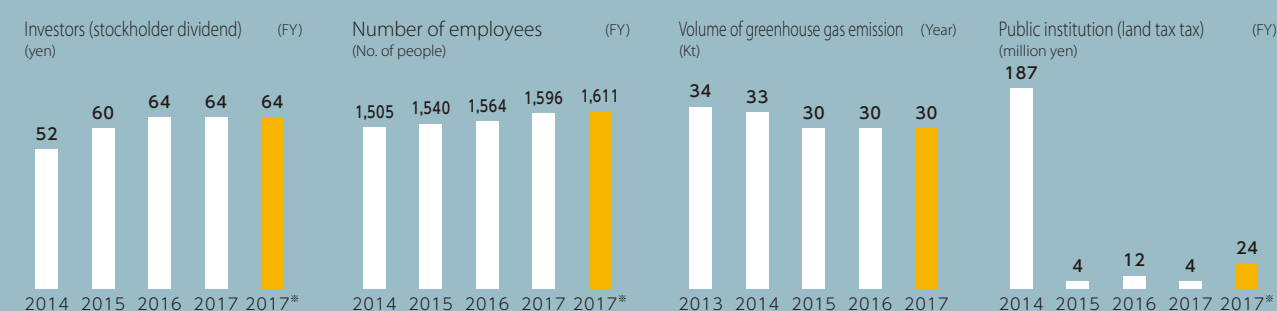
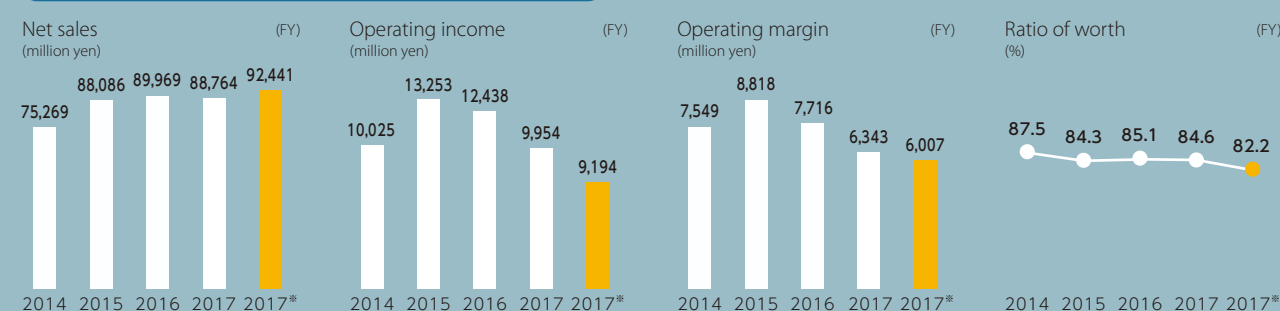


Creation of Both Corporate Value and Social Value through CSR

1 With regards to social issues outlined by SDGs for global issues, 2 based on the Group's management principles, 3 using accumulated corporate capabilities and 4 through corporate activities across the entire value chain (indicated in orange), TOK's CSR aims to 5 improve both corporate value and social value. We aim to enhance corporate capabilities that are useful to society through a PDCA process of identifying risks and opportunities in our corporate activities through proactive communication with stakeholders, and then creating business strategies (P) based on our management principles; implementing initiatives (D) and carefully verifying (C); with the aim of rebuilding the value chain (A).



Financial capital(Economic values)



* Due to a change in fiscal year-end, the fiscal year ended December 31, 2017 was an irregular nine-month period in Japan, and 12 months overseas.



The TOK Group's Risks and Opportunities Related to each SDG

SDGs are derived from a global agreement to eliminate poverty by 2030 as the first step toward putting the world on a sustainable path forward. SDGs differ from their predecessors, Millennium Development Goals (MDGs), in that they clearly expect companies to help solve the world's greatest issues (risks).

The United Nations has published the SDG Compass as a guideline to SDGs for corporations with specific examples of how SDGs can align with corporate activities. The preface to the SDG Compass talks about why the SDGs are important for business, regardless of their size. It points out that by coming up with innovative solutions and making transformative changes in fields related to each SDG, every company can create opportunities for new growth (business opportunities).

In 2016, the Japanese government set up the Sustainable Development Goals (SDGs) Promotion Headquarters. Reports have been issued as companies' progress with their initiatives supporting the concept of SDGs. In the economic world, companies have begun to collaborate and take action. As mentioned in the "Top Commitment" (page 3) and "The TOK Group's CSR" (page 9) sections, the TOK Group is advancing win-win measures that aim to improve both social value and corporate value, while working to create more effective value chains by clearly identifying risks and opportunities associated with each SDG.

► Creation of social value through advances in computer technology (ultra-microprocessing technology)

IC chips have CPUs and memories, the brains of computers. These chips consist of transistors (semiconductor devices), and the number of transistors in these tiny IC chips has a major impact on their performance.

Photolithography is a technology that forms the fine circuits of IC chips by using circuit designs that determine how these transistors are arranged. The photoresists that TOK supplies are critical materials that are keys forming these fine circuits. Today, photolithography is used in almost all semiconductor production processes.

The semiconductor industry has developed through a friendly competition to put the most transistors on ever-smaller chips. This has led to astounding advances in computer performance in a relatively short period of time, contributing significantly to virtually all segments of society. It is greatly anticipated that more advances in computer technology may present solutions to the 17 social issues identified in the SDGs. The TOK Group is expected to make a greater contribution in the cutting-edge field of photolithography, the foundation for advances in computer technology.



End poverty in all its forms everywhere



End hunger, achieve food security and improved nutrition and promote sustainable agriculture

► Use weather data, advance agricultural technology, improve plant breeding



Ensure healthy lives and promote well-being for all at all ages

► Improve telemedicine and medical equipment, develop preventative medicine and new drugs
► Implement initiatives for Health & Productivity Management (Recognized in the 2018 Certified Health & Productivity Management Outstanding Organizations Recognition Program (page 28))



Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

► Create opportunities for the people who live in poverty to learn ICT
► Strengthen self-development programs, including overseas sites



Achieve gender equality and empower all women and girls

► Share information by using ICT and provide opportunities for vocational training
► Spread gender quality and promote women in the workplace, including at overseas sites (page 29)



Ensure availability and sustainable management of water and sanitation for all

► Advance technologies for seawater desalination, water treatment and recycling
► Improve water risk management (page 39)



Ensure access to affordable, reliable, sustainable and modern energy for all

► Advance technologies related to renewable energy
► Supply materials related to solar power generation technology



Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

► Build infrastructure resilient to natural disasters and foster innovation with ICT
► Expand R&D investments and promote open innovation



Reduce inequality within and among countries

► Share information and form public opinion using communications networks; strengthen international monitoring systems



Make cities and human settlements inclusive, safe, resilient and sustainable

► Create safe, secure, and sustainable communities by deploying ICT



Ensure sustainable consumption and production patterns

► Build rational production and consumption systems that include 3R activities (reduce, reuse, recycle)
► Promote resource recycling (reduce industrial waste emissions and landfill disposal, achieve zero emissions) (page 41)



Take urgent action to combat climate change and its impacts

► Create production and consumption systems that help reduce substances that cause global warming
► Reduce emissions of substances that cause global warming, help develop semiconductor chips that consume less energy



Conserve and sustainably use the oceans, seas and marine resources for sustainable development

► Advance technologies related to fishing industry, create rational production and consumption systems for the fishing industry
► Reduce wastewater in business activities, cut down wastewater by reducing water usage (page 43)



Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

► Create production and consumption systems that encourage the sustainable and rational management of resources, build proper management systems, including desert greening
► Reinforce activities based on TOK Biodiversity Protection Declaration (page 44)



Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

► Share information and form public opinion using communications networks; strengthen international monitoring systems



Strengthen the means of implementation and revitalize the global partnership for sustainable development

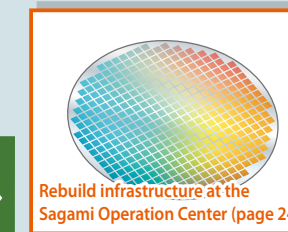
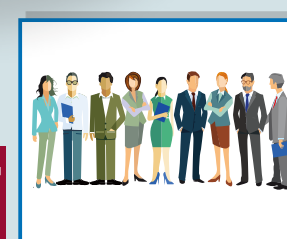
► Help develop sustained partnerships among industry, academia and the government by cooperating proactively on government measures and industry policies, as well as contributing to science and technology through the Tokyo Ohka Foundation.

► Progress in computer technology related to each SDG
► TOK Group initiatives related to each SDG



Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

► Expand economies and improve workplace environment by advancing ICT
► Promote diversity and work-life balance through fair employment practices based on the TOK Group Personnel Management Rules and good labor relations (pages 27-30)



Rebuild infrastructure at the Sagami Operation Center (page 24)

Ensuring Sound Business Management

Corporate Governance

Basic Concept

We believe realizing the management vision (page 10) based on our management principles will lead to higher corporate value and profits that can be shared with shareholders and many stakeholders. Realizing the management vision is the means to maintain sound and transparent management and to enhance operational efficiency as one of the most important management issues.

Priority Issues and Goals

Self-assessment of goal achievement
○ Took steps, achieved results
△ Took steps, but need to do more
× Did not take steps

Item	Issues and goals of fiscal 2017	Evaluation	Issues and goals of fiscal 2018
Corporate governance	1. Ensure management transparency and constantly enhance governance	○	1. Ensure management transparency and constantly enhance governance
	2. Update internal control rules on a global basis	○	2. Continuously update internal control rules on a global basis

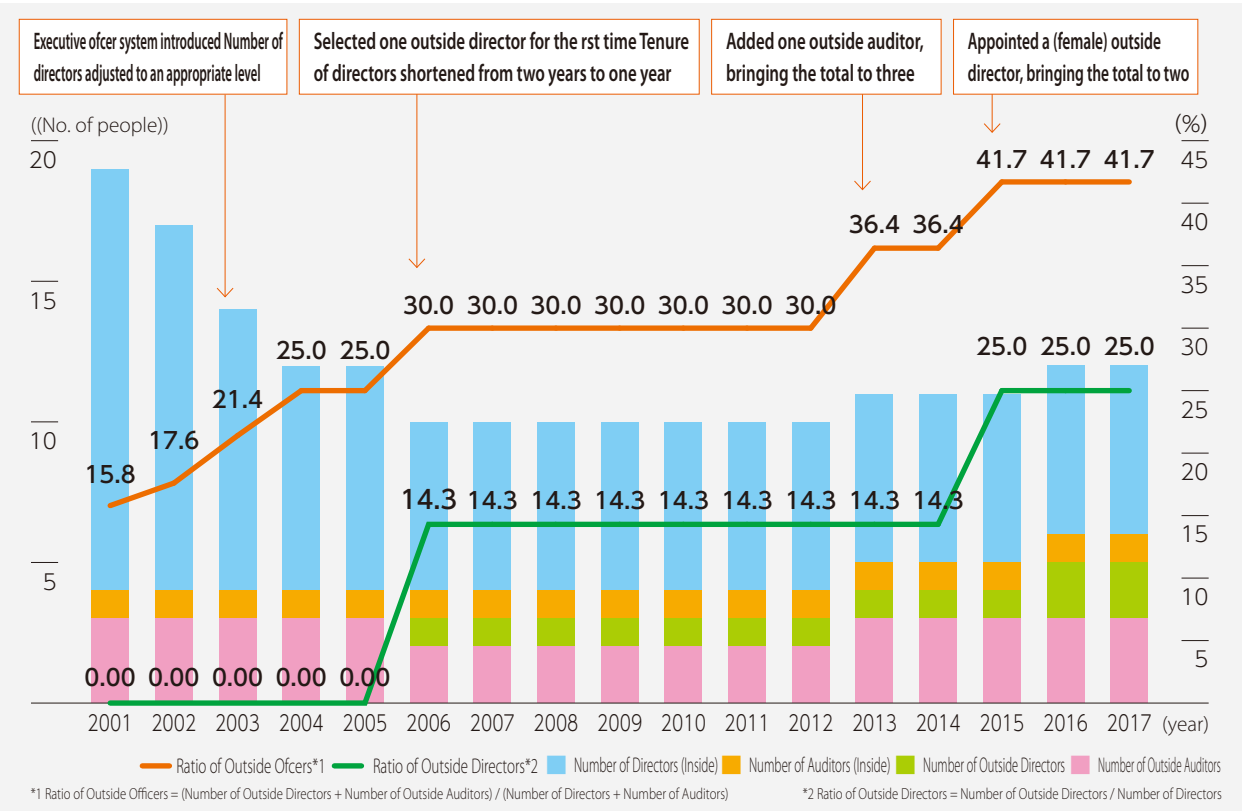
Initiatives to Strengthen Corporate Governance in Recent Years

The TOK Group reassessed approval processes with the aim of increasing the speed and efficiency of decision making in a bid to sustain growth and enhance corporate value, improving the efficiency of management to maximize the application of its inherent capabilities. To this end, the Company updated policies, rules and related documentation as well as created an operating structure. The Company makes sure materials are promptly delivered and there is enough time for deliberation by the Board of Directors and the Committee of Officers. TOK has put in place a structure for ensuring proper business execution across the entire Group.

Enhancing the Corporate Governance System

As a company with corporate auditors, TOK employs the corporate auditor system. We are taking actions to strengthen audits performed by the corporate auditors with the greater authority endowed by the Companies Act of Japan. In addition, TOK is taking advantage of the benefits of reforms to its Board of Directors, establishment of the executive officer system, and the election of an independent outside director to fortify the management decision-making and supervisory function and the business execution function while clarifying responsibility for performing these functions. We are convinced that these measures are the most effective means to strengthen management and upgrade our corporate governance.

TOK's Path to Stronger Corporate Governance



Corporate Governance System

Directors and the Board of Directors

The Board of Directors comprises eight directors, including two outside directors*. Their term of office is one year, which permits us to respond swiftly to changes in the business environment and clarify the responsibility of directors in each fiscal year. In addition, we elect two outside director with an independent status in order to enhance the transparency of the board and strengthen its supervisory function. The board, comprising of representative directors and directors, has an optimal structure in executing its required functions of managerial decision-making and supervision.

Internal Auditing Division

We have fifteen officers, including six officers concurrently serving as directors*. While strengthening the functions of the Board of Directors, i.e. managerial decision-making and supervision, the officers also focus on the function of business execution. In order to reinforce this function, we set up the Committee of Officers composing of the chief executive officer, chief operating officer, senior executive officer, executive officers, and officers, based on their respective duties and responsibilities.

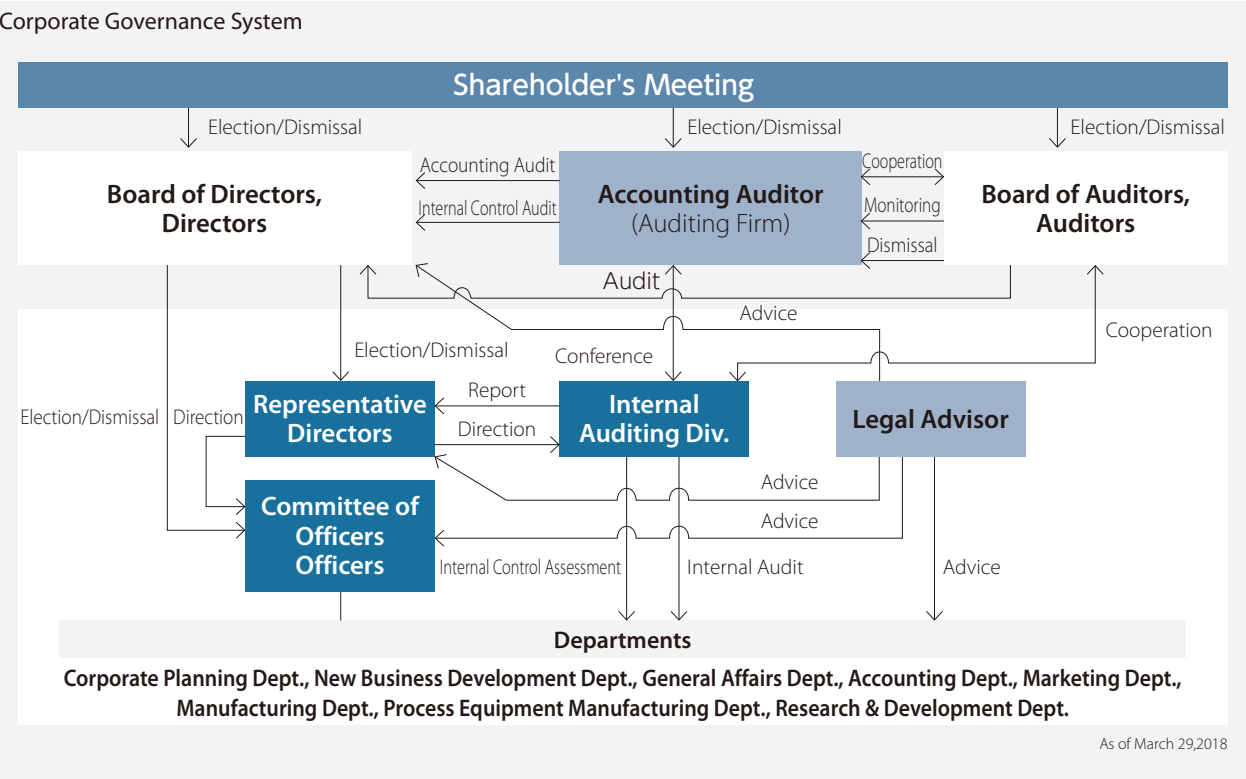
Corporate Governance System

Corporate Governance System

We have four auditors, including three outside auditors*. Each auditor is required to perform his/her duties allocated in accordance with the auditing standards (Corporate Auditor Auditing Regulations) and the auditing policies/responsibilities stipulated by the Board of Auditors. These include: attending the meetings of the Board of Directors and the Committee of Officers as well as other important meetings; and supervising the performance of directors by receiving progress reports from the directors and others and requesting an explanation when necessary. They also supervise the appropriateness of audit methods and results performed by the accounting auditors by receiving their progress reports and requesting an explanation when necessary.

Internal Auditing Division

We have set up the Internal Auditing Division, under the direct control of the President, composing of six staff members*. In addition to the standard audits of business operations, this division provides suggestions, proposals and advice for continuous improvements by undertaking evaluations of the effectiveness of internal controls on financial reporting.



Corporate Governance

Assessment of the Effectiveness of the Board of Directors

To ensure the effectiveness of the management supervision functions and decision-making functions of the Board of Directors, TOK analyzes and assesses the effectiveness of the entire Board of Directors every year. Each director and auditor conducted a self-assessment using an anonymous questionnaire format as a part of our analysis and assessment of the effectiveness of the entire Board of Directors.

As a result, the composition of the Board of Directors offers an even distribution of inside directors with thorough understanding of each field, and is well-balanced between experience and actual performance. The Board of

Main subjects on the questionnaire

- (1) Composition of the Board of Directors
- (2) Effectiveness of the Board of Directors
- (3) Information related to the Board of Directors
- (4) Decision-making process
- (5) External communications

Directors also maintains diversity by incorporating outside directors with differing backgrounds, knowledge and expertise. The size of the Board of Directors, the frequency with which it meets, the matters on which it deliberates and the time required for deliberation are all appropriate, and with the participation of outside directors and outside auditors the proceedings are highly transparent, with a deliberation conducted in a frank and open atmosphere and rapid decision-making; in general, the Board of Directors is positively assessed. Moreover, self-improvement and in-house check-and-balance functions were generally viewed in a positive light. Issues brought up in the previous fiscal year were addressed and improved to a certain degree, including (1) prompt delivery of materials to enhance deliberations of the Board of Directors, (2) adding required materials for improvement of the manner in which business execution and resolutions and reports are explained, and (3) holding seminars with outside experts to enhance training for board members. TOK will continue to make improvements with the aim of enlivening discussions and engaging in external communications to further enhance the effectiveness of the Board of Directors.

TOK publishes a corporate governance report that evaluates the effectiveness of the Board of Directors.

<https://www.tok.co.jp/company/governance/corporate-governance.html>

Information Provision and Support Structure for Outside Officers

TOK has created a support structure for outside officers to deepen their understanding and facilitate accurate judgements of the Group's business activities. Before meetings, the secretariat distributes to outside officers materials that are related to the agenda of the Board of Directors meetings, manages schedules, conveys information, and responds to the requests of outside officers.

For outside officers to understand the Group better, tours of business sites are periodically given to them inside and outside Japan. During the fiscal year under review, the outside officers visited the Sagami Operation Center and learned more about the Group by observing operations of plant facilities.

Activities of Outside Officers

Position	Name	Main activities
Outside Directors	Hiroshi Kurimoto	Kurimoto attended all 11 of the 11 Board of Directors meetings (attendance rate 100%) held during the fiscal year under review. He voiced timely opinions as required when discussing resolutions, based on his broad experience and abundant expertise as a business executive.
	Noriko Sekiguchi	Sekiguchi attended all 11 of the 11 Board of Directors meetings (attendance rate 100%) held during the fiscal year under review. She voiced timely opinions as required when discussing resolutions, based on her professional expertise in accounting and abundant hands-on business experience with several companies as a certified public accountant.
Outside Auditors	Hiroshi Saito	Saito attended all 11 of the 11 Board of Directors meetings (attendance rate 100%) and all 10 of the 10 Board of Auditors meetings (attendance rate 100%) held during the fiscal year under review. He voiced and raised timely opinions and questions as required at the meetings, based on his abundant experience and considerable insight as a business executive including at financial institutions.
	Kazumasa Fukada	Since he was elected on June 28, 2017, Fukada attended all 8 of the 8 remaining Board of Directors meetings (attendance rate 100%) and all 7 of the 7 remaining Board of Auditors meetings (attendance rate 100%) held during the fiscal year under review. He voiced and raised timely opinions and questions as required at the meetings, based on his broad experience including at a financial institution, and his abundant expertise as a business executive.
	Koichiro Takahashi	Since he was elected on June 28, 2017, Takahashi attended 7 of the 8 remaining Board of Directors meetings (attendance rate 88%) and all 7 of the 7 remaining Board of Auditors meetings (attendance rate 100%) held during the fiscal year under review. He voiced and raised timely opinions and questions as required at the meetings, based on his broad experience including at a financial institution, and his abundant expertise as a business executive.

Directors' remuneration system, remuneration levels, remuneration breakdown

Remuneration for TOK's directors and auditors is as shown in the following chart.

Policies and methods for determining and calculating director remuneration are essentially based on objectives for maintaining sound management in compliance with

laws and regulations while meeting the expectations of shareholders and other stakeholders, with the ultimate aim of increasing corporate value through growth in earnings. For more details, please refer to the Corporate Governance section in the Securities Report.

Remuneration Totals Paid to Directors and Auditors

Position	Total remuneration (Millions of yen)	Total of various types of remuneration (Millions of yen)			Number of eligible personnel
		Basic remuneration	Stock options	Bonuses	
Directors (Excluding outside directors)	129	102	15	12	7
Auditors (Excluding outside auditors)	16	16	—	—	1
Outside directors and auditors	36	34	—	0	7

The amounts for total remuneration and total of various types of remuneration for directors (excluding outside director) do not include the portion paid as salary for employee activities undertaken in parallel with director activities. The amounts for total remuneration and total of various types of remuneration for directors (excluding outside directors) and outside directors and auditors include payments to one director and two auditors who retired at the end of the 87th Ordinary General Meeting of Shareholders held on June 28, 2017 ("87th Ordinary General Meeting of Shareholders").

Dialogue with Shareholders and Investors

For shareholders and investors to better understand information about TOK, such as its management strategies and performance, the Company proactively engages in investor relations (IR) activities that include the timely, appropriate, and fair disclosure of information. TOK strives to hold "open" general meetings of shareholders, regularly engages in dialogue with institutional investors to further their understanding of the Group's business content, policies, and trends, and holds briefings for individual investors in various locations. During the fiscal year

under review, TOK held eight briefings for individual investors. Opinions we receive through IR activities are fed back to the management team and reflected in management and operations.



Business results meetings for institutional investors



Financial results briefings for individual investors

Future Issues and Initiatives

TOK will draw up and publish Corporate Governance Guidelines based on its management principles and management vision and with reference to the Tokyo Stock Exchange's Corporate Governance Code. The Company will also make every effort to sustain growth and increase corporate value by aiming for continual development as a corporation and constantly examining its corporate governance structure in response to changes in the business environment.

From the Standpoint of an Independent Officer

The TOK Group faces numerous business risks, which are assessed from perspectives such as responsibilities to stakeholders and the occurrence of losses. When considering what the most important risk is, we must first consider what the most important business task is. Speaking from my own personal experience in management of a company driven by technological development, the most important business task is to create new products to fuel sustainable growth so that the TOK Group remains in the game moving forward.

However, R&D to deliver a continuous stream of new products that customers want involves taking risks. I therefore want to make contributions as an independent officer so that those latent R&D risks are clarified and minimized, and frameworks are built to address them.

Hiroshi Kurimoto, Outside Director



Compliance

Basic Concept

The TOK Group makes concerted efforts to enhance its compliance system from the basic understanding that maintaining relationships of trust with all its stakeholders is a prerequisite for sustainable development as a corporation that coexists with society. We strive to improve awareness of compliance among all officers and employees to ensure strict compliance with laws and regulations, Company rules and social norms.

Priority Issues and Goals

Self-assessment of goal achievement

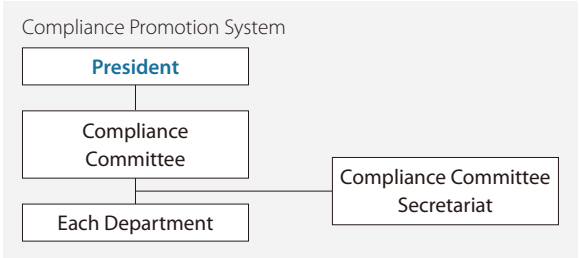
○ Took steps, achieved results
△ Took steps, but need to do more
× Did not take steps

Item	Issues and goals of fiscal 2017	Evaluation	Issues and goals of fiscal 2018
Compliance	1. Continue activities to instill compliance ◇Strengthen TOK Group compliance	○	1. Continue activities to instill compliance ◇Strengthen TOK Group compliance
	2. Respond to internal reporting incident	○	2. Respond to internal reporting incident

► Compliance promotion system and standards of conduct

Guided by the Compliance Committee, all employees at Group companies take action to promote compliance by participating in thorough training and related activities.

We aim to improve awareness of compliance among all officers and employees. We have created the TOK Group Compliance Standards of Conduct to clarify shared values and standards of conduct, including for subsidiaries in Japan and overseas. We have created handbooks for the Compliance Standards of Conduct in the languages used by Group companies and distributed them to all officers and employees of Group companies.



1. Ongoing activities to instill compliance

To prevent compliance-related risks from emerging, it is essential that all officers and employees practice and adhere to compliance. We therefore make efforts to prevent risks from emerging through PDCA* activities.

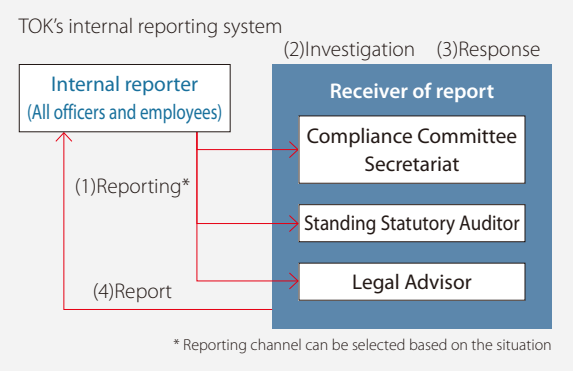
During the fiscal year under review, Group departments and sites implemented their own compliance training based on their particular situations. Members of the Compliance Committee Secretariat visited overseas bases to provide training with the aim of instilling the Compliance Standards of Conduct and raising awareness of compliance across the entire Group.

* PDCA: Plan, Do, Check, Act

2. Internal Reporting System

To quickly detect and prevent compliance risks in business activities, the TOK Group has set up reporting and consulting channels for officers and employees to use in the event they suspect behavior is in violation of compliance or other rules. When internal reports are made, we allow the internal reporter to choose who the report is made to, and we have a clearly stated policy of not dismissing or unfairly treating internal reporters, unless the report has been made for deceitful purposes.

During the fiscal year under review, the Group had one internal reporting incident related to labor and workplace conditions. For the confirmed violation of Company rules and procedures, we have taken appropriated measures, including training, disciplinary action, and a review of procedures and management supervision.



Future Issues and Initiatives

To spread and instill compliance, we will continue to take steps to disseminate the Compliance Standards of Conduct at each group company, and strengthen our responsiveness to laws and regulations regarding fair transactions within the context of global risks.

Risk Management

Basic Concept

The Company's perpetual development depends on being able to precisely deal with various risks that have major impacts on business. Through communications with stakeholders, we strive to identify and prevent a variety of potential risks. If a risk emerges, we will take the necessary measures to minimize the negative impacts from the risk. In these and other ways, TOK maintains and improves its global risk management system.

Priority Issues and Goals

Self-assessment of goal achievement

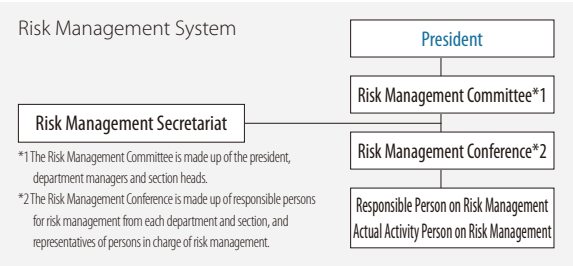
○ Took steps, achieved results
△ Took steps, but need to do more
× Did not take steps

Item	Issues and goals of fiscal 2017	Evaluation	Issues and goals of fiscal 2018
Risk management	1. Strengthen TOK Group's risk management system	○	1. Strengthen TOK Group's risk management system
	2. Strengthen crisis management ◇Reinforce contingency management drills	○	2. Strengthen crisis management ◇Reinforce contingency management drills
	3. Prepare for large-scale earthquakes ◇Periodically review Business Continuity Plan (BCP)	○	3. Prepare for large-scale earthquakes ◇Periodically review Business Continuity Plan (BCP)

► Risk Management System

The Risk Management Committee plays a central role in reviewing the risk management system and formulating risk management policy. The Company has risk management regulations and a risk management manual for precisely dealing with various risks.

Guided by this manual, we ensure that preventive measures are normally in place by managing business risk, public risk, and disaster and accident risk, and identifying and analyzing significant risks, as well as determining, executing, and reviewing countermeasures for these risks.



1. Initiatives to strengthen risk management system in recent years

Reaffirming the importance of contingency management after the Great East Japan Earthquake, TOK has taken steps to address various risks, including disasters and other accidents and environmental risks, since creating the Contingency Management Committee* in 2013. In 2016, the TOK Group Risk Management Committee was established to deal with a broader range of risks in accordance with the Company's global expansion.

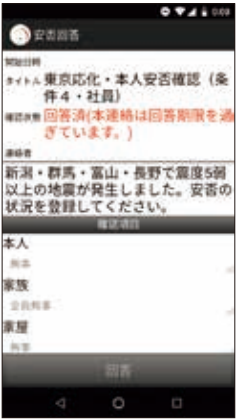
During the fiscal year under review, TOK identified and analyzed risks at all business sites including Group subsidiaries, and took measures to address the risks with large potential impacts, as well as implementing the PDCA cycle for assessments and evaluations. Moreover, TOK worked to improve its risk management system, formulating initial action guidelines and revising them for overseas subsidiaries.

* Renamed the "Risk Management Committee" in 2016

2. Strengthened crisis management

Strengthening contingency management drills: operation of safety confirmation system

At the Group, we believe business continuity planning begins with the safety of our employees. In Japan, TOK introduced and operates a safety confirmation system for confirming whether Group employees are safe in the event of natural disasters, including major earthquakes. Every year, safety confirmation drills are conducted to ensure the smooth operation of the system and to raise awareness of safety confirmation among employees. These drills were conducted again in fiscal 2017.



3. Large-scale earthquake preparedness

Based on lessons learned from the Great East Japan Earthquake and the Kumamoto Earthquake, TOK has put in place a Business Continuity Plan (BCP) that envisions damage simultaneously striking the Head Office and multiple sites from a major earthquake directly under Tokyo. TOK regularly reviews its BCP so it is grounded in reality by running desktop drills that simulate real-world damages that interrupt order taking and placement, product shipment, and cut off lifelines.

Future Issues and Initiatives

TOK will create a more resilient risk management system to prevent risks from emerging, by reviewing BCP, taking appropriate measures, and spreading awareness of risk management among officers and employees.

Risk Management: Improving Information Management

Basic Concept

The environment surrounding information management is drastically changing. For the TOK Group, an incident where information assets are leaked outside the Company could cause major damages to its accumulated competitive advantages and threaten its existence as an ongoing concern. For this reason, in advancing corporate activities, information management is a priority issue for management in terms of enhancing corporate value and fulfilling our social responsibility. We will redouble efforts in ensuring information security by establishing a PDCA cycle.

Priority Issues and Goals

Self-assessment of goal achievement | ○ Took steps, achieved results
△ Took steps, but need to do more × Did not take steps

Item	Issues and goals of fiscal 2017	Evaluation	Issues and goals of fiscal 2018
Information management	1. Maintain, manage, and improve information management systems ◇Strengthen information management by working groups (WG)	○	1. Maintain, manage, and improve information management systems ◇Review, update, and deploy rules for information management

Information Management Policies

The TOK Group (comprising TOKYO OHKA KOGYO CO., LTD. and its subsidiaries, hereinafter collectively the “TOK Group”) is implementing measures in line with the following policies, having positioned risk management related to information assets as a priority management issue to fulfill its corporate social responsibility.

[Definition, protection, and effective utilization of information assets]

1. With respect to all information assets held by the TOK Group, including managerial, client, marketing, personal, and technical information, the Group will comply with laws and regulations related to information security, other social norms, in-house rules and other guidelines, and protect the information appropriately. The Group shall only use the information to efficiently execute the operations of the Group, within the stipulated scope of authority, and for the prescribed purpose.

[Update and maintain tools and security platforms]

2. The TOK Group updates and maintains reasonable communications tools and security platforms to effectively utilize its information assets.

[Organizational structure and organized activities]

3. The TOK Group has established an Information Management Committee and will continue to build, maintain, and promote an information asset management structure properly governed for the overall Group.

[Completeness, confidentiality, and availability]

4. The TOK Group will identify and assess risks and continue to implement countermeasures and improvements as well as appropriately reduce information management risks through a range of human, physical, organizational, and IT-based measures to prevent leakage, falsification, theft, destruction, and other damage to the information assets held by the TOK Group.

[Education]

5. The TOK Group will implement in-house education regularly and continuously and work to raise awareness and keep everyone well informed of the in-house rules and other regulations.

[Incident response]

6. In the case that accidents and other incidents related to information security occur, the TOK Group will endeavor to minimize the damage from such incidents and implement measures to prevent their recurrence.

[Audits and continuous improvements]

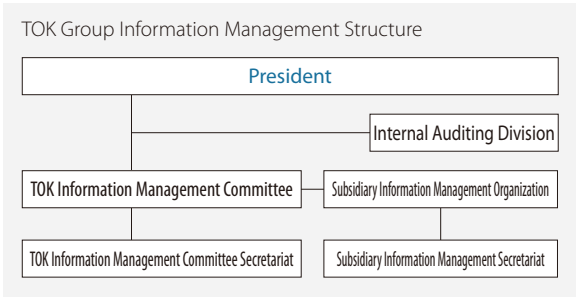
7. The TOK Group will implement regular audits and make continuous improvements as a part of its management of information assets.

Maintain, manage, and improve information management systems

The Company has created the Information Management Committee, headed by the Manager of the General Affairs Department and staffed by department managers of the TOK Group, including overseas affiliates and subsidiaries. The Committee decides on policies and measures related to information security and personal information protection. Key subsidiaries have established their own information management organizations, which collaborate under the guidance of TOK's Information Management Committee to strengthen information management systems across the TOK Group.

The Internal Auditing Division, which is independent of the Information Management Committee, regularly audits compliance with rules and other matters,

and reports the results to the president. If there are problems, improvement orders are issued to the audited divisions and the Information Management Committee. In this way the division works to improve our information management systems.



1. Strengthen information management by WG

The world of information management is drastically changing every day with serious incidents of information leaks, lawsuits, and frequent cyberattacks. Responding to these changes, the Information Management Committee


has identified key topics based on information management policy, and put WG in charge of addressing each key topic in a bid to strengthen information management.

Trade Secrets WG

In light of recent incidents involving the leak of trade secrets, confidential information needs to be managed as trade secrets under the law. This confidential information entails information TOK has accumulated, including customer information that could cause untold damage to its business if leaked externally or used illicitly. This WG sets rules for the specific type of information to be managed and how it should be managed. During the fiscal year under review, the WG endeavored to strengthen information management through ongoing improvements for better management of trade secrets at TOK and its key subsidiaries.

Training and Rules WG


Each and every employee must be aware of the importance of information management and strictly follow the rules for information management. It is therefore vital that employees correctly understand these rules. During the fiscal year under review, this WG conducted training about the importance of managing information and how to correctly manage information at all sites, while also enrolling all domestic employees in e-learning courses to improve their adherence to information management rules.



Information Management Training

Human Resources Related WG

This WG creates and implements rules required for human resource management, and training programs for different ranks. During the fiscal year under review, the WG conducted unannounced checks of whether rules are being followed on a daily basis at TOK and key subsidiaries.



Unannounced check

IT Development WG


The importance of IT in information management has continued to increase on a daily basis. This WG is deploying groupwide measures to prevent human errors and malicious information leaks.

During the fiscal year under review, this WG conducted targeted attack email simulation training in a bid to enhance awareness of information management through first-hand experience as a part of training about cyberattacks, including targeted malicious email that has been on the rise lately. This simulation entailed the sending of mock emails to employees of TOK and key subsidiaries that simulated malicious emails. This WG also worked to reinforce information management by installing the necessary IT infrastructure and document management systems.

Physical Security WG

It has been said that internal factors are responsible for most information leaks, such as employees walking out the door with sensitive corporate information. For this reason, this WG is tasked with reducing business risk by physically protecting the information assets accumulated thus far by the TOK Group with physical security measures, such as building access systems, security cameras, and security gates for managing the bringing in and taking out of devices.

During the fiscal year under review, we built a more robust management system deploying security stickers to major domestic sites while working to improve physical security, through the greater use of building access systems at key domestic sites.



Security gate
Security sticker

Future Issues and Initiatives

The Information Management Committee Secretariat has worked to enhance information management activities across the Group by creating and implementing plans for the Information Management Committee, supporting each WG, and conducting training. In fiscal 2018, the Secretariat will continue to strengthen the information management systems by reviewing, updating, and deploying rules across the Group. It will continue to enhance information management operations for the Group, implement information security audits at all Group sites, and undertake measures for improving any problems and raising awareness. In this way, we aim to help increase corporate value and fulfill our social responsibilities.

Creating Inspiration with High Value-Added Products

Aiming to Further Improve Customer Satisfaction

Provision of High Value-Added Products and Services

Basic Concept Most of the photoresists and other materials supplied by the TOK Group are custom-made products created through close communication and collaboration with customers. The Group aims for “monozukuri” that meets the expectations of customers and society while creating inspiration for both, through close collaboration via its “trinity” platform of sales, development, and manufacturing.

Priority Issues and Goals

Self-assessment of goal achievement
○ Took steps, achieved results
△ Took steps, but need to do more
× Did not take steps

Item	Issues and goals of fiscal 2017	Evaluation	Issues and goals of fiscal 2018
Provision of high value-added products and services	1. Promote our strategy of building close relationships with customers	○	1. Promote our strategy of building close relationships with customers
	2. Development of technologies and new businesses	○	2. Development of technologies and new businesses

1. Promote our strategy of building close relationships with customers

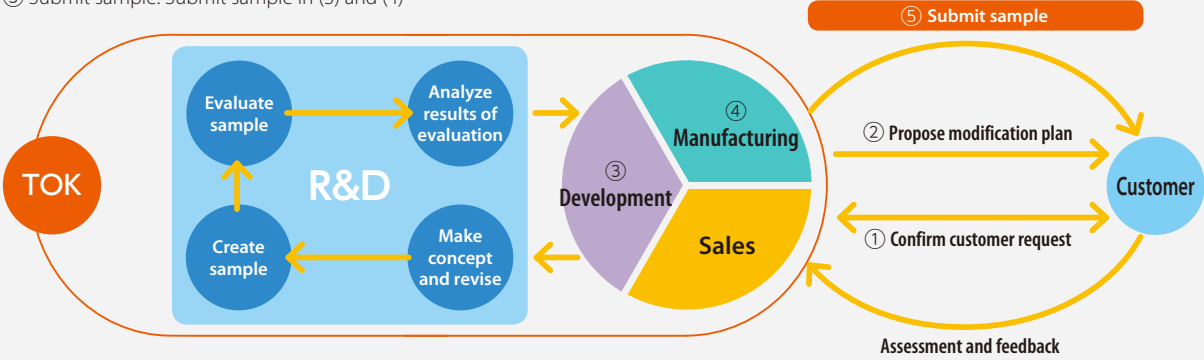
Along with advances in the miniaturization of semiconductors, customers have come to require higher-performance, higher-quality products, as well as more rapid development timelines. TOK has positioned its strategy of building close relationships with customers as a companywide strategy under the medium-term plan, while teams from sales, development, and manufacturing work in unison alongside customers to meet their requirements.

For example, when a customer requires new characteristics to be added to one of our products, it

is not rare for our development and sales personnel to communicate directly with the customers to ascertain their needs. We have seen great success from this approach at TOK Advanced Materials Co., Ltd. in Incheon, South Korea, which set up a development division inside its plant to eliminate the time it took to dispatch development personnel from Japan. Although the situation is different from Japan, with its advanced transportation network, we plan to continue our strategy of building close relationships with customers at each site while verifying the outcomes of these initiatives.

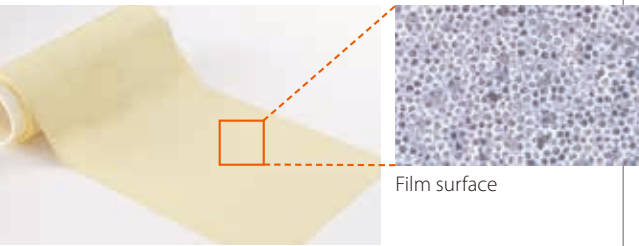
Flow of customer-oriented product development with “trinity” platform

- ① Confirm customer request: Sales and development personnel verify customer needs (requirements)
- ② Propose modification plan: Suggest plan to improve existing products with in-house development of new products and technologies
- ③ Development: Create sample that satisfy customer needs while collaborating with “manufacturing” in charge of commercialization
- ④ Manufacturing: Commercialize samples
- ⑤ Submit sample: Submit sample in (3) and (4)

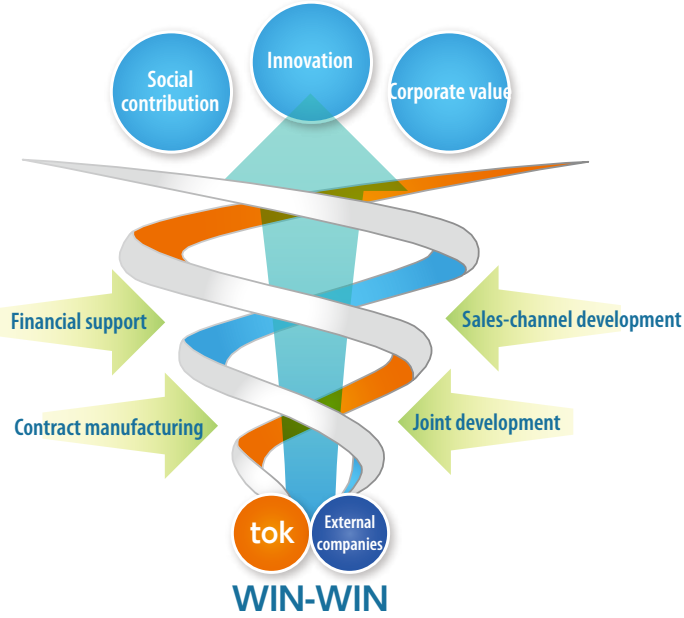


2. Develop new businesses by collaborating with external companies

After bringing to market its first photoresist in 1962, TOK has been a leading supplier in the world, pioneering cutting-edge microprocessing technology. This microprocessing technology that uses photolithography has played a key role in pushing advances in electronics devices used every day. By leveraging its core technologies accumulated over the years as well as collaborating with external companies that have excellent technologies that lead to new innovations, TOK aims to create new businesses that will become second and third pillars. During fiscal 2017, TOK made steady progress on this front, launching sales of porous films (TAPM: high-functional films) made with specially processed polyimide films using its microprocessing technology accumulated through manufacturing semiconductor materials and the Equipment Business.



TOK will rapidly advance R&D and commercialization while maximizing the strengths of TOK and external companies, aiming to create innovations that surprise the world.



TOPICS

Challenges of Sagami Operation Center Aiming to Create New Values through Restructuring

The Sagami Plant was opened as a new production site in 1967 to increase manufacturing capacity for the Company's products. In 1977, it became the Sagami Operation Center with the addition of an R&D division. Since then, the Sagami Operation Center has functioned as a site for an R&D-driven company, and it is being restructured into an R&D site that will take on the challenges of creating new corporate values, including new businesses.

1 Redefining “four functions” to continue as a core site for technological innovation

Accelerating open innovation with external parties

Promoting strategic partnerships in open innovation through proactive collaboration

Accelerating open innovation with internal parties

Create spaces for advancing in-house collaboration in a bid to provide high value-added products

Flexibly respond to future reform in the portfolio

Develop and reinforce environments for developing materials, functional materials, and function verification packaging that lead to the creation of new businesses

Advance to the next stage in high-purity chemicals production technologies

Construct clean rooms up to ISO Class 1 and try to establish technologies for zero contamination

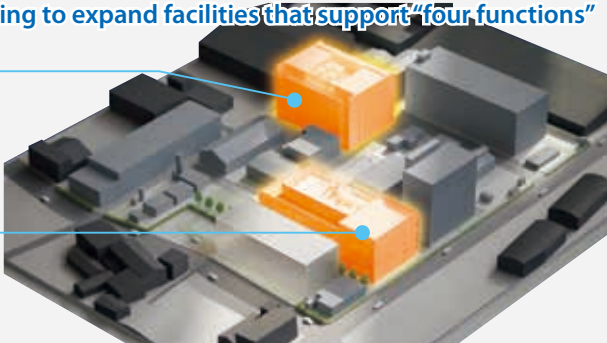
2 Construction of new C-1 Building and new B-6 Building to expand facilities that support “four functions”

New C-1 Building

Build out areas for open innovation related to resin synthesis and photoresist compounding in “organic materials test area,” “inorganic materials test area,” and “analysis area”

New B-6 Building

Establish an environment that facilitates advanced function verification, such as improving floor vibration criteria



Initiatives to Maintain and Enhance Quality

Basic Concept The TOK Group aims to be a corporate group trusted by the world for providing high-quality products that inspire customers. In all processes from design and development to raw material procurement, manufacture and sales, TOK aims to improve quality even further.

Priority Issues and Goals

Self-assessment of goal achievement ○ Took steps, achieved results △ Took steps, but need to do more × Did not take steps

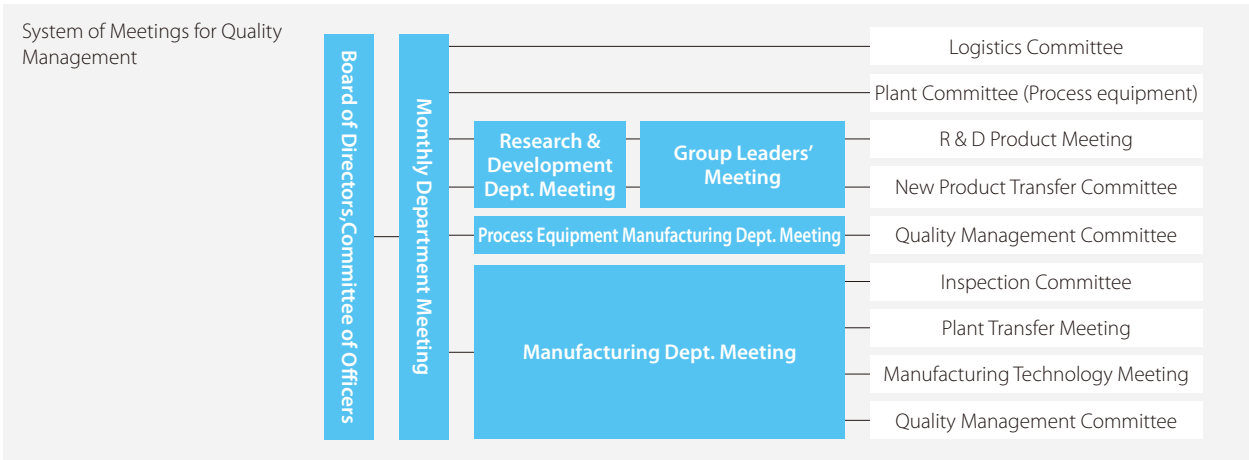
Item	Issues and goals of fiscal 2017	Evaluation	Issues and goals of fiscal 2018
Initiatives to Maintain and Enhance Quality	1. Maintaining and improving quality management systems	○	1. Maintaining and improving quality management systems

1. Toward maintaining and improving quality management systems

The TOK Group is committed to building relationships of trust and enhancing customer satisfaction by providing products that meet the needs of customers, and which customers can use with a sense of assurance and security. These efforts are undertaken in accordance with the TOK Group’s “Quality Manual.” TOK conducts activities to ensure the stability of product quality from the initial stages of mass-production by conducting risk assessments for newly developed products in their early stages, to provide superior products and services in terms of quality and function. Furthermore, we monitor the quality stability of existing products and work to discover irregularities in their early stages to ensure stable manufacturing processes.

During fiscal 2017, the TOK Group continued to improve quality by sharing quality management information among sites and introducing quality management methodologies suitable for each site.

Production plants have already acquired ISO 9001 certification (international standard for quality management systems), and under a system in which all related divisions take part, we hold various meetings related to quality management on a regular basis and carry out activities throughout the organization to raise quality, which include exchanging opinions on solutions to problems and sharing information.



Quality policy

Aim to be a globally trusted corporate group by inspiring customers with high-value-added products that have satisfying features, low cost and superior quality. Deepen and expand existing business domains and swiftly launch new business domains.

Each one of us clearly understand current situation and challenge ourselves with a sense of crisis.

1.Strengthen Marketing Ability, Be Motivated by a Strong Sense of Crisis, Prepare Well, and Take Immediate Action.

2.Promote Human Resource Development for Global Operation.

3.System to Capture Customer’s Voice Accurately and to Respond Them Immediately.

TOPICS

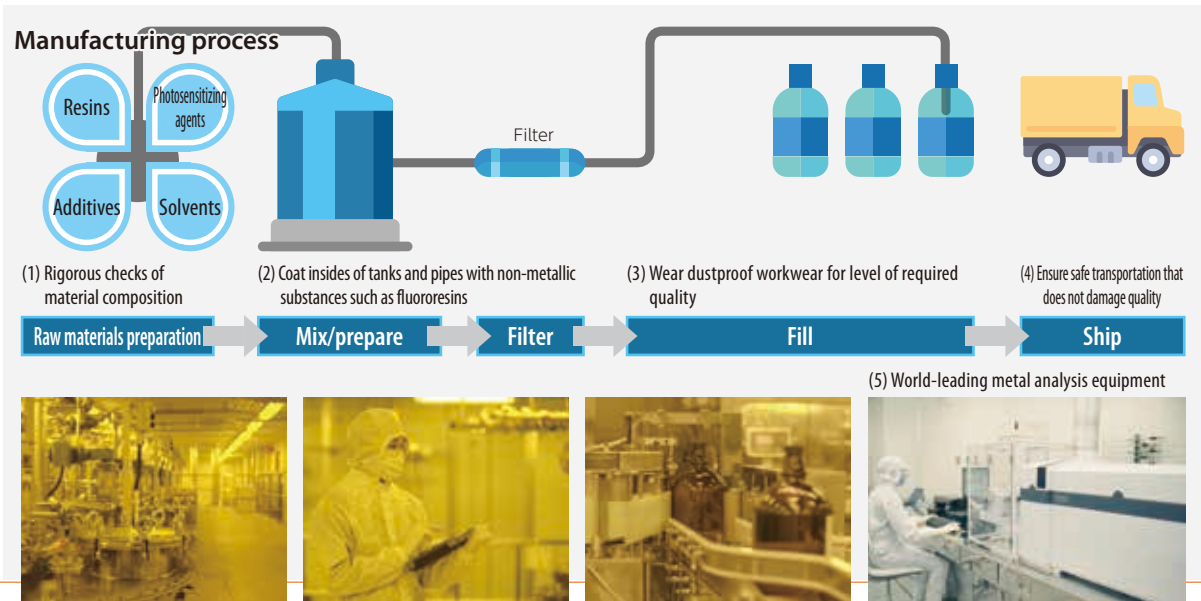
Thorough elimination of contamination with world-leading analysis and assessment system

Suspended particulates in cleanrooms and other impurities in photoresists are a cause of defects in semiconductor devices. As ultra-miniaturization of semiconductor circuits advances, TOK’s photoresists and high-purity chemicals must be of ultra-high purity. Systems need to be able to eliminate impurities to the ppt level (1 part per trillion) throughout cutting-edge production processes, especially metallic impurities, which can lead to defects in insulating films and leakage current.

To eliminate impurities, it is necessary to (1) minimize metallic impurities contained in raw materials; (2) improve manufacturing processes, as shown in the chart, by upgrading cleanroom environments and preventing contamination from manufacturing facilities; and, (3) update assessment and analysis systems for samples and products.

TOK has built a world-leading analysis and assessment system, created detailed manuals and fully trained employees to provide customers with products of the highest quality so they can be used without worry.

ppt level A level able to detect an impurity equivalent to one drop of coffee in one thousand 50-meter swimming pools.



Future Issues and Initiatives As semiconductor miniaturization advances, customer requirements for quality are likely to become increasingly sophisticated. TOK will continue to provide high-quality products while working to maintain and improve its quality management systems in line with customer requirements.

TOPICS

External Awards for Fiscal 2017

Efforts of the TOK Group, which provides products that can inspire its customers, have been highly evaluated by various customers, such as in the form of awards and other prizes. With this encouragement, we will further develop technologies and improve quality in the years ahead to provide highly satisfying services for customers.

During fiscal 2017, TOK received awards from leading companies including global semiconductor manufacturer Intel Corporation (U.S.), Taiwan Semiconductor Manufacturing Company Limited (Taiwan) and Japan Semiconductor Corporation (Japan).



Winning the Best Partner Award from the Japan Semiconductor Corporation (left)
Winning the PQS Award from Intel Corporation (right)

Creating a“Frank and Open-Minded”Workplace Where Workers Are Motivated

Initiatives to enhance corporate value through diversity

Respect for Human Rights and Initiatives for Fair Working Conditions

Basic Concept

The TOK Group has declared its respect for human rights and prohibits discrimination, and strives to understand and accept diverse values without regard to gender, age or nationality.

Based on this foundation, in line with one of our management principles, namely the creation of a frank and open-minded business culture, we are committed to developing a safe and sound working environment where each and every one of our employees can work in a motivated manner.

Priority Issues and Goals

Self-assessment of goal achievement ○ Took steps, achieved results
△ Took steps, but need to do more × Did not take steps

Item	Issues and goals of fiscal 2017	Evaluation	Issues and goals of fiscal 2018
Work style reforms	1. Prevention of harassment	○	1. Prevention of harassment
	2. Initiatives to maintain fair personnel and employment systems	○	2. Continue initiatives to maintain fair personnel and employment systems

▶ Respect for human rights

Respect for human rights is a fundamental basis for sustainable value creation through international business activities.

The TOK Group respects the basic human rights of individuals, diverse values, personality and privacy based on the TOK Group Personnel Management Rules and Compliance Standards of Conduct, and has pledged to never infringe on human rights of each officer and employee based on birth, nationality, race, ethnicity, belief or religion.

We conduct company-wide activities aimed at raising awareness of human rights, and have put in place systems such as collaboration with legal firms to respond to complaints and carry out improvements.

1. Prevention of harassment

TOK has codified “Detailed rules concerning harassment” and set up contact points and clarified procedures for handling harassment incidents. To prevent or correct harassment, we also strive to raise awareness among all employees through harassment prevention training.

In recent years, the Company has taken more steps to prevent harassment by making rules based on the Ministry of Health, Labour and Welfare’s guidelines for preventing maternity harassment and paternity harassment, as well as by clarifying contact points and procedures for handling harassment incidents.



Human Resources Policy

TOK has established a consistent policy of regarding human resources as the asset of the company since our establishment. We view all employees as valuable assets, and have stipulated the following items in line with this belief.

- ◇Never forget that business always starts with “people”.
- ◇Any discrimination within company and among employees is strictly prohibited.
- ◇Full compliance with applicable laws and regulations, as well as fair and equal compensation.
- ◇Educate personal and promote creativity to become a company that develops innovative technologies.
- ◇Personnel systems based upon performance, emphasizing and ensuring transparency.

▶ Building good labor relations

The Tokyo Ohka Kogyo Labor Union was formed in 1976 and is a member of the Japanese Federation of Textile, Chemical, Food, Commercial, Service and General Workers’ Unions. TOK has a union shop agreement with the labor union. As of December 31, 2017, there were 1,115 labor union members affiliated with the Group, and 83.2% of all employees are party to a labor-management agreement.

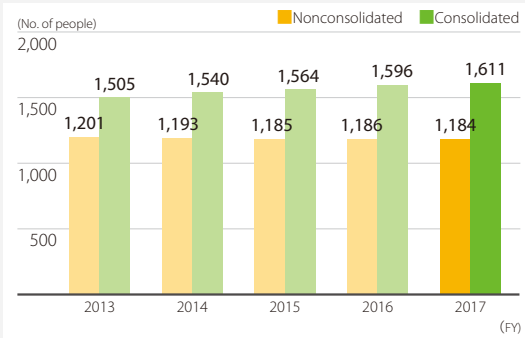
Since the labor union was first formed, labor and management have maintained good, cooperative relations. Once every two months, the central labor-management meeting takes place on the operating environment and other labor-management issues. As a part of this, we have concluded various labor agreements that include provisions on occupational safety and health for maintaining good labor and workplace conditions. When changes in working pattern are made for business purposes, they are always discussed in advance with the labor union.

2. Initiatives to maintain fair personnel and employment systems

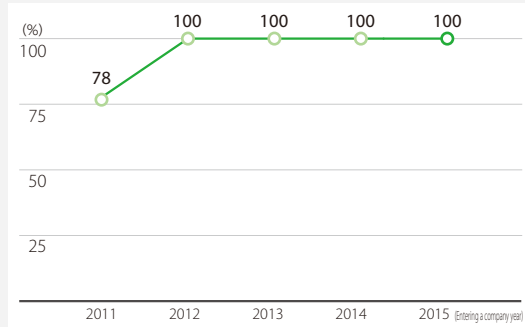
All employees of the TOK Group work as a group every day in diverse operating environments, in terms of race, languages, cultures and customs, to deliver products and services to customers around the world.

To be a corporate group that attracts and motivates employees, TOK set up the Personnel System Examination Committee for the purpose of improving corporate value with an eye on becoming a “100-year company.”The Committee’s meetings are attended by members of the Human Resources Div. and officers in charge, who examine initiatives in personnel and employment systems. Efforts are made to continuously advance the personnel system and improve work environments through an employee awareness survey to quantitatively identify organizational strengths and issues.

Number of employees



Fixation rate three years after the entering a company



Employee composition(Non-consolidated) As of December 31, 2017

	Number of people	Average age	Average length of service (No. of years)
Male	1,045	44.2	21.6
Female	139	35.4	12.7
Total or average	1,184	43.1	20.6

Number of employees at the overseas subsidiaries As of December 31, 2017

	Number of employees
KUMAGAYA OHKA CO., LTD.	8
TOK ENGINEERING CO., LTD.	4
TOK TECHNO SERVICE CO., LTD.	18
TOKYO OHKA KOGYO AMERICA, INC.	95
TOKYO OHKA KOGYO EUROPE B.V	10
TOK TAIWAN CO.,LTD.	150
CHANG CHUN TOK CO.,LTD.	21
TOK ADVANCED MATERIALS CO.,LTD.	104
合計	410

System users

Fiscal Year	2013	2014	2015	2016	2017
The number of users	42	44	54	64	81
Total	136	147	157	167	184

TOPICS

Recognized in 2018 Certified Health & Productivity Management Outstanding rganizations Recognition Progra

We believe the health of our employees is an essential component of business operations that has a major impact on the Company’s performance. On this basis, we have taken clear steps to prevent and discover employee illness with the aim of encouraging employees to take better care of their health. In fiscal 2015, we created the Data Health Plans to steadily move through a PDCA cycle and diligently work on helping employees with their health.

During fiscal year under review, we worked with the Tokyo Ohka Kogyo Health Insurance Society on various insurance-related measures, such as covering the entire cost of group vaccinations for influenza. We also worked

to prevent illnesses from becoming more serious through early discovery and treatment. As a result of continuing these initiatives,

TOK was recognized in the 2018 Certified Health & Productivity Management Outstanding Organizations Recognition Program (White 500) by the Ministry of Economy, Trade and Industry and the Nippon Kenko Kaigi for its organizational structure for health management and measures to promote employee health.



Initiatives to support growth by making the most of employee distinctiveness and enhance TOK's vitality and value

Basic Concept

We believe sustained growth depends on having diverse perspectives and values. We proactively hire and promote people who take pride in working for the TOK Group and who are able to both express their own opinions and listen to the opinions of others. TOK aims to create a corporate culture where new value is created out of the collision and mix of different values. By realizing our management principle of having a frank and open-minded culture, we aim to change our business portfolio into one representative of a truly global “100-year company.”

Priority Issues and Goals

Self-assessment of goal achievement | ○ Took steps, achieved results
△ Took steps, but need to do more × Did not take steps

Item	Issues and goals of fiscal 2017	Evaluation	Issues and goals of fiscal 2018
Work style reforms	1. Promotion of corporate activities that leverage diversity	○	1. Continue promotion of corporate activities that leverage diversity
	2. Promotion of women in the workplace	△	2. Promotion of women in the workplace

1. Promotion of corporate activities that leverage diversity

By utilizing diverse human resources and providing employees with opportunities to work to the best of their abilities, TOK aims to foster innovations that lead to the creation of value. To this end, TOK hires people from various research fields and people from foreign countries, and promotes some of these employees to senior management positions. TOK periodically holds the Global Conference to assemble the leaders of Group companies for sharing information and holding discussions about their companies and countries in a bid to generate synergy.

2. Promotion of women in the workplace

At each stage of hiring, retaining, and promoting women to management positions, our basic approach can be found rooted in our frank and open-minded corporate culture as the basis of our management principles. It is important for employees to find a balance between their personal lives and work. We make every effort to smoothly and consistently maintain workplaces that facilitate work-life balance.

In our hiring practices, we focus on increasing the female hiring ratio and encourage both female and male employees to take advantage of our childcare and nursing care leave systems. We make concerted efforts to create work environments that are more welcoming to women. We facilitate the promotion of

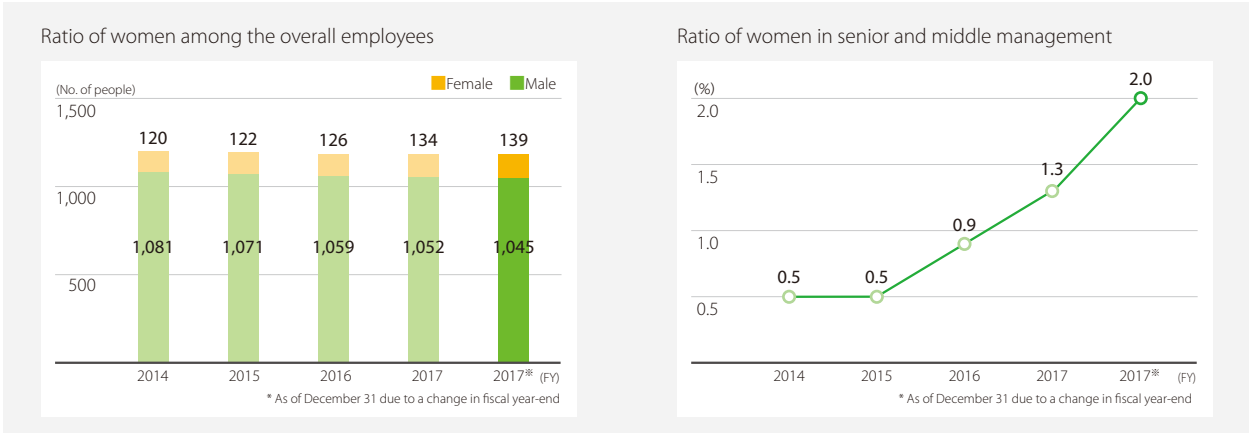
women into management positions by proactively encouraging women to undergo training for selected members and providing education that helps women think of their future careers from a young age. TOK has put in place a return-to-work system for rehiring employees who had to quit due to family circumstances or other reasons, allowing them to resume their careers.

TOPICS

Selected as a constituent stock in the MSCI Japan Empowering Women Index (WIN)

The TOK Group has been selected as a constituent in the MSCI Japan Empowering Women Index, a stock index managed by U.S.-based MSCI that the Government Pension Investment Fund (GPIF) uses for ESG investing.

The MSCI Japan Empowering Women Index focuses on society (S) within the ESG concepts of environmental (E), social (S) and governance (G). This thematic index selects companies from a broad range of sectors that score highly in terms of gender diversity and women empowerment.



Promoting a good work-life balance: making the most of every day, whether at work or home

Basic Concept

The TOK Group believes it is essential to have a corporate culture where employees can work for many years in health without worrying about their jobs, while feeling motivation and satisfaction in their work as they pursue their own lifestyles and fulfill their family responsibilities at each life stage. For this reason, the Company provides environments where employees can work with peace of mind, and develops and improves internal systems based on policies that allow employees to fulfill their responsibilities to their families.

Priority Issues and Goals

Self-assessment of goal achievement | ○ Took steps, achieved results
△ Took steps, but need to do more × Did not take steps

Item	Issues and goals of fiscal 2017	Evaluation	Issues and goals of fiscal 2018
Work style reforms	1. Promoting a good work-life balance	○	1. Promoting a good work-life balance

1. Promoting a good work-life balance

After joining the Company, many employees must deal with family responsibilities during their careers, such as child raising or nursing care for family members. TOK has introduced a variety of systems to promote a work environment that allows for flexible working arrangements. TOK has formulated an action plan based on the Act on Advancement of Measures to Support Raising Next-Generation Children. To ensure that employees are able to balance work and family commitments, we are injecting efforts



into creating better workplace environments that are easy to work in. The results of our efforts were recognized with the Kurumin (Mark of Support for Raising Next-Generation Children) accreditation in 2012.

User breakdown (As of December 31, 2017)

Childcare related systems	Number of users
Childcare Leave System	4 (2)
Shorter Working Hours	2 (3)
Childcare Time	12 (6)

*Figures in parentheses indicate new users in fiscal 2017

Future Issues and Initiatives

As with the childcare leave system, employee usage of our systems tends to lean toward women, so we are focusing efforts on creating a work environment and corporate culture where men are also able to take advantage of these systems without hesitation. We are aggressively taking steps examining the introduction of new systems, while improving our systems with attention paid to their convenience to facilitate a good work-life balance for our employees.

Childcare Leave System

We introduced the childcare leave system in July 1990. Under the system, employees are allowed to take leave for child care from the birth of their child up until 18 months of age or up until the first April 30 after the child's first birthday, whichever is longer. This enables employees to take leave for up to two years, which exceeds the length of the statutory leave period. The employee who has taken childcare leave can return to the same or an equivalent position in principle. They are also allowed to shorten their working hours until their child completes the third grade of elementary school. In addition, we introduced a flextime scheme for childcare in October 2007 in order to further enhance the support for employees' child raising efforts.

Sick Leave System

In March 1993, we adopted the sick leave system that supports staffs who are unable to work due to non-occupational injury or illness and have used all their paid leave. The sick leave is classified into three categories of “short-term sick leave,” “long-term sick leave” and “special long-term sick leave” and the amount of compensation for absence from work is determined according to the categories.

Occupational Rehabilitation System

In April 2005, we adopted the occupational rehabilitation system to help employees return comfortably to work after an absence of more than one month or longer due to non-occupational injury or illness. Under this system, these employees can reduce their working hours for up to two months from the day they return to work.

Expired Paid Leave Reserve System

In April 2008, we introduced the expired paid leave reserve system. Under the system, employees can reserve their unused, expired paid leave in cases where they have non-occupational injury or illness. A maximum of five days can be added each year and a total of up to 30 days can be reserved. The reserved paid leave can be used in units of 0.5 days.

For other systems, refer to

<https://www.tok.co.jp/eng/csr/employees/conditions.html>

Environmental Initiatives



We aim to establish a more effective management system that is able to ensure safety and security under a globally unified management system.

Nobuo Tokutake
General Manager for Environmental Management
Director, Officer, Department Manager, Manufacturing Dept.

Ongoing efforts to prevent environmental and workplace accidents at manufacturing sites are the foundation of corporate responsibility. Since its founding, the TOK Group has continued activities to properly manage chemical substances that contribute to the development of humanity and to eliminate social unrest. In April 2012, TOK declared its adoption of Responsible Care. As a company that handles chemical substances, we promote Responsible Care activities, voluntarily caring for the environment, health, and safety (EHS) from product development to disposal and recycling processes, aiming to improve our credibility as well as communicating with society.

In April 2016, TOK established the EHS Div. in light of the need to strengthen its EHS work. In addition to the

activities of the EHS Div., the EHS Div. was designated as a control tower for centralized management covering overseas sites, performing one of core 11 functions in the GMS (Group Management System) project that aims to build a common business management structure for the TOK Group. In the EHS Div., we aim to ensure safety and security by clarifying organizations, missions, and roles while reviewing management rules to set up systems in line with the management policies of GMS in our annual action plan.

To continually improve and strengthen communications with each site and progress with specific initiatives, TOK aims to establish a highly effective management system with a properly functioning PDCA process.

Environmental Policy

Contributing to society in our aim to become a corporate group that is trusted around the world, is one of the most important themes in our management plans. Accordingly, we will track our impact on the environment in all phases, from product development to procurement, production, sale, and disposal. Reducing environmental impact from our corporate activities by complying with laws and regulations, as well as our internal regulations and social norms, and balancing production with environmental conservation while preventing of pollution. We will take steps to accelerate the development of businesses in the environment and energy fields in order to contribute to the creation of energy on a global scale.

- 1.Enhance handling and management with consideration for chemical safety and the environment.
- 2.Promote efficient use, reuse, and recycling of resources.
- 3.Promote activities to conserve energy and mitigate global warming.
- 4.Prevention of pollution.

Labor security hygiene Policy

In consideration for the safety of the medicine to use as chemicals manufacturing industry, I carry out the reduction of the risk and exclusion and security work thoroughly and act for security of the security of an employee and the interested party and the prevention of the illness.

- Prevention of the work-related accident
- Continuous improvement of the system

Outline of RC Management

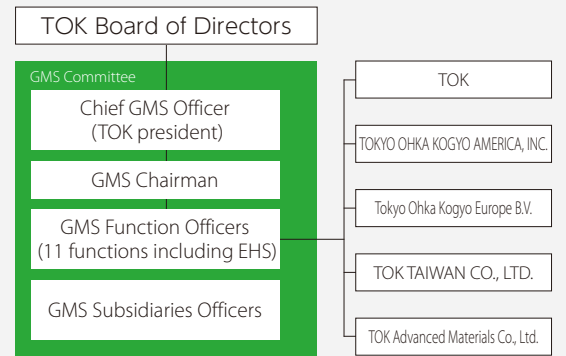
Basic Concept

TOK appropriately identifies risks associated with its production and sales activities, and invests management resources to secure clean environment/health/safety across the life cycle (development/production/consumption/recycling/disposal) of chemical products including photoresists for semiconductors and displays, as well as manufacturing equipment. We also continue improvement initiatives effectively to shape a sustainable society through our business.

Responsible Care (RC) activity framework

Agreeing with the Responsible Care initiatives of the Japan Chemical Industry Association, TOK declared its adoption of Responsible Care in 2012.

Thereafter in October 2017, the GMS Committee (TOK Group Management System) was created with EHS management as one of its core functions based on the newly drawn up EHS Management Policy. The EHS Div. is the main body in charge of supervising the EHS work conducted in Japan and overseas subsidiaries, and it also screens weakness and engages in improvement activities to strengthen the system.



Priority issues in EHS activities in fiscal 2017

1. Strengthen in-house management of used raw materials

The chemical substances used by the TOK Group often employ new structures in order to meet the functional and quality requirements in its products. Owing in part to incidents where different names were being used for the same chemical substance, TOK adopted a proprietary shared ID management system for the raw materials it uses, beginning in the fiscal year under review. This system has helped prevent mistakes in information related to chemical substances, while enabling rapid screening of products under development and swiftly applying for the registration of chemical substances in each country.

2. Strengthen systems for compliance with environmental and safety-related laws and regulations

While adhering to related laws and regulations, we set voluntary standards stricter than legally mandated levels, and are implementing activities in line with goals for reducing waste and saving energy over the medium term through 2019. In addition, we have reduced workplace accidents as a result of reviewing work environments to prevent occupational accidents caused by physical weakness. Moreover, we have strengthened our compliance structure by putting in place a chemical substance screening system for new products entering mass production and changes are made to existing products to prevent leaks of notifications and reports based on legal and customer requirements.

TOK is taking a more proactive stance on tackling global environmental issues

The TOK Group is advancing initiatives centered on CO2 reduction, industrial waste reduction, and proper management of chemical substances. The Group's organizational structure properly functions in accordance with environmental management systems (ISO 14001), and has achieved results within the scope of laws and regulations, but some parts are lacking in terms of collaboration between each department and overseas bases. As a core function of GMS, however, now that EHS Div. is designated as the division in charge of centralized management of environmental initiatives, and we are taking a more proactive role in addressing various issues than before.

We believe our mission should include global issues outlined by SDGs, which may not seem a part of our daily lives in Japan. It is for this very reason that the EHS Div. is assuming a leadership role by bringing up these issues and educating employees about them. With regard to the problem of water risk, which has become more widely recognized as a serious global risk in recent years, we are working to identify the current state of risks and will examine what we can and should do to address this risk.

Kimitoshi Kato
General Manager, EHS Div.



Targets and Results of Responsible Care Activities

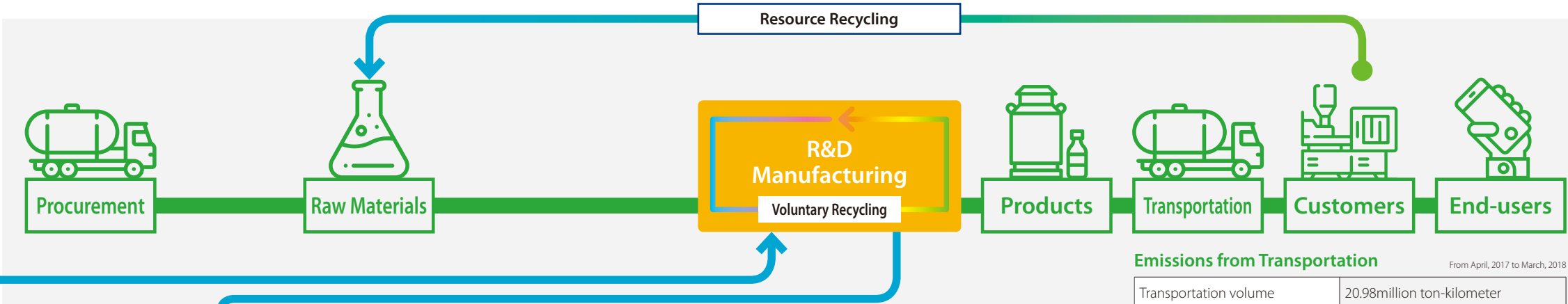
Managed items	Issues and goals of fiscal 2017		Fiscal 2017 results	Evaluation	Issues and goals of fiscal 2018
Environmental protection	Promotion of environmental management				
	Eradicate environmental accidents that affect external parties: Severe environmental accidents: Zero		Number of environmental accidents Severe accidents: Zero	○	Number of environmental accidents Severe accidents: Zero
	Proactive response to new environmental regulations		Grasped trends in environmental regulations without delay and responded appropriately	○	Accurately respond to regulations in Japan and abroad, address new environmental regulations
	Proactive disclosure of environmental information		Proactively disclosed information Published CSR Report	○	Proactively disclosed information Published CSR Report
	Address climate change issues				
	Improve energy-related CO2 emissions per base unit	Medium-term target: Reduce energy-related CO2 emissions (per base unit) by 10 points by 2019 compared with 2009 (reduction of 1 point annually) Fiscal 2017: Reduce CO2 emissions (per base unit) by 8 points compared with 2009	Reduced CO2 emissions (per base unit) by 6 points compared with 2009	×	Reduce CO2 emissions (per base unit) by 9 points compared with 2009
		Reduce energy-related CO2 emissions (per base unit) by at least 1 point from the previous year	Reduced CO2 emissions (per base unit) by 2 points compared with the previous year	○	Reduce energy-related CO2 emissions (per base unit) by at least 1 point from the previous year
	Improve energy consumption per base unit	Medium-term target: Reduce energy consumption (per base unit) by 10 points by 2019 compared with 2009 (reduction of 1 point annually) Fiscal 2017: Reduce energy consumption (per base unit) by 8 points compared with 2009	Reduced energy consumption (per base unit) by 16 points compared with 2009	○	Reduce energy consumption (per base unit) by 9 points compared with 2009
		Reduce energy consumption (per base unit) by at least 1 point compared with the previous year	Reduced energy consumption (per base unit) by 0.2 points compared with the previous year	×	Reduce energy consumption (per base unit) by at least 1 point compared with the previous year
	Improve energy consumption per base unit in distribution	Reduce energy consumption (per base unit) by at least 1 point compared with the previous year	Energy consumption (per base unit) increased by 6 points compared with the previous year	×	Reduce energy consumption (per base unit) by at least 1 point compared with the previous year
	Promote resource recycling				
	Initiatives to address water risk	Measure water usage at main points of use and quickly detect abnormalities	Measured water usage at each site and main points of use	○	Reduce water pollution risk by reassessing water drainage paths
		Measure current water risk at TOK Group sites	Conducted surveys of water usage conditions at overseas business sites, measured usage in water risk regions	○	Examine ways to reduce water usage in regions with high water risk
	Reduce industrial waste	Medium-term target: Reduce industrial waste (per base unit) by 5 points by 2020 compared with 2015 (reduction of 1 point annually) Fiscal 2017: Reduce industrial waste (per base unit) by 2 points compared with 2015	Reduced industrial waste (per base unit) by 5 points compared with 2015	○	Reduce industrial waste (per base unit) by 3 points compared with 2015 and by 1 point compared with the previous fiscal year
		Reduce industrial waste disposed in landfills Maintain zero emissions (keep less than 1%)	Industrial waste disposed in landfills → less than 1% Achieved zero emissions	○	Reduce industrial waste disposed in landfills Maintain zero emissions (keep less than 1%)
	Preserve air, water and soil environment				
	Prevent air and water pollution	Prevent air, water and soil pollution Keep under operational thresholds	Incidents where operational thresholds were exceeded: 2	×	Prevent air, water and soil pollution Keep under operational thresholds
	Countermeasures against ozone-depleting substances	Reduce CFC leakage volume through proper management of equipment (previous year → 82t-CO2) Promote use of alternative CFCs	Estimated CFC leakage volume → 25t-CO2 Upgraded to equipment that uses alternative CFCs	○	Manage CFC leakage volume through proper management of equipment Promote use of alternative CFCs
	Comply with PRTR Law	Precisely measure and report emissions of PRTR-regulated substances	Measured emissions and reported	○	Conduct surveys to reduce volume
	Preserve biodiversity				
	Preserve biodiversity	Improve awareness of biodiversity based on TOK Biodiversity Protection Declaration and encourage participation in related activities	Participated in the Kanagawa Trust Midori Foundation and activities to protect the environment around village forests Maintained biotopes (Dragonfly Pond)	○	Promote understanding of the importance of preserving biodiversity
Chemical substance management	Precisely address laws and regulations				
	Carry out appropriate and reliable management of chemical substances	Obtain information about revisions to laws and regulations, create deployment procedures Strengthen upstream management system	Updated manuals for managing chemical substances, clarified procedures for obtaining and fulfilling legal requirements when raw materials are changed Got EHS Div. involved from development stage, performed checks on proper use of chemical substances	○	Obtain information about revisions to laws and regulations, maintain deployment procedures Maintain upstream management system
	Properly comply with PCB Special Measures Act	Properly collect and store PCB-containing equipment, quickly dispose of PCB waste (low and high concentrations)	Continued to properly collect and store PCB-containing equipment Implemented plans to dispose of low-concentration PCB waste held in storage Continued to properly store high-concentration PCB waste	○	Properly collect and store PCB-containing equipment, quickly dispose of PCB waste (low and high concentrations)
Occupational health and safety, security/ disaster prevention	Occupational health and safety/environmental protection activities				
	Foster a safety culture	Implement experiential training for safety	Implemented experiential training for environmental safety	○	Implement preventive measures based on actual occupational accidents
	Safety education and training, disaster drills	Systematically implement emergency response training Periodically implement environmental awareness training	Implemented safety education and training, disaster drills	○	Systematically implement emergency response training Systematically implement environmental awareness training Implement guideline training for accident prevention
	Promote risk assessment in handling chemical substances	Strengthen initiatives to reduce risk in handling chemical substances	Strengthened response system for chemical injuries and accidents	○	Strengthen initiatives for reducing risk in handling highly corrosive chemical substances
	Zero workplace accidents	Zero workplace accidents	Implemented prevention of workplace accidents	○	Maintain zero workplace accidents

Reduction in Environmental Burden from our Corporate Activities

Environmental Performance

TOK conducts daily quantitative and qualitative evaluation of the effects that its corporate activities have on the environment, and takes various initiatives to minimize their impact.

Environmental performance Environmental performance evaluation is a method of evaluating, in qualitative and quantitative terms, environmental activities and results achieved by an organization in accordance with its environmental policy, objectives and goals



INPUT		OUTPUT	
Total energy consumed	14,859kL crude oil equivalent	CO ₂	30,000t-CO ₂
Electric power	40,860,000kWh(10,291kL crude oil equivalent)	SOx	1.4t
Petroleum (heavy oil)	1,049kL(1,058kL crude oil equivalent)	BOD	0.3t
Gas	2920,000m ³ (3,393kL crude oil equivalent)	General administrative waste	46t(Recycling rate: 57%)
Used water	404,000m ³	Industrial waste	General industrial waste 1,550t(Recycling rate: 35%) Specially controlled industrial waste 3,470t(Recycling rate: 65%)
Chemical substances (Class 1 Designated Chemical Substances under the PRTR Law)	1,230t		

From January, 2017 to December, 2017 (as for the chemical substance from April, 2017 to March, 2018)

From January, 2017 to December, 2017

SOx Produced from the combustion of fossil fuels containing sulfur. These are considered to be the causative substances of acid rain.

BOD BOD refers to the volume of oxygen required when pollutants in the water (organic substances) are turned into inorganic substances or gases through the action of microorganisms. BOD is a major indicator used when evaluating the degree of contamination of rivers and other water bodies. A higher value for BOD means that the water involved is more contaminated.

Data on environmental impact by site for fiscal 2017 https://www.tok.co.jp/csr/env-activity/load_data.html

Emissions of greenhouse gases

As climate change has become more serious in recent years, companies are expected to measure their greenhouse gas emissions from not only their own properties, but also across their entire value chain. The TOK Group measures and calculates its greenhouse gas emissions based on the Ministry of the Environment's Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain within the context of emissions from business activities (Scope 1, Scope 2) and indirect emissions from non-business activities (Scope 3).

TOK will advance initiatives toward the realization of a sustainable society, identifying issues throughout its value chain where its corporate activities can have an impact.

SCOPE1	9,717t-CO ₂	SCOPE2	20,319t-CO ₂
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Scope3 Emissions by Category

Purchased goods and services	31,495t-CO ₂	Downstream transportation and distribution	Domestic:2,902t-CO ₂ Overseas:3107t-CO ₂
Capital goods	Not applicable		
Fuel-and energy-related activities not included in Scope 1or 2	-	Processing of sold products	Not applicable
Upstream transportation and distribution	Not applicable	Use of sold products	Not applicable
Waste generated in operations	7,782t-CO ₂	End-of-life treatment of sold products	Not applicable
Business travel	803t-CO ₂	Downstream leased assets	Not applicable
Employee commuting	588t-CO ₂	Franchises	Not applicable
Upstream leased assets	-	Investments	Not applicable

From April, 2017 to March, 2018

Emissions from Transportation

Transportation volume	20.98million ton-kilometer
Energy consumed	1,092crude oil equivalent
CO2emissions	2,902t-CO ₂

From April, 2017 to March, 2018

Environmental Accounting

Environmental accounting

A system for understanding environmental conservation related investments made by, and expenses incurred by, businesses and other organizations, as well as the effects of such investments, in quantitative terms (currency or physical quantity) and communicating such information to stakeholders.

TOK has been using environmental accounting since fiscal 2000. This allows the Company to conduct environmental management while monitoring the expenses and effects of environmental programs. In fiscal 2017, environmental conservation expenses totaled ¥457 million, mainly for the prevention of pollution and recycling of resources.

Category		Key Initiatives	Investment	Cost
Business area cost	Pollution prevention cost	Air, water and other pollution prevention equipment and its renewal, operation, maintenance and management	2	94
	Global environmental conservation cost	Energy conservation activities	86	26
	Resource circulation cost	Waste processing	33	203
Upstream/Downstream cost		Green purchasing, collection of used products	0	8
Administration cost		Approach to environmental management system	0	96
R&D cost		Research and development related to environmental conservation (equipment and products for reducing environmental impact)	0	29
Social activity cost		Cleanup activities around the production plants	0	1
Environmental remediation cost			0	0
Total			121	457

*Changed to the total for January to December to rect a change in the scal year-end .

Environmental Conservation Cost

Investments refer to the accounting for equipment associated with environmental conservation and improvement. Expenses are the sum of depreciation, personnel and other operating expenses associated with environmental conservation. Personnel expenses are computed based on a basic unit cost.

Economic benefits associated with environmental conservation measures

Figures are calculated based on internally realized benefits from the sale of materials having value and from the reduction of costs.

Revenue		Amount
Revenue	Gains on the sale of recycled products	17
Cost savings	Reduction in disposal costs through reduction in the volume of waste	119
Total		136

*Changed to the total for January to December to rect a change in the scal year-end .

*Scope of environmental accounting covers production facilities in Japan and distribution centers, excluding the headquarters and marketing offices. Reference used is the Environmental Accounting Guidelines 2005, published by the Ministry of the Environment.
*Amounts of less than one million yen have been rounded off.

Environmental Protection

Address Climate Change Issues

Basic Concept

The TOK Group quantitatively measures the environmental impact of its value chain, and works to reduce environmental burden with a full understanding of the impact our production activities have on the environment.

We aim to achieve sustainable development alongside society through the development of products that help conserve resources and energy.

Priority Issues and Goals

Self-assessment of goal achievement

○ Took steps, achieved results
△ Took steps, but need to do more
× Did not take steps

Item	Issues and goals of fiscal 2017	Evaluation	Issues and goals of fiscal 2018
Environmental protection	1. Improve energy-related CO2 emissions per base unit ◇Reduce CO2 emissions (per base unit) by 8 points compared with 2009 ◇Reduce energy-related CO2 emissions (per base unit) by at least 1 point compared with the previous year Improve energy consumption per base unit ◇Reduce energy consumption (per base unit) by 8 points compared with 2009 ◇Reduce energy consumption (per base unit) by at least 1 point from the previous year	× ○ ○ ×	1. Improve energy-related CO2 emission per base unit ◇Reduce CO2 emissions (per base unit) by 9 points compared with 2009 ◇Reduce energy-related CO2 emissions (per base unit) by at least 1 point from the previous year Improve energy consumption per base unit ◇Reduce energy consumption (per base unit) by 9 points compared with 2009 ◇Reduce energy consumption (per base unit) by at least 1 point from the previous year
	2. Improve energy consumption per base unit in distribution ◇Reduce energy consumption (per base unit) by at least 1 point from the previous fiscal year	×	2. Improve energy consumption per base unit in distribution ◇Reduce energy consumption (per base unit) by at least 1 point from the previous fiscal year

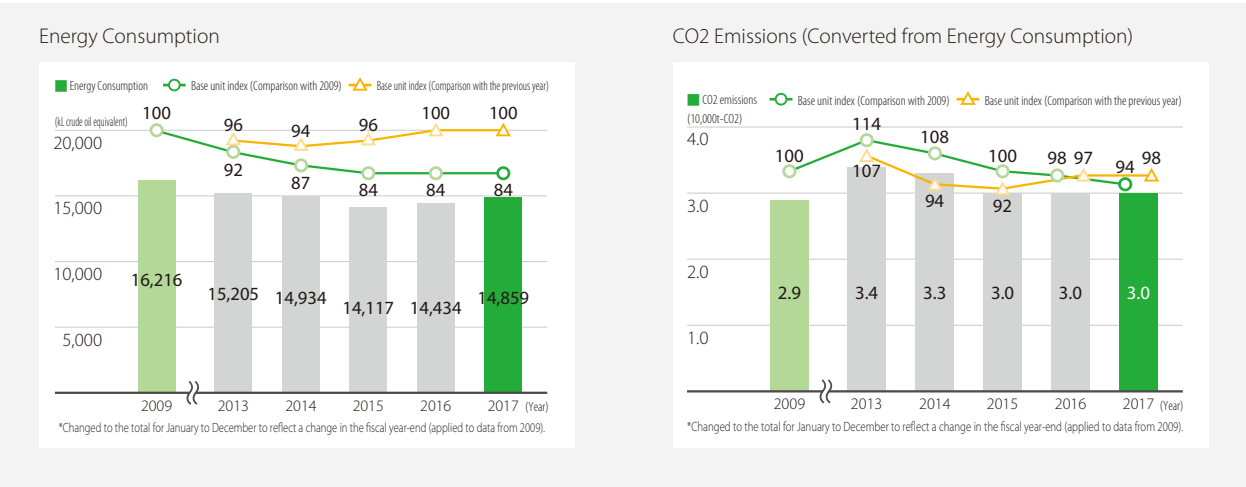
1. Improve energy consumption per base unit and CO2 emissions

TOK strives to reduce its environmental impact by improving product manufacturing processes, work efficiency, and facility operations, upgrading to high-efficiency equipment, and enhancing heat insulation around steam pipes. In 2017, electricity, city gas and other energy usage increased by 3 points compared with the previous fiscal year, equivalent to 14,859kL of crude oil, reflecting an increase in production volume at our sites that resulted in longer operating hours and the installation of

inspection equipment. Energy-related CO2 emissions increased by 1 point from the previous fiscal year to 30,036t-CO2.

Energy consumption was 84% of the base unit indexed to 2009, exceeding our target by 8 points, but at 99.8% of the base unit indexed to the previous year fell short of the objective of 1 point reduction.

Energy-related CO2 emissions were 94% of the base unit indexed to 2009, short of our target by 2 points, but they were 98% of the base unit indexed to the previous year, exceeding our target by 1 point.



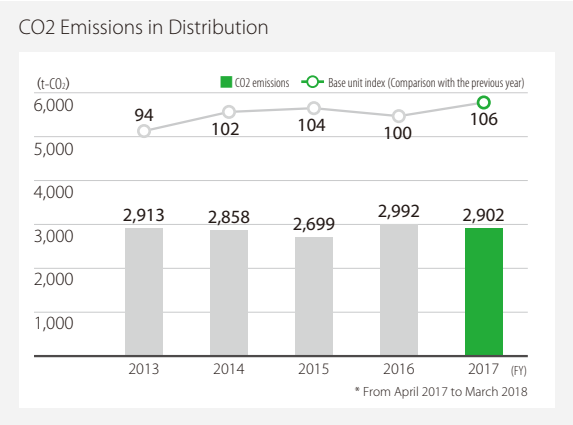
2. Improve energy consumption per base unit in distribution

Environmental measures in distribution: Increasing transportation efficiency

In fiscal 2017, shipments of products to overseas increased and the transportation of intermediate materials to overseas plants also increased, while shipments in Japan decreased. As a result, transportation ton-kilometers declined 11% and fuel consumption also decreased 6%. In terms of base units, cargo volume declined but the ratio of exported cargo that uses more packaging increased, resulting in a 6 point increase from the previous year. Accordingly, we failed to meet our target of 1 point reduction compared with the base unit indexed to the previous fiscal year.

Providing environmental and safety information during transportation

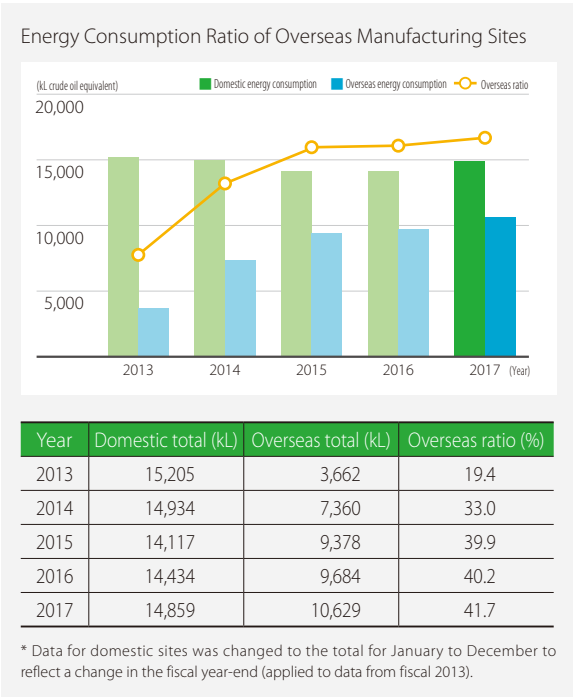
When hazardous products are transported, any leaks, fires, explosions or other accidents may cause damage to roads, people, objects, and ecosystems. For this reason, as a precaution, our drivers always carry



with them emergency contact cards (yellow cards) to help protect the environment and ensure safety.

3. Measures to prevent global warming at overseas manufacturing sites

In 2017, the overseas ratio of energy consumption increased slightly, reflecting the expansion of production facilities at overseas sites. Through a PDCA cycle for environmental management system, we will engage in production activities with a focus on energy conservation.



Future Issues and Initiatives

We view global warming and climate change as social issues on a global scale. Currently, each site is in charge of its own activities to address such issues because energy procurement costs and supply processes vary by site. Going forward, the TOK Group will formulate a clear vision, focus more on collaborative initiatives to increase the ratio of renewable energy and use lower-carbon energy sources by switching from coal and heavy oil to natural gas for energy.

Comment from a manager

Toward achieving our targets for 2019

TOK has set a medium-term target for reducing energy-related CO2 emissions (per base unit) by 10 points by 2019 compared with 2009 (reduction of 1 point annually), and has taken various measures to reduce CO2 emissions. One of these measures that should have a major impact on reducing CO2 emissions is the switch from heavy oil to natural gas as a fuel for boilers. City gas is being increasingly used as boiler fuel as the supply area for city gas expands. In this fiscal year, TOK plans to switch to city gas as a fuel for its boilers at one site in Japan. We aim to steadily reduce CO2 emissions, even though contribution from the switch is only a small portion of our total emissions.

Unfortunately, we did not achieve our goal in the fiscal year under review, but we will continue working toward the 2019 target.

Kaoru Toyoshima
Section Manager, EHS office



Environmental Protection

Promotion of resource recycling: Initiatives to address water risk

Basic Concept

Water risk is widely recognized as a serious worldwide risk, ranking among the three largest risks since 2012 in the Global Risks Report published by the World Economic Forum. The Group must use large quantities of pure water in its products and manufacturing processes, and therefore makes a concerted effort to minimize the amount of water consumed by production activities and to maintain and improve the quality of wastewater. We aim to contribute more in this regard through business activities that consider the issue of virtual water.

Virtual water

Virtual water is the amount of water needed to produce food that is imported. In 2005, Japan's food self-sufficiency ratio was 40% on a calorie basis. That year, Japan's virtual water tally was roughly 80 billion tons, the same amount of water that Japan consumes domestically in a year.

Priority Issues and Goals

Self-assessment of goal achievement

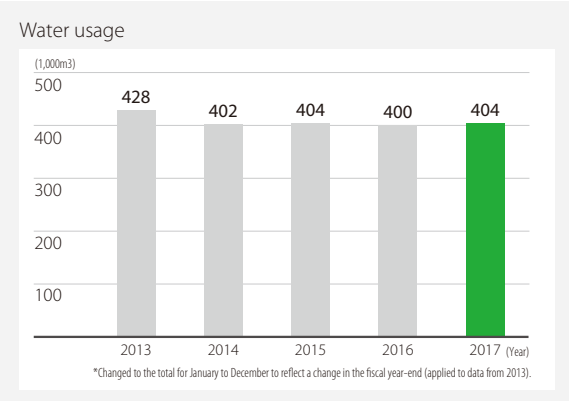
○ Took steps, achieved results
△ Took steps, but need to do more
× Did not take steps

Item	Issues and goals of fiscal 2017	Evaluation	Issues and goals of fiscal 2018
Environmental protection	Initiatives to address water risk		
	1. Measure water usage ◇Measure water usage at main points of use and quickly detect abnormalities	○	1. Reduce water pollution risk ◇Reduce water pollution risk by reassessing water drainage paths
	2. Measure current water risk at TOK Group sites	○	2. Measure current water risk at TOK Group sites ◇Examine ways to reduce water consumption in regions with high water risk

1. Measure water usage

Water usage volume changes when manufacturing processes and output change. TOK constantly monitors the state of industrial water and city water usage, and reviews related equipment.

In fiscal 2017, TOK continued to monitor and reduce water usage when possible. However, higher production volume resulted in water usage increasing by 4,000 tons from the previous fiscal year to 404,000 tons for its all domestic plants.



Worldwide water risk (0-100%) projections for 2030

In a business-as-usual (BAU) scenario, the map shows water usage as a percentage of water supply in each region, assuming both economic growth and higher CO2 emissions.

The higher the percentage, the more severe the competition for water as more people fight over fewer water resources.



Overall water risk

The current degree of exposure to water risk at TOK's production sites, based on a comprehensive evaluation of Physical Risk Quantity, Physical Risk Quality, and Regulatory & Reputational Risk.



Business-as-Usual (BAU) scenario (RCP8.5)

The BAU scenario is one of four scenarios for representative concentration pathways outlined in the Intergovernmental Panel on Climate Change's Fifth Assessment Report. This scenario assumes no further efforts are made to suppress emissions after already introduced or currently planned measures to reduce emissions. This scenario assumes maximum emission volume among projected greenhouse gas emissions as of 2100.

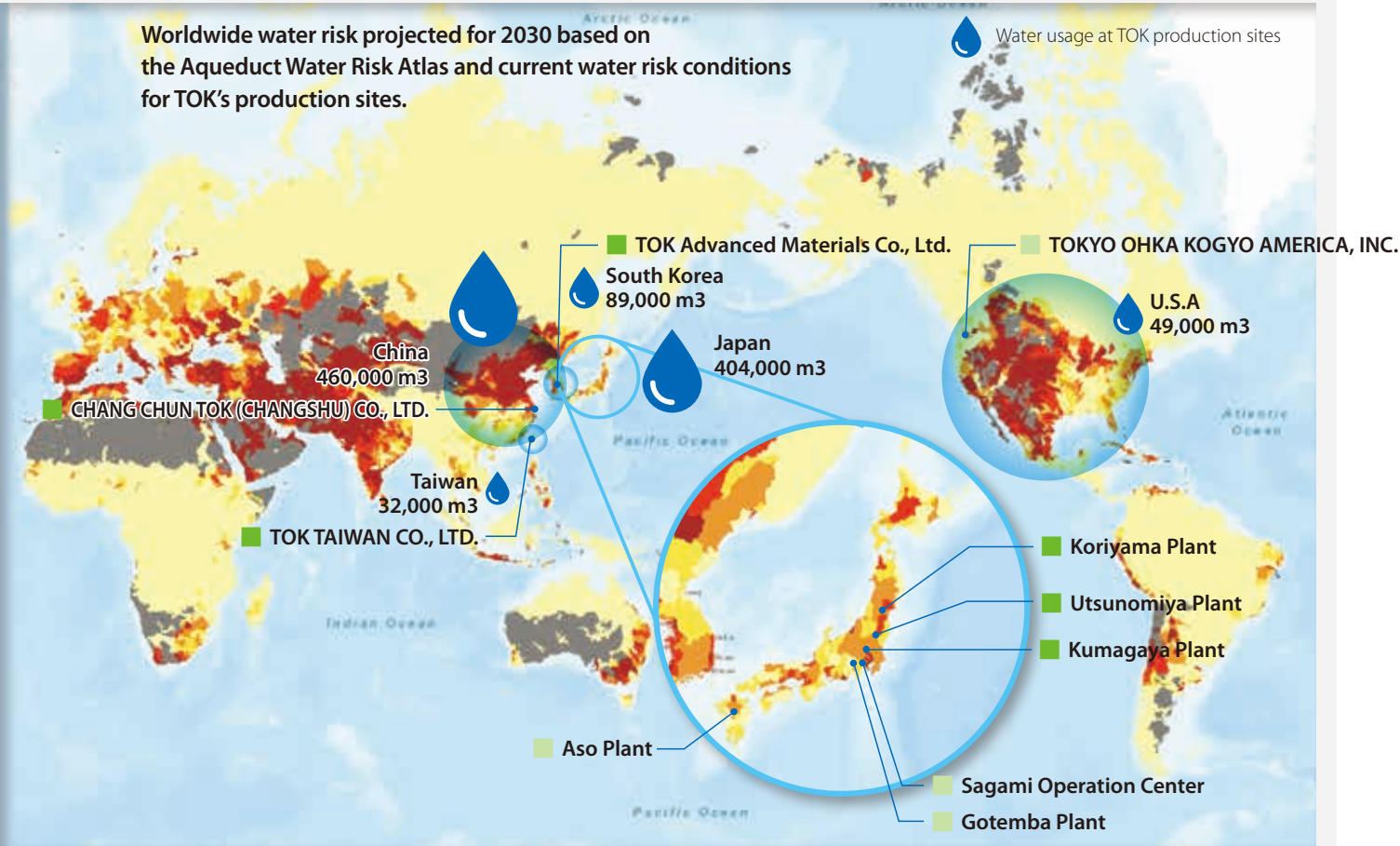
2. Current water risk at TOK Group sites

Water risk has drawn attention as an important issue lately. Based on the Aqueduct Water Risk Atlas put out by the World Resources Institute (WRI), the TOK Group conducted a survey of water risk in regions where it has sites. First, upon examining the overall water risk of its sites in Japan, we learned that the Koriyama, Utsunomiya, and Kumagaya plants have a higher level of risk than our three other sites. When comparing overseas sites, water

consumption was higher in China than other regions, which we attribute to the greater usage of cooling water. In light of these circumstances, TOK is redoubling efforts to conserve water resources by creating a sustainable production system that takes into account the local water environment, such as the state of the water resources and supply systems at each site.

Future Issues and Initiatives

TOK aims to reduce water pollution risk by measuring water usage and monitoring wastewater.



Aqueduct Water Risk Atlas

Aqueduct is an interactive website tool for mapping water risk provided for free by the World Resources Institute (WRI), a thinktank in the U.S. that researches water and other natural resource problems. Aqueduct provides data on water risk at the production sites of companies. The website also offers detailed information about natural resource problems in various regions of the world.

Environmental Protection

Promotion of resource recycling: Reducing industrial waste emissions and landfill disposal

Basic Concept

We conduct 3R activities (reduce, reuse, recycle) for effective use of limited natural resources. By restricting the volume of waste generated, thoroughly sorting the waste by type and increasing the volume that's recycled, we are working to make more effective use of resources. We strive to achieve zero emissions by working to reduce landfill disposal volume by processing waste products through combustion or crushing, called intermediate treatment, and through stabilization and volume reduction initiatives.

Definition of zero emissions

Landfill disposal volume (direct or after intermediate treatment) of less than 1% of industrial waste discharged by business activities.

Priority Issues and Goals

Self-assessment of goal achievement

○ Took steps, achieved results
△ Took steps, but need to do more
× Did not take steps

Item	Issues and goals of fiscal 2017	Evaluation	Issues and goals of fiscal 2018
Environmental protection	Reducing industrial waste		
	1. Reduce industrial waste emissions ◇Reduce industrial waste (per base unit) by 2 points compared with 2015	○	1. Reduce industrial waste emissions ◇Reduce industrial waste (per base unit) by 3 points compared with 2015 and by 1 point compared with the previous fiscal year
	2. Achieve zero emissions ◇Reduce landfill disposal of industrial waste (maintain below 1%)	○	2. Achieve zero emissions ◇Reduce industrial waste disposed in landfills (keep less than 1%)

1. Reduce industrial waste emissions

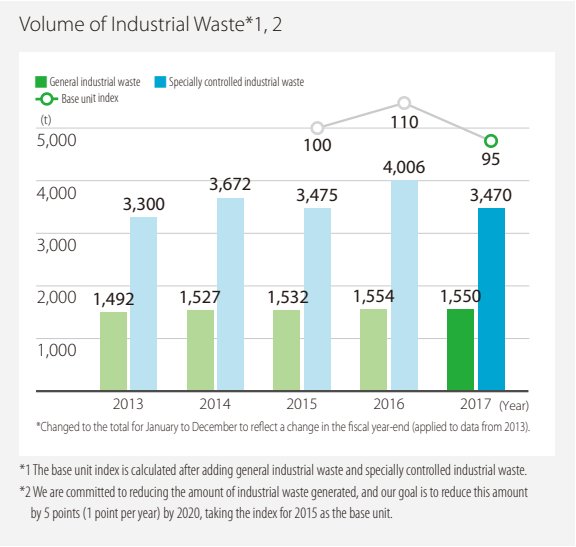
In 2016, TOK set a new target for reducing industrial waste (per base unit) by 5 points by 2020 compared with 2015 (reduction of 1 point annually). With this target in mind, TOK has seen measurable results from refining and reusing process effluents, internal effluent processing, internal heat recovery, and converting waste into items of value. In 2017, the Company reduced industrial waste by 5 points compared with 2015.

2. Achieve zero emissions

In fiscal 2017, industrial waste subject to landfill disposal after intermediate treatment stood at less than 1% of total waste, so we have achieved zero emissions.

While the volume of industrial waste is increasing, through rigorous sorting practices and revising processing methods

of waste generated, we achieved a recycling rate for overall industrial waste of 56%, equivalent to the previous fiscal year.



Comment from a manager

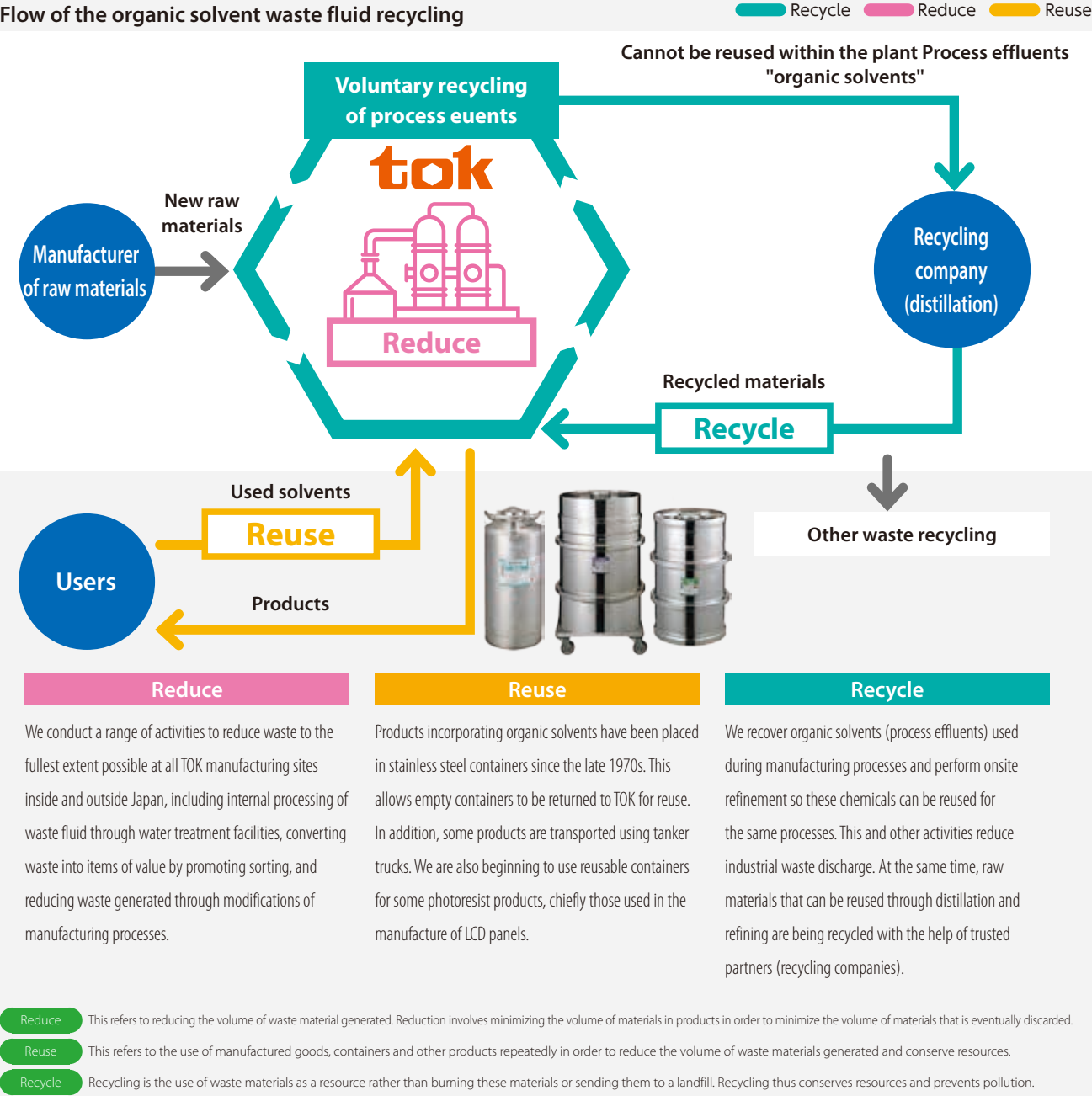
Initiatives to recycle resources
At the Koriyama Plant, we began recycling waste solvents from the manufacturing process in 2013, and the number of recycled items has increased with each passing year. As a result, the volume of waste solvents that is emitted as specially controlled industrial waste has now been reduced to 32% of total waste with the conversion of waste solvents into items of value from among specially controlled industrial waste which accounted for 67% of our total waste.

In recent years, the sorting of plastic by type has improved recycling effectiveness. The ratio of items of value from among industrial waste (weight basis) was 78% in 2017.

Going forward, we will focus more on reusing resources in addition to recycling, mainly by sorting waste better and striving to recycle and reuse even a little more waste.

Shinji Okada

General affairs office, Koriyama Plant



VOICE

Aiming to be “a global company that keeps providing solutions that contribute to the realization of resource-cycle society”
Nippon Refine's corporate philosophy is to contribute to the society through our business activities, the recycle of natural resources and preservation of the natural environment, in order to realize a sustainable society, and is specifically involved in contract refinement and recovery of used solvents, sales of refined products, and refinement of high-grade solvents. Our refining and recycling business proposes optimal solutions for customers.

Metallic contaminants are a major concern in the electronic materials industry that TOK belongs to, requiring management methods to prevent metal from contaminating products from the time they have been refined until they are delivered. Recently, in addition to product specifications, there has been an increase in requirements not defined in specifications. By having customers tell us their requirements beforehand, we can offer optimal solutions that provide mutual benefits, as we are able to come up with technological workarounds that prevent time loss and higher costs, while allowing us to propose production methods that take into account products after they are used. We are grateful for the opportunity to proactively exchange information with TOK and its efforts to understand the nature of our operations.

Looking ahead, while maintaining our relationship, we aim to be “a global company that keeps providing solutions that contribute to the realization of resource-cycle society.”

Nippon Refine Co., Ltd.

Mr. Nishio
Plant General Manager, Wanouchi Plant, (right)

Mr. Yamamoto
Sales Dept. (left)

Environmental Protection

Preserve air, water and soil environment / Preserve biodiversity

Basic Concept

The TOK Group takes steps to lighten its environmental impact through reductions in greenhouse gases and chemical substance emissions by upgrading equipment, switching fuels, and reviewing manufacturing processes to preserve the air, water and soil environments upon which our livelihoods depend. In fiscal 2016, the Company formulated the TOK Biodiversity Protection Declaration and is working to raise employee awareness of the issue, while participating in environmental conservation activities such as environmental activities for conserving village forests through participation in the Kanagawa Trust Midori Foundation.

Priority Issues and Goals

Self-assessment of goal achievement ○ Took steps, achieved results △ Took steps, but need to do more × Did not take steps

Item	Issues and goals of fiscal 2017	Evaluation	Issues and goals of fiscal 2018
Environmental protection	Preserve air, water and soil environment		
	1. Prevent air, water and soil pollution ◇Keep under operational thresholds	×	1. Prevent air, water and soil pollution ◇Keep under operational thresholds
	2. Countermeasures against ozone-depleting substances ◇Reduce CFC leakage volume through proper management of equipment ◇Promote use of alternative CFCs	○	2. Countermeasures against ozone-depleting substances ◇Reduce CFC leakage volume through proper management of equipment ◇Promote use of alternative CFCs
	3. Comply with PRTR Law ◇Precisely measure and report emissions of PRTR-regulated substances	○	3. Comply with PRTR Law ◇Conduct surveys to reduce volume
	Preserve biodiversity		
	4. Preserve biodiversity ◇Improve awareness of biodiversity based on TOK Biodiversity Protection Declaration and encourage participation in related activities	○	4. Preserve biodiversity ◇Promote understanding of the importance of preserving biodiversity

1. Prevent air, water and soil pollution

Reducing emissions of air-polluting substances

At each production site, TOK limits emissions into the atmosphere by upgrading to high-efficiency equipment and reviewing operation methods. At the Sagami Operation Center, Shonan Operation Center, Utsunomiya Plant and Koriyama Plant, TOK is steadily reducing emissions by switching fuel for boilers, from heavy oil to natural gas, which does not contain SOx, a cause of air pollution.

In 2017, however, there were two incidents at the Sagami Operation Center where its incinerator exceeded standards under environmental regulations, and these were duly reported to the government authorities. Steps were taken to remedy the problem.

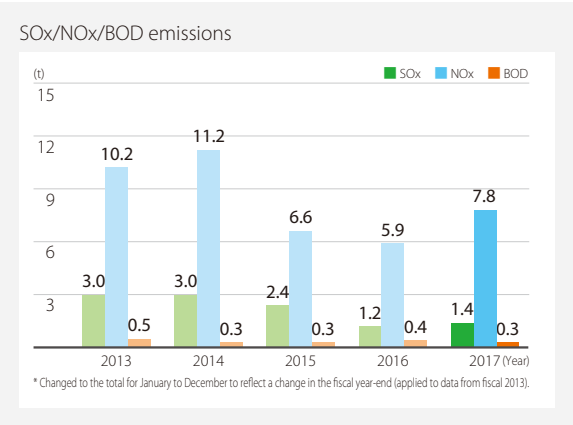
Monitoring soil pollution

TOK periodically monitors for soil pollution, and in the event that pollution is found, it cooperates with government entities to prevent its spread and clean up the pollution. During the fiscal year under review, no soil pollution was discovered.

Reducing emissions of water-polluting substances

Effluent emitted from various processes is released into the public water systems only after being purified with activated sludge treatment, at water treatment facilities. TOK makes every effort to reduce substances in its industrial effluent that impact the environment by highly purifying effluent through activated sludge treatment and separately storing high-concentration effluent, which is disposed of as industrial waste.

BOD emissions in the water discharged into public waters in 2017 were approximately 0.3 tons, a decrease of 0.1 tons from the previous last year. We will continue to maintain and manage water treatment facilities to achieve further reductions in discharges of BOD.



2. Countermeasures against Ozone-Depleting Substances

TOK uses ozone-depleting chlorofluorocarbons, such as CFC-11 and CFC-12, as coolants for refrigerators and freezers. Following a revision of the related legislation adopted in April 2015, the Company introduced a system for managing CFCs when related legislation was revised, putting into place a structure for properly managing, filling and disposing of CFCs. Accordingly, TOK's estimated leakage of CFCs in fiscal 2017 was 25t-CO2, which was below the reporting requirement level. Thanks to inspections, the amount of estimated CFC leakage has declined with each passing year.

TOK has fire extinguishing equipment that uses halon. The Company periodically inspects fire extinguishing equipment that uses such ozone-depleting substances. In the fiscal year under review, equipment was upgraded to use alternative CFCs at the Gotemba Plant, Koriyama Plant and Shonan Operation Center.

3. Comply with PRTR Law

The first step to managing chemical substances begins with measuring emissions of chemical substances that may be harmful, and where and how much they are released. Under the Japanese Pollutant Release and Transfer Register (PRTR) Law, which regulates chemical substances, companies are obligated to manage and report the release and transfer of chemical substances. To accurately report these numbers, TOK relies on its chemicals and PRTR management system.

Of the Class I Designated Chemical Substances, a list of 462 substances defined by the PRTR Law, TOK handled 39 substances (a total of 1,300 tons) in fiscal 2017, and the Company estimates 2

tons were released into the atmosphere and public water systems. TOK works to measure emissions of VOCs and harmful air-polluting substances through PRTR surveys with the Japan Chemical Industry Association, of which it is a member.

4. Preserve biodiversity

TOK Biodiversity Protection Declaration

1. We will position biodiversity protection as one of management's highest priorities and strengthen protection activities for the global environment

2. We will work to continually reduce our environmental impact through our production activities, our development and provision of products and services, and in coordination with the supply chain, thereby working to protect biodiversity.

3. We will strive to enhance activities by educating employees on a regular basis and facilitating recognition and a correct understanding of the importance of biodiversity protection.

4. We will continually conduct social contribution activities for environmental protection to earn the esteem and trust of society

5. We will announce the results of initiatives and promote communication with the general public.

Examples of Activities

▷ Develop green processes and green products

▷ Improve energy efficiency and promote resource recycling and 3R activities

▷ Assess environmental impact in new plant construction or extension plans and take measures

▷ Reduce environmental impact through activities to reduce waste

▷ Control diffusion into the environment of substances that readily accumulate and do not easily biodegrade through appropriate management of chemical substances

As a social contribution activity, the Company dispatched four employees to help with afforestation projects alongside local residents through the Kanagawa Trust Midori Foundation.

Future Issues and Initiatives

In the fiscal year under review, atmospheric pollution exceeded standards under environmental regulations, so the Company strengthened management in terms of inspecting equipment and reviewing operation management guidelines. To prevent a similar incident from occurring again, TOK is advancing activities toward achieving targets for fiscal 2018. The Montreal Protocol adopted revisions (the Kigali Amendment) that bring hydrofluorocarbons (HFC), an alternative CFC, under regulation to phase out the production and use of HFCs in stages. HFC is currently used as a coolant in many refrigerators, freezers and air conditioners. For this reason, TOK plans to introduce and upgrade related equipment while keeping an eye on future regulatory trends.

Comment from a manager

Work and Initiatives in the EHS Office

In the EHS Office, out of the three pillars, we mainly engage in activities to reduce CO2 and industrial waste. We have seen measurable results from strengthening management systems, improving efficiency and turning waste into items of value. With an eye on further reducing water risk, we are collaborating with overseas sites to coordinate activities on a global level.

In addition to current initiatives, we believe it is necessary to develop new reduction technologies in the future. We are collaborating with other departments and sharing information while proactively participating in the development of technologies needed to consistently achieve targets. We are advancing efforts that will contribute to society by reduction.

Toshiya Takagi
Section Manager, EHS Office

Chemical Substance Management

Strengthening activities related to product responsibility and product stewardship

Basic Concept Looking at international trends in the management of chemical substances over the past few years, managing chemical substances on a risk basis has become the norm following the agreement on 2020 targets at the 2002 World Summit on Sustainable Development in Johannesburg, South Africa. As one of its management principles, TOK has identified its responsibilities to local communities and communities around the world within the context of working to reduce its impact on the environment, including combating global warming, managing chemical substances, effectively utilizing resources, and reducing waste. In other words, TOK is strengthening activities related to product stewardship.

Priority Issues and Goals

Item		Issues and goals of fiscal 2017	Evaluation	Issues and goals of fiscal 2018
Chemical substance management	1. Carry out appropriate and reliable management of chemical substances ◇Obtain information about revised laws and regulations, create procedures for making sure they are followed ◇Strengthen upstream management system		○	1. Carry out appropriate and reliable management of chemical substances ◇Obtain information about revisions to laws and regulations, maintain deployment procedures ◇Maintain upstream management system
	2. Properly comply with PCB Special Measures Act ◇Properly collect and store PCB-containing equipment, quickly dispose of PCB waste (low and high concentrations)		○	2. Properly comply with PCB Special Measures Act ◇Properly collect and store PCB-containing equipment, quickly dispose of PCB waste (low and high concentrations)

1. Carry out appropriate and reliable management of chemical substances

TOK is strengthening product stewardship activities , a key pillar in Responsible Care, by evaluating risks associated with the chemical substances it handles and properly managing them based on these risks. Risk assessments require timely and accurate information about chemical substances. Since it is necessary to appropriately handle information about chemical substances throughout the supply chain, “upstream management” is very important through the timely and accurate receipt of information about chemical substances from upstream suppliers. In addition to the information about chemical substances received from these suppliers, TOK must obtain the latest information about chemical substance regulations in each country and display information on product safety data sheets (SDS) and labels to present its customers with relevant information about chemical substances. Since our products are used in Japan and exported to many overseas destinations, we strive to provide safety information through product SDS and labels compliant with the GHS of each country.

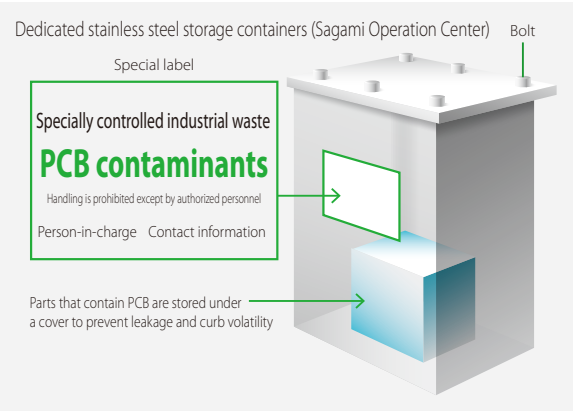
In the fiscal year under review, TOK worked to obtain the latest SDS for raw materials. At the same time, to strengthen upstream management, the Company completely revised the TOK Group Standards on Chemical Substances Management and distributed it to suppliers and established a system to obtain more accurate information about chemical substances. The Company makes diligent efforts to comply with laws and regulations, confirming the composition of existing products when laws and regulations are changed, updating procedures and clarifying responsibilities in obtaining information at an early stage about revisions to regulations governing chemical substances, and deploying internally.

2. Respond appropriately to PCB Special Measures Law

Used equipment waste containing PCB is stored at the Sagami Operation Center and Shonan Operation Center.

As a result of inspections conducted on electrical substation facilities in operation at all business sites in Japan, TOK confirmed that the Sagami Operation Center, Shonan Operation Center and Gotemba Plant are using equipment that use insulating oil containing minute amounts of PCB. For that equipment, we have clearly indicated that it contains PCB, and are managing their use. In addition, proper notices have been submitted to relevant government authorities.

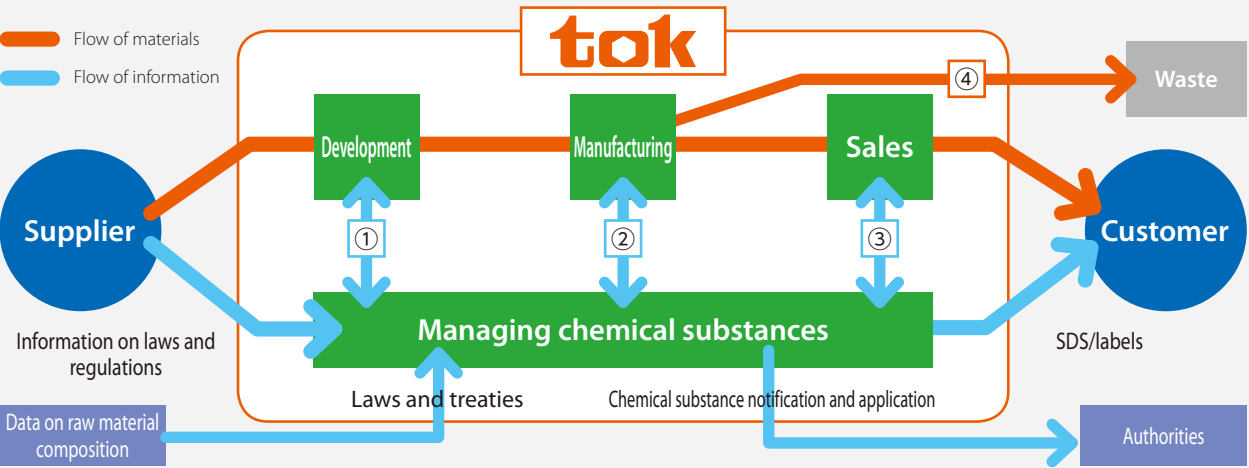
During the fiscal year under review, TOK disposed of some low-concentration PCB waste at the Sagami Operation Center. The Company plans to rapidly dispose of PCB waste in storage and electrical substation facilities in operation that use PCBs.



- WSSD 2020 Target** Aim to achieve by 2020 the use and production of chemical substances based on methods to minimize significant adverse effects on human health and the environment, using transparent science-based risk assessment procedures, taking into account the precautionary approach.
- PCB** Polychlorinated biphenyl (PCB) is a kind of organic compound, and was formerly used for thermal media, insulating oils, paints and other applications because it excels in terms of heat resistance and electrical insulation. However, due to its poor degradability and high toxicity, PCB production was discontinued in 1972. Nevertheless, little progress has been made with regard to its disposal, and managers responsible for its storage are required to place it under strictly controlled conditions.

Flow of chemical substance risk management in the supply chain

To properly manage chemical substance risk in the supply chain, it is necessary to provide information in accordance with the flow of materials. For each stage of development, manufacturing, sales, and disposal, TOK has created procedures for complying with laws and regulations and managing risks.



- ① Development stage**
For raw materials used in newly developed products, the Company has put in place a system for complying with legal requirements and ascertaining the existence of regulated substances under the REACH Regulation or other laws governing conflict minerals, etc. Moreover, the Company has created the TOK Group Standards on Chemical Substances Management, which define the chemical substances that are prohibited or should be managed, and works to reduce their use if standard thresholds are exceeded by proposing alternative plans.
- ② Production stage**
All raw materials used to manufacture products are subject to occupational health and safety risk assessments. The Company identifies hazardous factors in the production environment, clarifies the hazard level, decides what is necessary to mitigate and eliminate the hazardous factors based on their risk level, and then takes action to lower the risk. In this way, TOK maintains a proper work environment for its employees.
- ③ Sales stage**
TOK has connected its ERP system, which manages product shipment volumes, and its chemicals and PRTR management system, which manages chemical substance composition, to create a framework for automatically calculating the volume of chemical substances transferred. With this framework, TOK is able to appropriately report chemical substance volumes and apply for their usage in accordance with the Chemical Substances Control Law and the PRTR Law in Japan, as well as the laws and regulations of the countries that import its products.
- ④ Disposal stage**
Waste from each site is thoroughly sorted by type and recycled, and properly disposed when necessary. For waste disposal companies contracted to dispose the waste, TOK provides information about the type of waste handling precautions through Waste Data Sheet (WDS). The Company periodically visits the waste disposal companies to perform on-site audits and ensure waste is being disposed properly in accordance with contractual agreements.

TOK Group Standards on Chemical Substances Management

To promote initiatives related to reducing environmental impact, we are managing chemical substances during the raw material procurement stage. In January 2005, we formulated the TOK Standards on Chemical Substances Management, which specifies chemical substances to be prohibited or managed. Since then, we have revised the Standards multiple times to comply with the most recent laws, ordinances, and regulations, including the EU REACH regulations and conflict minerals regulated under and the U.S. Dodd-Frank Act (financial regulatory reform act).

In the seventh edition the Company issued in May 2017, we renamed it the TOK Group Standards on Chemical Substances Management, and clarified regulations for chemical substances at Group sites and customer requirements for the environmental management of substances, as well as completely reviewed the chemical substances subject to management. The TOK Group Standards on Chemical Substances Management are used as a tool for obtaining data on chemical substances from suppliers, and by sharing information through the supply chain, we will continue to properly manage chemical substances within the context of risk management.

Future Issues and Initiatives

In 2017, we visited a number of suppliers to talk directly with people involved in the management of chemical substances and exchanged frank opinions about commonly held issues to better understand and analyze current conditions. These visits led to the discovery of an issue where the dissemination of information throughout the supply chain is not being performed efficiently. TOK will further strengthen collaboration throughout the supply chain and work closer with suppliers to continue to create and improve systems for the proper management of chemical substances.

- REACH Regulation** * Registration, Evaluation, Authorization and Restriction of Chemicals. This is an EU regulation that manages the registration, evaluation, and accreditation of chemical substances through an integrated system, with the aim of ensuring complete fulfillment of responsibility on the producers' part, as well as thorough compliance with preventive principles.
- Conflict minerals** Refer to four types of minerals including tin, tantalum, tungsten, and gold mined in the Democratic Republic of the Congo and adjoining countries experiencing armed conflicts. These minerals are regulated under the U.S. Dodd-Frank Act (financial regulatory reform act).
- PRTR Law** Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof
- Chemical Substances Control Law** Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.

Occupational Safety and Health/Security and Disaster Prevention



To create better workplace environments, TOK is focusing on understanding risks and opportunities at the global level as a pillar of EHS activities, a key function of the GMS.

Kunio Mizuki
Director, Department Manager, General Affairs Dept.

Occupational health and safety is a pillar of Responsible Care management alongside environmental protection. It is also a pillar of EHS activities, a key function of the GMS for the purpose of reducing risks and increasing corporate value. Generally speaking, Japanese companies’ efforts in occupational health and safety take place at each site based on the Industrial Safety and Health Act. The TOK Group has taken the additional step of creating the Safety and Health Liaison Unit to closely coordinate these activities by the leaders and managers in charge at each site.

ISO 45001, which came into effect in March 2018, promotes the creation of company-wide management systems

including overseas sites. We view ISO 45001 as a guiding principle for the Group’s activities, such as those described above. ISO 45001 incorporates the concept of risks and opportunities (page 13), and TOK considers issues going forward to be the screening of risks and opportunities related to occupational health and safety, and formulating strategies and measures.

With the EHS Division taking the lead, the Company is keeping its Occupational Health and Safety Manual (version 10) up to date, and taking steps to review and improve measures for creating better workplace environments by strengthening its global and systematic management structure based on GMS.

Priority Issues and Goals

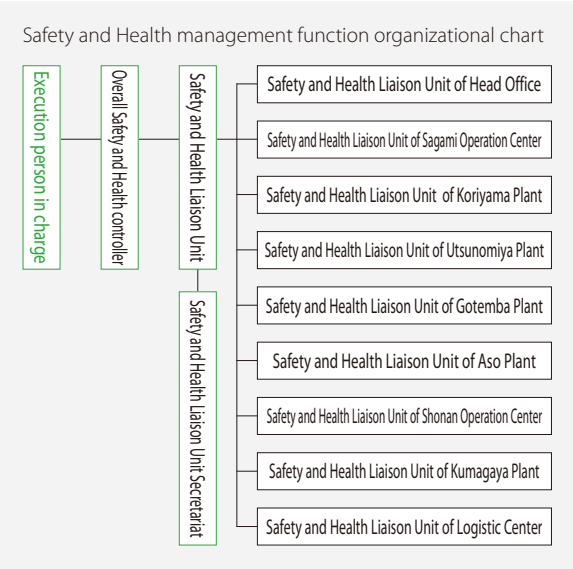
Self-assessment of goal achievement ○ Took steps, achieved results △ Took steps, but need to do more × Did not take steps

Item	Issues and goals of fiscal 2017	Evaluation	Issues and goals of fiscal 2018
Occupational health and safety, security and disaster prevention	1. Foster a safety culture	○	1. Implement preventive measures based on actual occupational accidents
	2. Safety education and training, disaster drills	○	2. Systematically implement emergency response training Systematically implement environmental awareness training Implement guideline training for accident prevention
	3. Promote risk assessment in handling chemical substances	○	3. Strengthen initiatives for reducing risk in handling highly corrosive chemical substances
	4. Zero workplace accidents	○	4. Maintain zero workplace accidents

1. Foster a safety culture

Based on lessons learned from the Great East Japan Earthquake and the Kumamoto Earthquake, TOK conducts drills for a variety of situations that simulate major accidents and disasters. We conduct environmental safety training for the purpose of increasing each and every employee’s awareness of the environment and safety. In the previous fiscal year, TOK worked to improve the risk awareness of employees by implementing “sensory training” that simulates workplace accidents using actual machinery.

We believe continuing initiatives that promote environmental and safety awareness will lead us to foster a safety culture. The entire TOK Group will continue these environmental safety activities in the future.



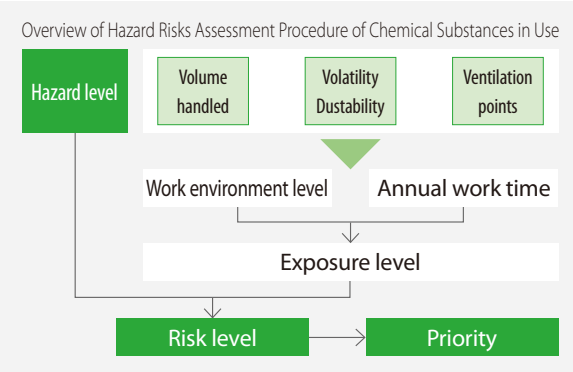
2. Safety education and training, disaster drills

Each site conducts emergency response drills that simulate environmental accidents and natural disasters. At the Aso Plant, having experience the Kumamoto Earthquake in April 2016, disaster drills are conducted every year that simulate a major earthquake. As for repair work after the Kumamoto Earthquake, thanks to the deployment of mobile power generators, we managed to quickly resume production. Learning from experience, the Group will continue to make every effort to advance disaster prevention.



3. Promote risk assessment in handling chemical substances

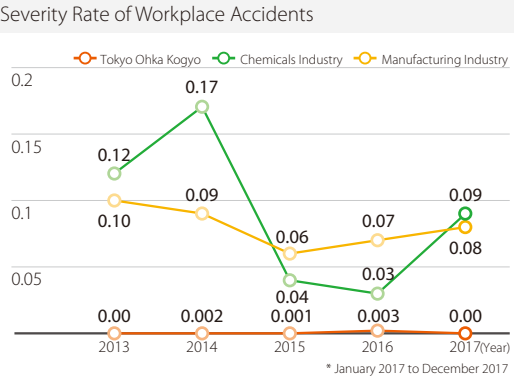
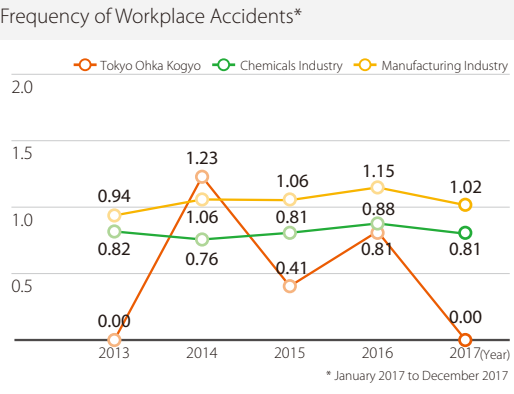
In June 2016, the Industrial Safety and Health Act was revised, making it mandatory to conduct risk assessments of 640 types of substances subject to reporting. Organic solvents, acids, alkalis and various other chemical substances are used in manufacturing processes. Reducing the risk of injuries and accidents related to these chemicals, even minimally, helps prevent workplace accidents. The Company has conducted risk assessment activities for approximately 10 years, and we continue to share risk information with employees and to reduce risk in dangerous and potentially hazardous work. The risk assessment method involves categorizing the risks and hazards of chemical substances used, and conducting risk assessments based on chemical substance volume handled, work frequency and other factors, and then determining the risk level. Risks for each operation in each process are clarified with a list, and for an operation that exceeds a certain risk level, the risk is reduced by enclosing facilities, improving ventilation equipment and other measures, with improvements reported on a regular basis to the Safety and Health Committee.



4. Zero workplace accidents

We have built an effective framework to prevent and handle workplace accidents. Our efforts include: setting up a Safety and Health Committee at each of our offices to conduct activities for preventing workplace accidents including regular safety training and drills for employees; establishing a Safety and Health Liaison Unit, which manages all activities for preventing workplace accidents through information sharing among offices; and preparing manuals for emergency safety measures in the event of workplace accidents.

There were no injuries resulting in lost workdays during the fiscal year under review. We will continue to make concerted, company-wide efforts to prevent workplace accidents to achieve our goal of zero workplace accidents.



*Frequency of workplace accidents: Refers to the frequency of accidents based on the number of casualties arising from workplace accidents per 1 million actual working hours.

●Frequency of workplace accidents = (No. of casualties due to workplace accidents / Total number of actual working hours) × 1,000,000

The number of casualties due to workplace accidents refers to the number of casualties leading to more than one day of suspended operation.

*Severity rate: Refers to the severity of accidents based on the number of days of lost time per 1,000 actual working hours.

●Severity rate = (Total number of days of lost time / Total number of actual working hours) × 1,000

The total number of days of lost time refers to the total number of days of lost time for the casualties of the workplace accidents.

Total number of days of lost time is computed as follows:

Fatality: 7,500 days / Permanent and complete industrial disability: No. of days for grades 1 to 3 of disability grade (7,500 days) Permanent and partial industrial disability: No. of days for grades 4 to 14 of disability grades (50 to 5,500 days depending on grade) Temporary disability: No. of calendar days of suspended operation × 300/365

●Data sources for the chemicals and manufacturing industries: “Survey on Industrial Accidents,” Ministry of Health, Labour and Welfare

Shareholders communication

The company conducts activities while engaging with its various stakeholders, so accepting their opinions and expectations is particularly important. The TOK Group appropriately discloses information and communicates with stakeholders through various opportunities on whether business activities are meeting their requirements and expectations.

For Environmental Preservation



Clean-up activities and forest thinning work

Employees at every TOK production facilities in Japan periodically clean up surrounding areas in a bid to raise awareness of the environmental protection among employees and interact more with local residents.

In fiscal 2017, we cleaned up areas around each production facility. We also engaged in forest thinning work while participating in afforestation activities with Kanagawa Prefecture residents through the Kanagawa Trust Midori Foundation, which works to preserve water resources in the prefecture where the Company's head office is located.



For Development of Science and Technology



Assistance to Tokyo Ohka Foundation

Tokyo Ohka Foundation for The Promotion of Science and Technology was established by the late Shigemasa Mukai, the founder of Tokyo Ohka Kogyo.

Its mission is to develop proprietary technology through fundamental research for the development of Japan, which has few natural resources, and the application of these technologies to industrial uses to achieve peace and prosperity among humankind. To that end, the Foundation provides funding for research and development in the field of science and technology, as well as for research exchange. A large number of beneficiaries are covered under the following grant categories: Grants for Research Projects; Grants for International Exchange; Support for the Promotion of Research Exchange Programs; and Grants for Promotion of Science Education.



Tokyo Ohka Foundation for The Promotion of Science and Technology (in Japanese)
<http://www.tok-foundation.or.jp>

For Shareholders, Investors



Proactive Investor Relations (IR) activities

The primary mission of our IR activities is to ensure the timely release of corporate information, such as management strategy and financial results, in a manner that is fair and proper for all shareholders and investors.

During the year under review, we held meetings for institutional investors about first-half results and year-end results. Moreover, we held individual meetings for follow-up information. TOK held briefings for individual investors in five cities (Sapporo, Tokyo, Nagoya, Kyoto, and Osaka) as venues for dialogue with individual investors.



For Local Community



Citizens' Festival/Tombo-Ike Observation Tour

TOK believes it is important to build trust while cooperating and collaborating with local communities, and proactively engages in activities that contribute to local communities.

During fiscal 2017, TOK held its 31st Noryosai (summer festival) at the dormitory and Company housing complex adjacent to the Shonan Operation Center as an opportunity to communicate with local residents and business partners. At the Gotemba Plant, we invited local children and their families to a Living Nature Observation Tour at the Dragonfly Pond, the plant's biotope. A large number of local residents came to both of these events, which will continue to be held in the future.



Third-Party Opinions

As in the previous year, I have been given the opportunity to read this report.

Recently, there have been moves in Japan and overseas to establish frameworks for promoting the creation of sustainable societies, such as the introduction of the Japanese version of the Stewardship Code and the Corporate Governance Code, as well as the 2030 Agenda for Sustainable Development/SDGs as objectives for international society.

This year's report mentions SDGs in the "TOK Group's Risks and Opportunities" section on page 13. I read in this section that the Company is covering 12 of the 17 goals created by the United Nations, and its corporate activities can have a major impact on the sustainability of society. I hope that TOK will introduce concrete examples of how it is working to achieve each SDG target in the future.

I expect to see the Company make even further progress going forward as a Group contributing to the sustainable development of society through integrated business and CSR activities.



Atsushi Fukuda

Professor, Dean of the College of Economics,
Kanto Gakuin University

On Receiving Third-Party Opinions

We thank you for providing invaluable feedback on the TOK Group's CSR Report again this fiscal year.

In this report, we outlined our basic approach to solving issues through various initiatives while explaining our activities to stakeholders in an easy-to-understand manner. We hope that this report helps more people gain a better understanding of the Group's activities.

We are taking to heart the points that Professor Fukuda mentioned. While linking our specific initiatives to SDG targets, we will advance our CSR activities to a new level. All employees of the Group are working in unison toward a sustainable society by reducing environmental impact from a medium- to long-term perspective.

TOK will continue to fulfill its responsibility to explain its activities while aiming to improve this CSR report. We welcome any and all opinions from readers of this report.



Hideo Ohashi

General Manager, Public Relations Div.,
General Affairs Dept.

Request for Information

<http://www.ecohotline.com>

Through the Eco Hotline, our CSR Report has been made available at libraries, universities, and other facilities throughout Japan. You may also submit a request for a copy of the CSR Report directly from the company, through the following URL.

Third-Party Verification Written Opinion



CSR Report 2018
Third-Party Verification Report

June 29, 2018

To : Ikuno Akutsu
President & Chief Executive Officer
TOKYO OHKA KOGYO CO., LTD.

Purpose of Verification

The purpose of this verification is to express the opinions of chemical industry experts with respect to the following matters, covering "CSR Report 2018" prepared by "TOKYO OHKA KOGYO CO., LTD." (hereinafter the "Report" and the "Company" or "TOK" respectively):

- 1) Rationality of the methods for calculating and compiling performance indicators (numerical figures) and the accuracy of these numerical figures.
- 2) Accuracy of non-numerical information in the Report
- 3) Responsible Care® and CSR activities
- 4) Distinctive characteristics of the Report

Verification Procedure

- At the Sagami Operation Center (hereinafter the "Sagami"), we inspected the rationality of the methods used for compiling the numerical data reported from each site (office, plant) and checked the accuracy of non-numerical information. The inspection at the Sagami was performed by asking questions about the Report to people responsible for relevant operations and people responsible for preparing the Report, as well as receiving materials and explanations.
- At the Koriyama Plant (hereinafter the "Koriyama"), we inspected the rationality of the methods used to calculate the figures reported to the Sagami, as well as the accuracy of non-numerical information. The inspection at the Koriyama was performed by asking questions to people responsible for relevant operations and people responsible for preparing the report, receiving materials and explanations, and cross-checking them against evidences.
- We applied the sampling method for investigating numerical figures and stated information.

Opinions

- 1) Rationality of the methods for calculating and compiling performance indicators (numerical figures) and the accuracy of these numerical figures
- Both the Sagami and the Koriyama use improved, reasonable methods to calculate and compile numerical figures, and for the scope of our investigation the performance figures were checked by multiple people and were calculated and tabulated correctly.
- Going forward, we hope that the Company will adopt an automated compiling system that improves the accuracy of figures submitted by plants, etc.
- 2) Accuracy of non-numerical information in the Report
- We confirmed that the data included in the Report are accurate. We pointed out a few issues regarding appropriateness of expressions and readability in the draft stage, but all of these issues are edited in the current Report.
- 3) Responsible Care and CSR activities
- We commend the fact that the "Commitment of Top Management" mentions CSR as activities that enhance both social value and corporate value at the same time within the context of risk management and the creation of business opportunities, and also mentions that this approach is taken in initiatives for SDGs. Going forward, we expect the Company to set up organizations and systems for taking specific actions of CSR.
- We approvingly note that the Company has added EHS management as one of 11 core functions of the GMS Committee (TOK Group Management System) and that TOK has also put in place a supervisory structure (led by the EHS Division) for EHS work in Japan and overseas subsidiaries.
- Among initiatives undertaken in fiscal 2017, we highlight the Company's success in reducing industrial waste and addressing water risk as a part of efforts to preserve the environment, as well as its determination to cut the risk of workplace accidents to zero in occupational health and safety and process safety and disaster prevention. Moreover, we commend the Company being recognized in the 2018 Certified Health & Productivity Management Outstanding Organizations Recognition Program.
- We positively note, at the Koriyama Plant, the Company has created economic value by sorting solid waste and refining effluents. We also approve of its monthly revolving patrols to clean up areas around the plant and inspect emergency equipment and tools.
- 4) Distinctive characteristics of the Report
- The Special Feature presents a timely introduction and explanation of SDGs and how they related to TOK Group business activities within the context of the TOK Group's win-win measures to increase both social value and corporate value.

Shigemitsu
Shigeki Nagamatsu
Chief Director, Responsible Care Verification Center
Japan Chemical Industry Association

List of Applicable GRI Sustainability Reporting Standards

Below is a table of where to find information about items disclosed based on GRI Standards.

* The information below does not indicate compliance with GRI Standards. Items with no information to disclose, or which are not relevant, have been omitted from the table. In addition, due to space restrictions, index descriptions have been omitted, and in some cases, several disclosures have been combined into one entry.

Items	Indicator	Page and Relevant Materials
General Standard Disclosures		
GRI102: General Standard Disclosures		
1. Organizational Profile		
102-1	Name of the organization	◇Corporate Data(P2)
102-2	Primary brands, products and services	◇TOK's Business Fields(P5-6)
102-3	Location of the organization's headquarters	◇Corporate Data(P2)
102-4	Location of operations	
102-5	Nature of ownership and legal form	
102-7	Scale of the organization	
102-6	Markets served	◇TOK's Business Hubs and Business Activities(P7-8)
102-8	Information on employees and other workers	◇Creating a "Frank and Open-Minded" Workplace Where Workers are Motivated(P27-30)
102-9	Supply chain	◇Creation of Both Corporate Value and Social Value through CSR(P11-12)
102-11	Precautionary Principle or approach	◇Ensuring sound business management(P15-22) ◇Environmental Initiatives(P31-32)
102-12	External initiatives	◇The TOK Group's Risks and Opportunities Related to each SDG(P13-14)
2. Strategy		
102-14	Statement from senior decision-maker	◇Commitment of Top Management(P3-4)
102-15	Key impacts, risks, and opportunities	◇Commitment of Top Management(P3-4) ◇The TOK Group's Risks and Opportunities Related to each SDG(P13-14) ◇Ensuring sound business management(P20-22)
3. Ethic and Integrity		
102-16	Values, principles, standards, and norms of behavior	◇TOK's CSR(P9-12) ◇Ensuring sound business management(P19)
102-17	Mechanisms for advice and concerns about ethics	◇Ensuring sound business management(P19)
4. Governance		
102-18	Governance structure	◇Ensuring sound business management(P15-18) ◇Report about the corporate governance
102-19	Delegating authority	◇Ensuring sound business management(P15-19) ◇Environmental Initiatives(P31-32)
102-20	Executive-level responsibility for economic, environmental, and social topics	
102-21	Consulting stakeholders on economic, environmental, and social topics	◇Ensuring sound business management(P15-18) ◇Report about the corporate governance
102-22	Composition of the highest governance body and its committees	
102-23	Chair of the highest governance body	
102-24	Nominating and selecting the highest governance body	
102-25	Conflicts of interest	
102-26	Role of highest governance body in setting purpose, values, and strategy	
102-27	Collective knowledge of highest governance body	
102-28	Evaluating the highest governance body's performance	
102-29	Identifying and managing economic, environmental, and social impacts	◇Ensuring sound business management(P15-22) ◇Report about the corporate governance
102-30	Effectiveness of risk management processes	
102-31	Review of economic, environmental, and social topics	◇Environmental Initiatives(P31-32)
102-33	Communicating critical concerns	◇Ensuring sound business management(P15-19) ◇Report about the corporate governance
102-35	Remuneration policies	◇Ensuring sound business management(P15-18) ◇Report about the corporate governance
102-36	Process for determining remuneration	
102-37	Stakeholders' involvement in remuneration	
5. Stakeholder Engagement		
102-40	List of stakeholder groups	◇TOK's CSR(P11-12)
102-42	Identifying and selecting stakeholders	◇The TOK Group's Risks and Opportunities Related to each SDG(P13-14) ◇Stakeholders communication(P49)
102-41	Collective bargaining agreements	◇Creating a "Frank and Open-Minded" Workplace Where Workers are Motivated(P28)
102-43	Approach to stakeholder engagement	◇TOK's CSR(P11-12) ◇Ensuring sound business management(P15-20) ◇Creation of the impression with high value-added products(P23)
102-44	Key topics and concerns raised	◇Creating a "Frank and Open-Minded" Workplace Where Workers are Motivated(P28-29) ◇Environmental Initiatives(P45-46)
6. Entities included in the consolidated financial statements		
102-45	Entities included in the consolidated financial statements	◇Financial Statements
102-46	Defining report content and topic boundaries	◇Editorial Policy(P2)
102-47	List of material topics	◇Priority Issues and Goals
102-49	Changes in reporting	◇Editorial Policy(P2)
102-50	Reporting period	◇Editorial Policy(P2) ◇GRI Content Index(P52)
102-51	Date of most recent report	
102-52	Reporting cycle	◇GRI Content Index(P52)
102-54	Claims of reporting in accordance with the GRI Standards	
102-53	Contact point for questions regarding the report	◇Back Cover
102-55	GRI content index	◇GRI Content Index(P52)
102-56	External assurance	◇Third party verification(P51)◇Third-Party Opinions(P50)
GRI103: Management Approach		
103-1	Explanation of the material topic and its Boundary	◇Basic Concept ◇Environmental Initiatives(P31-484)
103-2	The management approach and its components	
103-3	Evaluation of the management approach	◇Priority Issues and Goals ◇Third party verification(P51)

Indicator		Page and Relevant Materials
Environment		
GRI201: Economic Performance		
201-1	Direct economic value generated and distributed	◇Financial capital(Economic values)(P11) ◇Financial Statements
201-2	Financial implications and other risks and opportunities due to climate change	◇The TOK Group's Risks and Opportunities Related to each SDG(P13-14) ◇Environmental Initiatives(P35-37)
201-3	Defined benefit plan obligations and other retirement plans	◇Financial Statements
GRI203: Indirect Economic Impacts		
203-1	Infrastructure investments and services supported	◇Stakeholders communication(P49)
GRI205: Anti-corruption		
205-2	Communication and training about anti-corruption policies and procedures	◇Ensuring sound business management(P19-22)
GRI301: Materials		
301-1	Materials used by weight or volume	◇Environmental Initiatives(P35-36)
301-2	Recycled input materials used	◇Environmental Initiatives(P41-42)
301-3	Reclaimed products and their packaging materials	
GRI302: Energy		
302-1	Energy consumption within the organization	◇Environmental Initiatives(P35-38)
302-2	Energy consumption outside of the organization	
302-3	Energy intensity	◇Environmental Initiatives(P33-38)
302-4	Reduction of energy consumption	
302-5	Reductions in energy requirements of products and services	
GRI303: Water		
303-1	Water withdrawal by source	◇Environmental Initiatives(P39-40)
303-2	Water sources significantly affected by withdrawal of water	
303-3	Water recycled and reused	
GRI304: Biodiversity		
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	◇Environmental Initiatives(P44)
304-2	Significant impacts of activities, products, and services on biodiversity	
304-3	Habitats protected or restored	
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	
GRI305: Emissions		
305-1	Direct (Scope 1) GHG emissions	◇Environmental Initiatives(P35-36)
305-2	Energy indirect (Scope 2) GHG emissions	
305-3	Other indirect (Scope 3) GHG emissions	
305-4	GHG emissions intensity	◇Environmental Initiatives(P35-36)(P43-44)
305-5	Reduction of GHG emissions	
305-6	Emissions of ozone-depleting substances (ODS)	
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	
GRI306: Effluents and Waste		
306-2	Waste by type and disposal method	◇Environmental Initiatives(P45-46)
306-4	Transport of hazardous waste	◇Environmental Initiatives(P45-46)
GRI307: Environmental Compliance		
307-1	Non-compliance with environmental laws and regulations	◇Environmental Initiatives(P43-44)
GRI308: Supplier Environmental Assessment		
308-2	Negative environmental impacts in the supply chain and actions taken	◇Environmental Initiatives(P45-46)
Social		
GRI401: Employment		
401-1	New employee hires and employee turnover	◇Creating a "Frank and Open-Minded" Workplace Where Workers are Motivated(P27-30)
401-3	Parental leave	
GRI402: Labor / Management Relations		
402-1	Minimum notice periods regarding operational changes	◇Creating a "Frank and Open-Minded" Workplace Where Workers are Motivated(P27-28)
GRI403: Occupational Health and Safety		
403-1	Workers representation in formal joint management-worker health and safety committees	◇Creating a "Frank and Open-Minded" Workplace Where Workers are Motivated(P27-28)
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	◇Environmental Initiatives(P48)
GRI404: Training and Education		
404-2	Programs for upgrading employee skills and transition assistance programs	◇OHP(Relations with Employees)
GRI405: Diversity and Equal Opportunity		
405-1	Diversity of governance bodies and employees	◇Creating a "Frank and Open-Minded" Workplace Where Workers are Motivated(P28-29)
GRI412: Human Rights Assessment		
412-1	Operations that have been subject to human rights reviews or impact assessments	◇Creating a "Frank and Open-Minded" Workplace Where Workers are Motivated(P27-28)
412-2	Employee training on human rights policies or procedures	
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	
GRI413: Local Communities		
413-1	Operations with local community engagement, impact assessments, and development programs	◇Stakeholders communication(P49)
GRI414: Supplier Social Assessment		
414-2	Negative social impacts in the supply chain and actions taken	◇Environmental Initiatives(P45-46)
GRI416: Customer Health and Safety		
416-1	Assessment of the health and safety impacts of product and service categories	◇Environmental Initiatives(P45-46)
GRI417: Customer Health and Safety		
417-1	Requirements for product and service information and labeling	◇Environmental Initiatives(P45-46)
417-2	Incidents of non-compliance concerning product and service information and labeling	