TOKYO OHKA KOGYO CO., LTD.

Challenge for the Future

Annual Report 2017/12

Year Ended December 31, 2017

PHILOSOPHY

Challenge for the Future

We develop with society and continue to fulfill our goals of being a responsible and innovative company.

CONTENTS

The Value TOK Creates

Management Principles

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

Management Vision

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.

The Source of the Value We Create

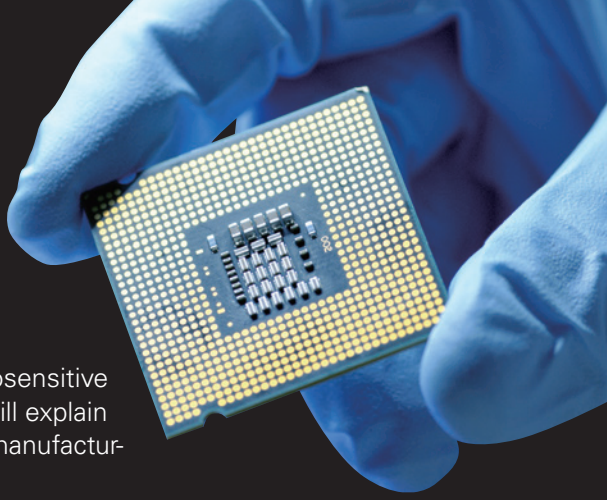
—Microprocessing Technologies That Create Inspiration

TOK delivers value in a wide variety of fields, including the manufacture of semiconductors, by rolling out microprocessing and applied technologies for the nanoscale* domain, along with implementing our strategy of building close relationships with customers and developing high value-added technologies from new standpoints.

* Nanometer (1nm) = one millionth of a millimeter; one hundred-thousandth the width of a human hair

Foundations for Value Creation

Financial Information/Corporate Information



TOK's Photoresists

TOK is the world's No.1 manufacturer of photoresists, which are photosensitive materials indispensable for the manufacture of semiconductors. We will explain the functions and performance of photoresists in the semiconductor manufacturing process.

Front-end processes
of semiconductor manufacturing

Process of making integrated circuits on a silicon circuit board and producing LSI chips. The process utilizes photoresists' resistance to etching.

Photoresists

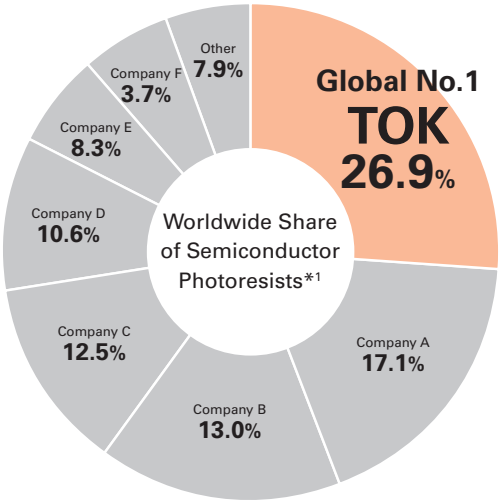
(1) Coating of photoresists
Coat the photosensitive resin photoresists.

Silicon wafer

Photoresists

Breakdown

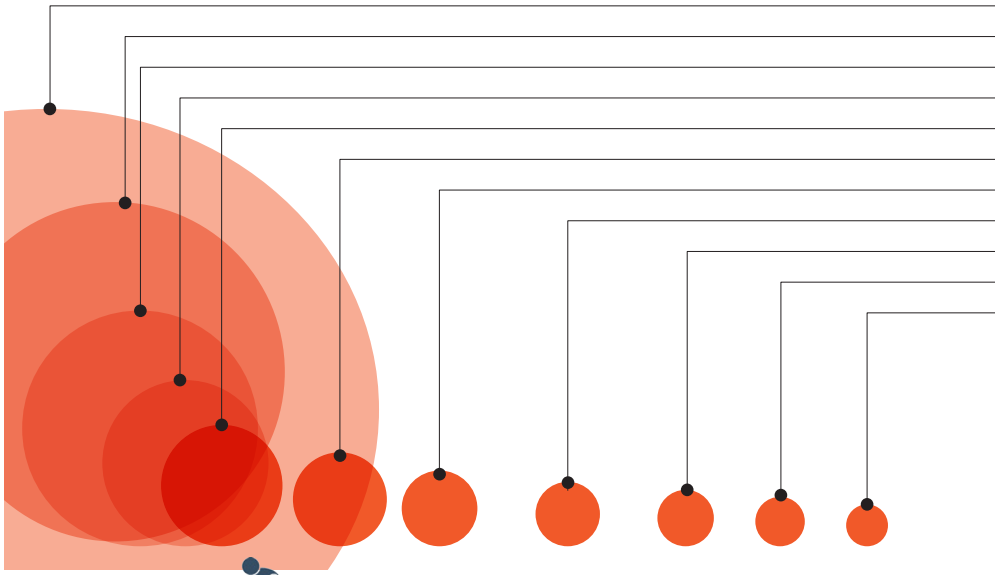
TOK's Semiconductor Photoresist Business



*1 Based on actual total sales volume of ArF, KrF, g-Line and i-Line photoresists in 2017 (Calculated by TOK based on Fuji Keizai's "Whole View of Photo-functional Material and Product Market 2018")

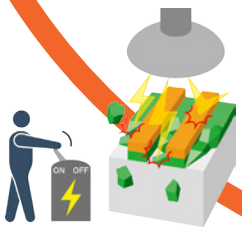
(2) Exposure
A photomask (circuit design) is transferred to the photoresist.
* Magnified cross-section of a silicon wafer

Evolving Miniaturization of Semiconductors*2



(3) Development
Photoresist patterns identical to the photomask (circuit design) are formed.

(4) Etching (Engraving)
Patterns are formed in the etching process. (Photoresist works as a protective film.)



Our Value Creation

We have accumulated deep knowledge of all front-end processes of semiconductor manufacturing through our engagement not only in photoresists, but also in high purity chemicals and process equipment.

→Toward creating further high added value

(5) Removal of photoresists
Photoresist having served its purpose is removed from the circuit board.

(6) Formation of a semiconductor field
A semiconductor field is formed by coating with a diffusing agent and baking at high temperature.

Achieving SDGs through Our Core Business

7 AFFORDABLE AND CLEAN ENERGY
8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
13 CLIMATE ACTION
17 PARTNERSHIPS FOR THE GOALS

Value for Society

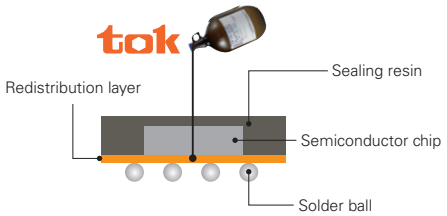
Mounted in various types of end products and social issues are resolved

Our Strength

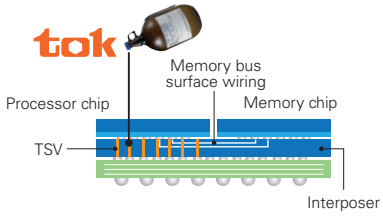
Providing photoresists that become growth drivers in both **front-end processes** and **back-end processes** of semiconductor manufacturing

Back-end processes
of semiconductor manufacturing

Process of dicing individual IC chips and inserting in each type of packaging. The process utilizes photoresists' thick-film forming capabilities.



EX. 1 **Fan-out wafer level packaging (FOWLP) with photoresists for RDL fabrication**



EX. 2 **2.5D interposer with photo-resists for RDL fabrication**

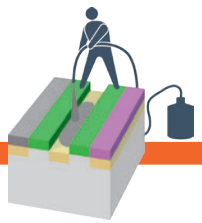
Source (Example 1): Nikkei Electronics, March 2016 issue

Our Cutting-Edge

TOK has developed and provides EUV (Extreme Ultraviolet) photo-resists for the line width of 7nm node, the world's most advanced miniaturization of semiconductors.

Special Feature Page 30–31

10,000nm *(1970s)*
3,000nm *//*
1,500nm *(1980s)*
1,000nm *//*
800nm *//*
600nm *(1990s)*
350nm *//*
250nm *//*
180nm *//*
130nm *(2000s)*
90nm *//*
65nm *//*
45nm *//*
32nm *(2010s)*
22nm *//*
14nm *//*
10nm *//*
7nm *(2018)*

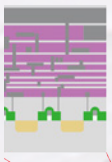


(7) Formation of wiring
Aluminum or copper wirings are formed.

(8) Formation of integrated circuits
ICs are formed by repeating the processes (1) through (7).

(9) Completion of an integrated circuit
Multiple ICs are created on wafer surface using microprocessing technology.

Cross-section of a completed IC



(10) Dicing of wafers
Wafer is diced into chip-sized components.

(11) IC chips completed
After dicing, each wafer portion becomes an IC chip.

*2 Includes TOK estimates for the decades shown.

Our History

Our History of Value Creation as a Pioneer

Our founder Shigemasa Mukai established a strong ideal of "challenge ourselves to develop products that entail any difficulties but are useful to society and are not offered by other companies." Based on this ideal, TOK challenges developing products that are the first of their kind in the world, Japan and the industry.

Our DNA

In the Japanese economy at the outset of the Showa era (1926–1989), ensuring the safety of coal miners, who supported the coal industry, had been a major social issue. After six grueling years, in 1934, founder Shigemasa Mukai was finally able to develop high-purity potassium hydroxide, an essential material for making batteries used in hard hat lights for coal miners. As the only domestic manufacturer mass producing this material, we played our part in improving the safety and security of coal mining. This philosophy of our founder lives on in our DNA today, as we create high value-added products for niche fields and help solve social issues.

First Registered Patent

As a material essential for the urban development of modern Japan, chlorinated naphthalene is used in coatings for electrical wires. In 1943, TOK developed "a chlorinated naphthalene composition with elasticity, high insulation, and short impregnation time." This material was also its first patent registration. Chlorinated naphthalene is widely used in electrical wire coatings, as well as a material for condensers and an anti-knock agent for aircraft engines. Chlorinated naphthalene sales have increased overseas as well. Along with high-purity potassium hydroxide, chlorinated naphthalene became the wellspring for our core competency in high purification technology and the framework for the early part of the Company's history.

1934

Pioneer Spirit

Shigemasa Mukai, TOK founder

Batteries for hard hat lights used by coal miners in the early Showa era (image)

High-purity potassium hydroxide

1943

Kawasaki Plant in about 1947

Patent certificate for "chlorinated naphthalene composition," the Company's first registered patent

History of ESG

1961–1999

1961 Launched employee proposal system
1970 Received award from Governor of Kanagawa Prefecture as a distinguished plant for trade and commerce
1974 Established the Pollution Prevention Committee
1978 Created the Hazardous Materials Management Committee
1979 Established Employee Stock Ownership Plan
Established the Earthquake Countermeasure Committee and the Energy-Saving Committee
1987 Established the Tokyo Ohka Foundation for The Promotion of Science and Technology
1991 Achieved 5.4 million hours of zero-accident (type 1) operations at Sagami Operation Center
Received the Environmental Conservation Award from the Kanagawa Environmental Conservation Association
1995 Created quality policy
1996 Obtained ISO 9002 certification at the Gotemba Plant and Sagami Operation Center
1999 Koriyama, Utsunomiya, and Gotemba plants acquired ISO 14001 certification

Global No.1

As a manufacturer of high-purity chemicals, TOK has mastered microprocessing technologies and obtained knowledge in the electronics field, beginning with the photoresist business on a full scale in 1968. In 1971, TOK developed an eco-friendly synthetic rubber photoresist, and then expanded its world market share in 1979 with g-Line photoresists and again in 1987 with i-Line photoresists. In 1997, TOK's KrF excimer laser photoresists became the industry standard, solidifying its position as the leading manufacturer of semiconductor photoresists.

1968 – 1997

Synthetic rubber photoresists with excellent resolution and eco-friendliness that increased the Company's market share (1971)

Koriyama Plant, where flagship products are manufactured

Co-Creation of Value Overseas

TOK has gradually expanded overseas with bases in North America, Asia, and Europe. In 2012, we established TOK Advanced Materials Co., Ltd. in South Korea, where the growth of the semiconductor industry has been remarkable. With cutting-edge development functions, TOK Advanced Materials Co., Ltd. is a customer-oriented site that uses an integration of "the trinity" platform covering development, manufacturing, and sales. We have established similar development systems in North America and Taiwan, and have built a development platform capable of responding quickly to live feedback from customers in the cutting-edge field of semiconductors. We create high added value in the front-end process and back-end process of both 2D and 3D semiconductors.

2012

TOK Advanced Materials Co., Ltd. (South Korea)

2000–2018

2003 Executive officer system introduced and number of directors adjusted to an appropriate level
2005 Sagami Operation Center, Utsunomiya Plant, and Gotemba Plant awarded the Fire and Disaster Management Agency Commissioner's Excellent Hazardous Materials-Related Business Site Award
2006 Selected one outside director for the first time, shortened tenure of directors from two years to one year
2012 Introduced the Employee Stock Ownership Plan (ESOP) Trust (Trust matured in March 2017)
First woman appointed to a management position
Received the Kurumin mark as a company that supports child-raising
2013 Added one outside auditor, bringing the total to three
2014 Started TOK Global Practical Training for Selected Members
2015 Appointed a (female) outside director, bringing the total to two
2017 Selected as a constituent stock in the MSCI Japan Empowering Women Index
Selected as a constituent stock in SNAM Sustainability Index in 2017
Koriyama Plant awarded the Fire and Disaster Management Agency Commissioner's Excellent Hazardous Materials-Related Business Site Award
2018 Recognized in the 2018 Certified Health & Productivity Management Outstanding Organizations Recognition Program (White 500)
Selected as a constituent stock in SNAM Sustainability Index in 2018

Our Strengths, as the Source of the Value We Create

As strengths unique to TOK, our world-leading microprocessing technology and high purification technology, coupled with our strategy of building close relationships with customers, allow us to provide new added value that inspires our customers and end users.

Technology

Microprocessing technology

Using our world-leading microprocessing technology, we rapidly develop products that satisfy the advanced needs of our customers, semiconductor manufacturers and electronic device manufacturers, while contributing to the resolution of various social issues.

- Accumulation and demonstration of world-leading technological capabilities in the development and production of materials to make semiconductor circuit line widths fine, materials used to make high-density semiconductor packages, and materials for stacking semiconductor devices in three dimensions
- Development and provision of EUV photoresists for 7nm and narrower nodes, the finest circuit widths in the world, for the miniaturization of semiconductors

Value Creation

Value creation domain = 1nm*1

0.000001mm

*1 One nanometer is approximately one hundred-thousandth the width of a human hair

Technology

High purification technology

To leverage microprocessing technologies, TOK supplies chemical products (cleaning solutions, thinner, developing solutions, etc.) with the highest level of purity in the world. In the mass production of cutting-edge devices, our chemical products add value for customers by improving yields on their production lines.

- World's highest level of purity, thanks to our focus on clear, identifiable reductions in impurities in chemical products
- Creation of new value based on development of high-quality grade tailored to customers' processes
- Leverage strengths in highly challenging domains, such as controlling performance at the molecular level

Value Creation

Detection sensitivity for metal impurities in cutting-edge high-purity chemicals = Less than 10 ppt*2

Less than 1/100,000,000,000

*2 Equivalent to less than one drop of coffee in a 50-meter Olympic size swimming pool

Strategy

A Strategy of Building Close Relationships with Customers

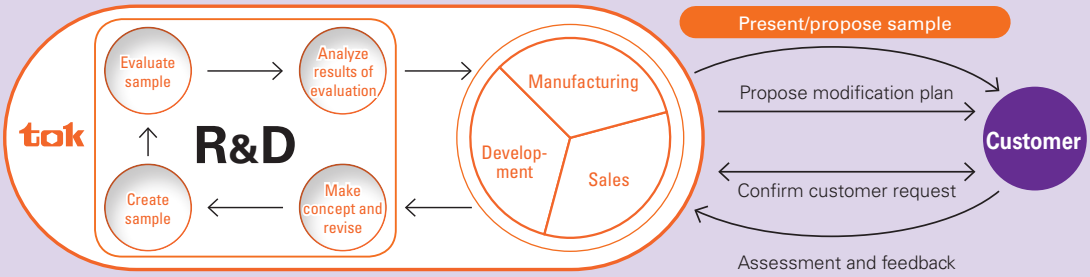
Growth in number of employees at customer-oriented sites overseas
Increased up to **4.8** times over 9 years (2009/3 vs. 2017/12)

TOK is focusing on a strategy of building close relationships with customers in order to emphasize speed more than anything else in the development of materials for cutting-edge semiconductor fields.

- Operations based on "the trinity" of development, manufacturing, and sales locations close to customers in the U.S., Taiwan, South Korea, and Japan
- We provide finely tuned tailor-made products swiftly for the different needs of each customer or process. This strength is derived from not only close physical proximity to customers, but also deep relationships with customers based on information exchange and trust

Value Creation

Customer-oriented business model



Products

Niche Top Products

World's top share products as percentage of consolidated net sales
Approx. **22**% (2017/12)

Having inherited the DNA that has existed in TOK since its founding, we are developing a business to continue to create materials that support advanced technologies and that cannot easily be imitated by other companies. Our business model is to develop and bring to market new, high-end, high-value-added products in niche fields.

- Our primary domains are niche business fields shaped by extremely disruptive and rapid cycles of technological change
- New business development that focuses on open innovation while specializing in world-first and niche top products
- Global Niche Top Companies Selection 100 (Electricity and electronics) (Ministry of Economy, Trade and Industry) (2014)

Value Creation

Products with the world's top share

KrF excimer laser photoresists
For 3D-NAND and other cutting-edge semiconductors

g-Line and i-Line photoresists
For power semiconductors and sensors, etc.

New business development targeting new markets

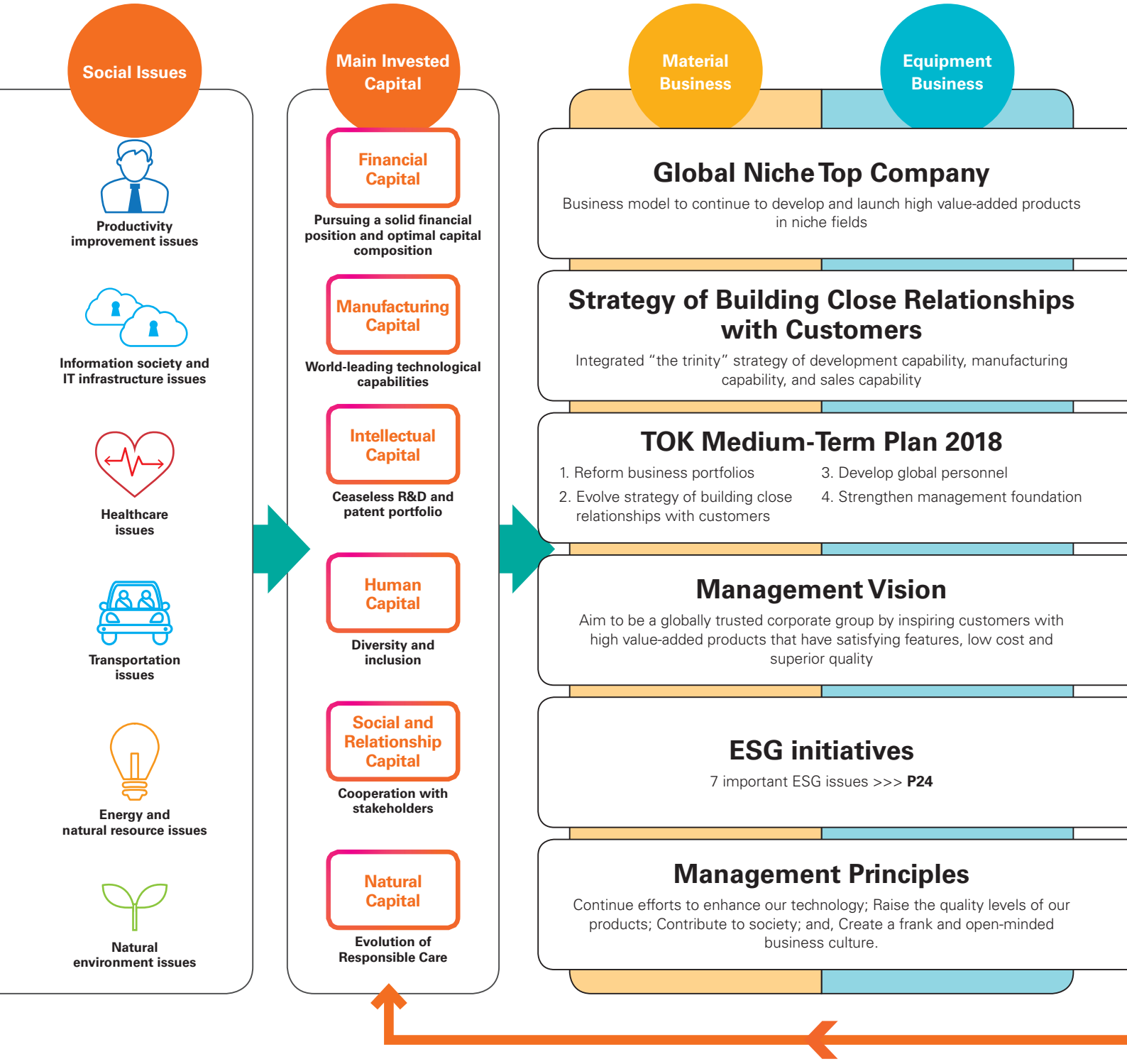
High-functional films
For electronic materials and separators

CO_2 recovery films
CO_2 and rare gas recovery

Value Creation Process

TOK's Sustainable Value Creation Process

As a global niche top company, TOK is contributing to solving social issues by developing products that are useful to society and are not offered by other companies, based on the strategy of building close relationships with customers. In the semiconductor-related business, where technologies change at an extremely fast pace, our ability to sustainably create value is supported by our robust financial capital, the world's highest level of technological capabilities, ceaseless R&D efforts and a strategic patent portfolio. Under the TOK Medium-Term Plan 2018, with the aim of realizing our "overarching aspiration" for 2020 by further strengthening and evolving these management



resources, we will focus on promoting Diversity 2.0, open innovation, and Responsible Care in collaboration with our employees. Looking ahead, TOK will use this series of initiatives to contribute to the evolution of all types of industry and technological innovation, and creation of an environmentally friendly society, as well as reinvest with an eye on sustainable value creation and work toward the realization of becoming a "100-year company".

New Business

- Commitment to high value-added products
- Win-Win Relationship
- "Challenge for the Future"
- Overarching aspiration for 2020
- Sustainable value creation
- DNA in place since TOK's founding

Customers

Semiconductor market, electronics components market and others

End products/End users

Value Delivered to Society

Contributing to the evolution of all types of industry and technological innovation/ creation of an environmentally friendly society

By providing products indispensable for the development and production of cutting edge-semiconductors, we:

- Contribute to **evolution of all types of industry and technological innovation;** and
- Contribute to **more compact, higher performance, energy-saving products.**

By providing products indispensable for the production of power semiconductors, we:

- Contribute to **the spread and evolution of renewable energy systems and various types of energy-saving products.**

Through new businesses, we:

- Aim to contribute to **creation of an environmentally friendly society,** and extension of healthy life spans.

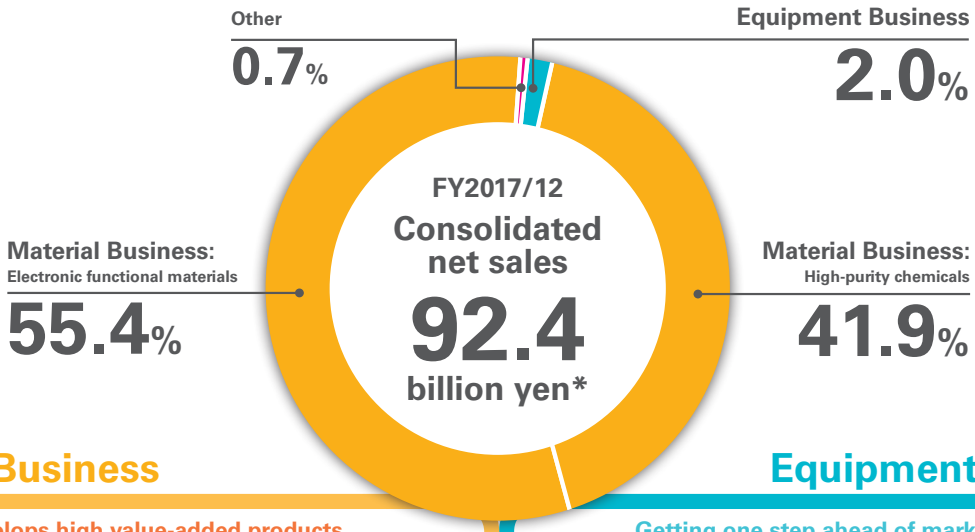
[SDGs to be achieved through our core business]

Enhance sustainable corporate value

Reinvest toward sustainable value creation

Business Portfolio

We are leveraging the Material Business, our current earnings driver centering on cutting-edge domains, and realizing synergy with our Equipment Business, which is cultivating new niche business domains.



Material Business

Develops high value-added products as an earnings driver

Electronic functional materials

Photoresists
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

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

Equipment Business

Getting one step ahead of market needs in synergy with the Material 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

—M&E (Materials & Equipment) Strategy—

Material Business

Strengthen our value creation in all directions in the 2D and 3D semiconductor markets

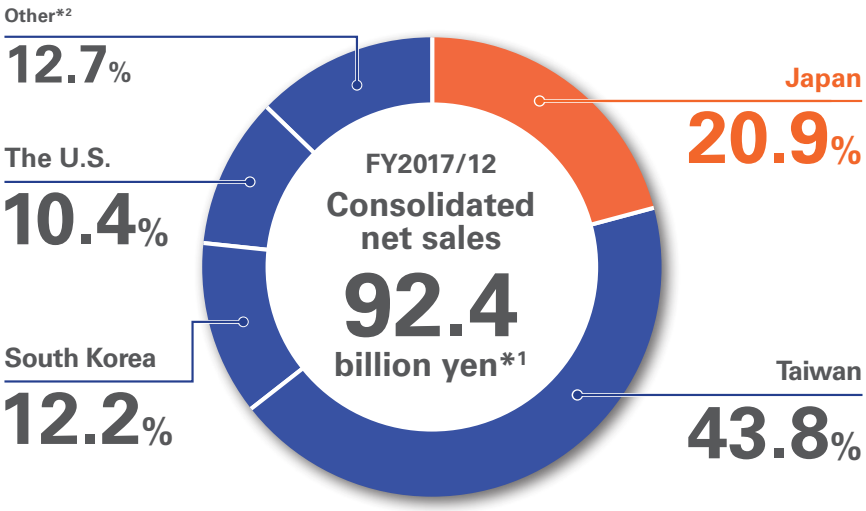
Equipment Business

SWOT analysis by segment
>>> Refer to pages 38 and 42

* 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.

Global Expansion

As a result of our focus on the semiconductor field and strategy of building close relationships with customers, overseas net sales account for approximately 75% of consolidated net sales, and are on an upward trend.



Japan
- Head office (9 sites)
- Number of employees (consolidated): 1,184

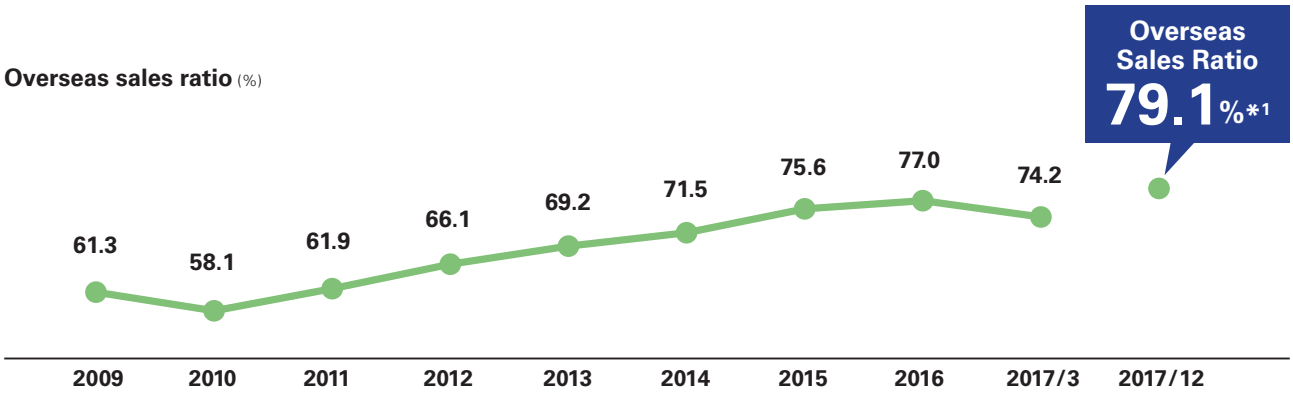
Taiwan
- 1 local subsidiary (3 sites)
- Number of employees (consolidated): 155

South Korea
- 1 local subsidiary (1 site)
- Number of employees (consolidated): 112

The U.S.
- 1 local subsidiary (2 sites)
- Number of employees (consolidated): 95

*2 Other: China, Europe, and Singapore, etc.

Overseas sales ratio (%)



Customer-oriented sites

—Close ties to regional customers, with an integration of "the trinity" platform covering development, manufacturing, and sales—

*1 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.

Product Portfolio

We excel in niche areas in both the front-end process and back-end process of semiconductor manufacturing, and we excel at both miniaturization and 3D packaging. We also offer cutting-edge value in the fields of high-purity chemicals, which are non-photosensitive materials, and equipment.

Semiconductor Manufacturing Field

- g-Line/i-Line Photoresists — Global No. 1*
- KrF Excimer Laser Photoresists — Global No. 1*
- ArF Excimer Laser Photoresists
- EUV (Extreme Ultraviolet) Photoresists
- EB (Electron Beam) Photoresists
- Interlayer Insulating Film
- Diffusing Agents
- Materials for Shrink Process
- Materials for Cover Coat
- Directed Self-Assembly Materials (DSA)
- High-Purity Chemicals

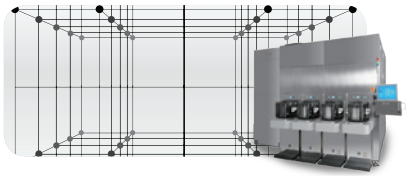
Semiconductor Packaging Manufacturing Field

- Bump Photoresists
- Lift-off Resists
- High-Purity Chemicals

Image Sensor/MEMS Manufacturing Field

- Materials for Photosensitive Permanent Films
- Resist for Micro Lens
- High-Purity Chemicals

3D Packaging Field



- 3D Packaging Equipment Zero Newton
- Adhesive Materials
- High-Purity Chemicals

Panel Manufacturing Field

- TFT Resists
- Black Resists
- UV Curing Machines
- Resists for Organic EL
- High-reliability Transparent Materials
- High-Purity Chemicals

High-Purity Chemicals

- Cleaning Solutions
- Thinner
- Developing Solutions
- Organic Chemicals
- Stripping Solutions
- Inorganic Chemicals

* Share of sales volume for 2017 (Source: Fuji Keizai's "Whole View of Photo-functional Material and Product Market 2018")

Main Target Markets, Applications, and End Products, etc.

All of TOK's products are based on the B-to-B business, and people never see our products in their daily lives. However, these materials are essential for the evolution of end products, and they contribute to various innovations and to solving a range of social issues.

Smartphones/ Tablet devices PCs/Wearable devices

VALUE
Higher performance
Energy saving
More compact

Large-capacity servers Supercomputers Game machines, etc.

VALUE
Higher performance
Energy saving
More compact

AI/IoT Self-driving vehicles/ Advanced driver assistance systems Robotics

VALUE
Higher performance
Energy saving
More compact

Renewable energy equipment/ Eco-friendly cars, etc.

VALUE
Higher performance
Energy saving
More compact

TVs/Various displays Smartphones/Tablet devices

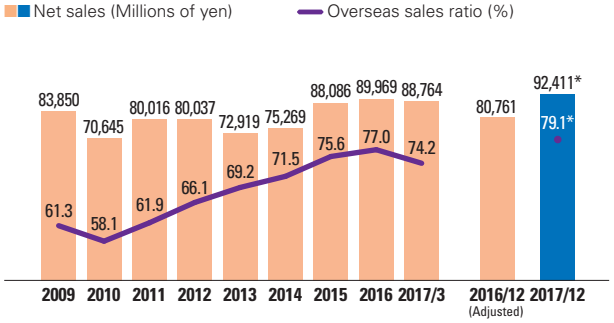
Semiconductor manufacturing lines, etc. Panel manufacturing lines, etc.

10-Year Financial Highlights

* The fiscal year ended December 31, 2017, was an irregular nine-month period due to a change in fiscal year-end.

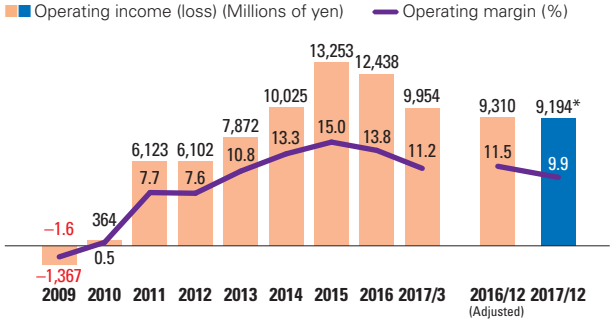
Net sales/Overseas sales ratio*

¥92,411 million* **79.1%***



Operating income (loss)*/Operating margin

¥9,194 million* **9.9%**

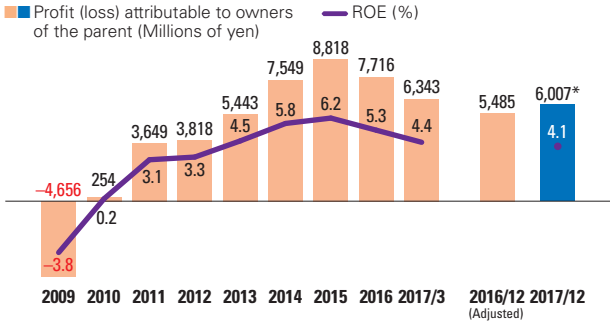


The overseas sales ratio has been on an uptrend as a result of our strategic focus on building close relationships with customers and an increase in the market share for our core products, mainly at overseas customers. Although TOK recorded our first operating loss since going public in the fiscal year ended March 31, 2009, immediately following the collapse of Lehman Brothers, we have steadily held profits at a certain level since the fiscal year ended March 31, 2011, thanks to business structural reform that included the streamlining of domestic plants, divesture of an overseas subsidiary, and withdrawal from the printing material business. In the fiscal year ended March 31, 2015, we achieved record-high operating income as a result of concentrating on growth in cutting-edge materials for semiconductors, strengthening our strategy of building close relationships with customers overseas, and reshaping our business portfolio since the fiscal year ended March 31, 2013. Under the "TOK Medium-Term Plan 2018," which began in the fiscal year ended March 31, 2017, we are continuing to pursue "high-quality profits," even though profit growth has recently been sluggish partly due to implementing one of our largest-ever rounds of investment.

* 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.

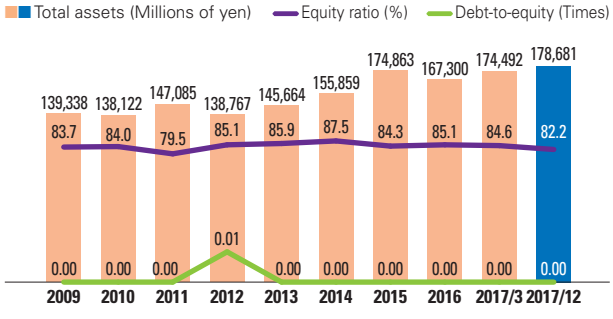
Profit (loss) attributable to owners of the parent*/ROE

¥6,007 million* **4.1%**



Total assets/Equity ratio/Debt-to-equity

¥178,681 million **82.2%** **0.00 times**



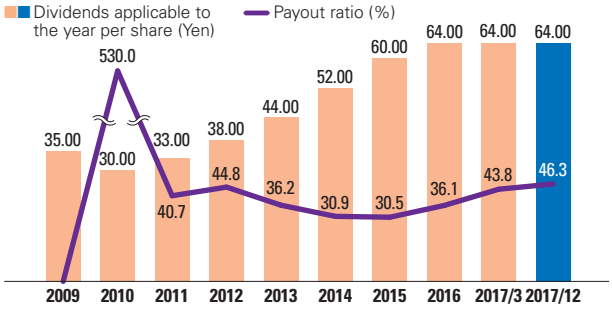
Under the "TOK Medium-Term Plan 2018," we have set a numerical target for ROE and are working to increase it by capturing high-quality profits through business portfolio reforms, attaining top-line expansion and a higher total asset turnover ratio, as well as considering review of the D/E ratio. Although ROE has stagnated lately mainly due to one of our largest rounds of investment ever and rising raw material prices, we are committed to improving ROE through profit growth.

* 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.

TOK has maintained an equity ratio of around 85% due to need to have a solid financial position as an R&D-driven company that targets niche top products. Through balance sheet management since the fiscal year ended March 31, 2017, TOK is pursuing an optimal balance between investment, cash reserves, and shareholder returns. The equity ratio has shifted to a downtrend mainly due to implementing the Company's largest share buyback in November 2017.

Dividends applicable to the year per share/Payout ratio

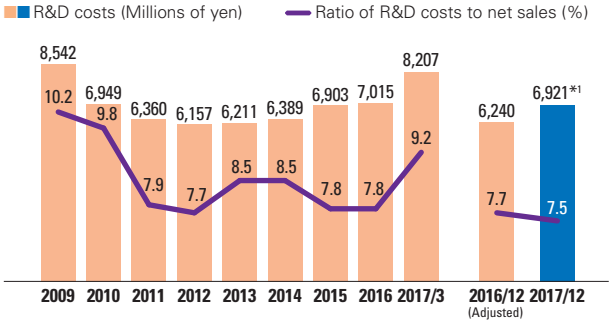
¥64.00 **46.3%**



Until the fiscal year ended March 31, 2016, our basic policy targeted a consolidated dividend payout ratio of at least 30%. In the fiscal year ended March 31, 2017, we updated our guidelines and changed to a policy that targets a sustained dividend at a consolidated payout ratio of at least 40% while taking current levels into account. Although the fiscal year ended December 31, 2017 was an irregular nine-month fiscal period, we left dividends per share unchanged at ¥64, and dividends were, in effect, increased.

R&D costs*1/Ratio of R&D costs to net sales

¥6,921 million*1 **7.5%**



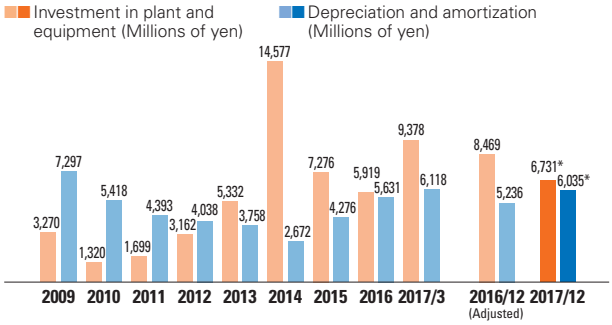
TOK's spending on R&D is equivalent to roughly 8% of net sales, much higher than the all-industry average of 4.1%*2. Over the past few years, R&D costs have been on an uptrend for the development of high value-added materials, equipment, and production technologies, as well as an increase in the supply of samples for cutting-edge semiconductor fields.

*1 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.

*2 Plan as of fiscal 2017. Source: The Nikkei Business Daily, August 2, 2017

Investment in plant and equipment*/Depreciation and amortization*

¥6,731 million* **¥6,035 million***



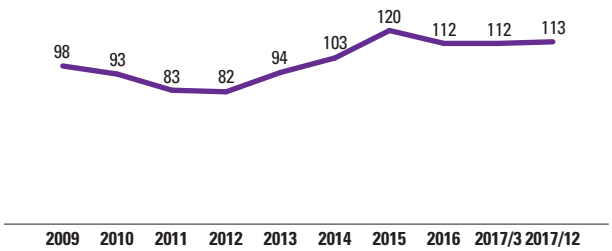
After an uptrend in depreciation alongside one of our largest-ever rounds of capital investment under the "TOK Medium-Term Plan 2018," the rate of increase in depreciation and amortization has been slowing down as these large-scale investments wind down.

* 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.

Exchange rate

¥113

(Yen/U.S. dollars, As of March 31)



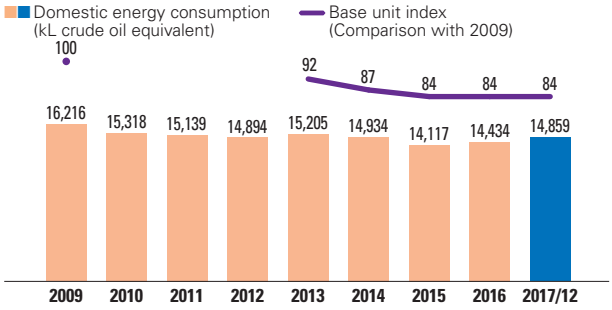
Our profits have become more sensitive to fluctuations in foreign exchange rates along with a higher ratio of overseas sales, and our foreign currency hedges to mitigate this sensitivity have, on their own, lost some effectiveness. For this reason, TOK aims to minimize financial risk, including foreign currency risk, by focusing more on global cash management that entails adjusting the balance of cash positions across overseas sites.

10-Year ESG Highlights

* The fiscal year ended December 31, 2017, was an irregular nine-month period due to a change in fiscal year-end.

Domestic energy consumption*

14,859 kL crude oil equivalent **84** Base unit index

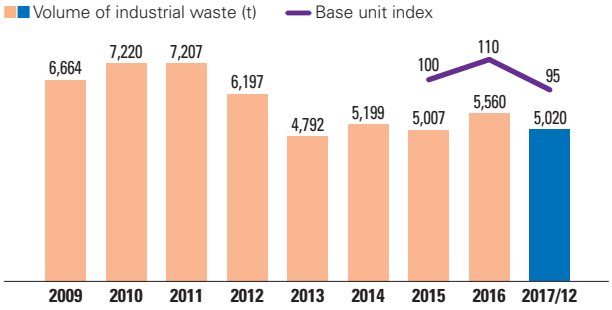


By the fiscal year ending December 31, 2019, TOK targets a reduction of 10 points in energy consumption compared with the base unit indexed to fiscal 2009. Thanks to smooth progress on various fronts, the Company achieved a reduction of 16 points in fiscal 2017, compared with the base unit indexed to fiscal 2009. Energy usage has been on an uptrend lately due to higher production volumes and the installation of new evaluation equipment, but we will continue efforts to reduce environmental impact.

* Due to a change in fiscal year-end, totals for 2009 and 2013 onward are from January through December.

Volume of industrial waste*1

5,020 t **95** Base unit index

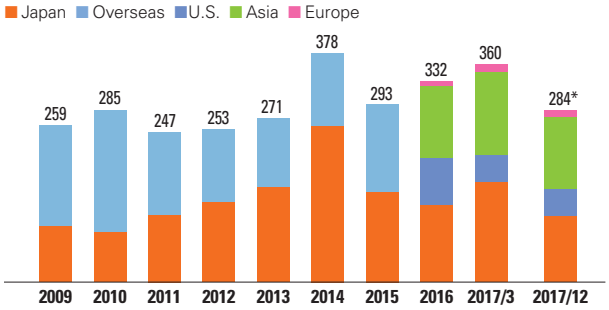


TOK has achieved zero emissions*2, as the volume of its industrial waste headed to landfill disposal via intermediate treatment has remained below 1% the total. TOK fell short of its target for reducing the total volume of industrial waste by 10 points by fiscal 2015 compared with the base unit indexed to fiscal 2010, so the Company is redoubling efforts with the goal of reducing it by 5 points by fiscal 2020 compared with the base unit indexed to fiscal 2015.

*1 Total sum of general industrial waste and specially controlled industrial waste. Due to a change in fiscal year-end, totals for 2013 onward are from January through December.
*2 Definition of zero emissions: Landfill disposal volume (direct or after intermediate treatment) of less than 1% of industrial waste discharged by business activities.

Number of patents

284*

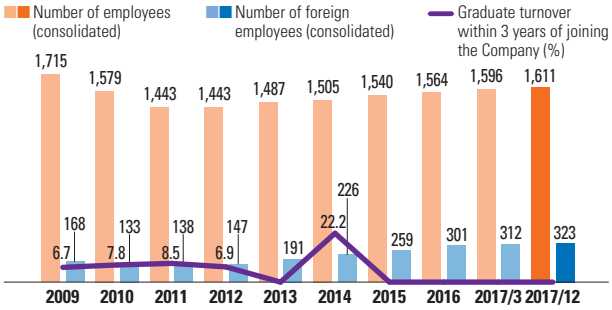


Alongside an increase in R&D in cutting-edge semiconductor fields, the number of patents has been on the rise. For new, promising technologies, our strategic patent portfolio is also designed to enable the stable pursuit of business development as well as to build barriers to entry.

* Due to a change in fiscal year-end, results for the fiscal year ended December 31, 2017 are for nine months only.

Number of employees/Number of foreign employees/ Graduate turnover within 3 years of joining the Company

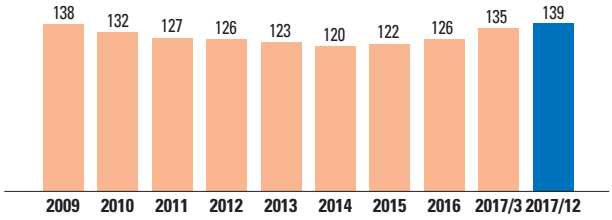
1,611 **323** **0.0%**



At TOK, the number of foreign employees has been increasing as a result of its strategy of building close relationships with customers overseas and emphasis on merit-based hiring of new graduates regardless of their nationality. Based on spirit of a frank and open-minded business culture, one of our management principles, and the basic philosophy that human resources are a company asset, we have expanded our personnel systems and training programs. As a result, the ratio of new graduate hires who quit within three years of joining the Company has stayed at zero percent in recent years. In February 2018, TOK was recognized in the 2018 Certified Health & Productivity Management Outstanding Organizations Recognition Program (White 500).

Number of female employees*

139

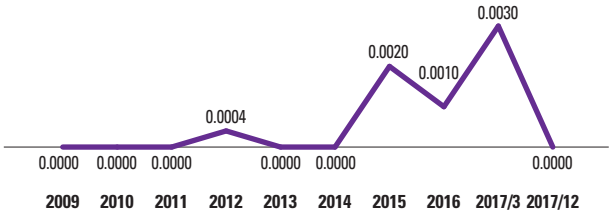


Over the past few years, the number of female employees has increased as a result of initiatives in merit-based hiring and leveraging human resources with the ultimate aim of strengthening our competitiveness. In recognition of our initiatives to promote women in the workplace, such as offering flexible work styles and support with career formation plans, TOK was selected as a constituent stock in the 2017 MSCI Japan Empowering Women Index.

* Non-consolidated basis (employees exclude those seconded from TOK to other companies and contract workers, and include people seconded from other companies to TOK)

Severity rate of workplace accidents

0.0000

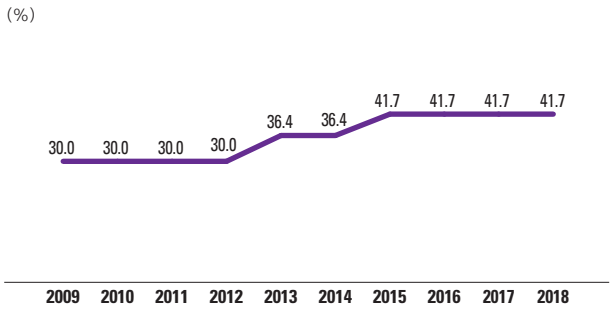


TOK conducts training and drills through the Safety and Health Committee, set up a Safety and Health Liaison Unit, and keeps emergency response manuals up to date. Moreover, the Company encloses facilities and improves ventilation equipment based on risk assessments of chemical substances used. As a result, TOK's severity rate of workplace accidents has remained far below the chemical industry average of 0.01*.

* Source: Ministry of Health, Labour and Welfare's 2017 Survey on Industrial Accidents/Chemicals Industry (1,000 employees or more)

Ratio of outside officers in the Board of Directors

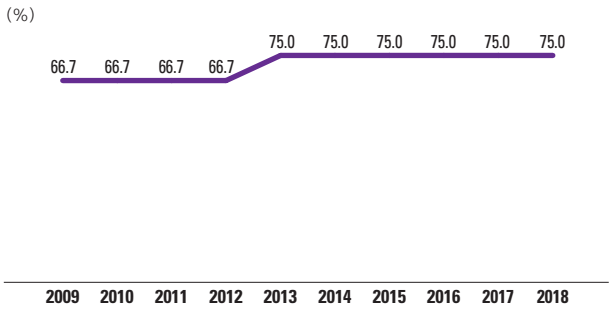
41.7%



TOK increased the number of outside auditors by one to three in 2013, and increased the number of outside directors by one to two in 2015. The ratio of outside officers on the Board of Directors is now 41.7%.

Ratio of outside auditors among corporate auditors

75.0%



The ratio of outside auditors on the Board of Auditors has been 75.0% ever since the number of outside auditors was increased by one to three in 2013.

Challenge for the Future

By continuing to turn changes into opportunities, we aim to become a "100-year company" through sustainable value creation.

Ikuo Akutsu

President & Chief Executive Officer

Q The semiconductor market remains brisk, but compared with a year ago, qualitative changes seem to be underway. What are these recent changes in the semiconductor market, your future outlook, and TOK's position and social mission?

TOK targets sustained growth through steadily generating earnings by constantly expanding growth opportunities while fulfilling its social mission.

■Constantly Expanding Growth Opportunities

We forecast the semiconductor market will expand 12.4%*1 year on year in 2018 and reach its largest size ever, owing to robust growth in datacenter applications and other areas, as well as accelerating market expansion in industrial equipment and automotive power semiconductors and sensors, despite slowing growth in cutting-edge semiconductors for smartphones. We expect these growth trends to continue for some time. Talk by some stock market participants since last year about a "super cycle" on the semiconductor market no longer signifies sharp growth like that seen in 2017, but we believe strong market expansion is becoming entrenched for the long run.

TOK has a leading share*2 of the world market for semiconductor photoresists, and semiconductor-related businesses generate 85% of consolidated net sales*3. We are concentrating on expanding market share in ArF and KrF excimer laser photoresists used in cutting-edge semiconductors, and working to achieve more growth in i-Line photoresists used to make power semiconductors. By continuing to create value in semiconductor-related businesses, we see a high likelihood of even more profit growth after posting record-high profits.

*1 World Semiconductor Trade Statistics
*2 Share of sales volume for 2017 (Calculated by TOK based on Fuji Keizai's "Whole View of Photo-functional Material and Product Market 2018")
*3 FY2017/12 (result)

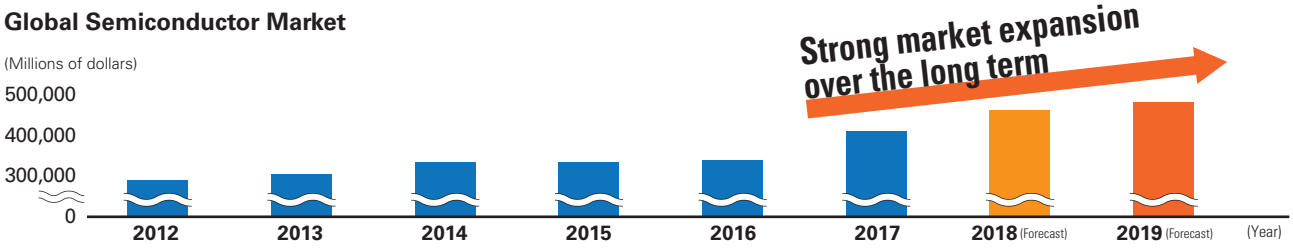
■Growth Factors from Population to Data

Some stock market participants have voiced strong concerns about excess supply and falling product prices once Chinese manufacturers have ramped up mass production of semiconductors. However, the main driver of growth in semiconductor-related industries is shifting away from population growth toward data volume, which has been increasing exponentially alongside advances in IoT, artificial intelligence (AI), and next-generation 5G communications technology. We therefore see the outlines of a new growth trajectory that is different from smartphones, displays and solar cells, markets that depend on growth in the population. Even if excess supply materializes temporarily after Chinese manufacturers start mass production, we expect "explosive growth in data volume" to create demand that offsets this factor. In our view, growth on the Chinese market is basically a positive factor for TOK.

■Management Principles and Our Social Mission

Continued expansion in growth opportunities for TOK also means that the Company will have more opportunities to help solve social issues. We will leverage our strengths in the front-end process and back-end process for the production of semiconductors, as well as cutting-edge semiconductors, power semiconductors and sensors. While focusing on medium- to long-term earnings growth, we will advance initiatives related to SDGs and ESG to continue fulfilling our social mission as a chemicals manufacturer. In turn, these initiatives will lead to the realization of our management principles, namely to continue efforts to enhance our technology, raise the quality levels of our products, contribute to society, and create a frank and open-minded business culture.

Global Semiconductor Market



Source: World Semiconductor Trade Statistics

Q From TOK's standpoint, what is value creation, and how does it tie in with the Company's management principles?

We are turning changes into opportunities through ceaseless R&D.

■Value Creation is the Act of Turning Changes into Opportunities

Our management principles of continuing efforts to enhance our technology, raising the quality levels of our products, contributing to society, and creating a frank and open-minded business culture are applicable in the current business environment, as we believe our constant efforts in R&D effectively turn changes into opportunities while we continue to help solve social issues. Based on our strategy of building close relationships with major semiconductor manufacturers, we are leveraging our development strengths in high value-added, cutting-edge fields, while at the same time focusing efforts on serving smaller companies in the industry and tackling development concepts for other industries. This is because our experience has been that focusing development activities on fields with nascent markets, regardless of the size of customers or technical field, has created many new opportunities and led to the establishment of business in new niche fields while solving social issues. We will continue to create value with our diverse stakeholders based on our strategy of building close relationships with customers.

■Value Creation in Semiconductor Miniaturization and Cutting-Edge Fields —EUV Photoresists—

As an example of value creation, our EUV (extreme ultraviolet) photoresists for 7nm–5nm nodes, used by the most advanced semiconductors in the world, have been praised by major customers and are beginning to contribute to sales. Cutting-edge semiconductors are found not only in the latest smartphones, but also in the FinTech field including cryptocurrency. As such, they are helping to advance blockchain technology and may eventually solve social issues in a variety of fields. We aim to secure the top market share for these photoresists, and will continue advancing R&D based on our strategy of building close relationships with customers.

(→**Refer to pages 30–31 "Special Feature" for details**)

■Value Creation for Mass Production in Cutting-Edge Semiconductor Fields —ArF Excimer Laser Photoresists & High-Purity Chemicals—

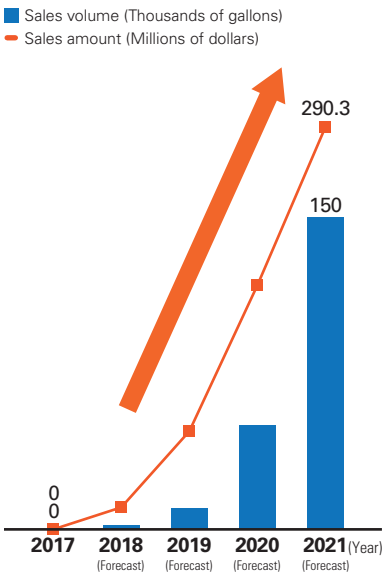
On a mass production basis, 10nm level semiconductors are on the cutting edge in the world, and TOK's ArF excimer laser photoresists are adopted by major semiconductor manufacturers in North America and South Korea. The Company expects earnings to expand as the 10nm level process enters mass production in full scale. In cutting-edge semiconductor fields, amid rapidly strengthening needs for higher purities, we supply high-purity chemicals to major customers in North America and Taiwan. Our products are of such high quality that impurities amount to only one drop of coffee (0.025 ml) in a 50-meter Olympic size swimming pool. We continue our efforts to develop even higher-purity processing.

■Value Creation in 3D Semiconductors —KrF Excimer Laser Photoresists—

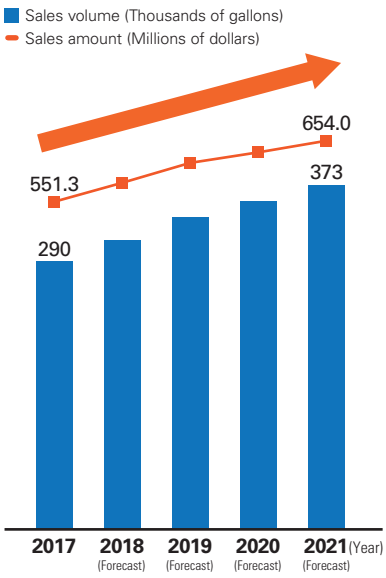
TOK is harnessing its ability to create value in 3D packaging. The market for 3D-NAND has been expanding on demand for solid state drives (SSDs) used in high-performance data servers and compact PCs. TOK is a global market share leader in the KrF excimer laser photoresists needed to make the multi-layer structures of 3D-NAND, providing the photoresists to major customers. Growth had once slowed on the mature market for these photoresists, but they became a growth driver once again as a result of TOK going back to the basics and developing these photoresists for new applications (sources of demand). The high-speed servers and compact PCs made by 3D-NAND and our photoresists have contributed to improvement in work-life balance and changes in working styles throughout society, through faster data processing at offices and out of offices, and greater efficiency by allowing employees to work at home via teleworking.

(→**Refer to pages 32–33 "Special Feature" for details**)

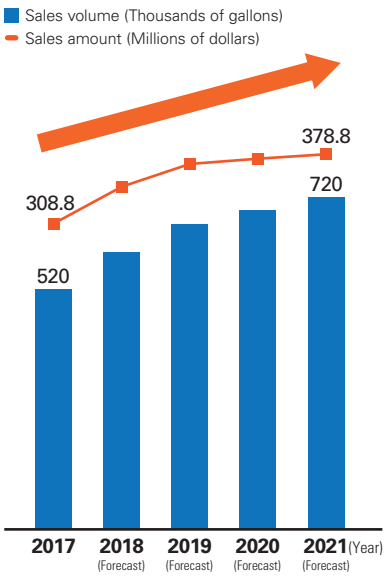
EUV Photoresists Market



ArF Excimer Laser Photoresists Market



KrF Excimer Laser Photoresists Market



(Source: Fuji Keizai's "Whole View of Photo-Functional Material and Product Market 2018")

■Value Creation in IoT and Power Semiconductor Fields —i-Line Photoresists—

We project steady growth in demand for i-Line photoresists used on the 350nm–250nm nodes to make IoT sensors, power semiconductors, and analog semiconductors. Our i-Line photoresists have contributed greatly to safety and security in an IoT society and the creation of a more environmentally friendly society. We make every effort to ensure stable supply of these photoresists, and are developing them for next-generation power semiconductors used in electric vehicles.

(→**Refer to page 45 "TOK Creates Value for the Environment through Business Activities" for details**)

■Value Creation in the Back-end Process of Semiconductor Manufacturing —High-density Integration Materials and Equipment Business—

In addition to the front-end process, where integrated circuits are made on semiconductors, we also create value in the back-end process, where semiconductor packaging is performed to connect (mount) semiconductors onto circuit boards to fulfill their functions.

Our high-density integration materials are used in the high-density packaging of semiconductors. We are developing and providing thick-film photoresists for fan-out wafer level packaging, which contribute to making cutting-edge devices including high value-added smartphones thinner and lighter.

In the Equipment Business, we are receiving an increasing number of inquiries alongside growth in TSV equipment development projects for 3D semiconductors and next-generation processors, which are likely to be used in next-generation servers, image sensors, autonomous vehicles, and game consoles. It takes time to launch these cutting-edge markets, so earnings are unlikely to benefit strongly over the short term. However, the Equipment Business is a field where emerging trends in electronics technologies can be identified at the earliest stages, creating significant qualitative synergies with the Materials Business. For this reason, we will continue to concentrate on our unique Materials & Equipment (M&E) strategy and develop both the Materials Business and Equipment Business.

(→**Refer to page 43 "2017/12 TOPICS" for details**)

Q Can you discuss the progress made so far on the "TOK Medium-Term Plan 2018," which is entering its final fiscal year, and the direction of the next medium-term plan?

We target further growth in profits toward achieving a new record high as quickly as possible by maximizing the strengths of our strategy to build close relationships with customers.

■Review of the Second Year of "TOK Medium-Term Plan 2018"

Under the three-year "TOK Medium-Term Plan 2018," which commenced in the fiscal year ended March 31, 2017, we target a new record high in operating income in the fiscal year ending December 31, 2018, the final year of the plan. We have concentrated on reforming our business portfolio, evolving the strategy of building close relationships with customers, developing global personnel, and strengthening the management foundation. To reinforce our ability to constantly create new values, we executed one of our largest ever strategic investments. In the fiscal year ended December 31, 2017, the second year of the plan, consolidated net sales increased 14%, with sales of ArF excimer laser photoresists up 10% year on year, KrF excimer laser photoresists up 15%, and high-purity chemicals up 25%, underscoring the robust demand in the Materials Business. Operating income declined 1.3% due to higher raw material costs from the final quarter of the year, and one-time expenses arising because of the change in the fiscal year-end.

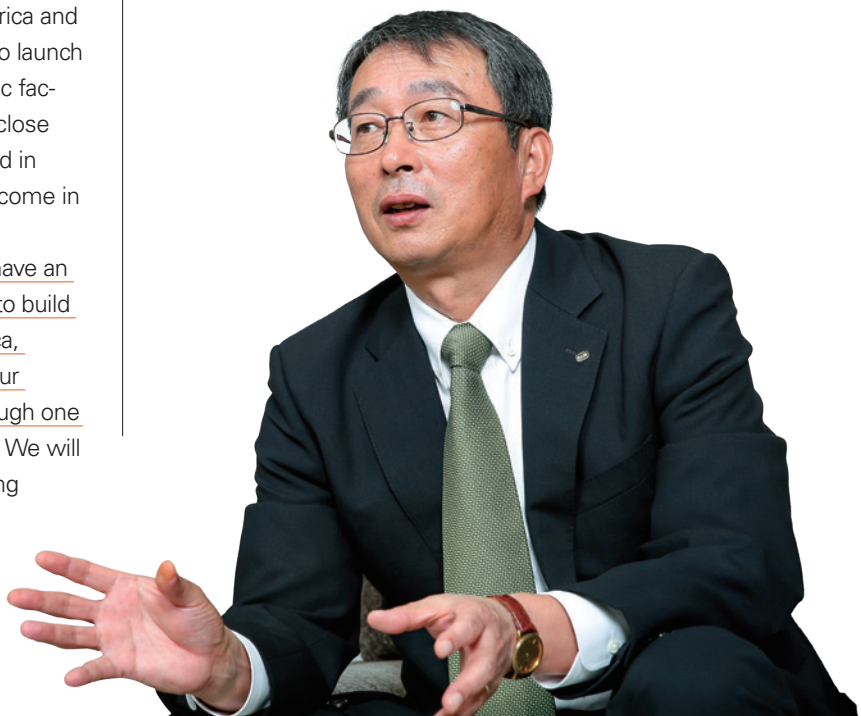
For the fiscal year ending December 31, 2018, the final year of the plan, we see a strong likelihood that raw material costs will continue to increase. We project that shipments of ArF excimer laser photoresists for cutting-edge semiconductors to major customers in North America and South Korea will be slow to gain momentum due to launch delays in final device markets and customer-specific factors. This is the largest factor for not being able to close the gap between our earnings forecasts announced in February 2018 and our initial target for operating income in the final fiscal year of the medium-term plan.

However, our initiatives to date have begun to have an unmistakable effect on strengthening our strategy to build close relationships with customers in North America, Taiwan, and South Korea, and we have enhanced our development capabilities in cutting-edge fields through one of our largest-ever rounds of strategic investments. We will continue to focus on evolving our strategy of building close relationships with customers and reforming our business portfolio with the aim of attaining a new record high in operating income as quickly as possible through ongoing profit growth.

■Toward the Next Medium-Term Plan

We are still working out the details of the next medium-term plan that will commence in the fiscal year ending December 31, 2019. While addressing the current issues of strengthening the Equipment Business and creating new businesses, TOK will continue to create value by turning changes into opportunities as a company that specializes in R&D in niche fields. In addition to our core competencies in microprocessing technology and high purification technology, we will continue to reinforce our strategy of building close relationships with customers, contribute to solving social issues, and sustain enhancement of corporate value with the ultimate aim of becoming a "100-year company" in 2040.

One of the most important strategies to this end will be enhancing our personnel measures, in my opinion. With this and other important strategies on our mind, we are engaging in dialogue with stakeholders, analysts and institutional investors while working out the details of the next medium-term plan, which we intend to unveil around February 2019.



Q Please describe your future investment strategy, financial and capital policies and plan for increasing ROE.

We will continue to pursue an optimal balance between investment, cash reserves, and shareholder returns.

■Strategic Investments Executed

As mentioned earlier, the Company executed one of its largest-ever strategic investments during the "TOK Medium-Term Plan 2018." At overseas customer-oriented sites, we launched new mass production lines for high-purity chemicals for cutting-edge semiconductors at our Tongluo Plant in Taiwan (Tongluo No. 2 Plant). In Japan, we increased capital investments in cutting-edge fields, including the installation of high-resolution exposure equipment for accelerating the development of ArF excimer laser photoresists at the Sagami Operation Center, our core R&D facility. The TOK Group is also constructing a new R&D Building at the Sagami Operation Center to serve as a site for open innovation that will show external stakeholders the wonders of our technologies while bringing people together over the long term. Plans call for completing construction on this facility in September 2019. Our hope is that it will serve as a site that draws in from the outside a variety of technological seeds, needs, ideas, and concepts that inform the creation of new businesses, reform our business portfolio, and drive value creation at the TOK Group as it moves toward becoming a "100-year company."

New R&D Building that will drive value creation toward becoming a "100-year company" (perspective drawing)

■Implementation of Largest Share Buyback Program/Large-Scale Investments Unlikely in Immediate Future

At TOK, we consider returning profits to shareholders to be one of our most important management objectives, and while taking a long-term perspective, we return profits to shareholders based on a comprehensive consideration of factors such as our financial position and business performance.

In November 2017, TOK implemented a share buyback program up to ¥10 billion, its largest-ever program, to enhance shareholder returns by buying back its own shares. We also distributed an annual dividend of ¥64 per share in the fiscal year ended December 31, 2017, which was effectively a higher dividend due to the shorter nine-month fiscal period during the change in fiscal year-end. This constituted a consolidated dividend payout ratio of 46.3%. For the fiscal year ending December 31, 2018, the Company plans to increase dividends by ¥8 year on year to ¥72 per share. Management is committed to maintaining its basic policy on profit distribution through a consolidated payout ratio of at least 40%.

With a firm presence in niche fields in the electronics market, which includes the rapidly and constantly changing semiconductor industry, we will hone our business model so that we can beat the competition, despite competitors being much larger than us and having different cash generation structures. To this end, TOK will ensure it has sufficient cash reserves and make the necessary investments to pull this off. With that said, we do not plan to make any large-scale investments like those during the "TOK Medium-Term Plan 2018" that were deemed necessary for sustainable value creation over the long run. We will accordingly focus on returns on these investments through top-line growth and stronger profits, and strive for the optimal balance between investments, cash reserves, and shareholder returns in line with this phase.

■Aiming to Increase ROE via Profit Growth

ROE was 4.1% in the fiscal year ended December 31, 2017, signaling that more needs to be done to achieve our target for ROE of at least 7% in the fiscal year ending December 31, 2018 and 8% or higher in the fiscal year ending December 31, 2020. The Company will continue to focus on profit growth in line with its policy of increasing the numerator in the ROE equation. For the denominator of this equation, our policy is to strengthen balance sheet management, which began in the second year of the current medium-term plan. We intend to share more details about this in the next medium-term plan.

Q Given the increase in opportunities to help solve social issues, what are the initiatives TOK is taking to address SDGs and ESG?

We are committed to sustaining value creation through initiatives that address SDGs and ESG.

■Creating a PDCA Cycle to Contribute to Resolving Social Issues

Reforms to corporate governance in Japan began in earnest in 2014. We have also taken steps to improve corporate governance by increasing the number of independent officers, conducting evaluation of the Board of Directors, setting and disclosing ROE targets, and emphasizing diversity for Board of Directors members and employees. In 2017, TOK became a constituent stock in the MSCI Japan Empowering Women Index and the SNAM Sustainability Index. In February 2018, TOK was recognized in the large enterprise category of the 2018 Certified Health & Productivity Management Outstanding Organizations Recognition Program (White 500).

Backed by these achievements, we will evolve our ESG initiatives. In light of ongoing expansion in semiconductor-related businesses, our core domain, we will create a system for value creation in core businesses that aligns with SDGs, and share this system with both internal and external stakeholders, while linking it to a PDCA cycle for contributing to the resolution of social issues and generating profits.

■Resolving Social Issues through Core Businesses —Initiatives in SDGs—

In resolving social issues through core businesses, TOK contributes to the advancement of various industries and technological innovation through its ongoing strategy of building close relationships with customers, mainly in semiconductor photoresists, as described in parts of this report.

Specifically, TOK will contribute to producing higher-performing, more compact, energy-saving industrial equipment, and will encourage more efficient work styles for people and value creation by developing and providing high-purity chemicals, high-density integration materials, and EUV, ArF, and KrF photoresists that are essential for miniaturizing and increasing the density of semiconductors. Through the reliable supply of i-Line photoresists essential for the production of power semiconductors and sensors, TOK contributes to the creation of a secure and safe society, as well as the proliferation and advancement of renewable energy systems, eco-cars, and energy-conserving equipment. All of our products in these core businesses will contribute to achieving "Affordable and clean energy" (SDG 7), "Decent work and economic growth" (SDG 8), and "Industry, innovation and infrastructure" (SDG 9).

■Focusing on ESG Material Issues

TOK focuses on the following ESG material issues as initiatives that support value creation through core businesses.

TOK's ESG Material Issues

- ◊Reduce environmental impact in production processes
- ◊Work to reduce environmental impact more than required by law
- ◊Enhance personnel measures and promote diversity to improve competitiveness
- ◊Encourage open innovation to strengthen competitiveness
- ◊Create great workplaces that allow employees to strike a work-life balance/promote occupational health and safety
- ◊Instill the Group Management System globally (controls/risk management/compliance)
- ◊Tightly manage information about cutting-edge technology

Achieving SDGs

By focusing on these ESG material issues, we will make steady progress toward achieving SDGs 7, 8, 9, 13, and 17 in our core businesses. We also aim to contribute to the achievement of "Gender equality" (SDG 5), and "Clean water and sanitation" (SDG 6).

We are currently examining how to address the latest revisions to the Corporate Governance Code in Japan, which was updated in June 2018, from the perspective of strengthening our ability to constantly create value and improve corporate value.

We kindly request the ongoing support and understanding of all our stakeholders.

Initiatives to Enhance Medium- to Long-Term Corporate Value

Becoming a "100-year company" in 2040

[Next medium-term plan] **Working out the details to be announced in February 2019**

Direction*

- Continue to create value by turning changes into opportunities as a company that specializes in R&D in niche fields
- Further enhancement of the strategy of building close relationships with customers in addition to our microprocessing technology and high purification technology that contributes to resolving social issues
- Strengthen initiatives in the Equipment Business and new businesses that have been issues under "TOK Medium-Term Plan 2018"
- Aim to increase ROE via profit growth emphasizing the numerator and stronger balance sheet management at the core
- Further strengthen personnel measures

* Readers are cautioned not to rely solely on the excerpts of the direction listed in this Annual Report as actual events may differ compared to those at the time of editing (July 2018).

Business Environment Increasing speed of technological change, etc.

Customers & TOK Investment recovery tends to be protracted due to increasing technological difficulties, etc.

[Current medium-term plan] **TOK Medium-Term Plan 2018 (FY2017/3–FY2018/12)**

Targets

- Operating income: ¥15 billion
- ROE: Over 7%

Strategy

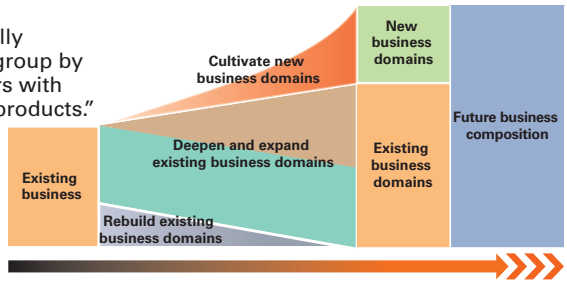
Execute aggressive, largest ever investments

- Reform business portfolios
- Evolve strategy of building close relationships with customers
- Develop global personnel
- Strengthen management foundation

Long-term Management Vision —"Overarching aspiration for 2020"—

- Operating income: ¥20 billion
- ROE: Over 8%

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



Business Environment Harsher development competition in the cutting-edge semiconductor field

TOK Increased overseas sales ratio

[Previous medium-term plan] **TOK Medium-Term Plan 2015 (FY2014/3–FY2016/3)**

Targets

- Surpass record-high earnings
- Enhance business foundations that support sustainable growth

Strategy

- Build close relationships with regional users
- Reform business portfolios
- Develop global personnel

Results

- Achieved record-high profits (FY2015/3 Operating income: ¥13.2 billion)
- Strategy of building close relationships with customers made significant progress
- Diversified earnings drivers

TOK Advanced Materials Co., Ltd. (South Korea)

TOK TAIWAN CO., LTD. (Taiwan)

Strengths (The source of the value we create)
➡**Pages 6–7**

Value Delivered to Society:
Contributing to the evolution of all types of industry and technological innovation/ creation of an environmentally friendly society

ESG Material Issues and Achieving SDGs
➡**Page 24**

We develop with society and continue to fulfill our goals of being a responsible and innovative company.

Message from the CFO

TOK will continue to pursue a new optimal balance between investment, cash reserves, and shareholder returns, evolving its balance sheet management to become a "100-year company."

Q1 Please tell us about the Company's share buyback program, its largest ever, which was implemented in November 2017.

A **It was our first round of "credit rebalancing" in balance sheet management.**

TOK is pursuing the optimal balance for investments, cash reserves and shareholder returns with an eye on long-term growth as a global niche top company. With the Company's 80th anniversary approaching in 2020, we have all had more opportunity to think about the shape of the TOK Group as a "100-year company." We reassessed our initiatives toward becoming a "100-year company" within the context of major changes on capital markets in Japan, such as the Corporate Governance Code, and came to the conclusion that we should begin taking steps to reinforce balance sheet management from a long-term perspective without waiting for the next medium-term plan to begin in 2019. The TOK Group is undertaking balance sheet management not only as a financial capital strategy, but also as an initiative to reform awareness internally, as a new management method toward becoming a "100-year company." In addition to returning value to shareholders, the recent share buyback can be viewed as our first round of "credit rebalancing" in balance sheet management with the aim of becoming a "100-year company."

Q2 Why did management decide on ¥10 billion as the amount for the share buyback?

A **It aligns with our provisional target for an equity ratio of around 80%.**

The Group's equity ratio has long hovered around 85%. In pursuit of an optimal asset composition that takes into account the capital cost, TOK set an equity ratio of around 80% as a provisional target for the final fiscal year of the current medium-term plan. To achieve this target, we implemented the share buyback as a part of reassessing financial leverage. After equity was reduced as a result of the November 2017 share buyback, we are aiming to reach an equity ratio of around 80% by the end of 2018 while continuing to ensure sufficient cash reserves through ¥10 billion in long-term debt financing that was implemented in the first half of this year.

Q3 What are the Company's future plans for strengthening balance sheet management?

A **We will concentrate on both "debit management" and "debit and credit balance management."**

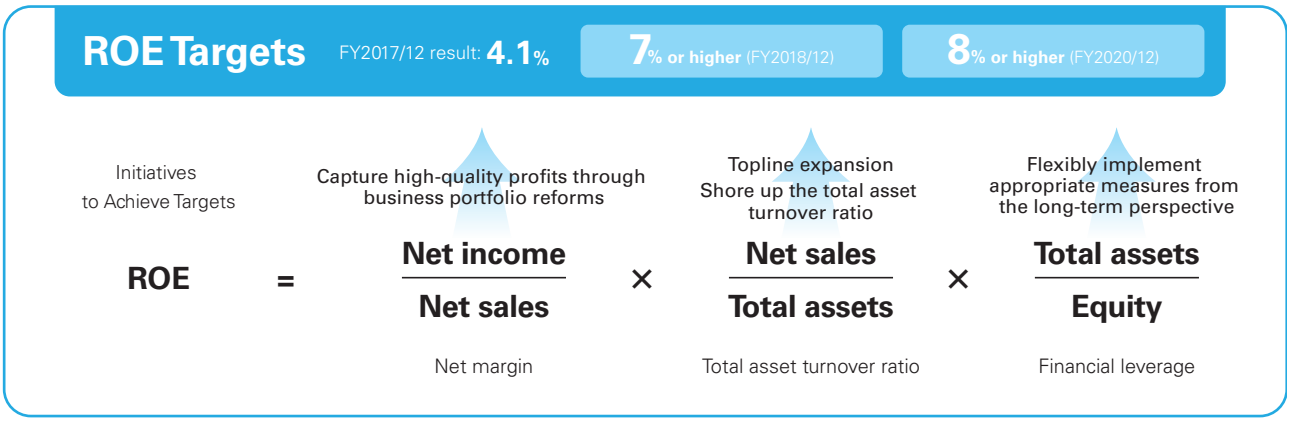
We plan to provide more information along with the full details of the next medium-term plan. For now, the general direction we will take entails a flexible approach to "credit management," which includes share buybacks, from a long-term perspective while considering future business strategies, investment plans, and performance trends. After starting with credit management, TOK plans to strengthen "debit management" and "debit and credit balance management." We are still working out the details, examining the clarification of our policy on cash holdings and the reassessment of the substance of credit within the context of debit management.

Q4 The fiscal year ended December 31, 2017, the second year of the medium-term plan, was a year of external factors having an unexpectedly large impact, such as delay in a generational switch in customers' processes and sharp increases in raw material prices. In light of this, how will TOK's future financial and investment strategies change?

A **Without flinching from short-term changes, we will settle down and concentrate on our long-term business strategies and balance sheet management.**

Regrettably, these external factors caused us to miss our earnings targets in the current medium-term plan. This also resulted in a decline in the net margin, a key element of ROE. During the remaining months of this year, we are making every effort to get back on track.

Senior Executive Officer, Department Manager, Accounting and Finance Dept. Yoichi Shibamura



However, the uncertainties that led to the rise of these external factors may increase further in the semiconductor industry that TOK calls its main business domain. TOK will stand its ground with its business model of being a global niche top company without a presence in bulk fields and a long-run R&D-driven company centered on electronics-related materials. To continue creating value through bold and flexible investments that leverage its appropriate cash reserves, TOK will take the long view without being distracted by short-term changes and concentrate on its business strategies and balance sheet management.

Q5 How is management working to improve ROE?

A **Under the next medium-term plan, TOK will rebuild measures for the numerator and take a more flexible and evolved approach in measures for the denominator over the long term.**

With regard to improving ROE, we are prioritizing improvements in the numerator and long-term profit growth. We are rebuilding our business strategies by returning to the basics of being an R&D-driven company with a strong presence in niche fields. As a part of this initiative, we are pursuing a more evolved approach to taking flexible measures for the denominator over the long term. Accordingly, among the elements that make up ROE, we are prioritizing improvements in net margin. Regarding financial leverage and the total asset turnover ratio, we are working to avoid a decline and shore up these metrics through stronger balance sheet management.

Q6 For the current TOK Medium-Term Plan 2018, management raised its target for the dividend payout ratio from 30% or higher to 40% or higher. Although earnings are trending below initial forecasts, is management still committed to a payout ratio of 40% or higher?

A **We are well positioned to reward long-run shareholders as much as possible.**

We will not change our stance on emphasizing dividends. Our current policy of maintaining a stable dividend while targeting a payout ratio of 40% or higher is very important as long as TOK has a business model that befits a long-run R&D-driven company. When engaging in long-run R&D activities and reaping the benefits, there is naturally a certain time lag that depends on market conditions and technological trends. We aim to reward shareholders who have supported TOK over the long run and understand the Company's unique traits with a consistent and strengthening dividend policy and sustained profit growth over the long term. To clarify our stance on maintaining a stable dividend, we are considering the introduction of new targets in addition to our target for a consolidated dividend payout ratio of 40% or higher.

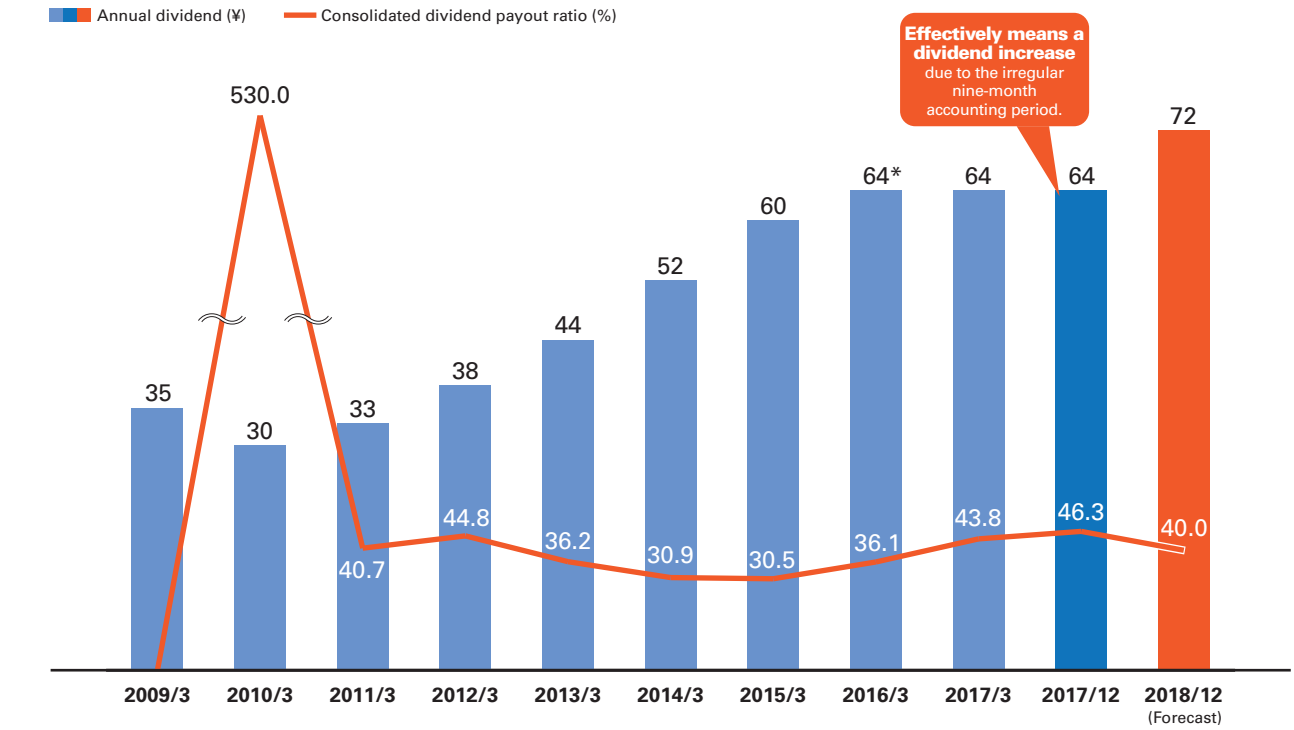
Q7 The Equipment Business has been criticized by some investors for incurring losses for three consecutive years. As CFO, what are your thoughts on this segment?

A **TOK will continue to invest in the Equipment Business based on its unique long-run development model.**

Around 2007, prior to the collapse of Lehman Brothers, the Equipment Business generated strong earnings, mainly on coating machines used in LCD panel manufacturing. Currently, TOK is turning around the business domain drastically in light of changes in market conditions and is pivotting toward fields that require time for launching new markets within cutting-edge semiconductor fields, such as 3D packaging. We understand why investors have their doubts when comparing it to the earnings-driving Materials Business. However, the Equipment Business is also emblematic of a business the Company had in the past as a long-run R&D-driven company in niche fields, representing new frontiers on the horizon. TOK is taking the long view in efforts to generate a return in the Equipment Business that is commensurate with other businesses and investments. We ask for investors' understanding as we strive to meet their expectations.

Shareholder Value

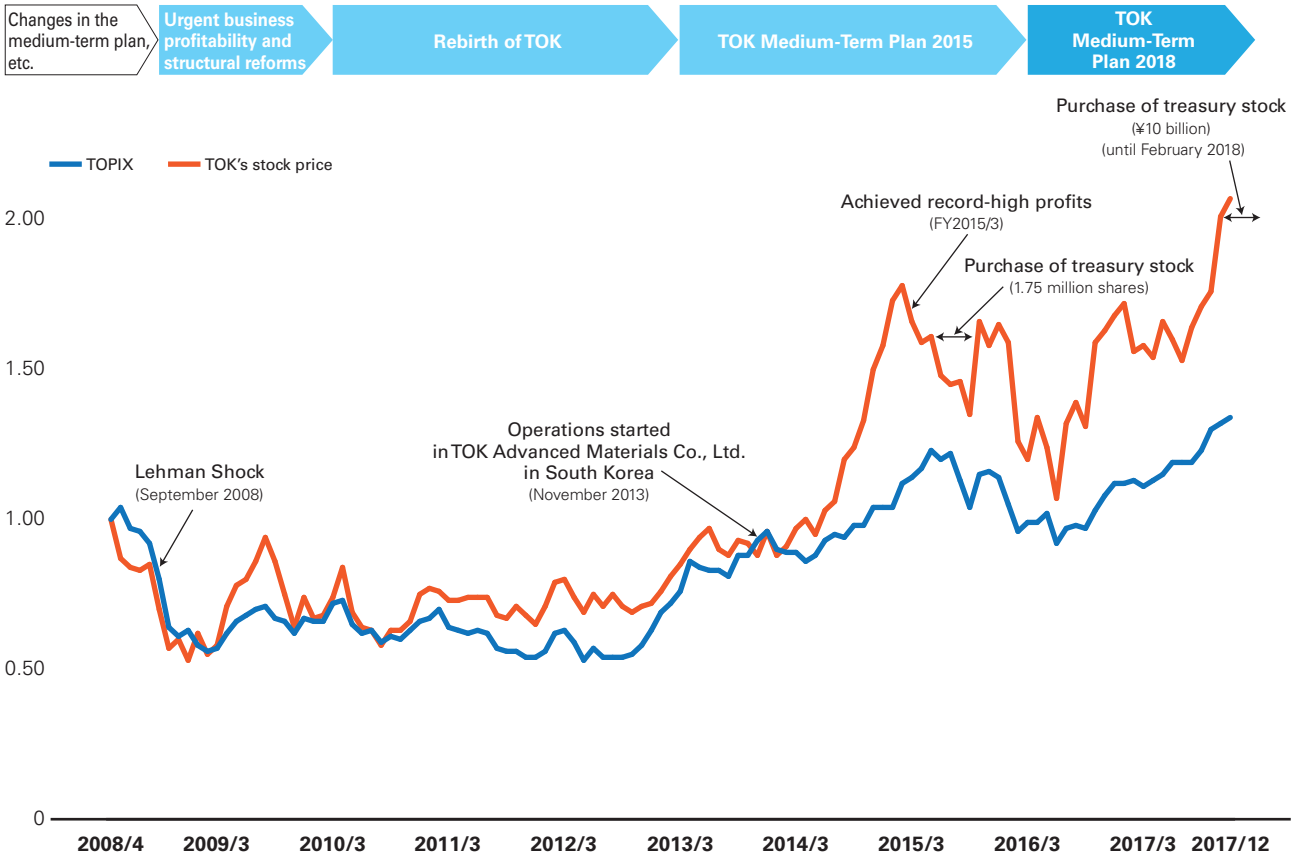
10-year Trends of Dividends per Share and Dividend Payout Ratio



* FY2016/3: Including a commemorative dividend of 4 yen for the 75th anniversary.

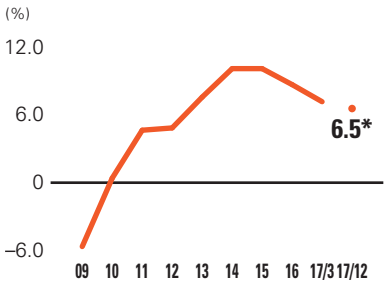
10-year Trends of TOK's Stock Price and TOPIX

Relative comparison with April 2008 being 1 (monthly, closing price basis)

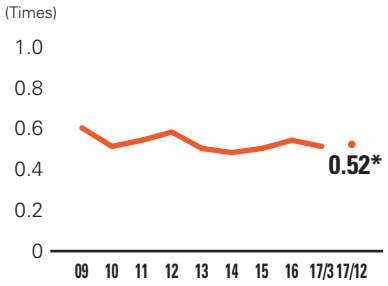


10-year Trends of ROE-related Indicators and ROE

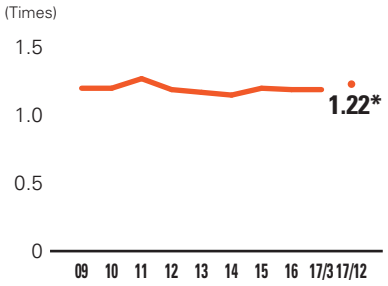
Net margin



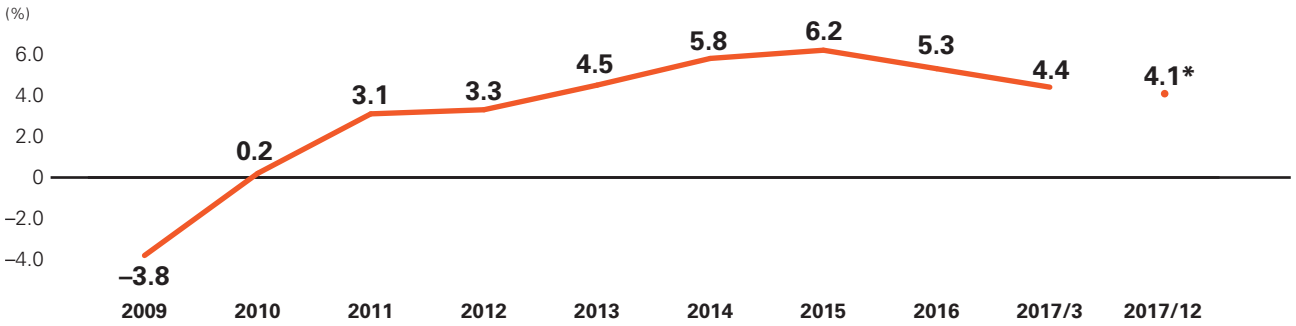
Total asset turnover ratio



Financial leverage



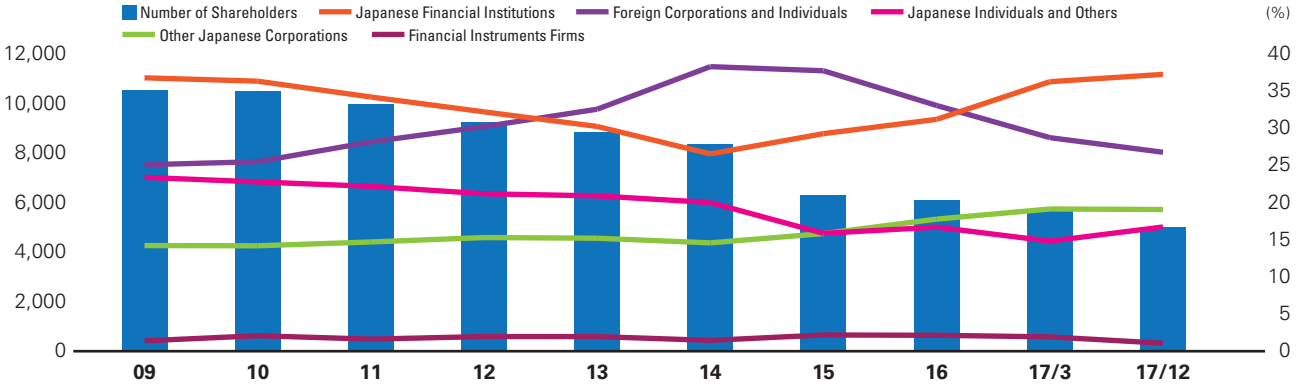
ROE



*The fiscal year ended December 31, 2017 was an irregular nine-month period due to a change in fiscal year-end.

Stock Information

Changes in number and composition (shareholding ratio) of shareholders



(Note) Treasury stock is included in "Japanese Individuals and Others."

Major shareholders

(As of December 31, 2017)

Name	Number of shares held (Thousands)	Ratio of shareholding (%)
Japan Trustee Services Bank, Ltd. (Trust Account)	3,409	8.10
The Master Trust Bank of Japan, Ltd. (Trust Account)	2,923	6.95
Meiji Yasuda Life Insurance Company	1,826	4.34
MLPFS CUSTODY ACCOUNT	1,485	3.53
The Bank of Tokyo-Mitsubishi UFJ, Ltd.	1,207	2.87
Hitachi Chemical Company, Ltd.	1,069	2.54
The Bank of Yokohama, Ltd.	1,026	2.44
Tokyo Ohka Foundation for The Promotion of Science and Technology	984	2.34
Mitsubishi UFJ Trust and Banking Corporation	953	2.27
Mitsubishi UFJ Capital Co., Ltd.	860	2.04

Notes: 1. The Company owns 3,021 thousand shares of treasury stock which are excluded from the above major shareholders.
2. The ratio of shareholding is calculated based on the number of shares (42,078,963 shares) obtained by subtracting the number of shares of treasury stock from the total number of shares issued.

Stock information

Stock listing	First Section of Tokyo Stock Exchange, Inc.
Category of industry	Chemicals
Securities code	4186
Share unit number	100
Accounting period	January 1 to December 31*
Dividend record date (Year-end)	December 31
Dividend record date (Interim)	June 30
Total number of shares authorized	197,000,000 shares (As of December 31, 2017)
Number of shares issued	45,100,000 shares (As of December 31, 2017)

*The Company changed its fiscal year-end from March 31 to December 31 effective from fiscal 2017.

SPECIAL FEATURE

TOK's Sustainable Value Creation Capabilities

—Cutting-edge Domains—

EUV Photoresists

EUV (extreme ultraviolet) lithography, a key technology for producing semiconductors with the finest circuit line width in the world, has finally entered the commercialization stage. TOK is harnessing its technological competitiveness in cutting-edge domains to create value through EUV photoresists.

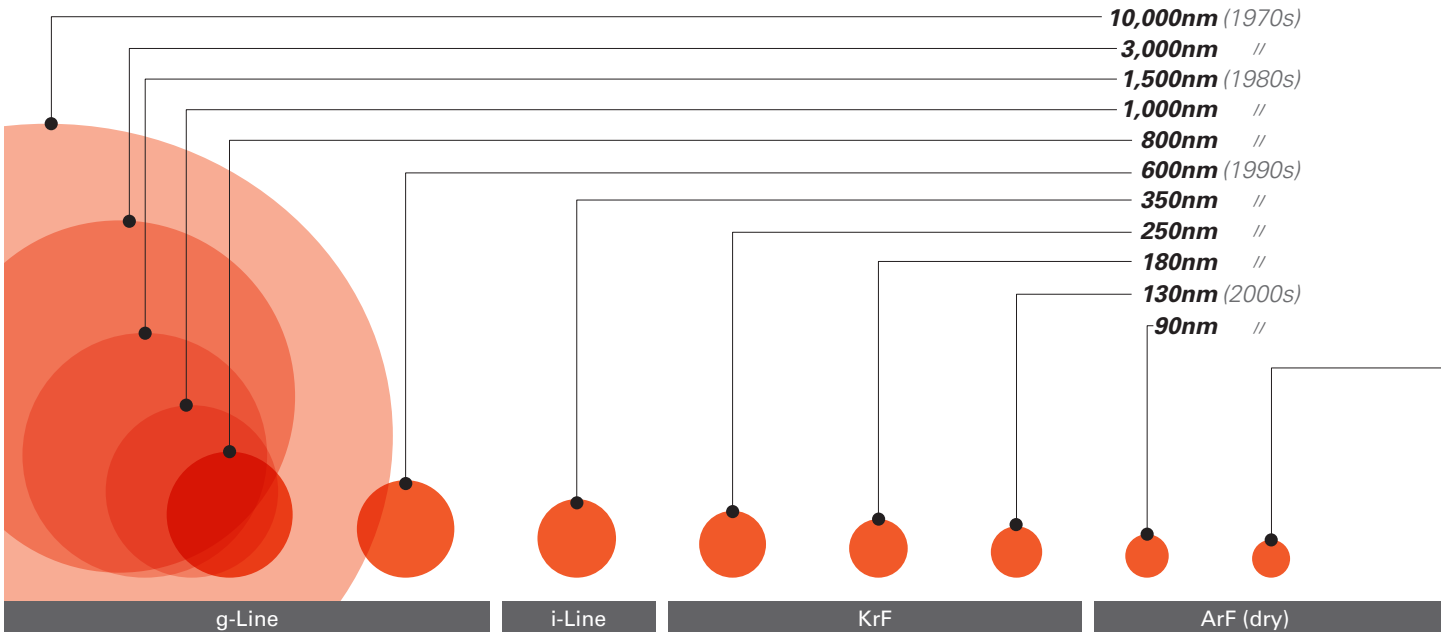
Satisfying Demanding Customer Requirements under Challenging Development Conditions

EUV light sources have a wavelength of 13.5nm, about 1/14th the wavelength of ArF light sources (193nm) currently at the cutting edge of technology. The characteristics required for EUV photoresists are the most stringent we have ever experienced in a generational change, owing to insufficient light source power in EUV exposure equipment and optical differences. From a material engineering standpoint, it was necessary to overcome various gaps stemming from the unique EUV process and photosensing mechanism, such as measures to reduce the outgas caused by the structure of the exposure equipment, and the small number of photons needed for a photoresist reaction.

For these reasons, TOK committed fully to R&D, reassessing and rebuilding from scratch its material selection and material engineering concepts. Since EUV exposure equipment is very expensive, it required a considerable investment to purchase. Because buying one for itself was prohibitive, TOK participated in a program run by IMEC*, an international research institution in Belgium, to advance R&D. TOK needed to produce certain results under challenging conditions that presented few opportunities to evaluate the prototypes it developed. Through painstaking discussions and simulations of development guidelines, issues, and experiments, TOK was able to develop products with the advanced characteristics demanded by customers.

* Interuniversity Microelectronics Centre

Evolving Miniaturization of Semiconductors*



EUV photoresists market forecast:

CAGR 225.7%*

(2018→2022)

* Based on sales volume (Calculated by TOK based on Fuji Keizai's "Whole View of Photo-functional Material and Product Market 2018")

Total development years spent on EUV photoresists at TOK:

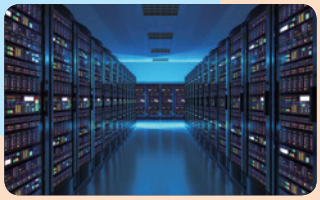
About 17 years

TOK
EUV photoresists

Customers
Cutting-edge semiconductors

5G communications system

Automotive semiconductors



High-performance servers

Value for Society

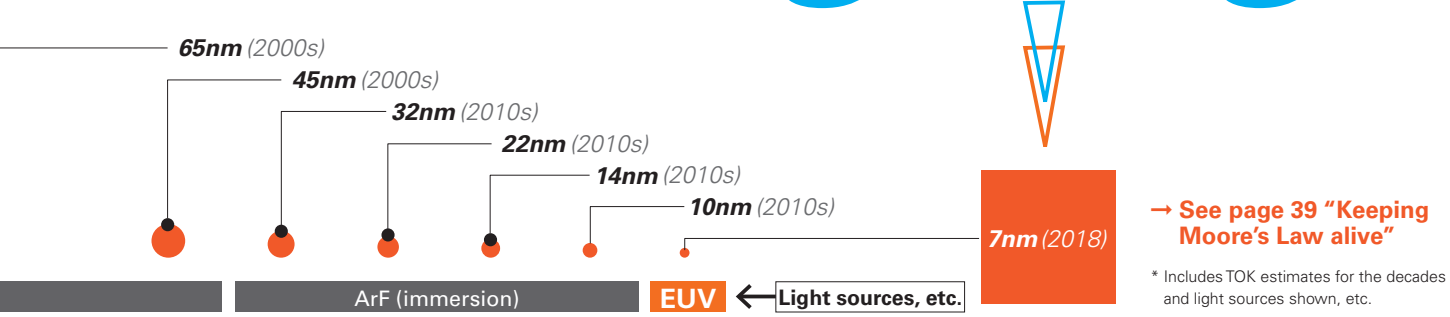
- 7nm and 5nm semiconductors made with EUV lithography are expected to be used in high-performance servers for AI, deep learning, cryptocurrency mining, and 5G communications systems as well as high-value-added smartphones.
- In the future, these semiconductors are also likely to be used in automobiles to instantly process large volumes of data.

Akiyoshi Yamazaki
General Manager, Advanced Material Development Div. 1, Research and Development Dept.

Aiming for top share of global market for EUV photoresists

TOK has won over a major customer for its EUV photoresists to be used in the mass production of 7nm semiconductors. The high reactivity of various materials used in TOK's photoresists is one reason why. The key requirements of EUV photoresists, namely sensitivity, resolution, and line-width roughness (LWR), are in a trade-off relationship with each other. With a deep understanding of the reaction mechanisms of photoresists, TOK aims to optimize materials by clarifying key parameters and moving through a PDCA cycle that applies this understanding to materials engineering. TOK is currently focusing on the development of photoresists for 5nm semiconductors, and aims to acquire the top share of the world market for EUV photoresists by sticking with its strategy of building close relationships with customers and the PDCA cycle.

Our Cutting-Edge



→ See page 39 "Keeping Moore's Law alive"

* Includes TOK estimates for the decades and light sources shown, etc.

SPECIAL FEATURE

TOK's Sustainable Value Creation Capabilities

—Existing Business Domains—

KrF Excimer Laser Photoresists

By concentrating R&D on existing fields in addition to cutting-edge domains, TOK maintains an ability to constantly create value. Its KrF excimer laser photoresists, which allowed the Company to pivot to cutting-edge materials through new applications development, provide value via 3D-NAND memory across a broad swath of society.

New Value Cre

Value chain in KrF excimer laser photoresists for 3D-NAND

Sales	R&D	Procurement
● Make every effort to satisfy customer requirements, even at initial stages when applications are unclear	● Fuse together thick film formation technology and microprocessing technology ● Development that envisions the customer's usage environment ● Build relationships of trust between customers and TOK's engineers	● Procurement division participates from initial stages of development ● Stabilize procurement and optimize costs by having TOK decide on structure and synthesis of raw materials, then depend on suppliers from mass production stage

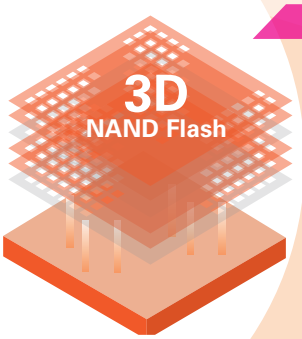
KrF excimer laser photoresists market forecast:

CAGR 6.1%*

(2018→2022)

* Based on sales volume (Calculated by TOK based on Fuji Keizai's "Whole View of Photo-functional Material and Product Market 2018")

TOK
KrF excimer laser photoresists



Customers
3D-NAND

Working at home on a compact PC

High-speed data processing outside the office

Value for Society

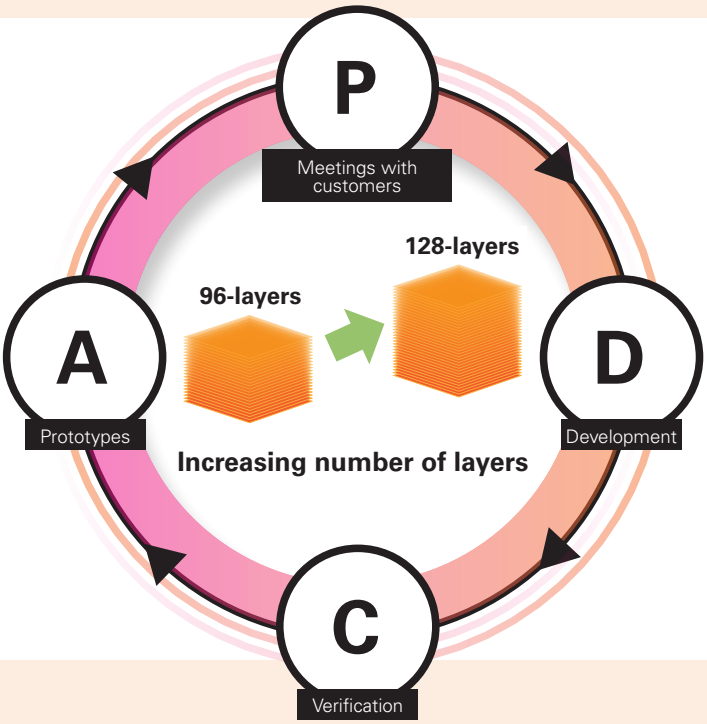
● 3D-NAND, created from KrF excimer laser photoresists, is being increasingly used in solid state drives (SSDs) as a key device that contributes to making high-performance PCs and tablet devices smaller, and speeding up servers. 3D-NAND is contributing to work style reforms in society by allowing employees to work from home via teleworking and shortening the time it takes to process data outside the office.

Yoshiaki Ono
Advanced Material Development Div. 1, Research and Development Dept.

Overcoming hardship with various techniques based on strategy of building close relationships with customers

The biggest challenges we faced developing KrF excimer laser photoresists for 3D-NAND were "resolution" of the same level required of conventional 2D semiconductors and "strength" at a level able to endure the formation of staircase structures in 3D-NAND. Through close-knit meetings and information exchanges with customers, we were able to achieve "strength" by making resist layers thicker while clearing requirements for "resolution" by using innovative techniques in solvents and constituent concentrations. Moreover, we satisfied customer requirements for "reactivity" to light by rebuilding the process for 3D-NAND. TOK is currently developing photoresists for 96-layer and 128-layer 3D-NAND. Technological difficulties are much higher for 128-layer 3D-NAND, but I am confident we will overcome these challenges by various techniques developed through our strategy of building close relationships with customers.

PDCA cycle in strategy of building close relationships with customers



ating

Manufacturing

- Establish production technologies and quality management methods for high-viscosity thick-film photoresists
- Build reliable production and quality management systems to continuously keep up with expanding demand

Creating New Value with Ability to Form Thick Films of Photoresists

Although the volume used in cutting-edge processes has declined due to miniaturization, KrF excimer laser photoresists have returned to a growth trajectory thanks to close-knit development with customers and new demand emerging for thick film formation, where the staircase structures unique to 3D-NAND are formed.

Working hard to increase its share of the KrF excimer laser photoresists market, TOK saw the limits to growth by tapping into demand for new processes. Instead, TOK has successfully concentrated resources on the development of KrF excimer laser photoresists for 3D-NAND, which were expected to be used extensively in new applications.

Earning Trust and Increasing Adoption through Strategy of Building Close Relationships with Customers

In pursuing its strategy of building close relationships with customers toward increasing adoption of KrF excimer laser photoresists for 3D-NAND, TOK participated in repeated meetings with customers to nail down the details of both lithography and etching requirements for the height, width, and shape of staircase structures. TOK modified its facilities with the intention of approximating as closely as possible the customer's usage conditions, going through repeated trial and error to produce a result that satisfied the customer, earning their trust in the process. By building relationships based on trust, TOK receives more information from customers that makes it possible to move faster on the development front, which in turn leads to adoption by the customer. While continuing to leverage this advantage, the Company will endeavor to develop photoresists compatible with even more layers.

SPECIAL FEATURE

TOK's Sustainable Value Creation Capabilities

—New Business Domains—

Meeting Customer Expectations with Chemicals

Using our unique technologies, we strive to precisely identify and satisfy customer needs. Through value creation that is taken for granted in existing business domains and applying it to new business domains, TOK aims to create new niche top products and accelerate reform of its business portfolio with an eye on becoming a "100-year company" in 2040.

High-Functional Films Business

The high-functional films developed by TOK are completely new products made by applying past technologies we had in the dry film business to porous polyimide. These products feature high heat resistance, high chemical resistance, and ultra-low dielectric constants for excellent safety and insulation performance. Development of these products had focused on separators for lithium-ion batteries as an application, but due to the discovery of characteristics that help improve the quality of electronic materials, initiatives are now underway in new business development as well. In light of these characteristics, TOK is working on their commercialization as separators for specialty batteries, while continuing new applications development with heavy investments intended to further improve their performance.

Bio-Chip Materials Business

In the life sciences industry, products that use semiconductor technology are gradually being commercialized as medical diagnostic devices. The aim is to use semiconductor technologies to run tests with very little medical data. Attention has been focusing on photolithography-related technologies that TOK excels in, especially materials that remain on devices as permanent films. TOK is concentrating efforts on commercializing bio-chip materials, using its extensive expertise in photoresist technologies to add features that are required in the medical diagnostic device fields, such as low autofluorescence, surface free energy, and adhesiveness.

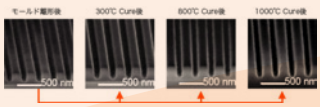
Nanoimprint Materials Business

Since nanoimprinting technology is based on photosensitive material technologies and has strong affinities to the Company's own technologies, TOK is focusing on developing new business in this field. In various industries, needs have been rising recently for optical structures for displays. In this context, TOK has been advancing the commercialization of nanoimprint material as a process material for making structures that control light. Needs are increasing for deep ultraviolet LEDs that do not use mercury ahead of the enactment of the Minamata Convention on Mercury in 2020. Since existing technologies have very low light extraction efficiency, TOK is moving to apply nanoimprint processing technology in the commercialization of structures able to more efficiently extract light.

Creation of an environmentally friendly society

Longer, healthier lives

Customers
Deep ultraviolet LEDs



TOK
Nanoimprinting technology

Customers
Specialty batteries

TOK
Bio-chip materials

TOK
High-functional films

Value for Society

- TOK expects to contribute to the creation of an environmentally friendly society by improving the quality of electronic materials and specialty batteries with high-functional films and improving light extraction efficiency with nanoimprint materials.
- Bio-chip materials are likely to contribute to longer, healthier lives by making diagnostic analysis more accurate.

Aiming to increase awareness of TOK products among more people in society

Emi Maeno
New Business Development Dept., New Business Development Div.

In charge of bio-chip materials, I oversee the design, assembly, and evaluation of culture chips with micro structures while working with partners on the commercialization of cell function assessment kits. With many uncertainties in new business development, I need to perform tasks and make proposals from objective, practical, and theoretical perspectives and drawing on an appropriate technical background. While nurturing the passion needed to reach goals, I take joy in trying to make new discoveries with a curiosity backed by being observant and recognizing issues. Since I often collaborate with people from other fields, I often come into contact with a wide array of diverse observations and issues. As this feeds my own curiosity, I move toward achieving my goals while balancing flexibility with staying true to the mission. People from outside the Company often comment on how hard it is to see TOK's technologies in final products even though its technologies are used in a wide range of fields. For this reason, it is my goal to create a product for TOK that is visible to consumers to raise awareness among even more people.

Developing

Material Business

Manufacturing and sales of electronic functional materials and high-purity chemicals

Director, Officer, Department Manager, Marketing Dept.

Keiichi Yamada

TOK TAIWAN CO., LTD.

TOK Advanced Materials Co., Ltd.

Material Business Performance

(Millions of yen)

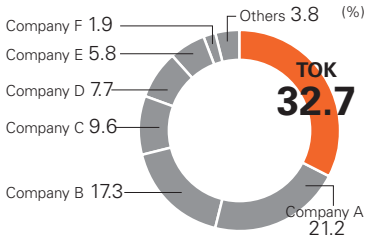
	FY2016/3	FY2017/3	YoY*	FY2017/12 Result*			FY2017/12 Calendar year adjustment*	FY2018/12 Forecast		
					Change	%			Change	%
Net sales	87,280	86,558	78,842	90,532	+11,690	+14.8%	98,247	102,100	+3,852	+3.9%
Electronic functional materials	51,134	53,074	47,318	51,230	+3,911	+8.3%	56,947	58,500	+1,552	+2.7%
High-purity chemicals	35,931	33,475	31,026	38,676	+7,649	+24.7%	41,165	43,500	+2,334	+5.7%
Other	214	9	496	623	+126	+25.5%	134	100	(34)	(25.8%)
Segment income	16,203	14,470	12,448	12,816	+367	+3.0%	14,868	14,600	(268)	(1.8%)
Segment income margin	18.6%	16.7%	15.8%	14.2%	–	–	15.1%	14.3%	–	–
Segment assets	90,734	97,542	–	106,220	–	–	–	–	–	–
Depreciation	5,220	5,831	–	5,833	–	–	–	–	–	–

* Due to the change in fiscal year-end, adjusted results for the fiscal years ended December 2016 and December 2017 are presented as adjusted figures for nine months' (April–December 2016) earnings of companies that ended their fiscal years in March 2017 (the Company and its domestic consolidated subsidiaries). Revised results for the fiscal year ended December 2017 are presented as adjusted figures for 12 months' (January-December 2017) earnings of companies that end their fiscal years in March (the Company and its domestic consolidated subsidiaries).

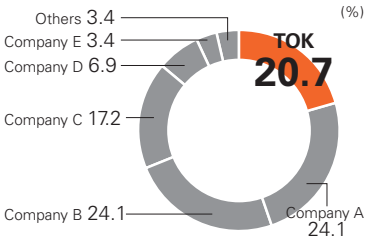
Earnings Drivers: Worldwide Share of Immersion KrF Excimer Laser Photoresists and ArF Excimer Laser Photoresists*

(Based on sales volume in 2017)

KrF excimer laser photoresists



ArF excimer laser photoresists



* Calculated by TOK based on Fuji Keizai's "Whole View of Photo-functional Material and Product Market 2018"

2017/12–2018 Market Conditions

Cutting-edge semiconductor fields steadily advancing while overcoming more difficult and prolonged development

The pace of miniaturization in semiconductor front-end processing has slowed somewhat since reaching the 10nm level process, and markets for end products that utilize these nodes are slow to take off in some cases due to high costs and other factors.

Meanwhile, the EUV (extreme ultraviolet) lithography market is showing signs of gaining traction, some 10 years later than initial projections, owing to the longer amount of time it has taken to develop challenging technologies, such as for miniaturization, in the cutting-edge semiconductor field. These challenges are being steadily overcome through collaboration among semiconductor and materials makers and equipment suppliers.

In semiconductor back-end processing, which has advanced quickly relative to the slower pace of miniaturization over the past few years, packaging and 3D packaging technologies have continued to gain ground in new application domains. Backed by its robust financial foundation, TOK continues to persevere in the development of technologies for cutting-edge fields by leveraging its ability to provide cutting-edge materials for both the front-end process and back-end process stages of semiconductor production, as well as its ability to develop technologies that translate into advantages in terms of greater miniaturization, higher densities, and 3D packaging.

Growth Strategy

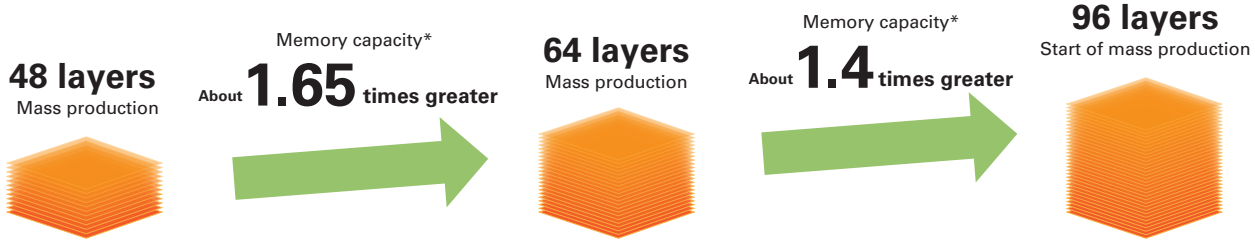
Focus on expanding the market share of earnings drivers

Under the TOK Medium-Term Plan 2018, the Company has focused on expanding the market share of ArF excimer laser photoresists to make them our largest earnings driver. The 10nm-level logic market, in which we already secured adoption of our ArF excimer laser photoresists by customers, is gradually emerging, and TOK is concentrating on securing and expanding a share of the 10nm-level DRAM market.

While expanding sales, TOK is committed to ensuring a stable supply of KrF excimer laser photoresists for 48-layer and 64-layer 3D-NAND memory. At the same time, the Company is focusing on its strategy of building close relationships with customers (semiconductor manufacturers) to ensure its advantage in next-generation technologies for 96-layer and 128-layer 3D-NAND (**Refer to the Special Feature on pages 32–33**). TOK intends to secure a top share of the world market for KrF excimer laser photoresists through ceaseless R&D while expanding market share in these photoresists for DRAM by pursuing high quality and advanced performance.

In high-density integration materials, growth has stalled in MEMS materials used in electronic components, but packaging photoresists are being increasingly used by customers. We will therefore concentrate more on our strategy of building close relationships with customers.

Performance Improves as the Number of Layers Increases in 3D-NAND Memory



* Memory capacity per unit of surface area

Source: Collated by TOK based on news releases of major semiconductor manufacturers

SWOT Analysis — Material Business —

Strengths
- Global structure of close relationships with customers (Japan, North America, Taiwan, South Korea)
- Earnings drivers in both the pre-process and post-process of semiconductor manufacturing
- Development capability in cutting-edge materials (miniaturization, high-density integration, 3D packaging)
- Proposal ability for semiconductor manufacturing processes (synergies with Equipment Business)

Weaknesses
- Fewer customers, with the same number of photoresist manufacturers
- Over-concentration of business domains in the electronics industry (delay in new business development)
- Resistance to price hikes based on industry business practices

Opportunities
- Increasing needs for ultra-miniaturization (ArF and EUV photoresists)
- Growing needs for cutting-edge packaging technologies (2.5D, 3D semiconductor packaging)
- Volume of data growing due to AI and IoT
- New semiconductor needs from launch of 5G communications systems

Threats
- Rising cost of development due to increasing technological difficulties
- Fewer customers due to industry consolidation
- Increased investment outlays for inspection and production equipment in connection with ultrahigh purification
- Higher costs of next-generation exposure equipment

Challenging the boundaries of high purity

Recently, sales of our high-purity chemicals including cleaning solutions, thinner, and developing solutions have increased to customers in North America and Taiwan for 10nm-level semiconductor production lines at the most advanced levels of miniaturization in the world on a mass production basis.

Every year, requirements become more stringent for contaminant reduction in cutting-edge semiconductor fields. Two decades ago, the level of contamination was measured in parts per million (ppm), and now it is measured in parts per trillion (ppt), and beginning to be measured in parts per quadrillion (ppq). TOK will continue to create value by taking on the challenge of attaining higher levels of purity in the fields of raw material refining technologies, cleaning technologies for production facilities and product containers, and manufacturing environments.

Human resource training that focuses on passing along technologies

In high purification technologies, metal analysis abilities have become increasingly important over the years to keep metallic impurities below specified levels in photoresists and high-purity chemicals. TOK aims to further hone its analysis abilities by installing the most advanced evaluation equipment, optimizing analysis conditions for product samples and each element, and enhancing collaboration among sites.

For human resources in particular, TOK is keen to raise the level of experience of its employees once they have full knowledge of product characteristics and understand how to use equipment, while keeping manuals up to date. Since sensory skills must also be learned, we emphasize having young engineers work alongside their veteran seniors on the front lines to receive sound guidance and inherit their technical skills.

Ongoing value creation via customer-oriented strategy

TOK has customer-oriented sites in North America, Taiwan, and South Korea, the regions that lead cutting-edge semiconductor fields. Approximately five years have passed since we began our full-scale strategy of building close relationships with customers through the local adaptation of "the trinity" of development, manufacturing, and sales. In addition to the close physical proximity of our sites, customers have voiced appreciation for the high level of data correlation via samples and the sheer volume of available information, as well as our operation of secure firewalls in information management. This is also a strength unique to TOK as a part of its solid foundation for value creation. While leveraging its strengths to their fullest, TOK is focusing intently on establishing a top position in new global niche markets.

Investment in a world-leading manufacturer of high refractive index materials that contribute greatly to lower power consumption

pixelligent
THE CLEAR SOLUTION™

In April 2018, TOK invested about ¥220 million in Pixelligent Technologies, LLC in the U.S., one of the world's leading manufacturers with the technology to mass produce zirconium oxide capped nanoparticles, a high refractive index inorganic material, with sub-10nm diameters. The objective is to promote supply of high refractive index materials that help improve the brightness and sensitivity of OLED displays and CMOS image sensors, two areas with growth potential.

High refractive index materials are expected to lead to lower power consumption in OLEDs and CMOS image sensors by improving the efficiency of light extraction.

Through this investment, TOK supports R&D of Pixelligent Technologies, while aiming to create applications in broader fields by combining the strengths of the two companies. We are advancing the scale up of high refractive index inorganic material production and the development of high refractive index material markets.

Keeping Moore's Law alive

The end of Moore's Law was proclaimed

The miniaturization of semiconductors has proceeded at a steady pace since the 1970s through 2015 or so, basically in accordance with Moore's Law, which predicts that the number of transistors in a dense integrated circuit will double every 18 months. Moore's Law is named after Gordon Moore, one of the founders of Intel Corporation, who made this prediction in 1965. In 2015, however, circuit line width reached the 10nm level, and since then it has become exponentially more difficult and costly to develop technologies that enable further miniaturization. This had led to the widespread view that Moore's Law has come to an end. Along similar lines, the International Technology Roadmap for Semiconductors (ITRS), which has served as a guideline for semiconductor-related companies, will no longer be updated after the 2015 edition.

A new stage of miniaturization begins with EUV lithography

Since 2016, however, major semiconductor manufacturers took the lead in accelerating the development of technologies for commercializing EUV lithography, which enables line width of single-digit nm level. Now that most problems inhibiting commercialization have been solved in terms of technologies and costs, 2017 saw the first trial runs for mass production of 7nm semiconductors using EUV lithography. In 2018 and 2019, a number of semiconductor manufacturers are likely to begin mass production using EUV lithography.

Compared with 14nm semiconductors made with ArF lithography, 7nm semiconductors made with EUV lithography have 30% more processing power and use 60% less power. This value, i.e., higher performance and lower power consumption, would constitute an extension of Moore's Law. Once mass production ramps up in the future, costs should come down in accordance with lower costs, another value typically created by Moore's Law, after higher capital investment and process costs, due to the greater technological difficulties, run their course.

TOK's EUV Photoresists

TOK has worked on the development of EUV photoresists since around 2000. The Company has secured adoption by major semiconductor manufacturers to use its EUV photoresists as a result of R&D based on the verification of preliminary theories, as well as the focused utilization of customer-oriented sites overseas.
(→**Refer to the Special Feature on pages 30–31**)

The performance threshold of chemically amplified EUV photoresists is currently thought to be around the 5nm node. For this reason, TOK invested in Inpria Corporation in 2016 to gain access to its metal-oxide EUV photoresist technologies with the aim of creating value beyond the 3nm node over the long term.

TOK's photoresists are compatible with various line widths along the semiconductor miniaturization spectrum

	i-Line photoresists	KrF excimer laser photoresists	ArF excimer laser photoresists	EUV photoresists
				
Light source for lithography	i-Line	KrF (krypton fluoride) excimer laser	ArF (argon fluoride) excimer laser	Extreme ultraviolet
Wavelength of light source	365nm (i-Line)	248nm	193nm	13.5nm
	Long			Short
Line width of semiconductors*	350nm>~≧250nm	250nm>~≧130nm	130nm>~≧10nm	10nm>~
	Wide			Narrow
Main applications and end products, etc.	Automotive power semiconductors Sensors LEDs, etc.	Mass-market smartphones High-performance servers Game consoles, etc.	Cutting-edge smartphones Wearable devices High-performance servers, etc.	Next-generation servers Next-generation supercomputers, Next-generation communications systems, etc.

* Only the round figures of primary ranges are shown

Equipment Business

Manufacturing, sales and maintenance of semiconductor manufacturing equipment and panel manufacturing equipment

Officer, Department Manager,
Process Equipment Manufacturing Dept.
Tsukasa Honkawa

Shonan Operation Center

Equipment Business Performance

(Millions of yen)

	FY2016/3	FY2017/3	YoY*	FY2017/12 Result*			FY2017/12 Calendar year adjustment*	FY2018/12 Forecast		
					Change	%			Change	%
Net sales	2,748	2,252	1,943	1,921	(21)	(1.1%)	2,174	6,800	+4,625	+212.7%
Segment income (loss)	(423)	(750)	(333)	(664)	(330)	–	(1,073)	200	+1,273	–
Segment income margin	–	–	–	–	–	–	–	2.9%	–	–
Segment assets	3,738	3,296	–	3,026	–	–	–	–	–	–
Depreciation	169	45	–	24	–	–	–	–	–	–

* Due to the change in fiscal year-end, adjusted results for the fiscal years ended December 2016 and December 2017 are presented as adjusted figures for nine months' (April–December 2016) earnings of companies that ended their fiscal years in March 2017 (the Company and its domestic consolidated subsidiaries). Revised results for the fiscal year ended December 2017 are presented as adjusted figures for 12 months' (January–December 2017) earnings of companies that end their fiscal years in March (the Company and its domestic consolidated subsidiaries). Net sales for the FY2017/12 calendar year adjustment and FY2018/12 forecast are the figures after elimination of inter-segment sales.

In the Semiconductor Manufacturing Equipment Field, TOK's Business Specializes in Niche Domains


Coating machine for photoresists


Vacuum UV hardening machine


Development automatic dilution system


Coating machine for R&D


Developing machine


3D packaging equipment


Plasma equipment

2017/12–2018 Market Conditions

Expanding growth potential in target markets

The commercial use of EUV lithography marks a new beginning in the miniaturization of semiconductors, but it will take time for the market to expand as costs come down. For this reason, back-end process technologies, such as 3D packaging and high-density integration, will still play an important role in the advancement of semiconductor devices.

Through-silicon-via (TSV) is a multilayering technology that layers semiconductor wafers in 3D, using a through-silicon process to pass between the layers. It is one of the most promising fields and a key to 3D packaging technology that enables more compact semiconductors with reduced power consumption and higher processing speeds. In the fiscal year ended December 31, 2017, the segment, which handles TSV equipment as a core product, posted losses for three consecutive years, owing to delays in acceptance inspections at customers. However, the growth potential of target markets continues to expand, so TOK will continue R&D in this area based on its strategy of building close relationships with customers.

Growth Strategy

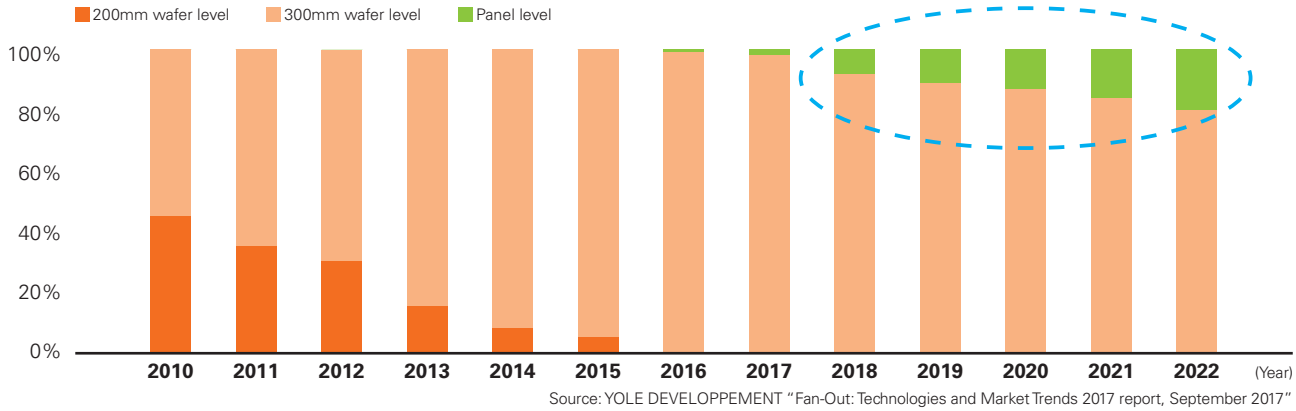
Ongoing development of TSV equipment for next-generation memory and GPUs

High Bandwidth Memory (HBM) is likely to be used in next-generation mobile devices, computer graphics, and cloud servers. Since HBM has a much higher number of chip layers, TOK's strength in silicon thinning technology has caught the attention of major semiconductor manufacturers, who are gradually adopting the Company's TSV equipment on production lines for HBM devices. Moreover, demand has been increasing for graphics processing units (GPUs) used in autonomous vehicles. Since the TSV method is highly likely to be used for these GPUs as well, TOK will continue to push ahead with R&D based on its strategy of building close relationships with customers.

Focusing on development of equipment for fan-out panel level packages

TOK is concentrating on the development of equipment for fan-out panel level packages (FOPLP) as an application for its TSV equipment. FOPLP is an extension of fan-out wafer level packages (FOWLP), which has helped make mobile devices thinner and lighter, and TOK supplies thick-film photoresists for FOWLP. FOPLP is able to produce roughly five times as many semiconductor packages as FOWLP, so if FOPLP reaches the commercial stage as a mass production technology, it would drastically reduce the cost of 5G communications and an IoT society, which requires huge volumes of compact, high-performance IC chips. We are therefore focusing keenly on the development of equipment for this field.

Fan-Out Package Production (%) Panel/Wafer Breakdown



Source: YOLE DEVELOPPEMENT "Fan-Out: Technologies and Market Trends 2017 report, September 2017"

SWOT Analysis — Equipment Business —

Strengths
- Track record in TSV equipment adoption, resulting advantage in technology and technological improvement
- Provides high-performance equipment for coating and stripping
- Knowledge of materials developed in the Material Business
- Lower break-even point using the fabless production method

Weaknesses
- Still in the development phase, so business scale and profit contribution remain small (insufficient cash cycle)
- Large impact on profits from investments in development of prototypes, etc.

Opportunities
- Growth in 3D packaging market from diversification of high integration technology
- Expansion of next-generation display market
- Equal opportunities for products to be adopted in a new market

Threats
- Full-scale entry by major companies as competitors catch up
- Introduction of high integration processes aside from 3D packaging

Expanding our business portfolio by leveraging strengths in displays and semiconductors

As core competencies, TOK's microprocessing technology and high-purification technology have the potential for wide adoption in display production, in addition to semiconductor production. Throughout our history, TOK has deepened our connections to the electronics industry, expanding our business portfolio by leveraging strengths in semiconductors and displays, as demonstrated by Ohkaseal high-purity potassium silicate, which was released in 1955, contributing greatly to the proliferation of TVs among families as a solution for CRT phosphor bonding, as well as processing equipment for LCD panels that led to record-high net sales (FY2007/3) in the Equipment Business segment.

TOK's strengths in materials technology, accumulated in photoresist and high-purity chemicals, have not only enhanced the performance of equipment, but also become a competitive advantage from the standpoint of swiftly providing solutions to customers, because the time required to optimize processes is significantly reduced at the development stage. The display device market is projected to continue expanding, driven by growing needs for higher resolutions. TOK aims to increase earnings on display-related equipment by leveraging these competitive advantages.

Ongoing development of flexible (Organic EL) display-related equipment amid Increasing needs for higher resolutions

The flexible (Organic EL) display market has been in a correction phase lately for smartphones, but is poised to take off on growing user needs in high-end virtual reality (VR) devices and broadcasting equipment, as well as their increasing use in automotive displays and lighting applications. For this reason, TOK is concentrating on flexible (Organic EL) display-related equipment.

The Company's UV curing machines* for Organic EL production have successfully increased the resolution of related photoresists and improved yields on the high-resolution etching process. A number of display manufacturers have already installed our UV curing machines, and inquiries from new customers are on the rise. As needs grow for higher resolutions, we expect UV curing machines to contribute to earnings.

* Ultra violet curing

Development of display manufacturing equipment with environmentally friendly UV curing technology

TIPS series UV curing machine

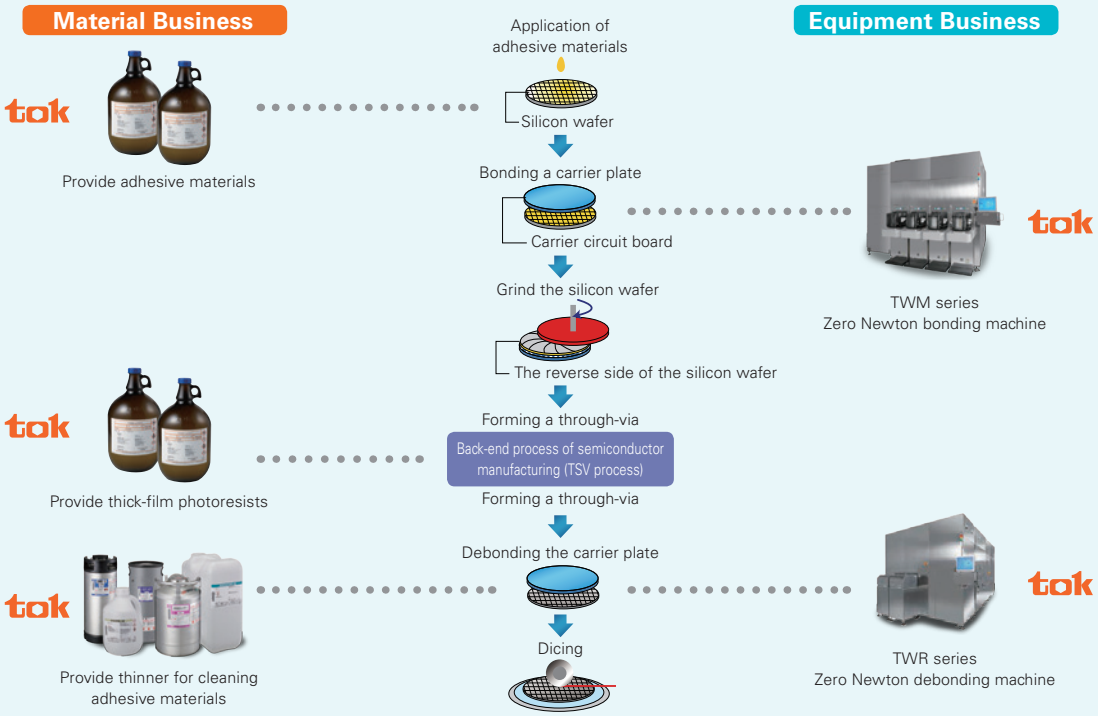
TOK has been concentrating efforts on developing and increasing sales of UV curing machines for flexible (Organic EL) displays. The Company's UV curing technology is at the heart of its UV curing machines. In UV curing, conventional heat used for material hardening processes has been switched to ultraviolet light, which lowers the risk of toxic gas or soot emissions and the risk of water pollution. Therefore, UV curing brings benefits in terms of improving EHS (environmental, health and safety) at production sites, and high work safety. LEDs are used as the main light source, so running costs are kept in check. Large furnaces or other equipment are not necessary, which helps keep costs low and space requirements small. Work time can also be shortened considerably. Since values can be created on these many fronts, TOK will continue to focus on the development and sale of UV curing machines.

Toward further development of the M&E (Materials & Equipment) strategy

In cutting-edge semiconductor devices, there is a growing trend for development to assemble around miniaturization, high-density integration, and 3D packaging. With earnings drivers in all of these fields, TOK aims to create unique value by focusing on its Materials & Equipment (M&E) strategy.

TOK's M&E Strategy

—When using TSV for 2.5D, 3D semiconductor packaging—



Continuing TOK's Unique M&E (Materials & Equipment) Strategy

Earnings in the Equipment Business segment have been stagnant for the past few years, prompting criticism from analysts and investors who suggest we integrate it with the Material Business segment or withdraw entirely.

However, TOK's Equipment Business is starkly different from the Material Business, for the following reasons:

- Fabless production method specializing in development without owning plants, contrary to the Material Business
- Longer lead times from order receipt to sales recognition than the Material Business, and
- Higher costs and prices per product than the Material Business.

Additionally,

- The Equipment Business allows TOK to quickly identify the latest trends in the electronics industry and needs for materials.
- A strength of the Equipment Business is the ability to engage in development with customers from the early stage of processes.
- More rapid development is possible by enhancing the performance of equipment with materials, and by supplementing the performance of materials with equipment.

We are confident that our M&E strategy still has future potential for these reasons. We have been advancing our strategy of building close relationships with customers in the next-generation semiconductor device and flexible display fields (→**See pages 41–42**), and by seizing on these opportunities, we aim to achieve breakthroughs in the segment.

Toward Further Development

The Company's M&E strategy currently focuses on 2.5D, 3D semiconductors using TSV and image sensors. In the future, we may pursue our M&E strategy to the following fields. While deepening and integrating our knowledge of both materials and equipment, we will leverage our unique strengths.

- Fan-out panel level packaging equipment/thick-film photoresists
- LCD panel manufacturing equipment/TFT resists

ESG Information

CONTENTS

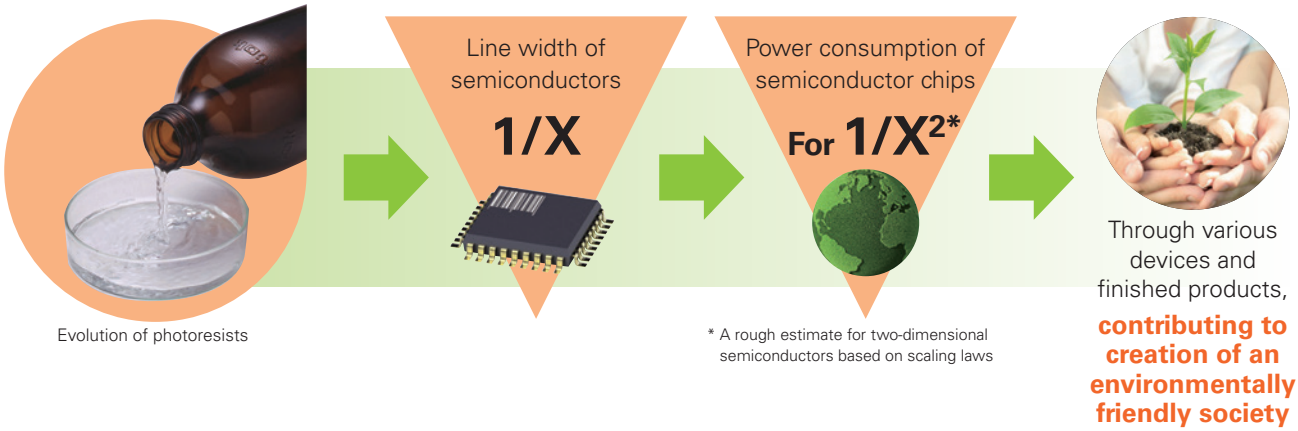
TOK Creates Value for the Environment through Business Activities

TOK creates environmental value through business activities via its core competencies in microprocessing technology and high purification technology. In new business fields, TOK develops new products that contribute to the realization of an environmentally friendly society through its high value-added technological expertise accumulated in the semiconductor-related businesses.

Our Photoresists Contribute to the Miniaturization of Semiconductors, Which Create Value in an Environmentally Friendly Society

By reducing the line width of semiconductors by half through advances in photolithography technologies using photoresists, power consumption can be reduced by 75% on semiconductor chips.* TOK's track record in miniaturization over a span of more than 40 years has continued to help reduce the line width to 1/1,000, thereby cutting power consumption to 1/1,000^2 of what it used to be. Going forward, TOK will further contribute to the creation of an environmentally friendly society in conjunction with the expansion of the EUV market.

TOK will continue to develop and provide cutting-edge photoresists that contribute to the creation of an environmentally friendly society.



Evolution of photoresists

* A rough estimate for two-dimensional semiconductors based on scaling laws

External Evaluation

TOK was selected as a constituent stock in the SNAM Sustainability Index in 2018, which was independently created by Sompo Japan Nipponkoa Asset Management Co., Ltd. (SNAM), and 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. In 2017, TOK was selected as a constituent stock in the MSCI Japan Empowering Women Index, which is managed by U.S.-based MSCI.

SNAM Sustainability Index
(Constituent stock for 2018)

Member of SNAM Sustainability Index 2018

2018 Certified Health & Productivity Management Outstanding Organizations Recognition Program (White 500)
(2018)

2018 健康経営優良法人 Health and productivity ホワイト500

MSCI Japan Empowering Women Index
(2017)

MSCI 2017 Constituent MSCI日本株 女性活躍指数 (WIN)

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ESG Material Issues/Achieving SDGs

TOK endeavors to achieve the following ESG material issues and SDGs.

ESG Material Issues

- ◇Reduce environmental impact in production processes
- ◇Work to reduce environmental impact more than required by law
- ◇Enhance personnel measures and promote diversity to improve competitiveness
- ◇Encourage open innovation to strengthen competitiveness
- ◇Create great workplaces that allow employees to strike a work-life balance/promote occupational health and safety
- ◇Instill the Group Management System globally (controls/risk management/compliance)
- ◇Tightly manage information about cutting-edge technology

Achieving SDGs

World's top share* for g-Line and i-Line Photoresists Essential for the Production of Power Semiconductors

Power semiconductors are key energy conservation components in renewable energy systems, including wind and solar power generation, as well as electric vehicles, hybrid cars and fuel-saving gasoline vehicles. TOK has the largest market share in the world* for g-Line and i-Line photoresists, which are essential in the manufacture of power semiconductors, and these photoresists have reliably accounted for almost 10% of consolidated net sales.

* Share of sales volume for 2017 (Source: Fuji Keizai's "Whole View of Photo-functional Material and Product Market 2018")

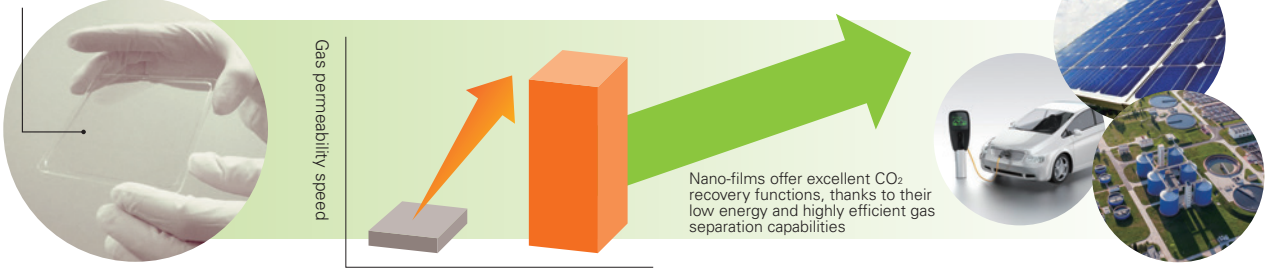
Develop CO_2 Recovery Films as a New Business

Under the TOK Medium-Term Plan 2018, which strategically prioritizes reforms of the business portfolio, TOK has been accelerating the development of new businesses in addition to focusing on high value-added products in existing businesses. (**Please refer to the "Special Feature" on pages 34–35**) As a new business, we developed nano-films, which are the thinnest films imaginable (less than 100nm) with large surface areas. We developed them in 2016 with help from Nano-Membrane Technologies, Inc. (Headquarters: Higashi-ku, Fukuoka City/Representative: Toyoki Kunitake), which has been designated as a RIKEN Venture* by RIKEN.

Made with organic, inorganic and composite materials, these nano-films are less than approx. 1/1,000th the thickness of a human hair. In addition to the semiconductor field, these nano-films hold promise for applications in environmental cleaning technologies, renewable energy devices, storage batteries and fuel cells. Of these possible applications, nano-films enable low energy and highly efficient gas refining, which is necessary to realize a next-generation energy society. Right now, we are focusing on their development as CO_2 and scarce gas recovery films to contribute toward an environmentally friendly society.

* A company started up with core technologies from research projects at RIKEN, and was designated through satisfying certain conditions.

Thickness: less than 1/1,000th that of a strand of hair



As a Global Company, TOK is Furthering Environmental Initiatives with the Aim of Improving Corporate Value Further.

We will contribute to improving the global environment as one aspect of our Group Management System.

The TOK Group helps solve various environmental issues through business activities that include supplying materials that contribute to the miniaturization and lower power consumption of semiconductors, while focusing on reducing environmental impact in manufacturing processes and the supply chain as a manufacturer that handles chemical substances and large quantities of water.

In accordance with progress on its strategy of building close relationships with customers in cutting-edge fields, TOK has seen a continued increase in the overseas sales ratio and overseas production ratio. At the same time, laws and regulations regarding chemical substance management are tightening overseas, and customer requirements are becoming stricter.

Under the "TOK Medium-Term Plan 2018," the Company has focused on its Group Management System (GMS) (**→see page 67**) to rebuild and strengthen the global group management structure, as well as Responsible Care* activities led by the EHS Div. In October 2017, TOK added EHS management as a core function to the GMS Committee to improve corporate value through the integrated management of environmental initiatives for the entire TOK Group, both inside and outside Japan, while enhancing collaboration across departments and overseas sites. We are advancing environmental initiatives as a part of activities that translate TOK's expanding value creation around the world into sustained growth in corporate value.

* Activities in which companies handle chemical substances voluntarily take environmental, safety and health measures in every process from chemical substance development through manufacturing, logistics, use and final consumption to disposal and recycling, and announce the results of these activities while engaging in dialogue and communication with the public.
(Defined by Japan Chemical Industry Association)

Nobuo Tokutake

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

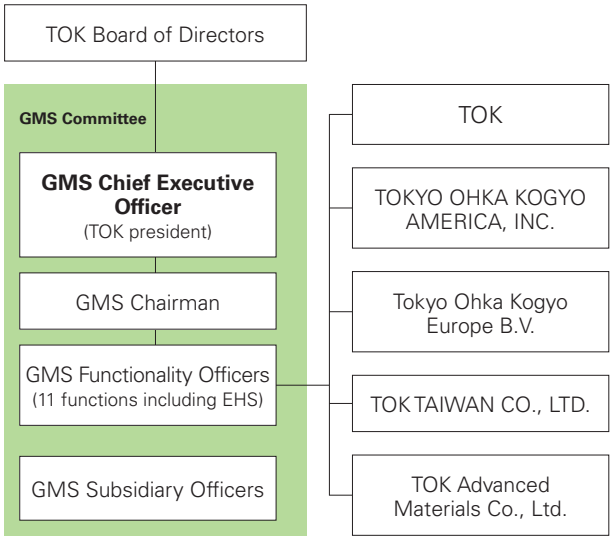
■Responsible Care Management

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

We have added EHS management as a core function of the GMS Committee we created in October 2017, and formulated the 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.



Self-imposed standards tougher than legal mandates

While adhering to related laws and regulations, TOK has set its own environmental and safety standards that are stricter than legally mandated levels, and strives to achieve them. In the past, the Company has set numerical targets for reducing industrial waste, and worked to reduce greenhouse gas emissions through initiatives to conserve energy, achieving reductions in excess of requirements under the Act on the Rational Use of Energy. More recently, the Company has continued its ambitious activities by setting new targets for reducing waste and conserving energy over the medium term, to 2019 or 2020.

EHS activities in the fiscal year ended December 31, 2017

The TOK Group often adopts new structures in chemical substances to meet customer requirements for functionality and quality in its products. To prevent confusion in the development process from different names 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 ended December 31, 2017. 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.

Moreover, TOK has strengthened its 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.

In addition, TOK has reduced workplace accidents as a result of reviewing work environments to prevent occupational accidents caused by physical weakness in employees.

The Company has also seen measurable results from its activities to reduce waste, including the refining and reuse of process effluents, internal processing of effluents, internal heat recovery, and the conversion of waste into items of value.

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

The TOK Group is advancing initiatives centered on CO_2 reduction, industrial waste reduction, and proper management of chemical substances. As a core function of GMS, we are taking a more proactive approach to solving various issues because it became clear that the EHS Div. is responsible for the centralized management of the Group's environmental initiatives. 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.

■Address Climate Change Issues

Basic concept

TOK 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. TOK aims to achieve sustainable development alongside society through the development of products that help conserve resources and energy, and initiatives to utilize natural energy, such as the installation of solar panels at some manufacturing sites overseas.

Improving energy usage efficiency and reducing CO_2 emissions

TOK constantly seeks to improve its manufacturing processes, work efficiency, and facility operations with the objective of continuously improving energy efficiency. TOK makes concerted efforts to reduce the environmental impact of facilities by upgrading to high-efficiency equipment and enhancing heat insulation around steam pipes. The Company is currently working toward its target of reducing both energy-related CO_2 emissions and energy consumption by 9 points compared with the base units indexed to 2009.

Measures to prevent global warming at overseas manufacturing sites

The ratio of energy consumption at TOK Group's overseas manufacturing sites changes in tandem with fluctuations in the overseas sales ratio. In the fiscal year ended December 31, 2017, the ratio of energy usage by overseas manufacturing sites increased by 1.5 points. Through a PDCA cycle for environmental management systems, TOK will engage in production activities with a focus on energy conservation.

Worldwide initiatives

The Group views 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, we 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.

Key climate change-related indicators

(Year)	2013	2014	2015	2016	2017
Domestic energy consumption (kL crude oil equivalent)	15,205	14,934	14,117	14,434	14,859
CO_2 emissions* (10,000t-CO_2)	3.4	3.3	3.0	3.0	3.0
Energy consumption ratio of overseas manufacturing sites (%)	19.4	33.0	39.9	40.2	41.7

* Energy consumption conversion

■Water Risk Initiatives

Basic concept

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*.

* Amount of water needed in countries that import food for consumption if they were to produce the food themselves instead of importing it.

Understanding water consumption volume and water risk

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. Our degree of exposure to water risk is higher at the Koriyama, Utsunomiya and Kumagaya plants than it is at our other three sites. Overseas, water consumption is much greater at our sites in China than other regions, owing to the high volume of cooling water used. TOK is reinforcing efforts to build a sustainable production system that takes into account local water environments, as well as the state of water resources and supply systems at each site.

* Based on the World Resources Institute's (WRI) water risk map (Aqueduct) standards

Water usage at all domestic plants

(Year)	2013	2014	2015	2016	2017
Water usage at all domestic plants ($1,000m^3$)	428	402	404	400	404

■Reducing Industrial Waste

Basic concept

To effectively use limited natural resources, TOK engages in 3R activities (reduce, reuse, recycle). The Company strives to maintain zero emissions* by restricting waste volume and increasing the volume of recycled waste by thoroughly sorting waste by type, as well as by reducing landfill disposal volume through intermediate treatment, stabilization, and volume reduction initiatives.

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

Zero emissions achieved

By 2020, TOK aims to cut industrial waste by 5 points compared with the base unit indexed to 2015, at a rate of 1 point per year. Intermediate treatment waste volume has remained under 1% and TOK has achieved zero emissions.

Volume of industrial waste

(Year)	2013	2014	2015	2016	2017
General industrial waste (t)	1,492	1,527	1,532	1,554	1,550
Specially controlled industrial waste (t)	3,300	3,672	3,475	4,006	3,470

■Preservation of Air, Water and Soil

Basic concept

The 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.

Prevent air, water and soil pollution

At the Sagami Operation Center, Shonan Operation Center, Utsunomiya Plant, and Koriyama Plant, the Company has switched boiler fuel from heavy oil to natural gas, achieving a steady reduction in SOx emissions. 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. To prevent a similar incident from occurring again, TOK is strengthening management in terms of inspecting equipment and revising operation management guidelines. At the same time, the Company is working to achieve its targets for the fiscal year ending December 31, 2018.

Effluent from various processes is released into public water systems after being purified with activated sludge treatment and other processing. High-concentration effluent is disposed of as industrial waste as a part of efforts to reduce substances in industrial effluent that have an impact on the environment.

We periodically monitor for soil contamination, and in the event that contamination is found, we cooperate with government entities to prevent its spread and clean up the contamination. No soil contamination was discovered in the fiscal year ended December 31, 2017.

Reducing ozone-depleting substances

TOK introduced a management system for chlorofluorocarbons in conjunction with the April 2015 enactment of the revised Act on Rational Use and Proper Management of Fluorocarbons, updating its environmental system on the proper management, filling, and disposal of chlorofluorocarbons. As a result, TOK's estimated CFC leakage volume was 25t-CO_2 in the fiscal year ended December 31, 2017, much less than the specified value that mandates reporting (1,000t-CO_2).

Reducing emissions of PRTR regulated substances

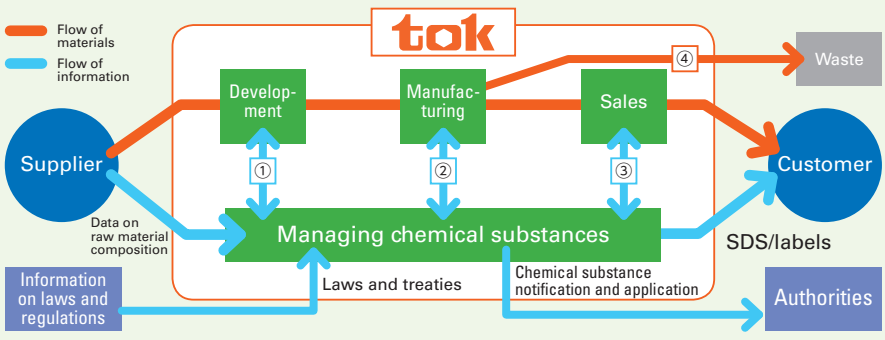
TOK uses the chemicals and PRTR management system to accurately calculate and report figures related to the release and transfer of chemical substances. In the fiscal year ended December 31, 2017, TOK handled 39 of the PRTR Law's chemical substances. TOK handled 1,300 tons of these chemicals during the fiscal year and released an estimated 2 tons of these chemicals into the atmosphere and public water systems. For some of the substances regulated by the PRTR Law, TOK intends to introduce alternative effluents and take other steps to reduce their emissions.

SOx/NOx/BOD emissions

(Year)	2013	2014	2015	2016	2017
SOx emissions (t)	3.0	3.0	2.4	1.2	1.4
NOx emissions (t)	10.2	11.2	6.6	5.9	7.8
BOD emissions (t)	0.5	0.3	0.3	0.4	0.3

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.

We advance collaboration with society while strengthening our ability to create value and moving toward becoming a "100-year company."

TOK is keen to collaborate with its stakeholders within the context of strengthening its ability to sustainably create value as a global niche top company.

In the cutting-edge semiconductor fields that the Group is focusing on, development timeframes have become longer amid growing complexity in technological development and mass production technologies. As a result, TOK aims to reinforce its management foundation and strengthen its ability to sustainably create value through constructive dialogue with shareholders and investors, as well as by redoubling efforts to collaborate with all stakeholders, including customers, suppliers, employees, and local communities. In collaborating with employees, the Company conducted a survey of employee awareness last year, and scored better than the average for other companies on responses like, "I would like to work here a long time," "I'm proud of my company's brand," and "Teamwork is good." In addition, the turnover rate for new graduates up to their third year at the Company has been kept at 0% in recent years. As we allocate human resources to strengthen competitiveness, we are hiring more non-Japanese employees and increasing the ratio of women in management positions in an effort to promote "Diversity and Inclusion"*.

Under the TOK Medium-Term Plan 2018, TOK is making steady progress on building up technological advantages in cutting-edge semiconductor fields, while pursuing its strategy of building close relationships with customers and making of its largest-ever investments. However, there are still some issues to address, including new business development, to reform our business portfolio into one for a "100-year company" by 2040. With an eye on accelerating new business development and open innovation, the key to reforming our business portfolio, our new R&D Building at the Sagami Operation Center, which will be completed in 2019, will be a center for building social and relationship capital with a broader and deeper segment of society by augmenting our accumulated knowledge with suppliers, academics, and venture companies.

The TOK Group works to continuously improve corporate value and achieve long-term growth toward becoming a "100-year company" by furthering this collaboration with society.

* Inclusion: Acknowledging and taking advantage of the skills and opinions of diverse human resources

Kunio Mizuki
Director, Executive Officer, Department Manager,
General Affairs Dept.

■ Personnel Measures for a "100-Year Company"

Launch of new initiatives

The TOK Group makes concerted efforts to train the next generation of employees through education, participation in management, and incentives to foster a sense of ownership in their work and careers as they take the initiative on their own. In the fiscal year ended December 31, 2017, TOK launched an initiative to improve its personnel measures. With an eye on becoming a "100-year company", we created the Personnel System Examination Committee comprising of all department managers, presidents of major overseas subsidiaries, and the Human Resources Div. led by the President, and conducted a survey of employee awareness to identify areas of organizational strength and weakness at the Company.

Selected as 2018 Certified Health & Productivity Management Outstanding Organizations Recognition Program (White 500)

In February 2018, 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. This distinction recognizes the TOK Group's awareness that employee health is essential to sustainable value creation, as well as its implementation of Data Health Plans since 2015 in collaboration with the Tokyo Ohka Kogyo Health Insurance Society, which use a PDCA cycle for preventing and discovering diseases while encouraging employees to take better care of their health. The Company will continue to encourage its employees and their families to maintain and improve their health.

2018 健康経営優良法人 Health and productivity ホワイト500

Level-based Training Program

In light of the overseas ratio of net sales being about 80%, our Level-based Training Program focuses efforts on the training of self-reliant human resources as TOK Group employees who can display competence while shouldering risks by themselves in Japan or abroad. This training includes participants from various departments forming teams to take on challenging tasks together, using their practical skills and pushing their abilities to greater heights (→ see the list of courses below). The following accomplishments have been achieved since this program began five years ago.

- ◆ The Logical Thinking Course has improved employees' ability to iteratively hypothesize and evaluate outcomes in the technological development process.
- ◆ The passing rate has risen on promotion exams for various positions.

TOK Global Practical Training for Selected Members

The TOK Global Practical Training for Selected Members has consistently shown outcomes, such as 8 of the 47 participants (over the course of 3 training sessions) being assigned to overseas positions and 6 participants being promoted to management positions. The abilities of almost all participants showed signs of improvement in terms of the five requirements for global human resources (→ see the list below). Moreover, employees who participated in the training even showed growth in broadening their horizons and sensitivity, the ability to gather and analyze information to identify problems, and the ability to execute the PDCA cycle, which are all requirements to be considered a candidate for executive positions. This training has already shown promise for grooming the next generation of executives at TOK.

TOK Global Practical Training for Selected Members

Level-based Training Program

Step	Course
1	Logical Communication
2	Team-Building
3	Logical Thinking
4	Leadership
5	Junior Management Training
6	New Manager Training

TOK Global Practical Training for Selected Members

Theme	Content	Personnel Requirements				
		Flexibility	Speed	Toughness	Communication	Language ability
Kick-Off Seminar	Participants learn the fundamentals of different cultures and English communication and methods for accurately expressing the points they wish to convey.	●	●	●	●	●
Win-Win Communication	Participants learn how to identify points of commonality and difference with a person having a different opinion, as well as how to negotiate and craft solutions.	●			●	
Overseas Training (Singapore)	Participants directly experience a different culture and find ways to "break out of their own shells" to quickly solve problems under a given set of difficult circumstances.	●	●	●	●	●
Leadership	Participants define and imagine for themselves "ideal leadership" and create a plan of action to bridge the gap between the current reality and the ideal.	●			●	
Mental Toughness	Participants become aware of their own level of growth through challenging exercises with people who are not Japanese. They come to understand their own abilities and strengths and to control motivation.	●	●	●	●	●
Presentation and Results Announcement	Participants make a presentation in English to executives.		●	●	●	●

— Undergoing TOK Global Practical Training for Selected Members —

I thought it was easy to stay motivated because all the participants were highly motivated and skilled. The training was beneficial in the context of identifying imperfections in my current situation and setting new goals. The training program was six months long, and presented opportunities to communicate with many people in departments that I usually do not interact that much with. It was also a great opportunity to build relationships within the Company, which was helpful in smoothing things out at work later. For regular work, I have become more conscious of how I proceed with conversation and putting together presentations. Recently, I have been working more with people at overseas sites. Generally, when Japanese people talk to each other, ambiguities may arise that are not immediately addressed for clarification. I will do my best to make sure this does not happen when communicating and working in different cultures, since it is so important to confirm that my meaning is accurately conveyed to coworkers.

Taijyu Miyachi Public Relations Section, Public Relations Div., General Affairs Dept.

■ Making Progress on Diversity 2.0

Promote Diversity and Inclusion for strengthening competitiveness

To become a "100-year company," TOK is keen to introduce people who have a different take on things to accelerate open innovation and new business development, in addition to reinforcing its competitiveness in cutting-edge semiconductor fields. The Company must create a completely new paradigm by promoting the exchange of diverse opinions. During the past few years, we have therefore been reinforcing our policy of hiring and promoting based on actual ability without regard to gender, nationality, and so forth. As a result, the ratios of female and non-Japanese employees have risen. Our efforts to empower female employees were recognized in 2017 with the inclusion of TOK as a constituent stock in the MSCI Japan Empowering Women Index. In 2012, TOK received the Kurumin mark as a company that supports child-raising, based on the Act on Advancement of Measures to Support Raising Next-Generation Children.

MSCI 2017 Constituent MSCI日本株 女性活躍指数 (WIN)

Number of users of childcare-related systems

	2014	2015	2016	2017/3	2017/12
Childcare leave system (number of users)	10	10	13	4	4
Shorter working hours (number of users)	4	10	4	2	2
Childcare time (number of users)	10	4	11	12	12

Hiring, retaining, and promoting women to management positions

Based on the Act of Promotion of Women's Participation and Advancement in the Workplace, our hiring targets entail a total female hiring ratio of at least 20%, and over the past few years, the ratio of newly hired females has hovered around 30–40% thanks to our renewed focus on merit-based hiring strategy. The ratio of female employees has steadily risen as a result of stronger measures to retain women by improving awareness of work-life balance, assistance in career formation as well as reviewing and upgrading systems for helping with childcare, nursing care, and employee transfers, while encouraging women to take advantage of these systems. Regarding the promotion of women to management positions, the ratio of female managers has been trending upward thanks to their proactive participation in overseas assignments and selective training. We aim to increase this ratio further by assisting female employees with aggressive career-formation plans and eliciting the understanding of their bosses on the importance of their career paths.

Indices related to female employee participation*1

	2014	2015	2016	2017/3	2017/12
Ratio of women among new hires (%)	16.7	45.0	40.0	45.8	29.2
Ratio of women among the overall employees (%)	10.0	10.2	10.6	11.4	11.7
Difference in average tenure figures for men and women (years)	6.6	7.7	8.0	8.7	8.9
Ratio of women in senior and middle management (%)	0.5	0.5	1.1	1.5	2.0
Ratio of women on the Board of Directors (%)	0.0	0.0	8.3	8.3	8.3*2

*1 Non-consolidated basis (employees exclude those seconded from TOK to other companies and contract workers, and include people seconded from other companies to TOK)
*2 As of 2018

Toward sustainable value creation as a global niche top company

To continue growing as a global niche top company with a rising ratio of overseas net sales, TOK believes the most important point is to hire more non-Japanese employees so they can be even more active. The ratio of non-Japanese employees is up on a consolidated basis as a result of expanding overseas customer-oriented sites and merit-based hiring/promoting regardless of nationality. Moreover, a non-Japanese person has been appointed to the top position at TOK Advanced Materials Co., Ltd., and locals have been promoted to key positions at subsidiaries in the U.S. and Taiwan. Our non-Japanese employees at overseas sites have the same level of advanced technical knowledge as their Japanese counterparts, and work together toward common goals. Also, non-Japanese employees contribute to deepening the strategy of building close relationships with customers, including obtaining live, honest feedback from local customers. The Company will make every effort to motivate its employees and inspire their creativity by improving measures for unifying its employees on a global basis while sharing its management principles and proactively increasing the number of non-Japanese employees.

Number of non-Japanese employees

	2014	2015	2016	2017/3	2017/12
Number of non-Japanese employees (non-consolidated)	1	5	6	11	11
Number of non-Japanese employees (consolidated)	226	259	301	312	323
Ratio of non-Japanese employees (consolidated, %)	15.0	16.8	19.2	19.5	20.0

Engaging more with senior personnel as a part of our competitive strategy and measures to pass technologies onto the next generation

In the semiconductor field and other cutting-edge domains, as well as in new business development, technologies from previous generations and technologies from businesses that no longer exist occasionally provide clues about possible breakthroughs in new technologies. When training personnel on the front lines, we thus believe it is important to work shoulder-to-shoulder with veterans and learn sensory skills as a supplement to keeping manuals up to date. We therefore emphasize further expanding roles for senior personnel in the Company. TOK has had a rehiring system in place since 2003 for all employees who have reached mandatory retirement age or fulfilled their employment contracts. With regard to a system for postponing the retirement age, management will work with labor unions to smooth it out as a common issue.

■ Occupational Health and Safety Initiatives

A core component of our Group Management System (GMS)

Occupational health and safety is a part of EHS activities, a key function of the GMS, and a pillar of Responsible Care management, like environmental preservation. At Japanese companies, occupational health and safety is typically the responsibility of each business site based on the Industrial Safety and Health Act. At the TOK Group, however, we closely coordinate occupational health and safety activities among business sites with the Safety and Health Liaison Unit, which consists of managers and leaders in charge of activities at each site. With the EHS Division taking the lead, the Company is keeping its Occupational Health and Safety Manual up to date, and taking steps to review and improve measures for creating better workplace environments by strengthening its global management structure based on GMS.

Constantly evolving safety training and disaster drills

In providing diverse products that help solve social issues, TOK has put in place a business continuity plan (BCP) that is constantly updated based on experience to minimize the impact on society from a halt in production in an emergency situation. At the Aso Plant, where repair work was needed after the Kumamoto Earthquake struck in April 2016, TOK managed to promptly resume production by dispatching mobile power generators and taking other recovery measures. Based on its experience here, the Company has since then redoubled efforts in regular disaster drills that simulate a major earthquake.

Disaster drills at the Aso Plant

Aiming for zero risk of 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. In the fiscal year ended December 31, 2017, TOK worked to improve the risk awareness of employees by implementing "sensory training" that simulates workplace accidents using actual machinery.

◆ **Injuries resulting in lost workdays in the fiscal year ended December 31, 2017: 0**

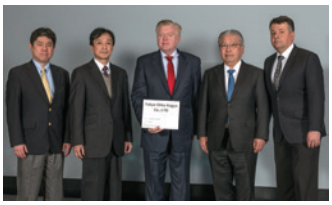
We will continue to make concerted, Company-wide efforts to prevent workplace accidents, to achieve our goals of "zero accidents" as well as "zero accident risks."

■ Dialogue with Stakeholders

Communication for co-creating value

As a member of society, the TOK Group will continue to create value and help address social issues while engaging in dialogue with stakeholders to gain insight into their expectations for the Group.

Dialogue with employees:
Conversation with the President



Dialogue with customers:
PQS Award from Intel Corporation

Dialogue with members of local communities:
Living Nature Observation Tour at the Dragonfly Pond (Gotemba Plant)

■ Social Contribution Activities

Contributing to scientific and technological progress

Established in 1987 by our founder Shigemasa Mukai, the Tokyo Ohka Foundation for The Promotion of Science and Technology (hereinafter, "the Foundation") was founded on the philosophy that the development of Japan, a nation with few natural resources, depends on the development of innovative technologies from advances in fundamental research, and the application of these technologies in industry will lead to peace and prosperity for humanity. With the aim of contributing to the invigoration and advancement of science and technology around the world, the Foundation provides the following four grant programs and bestows one award.

Grant Programs

■ **Grants for Research Projects**
2017: 11 grants totaling ¥11 million

■ **Grants for International Exchange**
2017: 8 grants totaling ¥2.69 million

■ **Support for the Promotion of Research Exchange Programs**
2017: 1 grant totaling ¥1 million

■ **Grants for Promotion of Science Education**
2017: 47 grants totaling ¥12.85 million

Award Presentations

■ **Mukai Award Presentation Events & Commemorative Science Lectures**
2017: Award presented to Mr. Shin-ichi Ohkoshi (Professor at Department of Chemistry, School of Science, the University of Tokyo) "Development of New Functional Substances with Solid State Physical Chemistry"

Dialogue between Independent Officers

What TOK Needs to Do to Become a "100-Year Company"

TOK's five independent officers had a conversation about the initiatives the Company should take to continue value creation as a global niche top company aiming to become a "100-year company" in 2040.

Hiroshi Kurimoto
Outside Director

Became an outside director for TOK in June 2014, after having held positions including representative director and president of a global niche top company with strengths in ESG products, including eco-friendly bearings and seismic isolation devices.

Noriko Sekiguchi
Outside Director

Became an independent certified public accountant after working at a major foreign investment bank and a major auditing firm in Japan. Became an outside director for TOK in June 2015, after having been a monitoring committee member of an international cooperation organization.

Hiroshi Saito
Outside Auditor

Became an outside auditor for TOK in June 2015, after having held positions as head of asset management and investment planning at a major domestic trust bank, CFO of a major bank holding company and then president of one of its group companies.

Kazumasa Fukada
Outside Auditor

Became an outside auditor for TOK in June 2017, after having worked for a major domestic non-life insurance company as a branch manager, the head of the sales department, and managing director.

Koichiro Takahashi
Outside Auditor

Became an outside auditor for TOK in June 2017, after having worked at a major domestic life insurance company as general manager of the marketing planning & research department, branch general manager, general manager of the human resources department, chief general manager of the retail sales department, senior managing executive officer, and president of one of its group companies.

Moderator: Standing Statutory Auditor, **Hajime Fujishita**

TOK's Strengths and Weaknesses

Q As we discuss the initiatives TOK should take toward becoming a "100-year company," let me first ask your opinions of TOK's strengths and weaknesses.

Kurimoto I believe one of TOK's strengths is its competitive position of being able to respond to sophisticated customer requirements that rivals cannot match, while TOK advances its strategy of building close relationships with customers specializing in niche fields. Another strength is management's ability to boldly take risks with investments that are massive at times. On the other hand, I believe a weakness is the difficulty of discovering new businesses that can rise to the expectation of becoming a source of earnings on par with photoresists, because growth will taper off if the Company becomes complacent with existing businesses, so it must therefore establish a top presence in new niche fields. Other threats and weaknesses the Company should ameliorate include the sensitivity of the silicon-cycle to economic trends, and its low ROE that results from a high equity ratio.

Saito I believe one strength is TOK's strong reputation for quality in niche fields. In my view, other strengths include the highly specialized team of engineers in both R&D and production technology, high degree of maneuverability in marketing and development afforded by a corporate scale that is not too large, a frank and open-minded corporate culture and the strong loyalty of its employees. One issue is the Company's low ROE due to the equity ratio being too high. With that said, we must not forget that its abundance of cash allows the Company to spend on R&D with medium- to long-term timeframes and ride out the ups and downs of the semiconductor industry. A weakness is the passive nature of the Company's R&D direction because it will always be a follower of technological advances and changes in final products as a materials maker, not an end product manufacturer. As a consequence, TOK tends to lack the wherewithal to allocate resources in R&D that could lead to a major breakthrough. Moreover, TOK has seen its ability to negotiate prices weakened as the number of its customers declines as a result of mergers and acquisitions. I believe another weakness is that higher sales volume for its products does not necessarily lead to greater profits.

Takahashi I agree that the Company's strengths include its strong technological development capabilities and marketing ability via collaboration with customers. Moreover, I think yet another strength is its open, family-like corporate culture from a human resources perspective. Its small product portfolio is a reflection of its niche top status. The fact that its ROE is not particularly high is preordained to a degree because TOK is an R&D-driven company. I think measures must be taken to improve ROE based on a well thought-out plan, instead of sweeping measures.

Sekiguchi In my opinion, one of the Company's strengths is its history of developing technologies and products that precisely meet customer needs in tune with the changing times. Perhaps its greatest strength is the trust placed in the TOK Group that has been earned by its pioneering technologies and strategy of building close relationships with customers. Meanwhile, I think issues include the Company's lifeline depending on investments in R&D and human resources due to its extremely high degree of concentration in cutting-edge fields, and always keeping a global perspective with a high overseas sales ratio. I think these issues are preordained for TOK as a global niche top company.

Fukada Since its founding, I believe TOK's strengths can be summed up as its foresight in technological development and perseverance in satisfying customer needs. Moreover, I think one of its strengths is its patient approach to seizing the next opportunity and turning it into a success even if it stumbles once in development competition. On the other hand, I believe weaknesses include the Company's somewhat lacking sense of crisis and urgency about the future due to past success in growing its business, as well as a lack of enough key personnel for global business development. On the governance front, I think the Company must move quickly to secure and train key personnel for internal auditing.

Q Thank you for your opinions. Next, I would like everyone to talk about their position on future business conditions for TOK.

Kurimoto The world is shifting from a focus on hardware to a focus on software. Profit margins at hardware-oriented companies tend to be lower than at software companies. Semiconductors continue to be essential for industry, and will be essential for livelihoods in the future, as demand will steadily expand for IoT and other innovations. I therefore believe there is sufficient potential for growth in the near term. To latch onto these trends and improve profitability, TOK must maintain an ability to develop technologies that keep rivals at bay. Finding the next niche field is the most important challenge for TOK. Within the context of the manufacturing industry, excluding software, a new growth industry that rivals the semiconductor industry does not exist at present. I therefore think it will be important for TOK to look for new fields in the semiconductor industry, even if they are small. Instead of hoping for a new source of earnings on the same scale as photoresists, a more realistic strategy may be to target overall sales growth through initiatives in numerous small niche fields, even if the size of sales in each niche field is small.

Sekiguchi Although there are high barriers to entering the photoresists industry, it is one where product shares can turn around at any moment, and competition only increases in intensity. I understand that it is important to continue creating new products that satisfy customer needs while accurately anticipating advances in technology.

Saito The semiconductor industry continues to grow, and compared with other industries, it still has sharper swings. It is therefore necessary for TOK to have rock-solid financial positions able to support investments in development to keep up with rapid technological innovations. I believe TOK should explain to its stakeholders in clear quantitative terms its equity ratio and cash position requirements in preparation for earnings fluctuations and cash outflows.

Fukada With the AI and IoT era on the horizon, I believe TOK's customers, business partners, investors and other stakeholders will only expect more from the Company. At the same time, competition from rivals and customer requirements are likely to increase to new levels, making it more challenging to earn stable earnings and sustain growth. Starting up new businesses will not be easy. With a healthy sense of crisis and broader scope in R&D, TOK must further strengthen its corporate culture and become more determined to succeed in existing businesses while taking on new challenges and honing its technological advantages.

Takahashi As overseas production keeps expanding, I think TOK needs to sophisticate global management, strengthen internal controls, and reinforce its resilience to geopolitical risks. In light of major changes on capital markets in Japan, as shown by the Corporate Governance Code, the Company should focus on strengthening balance sheet management to facilitate a more advanced capital policy, flatten its organization to expand diversity management, enhance borderless recruitment and improve its global personnel management system.

Q Based on your individual backgrounds and fields of specialty, please give your opinion on what TOK should focus on toward becoming a "100-year company" in 2040, while continuing to create value as a global niche top company.

Kurimoto Even while facing issues recently, the management team and all employees of TOK take pride in its corporate activities, and I also believe the Company's activities are of a high standard. Lately, however, reports have surfaced on an almost daily basis about scandals at what had been regarded as first-class companies, reminding us that a company can lose trust in an instant. The management team and all employees should never forget that initiatives in governance and compliance never cease. The Company's products are

unfamiliar to the general public, but are essential in the production of semiconductors that are becoming more prevalent in our lifestyles. For this reason, I hope that all employees understand that if a problem causes TOK to stop supplying its products, it would have an impact on society, causing major turmoil. Next, I see a need for debate about future management strategy from multiple angles and approaches. When it comes to niche fields, I think a debate is needed about which fields to concentrate on, and in which domains. In existing businesses, attention must always be paid to issues of deep interest to customers, issues related to technological innovation, and new technologies that could replace existing technologies. I believe TOK needs to consider more carefully whether its products can be applied to business fields other than semiconductors. As for strategy, TOK should build on success by doing what other companies do not attempt. For this reason, I believe the Company needs to think more about taking a multi-faceted strategy and approach to business.

Sekiguchi I specialize in internal controls, so I will talk in these terms. Internal controls should constantly be reviewed in order to stay in tune with changes in the internal and external environment. In determining whether internal controls are effectively working, it is naturally imperative that each employee follows laws, regulations, and internal rules. Moreover, employees must engage in activities with a strong sense of ethics, responsibility, and sincerity while conforming to social norms and thoroughly adhering to compliance. Currently, I see no causes for concern in TOK's internal control system, which is under the direct control of the president and takes basic steps to ensure effectiveness, such as distributing compliance handbooks to all employees. While ensuring the basics, as a specialist in internal controls, I will help advance efforts to reduce risks so that the Company can evolve its internal control flexibly, responding to changes in the business environment. With regard to advancing the careers of female employees, I think there is a correlation between the ratio of women hired and the ratio of women in management positions. In some years, TOK's new hires have been over 45% women, and I look forward to seeing these women eventually be assigned to key positions within the organization to carry TOK into the future. I encourage all female employees to build up the courage to raise your hands and voices when you want to try something new. Your coworkers will warmly encourage you to succeed, as I believe this is embedded in TOK's corporate culture.

Saito Medium- to long-term growth in earnings, as well as continuous improvement in capital and asset efficiency, are important not only for investors but all stakeholders. For this reason, I think management needs to create a system able to more quantitatively

and accurately measure the efficiency and effectiveness of capital investments and R&D. If possible, this system should be applicable to individual projects, departments and fields, in addition to encompassing the entire company.

Fukada These days, Business Continuity Management (BCM) has become a necessity to deal with the risk of business interruptions from the possibility of damage from major natural disasters, such as Tonankai earthquakes or earthquakes directly beneath the greater Tokyo area, and cyber terrorism or other accidents. TOK has created a Business Continuity Plan (BCP) and conducts crisis response drills. However, I believe honing the ability of all employees to identify risks is most important. It is also important for employees to learn how to stop thinking such risk has nothing to do with them, and take ownership of all risks within their reach. I believe it is possible to reduce the unexpected to as close to zero as possible once employees become more aware of the risks surrounding them.

Takahashi I think TOK needs to raise the level of its organization and human resource management to global standards. The Company's organization and human resource management system has advanced over the years, and this progress is beginning to show with a lower percentage of younger employees leaving, as well as TOK being chosen for inclusion in the MSCI Japan Empowering Women Index, and being recognized in the 2018 Certified Health & Productivity Management Outstanding Organizations Recognition Program (White 500). As the overseas sales ratio continues to rise, I think the Company should advance reforms that keep it up to date with a maturing and diversifying social and economic environment along with the emergence of an IoT society. More specifically, I think it is important for the Company to enhance borderless recruitment and find an optimal balance between central and local authority.

Q Finally, please tell us how you would like TOK to become as a "100-year company" in 2040, and the challenges you see for TOK to achieve this vision.

Kurimoto I would like TOK to become a company with several times as many product lines as now, with new products generating 50% of overall sales. One way of thinking about 20 years from now is understanding the "future" that has already happened. In this sense, it is evident that demand will increase for food and energy around the world, people will live longer, regional disparities will increase, and greenhouse gases will need to be controlled. I would like to see a discussion about what TOK can do to address such issues that are certain to come up in the future, starting with its current trajectory or a slight pivot in a different direction. In 20 years, some employees aged 35–40 now will be managers, so these employees should be included in the discussion.

Saito I am of the same opinion that TOK should build a more diversified business portfolio, such as by having semiconductor-related businesses account for about 50% of the total, for example. Even if the size of the Company or nature of its business changes, I hope that TOK continues to have a frank and open-minded corporate culture that retains its positive vibe and ability to draw in young people, talented engineers, and globally-minded people from various fields.

Sekiguchi I hope TOK will continue to be a global niche top company. My wish is to see it remain a company that works closely with its customers to take on new challenges in technologies and products that are number one (better than rivals), leveraging its high technological capabilities, and the only one (not available anywhere else). Like today, I want TOK to be a company where employees can work without worry and are satisfied with their contributions to the Company.

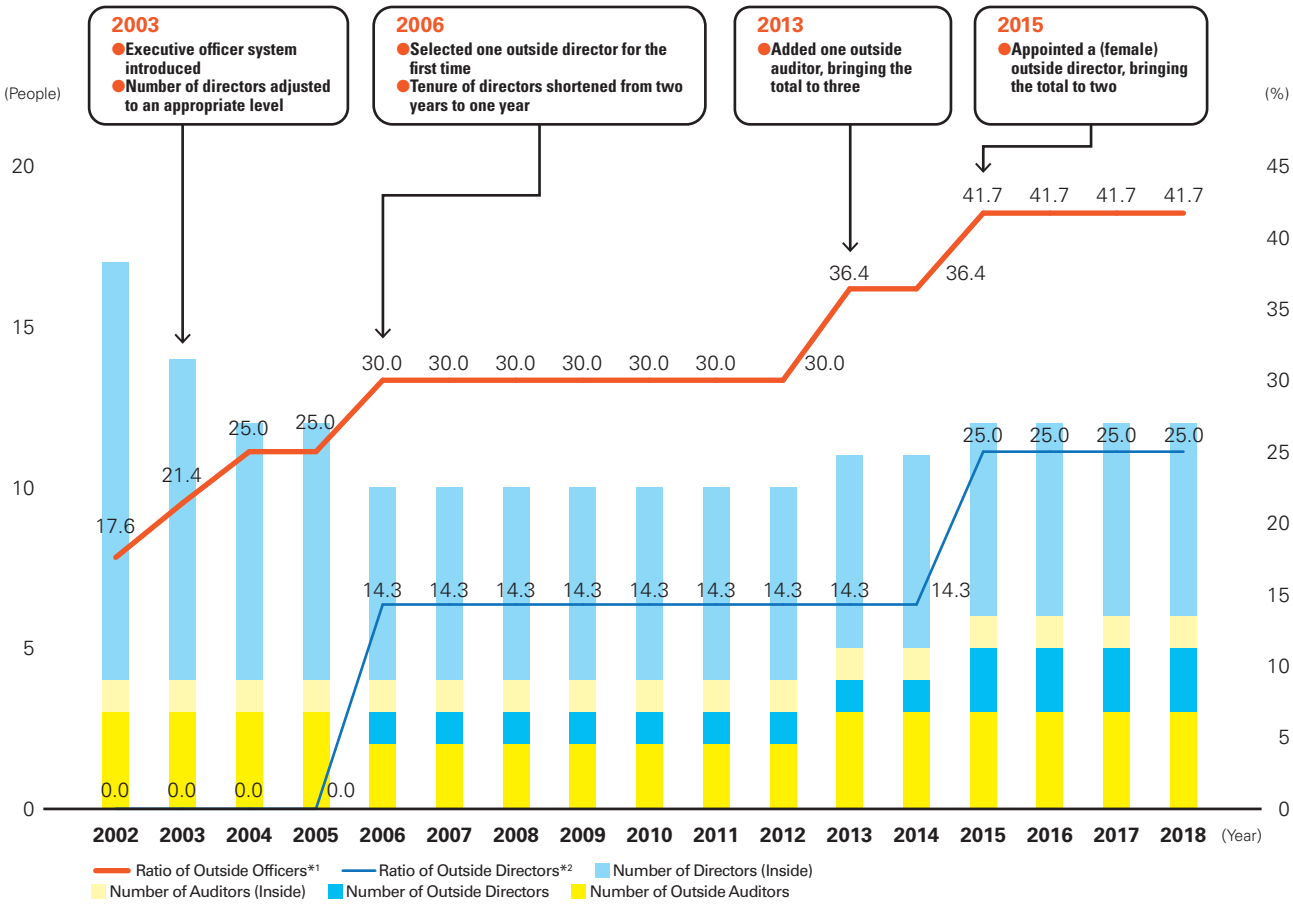
Fukada I think three elements will be essential going forward: the ability to create technologies and value essential to society, trust from customers rooted in high quality, and passionate employees well-versed in management principles. These three elements are firmly embedded in TOK today, and by repeatedly talking about them with employees to raise the bar, I believe TOK's corporate culture will rise to a level commensurate with a "100-year company."

Takahashi As TOK aims to become a "100-year company," I think the key will be drawing out the abilities of the millennial generation in particular. As the hiring of global personnel is increasingly becoming a sellers' market, I believe it is essential to foster team spirit and improve human resource management at overseas sites based on the principles of respect for individuals, including diverse work styles, while working toward a flatter organization, including the delegation of authority.

Corporate Governance

We will further strengthen corporate governance, looking to sustainably enhance our corporate value.

TOK's Path to Stronger Corporate Governance



*1 Ratio of Outside Officers = (Number of Outside Directors + Number of Outside Auditors) / (Number of Directors + Number of Auditors)
*2 Ratio of Outside Directors = Number of Outside Directors / Number of Directors

Basic Concept

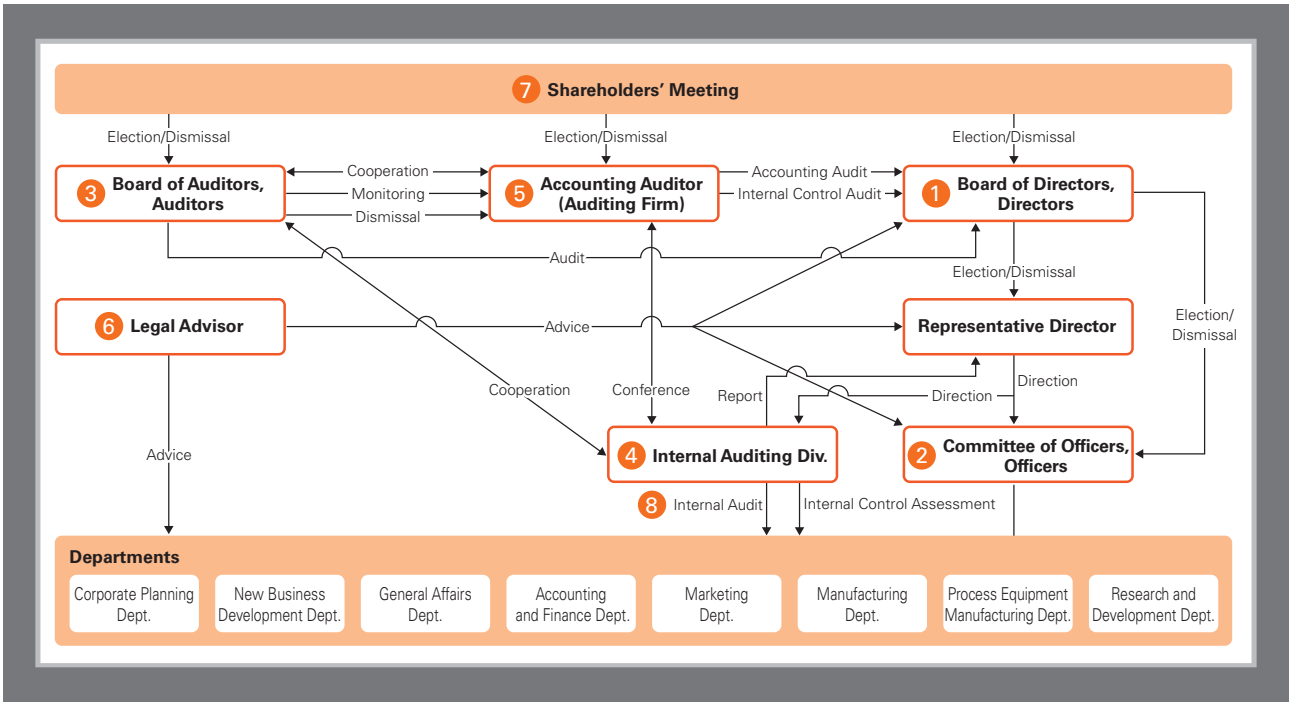
We have had a management vision of aiming to be a globally trusted corporate group by inspiring customers with high value-added products that have satisfying features, low cost and superior quality, under our management principles since our establishment ("Continue efforts to enhance our technology," "Raise the quality levels of our products," "Contribute to society," and "Create a frank and open-minded business culture.") We believe that realizing this will lead to benefits shared by shareholders and all other stakeholders and will improve corporate value.

Realizing the management vision is the means to maintain sound and transparent management and to enhance operational efficiency, with speeding up of the decision-making process as one of the most important management issues.

Type of 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 upgrade our corporate governance.

Diagram of Corporate Governance System (As of March 29, 2018)



Directors and Board of Directors Diagram 1

To quickly respond to changes in the operating environment and clarify accountability for the directors concerning operating results in each fiscal year, we have shortened the tenure of the directors from two years to one year since June 2006. To make the activities of the directors more transparent and reinforce the corporate governance system, there have been two independent outside directors since June 2015.

In principle, the director system has a flat structure with two levels: representative director and directors. This creates a framework that allows the Board of Directors to fulfill its primary responsibilities by effectively reaching management decisions and supervising the Company's management.

As of March 29, 2018, we had eight directors, including two outside directors. In principle, the Board of Directors meets once a month on a regular basis and holds extraordinary meetings as required. The meetings are held to decide important matters of business execution, with the goal of supervising the business duties executed by the representative director and directors.

The number of directors on the Board of Directors is set to not exceed 10 directors in the Company's Articles of Incorporation. The articles also stipulate that resolutions for the election of directors must be approved by a non-cumulative majority vote at a General Meeting of Shareholders with a third or more of the shareholders in attendance.

Assessment of the Effectiveness of the Board of Directors

Our directors and auditors conduct an assessment and discuss at the Board of Directors using an anonymous self-evaluation questionnaire format of the composition of the Board of Directors; the effectiveness of the Board of Directors; information related to the Board of Directors; the decision-making process; and external communications. This offers an analysis and assessment of the effectiveness of the Board of Directors as a whole.

The following opinions were received during the fiscal year ended December 31, 2017, the third time the assessment has been conducted:

- having a composition offering inside directors with thorough understanding of each field, and a good balance between experience and actual performance
- maintaining diversity by incorporating outside directors with differing backgrounds, knowledge and expertise
- realizing rapid decision-making, a high degree of transparency with participation of outside directors and outside auditors and conducted in a frank and open atmosphere
- generally good self-improvement and in-house check-and-balance functions

Meanwhile, issues needing resolution from the previous fiscal year were:

- preparation of materials to enhance deliberations of the Board of Directors
- improvement of the manner in which business execution and resolutions and reports are explained
- enhancement of training.

Due to steps that included prompt delivery or addition of required materials and conducting a training seminar, the issues above were noted to have improved to a certain degree.

We will continue to work on devising methods and improvements and address issues that newly arose in the most recent assessment, which were enlivening discussions, and engage in external communications, as well as seek to further enhance the effectiveness of the Board of Directors.

Establishment of Independent Officer Meetings

TOK has established meetings for its independent officers, currently two outside directors and three outside auditors. They are held with the same frequency as Board of Directors meetings. The standing statutory auditor also attends the meetings.

The meetings aim to strengthen the effectiveness of and add vigor to deliberations at the Board of Directors through:

- additional explanations on topics from management meetings that were not on the agenda of the Board of Directors
- exchange of opinions on themes to be taken up at the next Board of Directors meeting
- explanations of cutting-edge technology matters

Officers and Committee of Officers Diagram❷

While taking steps to strengthen the Board of Directors' functions in management decision making and supervision, TOK has the Committee of Officers made up of all officers to reinforce its business execution capabilities. The committee members include the chief executive officer, the chief operating officer, senior executive officers, executive officers and officers. Those officers' ranks derive from differences in business responsibilities and other considerations.

As of March 29, 2018, the Company had 15 officers, including six officers also serving as directors. In principle, the Committee of Officers meets once a month on a regular basis and holds extraordinary meetings as required. The meetings are held to share instructions and orders resolved by the Board of Directors and information among the officers, and with the goal of deliberating and approving certain important decisions that are not subject to a Board of Directors resolution.

Auditors and Board of Auditors Diagram❸

As of March 29, 2018, we had four auditors, including three outside auditors. In principle, the Board of Auditors meets once a month on a regular basis and holds extraordinary meetings as required. The meetings are held to receive reports regarding important auditing matters from each auditor, with the goal of deliberating and reaching resolutions on those matters. The auditors attend the Board of Directors, the Committee of Officers, and other important meetings. Their duties are performed in accordance with auditing standards (Corporate Auditor Auditing Regulations), the auditing policy, the division of tasks, and other considerations. In addition, the auditors check the performance of directors by receiving reports from directors and other corporate staff, and requesting an explanation if necessary. For financial audits, the auditors receive reports from the accounting auditor and use other means, including requesting an explanation if necessary, to verify the suitability of financial accounting methods and the results of these audits.

Note that the corporate auditors (including standing statutory and outside auditors) hold regular quarterly meetings with the outside directors in an effort to share information and opinions. To improve the effectiveness of corporate audits, and to ensure smooth execution of audit duties, one person is also assigned to assist the auditors.

Internal Auditing Division Diagram❹

The Internal Auditing Division, under the direct control of the president, comprises six full-time staff members. In addition to internal audits, this division offers suggestions, proposals, and advice for continuous improvement through evaluations of the effectiveness of internal controls in financial reporting.

Accounting Auditor Diagram❺

The accounting auditor conducts accounting audits of the Company from an impartial and independent standpoint. There were two certified public accountants who conducted the accounting audit of the Company in the fiscal year ended December 31, 2017: Yasuhiro Ohnaka and Masato Shoji, both of whom are designated limited liability partners and executive members of accounting auditor Deloitte Touche Tohmatsu LLC. Moreover, there were five other certified public accountants, two junior accountants, and 13 other people who assisted in conducting the Company's accounting audit. The details of the remuneration of the Company's certified public accountants (Deloitte Touche Tohmatsu LLC) for conducting the accounting audit during the fiscal year ended December 31, 2017 are as follows:

- Remuneration in relation to the services set forth in Article 2, Paragraph 1 of the Certified Public Accountants Act (Act No. 103 of 1948): ¥50 million

Legal Adviser, etc. Diagram❻

The Company has concluded advisory contracts with a number of law firms, and receives appropriate advice from legal advisors in situations requiring legal assessment.

Efforts to Invigorate the Shareholders' Meeting and Facilitate Smooth Exercise of Voting Rights Diagram❼

To facilitate the exercise of voting rights by shareholders, we hold our General Meeting of Shareholders in March, when most other Japanese companies' shareholder meetings are not hosted at the same time, set a period for reviewing the resolutions for approval by the meeting that is longer than the number of days required by law, and send our Notice of Convocation of the General Meeting of Shareholders out early (21 days (three weeks) before the day of the meeting). It is also published on our website ahead of time, four weeks before the day of the meeting.

To enable the shareholders in attendance to better understand the proceedings of the General Meeting of Shareholders, we use narrated video footage to report the items up for resolution. In addition, we also upload the Notice of Convocation, Notice of Resolution, and Results of the Exercise of Voting Rights to the General Meeting of Shareholders for disclosure on the Company website.

Cooperation between the Auditors, Internal Auditing Division and Accounting Auditor

Internal Audit and Corporate Audit Diagram 8

Cooperation between the auditors and accounting auditor

The auditors receive reports on the result of accounting audits and other work from the accounting auditor (auditing firm) four times a year. They also receive an explanation of the auditing plan from the accounting auditor once a year. In addition, the auditors also accompany the accounting auditor to the factory audits the accounting auditor conducts if necessary, as well as examine the auditing method of the accounting auditor. Apart from this, the auditors also exchange information and opinions with the accounting auditor as required.

Relationship between internal audits, corporate audits, accounting audits and Internal Auditing Division and the internal control department

The TOK Group's internal control department comprises divisions in charge of compliance and risk management in addition to the Internal Auditing Division, which is in charge of evaluating the effectiveness of internal control as it pertains to internal audits and financial reporting.

The Internal Auditing Division, as a part of the internal control department, reports the results of internal audits to the president, auditors and the relevant divisions. In addition, it provides the relevant divisions with suggestions, proposals and advice as required.

As for corporate audits, the auditors report the results of their corporate audits of directors' execution of duties to the president and the accounting auditor (auditing firm). In conducting internal control audits, the auditors receive evaluation reports and other information from the internal control department as necessary.

The accounting auditor (auditing firm) reports the results of its accounting audits to the President and auditors. It also holds discussions with the internal control department to help them with internal control audits.

Election of Outside Directors and Outside Auditors

The Company has eight directors, of whom two are outside directors, as well as four auditors, of whom three are outside auditors.

The Company has established the following criteria and policies regarding independence in the election of outside directors and outside auditors.

Independence Standards for Outside Officers

Independent outside officers under this criteria are defined as those who fulfill the legal requirements of an outside officer, and to whom any one of the following does not apply.

a. A person who executes the business of the Company or its consolidated subsidiaries (the "Group"), or who did so for a period of 10 years before being appointed.
b. A person/entity for which the Group is a major client (Note 1), or who executes the business of such a person/entity.
c. A major customer of the Group (Note 2) or a person who executes the business of such customer.
d. A major lender of the Group (Note 3) or a person who executes the business of such lender.
e. A person who, apart from receiving officer compensation from the Group, belongs to a consulting, accounting, or legal firm (corporate entity, cooperative, or other such group) receiving large amounts of cash or other assets (Note 4) from the Group.
f. A person to whom the above b. through e. applied in the previous three years.
g. A person who in the past three years has received donations from the Group averaging more than ¥3.0 million per year.
h. Major shareholders of the Group (Note 5) or a person who executes the business of such shareholder.
i. A person who executes the business of a company with a mutual relationship between outside officers. (Note 6)
j. A person whose spouse or a relative within the second degree of kinship come under any one of above items a. through i.
k. A person who has served a total of more than eight years as an outside officer.
l. Regardless of the above provisions, a person for whom it is deemed likely that conflicts of interest will arise with the Company.

Notes:

1. A person/entity for which the Group is a major client, means a supplier that provides the Group with products or services, the amount of which transactions averaged more than ¥10.0 million per year over the past three years and represented more than 2% of the supplier's consolidated annual revenue in the most recent fiscal year.
2. A major customer of the Group means a customer to which the Group provides products and services, the amount of which transactions averaged more than ¥10.0 million per year over the past three years and represented more than 2% of the Group's consolidated annual revenue in the most recent fiscal year.
3. A major lender of the Group means a financial institution which has lent an amount equivalent to more than 2% of the Group's consolidated total assets.
4. A large sum of cash or other assets, means assets that averaged more than ¥10.0 million per year over the past three years, and which in the most recent fiscal year had an economic value in excess of 2% of said consultant or accounting or legal expert's consolidated annual revenue. (In the event the beneficiary of said assets is a corporation, association or other organization, then assets that averaged more than ¥10.0 million per year over the past three years, and which in the most recent fiscal year had an economic value in excess of 2% of said organization's consolidated annual revenue).
5. Major shareholder, means a shareholder with a ratio of voting rights of more than 10%.
6. A mutual relationship between outside officers means a relationship in which a person who executes the business of the Group is also an outside officer at another company, and in which a person who executes the business of said outside company is also an outside officer of the Company.

Reasons for the Election of Inside Directors

Name	Reasons for election
Ikuo Akutsu Representative Director President & Chief Executive Officer	Since assuming the position of Representative Director, President and Chief Executive Officer, Akutsu has led the management of the TOK Group ("the Group") as its top executive and contributed to the Group's further development through the measures in the Medium-Term Plan. Thus, Akutsu can be expected to continue contributing to the management of the Company.
Harutoshi Sato Director	Sato has held important positions in the Group, serving in such roles as representative at the U.S. subsidiary, person responsible for quality assurance, and person responsible for product development before assuming the position of Department Manager, Research and Development Dept. Owing to this experience, he is well acquainted with the Company's business characteristics and customers and consequently possesses necessary and sufficient knowledge of such matters as important decision-making by the Board of Directors and supervision of duties executed by other Directors. Thus, Sato can be expected to continue contributing to the management of the Company.
Kunio Mizuki Director	Assuming the position of Department Manager of the General Affairs Dept. after serving as General Manager of the General Affairs Div., Mizuki has been working to strengthen corporate governance, including development of the information management system, the contingency management system, and the compliance system as well as improvement of investor relations. Furthermore, through his experience with the business operations in his charge, he possesses necessary and sufficient knowledge of such matters as important decision-making by the Board of Directors and supervision of duties executed by other Directors. Thus, Mizuki can be expected to continue contributing to the management of the Company.
Nobuo Tokutake Director	Tokutake has held important positions in the Group, serving in such roles as product developer, representative at the U.S. subsidiary, and Chairman and President of the Taiwanese subsidiary before assuming the position of Department Manager, Manufacturing Department. Owing to this experience, he is well acquainted with the Company's business characteristics and customers and consequently possesses necessary and sufficient knowledge of such matters as important decision-making by the Board of Directors and supervision of duties executed by other Directors. Thus, Tokutake can be expected to continue contributing to the management of the Company.
Keiichi Yamada Director	Yamada has knowledge and rich experience in product development, sales and marketing, which he developed in previous positions. In addition, since joining the Company he has mainly been engaged in sales and marketing of mainstay products and is well acquainted with the electronic materials industry and characteristics and customers of the Company's business based on such roles as Department Manager of the Marketing Dept. Furthermore, he possesses necessary and sufficient knowledge of such matters as important decision-making by the Board of Directors and supervision of duties executed by other Directors. Thus, Yamada can be expected to continue contributing to the management of the Company.
Noriaki Taneichi Director	Taneichi has held important positions in the Group, serving in such roles as representative at the U.S. subsidiary, person in charge of the sale and marketing of mainstay products, and person responsible for new business development before assuming the position of Department Manager, New Business Development Dept. Owing to this experience, he is well versed in not only the Company's existing business areas, but also in new business areas, and consequently possesses necessary and sufficient knowledge of such matters as important decision-making by the Board of Directors and supervision of duties executed by other Directors. Thus, Taneichi can be expected to continue contributing to the management of the Company.

Reasons for the Election of Outside Directors

Name	Reasons for election
Hiroshi Kurimoto	Kurimoto was elected on the expectation that he would continue supervising TOK's management from an objective and neutral point of view, based on his abundant experience and considerable insight as a business executive of a listed company, and contribute to strengthening corporate governance by advising the Company on management in general.
Noriko Sekiguchi	Sekiguchi was elected to contribute to corporate governance and TOK's management from an objective and neutral point of view continuously, based on her professional expertise in accounting and abundant hands-on business experience with several companies as a certified public accountant, and her thorough understanding of internal control, including from her experience as a member of external committees investigating fraudulent accounting at numerous listed companies, and advise the Company on management in general.

Reasons for the Election of Outside Auditors

Name	Reasons for election and Independence
Hiroshi Saito	Saito was elected to contribute to auditing TOK's management from an objective and neutral point of view, based on his abundant experience and considerable insight as a business executive including at financial institutions. Saito was once a business executive with Mitsubishi UFJ Trust and Banking Corporation, which owns stock in TOK and conducts cash deposit, stock administration agent and other transactions with the Company under routine and standard business conditions. However, these capital and business relationships were deemed not to affect Saito's independence as an outside auditor of TOK. In addition, Saito was also once a business executive with Mitsubishi UFJ Financial Group, Inc. stock in which TOK owns; however, this capital relationship was deemed not to affect Saito's independence as an outside auditor of TOK.
Kazumasa Fukada	Fukada was elected to contribute to auditing TOK's management from an objective and neutral point of view, based on his abundant experience and considerable insight as a business executive including at financial institutions. Fukada was once a business executive with Tokio Marine & Nichido Fire Insurance Co., Ltd., which owns stock in TOK and conducts insurance transactions with the Company under routine and standard business conditions. However, these capital and business relationships were deemed not to affect Fukada's independence as an outside auditor of TOK.
Koichiro Takahashi	Takahashi was elected to contribute to auditing TOK's management from an objective and neutral point of view, based on his abundant experience and considerable insight as a business executive including at financial institutions. Takahashi was once a business executive with Meiji Yasuda Life Insurance Company, which owns stock in TOK and conducts insurance transactions with the Company under routine and standard business conditions. However, these capital and business relationships were deemed not to affect Takahashi's independence as an outside auditor of TOK.

The Main Activities of Outside Directors and Outside Auditors

Name	Attendance record and activities at Board of Directors and Auditors meetings
Hiroshi Kurimoto Outside Director	Kurimoto attended all 11 of the 11 Board of Directors meetings (attendance rate 100%) held during the fiscal year ended December 2017. He voiced timely opinions as required when discussing resolutions, based on his broad experience and abundant expertise as a business executive.
Noriko Sekiguchi Outside Director	Sekiguchi attended all 11 of the 11 Board of Directors meetings (attendance rate 100%) held during the fiscal year ended December 2017. 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.
Hiroshi Saito Outside Auditor	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 ended December 2017. 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 Outside Auditor	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 ended December 2017. 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 Outside Auditor	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 ended December 2017. 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.

The Major Decisions and Agenda of Board of Director Meetings in the Fiscal Year Ended December 2017

- Enhanced manufacturing equipment for high-purity chemicals mainly used in the cutting-edge miniaturization process in semiconductor manufacturing (TOK TAIWAN)
- Enhanced quality control mainly for the cutting-edge miniaturization process in semiconductor manufacturing (TOK Advanced Materials, South Korea)
- Invested in R&D for cutting-edge products (Equipment Business, Shonan Operation Center)
- Confirmed progress on plans for new R&D Building (to be completed in 2019 at the Sagami Operation Center)
- Confirmed progress on TOK Medium-Term Plan 2018
- Decided to implement share buybacks
- Confirmed policy for balance sheet management, etc.
- Confirmed progress on Group Management System (GMS) Project
- Reviewed measures for environment/occupational health and safety and reinforced measures at domestic and overseas business sites
- Reviewed and strengthened measures for employee training programs

Remuneration of Directors and Auditors

TOK's guidelines for remunerating its directors and auditors are as follows. The guidelines focus mainly on complying with laws and regulations and maintaining sound management, while also seeking to set remuneration at a level that satisfies the expectations of shareholders and other stakeholders by increasing earnings and corporate value.

Directors' Remuneration

Directors' remuneration consists of a fixed salary as base remuneration, a bonus linked to financial performance in the fiscal year, and stock options linked to results, enhancement of corporate value and stock price performance as an incentive to enhance drive and motivation to increase the stock price.

The fixed salary is decided and paid within the remuneration framework approved at the General Meeting of Shareholders (of within ¥420 million per year), based on specific standards established by the Company's Board of Directors.

Bonuses are set within the above-mentioned remuneration framework (of within ¥420 million per year). The Board of Directors decides whether or not to pay bonuses, and the amount of bonuses to be paid, after taking into consideration the performance of the Company and the individual director.

Incentives Granted to Directors

· Stock compensation-type stock options

Stock compensation-type stock options were set as a part of the above-mentioned remuneration framework (of within ¥420 million per year) when revisions to TOK's remuneration system were approved by the Ordinary General Meeting of Shareholders. Based on certain standards set forth by TOK, the Board of Directors decides the amount of fixed salary of each director to be replaced by stock compensation-type stock options. This is done to bolster morale and motivate each director to raise the corporate value of TOK by contributing to an increase in earnings, and thereby the stock price of TOK, over the long term. Outside directors do not receive stock compensation-type stock options (subscription warrants) in consideration of their roles.

Auditors' Remuneration

Auditors are responsible for supervising and auditing business duties executed by the directors, in a position that is independent of the Board of Directors. They receive only a basic remuneration in the form of a basic salary, which is decided on and paid out following discussions among the auditors, within a remuneration framework (of within ¥72 million per year) approved by the General Meeting of Shareholders.

Remuneration Totals Paid to Directors and Auditors (Fiscal Year Ended December 2017)

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	35	34	—	0	7

Notes: 1. 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.

2. 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").

Internal Control System

TOK endeavors to augment the Group's internal control systems by strengthening management at overseas subsidiaries that have a growing presence and maintaining its compliance system. Below is a summary of our compliance system, risk management system, business execution reporting and other group internal control systems, as well as systems for the retention and management of information, and information management structure.

→ For further details on internal control, please see the Corporate Governance Report at https://www.tok.co.jp/content/download/927/11053/file/gov_report180531.pdf (in Japanese)

Compliance System

- Based on its compliance regulations, the Group's Compliance Committee meets, and provides a summary of the Committee's activities to the Board of Directors.
- Working to improve the group compliance system, including establishing a reporting system for internal reporting from overseas subsidiaries to TOK

Risk Management System

- Based on its risk management regulations, the Group's Risk Management Committee meets, and a summary of the Committee's activities is provided to the Board of Directors.
- TOK and domestic subsidiaries conduct periodical reviews of Business Continuity Plan (BCP) and initial action guidelines, and overseas subsidiaries conduct periodical reviews of initial action guidelines.
- Based on its financial risk management regulations, the status of Group internal financial risk is reported to the Board of Directors, with annual policies for responding to that risk decided by the Board.

Business Execution Reporting and Other Group Internal Control Systems

- Based on its subsidiary management regulations, the Company receives monthly business reports from its subsidiaries. In addition, a report on overseas subsidiaries is presented to the Board of Directors annually.
- To ensure cohesion with its subsidiaries, the Company has established policies and regulations with the goal of enhancing the Group's corporate value, and has started to operate this system.
- Based on the basic policies regarding internal controls related to financial reporting, internal control assessments are conducted annually, the results of which are reported to the Internal Control Committee, with a summary provided to the Board of Directors.

Retention and Management of Information

- Based on the basic regulations for information management, the Information Management Committee meets with a summary of its activities provided to the Board of Directors.
- Based on the document organization and retention regulations, retention periods have been established by type for minutes of the Board of Directors, approval forms and other important information related to decision-making, and such documents are appropriately retained and managed. Moreover, the Company and domestic subsidiaries revise document organization and retention regulations to improve retention and management.

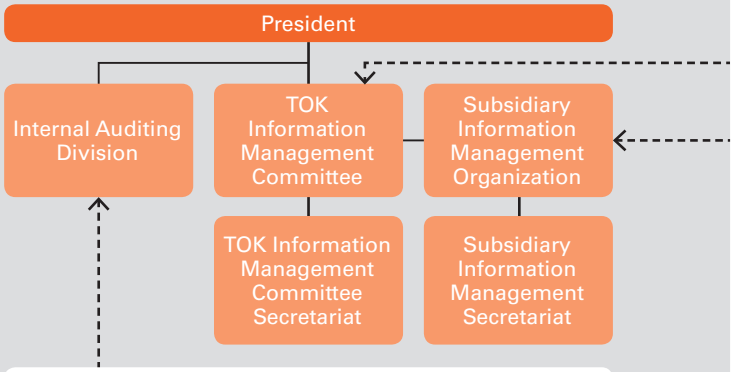
Reinforce Information Management Structure

For TOK, which engages in R&D in cutting-edge semiconductor fields under its strategy of building close relationships with its customers, a solid information management structure is one of the most important aspects of risk management.

Positioning information management as an important corporate governance issue, the Group is working to steadily implement an information management scheme based on the Information Management Policies, and to continuously reinforce that scheme. During the year ended December 31, 2017, we enhanced information management by various working groups with the aim of maintaining, managing, and improving the information management structure.

A PDCA cycle is in place to ensure information security and is implemented at a higher degree of intensity.

Information Management Structure



Information Management Initiatives of Working Groups

Based on our information management policy, the Information Management Committee has set up the following working groups (WG) as a part of the PDCA cycle for information management.

- Trade Secrets WG
- Training and Compliance with Rules WG
- Human Resources-Related WG
- IT Development WG
- Physical Security WG

Information Management Audits by the Internal Auditing Division

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 continuously improve our information management system.

Information management training

Physical Security Measures

At major domestic and overseas production bases, applying a blindfold sticker on mobile phone cameras is mandated.

In TOK Advanced Materials Co., Ltd., our strategic base in South Korea for building close relationships with customers, depositing recording equipment at the security gate is mandated.

Group Management System

GMS

—Initiatives to Strengthen Corporate Value and Risk Management—

Project Phase Completed, Shift to Fixing Phase

The TOK Group's value creation has continued expanding within and outside of Japan. Since 2015, we have focused on the Group Management System as a way to tie this to steady enhancement of sustainable corporate value. The two-year project phase has finished and, moving forward, we will shift to the fixing phase where the projects results will become established aspects of the TOK Group's overall global structures and frameworks.

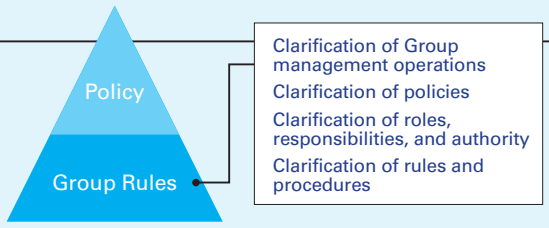
The 12 GMS Fields

Business management	Sales management	Accounting/Financial management	Purchase/Procurement management
Risk management	Human resource management	Production management	EHS management
Compliance	Information management	Safe Exports management	SCM

1 Project Results

Set Rules Shared Groupwide

Unified policies and regulations, etc., for the entire TOK Group, in Japan and overseas, were produced to outline management functions for each of the aforementioned 12 GMS fields. These have been codified under the TOK Group Documents, and global operations started on October 1, 2017.

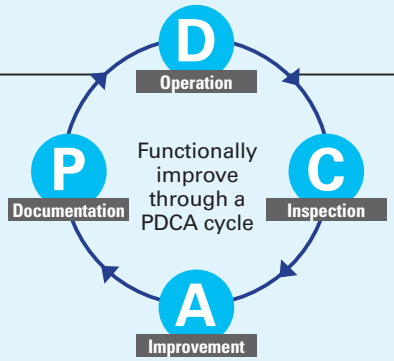


Establishment of unified policies, regulations, etc., for the entire Group

2 Project Results

Systemization of the PDCA Cycle

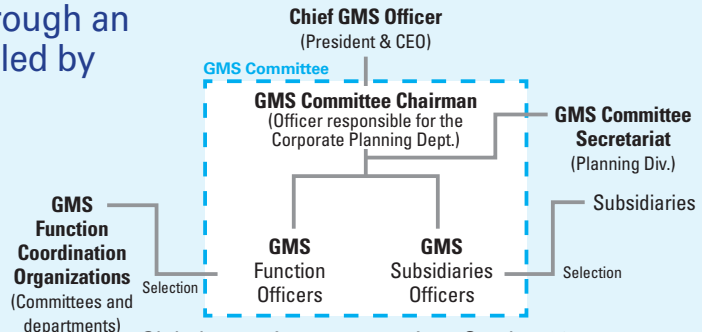
Every fiscal year the TOK Group formulates a GMS action plan based on risks, issues, results of self-evaluations and more, and has built a framework for the Board of Directors to review the results of those activities.



3 Project Results

Continuous Improvement through an Organization Directly Controlled by the President

TOK newly established the GMS Committee under the direct control of the president to maintain TOK Group common rules and improve continuously. We will shift to the GMS fixing phase based on the participation of all officers and employees.



Global operating structure since October 2017

IR Activities/SR Activities

Dialogue with Shareholders and Investors

The Director, Executive Officer, Department Manager of General Affairs Dept. is responsible for managing and controlling investor relations (IR), and through meetings on business results, meetings with institutional investors, company orientations for individual investors and a variety of other efforts, works to be proactive in achieving a constructive dialogue.

The Public Relations Division serves as the department responsible for TOK's IR with regard to dialogue with shareholders and investors, and is primarily responsible for facilitating that dialogue, exchanging information with our accounting, sales, legal and other departments as needed and maintaining a coordinated collaboration. The department in charge of IR also works to provide the top management and relevant officers with records of meetings with analysts, shareholders and investors, and to share information.

Main IR activities in FY2017/12

Business results meetings for institutional investors/analysts	2
Individual meetings with institutional investors/analysts	137
Financial results briefings for individual investors	8

IR Activities

TOK conducts proactive IR activities, centered primarily on the Public Relations Division, in an effort to enhance our dialogue with shareholders and investors. Specifically, we hold events including biannual meetings on business results, company orientations for individual investors, as well as tours of our facilities. Our CSR reports, annual reports, business reports to shareholders, and Notice of The Convocation of The Ordinary General Meeting of Shareholders are all published on our website, part of our proactive effort to provide shareholders and investors with the information they need.

Records of opinions and requests from shareholders and investors that reach us through this dialogue are collected and regularly reported to the president and other management, and we work to ensure that information is understood and shared.

In accordance with our Compliance Standards of Conduct, TOK also makes an effort to provide its shareholders and investors with consistent information, and to offer fair and timely disclosure. We have also established internal regulations regarding management of insider information, and strive to ensure those regulations are closely followed.

Anti-takeover Measures

TOK has adopted anti-takeover measures. Please refer to our website for more information.
https://www.tok.co.jp/content/download/4193/59903/file/180223.pdf (in Japanese)

Complying with the Corporate Governance Code

TOK implements all of the principles set forth in the Corporate Governance Code established by the Tokyo Stock Exchange*.

*** This Annual Report is the first issue since the shift in fiscal year-end to December, which took place in the year ended December 31, 2017 (irregular fiscal period). Consequently, these pages contain information related to the Corporate Governance Code before it was revised in June 2018.**

We are still examining the response to the Corporate Governance Code since its revision, and we plan to cover that response in future publications, including the Annual Report.

Complying with Various Principles of the Corporate Governance Code

(Principle 1.4) Cross-shareholdings

(1) Policies regarding cross-shareholdings

Given that our business centers primarily on cutting-edge fields in the electronics market, and that we are expanding our business domains, we believe that maintaining and developing smooth relationships with our business partners is essential to achieving sustainable growth in the medium- to long-term. For that reason, we may at times acquire and own shares in the companies we do business with.

Our basic policy is that such acquisition and ownership will target shares of those business partners through which such ownership will enable us to strengthen relationships, thus leading to sustained enhancement in corporate value. At the same time, the Board of Directors regularly reviews these cross-holdings in terms of whether they are fulfilling their role and purpose, and determines whether to continue holding them or sell them off.

(2) Criteria for exercising voting rights
In exercising voting rights with regard to cross-shareholdings, we not only look at whether such exercise will contribute to improving the corporate value of the business partner in question, but also determine whether to approve such measures based on comprehensive consideration for maintaining our rights as a shareholder and of the objectives of the cross-shareholding.

(Principle 1.7) Related Party Transactions
When engaging in transactions with its officers, major shareholders and others (i.e., related party transactions), TOK considers the rationality of pricing and other transaction terms as it would in third party transactions, to ensure that such transactions do not harm the common interests of the Company and its shareholders. At the same time, in compliance with legal provisions and our own internal regulations, particularly important transactions are presented to the Board of Directors for their approval.

(Principle 3.1) Full Disclosure
(1) Company objectives (e.g. business principles), business strategies and business plans
→ **See the first page "Management Principles"; page 7 "A Strategy of Building Close Relationships with Customers"; pages 18–24 "A Message from the President" and page 25 "Initiatives to Enhance Medium- to Long-Term Corporate Value"**
(2) Basic views and guidelines on corporate governance
→ **See page 59"Basic Concept"**
(3) Board policies and procedures in determining the remuneration of the senior management and directors
→ **See page 64–65 "Remuneration of Directors and Auditors"**
(4) Board policies and procedures in the appointment of senior management the nomination of director and auditor candidates

a. Policies and procedures in the appointment of senior management and the nomination of director candidates
Once a year, the president prepares a draft used in determining senior management and director personnel issues (e.g. elections and dismissals), based on consideration of the Group's performance, the contribution of senior management and directors to the medium-term plan and the previous fiscal year's budget, and a self-assessment by the Board of Directors. Outside directors are briefed on this draft in advance, and provide advice as required. The Board of Directors then decides on a resolution to the General Meeting of Shareholders based on said draft.

b. Policies and procedures in the nomination of auditor candidates
In nominating auditor candidates, the president will, (a) in the case of auditors nominated from within the Company, consider the knowledge, experience and capabilities gained by the individual through execution of their duties within the Company, and, (b) in the case of outside auditors, will consider their independence, objectivity, and the knowledge, experience and capabilities gained through execution of their duties outside the Company. The president will then prepare a draft proposal for the Board of Auditors. Upon the consent of the Board of Auditors, the Board of Directors then decides on a resolution to the General Meeting of Shareholders.

(5) Explanations with respect to the individual appointments of senior management and nominations of director and auditor candidates based on (4)
→ **Refer to page 63 "Reasons for the Election of Directors and Auditors" for information on the reasons for election directors and auditors.**

(Supplementary Principle 4.1.1)
Based on the Board of Directors regulations, the Company's Board of Directors decides on matters prescribed by laws and regulations, the Articles of Incorporation, and other matters concerning the execution of important business. Decision-making involving execution of business other than matters to be decided by the Board of Directors is delegated, as appropriate, to the Committee of Officers, the representative director, the directors and the officers, and those matters are clearly set forth in the Committee of Officers regulations and the Specific Authority by Position.

(Principle 4.9) Independence Standards and Qualification for Independent Directors
→ **See page 62 "Independence Standards for Outside Officers"**

(Supplementary Principle 4.11.1)
(1) Policies for appointment of director candidates and approach to composition of the Board of Directors
Internal director candidates are chosen from among officers and others responsible for overall management, based on a comprehensive consideration of numerous factors, including diverse, advanced skills, knowledge and actual performance. Outside director candidates are also evaluated for similar factors, with appointments focusing on those with extensive experience at listed companies and wide-ranging knowledge in management, or from among experts with a thorough understanding of legal affairs, finances, accounting, internal control systems and other areas. We also select those who can devote sufficient time and effort as required by their duties, and who meet the standards for independence prescribed by TOK and the Tokyo Stock Exchange. With regard to the diversity and size of the Board of Directors, we strive for a balanced composition, with internal directors selected for their thorough understanding of areas including sales, development, and manufacturing, as well as whether they are newly appointed or reappointed, their experience and past performance. We also ensure diversity by bringing in multiple outside directors of differing backgrounds, knowledge and expertise. Our policy is to maintain a Board of appropriate size that will contribute to quick, bold decision-making in a manner commensurate with our business.

(2) Procedures for appointing director candidates
Based on the above policy, the president prepares a draft appointment of director candidates. Outside directors are briefed on this draft in advance and provide advice as required. The draft is then voted on by the Board of Directors and presented as a resolution to the General Meeting of Shareholders.

(Supplementary Principle 4.11.2)
Directors serving in other important positions
→ **See pages 70–71 "Board of Directors/Corporate Auditors and Officers"**

(Supplementary Principle 4.11.3)
Board of Directors evaluation
→ **See page 60 "Assessment of the Effectiveness of the Board of Directors"**

(Supplementary Principle 4.14.2)
TOK offers its outside officers opportunities to gain knowledge of the TOK Group's business, structure, management strategy and financial condition, as well as opportunities to deepen their understanding of the TOK Group through participation in internal meetings and visits to our plants and so forth. Upon appointment, inside officers are offered opportunities to learn their legal obligations and responsibilities as fiduciaries, as well as to recognize the attitudes and roles expected of them as officers, and to acquire the knowledge they need to appropriately execute those obligations and roles.

(Principle 5.1) Policy for Constructive Dialogue with Shareholders
→ **See page 68 "IR Activities/SR Activities"**

Board of Directors/Corporate Auditors and Officers

Directors

Ikuo Akutsu

Representative Director,
President & Chief Executive Officer

1982 Joined the Company
2003 General Manager, Manufacturing Technology Div.
2003 General Manager, Advanced Material Development Div. 2
2007 Chairman and President of TOK TAIWAN CO., LTD.
2009 Officer; Dept. Manager, Corporate Planning Dept.
2010 Director; Executive Officer; Dept. Manager, Corporate Planning Dept.
2011 Representative Director, President and Chief Executive (to the present)

Harutoshi Sato

Director, Executive Officer
Dept. Manager, Research and Development Dept.

1984 Joined the Company
2004 General Manager, Quality Assurance Div.
2007 General Manager, Advanced Material Development Div. 2
2008 General Manager, Advanced Material Development Div. 1
2009 Officer; Deputy Dept. Manager, Research and Development Dept. and General Manager, Advanced Material Development Div. 3
2011 Officer; Deputy Dept. Manager, Research and Development Dept. and General Manager, Advanced Material Development Div. 1
2012 Director; Officer; Dept. Manager, Research and Development Dept.
2017 Director; Executive Officer; Dept. Manager, Research and Development Dept. (to the present)

Kunio Mizuki

Director, Executive Officer
Dept. Manager, General Affairs Dept.

1985 Joined the Company
2005 General Manager, General Affairs Div.
2009 Officer; Deputy Dept. Manager, Administration Dept. and General Manager, General Affairs Div.
2012 Officer; Dept. Manager, General Affairs Dept.
2013 Director; Officer; Dept. Manager, General Affairs Dept.
2017 Director; Executive Officer; Dept. Manager, General Affairs Dept. (to the present)

Nobuo Tokutake

Director, Officer
Dept. Manager, Manufacturing Dept.

1984 Joined the Company
2003 Chairman and President of TOK TAIWAN CO., LTD.
2007 General Manager, Quality Assurance Div.
2009 Senior General Manager, Production Control Div. and General Manager, Quality Assurance Div.
2013 Officer; Deputy Dept. Manager, Manufacturing Dept.
2015 Director; Officer; Dept. Manager, Manufacturing Dept. (to the present)

Keiichi Yamada

Director, Officer
Dept. Manager, Marketing Dept.

1983 Joined Japan Synthetic Rubber Co., Ltd. (present JSR Corporation)
2001 General Manager, Kyushu Office of JSR Corporation
2002 Business Director of Shipley Far East Ltd. (present Rohm and Haas Electronic Materials K.K.)
2004 General Manager Japan of Rohm and Haas Electronic Materials K.K.
2008 Senior Deputy General Manager, Electronic Material Marketing Control Div. of the Company
2012 Deputy Dept. Manager, Marketing Dept. of the Company
2013 Officer; Deputy Dept. Manager, Marketing Dept. of the Company
2016 Director; Officer; Dept. Manager, Marketing Dept. (to the present)

Noriaki Taneichi

Director, Officer
Dept. Manager, New Business Development Dept.

1986 Joined the Company
2009 Dept. Manager, Marketing Development Business Development Div.
2011 Dept. Manager, New Business Development Dept.
2015 Officer; Deputy Dept. Manager, New Business Development Dept.
2017 Director; Officer; Dept. Manager, New Business Development Dept. (to the present)

Hiroshi Kurimoto

Outside Director

1970 Joined OILES CORPORATION ("OILES")
1999 Director of OILES
2003 Director; Managing Operating Officer of OILES
2006 Representative Director, President and Chief Operating Officer of OILES
2011 Representative Director and Chairman of OILES
2014 Director (Outside Director) of the Company (to the present) Director and Senior Advisor of OILES
2015 Senior Advisor of OILES
2016 Executive Advisor of OILES

Noriko Sekiguchi

Outside Director
(Representative of Sekiguchi CPA Office)

1986 Joined Manufacturers Hanover Bank (present JPMorgan Chase Bank, N.A.)
1991 Joined Asahi-Shinwa Kaikeisha audit corporation (present KPMG AZSA LLC)
1994 Registered as certified public accountant
1998 Joined Japan Broadcasting Corporation
2001 Joined Triumph International (Japan) Ltd.
2002 Reregistered as certified public accountant
2004 Joined Ernst & Young ShinNihon (present Ernst & Young ShinNihon LLC)
2010 Representative of Sekiguchi CPA Office (to the present)
2011 Contract Monitoring Committee Member of Japan International Cooperation Agency ("JICA") (to the present)
2011 External Assessment Committee Member of JICA (to the present)
2012 Registered as certified tax accountant
2015 Director (Outside Director) of the Company (to the present)

Auditors

Hajime Fujishita
Standing Statutory Auditor

1983 Joined the Company
2003 General Manager, Utsunomiya Plant
2004 General Manager, Aso Plant
2005 General Manager, Manufacturing Technology Div.
2009 Officer (Chairman and President of TOK TAIWAN CO., LTD.)
2012 Officer; Dept. Manager, Process Equipment Manufacturing Dept.
2016 Standing Statutory Auditor (to the present)

Hiroshi Saito
Outside Auditor

1974 Joined Mitsubishi Trust and Banking Corporation ("MTB," present Mitsubishi UFJ Trust and Banking Corporation)
1998 Manager, Foreign Exchange and Money Market Div. of MTB
2000 Manager, Asset Management Div. 2 of MTB
2002 Manager, Investment Planning Div. of MTB
2002 Officer and Manager, Investment Planning Div. of MTB
2004 Officer and Manager of Kyoto Branch of MTB
2006 Representative Director and Managing Director of Mitsubishi UFJ Trust and Banking Corporation
2007 Representative Director and Senior Managing Director of Mitsubishi UFJ Financial Group, Inc.
Director (Outside Director) of The Bank of Tokyo-Mitsubishi UFJ, Ltd.
2011 Representative Director and President of Mitsubishi UFJ Trust Investment Technology Institute Co., Ltd. ("MTEC")
2012 Corporate Auditor (Outside Corporate Auditor) of Maruzen Showa Unyu Co., Ltd.
2014 Advisor of MTEC
2015 Auditor of the Company (Outside Auditor) (to the present)

Kazumasa Fukada
Outside Auditor

1977 Joined Tokio Marine and Fire Insurance Company, Limited ("TMFI")
(present Tokio Marine & Nichido Fire Insurance Co., Ltd.)
2002 Branch Manager of Nagano Branch, Chubu and Hokuriku Headquarters of TMFI
2005 General Manager of Tokyo Automotive Sales Div. 4 of Tokio Marine & Nichido Fire Insurance Co., Ltd. ("TMNF")
2007 Associate Director; General Manager of Tokyo Automotive Sales Div. 4 of TMNF
2008 Executive Officer; General Manager of Head Office Sales Dept. 2 of TMNF
2010 Managing Director of TMNF
2011 Managing Director; General Manager of Tokyo Automotive Sales Div. 1 of TMNF
2011 Managing Director of TMNF
2013 Managing Director of the General Insurance Association of Japan
2017 Auditor of the Company (Outside Auditor) (to the present)
2017 Advisor of Tokio Marine & Nichido Fire Insurance Co., Ltd.

Koichiro Takahashi
Outside Auditor

1978 Joined Meiji Life Insurance Company ("MLI") (present Meiji Yasuda Life Insurance Company)
2000 General Manager, Marketing Development Dept. of MLI
2001 General Manager, Marketing Planning & Research Dept. of MLI
2003 General Manager of Niigata Branch of MLI
2005 Executive Officer; General Manager of Human Resources Dept. of Meiji Yasuda Life Insurance Company ("MYLI")
2006 Corporate Executive Officer; General Manager of Human Resources Dept. of MYLI
2008 Managing Executive Officer; Chief General Manager of Nagoya Headquarters of MYLI
2009 Managing Executive Officer; Chief General Manager of Retail Sales Dept. of MYLI
2012 Senior Managing Executive Officer; Chief General Manager of Retail Sales Dept. of MYLI
2014 President and CEO of MYJ Co., Ltd.
2016 Chairman of the Board of Meiji Yasuda System Technology Company Limited
2017 Auditor of the Company (Outside Auditor) (to the present)
2018 Auditor of Meiji Yasuda Institute of Life and Wellness, Inc. (to the present)

Officers

Yoichi Shibamura
Senior Executive Officer
Dept. Manager,
Accounting and Finance Dept.

Yoshio Hagiwara
Senior Executive Officer
Dept. Manager,
Corporate Planning Dept.

Koichi Irino
Executive Officer
Chairman and President of
TOK TAIWAN CO., LTD.

Jun Jang
Officer
President,
TOK Advanced Materials Co., Ltd.

Kazufumi Sato
Officer
Deputy Dept. Manager,
Research and Development Dept.

Yuichi Murakami
Officer
Deputy Dept. Manager,
Manufacturing Dept.

Kousuke Doi
Officer
President, TOKYO OHKA KOGYO
AMERICA, INC.

Tsukasa Honkawa
Officer
Dept. Manager, Process Equipment
Manufacturing Dept.

Naoki Watanabe
Officer
Deputy Dept. Manager,
Marketing Dept.

10-Year Financial Summary

* The fiscal year ended December 31, 2017, was an irregular nine-month period due to a change in fiscal year-end.

Urgent business profitability and structural reforms

Measures to cope with new business environment:
- Cost reduction
- Establishment of low-cost structure

Lehman Shock
(September 2008)

Rebirth of TOK

Direction:
- Enhance marketing capabilities on a global basis
- Further speed up technology development
- Launch new business promptly
- Accelerate global strategy and expand worldwide market share

Recorded first operating loss since going public:
→Brought operating income back into the black one year later

Fiscal years ended March 31 and fiscal year ended December 31	2009/3	2010/3	2011/3	2012/3
Results of operation:				
Net sales	83,850	70,645	80,016	80,037
Material Business	72,589	65,091	71,482	66,645
Equipment Business	11,350	5,632	8,622	13,500
Operating income (loss)	(1,367)	364	6,123	6,102
Income (loss) before income taxes	(5,325)	114	6,427	6,577
Profit (loss) attributable to owners of the parent	(4,656)	254	3,649	3,818
Free cash flow	8,493	6,504	12,435	(6,641)
Investment in plant and equipment	3,270	1,320	1,699	3,162
Depreciation and amortization	7,297	5,418	4,393	4,038
R&D costs	8,542	6,949	6,360	6,157
Per share data (Yen/U.S. Dollars):				
Basic profit (loss)	(102.00)	5.66	81.08	84.86
Cash dividends applicable to the year	35.00	30.00	33.00	38.00
Net assets	2,591.43	2,578.30	2,597.72	2,641.28
At the year-end:				
Total assets	139,338	138,122	147,085	138,767
Total long-term liabilities	2,205	2,350	2,105	2,613
Interest-bearing debt	458	57	0	610
Net assets	118,377	117,658	118,567	119,590
Key performance indicators (%):				
Operating margin	(1.6)	0.5	7.7	7.6
ROE	(3.8)	0.2	3.1	3.3
Ratio of R&D costs to net sales	10.2	9.8	7.9	7.7
Equity ratio	83.7	84.0	79.5	85.1
Debt-to-equity (Times)	0.00	0.00	0.00	0.01
Payout ratio	—	530.0	40.7	44.8
Industry trend:				
Worldwide semiconductor market (Millions of U.S. dollars)*1, (Year)	226,313	298,315	299,521	291,562
Worldwide photoresists sales (Thousands of U.S. dollars)*2	897,827	1,129,893	1,220,078	1,279,706
Exchange rate (¥/$)*4	98	93	83	82

*1 Source: World Semiconductor Trade Statistics *2 Source: SEMI (Total sales of ArF and KrF excimer laser and g- and i-Line photoresists)
*3 Forecast-based amount for 2018 *4 As of the end of each fiscal year

TOK Medium-Term Plan 2015

Objectives:

- Surpass record-high earnings
- Enhance business foundations that support sustainable growth

Strategies:

- Build close relationships with regional users
- Reform business portfolios
- Develop global personnel

TOK Medium-Term Plan 2018

Long-term management vision for fiscal 2020:

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

Strategies:

- Reform business portfolios
- Evolve strategy of building close relationships with customers
- Develop global personnel
- Strengthen management foundation

Shifted our focus to new business growth:
→Achieved record-high operating income in the fiscal year ended March 31, 2015

Material Business:
Segment net sales achieved a record high

					Millions of yen	Thousands of U.S. dollars
2013/3	2014/3	2015/3	2016/3	2017/3	2017/12	2017/12
72,919	75,269	88,086	89,969	88,764	92,411	817,801
67,697	72,866	84,611	87,280	86,558	90,532	801,176
5,302	2,484	3,581	2,748	2,252	1,921	17,007
7,872	10,025	13,253	12,438	9,954	9,194	81,364
8,031	11,666	14,301	11,777	9,220	9,492	84,005
5,443	7,549	8,818	7,716	6,343	6,007	53,162
12,363	(2,610)	3,380	7,517	(926)	4,169	36,897
5,332	14,577	7,276	5,919	9,378	6,731	59,566
3,758	2,672	4,276	5,631	6,118	6,035	53,411
6,211	6,389	6,903	7,015	8,207	6,921	61,249
121.69	168.54	196.61	177.30	146.18	138.31	1.22
44.00	52.00	60.00	64.00	64.00	64.00	0.56
2,796.37	3,044.24	3,285.81	3,298.00	3,384.14	3,490.97	30.89
145,664	155,859	174,863	167,300	174,492	178,681	1,581,250
2,811	1,518	3,569	2,899	2,024	3,421	30,279
488	366	814	534	135	—	—
127,838	139,962	151,999	147,270	152,931	153,517	1,358,559
10.8	13.3	15.0	13.8	11.2	9.9	
4.5	5.8	6.2	5.3	4.4	4.1	
8.5	8.5	7.8	7.8	9.2	7.5	
85.9	87.5	84.3	85.1	84.6	82.2	
0.00	0.00	0.00	0.00	0.00	0.00	
36.2	30.9	30.5	36.1	43.8	46.3	
305,584	335,843	335,168	338,931	412,221	463,412*3	
1,152,306	1,288,713	1,230,022	1,358,009	1,504,224		
94	103	120	112	112	113	

Equity ratio:
We aim to reduce the equity ratio to around 80% as a provisional target for the final year of the "TOK Medium-Term Plan 2018."
(→**See pages 26–27 "Message from the CFO"**)

—FY2017/12 Market Trends, Results of Operations, Financial Position, and FY2018/12 Performance Outlook—

Change in Fiscal Year-End
At the 87th Ordinary General Meeting of Shareholders held on June 28, 2017, the Company's proposal of partial amendments to the Articles of Incorporation was approved. From the fiscal year ended December 31, 2017, the end of the fiscal year has changed from March 31 to December 31, and subsidiaries that ended their fiscal years in March have also changed their fiscal year-ends to December. Accordingly, the transition period of the fiscal year ended December 31, 2017 is an irregular nine-month period (from April 1, 2017 to December 31, 2017) for TOK and its subsidiaries that closed their books in March, and a regular 12-month period (from January 1, 2017 to December 31, 2017) for subsidiaries that closed their books in December. To facilitate year-on-year comparisons, the results of the previous fiscal year have been adjusted to align with the current fiscal year.

Business Environment

In the fiscal year ended December 31, 2017, the global economy overall continued to make a recovery. The Chinese economy began to strengthen again, while economic recovery continued in Europe and the U.S. The Japanese economy maintained a moderate recovery trend overall, with a turnaround in consumer spending amid ongoing improvement in employment and income conditions while corporate earnings rebounded.

On foreign exchange markets, the yen averaged ¥110.1 against the U.S. dollar with some fluctuation seen from April to September, and then stabilizing around a yen depreciation trend from October. As a result, the average exchange rate for the full year was about ¥5 weaker than the same period in the previous year.

Net Sales and Operating Income

In the fiscal year ended December 31, 2017, consolidated net sales increased ¥11,650 million, or 14.4%, from the same period in the previous year to ¥92,411 million. Net sales in the first half increased ¥6,154 million, or 14.3%, to ¥49,051 million. Net sales in the second half increased ¥5,496 million, or 14.5%, to ¥43,360 million.

In the electronics industry, the main source of demand for the Company's products, demand decreased for PCs and tablet devices, but sales of smartphones remained at a high level, and growth of the data server market drove expansion in the semiconductor market for favorable conditions overall.

Cost of sales increased ¥9,927 million, or 18.4%, from the same period in the previous year to ¥63,805 million, reflecting higher material costs due to rising raw material prices, even though rent expenses declined. The cost of sales ratio rose 2.3 percentage points to 69.0%. As a result, gross profit increased ¥1,722 million, or 6.4%, to ¥28,606 million.

Selling, general and administrative (SG&A) expenses increased ¥1,839 million, or 10.5%, from the same period in the previous year to ¥19,411 million, mainly due to increases in depreciation and amortization and one-time costs associated with a change in the fiscal year-end, despite decreases in provision of allowance for doubtful accounts and costs for consumables.

Operating income declined by ¥116 million, or 1.3%, from the same period in the previous year to ¥9,194 million, mainly due to an increase in SG&A expenses, despite an increase in gross profit.

Performance by Segment*

Material Business Segment

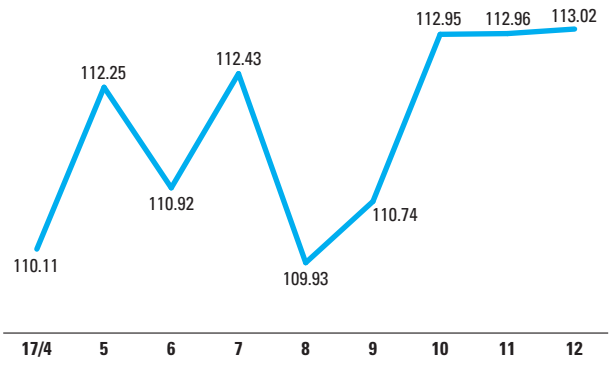
Sales in the Material Business increased by ¥11,690 million, or 14.8%, from the same period in the previous year to ¥90,532 million. Operating income grew ¥367 million, or 3.0%, to ¥12,816 million, owing to stronger sales of high value-added products and gains from foreign exchange fluctuation, despite increases in expenses such as manufacturing expenses and SG&A expenses, as well as declines from discounted selling prices.

■ Electronic Functional Materials Division

In the electronic functional materials division, sales increased ¥3,911 million, or 8.3%, from the same period in the previous year to ¥51,230 million.

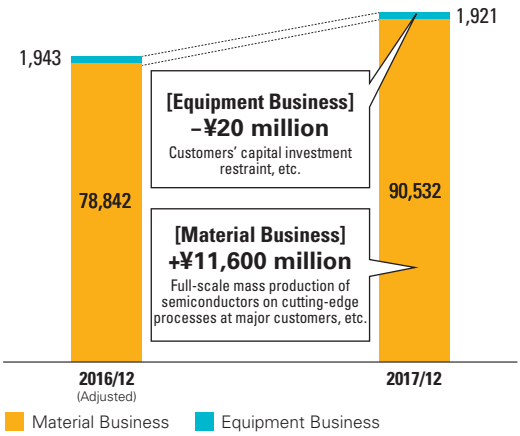
* Intersegment sales or transfers have not been eliminated.

Exchange Rate (Yen/U.S. dollars, Monthly average)



Source: Mitsubishi UFJ Research and Consulting Co., Ltd.

Net Sales by Segment Year-on-Year Comparison (Millions of yen)



Sales of semiconductor photoresists were solid and increased. Sales expanded on stronger demand for excimer laser photoresists for 3D memory and full-scale mass production for semiconductors on cutting-edge processes at major customers. Furthermore, sales of high-density integration materials grew thanks to successful sales and R&D activities that precisely reflect user needs, and higher sales of photoresists for semiconductor packages and photoresists for MEMS (microelectromechanical systems). Sales of photoresists for displays also increased, thanks to the adoption of products for high-resolution displays.

■ High-Purity Chemicals Division

Sales in the high-purity chemicals division increased ¥7,649 million, or 24.7%, to ¥38,676 million.

Sales of photoresist chemicals used to manufacture semiconductors increased due to significant growth in sales from customers in Asia that launched production lines on cutting-edge processes. Sales also increased for photoresist-related chemicals used to manufacture displays, reflecting stronger demand from customers mainly in Asia.

Equipment Business Segment

■ Process Equipment Division

In the 3D packaging market, the Zero Newton TSV process system is driving higher functionality and higher performance of semiconductors. While this system has built up a track record of use in new semiconductor manufacturing applications for data servers, its spread in the PC and smartphone markets has been weak. As a result, investments by users to upgrade production capacity have been restrained, leading to declines in sales.

As a result, sales in the Equipment Business decreased ¥21 million, or 1.1%, from the same period in the previous year to ¥1,921 million. Operating loss expanded by ¥330 million from the same period in the previous year to a loss of ¥664 million.

Orders in the period under review reached ¥1,758 million. Of this, orders in the first half totaled ¥1,090 million and in the second half ¥667 million. The year-end order backlog was ¥1,190 million.

Financial Condition

Total assets as of December 31, 2017 increased by ¥4,188 million from the previous fiscal year-end to ¥178,681 million.

Total current assets decreased ¥928 million from the previous fiscal year-end to ¥87,719 million. This mainly reflects a decrease of ¥5,481 million in cash and deposits and time deposits partly offset by increases of ¥2,660 million in trade notes and accounts and ¥2,280 million in inventories.

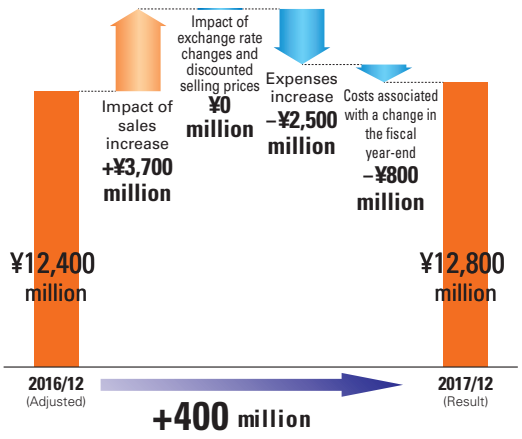
Non-current assets increased ¥5,117 million from the previous fiscal year-end to ¥90,962 million. This was mainly attributable to increases of ¥3,325 million in investment securities due to rise in stock price and ¥2,037 million in property, plant and equipment reflecting investment in plant and equipment.

Total liabilities as of December 31, 2017 increased ¥3,602 million from the previous fiscal year-end to ¥25,163 million. This primarily reflects increases of ¥1,325 million in deferred tax liabilities, ¥904 million in other payable and ¥837 million in trade notes and accounts despite a decrease of ¥428 million in income taxes payable.

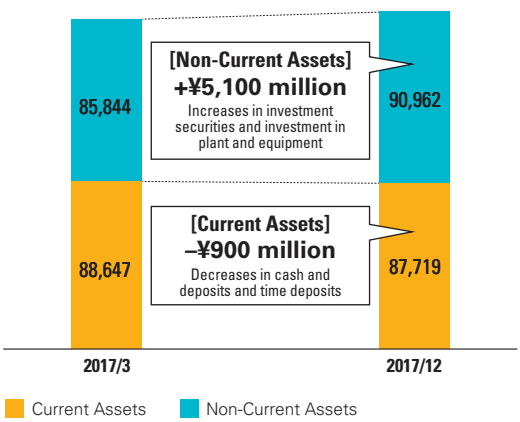
Total equity as of December 31, 2017 increased ¥585 million from the previous fiscal year-end to ¥153,517 million. The increase mainly reflects profit attributable to owners of the parent of ¥6,007 million, an increase of ¥3,787 million in accumulated other comprehensive income from higher unrealized gains on investment securities held, and an increase of ¥1,222 million in non-controlling interests, which were partly offset by ¥7,809 million in purchases of treasury stock and ¥2,793 million in cash dividends paid.

As a result, the equity ratio stood at 82.2% at the end of the fiscal year.

Breakdown of Change in Material Business Segment Operating Income



Total Assets Year-on-Year Comparison (Millions of yen)



Cash Flows

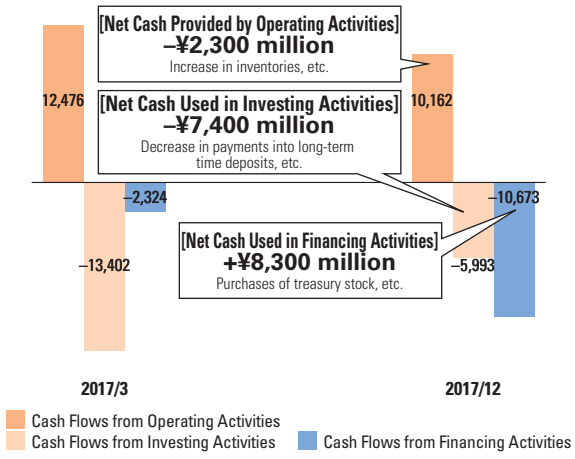
Net cash provided by operating activities during the fiscal year under review came to ¥10,162 million, a decrease of ¥2,313 million from the end of the previous fiscal year. The decrease reflected an increase in inventories, and a decrease in trade notes and accounts payable.

Net cash used in investing activities was ¥5,993 million, a decrease of ¥7,408 million from the previous fiscal year, mainly reflecting decreases in payments into long-term time deposits and purchases of property, plant and equipment.

Net cash used in financing activities was ¥10,673 million, an increase of ¥8,348 million from the previous fiscal year. The decrease reflected purchases of treasury stock.

As a result, cash and cash equivalents on December 31, 2017 decreased ¥5,945 million to ¥29,961 million from ¥35,907 million at the previous fiscal year-end.

Cash Flows Comparison (Millions of yen)

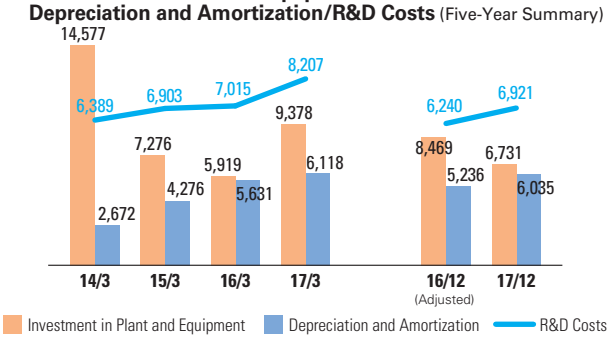


FY2018/12 Performance Outlook

Net sales in the fiscal year ending December 31, 2018 are forecast to increase 8.4% compared with adjusted figures*1 for the fiscal year ended December 31, 2017 to ¥108,900 million, on the expectation for sales growth in the Materials Business and expansion in the Equipment Business.

Operating income is forecast to increase 11.4% to ¥11,000 million, owing to earnings improvement in the Equipment Business, while higher raw material prices undermine profit in the Materials Business. TOK estimates profit attributable to owners of the parent to expand 8.9% to ¥7,500 million, alongside growth in operating income.

Investment in Plant and Equipment/ Depreciation and Amortization/R&D Costs (Five-Year Summary)



Earnings Forecasts (Millions of yen)

	FY2017/12 Calendar year adjustment*1	FY2018/12 Forecast	Change	%
Net Sales	100,422	108,900	+8,477	+8.4
Operating Income	9,878	11,000	+1,121	+11.4
Profit Attributable to Owners of the Parent	6,885	7,500	+614	+8.9

*1 The previous period's earnings for TOK and its consolidated subsidiaries that ended their fiscal years in March (see below) have been adjusted to align with a 12-month period (from January 1, 2017 to December 31, 2017) for the fiscal year ended December 31, 2017.

			2017/3			2017/12 Calendar year adjustment				2018/12			
	3Q Oct.–Dec.	4Q Jan.–Mar.	1Q Apr.–Jun.	2Q Jul.–Sep.	3Q Oct.–Dec.	4Q Jan.–Mar.	1Q Apr.–Jun.	2Q Jul.–Sep.	3Q Oct.–Dec.	1Q Jan.–Mar.	2Q Apr.–Jun.	3Q Jul.–Sep.	4Q Oct.–Dec.
Domestic (March fiscal year-end)			1Q	2Q	3Q	4Q*2	1Q	2Q	3Q	1Q	2Q	3Q	4Q
Overseas (December fiscal year-end)		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q

*2 Adjustment of January-March results for domestic businesses that were not consolidated in the fiscal year ended December 2017

Risk Information

The TOK Group conducts business activities in every region of the world in a diverse range of fields. When carrying out these business activities, it encounters a variety of risk factors that may have a detrimental impact on its financial conditions and management performance. The risks described below are solely those that the Group judged to be most significant as of December 31, 2017 and do not constitute all of its risk factors.

1. Industrial and economic change-related risk

The Group conducts its business within the electronics industry and a characteristic of this industry's market is its major cyclical changes in demand. In particular, materials and devices for semiconductors and displays are extremely affected by such demand trends. Also, due to the rapid speed of technological innovation in this industry and the complexity and diversity of user needs, market conditions often change, as do prices in response to these changes. These factors may have an impact on the Group's business results.

2. Exchange rate fluctuation-related risk
The Group is focusing its energies into developing its businesses in the markets of North America, Europe, and Asia, which are expected to expand in the future, and has production and sales bases in these regions. Some of the Group's overseas transactions are yen-denominated, while for others it carries out risk hedging through forward exchange contracts. However, if exchange rate fluctuations are greater than forecast, this may have an impact on the Group's business results.

3. Research and development-related risk
In order for the Group to maintain its competitiveness in the electronics industry, where technological innovation occurs at a rapid pace, it carries out R&D to provide products that precisely reflect user needs. However, realizing technological innovation and anticipating changes to user needs are not easy tasks and regardless of how much management resources it invests into R&D, due to unforeseeable reasons it may not produce the hoped-for results. This may have an impact on the Group's business results.

4. Intellectual property-related risk
In carrying out its business activities, the Group has acquired a diverse portfolio of intellectual property, to which it grants licenses to third parties. Also, when it deems it necessary or useful to do so, it acquires licenses from third parties in order to use their intellectual property. If the Group is unable to safeguard and maintain its own intellectual property rights or acquire third party rights as anticipated, it may become a party in a dispute or lawsuit relating to these rights. The costs incurred due to these events may have an impact on the Group's business results.

5. Raw material procurement-related risk
The Group uses various raw materials in its production activities and it aims to stably procure these materials by maintaining a network of multiple suppliers. However, its production activities may be affected by a delay or suspension in the supply of raw materials due to problems at the manufacturers of these materials. This may have an impact on the Group's business results. In addition, an increase in the price of raw materials may have an impact on its business results.

6. Product liability-related risk
Within the process in which the Group supplies its products to customers who then use them, problems may occur that originate in a product defect. The Group has insurance to cover product liability compensation payments, but insurance may not be able to cover the entire amount that has to be paid. Therefore, if such a problem occurs it may have an impact on the Group's business results.

7. Natural disaster and accident-related risk
The Group has established manufacturing plants both within Japan and overseas. In the event of a natural disaster, such as an earthquake, or an unforeseen accident, such as a fire or an explosion, it may have to suspend its production activities and delay product shipments. The Group may also have to pay repair or replacement costs at the damaged plant. These events may have an impact on the Group's business results.

8. Environment-related risk
The Group uses various types of chemical substance within its production activities and has strict rules to ensure they are handled safely. However, in the event of an accident involving the leakage of chemical substances, the Group's reputation within society may be affected, it may have to pay costs as compensation or in order to carry out counter measures, and it may have to suspend production activities. These factors may have an impact on the Group's business results.

In addition, the Group always observes the various environment-related laws and regulations in each country where it conducts its business activities. However, in the future these laws and regulations may be made stricter, the Group may be forced to pay additional costs or limit its business activities. These factors may have an impact on the Group's business results.

9. Legal risk
When conducting its business activities throughout the world, the Group must acquire approval for business and investment activities and observe each government's regulations relating to restrictions on imports and exports. In addition, it must observe laws and regulations relating to trade, monopolies, international taxation, the environment, and recycling. If there are major revisions to any of these laws and regulations, or if the Group fails to precisely understand their requirements, or if for any reason it is unable to observe them, then this may have an impact on the Group's business results.

10. Overseas business activity-related risk
The Group carries out production and sales activities in North America and Asia and sales activities in Europe. However, in its overseas business activities it constantly faces the following types of risk; unexpected revisions to laws and regulations; a weakening of the industrial base; difficulties in securing the required personnel; and the possibility of terrorist attacks, conflicts, and natural disasters. If any of these risks occur, it may obstruct the Group's overseas business activities and have an impact on its business results.

11. Information leakage risk
The Group possesses confidential business information and also information relating to various other companies and individuals. It implements thorough measures to ensure the security of all the information it handles, but if due to some unforeseeable event information leaks outside of the Group, this may damage its reputation within society and it may have to pay liability payments for the damage caused to a company or individual whose information was leaked. These factors may have an impact on the Group's business results.

Consolidated Balance Sheets

TOKYO OHKA KOGYO CO., LTD. and Consolidated Subsidiaries
December 31, 2017 and March 31, 2017

	Millions of yen		Thousands of U.S. dollars
ASSETS	2017/12	2017/3	2017/12
CURRENT ASSETS			
Cash and deposits	¥ 27,961	¥ 33,907	$ 247,449
Time deposits	16,219	15,756	143,539
Receivables:			
Trade notes and accounts	22,554	19,893	199,599
Securities	2,000	2,000	17,699
Other	422	581	3,736
Allowance for doubtful accounts	(157)	(242)	(1,392)
Inventories	15,893	13,613	140,653
Deferred tax assets	1,574	1,421	13,935
Prepaid expenses and other current assets	1,249	1,716	11,055
Total current assets	87,719	88,647	776,276
PROPERTY, PLANT AND EQUIPMENT			
Land	9,120	8,976	80,715
Buildings and structures	62,902	60,088	556,663
Machinery and equipment	56,406	57,828	499,168
Furniture and fixtures	20,684	19,844	183,050
Construction in progress	4,077	3,214	36,085
Total	153,192	149,952	1,355,682
Accumulated depreciation	(101,488)	(100,286)	(898,126)
Net property, plant and equipment	51,703	49,666	457,556
INVESTMENTS AND OTHER ASSETS			
Investment securities	16,486	13,389	145,900
Investments in and advances to an unconsolidated subsidiary and associated companies	1,164	936	10,307
Long-term loans receivable	8	572	78
Net defined benefit asset	2,352	1,462	20,818
Long-term time deposits	18,000	18,000	159,292
Deferred tax assets	145	457	1,289
Other assets	1,099	1,360	9,730
Total investments and other assets	39,258	36,178	347,417
TOTAL	¥ 178,681	¥ 174,492	$1,581,250

LIABILITIES AND EQUITY	Millions of yen 2017/12	2017/3	Thousands of U.S. dollars 2017/12
CURRENT LIABILITIES			
Payables:			
Trade notes and accounts	¥ 10,444	¥ 9,607	$ 92,426
Construction and other	4,966	4,107	43,952
Income taxes payable	962	1,390	8,513
Accrued expenses	3,652	3,418	32,323
Advances from customers	236	336	2,091
Deferred tax liabilities	329	21	2,912
Other current liabilities	1,151	654	10,189
Total current liabilities	21,742	19,536	192,410
LONG-TERM LIABILITIES			
Deferred tax liabilities	2,533	1,515	22,416
Net defined benefit liability	262	223	2,323
Other long-term liabilities	625	286	5,539
Total long-term liabilities	3,421	2,024	30,279
EQUITY			
Common stock—authorized, 197,000,000 shares in 2017/12 authorized, 197,000,000 shares in 2017/3 issued, 45,100,000 shares in 2017/12 issued, 45,100,000 shares in 2017/3	14,640	14,640	129,561
Capital surplus	15,207	15,207	134,583
Retained earnings	116,904	113,708	1,034,551
Treasury stock—at cost, 3,021,037 shares in 2017/12 and 1,496,738 shares in 2017/3	(11,732)	(4,086)	(103,824)
Accumulated other comprehensive income:			
Unrealized gain on available-for-sale securities	6,893	4,694	61,006
Foreign currency translation adjustments	4,646	3,533	41,118
Remeasurements of defined benefit plans	335	(139)	2,971
Total	146,896	147,559	1,299,968
Stock acquisition rights	247	221	2,191
Non-controlling interests	6,373	5,150	56,399
Total equity	153,517	152,931	1,358,559
TOTAL	¥178,681	¥174,492	$1,581,250

Consolidated Statements of Income

TOKYO OHKA KOGYO CO., LTD. and Consolidated Subsidiaries
Fiscal Period Ended December 31, 2017 and Fiscal Year Ended March 31, 2017

	Millions of yen		Thousands of U.S. dollars
	2017/12	2017/3	2017/12
NET SALES	¥92,411	¥88,764	$817,801
COST OF SALES	63,805	56,786	564,650
Gross profit	28,606	31,978	253,150
SELLING, GENERAL AND ADMINISTRATIVE EXPENSES	19,411	22,023	171,785
Operating income	9,194	9,954	81,364
OTHER INCOME (EXPENSES):			
Interest and dividend income	309	277	2,739
Foreign exchange gain (loss)—net	726	(445)	6,426
Loss on valuation of derivatives	(789)	(439)	(6,987)
Gain on changes in equity of affiliates	196	—	1,735
Loss on impairment of long-lived assets	(242)	(678)	(2,146)
Loss on disaster	—	(91)	—
Other—net	98	643	874
Other (expenses) income—net	298	(734)	2,641
INCOME BEFORE INCOME TAXES AND NON-CONTROLLING INTERESTS	9,492	9,220	84,005
INCOME TAXES:			
Current	2,140	2,635	18,944
Prior years	—	0	—
Deferred	348	(454)	3,084
Total income taxes	2,489	2,181	22,028
NET INCOME BEFORE NON-CONTROLLING INTERESTS	7,003	7,039	61,976
NON-CONTROLLING INTERESTS IN NET INCOME	996	695	8,814
PROFIT ATTRIBUTABLE TO OWNERS OF THE PARENT	¥ 6,007	¥ 6,343	$ 53,162

	Yen		U.S. dollars
PER SHARE OF COMMON STOCK	2017/12	2017/3	2017/12
Basic profit	¥138.31	¥146.18	$1.22
Diluted profit	137.91	145.53	1.22
Cash dividends applicable to the year	64.00	64.00	0.57

Consolidated Statements of Comprehensive Income

TOKYO OHKA KOGYO CO., LTD. and Consolidated Subsidiaries
Fiscal Period Ended December 31, 2017 and Fiscal Year Ended March 31, 2017

	Millions of yen		Thousands of U.S. dollars
	2017/12	2017/3	2017/12
NET INCOME BEFORE NON-CONTROLLING INTERESTS	¥ 7,003	¥ 7,039	$61,976
OTHER COMPREHENSIVE INCOME:			
Unrealized (loss) gain on available-for-sale securities	2,199	1,860	19,462
Foreign currency translation adjustments	1,457	(1,369)	12,900
Remeasurements of defined benefit plans	475	114	4,205
Share of other comprehensive income in an associate	(19)	(56)	(174)
Total other comprehensive income	4,112	549	36,393
COMPREHENSIVE INCOME	¥11,115	¥ 7,589	$98,370
TOTAL COMPREHENSIVE INCOME ATTRIBUTABLE TO:			
Owners of the parent	¥ 9,794	¥ 7,028	$86,677
Non-controlling interests	1,321	560	11,692

Consolidated Statements of Changes in Equity

TOKYO OHKA KOGYO CO., LTD. and Consolidated Subsidiaries
Fiscal Period Ended December 31, 2017 and Fiscal Year Ended March 31, 2017

	Thousands	Millions of yen										
						Accumulated other comprehensive income (loss)						
	Number of shares of common stock outstanding	Common stock	Capital surplus	Retained earnings	Treasury stock	Unrealized (loss) gain on available-for-sale securities	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total	Subscription rights to shares	Non-controlling interests	Total equity
BALANCE, APRIL 1, 2016	43,169	¥14,640	¥15,207	¥110,359	¥ (5,239)	¥2,834	¥ 4,823	¥(253)	¥142,371	¥ 309	¥4,589	¥147,270
Profit attributable to owners of the parent	—	—	—	6,343	—	—	—	—	6,343	—	—	6,343
Cash dividends paid:												
Final for prior year, ¥32.0 per share	—	—	—	(1,384)	—	—	—	—	(1,384)	—	—	(1,384)
Interim for current year, ¥32.0 per share	—	—	—	(1,391)	—	—	—	—	(1,391)	—	—	(1,391)
Purchase of treasury stock	(0)	—	—	—	(2)	—	—	—	(2)	—	—	(2)
Disposal of treasury stock	435	—	—	(218)	1,156	—	—	—	937	(174)	—	763
Net change in the year	—	—	—	—	—	1,860	(1,290)	114	684	86	560	1,332
BALANCE, MARCH 31, 2017	43,603	14,640	15,207	113,708	(4,086)	4,694	3,533	(139)	147,559	221	5,150	152,931
Profit attributable to owners of the parent	—	—	—	6,007	—	—	—	—	6,007	—	—	6,007
Cash dividends paid:												
Final for prior year, ¥32.0 per share	—	—	—	(1,396)	—	—	—	—	(1,396)	—	—	(1,396)
Interim for current year, ¥32.0 per share	—	—	—	(1,397)	—	—	—	—	(1,397)	—	—	(1,397)
Purchase of treasury stock	(1,593)	—	—	—	(7,809)	—	—	—	(7,809)	—	—	(7,809)
Disposal of treasury stock	69	—	—	(18)	163	—	—	—	144	(26)	—	118
Net change in the year	—	—	—	—	—	2,199	1,112	475	3,787	52	1,222	5,062
BALANCE, DECEMBER 31, 2017	42,078	¥14,640	¥15,207	¥116,904	¥(11,732)	¥6,893	¥ 4,646	¥ 335	¥146,896	¥ 247	¥6,373	¥153,517

	Thousands of U.S. dollars										
					Accumulated other comprehensive income (loss)						
	Common stock	Capital surplus	Retained earnings	Treasury stock	Unrealized (loss) gain on available-for-sale securities	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total	Subscription rights to shares	Non-controlling interests	Total equity
BALANCE, MARCH 31, 2017	$129,561	$134,583	$1,006,271	$ (36,159)	$41,543	$31,271	$(1,233)	$1,305,837	$1,957	$45,580	$1,353,375
Profit attributable to owners of the parent	—	—	53,162	—	—	—	—	53,162	—	—	53,162
Cash dividends paid:											
Final for prior year, $0.28 per share	—	—	(12,357)	—	—	—	—	(12,357)	—	—	(12,357)
Interim for current year, $0.28 per share	—	—	(12,362)	—	—	—	—	(12,362)	—	—	(12,362)
Purchase of treasury stock	—	—	—	(69,109)	—	—	—	(69,109)	—	—	(69,109)
Disposal of treasury stock	—	—	(161)	1,444	—	—	—	1,283	(231)	—	1,051
Net change in the year	—	—	—	—	19,462	9,847	4,205	33,515	466	10,819	44,800
BALANCE, DECEMBER 31, 2017	$129,561	$134,583	$1,034,551	$(103,824)	$61,006	$41,118	$ 2,971	$1,299,968	$2,191	$56,399	$1,358,559

Consolidated Statements of Cash Flows

TOKYO OHKA KOGYO CO., LTD. and Consolidated Subsidiaries
Fiscal Period Ended December 31, 2017 and Fiscal Year Ended March 31, 2017

	Millions of yen		Thousands of U.S. dollars
	2017/12	2017/3	2017/12
OPERATING ACTIVITIES:			
Income before income taxes and non-controlling interests	¥ 9,492	¥ 9,220	$ 84,005
Adjustments for:			
Income taxes paid	(2,286)	(2,567)	(20,236)
Depreciation and amortization	6,035	6,118	53,411
Provision for doubtful accounts	(130)	180	(1,152)
Foreign exchange (gain) loss—net	(1,131)	576	(10,012)
Gain on sales of investment securities	(0)	(265)	(0)
Loss on impairment of long-lived assets	242	678	2,146
Loss on valuation of derivatives	789	439	6,987
Increase in net defined benefit asset	(151)	(248)	(1,338)
Decrease in net defined benefit liability	(18)	(31)	(167)
Increase in trade notes and accounts receivable	(2,286)	(2,124)	(20,235)
Increase in inventories	(1,929)	(915)	(17,073)
Increase in trade notes and accounts payable	755	1,836	6,685
Increase (decrease) in advances from customers	(100)	327	(891)
(Increase) decrease in consumption taxes refund receivable	295	(246)	2,619
Other—net	586	(500)	5,189
Net cash provided by operating activities	10,162	12,476	89,937
INVESTING ACTIVITIES:			
Deposit for time deposits—net	(386)	(445)	(3,418)
Purchases of property, plant and equipment	(5,884)	(9,008)	(52,070)
Payments into long-term time deposits	(3,000)	(14,000)	(26,548)
Withdrawal of long-term time deposits	3,000	12,000	26,548
Purchases of investment securities	—	(1,499)	—
Proceeds from sales of investment securities	0	392	0
Collection of loans receivable	563	0	4,990
Payments of loans receivable	(0)	(565)	(6)
Other—net	(286)	(276)	(2,534)
Net cash used in investing activities	(5,993)	(13,402)	(53,040)
FINANCING ACTIVITIES:			
Repayments of long-term loans payable	(138)	(374)	(1,224)
Dividends paid	(2,785)	(2,769)	(24,651)
Dividends paid for non-controlling interests	(98)	—	(873)
Disposal of treasury stock	173	823	1,534
Purchases of treasury stock	(7,823)	(2)	(69,236)
Other—net	—	0	—
Net cash used in financing activities	(10,673)	(2,324)	(94,451)
FOREIGN CURRENCY TRANSLATION ADJUSTMENTS ON CASH AND CASH EQUIVALENTS	557	(358)	4,935
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(5,945)	(3,608)	(52,618)
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	35,907	39,516	317,766
CASH AND CASH EQUIVALENTS, END OF YEAR	¥ 29,961	¥ 35,907	$265,148

Corporate Information (As of December 31, 2017)

Head office

Corporate Name	TOKYO OHKA KOGYO CO., LTD.
Established	October 25, 1940
Head Office	150 Nakamaruko, Nakahara-ku, Kawasaki-shi, Kanagawa 211-0012, JAPAN
Number of Employees	1,611 (Consolidated)
Paid-In Capital	¥14,640,448,000
Web Site	https://www.tok.co.jp/eng
Stock Listing	Tokyo
Investor Relations Contact	Public Relations Division 150 Nakamaruko, Nakahara-ku, Kawasaki-shi, Kanagawa 211-0012, JAPAN TEL. +81-44-435-3000 FAX. +81-44-435-3020

External Evaluation

Selected or recognized for ESG-related indices, etc.

SNAM Sustainability Index (A constituent stock in 2018)

Member of SNAM Sustainability Index 2018

2018 Certified Health & Productivity Management Outstanding Organizations Recognition Program (White 500) (2018)

2018 健康経営優良法人 Health and productivity ホワイト500

MSCI Japan Empowering Women Index (2017)

MSCI 2017 Constituent MSCI Japan Empowering Women Index (WIN)

(Note) THE INCLUSION OF TOKYO OHKA KOGYO CO., LTD. IN ANY MSCI INDEX, AND THE USE OF MSCI LOGOS, TRADEMARKS, SERVICE MARKS OR INDEX NAMES HEREIN, DO NOT CONSTITUTE A SPONSORSHIP, ENDORSEMENT OR PROMOTION OF TOKYO OHKA KOGYO CO., LTD. BY MSCI OR ANY OF ITS AFFILIATES. THE MSCI INDEXES ARE THE EXCLUSIVE PROPERTY OF MSCI. MSCI AND THE MSCI INDEX NAMES AND LOGOS ARE TRADEMARKS OR SERVICE MARKS OF MSCI OR ITS AFFILIATES.

Evaluations and commendations for various activities

Intel Corporation Preferred Quality Supplier (PQS) Award (2018, 2016)

Taiwan Semiconductor Manufacturing Company Limited 2017 Excellent Performance in Lithography Material (2017) IMQR Award (2016)

Nikkei Annual Report Awards Award for Excellence (2018, 2016)

45th Nikkei Science Advertising Awards Grand Prize (2016)

Global Niche Top Companies Selection 100 (Ministry of Economy, Trade and Industry) (2014)

Global Network

TOKYO OHKA KOGYO CO., LTD.

1 Head Office
2 Shanghai Representative Office
3 Singapore Office

TOKYO OHKA KOGYO AMERICA, INC.

Established: April 1989
Business: Manufacture and sales of photoresists, and development, manufacture and sales of photoresists-related chemicals

4 Head Office/Oregon Plant
5 Sales Office (California)

TOK TAIWAN CO., LTD.

Established: January 1998
Business: Manufacture and sales of photoresists, and development, manufacture and sales of photoresists-related chemicals

6 Head Office (Hsinchu City)
Miaoli Plant (Miaoli City)
Tongluo Plant (Miaoli County)

CHANG CHUN TOK (CHANGSHU) CO., LTD.

Established: October 2004
Business: Manufacture and sales of photoresists-related chemicals

7 Head Office/Changshu Plant (China)

Tokyo Ohka Kogyo Europe B.V.

Established: December 2005
Business: Sales of photoresists and related chemicals

8 Head Office (The Netherlands)

TOK Advanced Materials Co., Ltd.

Established: August 2012
Business: Development, manufacture, and sales of photoresists and related chemicals

9 Head Office/Incheon Plant (South Korea)

TOKYO OHKA KOGYO CO., LTD.

150 Nakamaruko, Nakahara-ku, Kawasaki-shi,
Kanagawa 211-0012, JAPAN

https://www.tok.co.jp/eng