TOKYO OHKA KOGYO CO., LTD.

Integrated Report 2022

Year Ended December 31, 2022

Technology Deepens at 0.000000001 m

Purpose:

Contribute to a sustainable

Management Principles

Create a frank, open-minded business culture, continue efforts to enhance technology, raise the level of quality of products, and contribute to society

CSR Policy

- Increases the sustainable corporate value as a whole group by improving employee engagement.
- Continues to provide high-value-added products that contribute to technological innovations in order to resolve social issues.
- Strives to grow together with society and remain as an attractive company that earns the trust of all stakeholders.

Management Vision

The e-Material Global Company™ contributes to a sustainable future through chemistry

future through chemistry

August 2023

Noriaki Taneichi

Representative Director,
President & Chief Executive Officer

—A Society We Aim For—

TOK pursues a sustainable future society filled with happiness and this starts from the pursuit of happiness for individuals in the workplace.




Semiconductors substantially contribute to the resolution of a variety of different social and environmental issues that face humans and to convenient, comfortable, safe and secure lives. TOK is a manufacturer with the largest global market share of photoresists—materials essential for the manufacture and upgrading of semiconductors.

In Japan and internationally, TOK achieved sustainable growth by practicing customer-oriented strategies and by providing value created through the use of world-leading microprocessing and high purity processing technologies that the company has continuously sophisticated over more than 80 years since its foundation. Under the management vision, The e-Material Global Company™ contributing to a sustainable future through chemistry, TOK is striving to create value from the long-term viewpoint, aiming to contribute to 5G and IoT innovation by 2030, to become a 100-year company in 2040, and achieving carbon neutrality by 2050.

In these everyday activities, TOK places the largest focus on "happiness" as the keyword. The TOK Group practices its purpose—*contribute to a sustainable future through chemistry*—extracted from the management vision and invests in human capital under the concept of pursuit of happiness for individuals in the workplace. The Group hopes that these measures will have a ripple effect to improve happiness for external stakeholders and broadly throughout society.

Human resources who feel a high level of happiness usually provide high performance. Customers who use our products with high added value produced by such human resources will also achieve high performance, leading to an increased sense of happiness. When consumers can improve the quality of life by using excellent end products produced by TOK customers, happiness will be enhanced broadly throughout society. TOK will continue to pursue a society where people feel a high level of happiness that starts from the pursuit of happiness for individuals in the workplace.

The *Integrated Report 2022* provides a multi-faceted view of value creation by TOK from the perspectives of social impact and linkage and interaction among capital sources. The report also states how TOK enhances its corporate value in a sustainable manner while adding the viewpoints of self-reformation and stakeholder engagement as both risks and opportunities continue to be maximized.

In authoring this report, TOK referred to the International Integrated Reporting Framework promoted by the IFRS Foundation and Guidance for Integrated Corporate Disclosure and Company-Investor Dialog for Collaborative Value Creation 2.0 issued by the Ministry of Economy, Trade and Industry. The company considered the feedback received in dialogs with shareholders, investors, and other stakeholders, as well as the opinions received regarding the *Integrated Report 2021*. I would like to assure the readers that this report represents our best efforts to bring together a variety of information related to long-term value creation at TOK through the commitment of management executives and company-wide due processes in each division.

CORE COMPETENCE 1
—World-leading microprocessing technology

Enhancing intellectual capital and continuously contributing to a sustainable future

Value creation area = 1 nanometer*1

0.000000001 m

*1 Approx. 1/100,000 of hair thickness

TOK was established as an R&D-driven company in 1940. The company developed semiconductor photoresists for the first time in 1968, and the company has continuously promoted R&D and upgraded microprocessing technology while accumulating intellectual capital, thereby contributing to the advancement of semiconductor technology.

At present, TOK continuously upgrades its world-leading microprocessing technology under the purpose—*Contribute to a sustainable future through chemistry*. In this way, the company contributes to higher performance, lower power consumption, cost reduction, and miniaturization of semiconductors so that TOK can satisfy social expectations with end products and contribute to the generation of a positive social impact.

Trends of line width of semiconductors*2

1970s
Line width of semiconductors
10,000 nm–1,500 nm

1980s
Line width of semiconductors
1,500 nm–600 nm

1990s
Line width of semiconductors
600 nm–130 nm

Always satisfying social expectations with microprocessing technology

1970s

Social expectations
More efficient economic activities

Examples of final products
Calculators*3

Outputs
First semiconductor positive photoresist developed in Japan

1980s

Social expectations
More advanced information processing

Examples of final products
PC

Outputs
i-Line photoresists

1990s

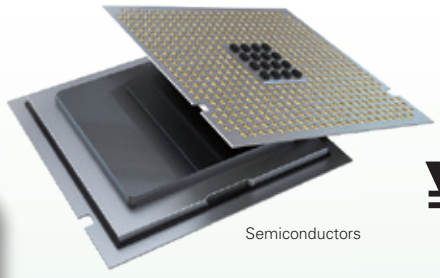
Social expectations
More advanced communication

Examples of final products
Feature phones

Outputs
KrF excimer laser photoresists

*2 Includes estimates by TOK for the decades shown
*3 The photos of examples of final products on this page are conceptual images.
*4 Calculated based on the closing stock price at FY 2022/12 end and the number of shares issued (including treasury stock)

TOK photoresists



Semiconductors

Highlights 2022

Aggregate market value

¥255.1 billion*4

2000s

Semiconductor process nodes

130 nm–32 nm

2010s–

Semiconductor process nodes

32 nm–7 nm

2020s–

Semiconductor process nodes

5 nm

Accumulated intellectual capital

2000s

Social expectations

Social networking

Examples of final products
Smartphones

Outputs
ArF excimer laser photoresists

2010s

Social expectations

Promotion of decarbonization

Examples of final products
General electronic products

Outputs
Full portfolio

2020s

Social expectations

Advancement of AI

Examples of final products
Interactive AI

Outputs
EUV photoresists

CORE COMPETENCE 2

World-leading high purity processing technology

Continuously satisfying customer expectations by strengthening manufactured capital

Level of impurities in cutting-edge products

Less than 1/1,000,000,000,000

In addition to microprocessing technology, the second core competence of TOK is high-purity processing technology, which has been continuously upgraded since the foundation of the company.

TOK released many "Japan's first" fine chemical products leveraging high-purity processing technology and they satisfied many social expectations in the early post-war era in Japan. Through subsequent global expansion, TOK provides customers across the world with materials stably produced from its robust manufactured capital to substantially contribute to higher productivity (yield) and resource saving by world-leading semiconductor manufacturers.

Source
1940

Original management principles presented by Founder Shigemasa Mukai

—"Create a frank and open-minded business culture, continue efforts to enhance our technology, raise the quality levels of our products, and contribute to society"

Consistently satisfy social expectations with high-purity processing technology

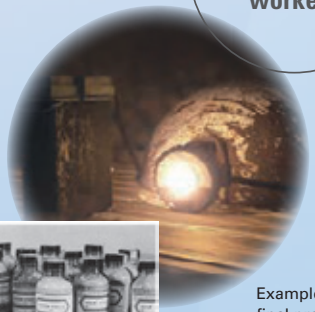
Foundation

Source
Create a frank and open-minded business culture

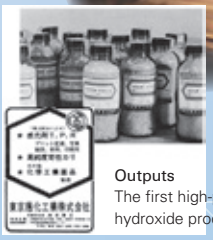
Shigemasa Mukai, TOK founder

1930–40s

Social expectations
Safety of workers



Examples of final products
Batteries used in hard hat lights for coal miners



Outputs
The first high-purity potassium hydroxide produced in Japan

1950s

Social expectations
Development of culture

Examples of final products
Black-and-white TVs

Outputs
The first high-purity potassium silicate produced in Japan, Ohka Seal

*1 1 ppm = 1/1,000,000; 1 ppb = 1/1,000,000,000; 1 ppt = 1/1,000,000,000,000
*2 Includes estimates by TOK for the decades shown

High-purity chemicals and photoresists from TOK

Semiconductors

Highlights 2022

Consolidated net sales

¥175.4 billion

Strengthening of manufactured capital

Trends in level of high-purity processing (impurities)*1*2

1970s
Level of impurities
≤ 1 ppm

2000s
Level of impurities
≤ 100 ppt

2020s
Level of impurities
≤ 1 ppt

*1970s*2*

Social expectations
Higher productivity

Value provided
Higher yield in semiconductor production

Outputs
High-purity chemicals and semiconductor photoresists

*2000s*2*

Social expectations
Resource saving and environmental contribution

Value provided
Reduced material loss in semiconductor/LCD production

Outputs
High-purity chemicals and semiconductor photoresists

2020s

Customer expectations
Higher purification

Value provided
Pursuing ultimate defect reduction with state-of-the-art equipment

Outputs
High-purity chemicals and semiconductor photoresists

CORE COMPETENCE 3

Customer-oriented strategies

Overseas sales growth rate over the past 10 years*1

2.9 times

Increasing social and relational capital through human capital-oriented management

Customer-oriented strategies are TOK's strengths that continuously advance the benefits of microprocessing and high-purity processing technology, and TOK delivers them to all parts of the world.

TOK opened its first overseas site in 1987 and accelerated overseas expansion as the offshoring of the semiconductor industry proceeded. In 2012, the company established a customer-oriented site in South Korea, where human resources from the development, manufacturing, and marketing functions work in collaboration.

The company also promoted the same strategies in Taiwan and the United States to upgrade human capital. TOK is now engaged in long-run research and development activities based on the frank and open-minded business culture and a close relationship of trust with customers.

Continuously expanding social and relational capital to all parts of the world

1987 Overseas expansion **USA**

First overseas site
Ohka America, Inc.
(present Tokyo Ohka Kogyo America, Inc.)

1998 Overseas expansion **Taiwan**

First overseas site in Asia
TOK Taiwan Co., Ltd.
(Miaoli Plant)

2004 Overseas expansion **China**

First manufacturing site in China
Chang Chun TOK (Changshu) Co., Ltd.
(Changshu Plant)

Continuously contributing to a sustainable future through chemistry through long-run research and development with human capital-oriented management

Photoresists for image sensors

Long-run research and development (approx. 10 years)

Release and growth in *2003*

EUV photoresists

*1 FY 2013/3 vs. FY 2022/12

Highlights 2022

Intel Corporation
EPIC Distinguished Supplier Award
(2022)

Micron Supplier Award
(2022)

Texas Instruments Inc.
Supplier Excellence Award
(2022)

Number of employees (consolidated)
1,950

Overseas sales ratio
82.2%

Fostering human capital

2012 Customer-oriented South Korea

The trifecta of development, manufacturing, and marketing
TOK Advanced Materials Co., Ltd.

2014 Customer-oriented Taiwan

Upgrading the customer-oriented strategies
TOK Taiwan Co., Ltd.
(Tongluo Plant)

2016 Customer-oriented Taiwan

The trifecta of development, manufacturing, and marketing
TOK Taiwan Co., Ltd.
(Tongluo No. 2 Plant)

MEMS materials

Long-run research and development (approx. 10 years)

Growth in *2019*

Release and growth in *2019*

Long-run research and development (approx. 20 years)

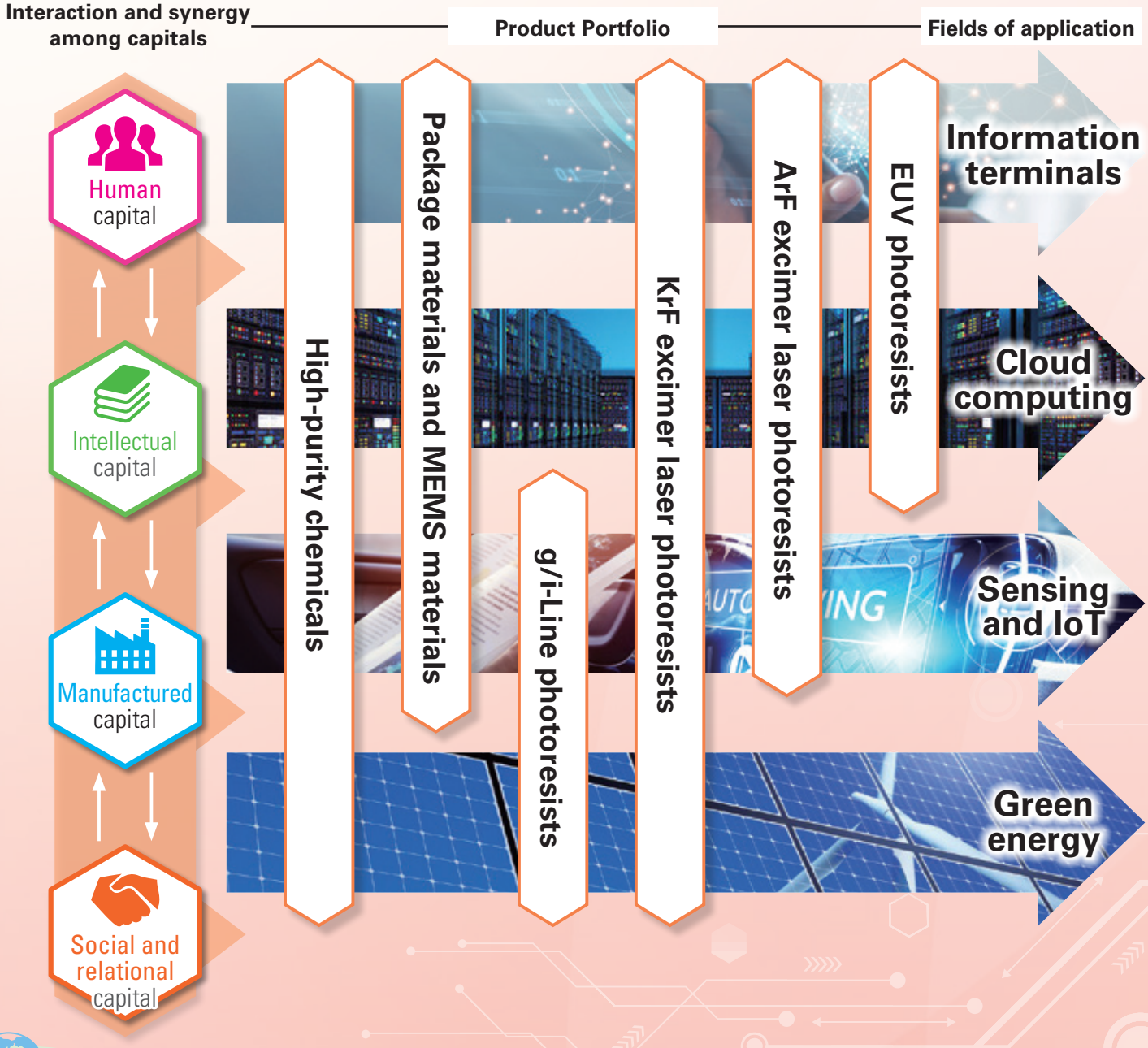
IMPACT ENABLER

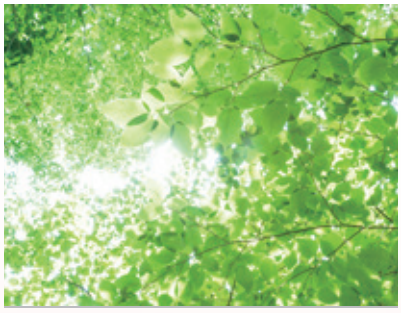
TOK Photoresists

Collecting internal and external management resources to pursue the generation of a positive social impact

In reference to the history of TOK, the company is confident that the generation of a positive social impact will be led through initiatives to enhance the happiness of stakeholders and to improve the interaction and synergy of internal and external management resources with human capital-oriented management at the core.

The advancement of semiconductor technology underlies the positive social impact generated by the communications revolution through the ongoing dissemination of 5G and the next-generation 6G specifications. The company believes that semiconductors will grow to an unprecedented scale and substantially contribute to the achievement of carbon neutrality as a social requirement of humankind.




Therefore, the TOK Group reselected information terminals, cloud computing, sensing and IoT, and green energy as the four fields in which the Group will grow together with customers from the semiconductor industry; consequently, TOK decided to intensively invest human capital and all other management resources in these fields.

The product portfolio of TOK, which features semiconductor photoresists and high-purity chemicals, will continue to contribute to value creation in each field. TOK will also contribute to the generation of a positive social impact toward a sustainable future by further accelerating R&D and marketing products that promote innovation.

Social issues (examples)	Solutions and value chain	Expected social impact
Widening economic disparity due to digital divide	[TOK] Development and provision of thick-film KrF excimer laser photoresists ▼ [Semiconductor manufacturers and device manufacturers] Cost reduction per byte with increased layers of 3D-NAND Production and marketing of low-price smartphones	Provision of information and educational infrastructure to **4** million people in developing countries*1
Increasing power consumption due to the rapid expansion of data centers	[TOK] Development and provision of EUV photoresists ▼ [Semiconductor manufacturers and device manufacturers] Reduction of power consumption per computational session by logic semiconductors Reduction of power consumption at data servers	Reduction of global power consumption by about **0.3**%*2 (forecast 2030)
Economic loss due to increased deaths from traffic accidents	[TOK] Development and provision of image sensor photoresists ▼ [Semiconductor manufacturers and device manufacturers] Advancement and mass production of automotive image sensors Increased production of ADAS vehicles	Reduction of annual deaths from traffic accidents by about **30,000***3 (about 2% of the total)
Improving efficiency of renewable energy systems	[TOK] Development and provision of photoresists for next-generation power semiconductors ▼ [Semiconductor manufacturers and device manufacturers] Advancement and mass production of next-generation power semiconductors Improved efficiency of EVs and wind/hydropower generation systems	Reduction of global power consumption by about **0.4**%*4 (forecast 2030)

*1 Estimated based on the number of non-smartphone owners and the effect of device price reduction. The population with 30 US dollars as the down payment for installment payments exceeding 5% of annual income is defined as the population who cannot purchase smartphones.
*2 Estimated using power consumption by data center servers and the sustained effects of Moore's law as key factors. The use of high-end logic semiconductors only includes data centers and excludes servers and laptop PCs placed elsewhere.
*3 Estimated using deaths from traffic accidents and the ratio of ADAS vehicles. The estimation is based on fatal accidents in 2020 and excludes anticipated increases through to 2030 in emerging countries with many fatal traffic accidents.
*4 Estimated using power consumption in wind/solar power generation, EVs, and data centers, and the dissemination of next-generation power semiconductors with SiC and GaN as key factors. Train cars and commercial vehicles are excluded.

IMPACT ENABLER

TOK Photoresists

Global market size for semiconductor photoresists

(Based on sales in 2022*1)

2,589,575,000 US dollars

Increased by **6.5**% year-on-year

TOK's market share for semiconductor photoresists

(based on estimated shipment quantity 2022*2)

EUV photoresists

38.0%

Global **No.1**

ArF excimer laser photoresists

16.2%

Global **No.4**

KrF excimer laser photoresists

36.6%

Global **No.1**

g/i-Line photoresists

22.8%

Global **No.1**

Market growth forecast for semiconductor photoresists (from 2021 to 2028)*3

— EUV photoresists

CAGR

30.1%

— ArF excimer laser photoresists

CAGR

7.3%

— KrF excimer laser photoresists

CAGR

6.9%

— g/i-Line photoresists

CAGR

5.7%

*1 Calculated by TOK based on aggregation by SEMI

*2 Source: Fuji Chimera Research Institute, *Current Status and Future Outlook of Cutting-edge/Noticeable Semiconductor-related Markets 2023*

*3 Based on the actual shipment in 2021 and the estimated shipment in 2028 (calculated based on Fuji Chimera Research Institute, *Current Status and Future Outlook of Cutting-edge/Noticeable Semiconductor-related Markets 2023*)

Contents

Value Creation Story

Initiatives to Address Material Issues for Enhancing Corporate Value

Data Section

Editorial Policy

Scope and time frame of this report

- Time frame: Fiscal year ended December 31, 2022 (January 1, 2022, to December 31, 2022) (Includes some content after January 2023)
- Organization: Tokyo Ohka Kogyo Co., Ltd., and its consolidated subsidiaries and equity method affiliates **(See pages 124–125 "Global Network")** unless otherwise specified in the text
- Publication on the website: Information on the various initiatives related to financial and nonfinancial information, including information not presented in this integrated report, can be found on the company's website. https://www.tok.co.jp/eng

Reference guidelines

- International Integrated Reporting Framework promoted by the IFRS Foundation
- Guidance for Integrated Corporate Disclosure and Company-Investor Dialog for Collaborative Value Creation 2.0 published by the Ministry of Economy, Trade and Industry
- Environmental Reporting Guidelines 2018 published by the Ministry of the Environment
- ISO 26000: 2010 – Guidance on Social Responsibility released by the Japanese Standards Association
- GRI Sustainability Reporting Standards

Environment Social Governance 価値協創ガイダンス

Forward-looking statements and estimates

This integrated report contains forward-looking statements, forecasts, and social impact estimates that present the future prospects of Tokyo Ohka Kogyo Co., Ltd., (the Company) in terms of business planning, earnings, and management strategies. Such statements are based on management judgment and estimates and are derived from information available at the time the information was prepared. Readers are cautioned not to rely solely on this report because actual results, management strategies, and social impact may substantially differ from those discussed in this report due to changes in the business environment and other conditions.

IMPACT ENABLER

TOK's Photoresists

Providing Customers with Inputs That Contribute to Innovation

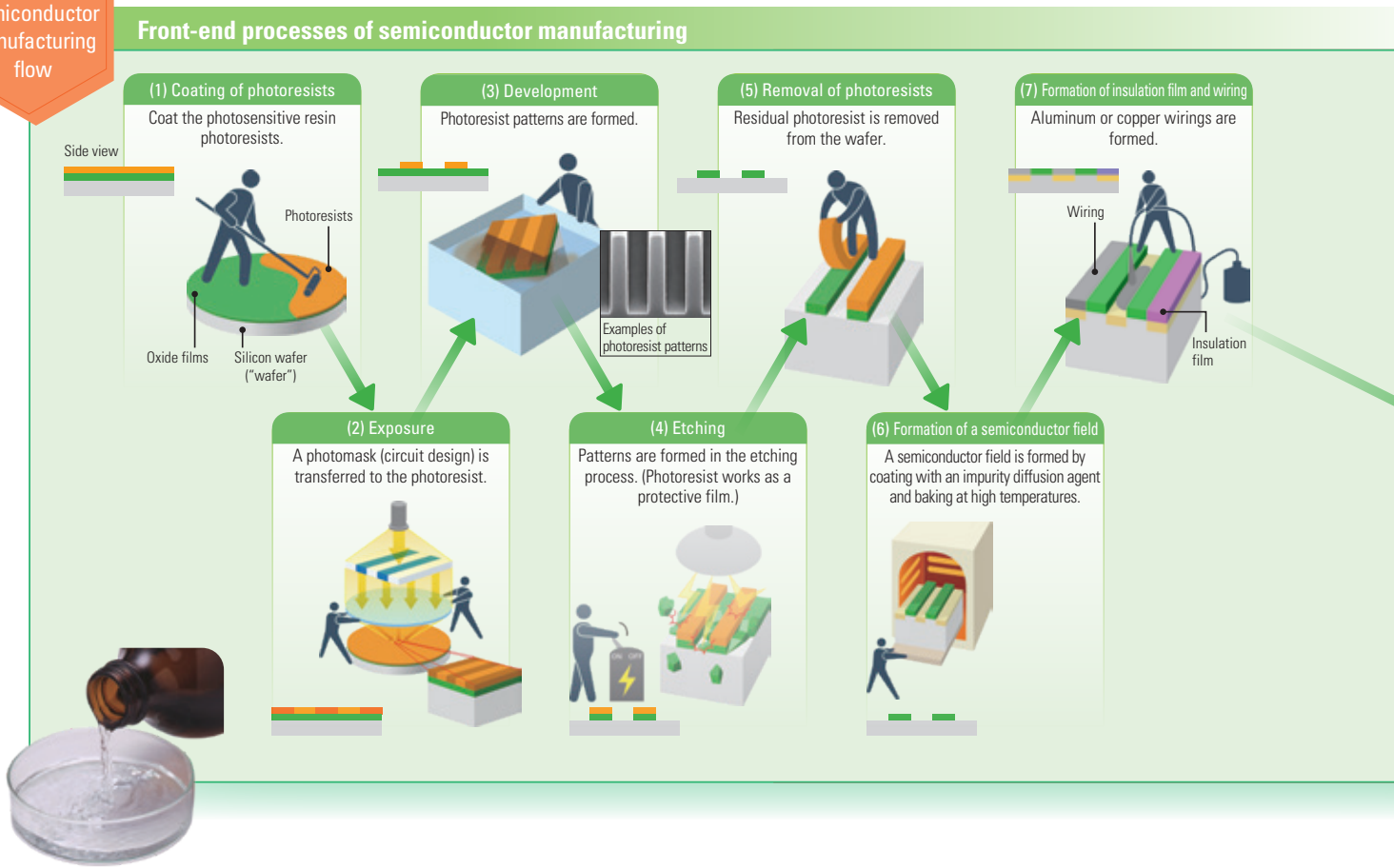
TOK's photoresists provide customers with inputs that serve as the starting point for the customer's value creation process and contribute to the generation of a positive social impact through innovation by substantially upgrading the quality of customers' outputs in terms of semiconductor performance, quality, and yield. This section describes the functions, performance, and core value provided by TOK's photoresists in the semiconductor manufacturing process.

TOK's Semiconductor Photoresist Business

Semiconductor manufacturing flow

Process of making integrated circuits on a silicon substrate and producing semiconductor chips. The process uses photoresists' resistance to etching.

Also see our informational video concerning TOK's contribution.



Impact enabler: TOK's photoresists

Factors Adding Value to Semiconductor Photoresists

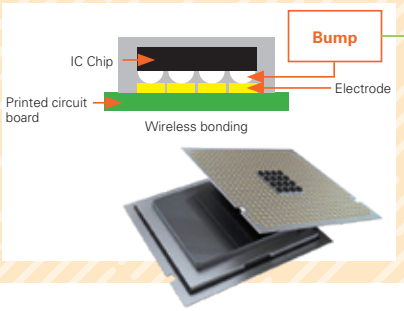
Sensitivity	Resolution	Roughness* *Fluctuations in line width
Etching resistance	Substrate adhesiveness	Processing applicability
Purity	Substance safety	Cost

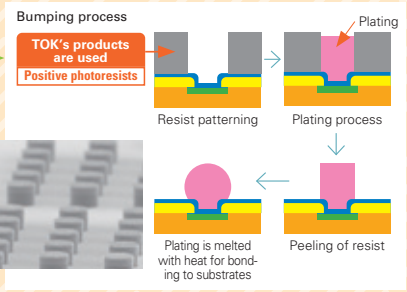
Our Strength

Providing photoresists as an impact enabler in both the front-end process and the back-end process of semiconductor manufacturing

Wireless bonding contributes to downsizing, weight reduction, and higher performance

In this method, projected connection terminals called "bumps" are laid out at the bottom of the IC chip without using fine metal wire and are energized by coming into direct contact with the printed circuit board. By saving space for wire connections, the IC chip is directly connected to the printed circuit board, which reduces the connection distance and contributes to downsizing, weight reduction, and the higher performance of semiconductor packages.





In this process, individual semiconductor chips are cut out to be sealed into different packages. The process takes advantage of the thick file forming capacity of photoresists.

Back-end processes of semiconductor manufacturing

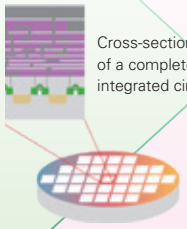
(8) Formation of integrated circuits

ICs are formed by repeating the processes (1) through (7).

(9) Completion of an integrated circuit

Multiple ICs are created on the wafer surface using microprocessing technology.

Cross-section of a completed integrated circuit

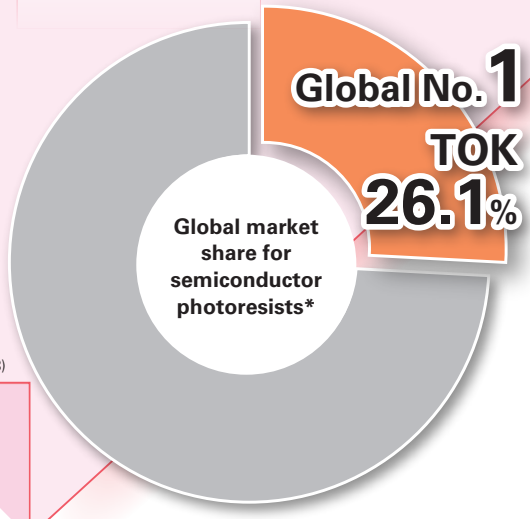


(10) Dicing of wafers

Wafer is diced into chip sizes.

Semiconductor chips completed

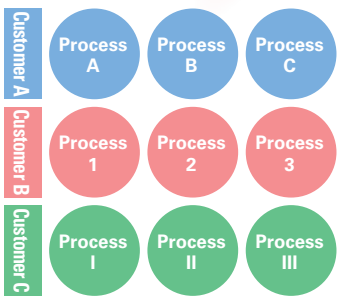
Each diced wafer becomes an IC chip.



* Based on the projected shipment volume of EUV, ArF, KrF, g-/i-Line photoresists in 2022 (calculated based on Fuji Chimera Research Institute, Current Status and Future Outlook of Cutting-edge/Noticeable Semiconductor-related Markets 2023)

Core value of TOK

We can swiftly provide finely tuned tailor-made photoresists for the different needs and requirements of each customer or process



Innovation and social impact led by semiconductors and final products/ services

OUTPUT & OUTCOME

Outputs — Full Portfolio

TOK has developed strong niche domains in both the front-end processes and back-end processes of semiconductor production with strengths in both miniaturization and 3D packaging. As a long-established supplier of photoresists, TOK provides a full portfolio comprising both the legacy and cutting-edge fields. The Company also provides cutting-edge value while seeking synergy in high-purity chemicals as non-photosensitive materials.

Semiconductor manufacturing field

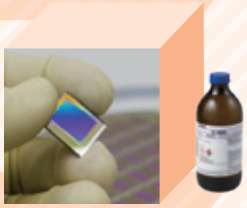
- Global No.1*1 EUV photoresists
- Global No.1*1 KrF excimer laser photoresists
- Global No.1*1 g-Line and i-Line photoresists
- Global No.4*1 ArF excimer laser photoresists
- Materials for SiC/GaN power semiconductors
- Electronic beam (EB) photoresists
- Interlayer insulating films
- Diffusing agents
- Protective coating materials
- Directed Self-Assembly (DSA) materials

Semiconductor packaging manufacturing field

- Bump photoresists
- Wafer level CSP photoresists

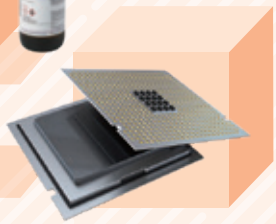
Image sensor MEMS manufacturing field

- Photosensitive permanent film materials
- Microlens photoresists
- Lift-off photoresists



3D packaging field

- Adhesive materials



High-purity chemicals

- Clean solutions
- Thinners
- Developing solutions
- Organic chemicals
- Stripping solutions
- Inorganic chemicals
- Surface modifiers

Panel manufacturing field

- TFT photoresists
- Color filter photoresists
- Photoresists for Organic EL
- High-reliability transparent materials

*1 Based on the share of projected shipment volume in 2022 (calculated based on Fuji Chimera Research Institute, Current Status and Future Outlook of Cutting-edge/Noticeable Semiconductor-related Markets 2023)

SDGs to which we contribute

Outcomes — Contribution to a Sustainable Earth and Human Society

Against the backdrop of increasing climate change and the risks of infectious disease, semiconductor demand has shifted to a substantially different phase. Semiconductor materials in all areas, including not only the cutting-edge field but also the legacy field, have become indispensable for achieving a sustainable earth and human society. TOK provides a stable supply of these materials under its purpose to contribute to a sustainable future through chemistry.

OUTCOME

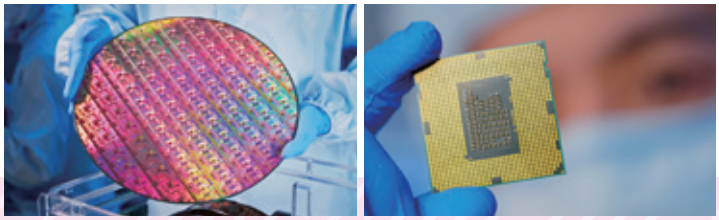
Information Terminals
Smartphones
Tablet devices
PCs
Wearable devices

Cloud Computing
Data servers
AI/Metaverse
Supercomputers
Gaming services

Sensing & IoT
AI
Autonomous vehicles/ ADAS
Robotics

Green Energy
Decarbonization/ renewable energy equipment
Eco-cars

Semiconductor manufacturing lines
Panel manufacturing lines



TVs
Displays
Smartphones
Tablet devices

Higher performance of devices
Energy-saving
Miniaturization

Convenient/ comfortable
Safe/secure
Environment-friendly living

Contribution to a sustainable earth and human society

PORTFOLIO

Business Portfolio — For Further Development of Materials and Equipment Strategies

In March 2023, TOK transferred its equipment segment to AIMECHATECH, Ltd., after continuously promoting materials and equipment (M&E) strategies that combined the materials business as the current earnings driver with the equipment segment that specialized in niche fields through synergy with the materials segment. Going forward, TOK will establish new M&E strategies through collaboration with AIMECHATECH for generating a positive social impact both in the cutting-edge fields that drive innovation and in legacy fields that contribute to decarbonization.

Materials business

Develops high value-added products as an earnings driver

M&E (Materials and Equipment) strategy

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

Getting one step ahead of market needs in synergy with the Materials Segment

Equipment business

Electronic functional materials

Photoresists

Widely used materials indispensable for the **microprocessing** for devices, including semiconductors, LCD panels, and other electronic products

High-purity chemicals

High-purity chemicals

Clean solutions, thinners, developing solutions, and other chemicals with **world-leading high purity**

Materials

High-density integration materials

Packaging photoresists which are compatible with **multilayer stacking** resulting from the miniaturization of semiconductors/MEMS materials

Inorganic and organic chemicals

Chemicals used in a wide range of industries

Process equipment

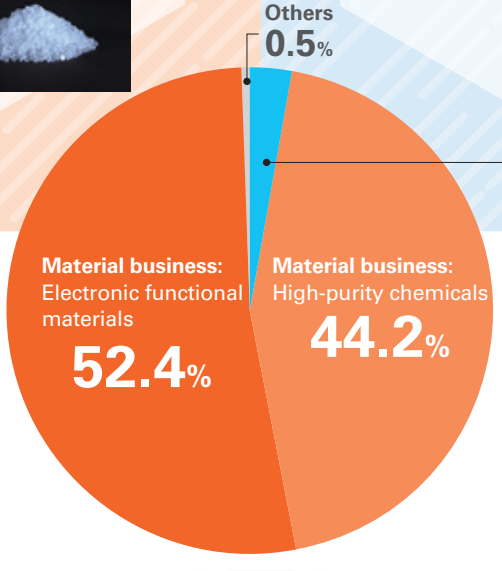
Semiconductor manufacturing equipment

Plasma ashing system **for power semiconductors**/Zero Newton® wafer handling system enables significant increases in the efficiency of **the 3D packaging process** for semiconductors, and **the thinning process for power semiconductors**

Equipment

LCD panel manufacturing equipment

UV curing machines used to manufacture **flexible organic EL panels**, coating machines that can achieve high-precision performance, and coating machines for R&D



FY 2022/12

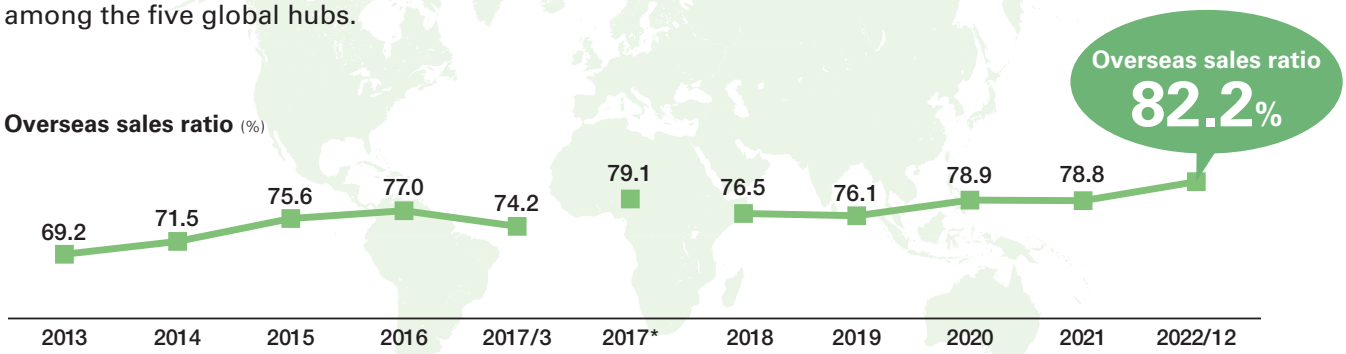
Consolidated net sales

¥175.4 billion

Regional Portfolio — Customer-oriented and Risk Diversification

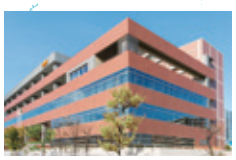
Our business has become increasingly globalized through the promotion of customer-oriented strategies focused on semiconductor fields. The overseas sales ratio has been around 80% over the past several years. Considering the recent surge of economic security risks and the accelerating multi-site operation by overseas customers, TOK will promote thorough customer-oriented strategies and risk diversification through the agile enhancement, utilization, and collaboration of managerial resources among the five global hubs.

Overseas sales ratio (%)



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

Japan
- Headquarters (9 sites)
- Number of employees: 1,346



The United States
- 2 local subsidiaries (3 sites)
- Number of employees: 137

Taiwan
- 1 local subsidiary (2 sites)
- Number of employees: 233

China
- 2 local subsidiaries (2 sites)
- Number of employees: 64

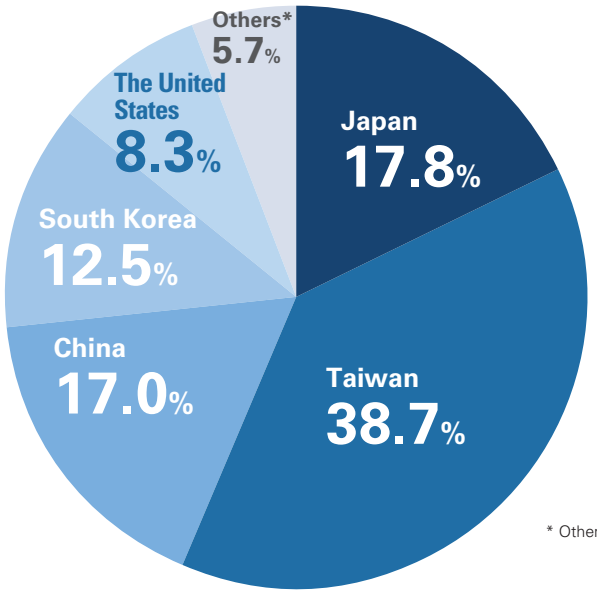
South Korea
- 1 local subsidiary (1 site)
- Number of employees: 153

* The numbers of local subsidiaries and sites are as of March 31, 2023, and the numbers of employees are as of December 31, 2022.

FY 2022/12

Consolidated net sales

¥175.4 billion



* Others: Europe, Singapore, and other countries

CAPITALS

Strengthening Value Creation Power with the Linkage and Synergy Among Capitals at the Core

The TOK Group will continue to survive the intense competition for technological development in the cutting-edge field of semiconductors, while sustaining long-term value creation in decarbonization and other fields with substantial environmental contribution by strategically enhancing technology (manufactured capital and intellectual capital), human resources (human capital), and human connections (social and relational capital) based on robust cash generating abilities (financial capital), thereby creating greater economic and social value through enhanced interaction among the capital sources.

Financial capital

- Financial capital policy for the super-long term
- Dividend policy based on net assets

■ Balance sheet management

Pursuing an optimal balance between investment, cash reserves, and shareholder returns

- Executing the niche top strategy in cutting-edge fields
- Aggressively taking risks as an R&D-driven company

■ Strategic policy on cash reserves

Establishing a policy on cash reserves of working capital, investment reserves, and risk reserves

- Develop technologies in anticipation of a super-long time frame
  Continue to make challenges over a super-long time frame
  Preparedness for major natural disasters
- Representing top-class financial soundness in the chemicals sector (equity ratio 71.3%, D/E ratio 0.06*)

* Both as of December 31, 2022

■ Enhancement of dividends

A dividend policy targeting a DOE of 4.0%

- Steady and continuous shareholder returns

■ Pursuit of higher asset efficiency

Target ROE: maintain at 8.0% (FY 2024/12)/10% or higher (FY 2030/12)

■ To maximize cash generating ability

Promoting investment and business strategies using EBITDA, ROIC, and IRR as monitoring indicators

Manufactured capital

- World-leading microprocessing technology
- World-leading high-purity processing technology

■ Microprocessing technology

Development and manufacture of materials to make semiconductor circuit line widths fine and materials used to make higher-density semiconductor packages
Development and manufacture of materials for stacking semiconductor devices in three dimensions

- Continuing to satisfy the sophisticated customer needs from the manufacturers of semiconductor and electronic components

■ High-purity processing technology

Supply clean solutions, thinners, and developing solutions with the highest purity in the world by absolutely minimizing impurities in the product

- Realizing shared value by improving yield, increasing productivity, saving resources, and reducing costs of customer's manufacturing lines on the mass production lines for cutting-edge devices and disseminating the social value (impact) of cutting-edge semiconductors
- Making our strengths more effective in highly challenging domains, such as controlling performance down to the molecular level

■ Niche top products

DNA of the founder, Shigemasa Mukai: "Create materials that are supported by advanced technologies and that cannot easily be imitated by other companies"

- Focusing on niche business fields shaped by radical and rapid technological changes
- Promoting a business model that continues to develop and bring to market new, high-end, high-value-added products

Intellectual capital

- Sustaining high levels of R&D investment
- Corporate culture supporting long-run development

■ High ratio of R&D costs to net sales

Maintaining ratio of R&D costs to net sales around 8%

- Strengthening R&D functions in Japan, the United States, South Korea, and Taiwan
- Continuing development for the further advancement of microprocessing and high purity processing technologies centered on research into functional polymer materials and the development of applied technologies
- Focusing on the development of new high-functional materials and production technologies; Also expanding and accelerating open innovation

■ Marketing capabilities in R&D

Integration of the development and the marketing

- R&D efficiency* has increased to 244% by 84 points over the past five years as a result of promoting the integration of development and marketing under an unfading startup spirit and the blue ocean strategy combined with the acceleration of stringently customer-oriented development. Excess cash beyond the standard value (200%) is used for long-run R&D envisioning more than ten years ahead.

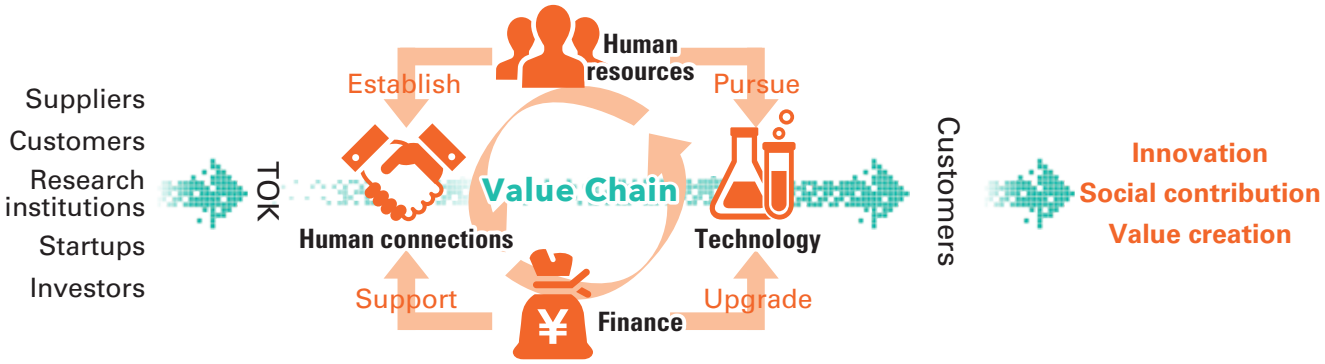
* R&D efficiency = Operating income over the past five years / R&D costs over the preceding five years

■ Long-run development

A willingness to accept challenges based on the management principle of creating a frank, open-minded business culture

- Fostering a frank, open-minded business culture that supports the challenges of the persistent pursuit and deepening of knowledge that has continued for more than 10 years even though R&D in cutting-edge fields becomes increasingly difficult

By enhancing interaction among the capital sources, create greater economic and social value



Human capital

- Personnel measures focused on happiness
- Diversity and inclusion

■ **Policy on Leveraging Human Resources "Never forget that all business begins with people."**
Increasing investments in human capital as a growth strategy

- Average annual salary per person increased by ¥1.86 million over the past 10 years,*1 and average tenure figure rose by 0.3 years.*1
- Ratio of paid leave taken stood at 79.6%, significantly higher than the national average of 58.3%.*2

*1 Unconsolidated basis

*2 Source: Ministry of Health, Labour and Welfare's Summary 2022 of General Survey of Working Conditions for fiscal years 2021 or 2020

■ **Endeavor to improve employee engagement as a key initiative in the medium-term plan**
Pursuing measures that align with individual values of personnel and their happiness

- Evaluation parameters for performance-linked share-based remuneration for officers consist of ROE and an employee engagement indicator
- New personnel system based on the mission grade system
- Executive Fellow system, SP position system (front-and back-office), incentive payment system, and technological recognition system

■ **Advancing international employees and female personnel**
Merit-based hiring and promotions regardless of nationality or gender

- The consolidated ratio of international employees has increased, and locally hired personnel with a deep understanding of TOK management principles in the sales, development, and manufacturing divisions are making a significant contribution to cutting-edge value creation.
- The number and ratio of female employees increased. Further promote diversity and inclusion toward the material issue: Contribution to innovation and the creation of social value.

Social and relational capital

- Staying abreast of customers who are leading global cutting-edge technology
- Supplier engagement

■ **Establishing development and manufacturing sites in the United States, South Korea, and Taiwan, where many customers are located**
Introducing prototype production lines equal to the ones of customers who are leading global cutting-edge technology

- Quickly commercialize R&D achievements and build a robust relationship of trust in the fast-changing semiconductor and electronics industries
- Flexible response to the risk distribution and global multi-site operations of customers

■ **Establishing robust customer base as a long-established supplier of photoresists**
Provide customers in all areas with a full portfolio, including legacy products

- Ensure long-term transactions for more than 20 to 30 years, especially in businesses related to decarbonization and power semiconductors

■ **Building innovation ecosystems with diverse stakeholders**
Collaborating with stakeholders and customers to drive innovation in the cutting-edge semiconductor fields where difficulty in development has been increasing each year

- Discover and support venture companies with technological advantages by engaging in joint research with academics, and participating in a variety of consortiums

■ **Creating cutting-edge value with suppliers**
Strengthening and improving supplier engagement that leads to human rights due diligence

- Create cutting-edge semiconductor materials from the formulation of raw materials together with suppliers
- Closely cooperate with suppliers in measures concerning global environmental conservation and human rights

Natural capital

- Contribute to decarbonization through business
- Minimize environmental risks

■ **Contribution to decarbonization both in the materials segment and through M&E strategies**
Provide products that contribute to decarbonization

- Reduce power consumption through the miniaturization of semiconductors by supplying cutting-edge photoresists
- Having a top share* of the world market for g-/i-Line photoresists is essential in the manufacture of power semiconductors used to conserve and control energy in renewable energy systems, electric vehicles, and hybrid cars. Sales of g-/i-Line photoresists have reliably accounted for almost 10% of consolidated net sales.
- Establish a competitive advantage in the development of materials for next-generation SiC/GaN power semiconductors as well

* Based on the projected shipment volume in 2022 (calculated based on Fuji Chimera Research Institute, Current Status and Future Outlook of Cutting-edge/Noticeable Semiconductor-related Markets 2023)

■ **Responsible care activities***
Appropriate management as a manufacturer that handles chemical substances and uses large volumes of water in the production processes, combined with efforts for reducing greenhouse gases toward decarbonization and for conserving biodiversity

- At all key sites in Japan, 100% of purchased electricity has been shifted to renewable energy sources.
- Focusing efforts on minimizing environmental risk in the production process and throughout our supply chain
- Promoting responsible care activities as a part of our Group Management System (GMS) that reinforces the group management structure globally

* Activities in which companies handle chemical substances voluntarily implement 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 communicating with the public. (Defined by the Japan Chemical Industry Association)

CULTURE & BUSINESS MODEL

Backbone of Business Model — DNA and Corporate Culture

Apart from the six financial and nonfinancial capital sources, the TOK corporate culture is an additional managerial resource that takes root in all field employees that developed from the DNA inherited from the era of Founder Shigemasa Mukai under the purpose of contributing to a sustainable future through chemistry. Celebrating its 83rd anniversary of foundation in 2023, TOK will continue to inherit its DNA and corporate culture to promote its business model featuring customer-oriented strategies.

DNA

Shigemasa Mukai,
TOK founder

— Ideal at foundation —

Challenging ourselves to develop products, however hard it may be, that are useful to society and not offered by other companies

— Policy for restart in the post-war era —

Create high-purity chemicals and other materials based on advanced technologies that cannot be easily imitated by other companies without imitating other entities

— At the establishment of the Tokyo Ohka Foundation for the Promotion of Science and Technology —

As a resource-poor country, Japan needs to develop products based on the proprietary technologies accumulated through basic research and their application to industry, thereby contributing to the peace and prosperity of humankind.

Purpose: Contributing to a sustainable future through chemistry

Corporate culture

Purpose-driven

Make sure that all management resources and initiatives ultimately contribute to society

◆

Creating shared value (CSV)

◆

Contribution to SDGs

Pursuit for niche top

Unfading startup spirit

◆

Blue ocean strategy

◆

Specialize in niche areas with high added value

◆

Global Niche Top Companies Selection 100

Long-run R&D

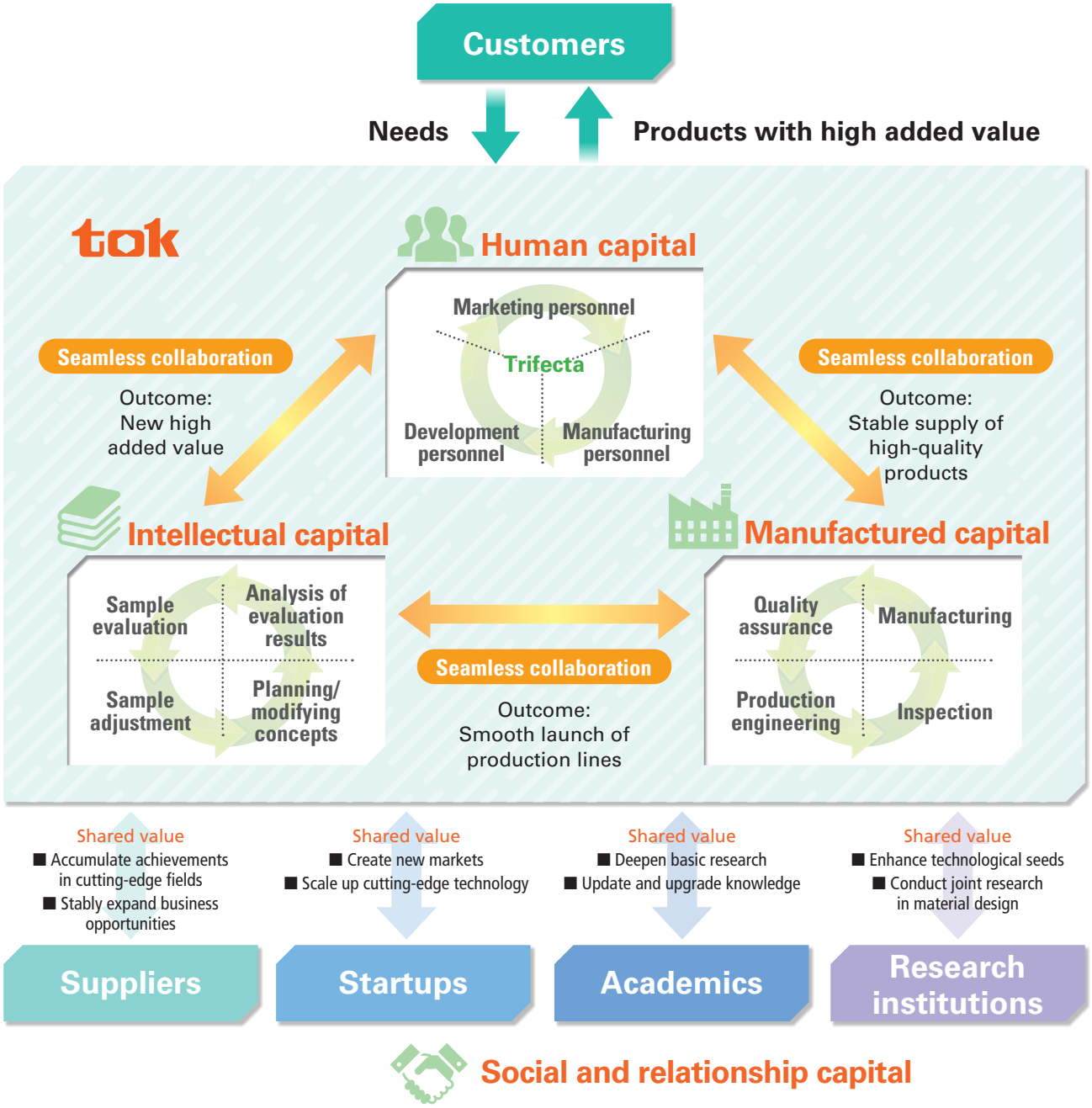
Persistently continue with R&D in pre-emerging fields for more than 10 years

◆

A frank and open-minded business culture that enables challenges in R&D and marketing, as well as research under the table

Business Model — Promoting Customer-oriented Strategies Based on the Trifecta of Development, Manufacturing, and Marketing Under the Unfading Startup Spirit

In its customer-oriented strategies, the human resources in the development departments, manufacturing departments, and marketing departments serve customers in a trifecta through seamless collaboration with resources across the TOK Group, thereby achieving the creation of new high added value, the smooth launch of products, and the stable supply at high quality. The Group also provides customers with diverse shared value obtained through collaboration with suppliers, startups, academics, research institutions, and open innovation embedded in our products.



VALUE CREATION PROCESS

TOK's Sustainable Value Creation Process

As the VUCA tendencies continue to intensify, TOK has formulated the management vision—The e-Material Global Company™—that contributes to a sustainable future through chemistry and under which the Group boosts the activities to achieve the TOK Vision 2030 based on the new TOK Medium-Term Plan 2024 launched in 2022. As a global niche top company, TOK contributes to the resolution of social issues based on the specified purpose by leveraging the robust customer base established in Japan and overseas.

Social issues/ megatrends

- Greater difficulty and longer spans in technological innovation
- Reduction of climate change risks by accelerating decarbonization
- Accelerated emergence of generative AI/ metaverse and dissemination of 5G/IoT
- Escalated infectious disease risk
- Shift to a new mobility society
- Widening information and education inequalities resulting from economic disparity
- Increasing risks of using fossil resources

Inputs (FY 2022/12)

Financial capital
Total assets: ¥238.0 billion
Equity ratio: 71.3%

Manufactured capital
Investment in plant and equipment: ¥14.5 billion

Intellectual capital
Number of patents: 361
R&D costs: ¥11 billion

Human capital
Number of employees (consolidated): 1,950

Social and relationship capital
Selling products in 28 countries/regions

Natural capital
Sustainable natural resources and biodiversity

Materials business | **New M&E strategies**

TOK Medium-Term Plan 2024

Increase the global market shares of cutting-edge photoresists, acquire and create core technologies for electronic materials and new fields, secure stable supplies of high-quality products and establish an optimal production system for the Group, improve employee engagement and promote people-oriented management, and establish a sound and efficient management foundation

Upgraded customer-oriented strategies

Accelerate the integration of the Marketing Department and the Research and Development Department, thereby upgrading the trifecta of development, manufacturing, and marketing into a new phase

Initiatives for Material Issues

Contribution to innovation and the creation of social value, pursuit of employee happiness, establishment of a resilient organization, global environmental conservation considering future generations, and supply chain sustainability

Global Niche Top Company

Maintain the business model that continues to develop and launch high value-added products in niche fields

Purpose and management vision

Contributing to a sustainable future through chemistry
The e-Material Global Company™
* Purpose

Management Principles

Create a frank, open-minded business culture;
continue efforts to enhance technology;
raise the level of quality of products; and contribute to society

TOK Vision 2030: overarching aspiration

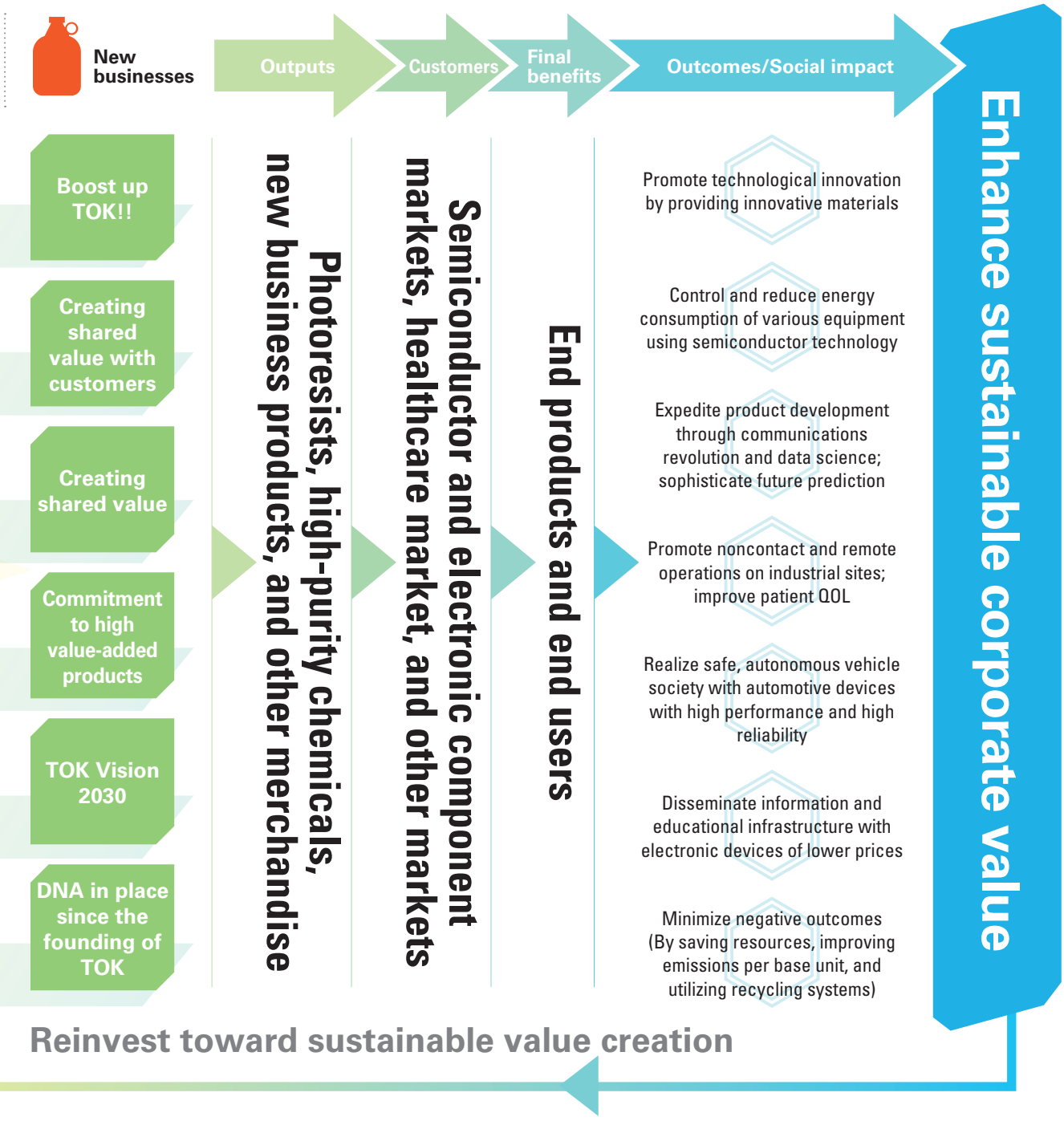
— Quantitative aspects —

Net sales	EBITDA	ROE
¥200.0 billion	¥45.0 billion	10% or higher

— Qualitative aspects —

- Provide new added value to inspire customers
- Earn the trust from stakeholders worldwide
- Continue developing high technological capabilities and show international presence
- Enhance corporate value sustainably with an aim to contribute to SDGs
- All employees can work lively with pride

Cutting-edge value creation in the semiconductor-related and electronics-related businesses, where technologies change at an extremely fast pace, is supported by investments in human capital, a financial base with a super-long-term view, world-leading technological capabilities based on continuous R&D, and initiatives for material issues. TOK will continue to flexibly upgrade the value creation process while closely monitoring global risks and opportunities and contribute to high-level social and scientific issues, thereby enhancing its sustainable corporate value.



STAKEHOLDER ENGAGEMENT

To Establish Win-win Relationships with All Stakeholders

TOK will achieve long-term sustainable value creation by generating new solutions and social impact through collaboration with stakeholders in response to increasingly complicated social issues and technological requirements.

TOK aims to establish win-win relationships with all stakeholders as mentioned below.

Our Stakeholders

TOK will contribute to the resolution of new social issues and unanticipated risks by creating shared value through close communication with stakeholders in Japan and overseas.

Customers

■ Shared value

- Provision of new added value that inspires customers (overarching aspiration under TOK Vision 2030)
- Relationship of trust that enables continued value creation in the cutting-edge fields
- Production structure that guarantees stable supply to society

■ Policies and basic initiatives

- Focusing on Strategy 3 under the TOK Medium-Term Plan 2024 **(see page 42)**
- Record-high investment in plant and equipment to support stable production in the semiconductor industry that is in a long-term growing trend
- Customer-oriented strategies (trifecta of development, manufacture, and marketing) to be further deepened and advanced
- Flexible response to global multi-site operations of customers
- Risk distribution by having production sites in five regions across the world
- Advanced initiatives in environment-/ sustainability-friendly products

■ Communication channels

- Customer-oriented sites established in Japan, the United States, China, South Korea, Taiwan, Singapore, and the Netherlands and collaboration/ engagement at customer sites

■ Specific examples and latest achievements

- Received supplier awards from many customers

Micron Technology
Micron Supplier Award (2022)

Shareholders and investors

■ Shared value

- Long-term sustainable growth and corporate value enhancement
- Increased capital efficiency
- Reduced capital costs
- Strengthened engagement through constructive dialog

■ Policies and basic initiatives

- Communicating with enhanced transparency of business management through timely and fair disclosure of information on finance and business activities
- Officer and department manager of the General Affairs Department undertakes management and oversight as IR Officer.
- Records of opinions and requests received through dialogs are collected and regularly reported to all directors as part of the information sharing process.
- In accordance with the Disclosure Policy, TOK endeavors to provide consistent information and ensure fair, timely, and appropriate disclosure.
- TOK has also established rules for the management of insider information and strives to ensure stringent observance.

■ Communication channels

- Business results meetings for analysts/ institutional investors (2 sessions*)
- Individual meetings with analysts/ institutional investors (283 sessions*)
- Financial results briefings for individual investors (7 sessions*)
- The integrated reports, business reports to shareholders and the notice of the convocation of the ordinary general meeting of shareholders are published on our website.

■ Specific examples and latest achievements

- Individual meetings with analysts/ institutional investors containing ESG topics (7 sessions*)

* Achievements in FY 2022/12

Business results meeting was held online (FY 2022/12)

Employees and future generations

■ Shared value

- Frank, open-minded business culture as one of the management principles
- New personnel system and measures that respect the values of each individual
- Establishing an environment that enables longer working life (e.g., enhancement of re-employment system)

■ Policies and basic initiatives

- The philosophy of the TOK Group Policy on Leveraging Human Resources is incorporated into the respective human resource measures
- Focusing on Strategy 4 under the TOK Medium-Term Plan 2024 **(see page 42)**
- Focusing on enabling all employees to work with vigor and pride as an overarching aspiration under TOK Vision 2030. Also featuring the leveraging global human resources as one of the Seven Management Strategies under the Vision

■ Communication channels

- Employee engagement survey
- Dialog sessions between young employees and the president
- Group reports issued in multiple languages (Japanese, English, Korean, and Chinese)
- Internal whistleblowing system to identify and improve or prevent compliance risks at an early stage (reports received: 0 time*)

■ Specific examples and latest achievements

- Strengthened communication to foster unity on a global basis (by issuing the group reports and the president's video message in multiple languages, etc.)
- Implemented CSR training for all employees, directors, and auditors in Japan: participation rate 100%*

* Achievements in FY 2022/12

Dialog sessions between young employees and the President

Suppliers/startups

■ Shared value

- Solid partnership to create high added value
- Supply chain that guarantees a stable supply to society while respecting the environment and human rights
- Based on the Occupational Health and Safety Policy, the utmost priority is placed on the maintenance of the health and safety of all internal and external persons (workers) who provide service in the work environment of the TOK Group.
- Open innovation through corporate venturing

■ Policies and basic initiatives

- Chemical substance regulations, customer requirement standards, and TOK procurement policy are shared through the TOK Group Standards on Chemical Substances Management
- Business transactions with impartiality, fairness, and transparency based on the CSR Policy, while respecting human rights, society, and the global environment
- Information management in accordance with the TOK Group Information Management Policy

■ Communication channels

- Inspection and verification of manufacturing systems through periodic audits (on-site and online)
- Joint research and development in the new R&D building

■ Specific examples and latest achievements

- Accelerating open innovation in the new R&D building of Sagami Operation Center

Universal Materials Incubator Co.,Ltd.

Participated in UMI3 Investment Limited Partnership (October 2022)

Academics, research institutions, and consortium

■ Shared value

- Initiatives toward technological breakthrough through industry-academia collaboration from a long-term viewpoint; enhancement and streamlining of basic research
- Expediting R&D process through collaboration with international research institutions
- Acquiring business opportunities through participation in the industrial consortium

■ Policies and basic initiatives

- Accumulating technological seeds that will lead to future blue oceans and new concepts
- Acquiring a broad range of technological seeds through open innovation in order to input internal resources in full scale as soon as the market takes off

■ Communication channels

- Sending TOK human resources to universities and research institutions in Japan and overseas
- Joint research and development
- Providing grants for research and development activities through the Tokyo Ohka Foundation for the Promotion of Science and Technology

■ Specific examples and latest achievements

- Established a joint laboratory with Yokohama City University (July 2019)
- Provided grants through the Tokyo Ohka Foundation for the Promotion of Science and Technology in 2022: 107 projects, ¥49.25 million

JOINT2

Participated in JOINT2, a consortium for the development of next-generation semiconductor packaging technology

Established a joint research site with the Tokyo Institute of Technology (June 2023)

National/ local governments and local communities

■ Shared value

- Sustainable development of society
- Response to global risks that include climate change, infectious diseases, and geopolitical risks
- Response to unexpected risks that will emerge

■ Policies and basic initiatives

- Purpose: Contribute to a sustainable future through chemistry
- Close collaboration with national/local governments and local communities toward the overarching aspiration under TOK Vision 2030
- Proactively promote social contribution activities in the areas around TOK business sites by emphasizing cooperation and collaboration with local communities and establishing a relationship of trust

■ Communication channels

- Negotiations with competent authorities in Japan, the United States, South Korea, and Taiwan related to environmental regulations and applicable laws
- Activities in accordance with the local policies and objectives in response to climate change risks and infectious disease risks, as well as the conservation of biodiversity
- Emphasizing local communication at normal times as the basis of stable value provision to society

■ Specific examples and latest achievements

- Dialogs about the environment and safety: 693 participating employees*
- Dialogs with local communities

* Achievements in FY 2022/12

Participated in the afforestation activities with residents of Kanagawa Prefecture through the Kanagawa Trust Midori Foundation

OUR MATERIAL ISSUES

Initiatives to Address Material Issues for Enhancing Sustainable Corporate Value

TOK defined material issues as the starting point for its long-term initiatives for the attainment of the TOK Vision 2030, a 100-year company in 2040, and carbon neutrality in 2050. The Company has endeavored to address the material issues closely linked to the TOK Medium-Term Plan 2024.

— Toward Achieving a Sustainable Future —

TOK aims to become "The e-Material Global Company™ contributes to a sustainable future through chemistry" under the TOK Vision 2030 where diverse benefits will be realized through the semiconductor technologies of autonomous vehicles, AR/VR, remote medical care, remote agriculture, and remote construction projects with communication revolution (Beyond 5G) at the core.

The TOK Medium-Term Plan 2024 was formulated by backcasting from the Vision with the aim of acquiring abundant business opportunities pertaining to a sustainable future, while implementing countermeasures against the risks of the increasing severity of climate change, the spread of infectious diseases, and the surge in economic security issues.

The Company defined five TOK's material issues aimed at the enhancement of sustainable corporate value by handling risks and opportunities as listed above. TOK will increase the effectiveness of key initiatives and the KPI for each material issue by promoting a PDCA cycle in close linkage with the TOK Medium-Term Plan 2024.

Process of defining material issues

Step 1

TOK selected the issues it needs to address to create sustainable value by considering the applicable guidelines in Japan and overseas, and the Responsible Care Code of the Japan Chemical Industry Association.

Step 2

TOK evaluated the selected issues to prioritize them from the two axes of importance for society and stakeholders, which considered day-to-day dialogs with ESG investors and other stakeholders, and the importance to TOK management, which considered strategies under the TOK Vision 2030 and the TOK Medium-Term Plan 2024 and identified the five most important items.

Step 3

TOK defined the identified items as material issues, along with key initiatives and risks and opportunities in a PDCA cycle for each issue, through discussions and approval at meetings of the Board of Directors.

Material issues

- Contribution to innovation and the creation of social value
- Pursuit of happiness in personnel
- Establishment of resilient organization
- Global environmental conservation considering future generations
- Supply chain sustainability

Contribution to the achievement of a sustainable future under TOK Vision 2030

Backcast

Accumulated achievements

TOK Medium-Term Plan 2024

Close linkage

Material issues

Material issues	SDGs to which we contribute	ESG fields	Risks and opportunities
Contribution to innovation and the creation of social value	3, 9, 11, 12, 13, 17	Social (S)	■ Intensifying global competition in the semiconductor industry and increased geopolitical risks ■ Expanding the role of cutting-edge semiconductors in innovation and the resolution of social issues ■ Increasingly complex silicon cycle ■ Technological advancement and market expansion in cutting-edge fields, both in the miniaturization and in the 3D packaging of semiconductors; market expansion in older generations (legacy fields)
			■ Expansion of applications and social needs of semiconductor technologies (such as life science-related materials, functional materials, and optical materials) ■ Risk reduction and long-term stable growth through the diversification of business portfolio and the multiplication of target markets
			■ Mixed presence of fields with tight supply and those with oversupply in the semiconductor market ■ Increase in the need for further advancement, complexity, and ultrahigh purification of customer requirements in semiconductor materials
Pursuit of happiness in personnel	3, 4, 5, 8, 10		■ Intensifying competition for recruitment in semiconductor-related industries ■ Global personnel development in conjunction with the increase in overseas sales ratio ■ Increasing importance of happiness in society (wellbeing)
			■ Creation of innovation and increase of competitiveness through the leveraging of diverse human resources ■ Aging of employees and the utilization of "know-why" of senior human resources
			■ Borderless expansion of supply chain ■ Escalating geopolitical risks
Establishment of resilient organization	16, 17	Governance (G)	■ Increase of potential risks involved in business growth and the increase of stakeholders ■ Rapid changes in the business environment in the era of VUCA
			■ Increase of sustainability requirements ■ Upgrading of supervisory and control functions to directly link business growth to the enhancement of corporate value
			■ More stringent laws and regulations based on global initiatives for sustainability and decarbonization ■ Maintenance and enhancement of social trust and brand power in local communities overseas
			■ Increasing tail risks that include pandemics and extremely severe natural disasters ■ Strengthening risk resilience to continuously fulfill supplier's responsibility
Global environmental conservation considering future generations	6, 7, 11, 12, 13, 14, 15	Environment (E)	■ Increasing climate change risks and accelerated initiatives for decarbonization ■ Cost increases due to the introduction and spread of carbon pricing ■ Cost increases due to more precise temperature control for cutting-edge products ■ Expansion of energy-saving effects through advancement in the miniaturization of semiconductors ■ Expansion of materials for power semiconductors
			■ Increase in water stress due to global warming ■ Increasing interest in the marine plastics issue ■ Expansion of a circular economy
			■ Tighter emissions regulations in major developed countries ■ Further risk reduction by satisfying standards stricter than regulatory requirements
			■ Increased risk of global biodiversity loss ■ Risk reduction through initiatives addressing biodiversity and water resources as a single issue
Supply chain sustainability	12, 17		■ Tighter chemical substance control regulations in major developed countries ■ Increased product value by taking thorough action prior to legislation from before and during the early stages of material development
	3, 12	Social (S)	■ Increased risks of accidents due to the increase of production sites, production volume, and operating hours ■ Escalating human rights risks resulting from expanding supply chain and increasing importance of lifecycle assessment ■ Further risk reduction through RBA audits and ISO 45001 certification

By creating value based on purpose, the TOK Group will contribute to the creation of a social impact toward the realization of a sustainable future.

Noriaki Taneichi

Representative Director, President & Chief Executive Officer

To Our Stakeholders —Message from the President—

Social impact

Achieve breakthroughs in cutting-edge fields

Since its foundation as a fine chemical manufacturer in 1940, TOK achieved sustainable growth and enhanced its corporate worth by creating new value that contributes to the resolution of the social issues of each era as an R&D-driven company specializing in niche cutting-edge fields. In FY 2022/12, especially large progress was made in the development of materials for cutting-edge processes in the miniaturization of semiconductors. By upgrading the manufacturing process with state-of-the-art equipment at the Sagami Operation Center, TOK made significant advances toward the realization of a 2 nm semiconductor, in addition to the further performance improvement of EUV photoresists for the 5 nm line width. TOK has continuously increased its market share of EUV photoresists for 5 nm semiconductors, which are in mass production and currently in the dissemination phase. Compared to 7 nm, 5 nm semiconductors reduce power consumption by 30%, which contributes to global CO_2 emissions reduction. In addition, 2 nm semiconductors will increase operating speed by about 45% from 7 nm and reduce power consumption by about 75%, thereby likely to generate a distinctive social impact, including energy savings by data centers that are considered to account for about 1% to 2% of global energy consumption, further high-speed laptop PCs, and the expected detection of objects by autonomous vehicles combined with reduced reaction times. Under the TOK Purpose of contributing to a sustainable future through chemistry, the Group will further invigorate its unfading startup spirit, which has taken root in its corporate culture, and thereby contribute to the generation of a social impact as a long-running R&D-driven company. **(→ see pages 10–11, "IMPACT ENABLER")**

Continuously enhance social and economic value even when market growth slows or is in an adjustment phase

As a core component of the value creation at TOK, I would like to emphasize that TOK's microprocessing technology and high-purity processing technology, which have been continuously upgraded since the foundation of the company, have led to substantial contributions to the quality improvement of world leading cutting-edge semiconductor devices.

In the ongoing effort to miniaturize semiconductors, reducing defects to ultimately minimize impurities is the key, in addition to advances in exposure sensitivity and etching performance. In particular, the current type of EUV lithography system costs about 15 billion yen per unit and the next-generation type costs about 45 billion yen. To establish one plant for 2 nm semiconductors, a capital investment of about two trillion yen must be considered.

Under these circumstances, two key points are required to have TOK EUV photoresists selected. One is to improve the sensitivity of photoresists so that more high-cost lithography systems operate and more semiconductors can be produced with less power consumption. For doing so, TOK microprocessing technology plays a significant role. The second point is to achieve defect reduction by minimizing impurities in photoresists and other materials, as well as in the manufacturing processes.

The semiconductor market growth in FY 2022/12 was only 3.3% year-over-year. However, TOK achieved an increase in consolidated net sales by 25.3% by expanding its market share for EUV/ArF photoresists through the attainment of these two key points by upgrading the manufacturing process as mentioned above. At the same time, customers achieved yield improvement and cost reductions. As a result of this, TOK delivered convenient, comfortable, safe, secure, and environment-friendly living based on cutting-edge semiconductors to more end users at lower prices. The improved sensitivity of photoresists and defect reductions minimize the negative outcomes, such as power consumption, water consumption, and resource disposal, in semiconductor manufacturing processes. Needless to say, this led to the sustainability of the global environment.

The semiconductor market is expected to grow on a medium- to long-term basis by about 1.5-fold to become a one-trillion-yen market by 2030.* On the other hand, uncertain conditions remain with regard to the short-term future. TOK continues to advance toward its overarching aspiration for 2030 **(→ see page 43)** by consistently winning the competition in cutting-edge fields and contributing to the generation of a social impact, thereby continuously enhancing social value and economic value, even when market growth slows or is in an adjustment phase.

* Source: German Electrical and Electronic Manufacturers Association (ZVEI) (March 2023)

Management resources

Shed light on all internal and external management resources and enhance the happiness of stakeholders

The growth forecast for the semiconductor market until 2030 as mentioned above and TOK's road map toward its overarching aspiration incorporate not only the growth of cutting-edge semiconductors, such as logic and memory but also the growth of the legacy fields in microprocessing, such as sensors and power semiconductors. The Group has newly specified four fields as target fields for contributing to the generation of a social impact toward the attainment of a communication revolution and TOK's overarching aspiration for 2030: sensing & IoT and green energy in legacy fields as well as information terminals and cloud computing in the cutting edge fields **(→ see pages 10–11, "IMPACT ENABLER")**.

A substantial impact is generated not only by cutting-edge semiconductors but also by legacy semiconductors toward the resolution of a variety of social and environmental issues that face humans and improvements in living quality. As mentioned earlier, immediate public interest tends to focus on 2 nm semiconductors and other cutting-edge fields. However, TOK also supplies photoresists for IoT and sensors that support the safe, secure lives of people. TOK also has the largest global market share of g/i-Line photoresists for power semiconductors which greatly contribute to decarbonization, and owns substantial human capital, manufactured capital, social and relationship capital, and intellectual capital pertaining to these photoresists. As mentioned at the beginning of this document, TOK aims to initially pursue the happiness of employees and to enhance the happiness of external stakeholders and the global community, and further of human kind. Toward these goals, the Group sheds light on all these management resources afresh and focuses on the four fields as the means to enhance the happiness of stakeholders. By fully utilizing internal and external management resources in all fields, TOK will pursue contributions for a further social impact.

By maximizing interaction and synergy among the capitals, create larger economic value and social value

Within these initiatives, the most important step is to strengthen interaction and synergy among the capital fund components. I have defined the four earning powers of the TOK Group: technology (intellectual capital and manufactured capital), human resources (human capital), human connections (social and relationship capital), and finance (financial capital). The value chain of the TOK Group consists of the advanced technology that has been accumulated since the foundation of the company and the human connections with our customers and suppliers. Human resources are the source of these powers. Bold challenges need to be made in certain cases to strengthen these three powers, which are enabled by robust financial power. TOK will continue to achieve sustainable growth and corporate value enhancement by strengthening these capital components.

As the issues that face humans become increasingly more difficult and complex and the VUCA tendencies intensify, TOK will continue to be a company with an unfading startup spirit while rolling out business models for consistently beating competitors that are larger than TOK and that have different cash generation structures and business portfolios from TOK. In addition to further strengthening each capital component, TOK will further enhance its collaborative creation among the capital components and maximize the synergy, thereby creating greater economic value and social value in order to achieve higher competitive advantages and more contributions to its social impact.

Recognition of business environment

Medium- to long-term business opportunities are being maximized to an unprecedented scale

FY 2022/12 was the first year of the TOK Medium-Term Plan 2024, which was backcast from the TOK Vision 2030 aiming at achieving net sales of 200 billion yen by 2030. For this year, TOK expanded its market share of EUV/ArF photoresists as mentioned above and increased the sales of high-purity chemicals for cutting-edge fields, thereby substantially exceeding the market growth rate and achieving record-high performance for three consecutive years.

In 2023, the semiconductor market is expected to remain in an adjustment phase and decrease by 10.3% year-over-year. However, TOK believes the market will

increase to the record largest scale again in 2024, triggered by the expansion of the generative AI market.*1 As mentioned earlier, the market is also expected to grow to a one-trillion-yen scale by 2030.*2 Therefore, we can state that medium- to long-term business opportunities that surround TOK are being maximized on an unprecedented scale. To steadily grasp these opportunities, TOK will additionally allocate cash of 15 billion yen to the initial medium-term plan and make the largest capital investment ever of 60 billion yen over the next three years in Japan and overseas.

*1 Source: World Semiconductor Trade Statistics (published in June 2023)
*2 Source: German Electrical and Electronic Manufacturers Association (ZVEI) (March 2023)

Take precautions against complacency to continue handling maximized risks

On the other hand, the risks that surround the TOK Group continue to increase in proportion to the maximized opportunities. The Group will take the utmost precautions in handling the risks while never becoming complacent about the favorable performance over the past three years.

Concerning the largest capital investment ever that was mentioned earlier, we remind ourselves of our principle based on the lessons learned from the 2008 financial crisis when we reported the first operating loss since our listing—to be ambitious in earnings, a coward in spending, but brave in implementing determined investments. Based on this principle, we will maintain robust business management by promoting ROIC activities while maximizing cash generation capability based on a strong financial foundation.

In the meantime, there are price-raising pressures and tightening of the supply of raw materials due to reduced investments in fossil fuels resulting from the acceleration of global decarbonization, recovery of the global economy following the COVID-19 pandemic, and the Ukraine crisis. In FY 2022/12, TOK achieved appropriate profits by substantially expanding the scope of application of the selling price adjustment measures (passing material price rise on to selling prices and introducing formulas linked to material prices). The Group also endeavored to achieve a stable supply to customers and maintain the supply chain through rapid decision-making at monthly supply chain meetings. In the coming years, we will proactively promote strategic investments in preparation for another tightening of supply and demand while having an overview of the entire supply chain in Japan and overseas, thereby rolling out ambitious supply chain strategies with greater resilience.

Hope for the spread of a social impact by leveraging a centralized production model and a local production and local consumption model

Geopolitical risks are increasingly escalating because of the international momentum of regarding semiconductors as strategic supplies, combined with the U.S.-China confrontation and the Ukraine crisis. TOK will continue to flexibly respond to shift by customers to multiple global sites and reshoring. TOK will also fully utilize its global network of the five regions (Japan, the United States, China, the Republic of Korea, and Taiwan) while optimally combining its business portfolios and regional portfolios to achieve a flexible response, such as producing photoresists in a centralized production model and high-purity chemicals in a local production and local consumption model. As mentioned at the beginning of this document, the TOK Group aims to achieve a sustainable future filled with happiness. TOK hopes that the social impact that is generated by providing high value-added products that contribute to innovation through technological advancement will spread to people around the world. Our hope at the TOK Group is that the gaps widening around the world will be reduced and society becomes filled with happiness. We believe that this is also what society expects from TOK.

Self-reformation

Introduce a new M&E strategy by transferring the equipment business

In FY 2022/12, TOK decided to promote two self-reformations as steppingstones in responding to the maximized risks and opportunities as the TOK Group and continuing sustainable growth and corporate value enhancement.

The first self-reformation was the introduction of a new M&E strategy by transferring the equipment business. Since the development of the plasma ashing system in 1971, TOK has focused on Materials and Equipment (M&E) strategies and established a thick customer base through unique product portfolios specializing in niche areas, such as developing machines, coating machines, and process equipment for LCD panels, as well as UV curing machines and wafer handling system Zero Newton®. The process equipment for LCD panels especially defined a generation in the 2000s. TOK also received repeat orders for the plasma ashing system for use with power semiconductors and for Zero Newton® for use with 2.5D to 3D semiconductors. We are confident that the unique M&E strategies of TOK have resulted in certain achievements by providing clear added value and social value. On the other hand, the business scale decreased through the restructuring of the LCD panel market and the 2008 financial crisis combined with the difficulty in maximizing the strengths of the fabless operation specializing in R&D, which resulted in the recent weak performance reporting deficit for seven consecutive fiscal years.

In the semiconductor industry which requires to provide advanced solutions, what would be the optimal way to recover earning power in this business while continuously upgrading the M&E strategies for integrating properties in the three aspects of materials, equipment, and processes?
—Our conclusion through deliberation of several plans in Japan and overseas was to transfer the business to and execute a partnership contract with AIMECHATECH, which has substantial strengths as a dedicated equipment manufacturer. While consigning the operation of the hardware equipment business to AIMECHATECH, TOK concluded the basic partnership contract based on the M&E strategies and acquired nearly 20% of the company's shares. In this way, TOK established a solid relationship with the company with a certain influence on its management and thereby pursuing the further development of its M&E strategies to enhance TOK corporate value as a material manufacturer.

Shift to a company with an Audit and Supervisory Committee for advanced governance

The second self-reformation is the shift from a company with a Board of Auditors to a company with an Audit and Supervisory Committee as a part of the corporate governance structure. TOK shifted to the new structure because of the need to upgrade corporate governance and establish a resilient organization in line with the expansion of the business scale toward the objectives announced in TOK Vision 2030 (net sales of 200 billion yen or more and EBITDA of 45 billion yen or more), while continuously handing over TOK's unfading startup spirit as part of its corporate culture. A part of the important executive decision-making authority of the Board of Directors is delegated to the representative director, and we will have deeper essential discussions concerning future growth strategies, a desirable business portfolio, and sustainability that includes risk management and human capital strategies. As the Audit and Supervisory Committee, the majority of which consists of outside directors with voting rights, monitors the various executive operations of the TOK Group from diverse viewpoints, TOK will achieve more transparent management with a smaller distance between the Board of Directors and field employees.

TOK medium-term plan 2024 and initiatives for material issues

Substantially progress in contribution to innovation and the creation of social value as a material issue

In the TOK Medium-Term Plan 2024, which started in the last fiscal year, we promoted the PDCA cycle to become "The e-Material Global Company™" of contributing to a sustainable future through chemistry under the management vision announced in the TOK Vision 2030 by closely linking the five key strategies and material issues together. In FY 2022/12, through initiatives for the material issue of the *contribution to innovation and the creation of social value*, TOK's net sales of EUV/ArF photoresists increased through technological advancement based on defect reductions as earlier stated. As a result, we made substantial progress in TOK's key strategies to increase the global market shares of cutting-edge photoresists and to establish an optimal production system for the Group.

Pursue heat-control materials toward the generation of the next impact

Under the key strategy of acquiring and creating the core technologies for electronic materials and new fields, we are focusing on the development a new business that will parallel photoresists and high-purity chemicals with the goal of becoming a 100-year company by 2040. In FY 2022/12, the cell sequencing chip SIEVEWELL™, marketed with the TOK brand in the life science materials, started to substantially disseminate into the settings of drug discovery screening and cancer treatment. Materials for biochip production for the next-generation DNA sequence, which increased the efficiency in clinical sites, have also gained acceptance.

TOK promoted the development of light-control materials, heat-control materials, and surface-control materials as a new business or existing businesses. In particular, heat-control materials include many remaining requirements that humans need to pursue toward reducing climate change risks. We consider these to be a major prerequisite to the achievement of a sustainable future and society filled with happiness, as well as green energy selected as the focused field. In FY 2022/12, as the development of a new product under this theme, we promoted the development of radiating heat-dissipation materials that emit the heat generated by semiconductors and electronic parts without needing a cooling fan. The radiating heat-dissipation materials implement the cooling effect through heat dissipation from the heat source of electronic parts. The materials achieve sustainability both in functionality and in composition with the heat-emission sheet design that would achieve downsizing and space-saving, combined with the use of environment-friendly materials. The potential market for the materials is expected to become a several-billion-yen scale, including automotive devices. By expanding the scope of application, the materials may generate greater economic value and social value in the future. We will continue to

promote long-term R&D concerning heat-control materials toward the contribution to the next social impact.

Endeavor to improve employee engagement as a key strategy in the medium-term plan

As I have said, the TOK Group started from the pursuit of happiness for employees and pursued the contribution to a social impact. TOK promotes the pursuit of the happiness of personnel as a new material issue and improves employee engagement and promotes people-oriented management as the fourth key strategy in the medium-term plan. In addition, we introduced an employee engagement index in FY 2022/12 as one of the evaluation parameters for the remuneration of directors. In this way, TOK accelerates initiatives for improving employee engagement through the strong commitment of management executives.

As specific initiatives, we designed and introduced detailed systems while operating the new personnel system based on the mission grade system, which was introduced at the beginning of this year. In September 2022, TOK joined the Human Capital Management Consortium, which was established by Mr. Kunio Ito, director of the Hitotsubashi CFO Education and Research Center, and other initiators, where TOK shares advanced cases in the practice of human capital management, discusses inter-corporation cooperation, and examines effective information disclosure. While doing so, I promoted research on the formulation of a balance sheet for human resources, a balance sheet for technology, and a balance sheet for human connections, which I mentioned in the Integrated Report last year in cooperation with the department manager of the Accounting and Finance Department. We pursue the enhancement of corporate value by quantitatively measuring the value of nonfinancial capital, accumulating and utilizing the capital, and maximizing synergy among the capital components.

Pursue the material issue of global environmental conservation in consideration of future generations as a prerequisite for a sustainable future

As a prerequisite for a sustainable future and a society filled with the happiness that we pursue, we also promote initiatives for global environmental conservation in consideration of future generations, a material issue closely linked to the contribution that has a social impact. In FY 2022/12, we made particular progress in the initiatives for carbon neutrality, including the contribution to lower power consumption through the miniaturization of semiconductors, combined with the steady sales of i-Line photoresists for power semiconductors and of materials for next-generation power semiconductors, such as SiC (silicon carbide) / GaN (gallium nitride). Furthermore, TOK funded the UMI3 Fund, a venture capital firm featuring support for decarbonization startups, since October 2022 as engagement in more advanced decarbonization initiatives.

As an initiative for attaining the long-term environmental objectives of TOK toward 2030, the company shifted more than 70% of purchased electricity to renewable energy sources at all key sites in Japan in September 2021 and 100% in February 2023. Compared to before the introduction of electricity from renewable energy sources, TOK reduced CO_2 emissions by about 20,000 tons annually.

In the coming years, we will grasp and disclose the financial outcomes of these initiatives related to the risks and opportunities of decarbonization within the framework of TCFD, thereby further refining our growth strategies. In particular, based on the keen recognition of the emerging water risk in Taiwan, which has become one of our key production bases, we implement local countermeasures and risk reduction measures using our global network.

Establish a Council of Directors as a unique meeting body that also functions as the core of sustainability governance

TOK endeavors to strengthen the effectiveness of governance under the material issue *establishment of a resilient organization*. As stated earlier, TOK shifted to a company with an Audit and Supervisory Committee in March of this year. In addition, the company also implemented a Council of Directors as TOK's unique meeting body as the first step in achieving more transparent management with a smaller distance between the Board of Directors and direct labor force. The Council comprises Board members, executive officers, the heads of related departments, and persons in charge. Through frank and open-minded discussions, Council members will exchange differing opinions concerning management issues and provide the resulting inputs to the Board of Directors and the Committee of Officers. The Council has also started functioning as a core organization for sustainability and governance. The identification of issues and constructive investments in human capital, risk management, and carbon neutrality initiatives at the Council lead to discussions and resolutions at the Board of Directors concerning ESG and sustainability issues and initiatives on material issues.

The TOK Group will continue contributing to the social impact toward a sustainable future. Employees and the Board of Directors are engaged in the initiatives concerning the material issues described above. Through these initiatives, TOK will reduce short-term, medium-term, and long-term growth inhibitors, thereby reducing capital costs and enhancing sustainable corporate value. As specific initiatives, management and under, and the Board of Directors cooperatively maintain effective sustainability governance based on discussions by the Council of Directors as mentioned above. At the same time, I will take the leadership role in pursuit of corporate value enhancement through sustainability activities.

We request your continued expectations for purpose-driven value creation and contribution to a social impact by TOK.

Message from the Officer in Charge of Accounting and Finance

Through BS management entailing improvement in cash allocation and nonfinancial capital, TOK pursues the practice of the Purpose and corporate value enhancement.

Okikuni Takase
Officer, Department Manager, Accounting and Finance Department

Achievements and issues in the 1st year of TOK Medium-Term Plan 2024 and key measures for the 2nd year onward

Supporting all value creation activities through improvement in cash allocation

As both risks and opportunities become maximized in the business environment with continuously emerging tail risks, I support all value creation activities of the TOK Group and its contribution to a social impact with financial power by incessantly improving cash allocation within the company.

As part of this initiative, I promoted large investments without delay based on the three-year cash flow plan that clearly demonstrated the intention of effectively using the earned cash in FY 2022/12 as the first year of TOK Medium-Term Plan 2024 by backcasting from TOK Vision 2030 and of the new material issues. Furthermore, I implemented several additional investments in order to grasp opportunities in the semiconductor industry, which continues to grow on an unprecedented scale in the medium to long term. I am also steadily establishing preparedness for more diversified funding in order to make larger growth investments than earned, including the acquisition of credit ratings in 2022 and the subsequent upgrading.*1

In the meantime, I recognize that a requirement is to improve capital efficiency by strengthening risk hedges in order to minimize any impact on the TOK Group caused by tail risks as in the COVID-19 pandemic and the Ukraine crisis. If cash reserves are excessively reduced for the purpose of BS adjustment, a certain impact on growth investments and recruiting cannot be avoided in the event of emerging tail risks. Therefore, I implement financial capital measures that achieve robust resilience while emphasizing capital efficiency.

Because cash generation steadily progressed in the first year of the Medium-Term Plan, I modified the cash flow plan at the beginning of the second year with the respective addition of 15 billion yen to the three-year cumulative EBITDA plan and investments in plants and equipment plan. These modifications were made because I recognize the high probability of the medium- to long-term growth of the semiconductor industry, while representing my strong determination to continue investments in plants and equipment through BS adjustments (such as the use of cash reserves and external funding) from the medium- to long-term perspective, even if EBITDA does not increase on a short-term basis.

*1 From A as of February 2022 to A+ in June 2023 (R&I credit rating)

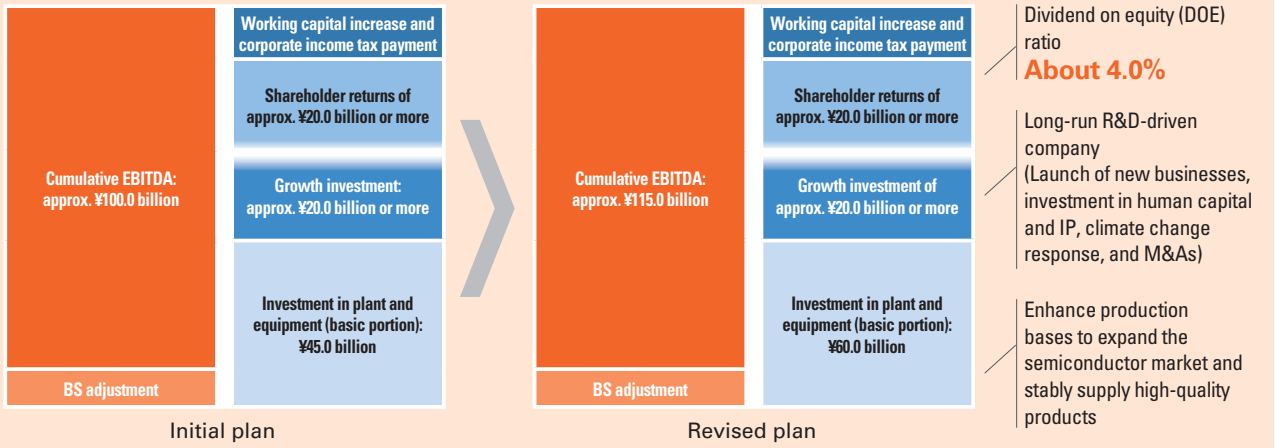
For corporate value enhancement through investment in human capital and countering climate change

The growth investment of about 20 billion yen as part of the three-year cash allocation includes the investment in human capital and countering climate change. I will steadily promote these measures that will lead to corporate value enhancement.

Through investments in human capital, TOK improves employee engagement and promotes people-oriented management as the key strategy of the Medium-Term Plan and pursues the happiness of all personnel as a material issue. Through BS management that includes nonfinancial capital and that supports these initiatives, TOK will strive to accumulate the three earning powers (nonfinancial capital) as assets on a long-term basis, comprising technology (manufactured capital and intellectual capital), human resources (human capital), and human connections (social and relational capital), toward the practice of the Purpose **(See pages 4–9, "CORE COMPETENCE")**. In addition, TOK introduced employee engagement indicators as one of the evaluation parameters for the remuneration of directors under TOK Medium-Term Plan 2024. In this way, TOK strengthened the commitment of its management executives to investments in human capital, thereby upgrading the correlation between nonfinancial capital and financial capital and leading to the enhancement of the TOK brand and corporate value.

In countering climate change, TOK is promoting the introduction of renewable energy and other measures for attaining the long-term environmental objectives by 2030 with the aim of the achievement of carbon neutrality by 2050. The TOK Group started the calculation of the financial effect of these measures in TCFD-based disclosure **(See pages 68–69)**. TOK is also strengthening measures for the quantitative identification of contribution made by countering climate change to the future

Revised the three-year cash flow plan based on the results of first year of the Medium-Term Plan



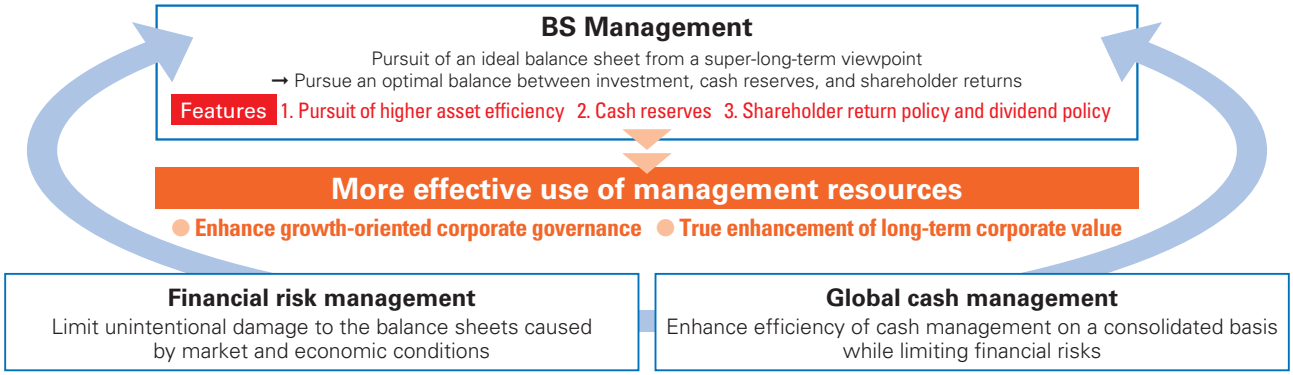
Cash reserve policy

As a long-running R&D-driven company, TOK calculates cash reserves from the standpoint of securing necessary funds.

- Develop technologies in anticipation of a super-long time frame
- Continuously tackle challenges over a super-long time frame
- Respond rapidly when the unexpected happens (restoration and rebuilding following major disasters)

Amount of cash reserves = Working capital + Investment reserves + Risk reserves

Continue promoting the trinity of BS management, financial risk management, and global cash management



capital cost reduction and corporate value enhancement. As its contribution to decarbonization through business, TOK has been demonstrated that semiconductor photoresists generate clear impact through the energy-saving effect of miniaturization and power semiconductors **(See pages 10–11, "IMPACT ENABLER")**. In the coming years, the Group will further strengthen the PDCA cycle for corporate value enhancement and its effectiveness by upgrading the calculation of such social impact.

Supporting risk taking as a long-running R&D-driven company with finance

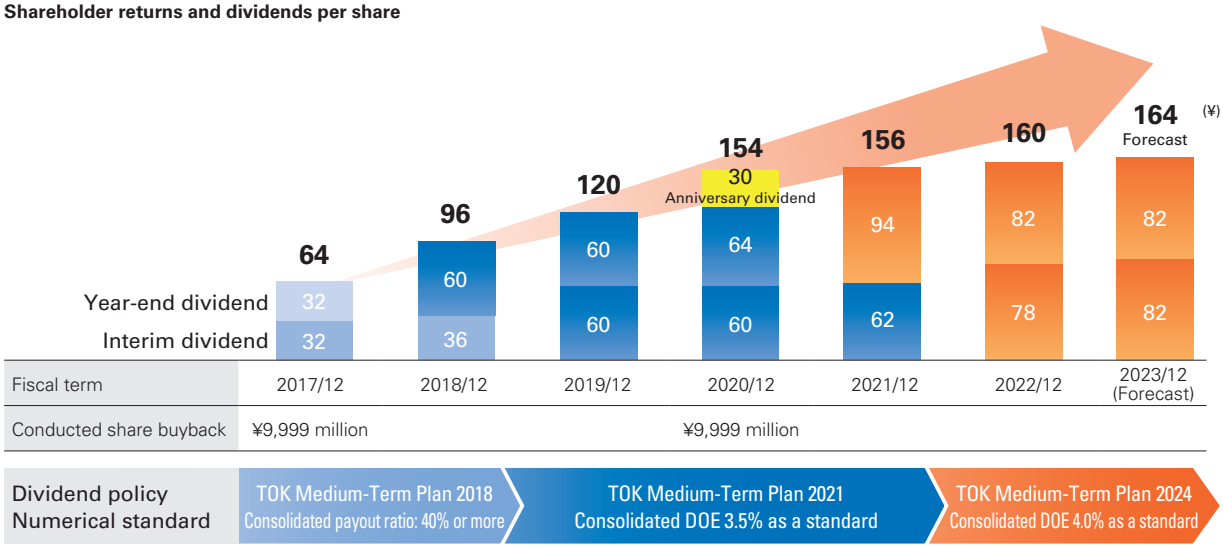
To grasp the maximized opportunities as a prerequisite for medium- to long-term growth in earnings, I will continue to support TOK's proprietary long-running R&D with finance, considering the increasing technological difficulty in the cutting-edge fields of semiconductors. To harvest growth through long-term R&D for more than ten years and continuous investment in production equipment, it is essential to make intensive investments with a clear focus on future markets. Therefore, I will identify future cash flow and business risks and balance capital costs and risks on a long-term basis with agile and efficient funding.

Continuing DOE 4.0% policy for shareholder returns

TOK plans shareholder returns of more than about 20 billion yen over three years under the cash allocation plan and the DOE 4.0% policy as mentioned above. Based on this plan, the cash dividend applicable to the year per share was increased by four yen from the previous fiscal year to 160 yen for FY 2022/12, the highest dividend ever.

This policy has mostly been favorably evaluated in dialogs with shareholders and investors. TOK is also receiving opinions that more cash should be allocated to growth investment, considering the present condition of the semiconductor industry, which has started growing at unprecedented speed. However, because the growth fund is likely to be sufficient for the time being, TOK will continue to reinvest earned cash while retaining adequate equity under this policy, thereby maintaining a favorable circle that leads to further business growth combined

Shareholder returns and dividends per share



with cash generation and increased ROE. In this way, TOK will provide long-term returns to shareholders who support TOK's long-run value creation from a long-term perspective.

The TOK Group also receives a variety of opinions concerning the buyback of shares. The Group plans to optimize necessary cash toward sustainable growth under the cash reserve policy above and flexibly buy back the shares if any surplus is generated.

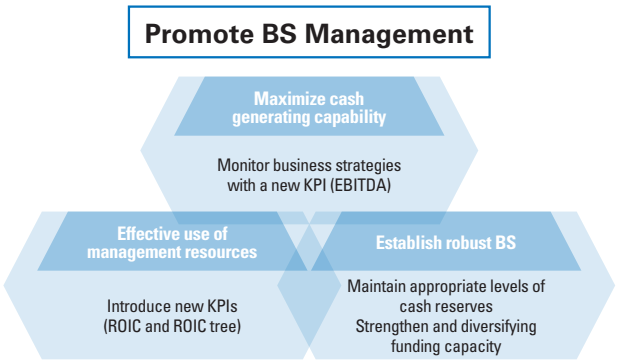
Initiatives toward TOK Vision 2030

Upgrade BS management from a long-term perspective

While undertaking the initiatives described above, the company initiated TOK Vision 2030 in August 2020, which aims to maximize cash generating capabilities, effectively use management resources, and create resilient balance sheets in order to upgrade the financial capital policy based on BS management from the long-term perspective through the monitoring of business strategies by introducing EBITDA, introducing and disseminating ROIC and the ROIC tree, maintaining appropriate levels of cash reserves, and enhancing and diversifying fundraising capabilities.

To maximize cash generating capabilities through the monitoring of business strategies by introducing EBITDA, TOK will promote monitoring by using EBITDA as the KPI because a substantial loss of opportunity may result if TOK refrains from investment in plants and equipment for the fear of short-term increase in depreciation and amortization in cutting-edge fields with rapid technological changes. With respect to the discussion of cash allocation, EBITDA is also effectively functioning as an indicator that replaces cash in.

Establishing and effectively using the financial foundation as a strategy under TOK Vision 2030



ROIC activities toward the effective utilization of all management resources

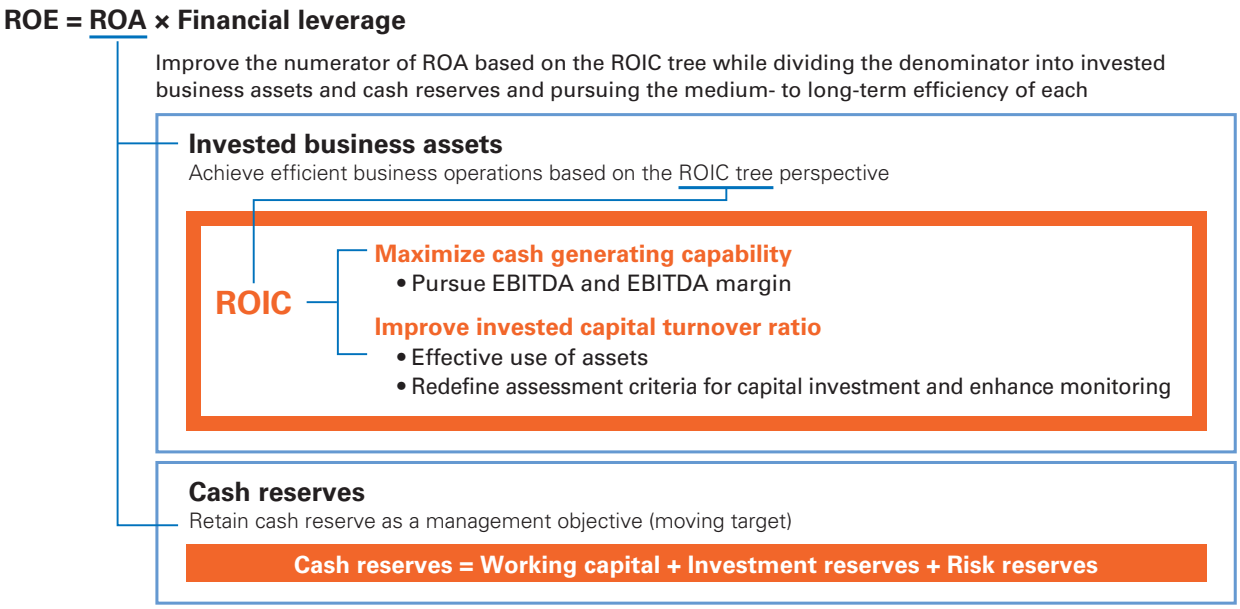
TOK will continue to promote ROIC activities to effectively use management resources as part of the BS management stated in TOK Vision 2030.

The initiatives of ROIC and ROIC tree have been steadily disseminating into on-site personnel. Both the identification of optimal cash reserves from the long-term perspective and the ROIC activities to measure the strengths of businesses are simultaneously in progress for ROE improvement. TOK is also promoting both the macro approach and the bottom-up approach to attain an optimal balance between the maximization of earning power and the quality of assets in business activities.

As for the macro approach, TOK introduced ROIC targets on a simulation basis, toward which the company is drafting plans using multifaceted thinking. TOK is also expanding the scope of ROIC training from only officers to group-wide tier-based training. In this way, the company hopes that all managers and employees will fulfill their tasks with a medium-term and long-term BS mind and not only focus on short-term PL.

In the bottom-up approach, TOK promotes the effective use of assets and the on-site improvement of the respective components and KPIs, featuring the initiative for the ROIC reverse tree at ROIC model plants. Consequently, the

Improving ROIC for better ROE to utilize management resources efficiently



company effectively utilized the noncurrent assets of plants and improved the cash conversion cycle (CCC) linked among the plants and marketing departments. TOK will advance ROIC activities while continuously reviewing the components and KPIs in consideration of the ongoing rapid environmental changes and the goals of each business segment. In addition, by applying IRR to large-scale investment in plant and equipment, TOK aims to clarify the cash flow, payout time, and yield of the relevant projects.

Strengthen tax affairs governance on a worldwide basis

The TOK Group will continue to emphasize tax payment as a means of providing returns to social and relational capital from TOK. The TOK Group will continue to grasp taxation and tax customs, as well as product market conditions, in all regions where the Group does business, while maintaining an overview of tax affairs and identifying requirements at each entity and on a consolidated basis. At the same time, TOK will continue to formulate a transfer pricing policy based on the information above, incorporate the policy into the transfer pricing documents for Base Erosion and Profit Shifting (BEPS), and enhance training for group tax personnel in each country. In addition to these measures, TOK will strengthen tax affairs governance on a worldwide basis in cooperation with many stakeholders in Japan and overseas.

Upgrade BS management including both financial capital and nonfinancial capital

To upgrade BS management as specified above, I, as the director in Charge of Accounting and Finance, will continue to strengthen BS management including both financial capital and nonfinancial capital, while deepening my understanding of TOK's strengths, management resources, and corporate culture. In this way, I intend both to maximize cash generation capability and to reduce capital costs, so that TOK will continuously contribute to a sustainable future through chemistry as its purpose and achieve the enhancement of sustainable corporate value.

TOK demonstrated resilience and continued growth for more than 50 years in the high-volatility semiconductor industry, underlain by robust financial capital combined with its corporate culture based on the management principles since its foundation (frank and open-minded business culture, incessant technological improvement, upgrading of products, and social contribution) and the thick accumulation of nonfinancial capital, comprising technology (manufactured capital), human resources (human capital), and human connections (social and relational capital).

In the coming years, the strengthening of nonfinancial capital will be especially necessary. In addition to increased investments in human capital, intellectual capital, and manufactured capital, TOK will further enhance social and relational capitals toward expanded collaboration with external stakeholders and thereby continuously achieve customer satisfaction based on the full utilization of the four earning powers (technology, human resources, human connections, and finance) in order to maximize our cash generation capability.

Furthermore, I will leverage the power of finance to support the initiatives for maximizing the interaction and synergy between nonfinancial capital and financial capital. I will also establish methodology for the quantitative measurement and evaluation of the value of nonfinancial capital from the perspective of management accounting, in order to upgrade BS management, including all financial capital and nonfinancial capital toward the further reduction of capital costs.

I will communicate these financial and nonfinancial activities and achievements at IR and SR sessions in quantitative and narrative manners in order to strengthen engagement with stakeholders and lead to the continuous practice of the purpose on a long-term and super-long-term basis, coupled with the attainment of TOK Vision 2030 to be inherited toward a 100-year company in 2040.

Medium-Term Plan
— Review of the Past Two Medium-Term Plans

TOK Medium-Term Plan 2018 — From FY 2017/3 to FY 2018/12 —

After achieving record-high profits under the TOK Medium-Term Plan 2015, TOK began to make proactive investments focused on strengthening the management foundation and reforming the business portfolios, in order to gain momentum for the overarching aspiration for 2020 (operating income of ¥20 billion).

Positioning/Management Objectives/Features

Three key years for achieving the overarching aspiration

Continued efforts to deepen existing business domains and swiftly launch new businesses

- Continue proactive investments for the overarching aspiration
- Aim for record-high profits during the final year
- Aim for ROE of over 7% and enhance returns to shareholders

Company-Wide Strategy

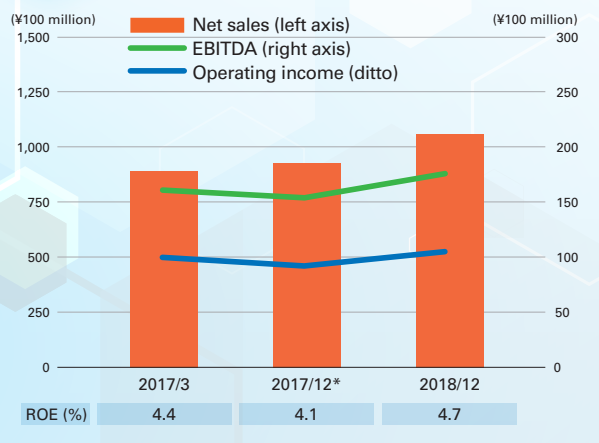
[Reform business portfolios]
- Renew mainstay products
- Create new businesses and new materials
- Recover earnings in the equipment segment and develop versatile applications for TSV technology

[Evolve customer-oriented strategies]
- Strengthen the development of ArF excimer laser photoresists (on a scale of 10 nm onward)
- Further increase the market share of KrF excimer laser photoresists (Thick-film photoresists for 3D-NAND)
- Strengthen the customer support structure in the Chinese market

[Develop global personnel]
- Promote the development of core human resources from a Group-wide perspective and recruit and promote diverse personnel appropriate for global business

[Strengthen management foundation]
- Build a governance system that reduces the risks accompanying globalization and that raises corporate value

TOK Medium-Term Plan 2018



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

Results/Issues

Strengthened R&D and production bases

Invested ¥21.7 billion in plants and equipment


TOK Taiwan Co., Ltd.


Sagami Operation Center/New R&D Building

Leveraged strengths in the innovative semiconductor segment

EUV photoresists: Highly rated by major customers

KrF excimer laser photoresists: Adoption for 3D-NAND (Japan and Asia)/ Increasing demand accompanying the expansion of 3D-NAND mass production (Japan, Asia)

High-density integration materials: Adoption for FOWLP (semiconductor field) by a major customer/Adoption by customers in Japan and overseas resulting in expanded adoption and application (electronic components field)

High-purity chemicals: Expanded adoption for the next-generation process by a major customer (Asia)/Adoption and increased demand for new clean solutions (Asia and North America)

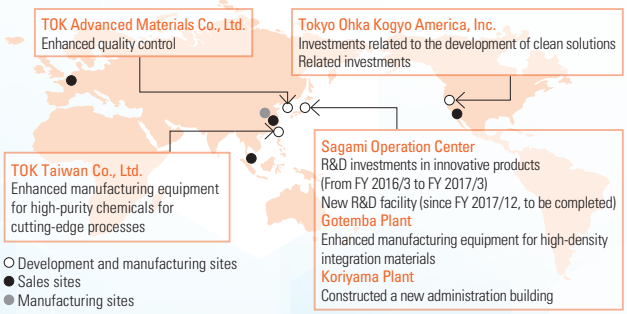
Midway through reform of the business portfolios

ArF excimer laser photoresists: A major customer did not adopt (Asia) the product and delays in the production plans of major customers (Asia and North America)

Equipment segment: Delayed expansion of 3D packaging process market

New Business: Delay in commercializing focused themes (high-functional films and nanoimprints)

Key Investments in Plants and Equipment under the TOK Medium-Term Plan 2018



Aggregate Market Value (including treasury stock)

TOK Medium-Term Plan 2021 — From FY 2019/12 to FY 2021/12 —

The TOK Medium-Term Plan 2021 started in 2019. Although revenue decreased because of U.S.-China trade friction in FY 2019/12, TOK achieved record-high performance for two consecutive years that had been supported by strong semiconductor demand in FY 2020/12 and FY 2021/12.

Management Vision: Aim to be a globally trusted corporate group by inspiring customers with high value-added products offering satisfying features, low prices, and superior quality.

Company-Wide Goals (Qualitative Objectives): Cultivate niche markets that the TOK Group should develop.

Features

Strengthen business portfolio reforms

- Ambitiously develop the technologies required for 5G, IoT, and Innovation

Return to a growth trajectory

- Operating income target (FY 2021/12): ¥15.0–20.5 billion

Strengthen balance sheet management and introduce a new dividend policy

- A new dividend policy targeting a DOE of 3.5%
- Flexibly buy back shares as a means of returning profits to shareholders

Company-Wide Strategy

[Accurately identify and rapidly address the opinions of customers to build an even larger and stronger pipeline to those customers]

■ Rapidly and steadily work to develop a support structure along with R&D thoroughly focused on customer satisfaction.

[Strengthen marketing, increase understanding of the customers' value creation processes, and translate these efforts into new value creation]

■ Through rigorous marketing, TOK will carefully identify solutions that lead to the creation of new value for customers, and intensively and proactively address any concerns.

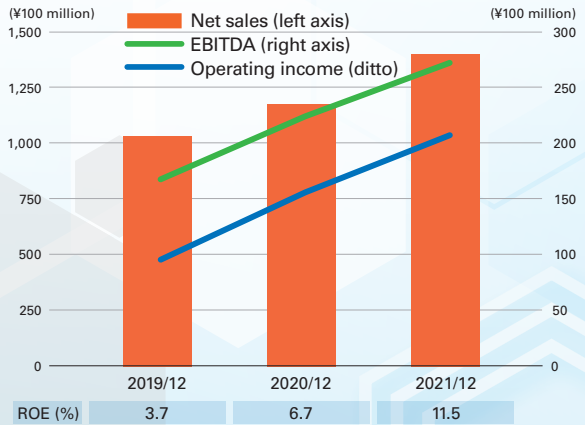
[Strengthen human resources who can conduct research, make decisions, and take the initiative]

■ Strengthen human resources who pursue the possibility of business with a diverse range of customers and continue addressing challenges until they succeed.

[Strengthen the TOK management foundation]

■ Promote balance sheet management aimed at the further advancement of group management, enhancement of corporate governance, and more efficient utilization of management resources.

TOK Medium-Term Plan 2021



	2019/12	2020/12	2021/12
ROE (%)	3.7	6.7	11.5

Results

Achieved record-high performance for two consecutive years

Returned to a growth trajectory

Leveraged strengths in the innovative semiconductor segment

ArF/EUV photoresists: Expanded adoption by major customers and increased production/Acquired a higher market share with major customers

KrF excimer laser photoresists: Increased demand for thick-film photoresists for 3D-NAND/Increased demand in Asia

i-Line photoresists: Achieved growth for power semiconductors/automotive semiconductors supported by decarbonization and EV shift

High-density integration materials: Acquired the adoption of resists for innovative packages and increased demand in OSAT/Expanded adoption of MEMS materials by customers in Japan and other countries

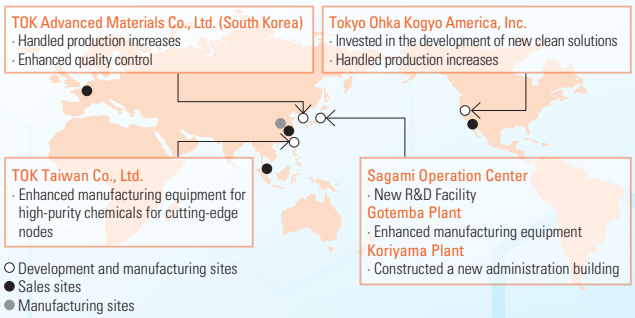
High-purity chemicals: Increased demand based on strong semiconductor production in Asia/Increased demand for new clean solutions in North America

Strengthened R&D and production bases especially overseas

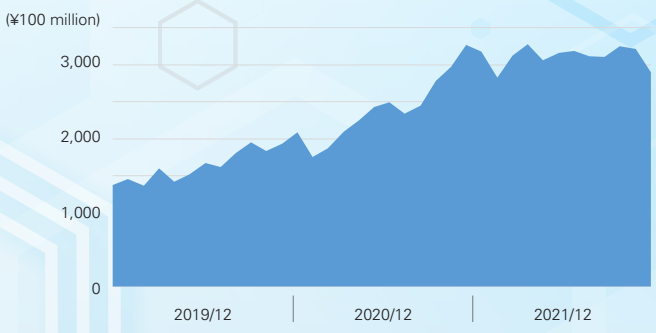
Made capital investment of ¥28.3 billion

Sagami Operation Center/ New R&D Facility | TOK Taiwan Co., Ltd. | TOK Advanced Materials Co., Ltd. (South Korea)

Key Investments in Plants and Equipment under the TOK Medium-Term Plan 2021



Aggregate Market Value (including treasury stock)



TOK Vision 2030 & TOK Medium-Term Plan 2024

TOK Medium-Term Plan 2024 — From FY 2022/12 to FY 2024/12 —

The TOK Medium-Term Plan 2024 is the first medium-term plan formulated via backcasting from the TOK Vision 2030 and presents milestones to be accomplished.

TOK will establish a solid basis to attain the overarching aspiration through five strategies that will lead to the next medium-term plan.

Features

- Medium-term plan for attaining TOK Vision 2030
- Boosting up TOK toward 2030!

Performance Targets (FY 2024/12)

- Consolidated net sales ¥180.0 billion or more
- Consolidated operating income ¥27.0 billion or more
- EBITDA ¥35.0 billion or more
- ROE Maintain 8.0% or more

Medium-Term Plan Strategies

[1] Increase global market share of cutting-edge photoresists

■ In order to increase the market share of cutting-edge photoresists as the growth driver of the group, TOK will establish a robust position as "The e-Material Global Company®" and provide technologies, quality, environment, and added value that contribute to the value creation process of customers.

[2] Acquire and create core technologies in electronic materials and new fields

■ In the effort to become a 100-year company, TOK will create a new business that will parallel photoresists and high-purity chemicals as the present mainstay businesses.

[3] Secure stable supplies of high-quality products and establish an optimal production system for the Group

■ In order to respond to a changing external environment and to rapidly and appropriately satisfy the increasingly advanced and complex requests from customers, TOK will establish an optimal production system.

[4] Improve employee engagement and promote people-oriented management

■ In addition to creating an environment for the improvement of happiness and productivity of each employee, while establishing education and developing a system to exercise their capabilities, TOK will implement measures that support employee motivation and joy for the work.

[5] Build sound and efficient management foundation

■ The Company will execute the four strategies above with maximum performance and build a management foundation to further develop the TOK Group.

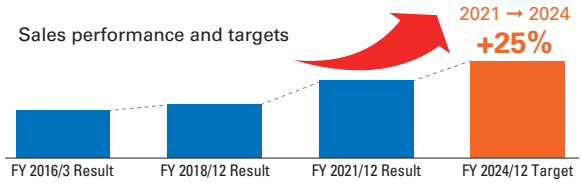
■ TOK will attain environment-friendly production, information and risk management, and compliance at high levels to strengthen governance throughout the entire TOK Group.

■ At the same time, the Company will work to establish an in-house digital environment for smart factories and data utilization in response to constantly changing external environments **(See page 59)**.

Business Strategies

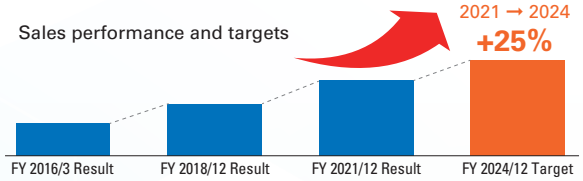
[1] Semiconductor photoresists

■ Expand marketing in a full portfolio in response to the increasing semiconductor demand



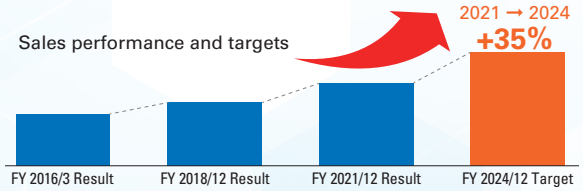
[2] High-density integration materials

■ Market products that rapidly respond to cutting-edge packaging technologies



[3] High-purity chemicals

■ Expand marketing in Asia and North America in response to advanced semiconductor processes and increasing demand



[4] New businesses

■ Creating new businesses envisioning a 100-year company
Optical materials, functional materials, and life science-related materials
(See page 58)

Backcasting

TOK Vision 2030

Management Vision

Contribute to a sustainable future through chemistry
The e-Material Global Company™

Overarching aspiration (quantitative aspects)

Net sales: **¥200.0 billion**
EBITDA: **¥45.0 billion**
ROE: **10% or higher**

Overarching aspiration (qualitative aspects)

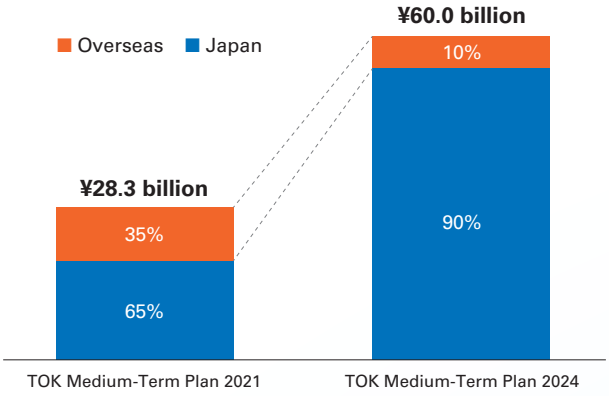
- Provide new added value that inspires customers
- Earn trust from stakeholders worldwide
- Continue developing high technological capabilities and show international presence
- Enhance corporate value sustainably with an aim to contribute to SDGs
- All employees can work lively with pride

Seven strategies toward 2030

Inherited toward a 100-year company

Capital Investment Plan

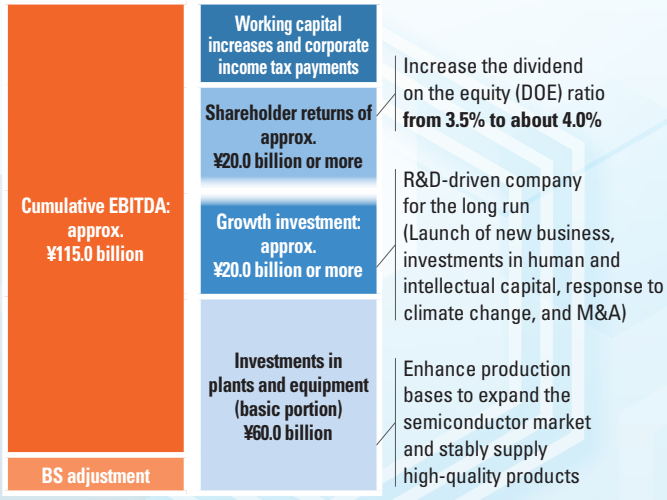
[Record-high capital investment plan]
■ To strengthen the supply chain, proactively invest capital in Japan



Promote Balance Sheet Management

[Pursue an optimal balance among investment, cash reserves, and shareholder returns]
■ EBITDA generated through the growth of semiconductor materials will be agilely distributed as shareholder returns after making prioritized growth investments.

Three-year cash flow plan (conceptual graph)



Review of Operations

Material Business

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

Risks and opportunities — Materials Business —

Risks

- Rising cost of development due to increasing technological difficulties
- Unfavorable market environment due to the escalating geopolitical risks that include U.S.-China trade friction
- Interruption or confusion in the supply chain due to increased climate change risks and infectious disease risks
- Increased investment outlays for inspection and production equipment in connection with ultrahigh purification
- Impact of higher costs of equipment following advances in exposure equipment and miniaturization
- Impact of over-concentration of the main business domains in the electronics industry

Opportunities

- Increases in the need for ultra-miniaturization (EUV and ArF photoresists)
- Growing need for cutting-edge packaging technologies (2.5D and 3D semiconductor packaging)
- Further increase in data volume and semiconductor needs due to 5G, IoT, and AI
- Increase in power semiconductor needs due to accelerated global initiatives for decarbonization
- Expansion of business opportunities through the global structure of close relationships with customers (in Japan, the U.S., South Korea, and Taiwan), and multi-site systems at major customers
- Capture growth opportunities through strengths in both the front-end process and back-end process of semiconductor manufacturing
- Increase in proposal opportunities for semiconductor manufacturing processes due to further diversified needs in both materials and equipment (synergies with Equipment Business)

Issues for society and customers and TOK outcomes

Continuously upgrading solutions to generate social impact

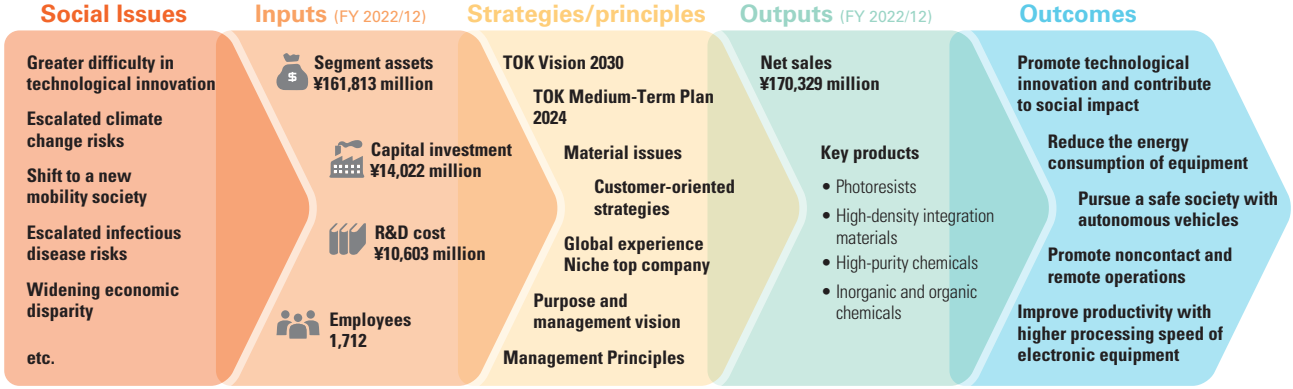
The materials segment creates value in both cutting-edge fields and legacy fields because TOK is seen as the manufacturer with the largest global market share for semiconductor photoresists. TOK will continue to contribute to the generation of a social impact by continuously upgrading solutions in the four fields of information terminals, cloud computing, sensing and IoT, and green energy. As specific products, TOK stably supplies EUV photoresists and ArF excimer laser photoresists for the cutting-edge nodes of miniaturization in the fields of information terminals and cloud computing, as well as KrF excimer laser photoresists for image sensors and g/i-Line photoresists for power semiconductors in the fields of sensing and IoT, and green energy, which contributes to the resolution of social issues common to humankind, while pursuing the earnings of the TOK Group using these products as value creation drivers toward attainment of the TOK Medium-Term Plan 2024 and TOK Vision 2030 **(See pages 10–11 "IMPACT ENABLER")**.

Continuously upgrading world-leading technology and supply capacity through collaborative creation in the value chain

For the TOK Group to contribute to the generation of an even greater social impact, the Group considers it essential that the company continues to enhance its supply capacity as the manufacturer with the largest global market share of semiconductor photoresists, while consistently upgrading world-leading microprocessing technology and world-leading high purity processing technology as its core competences. Since its foundation in 1940, TOK has continuously aimed to maintain its unfading startup spirit while specializing in niche areas with high added value. The Company continuously upgrades its world-leading technology and supply capacity through collaborative creation activities with customers and suppliers, which then strengthens the value chain in pursuit of sustainable growth and corporate value enhancement.

On a short-term basis, in particular, the establishment of a robust supply chain has become more important than ever because of the emergence of combined risks. TOK shares its passion for collaboratively creating high-quality products and strengthens its activities for linking customers, TOK, and suppliers, while striving to enhance supplier engagement.

Value creation flow of material business — Develop high value-added products as an earnings driver —



The Cutting Edge

tok's Human Resource

Koki Tamura
General Manager, Sales Strategy Div.

Acquiring new businesses by collaborating with the development and manufacturing divisions and establishing external human connections

To accelerate the collaboration of marketing and development, the Sales Strategy Division is located in the Sagami Operation Center, which is the R&D base. By supporting material development through close communication with the development division, we are strengthening the trifecta of development, manufacturing, and marketing. The Sales Strategy Division also collects and internally shares customer information and competitor information and comprehensively analyzes market conditions, customer conditions, and development conditions at TOK, thereby formulating strategies from the medium- to long-term perspectives. To this end, it is necessary to collect information concerning next-generation technologies and to obtain information from customers and other sources in a timely manner, including essential market research in both new and existing fields, as well as the acquisition of new customers. To collect current information in the rapidly progressing electronic device industry, human connections are most important. We establish new human connections while maintaining existing connections, so that we can formulate strategies from broad, multi-faceted perspectives. In this way, we market new materials before competitors, differentiate TOK from competitors, and then discover businesses to become the future mainstays that will lead to new business.

Summary of the first year of TOK Medium-Term Plan 2024 and key measures for the second year onward

For securing stable supply of high-quality products and establish an optimal production system for the Group

In FY 2022/12 as the first year of TOK Medium-Term Plan 2024, TOK promoted key strategies to secure stable supplies of high-quality products and establish an optimal production system for the Group in both Japan and overseas as part of its efforts to continuously upgrade supply capacity as described above.

The specific activities included the establishment of a new evaluation building at the Koriyama plant, the key production base, in July 2022, which further improved product quality and inspection efficiency using new evaluation equipment, while guaranteeing scalability to meet further demand increase and production expansion in the future. Investment in plants and equipment is continued at the Sagami Operation Center as the core of cutting-edge TOK research and development. In Kikuchi, Kumamoto, a new base is under construction in expectation of increased demand for thinners, developing agents, and high-purity chemicals, toward operation start in the end of 2024.

Globally, Tokyo Ohka Kogyo America, Inc., established TOKCCAZ, LLC. to enhance user support in the United States in May 2022, which strengthened its sales structures for thinners and developing agents. In March 2023, TOK Taiwan Co., Ltd., transferred the Miaoli plant to a partner company to further increase the production capacity for thinners and developing agents and strengthen sales and customer support structures. TOK Advanced Materials plans investments for production increases because of expected future demand increases for semiconductor materials in South Korea.

Steadily grasping business opportunities in the next-generation power semiconductor market

Regarding its product portfolio, TOK continues to promote the key strategy to increase global market share of cutting-edge photoresists, while strengthening initiatives in the lately selected four fields (information terminals, cloud computing, sensing & IoT, and green energy) toward the attainment of a communications revolution in 2030 and the overarching aspiration announced in TOK Vision 2030.

In the green energy field, in particular, because efforts toward decarbonization and carbon neutrality are being accelerated across the world, the next-generation power semiconductor market is emerging in full scale with silicon carbide (SiC)/gallium nitride (GaN) power semiconductors. TOK will steadily grasp business opportunities in the new market by expediting the development of new high heat-resistance photoresists based on the expertise accumulated from i-Line photoresists over many years.

Material Business Performance

(Millions of yen)

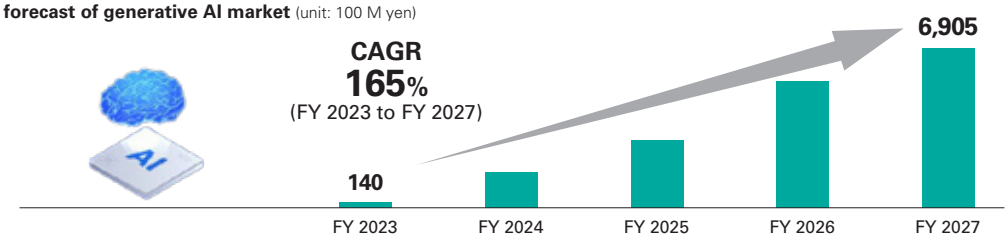
	FY 2020/12 Result	FY 2021/12 Result	FY 2022/12 Result		
				Change	%
Net sales	114,773	137,725	170,329	+32,604	+23.7%
Electronic functional materials	65,878	79,491	91,868	+12,377	+15.6%
High-purity chemicals	48,732	57,804	77,460	+19,656	+34.0%
Others	161	430	1,000	+570	+132.5%
Operating income	20,395	26,438	34,755	+8,317	+31.5%
Operating margin	17.8%	19.2%	20.4%	—	—
Segment assets	119,695	135,794	161,813	+26,019	+19.2%
Depreciation and amortization	6,518	6,158	6,470	+312	+5.1%
R&D cost	9,093	9,390	10,603	+1,213	+12.9%

The Cutting Edge

TOK's business opportunities expand as the generative AI market expands

Whereas negative growth is anticipated in the global semiconductor market for the first time in four years in 2023, the market is expected to take an upturn in 2024 toward the largest scale ever. Under these circumstances, the market is considered to bottom out or take an upturn triggered by increasing demand for graphics processing units (GPU) and high bandwidth memory (HBM) resulting from expansion of the generative AI market.

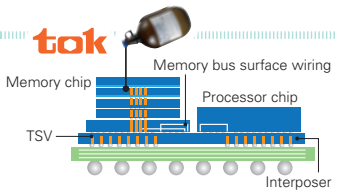
Growth forecast of generative AI market (unit: 100 M yen)



Source: Seed Planning, Inc.,
"Present Status and Future Outlook of Interactive AI Services"
(CAGR was calculated by TOK.)

GPU
(Graphics Processing Unit)

- Semiconductor device essential for generative AI
- Undertakes deep learning via neural network
- High-speed parallel processing of large data using HBM



HBM
(High Bandwidth Memory)

- High-speed memory device indispensable for GPU
- Vertically laminated DRAM
- High-speed processing of large data applicable to supercomputers

Front-end processes of semiconductor manufacturing

Back-end processes of semiconductor manufacturing

tok

EUV/ArF/KrF photoresists

Packaging photoresists

GPU and HBM are essential for generative AI

Generative AI uses deep learning and neural networks as the core technologies for self-learning in pursuit of answers. The larger the data input becomes, the more complex the determination that is required. Therefore, the GPU is used as a semiconductor device that is good at large-volume high-speed parallel processing.

Because the GPU is also good at image processing, it was originally used for game consoles and graphics-only devices, but with the current expansion of the generative AI market, GPU demand for AI use is rapidly increasing.

Establishing a competitive advantage in the development of materials for HBM of each generation

HBM is a memory device for large-volume high-speed calculations as a component of GPU.

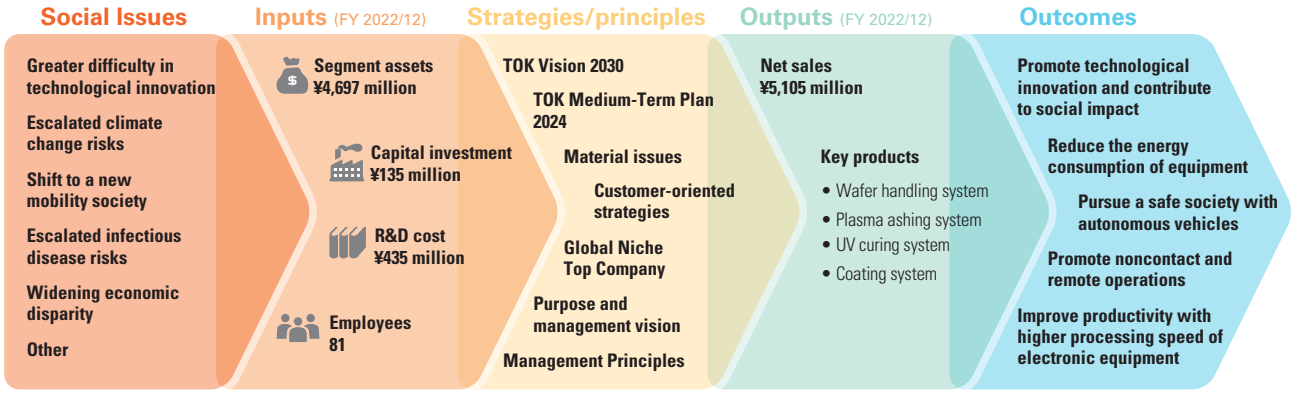
HBM has continuously been upgraded in each generation. In the first and second generations, TOK provided packaging photoresists for DRAM lamination in the back-end processes. For the third and fourth generations, which are used for generative AI, TOK increased the supply of advanced materials in the front-end processes, such as EUV/ArF/KrF photoresists for DRAM production, in addition to packaging photoresists.

Review of Operations

Equipment Business

Manufacturing, sales, and maintenance of semiconductor manufacturing equipment

Value creation flow of equipment business through to FY 2022/12



Issues for society and customers and TOK outcomes

M&E strategies — Initiatives to date

In March 2023, TOK transferred the equipment business (excluding certain parts) to AIMECHATECH, Ltd. Following the transfer, TOK continues to aim for the development of its Materials and Equipment (M&E) strategies in collaboration with AIMECHATECH in order to enhance corporate value as a materials manufacturer.

The equipment segment of the TOK Group specialized in the niche areas for differentiation from major equipment manufacturers and mainly promoted the M&E strategies to propose processes for maximizing material characteristics based on its profound knowledge of semiconductor materials.

For example, TOK released a 3D packaging system Zero Newton® in 2008 and obtained an increasing number of orders based on the high evaluation of its wafer processing capacity as a cutting-edge high-density integration system. In the materials segment, TOK increased sales by supplying thick-film photoresists, adhesive materials, and thinners for the system. Cutting-edge devices produced by this system with these materials, such as 2.5D/3D semiconductors and SoIC, have been growing for different sensors and automotives that support IoT & 5G, as well as for home appliances and image processing, thereby contributing to the achievement of more convenient, safer, and securer human lives.

The plasma ashing system for power semiconductors, which was released in the mid-1980s, has been highly evaluated for its high photoresist removal capability with repeat orders from many customers over many years. In the materials segment, TOK increased sales by supplying i-Line photoresists for the system, thereby continuously contributing to decarbonization through M&E strategies.

Although the equipment segment had experienced difficult conditions and reported deficits for seven consecutive years from FY 2016/3, TOK achieved profitability in FY 2022/12 with progress in the delivery and acceptance of Zero Newton® and other ordered products against the backdrop of the recent increase in equipment orders based on the developing 3D packaging market and the increasing demand for power semiconductors.

Equipment Business Performance

(Millions of yen)

	FY 2020/12 Result	FY 2021/12 Result	FY 2022/12 Result		
				Change	%
Net sales	2,811	2,329	5,105	+2,776	119.1%
Segment income (loss)	(310)	(290)	790	+1,080	—
Operating margin	—	—	15.5	—	—
Segment assets	2,015	3,016	4,697	+1,681	+55.7%
Depreciation and amortization	32	34	40	+6	+17.6%
R&D cost	452	409	435	+26	+6.4%

Introducing a new M&E strategy

Future M&E strategy

TOK transferred its equipment segment to AIMECHATECH on March 1, 2023, as was publicly announced in the Notification Concerning the Transfer of the Equipment Segment (Excluding Certain Parts) Through a Company Split and Stock Transfer dated September 26, 2022. TOK obtained 19.56% of AIMECHATECH's stocks as of September 30, 2022.

AIMECHATECH is an equipment manufacturer with advanced technology and customer support capabilities as a company operating the development, design, manufacturing, and marketing of LCD panel manufacturing equipment and after-sales service in Japan and overseas with micro-coating technology and high-precision lamination technology as the company's core technologies.

In the coming years, TOK will pursue the maximization of the corporate value of both companies by fully leveraging its management resources and the expertise of the two companies, aiming at the M&E strategy and collaborative creation based on the combination of the semiconductor and display systems that TOK transferred to AIMECHATECH and the materials supplied by TOK **(See pages 33–34, "Messages from the President")**.

Collaboration with AIMECHATECH

In collaboration with AIMECHATECH, Ltd. as our new business partner,

we aim to upgrade the M&E strategies!

AIMECHATEC × tok

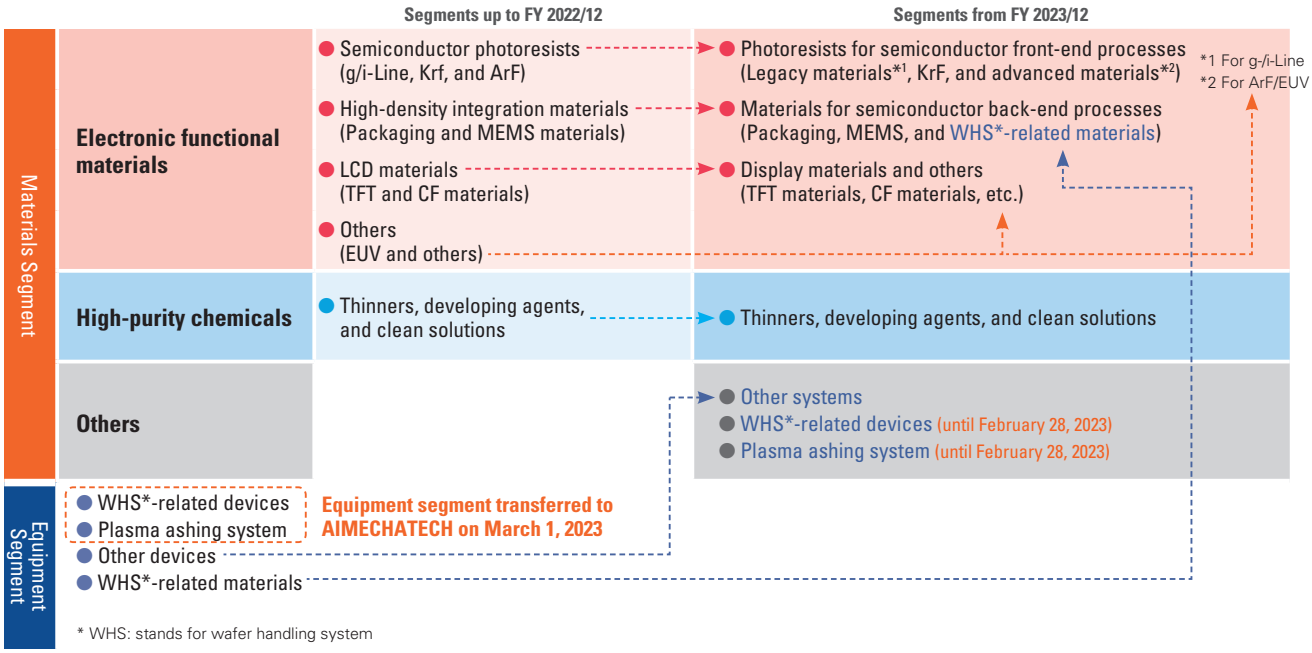
Advanced technology and customer support capabilities as an equipment manufacturer

Knowledge in chemistry accumulated in the semiconductor material fields

Zero Newton®

Various materials

Changes to segment disclosures



Our Material Issues

Initiatives to Address Material Issues for Enhancing Corporate Value

Material Issues/
Key Initiatives, Risks and Objectives, and List of Objectives

Material issues	SDGs to which we contribute	ESG fields	Key initiatives	Risks and opportunities	Issues and objectives for FY 2022/12
Contribution to innovation and the creation of social value		Social (S)	Increase global market share of cutting-edge photoresists	■ Intensifying global competition in the semiconductor industry and increased geopolitical risks ■ Expanding role of cutting-edge semiconductors in innovation and the resolution of social issues ■ Increasingly complex silicon cycle ■ Technological advances and market expansion in cutting-edge fields, both in the miniaturization and in the 3D packaging of semiconductors; market expansion of older generations (legacy fields)	■ Provide technologies, quality, environment, and added value that contribute to the value creation process of customers ■ Continue development and improvement from a thoroughly customer-oriented perspective ■ Ambitiously develop technologies required for 5G, IoT, and other innovations
			Acquire and create core technologies in electronic materials and new fields	■ Expansion of applications and social need for semiconductor technologies (such as life science-related materials, functional materials, and optical materials) ■ Risk reduction and long-term stable growth through the diversification of the business portfolio and the multiplication of target markets	■ Continue to develop and strengthen commercial viability in new business fields (high-functional films, life science-related materials, and optical materials) ■ Expand collaborative projects with other companies and groups
			Secure a stable supply of high-quality products and establish an optimal production system for the Group	■ Mixed presence of fields with a tight supply and those with an oversupply in the semiconductor market ■ Increase in the need for further advances, complexity, and ultrahigh purification of semiconductor materials	■ Improve detection sensitivity for metal impurities that comply with customer development roadmaps ■ Create new value through DX (material development utilizing materials informatics/shift to smart factories)
Pursuit of happiness by personnel			Improve employee engagement and promote people-oriented management	■ Intensifying competition for recruitment in semiconductor-related industries ■ Global personnel development in conjunction with the increase in the overseas sales ratio ■ Increasing importance of happiness in society (wellbeing)	[2024 targets] Employee engagement: Improve by three points (vs. 2021) Employee-friendly environment: Improve by seven points (vs. 2021) ■ Continue promoting a good work-life balance ■ Childcare leave user rate among male employees: Maintain at 30% or more ■ Flex time expanded to more departments and work from home introduced as an official system. ■ Introduce new personnel system and appropriately operate the system to set it in place ■ Continue to implement training for department heads ■ Promote health and productivity management
			Diversity and inclusion	■ Creation of innovation and increase of competitiveness through the leveraging of diverse human resources ■ Aging of employees and the utilization of "know-why" of senior human resources	■ Continue to promote corporate activities that leverage diversity ■ Promote personnel exchanges within the Group ■ Continue to promote women in the workplace ■ Implement training for female employees pursuing management positions ■ Ratio of women in senior and middle management: Aim to increase to twice the current level by 2030 (vs. 2020)
			Respect for human rights and fair working conditions	■ Borderless expansion of supply chain ■ Escalating geopolitical risks	■ Continue efforts to prevent harassment ■ Implement human rights education
Establishment of resilient organization		Governance (G)	Build a sound, efficient management foundation	■ Increase in the potential risks involved in business growth and the increase of stakeholders ■ Rapid changes in the business environment in the era of VUCA	■ Streamline operation of the Information Management Committee ■ Strengthen cybersecurity measures
			Strengthen the effectiveness of governance	■ Increase in sustainability requirements ■ Upgrading of supervisory and control functions to directly link business growth to the enhancement of corporate value	■ Continue to thoroughly implement the PDCA cycle to improve the effectiveness of the Board of Directors (assess effectiveness once a year) ■ Enhance internal control functions ■ Continue to check the approval authority and approval request operations ■ Establish new CSR and sustainability governance structures ■ Review the manufacturing transfer process and the OEM process ■ Establish a risk transfer analysis process
			Compliance	■ More stringent laws and regulations based on global initiatives for sustainability and decarbonization ■ Maintenance and enhancement of social trust and brand power in local communities overseas	■ Continue activities to instill compliance ■ Continue periodic checks of laws and regulations (four times annually), and review the list of applicable laws and legal management procedures ■ Continue the appropriate operation of the internal reporting system ■ Further enhance and disseminate the whistleblowing system
			Risk management	■ Increasing tail risks that include pandemics and extremely severe natural disasters ■ Strengthening risk resilience to continuously fulfill supplier's responsibility	■ Reduce risks previously and newly identified through risk assessments ■ Continue to hold drills to increase awareness and maintain a high response rate ■ Conduct desktop drills anticipating actual damage

[Self-assessment of goal achievement]
○ Undertook and achieved results
△ Implemented with room for further accomplishments
× Did not undertake nor achieve yet

Main achievements, progress, and KPI in FY 2022/12	Evaluation	Issues, qualitative objectives, and KPI objectives for FY 2023/12	Pages
■ Consolidated net sales: Increased by 25.3% year over year	○	■ Provide technologies, quality, environment, and added value that contribute to the value creation process of customers ■ Continue development and improvement from a thoroughly customer-oriented perspective ■ Ambitiously develop technologies required for 5G, IoT, and other innovations	P14–15 P44–46 P54–57
■ Number of collaborative projects promoted with other companies and groups: Decreased by approximately 12% year over year ■ External releases by the New Business Development Department: Increased by 63% year over year	○	■ Continue to develop and strengthen commercial viability in new business fields (high-functional films, life science-related materials, and optical materials) ■ Expand collaborative projects with other companies and groups	P27 P58
■ Improve detection sensitivity for metal impurities that comply with customer development roadmaps	○	■ Improve detection sensitivity for metal impurities that comply with customer development roadmaps ■ Create new value through DX (material development utilizing materials informatics/shift to smart factories)	P6–7 P54–57 P59 P61 P67
■ Ratio of paid leave taken: 79.6%*1 ■ Increased childcare leave taken (male employees: 8 in 2021 to 12 in 2022 with the user rate increasing to 57.1%)*2 ■ Flex time expanded to more departments, while permanent work from home system yet to be established ■ Introduced new personnel system and started internal system for operating the new evaluation system ■ Implemented 360° training for department/division heads ■ Implemented career support measures ■ Formulated Declaration of Health and Productivity Management	○	[2024 targets] Employee engagement: Improve by three points (vs. 2021) Employee-friendly environment: Improve by seven points (vs. 2021) ■ Employee engagement: Promote initiatives toward the objective for 2024: Improve by three points (vs. 2021) ■ Employee-friendly environment: Promote initiatives toward the objective for 2024: Improve by seven points (vs. 2021) ■ Continue promoting a good work-life balance ■ Childcare leave user rate among male employees: Maintain at 30% or more ■ Appropriate operation of personnel system ■ Career support measures ■ Promote health and productivity management	P60–63
■ Personnel exchange within the Group was limited due to the impact of COVID-19 ■ Ratio of non-Japanese employees: 26.9% ■ Ratio of local hires in overseas management positions (consolidated basis): 56.2%	△	■ Employment of global human resources: Establish a foundation for promoting personnel exchanges within the Group	P60–63
■ Ratio of women in senior and middle management: 4.0% (vs. 3.2% in 2020)*1 ■ Ratio of female new graduates hired: 26.4%*1	○	■ Continue to promote women in the workplace ■ Ratio of women in senior and middle management: Aim to increase to twice the level by 2030 (vs. 2020)	P62 P73
■ Implement anti-harassment and human rights education	○	■ Continue efforts to prevent harassment ■ Implement human rights education	P60–63
■ Review the operation of Information Management Committee ■ Clarified cybersecurity structures and strengthened countermeasures against cyberattacks	○	■ Rationalize information management rules and review evaluation standards for the status of information management measures ■ Strengthen cybersecurity measures	P88–89
■ Established the Council of Directors ■ Checked progress in matters resolved by the Board of Directors ■ Made improvements to the evaluation and requirements of the Board of Directors for the previous fiscal year and reviewed the questionnaire for the evaluation of the Board ■ Reviewed the internal regulations for shifting to a company with an audit and supervisory committee ■ Checked the approval authority and approval request operations	○	■ Continue to thoroughly operate the PDCA cycle to improve the effectiveness by the Board of Directors (assess effectiveness once a year) ■ Continue to check the approval authority and approval request operations	P76–91
■ Established a group-common manufacturing transfer process and promoted structures for expediting the kickoff of OEM ■ Established processes from risk transfer analysis to implementation	○	■ Continue the review of the OEM process ■ Visualize risks throughout the Group and establish a system foundation for grasping the risk handling status	P87–88 P90–91
■ Conducted compliance training ■ Revised and internally disseminated the Explanatory Guidance on CSR Policy and the Q&As on Compliance ■ Performed checks on compliance with laws and regulations (four times annually), and reviewed the list of applicable laws and legal management procedures	○	■ Continue activities to instill compliance ■ Continue periodic checks of the laws and regulations (four times annually), and review the list of applicable laws and legal management procedures	P86–87
■ Reports to the whistleblowing system: 0, consultations with the outside counseling section: 15 ■ Reviewed the whistleblowing system following the legal amendment and formulated a draft revision of the compliance regulations ■ Explained and reported on the whistleblowing system through compliance training	△	■ Continue the appropriate operation of the internal reporting system ■ Further enhance and disseminate the whistleblowing system	P87
■ Conducted drills to improve awareness of the safety confirmation system in the event of a major natural disaster. Held four company-wide drills with a high response rate maintained in all sessions	△	■ Reduce the risks previously and newly identified through risk assessments ■ Continue to hold drills to increase awareness and aim to maintain a high response rate ■ Conduct desktop drills anticipating actual damage	P87–88

*1 Unconsolidated *2 Errors regarding the number of users for 2021 have been corrected.

Material Issues/
Key Initiatives, Risks and Objectives, and List of Objectives

Material issues	SDGs to which we contribute	ESG fields	Key initiatives	Risks and opportunities	Issues, objectives, and KPI for FY 2022/12	
Global environmental conservation considering future generations	6, 7, 11, 12, 13, 14, 15	Environment (E)	Initiatives toward achieving carbon neutrality	■ Increasing climate change risks and accelerated initiatives for decarbonization ■ Cost increase due to the introduction and spread of carbon pricing ■ Cost increase due to more precise temperature control for cutting-edge products ■ Expansion of energy-saving effects through advances in the miniaturization of semiconductors ■ Sales increase of materials for power semiconductors	Develop, manufacture, and market environment-friendly products	■ Stably supply i-Line photoresists for power semiconductors ■ Increase sales of plasma ashing systems for power semiconductors
					Proactive response to new environmental regulations	■ Introduce a comprehensive management system for environment-related data and prepare to start operation in 2023
					Proactive disclosure of environmental information	■ Proactive information disclosure through the Integrated Report and on the website
					Improve energy-related CO_2 emissions per base unit* [Medium-term target] Reduce energy-related CO_2 emissions (per base unit) by 15 points by 2030 compared with 2019	■ Reduce energy-related CO_2 emissions (per base unit) by 15 points by 2030 compared with 2019
						■ Reduce energy-related CO_2 emissions (per base unit) by 1 point compared with the previous year
					Improve energy consumption per base unit* [Medium-term target] Reduce energy consumption (per base unit) by 15 points by 2030 compared with 2019	■ Reduce energy consumption (per base unit) by 15 points by 2030 compared with 2019
						■ Reduce energy consumption (per base unit) by 1 point compared with the previous year ■ Measures against the aging of equipment and the introduction of new energy conservation systems
					Improve energy consumption per base unit in distribution*	■ Reduce energy consumption (per base unit) by 1 point or more compared with the previous year ■ Achieve efficient transportation by improving the loading rates of vehicles
					Measures to prevent global warming at overseas manufacturing sites	■ Promote production activities considering energy conservation
			Promote resource recycling	■ Increase in water stress due to global warming ■ Increase in interest in the marine plastics issue ■ Expansion of a circular economy	Initiatives to address water risk*	■ Reduce water consumption by renewing equipment ■ Promote the cyclic use of water
						■ Reduce domestic water consumption by 15% by 2030 compared with 2019 ■ Continue measures against flood risks
					Initiatives to address the marine plastics issue	■ Introduce product packaging materials derived from bioplastics
					Reduce industrial waste* [Medium-term target] Reduce (per base unit) by 15 points by 2030 compared with 2019	■ Reduce (per base unit) by 15 points by 2030 compared with 2019
						■ Industrial waste disposed in landfills: Less than 1%, achieving zero emissions
			Conserve air, water, and soil environments	■ Tighter emissions regulations in major developed countries ■ Further risk reduction by satisfying standards stricter than regulatory requirements	Prevent air, water, and soil pollution	■ Excess of operational thresholds: None
					Countermeasures against ozone-depleting substances	■ Manage CFC leakage volume through the proper management of equipment ■ Examine the introduction of non-CFC equipment when renewing facilities
					Eradicate environmental accidents that affect external parties	■ Environmental accidents: No major accidents
			Preserve biodiversity	■ Increased risk of global biodiversity loss ■ Risk reduction through initiatives addressing biodiversity and water resources as a single issue	Improve awareness of biodiversity based on TOK Biodiversity Protection Declaration and encourage participation in related activities	■ Implement ongoing employee training ■ Continue activities to preserve forests
Supply chain sustainability	12, 17		Precisely address laws and regulations	■ Tighter chemical substance control regulations in major developed countries ■ Increased product value by taking thorough action prior to legislation from before and during the early stages of material development	Carry out appropriate and reliable management of chemical substances	■ Establish chemical substance information management system ■ Continue to strengthen and operate chemical substance management system
					Properly comply with the PCB Special Measures Act	■ Formulate and promote equipment renewal plan based on the roadmap toward the deadline of disposal of PCB waste (low concentration) in 2027
	3, 12	Social (S)	Occupational health and safety/ Reduction of risks posed by chemical substances	■ Increased risks of accidents due to the increase in production sites, production volume, and operating hours ■ Escalating human rights risks resulting from expanding the supply chain and increasing the importance of lifecycle assessment ■ Further risk reduction through RBA audits and ISO 45001 certification	Foster a safety culture	■ Prepare to acquire ISO 45001 certification and to extend the scope of certification (to complete acquisition at sites in Japan by 2023) ■ Foster safety culture by reestablishing the 5S
						■ Promotion of risk assessment activities in work
						■ Promotion of safety education and training and disaster drills
						■ Achieved zero accidents resulting in lost workdays

[Self-assessment of goal achievement]
○ Undertook and achieved results
△ Implemented with room for further accomplishments
× Did not undertake nor achieve yet

Main achievements, progress, and KPI in FY 2022/12	Evaluation	Issues, qualitative objectives, and KPI objectives for FY 2023/12	Pages
■ Stably supply i-Line photoresists for power semiconductors ■ Increase sales of equipment for power semiconductors	○	■ Stably supply and increase sales of i-Line photoresists for power semiconductors	P30–35 P45 P54–57 P68–69
■ Introduce and start test operation of a comprehensive management system for environment-related data	○	■ Start full-scale operation of a comprehensive management system for environment-related data	P92–101
■ Proactive information disclosure Publish the Integrated Report and disclose environmental information on the website	○	■ Proactive information disclosure Publish the Integrated Report and disclose environmental information on the website	P26–27
■ Reduce energy-related CO_2 emissions (per base unit) by 58 points compared with 2019	○	■ Reduce energy-related CO_2 emissions (per base unit) by 15 points by 2030 compared with 2019	P94–95
■ Reduce energy-related CO_2 emissions (per base unit) by 31 points compared with 2021	○	■ Reduce energy-related CO_2 emissions (per base unit) by 1 point compared with the previous year	P94–95
■ Reduce energy consumption (per base unit) by 20 points compared with 2019	○	■ Reduce energy consumption (per base unit) by 15 points by 2030 compared with 2019	P94–95
■ Maintain energy consumption (per base unit) without increase/decrease (± 0 points) compared with 2021	△	■ Reduce energy consumption (per base unit) by 1 point compared with the previous year ■ Measures against the aging of equipment and the introduction of new energy conservation systems	P94–95
■ Maintain energy consumption (per base unit) without increase/decrease (± 0 points) compared with 2021	△	■ Reduce energy consumption (per base unit) by 1 point or more compared with the previous year ■ Achieve efficient transportation by improving the loading rates of vehicles	P94–95
■ Renew equipment considering energy conservation	○	■ Promote production activities considering energy conservation	P95
■ Propose and implement plans at each site Example: Renewal of pure water building	△	■ Reduce water consumption by renewing equipment ■ Promote the cyclic use of water	P96–97
■ Domestic water consumption: Increased by 22% compared with 2019 ■ Continue measures against flood risks	△	■ Reduce domestic water consumption by 15% by 2030 compared with 2019 ■ Continue measures against flooding risks	P96–97
■ Consider introduction of product packaging materials derived from bioplastics	△	—	P101
■ Industrial waste generation (per base unit): Increased by 23 points compared with 2019	△	■ Reduce (per base unit) by 15 points by 2030 compared with 2019	P98–99
■ Industrial waste disposed in landfills: Less than 1%, achieving zero emissions	○	■ Industrial waste disposed in landfills: Less than 1%, achieving zero emissions	
■ Excess of operational thresholds: None	○	■ Excess of operational thresholds: None	
■ Manage CFC leakage volume through the proper management of equipment ■ Examine the introduction of non-CFC equipment when renewing facilities	○	■ Manage CFC leakage volume through the proper management of equipment ■ Examine the introduction of non-CFC equipment when renewing facilities	P101
■ Environmental accidents: No major accidents	○	■ Environmental accidents: No major accidents	P100–101
■ Implement CSR training for employees as well as all directors and auditors: 100% participation rate ■ Dispatched employees to participate in activities at the Kanagawa Trust Midori Foundation	○	■ Implement ongoing employee training ■ Continue activities to preserve forests	
■ Revised the chemical substances management system and streamlined legal data applicable to TOK products ■ Revised the chemical substances management start and achieved information collection from all suppliers	○	■ Establish chemical substance information management system ■ Strengthen chemical substance management system of the TOK Group	P102–104
■ Formulate and promote equipment renewal plan based on the roadmap toward the deadline of disposal of PCB waste (low concentration) in 2027	○	■ Formulate and promote equipment renewal plan based on the roadmap toward the deadline of disposal of PCB waste (low concentration) in 2027	
■ Acquired ISO 45001 certification at three domestic sites ■ Identified issues in 5S activities and determined future activity policy	○	■ Completed the acquisition of ISO 45001 certification at all domestic sites ■ Setting 5S activities in place	P105–106
■ Promoted reduction activities for risks with high severity (unacceptable high risks) ■ Strengthened risk assessment and hazard prediction activities for infrequent operations	△	■ Strengthening risk management with safety first	
■ Implemented emergency response drills	○	■ Strengthen emergency response drills	
■ Four accidents with lost workdays and five accidents without lost workdays	×	■ Achieve zero accident with lost workdays	P105–106

* Unconsolidated basis and consolidated subsidiaries in Japan

Message from the Director in Charge of Marketing and Development

Accelerating market share expansion in cutting-edge fields to steadily implement the material issue of the contribution to innovation and the creation of social value.

Kousuke Doi

Director, Senior Executive Officer, Department Manager, Marketing Department and Research and Development Department

For the enhancement of corporate value

By integrating sales and development, maximize interaction and synergy among human capitals

Toward sustainable growth in earnings as a prerequisite for corporate value enhancement, the TOK Group has globally promoted customer-oriented strategies through the trifecta of development, manufacture, and marketing for many years. Starting in April 2022, I served as the department manager of both the Marketing Department and the Research and Development Department for further integrating sales and development. I reorganized the Marketing Department and transferred certain sections to R&D bases. I also introduced shared personnel evaluations into the two departments, thereby accelerating value creation by one team to seamlessly integrate sales and develop human resources.

The effect clearly emerged in the first year of introduction. In FY 2022/12 as the first year of the TOK Medium-Term Plan 2024, TOK increased its market share and achieved record-high performance despite the slowing growth of the semiconductor market. As specific measures, I continued to promote the existing customer-oriented strategies as our core competence, strengthened collaboration of the Research and Development Department with the Sales Strategy Division in order to handle overall marketing on a product basis instead of a customer basis. I also strategically identified R&D themes, set material issues based on the market sale and prospective analysis of each product, selected projects that must be acquired, and formulated market share targets. As a result of strengthening concentration, a shared mind, and an aggressive approach through the collaborative efforts of sales and development toward the establishment of a further competitive advantage, we expanded market shares for EUV/ArF photoresists for cutting-edge nodes of semiconductors and increased sales of high-purity chemicals. To increase the global market share of cutting-edge photoresists as a key strategy under the Medium-Term Plan, promoted as one of the material issues, we will continue to maximize interaction and synergy among human capital in sales and development, thereby leading to further increases in earnings and contribution to a social impact.

By achieving and maintaining 200% R&D efficiency as a KPI, we will further improve capital efficiency and attain sustainable corporate value enhancement

To further improve capital efficiency, we will continue to aim at achieving and maintaining 200% R&D efficiency (operating income over the past five years divided by R&D costs over the preceding five years) as an R&D KPI, thereby leading to the further improvement of ROIC and ROE, while apportioning any surplus over 200% to R&D investment within the long-term themes for the next ten years so that the TOK Group can continue growing in the future. In this way, we strive to deepen knowledge in existing fields while pursuing knowledge of the development of new materials and new businesses, thereby further upgrading the Group as a long-running R&D-driven company and company with unfading startup spirit while promoting sustainable corporate value.

KPI

Achieve and maintain R&D efficiency at

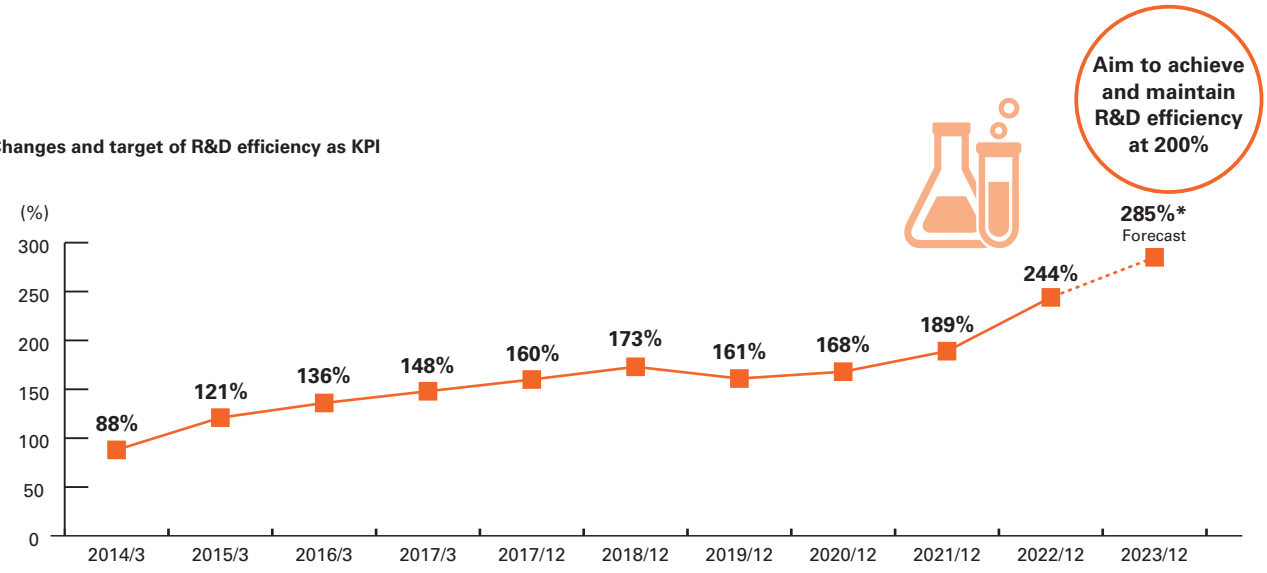
200%

Response to megatrends and maximized risks and opportunities

Medium- to long-term growth expected in the semiconductor industry

In the global semiconductor market in 2022, demand at home under the COVID-19 pandemic subsided, while geopolitical risks escalated because of the Ukraine crisis and other factors, and worldwide inflation affected personal consumer spending and corporate investments in plant and equipment. As a result, the market growth rate was only 3.3% year over year (compared to increase by 26.2% year over year in 2021).*1 The slowing tendency will continue for the time being. Particularly in 2023, negative growth (–10.3% year over year) is forecast for the first time in four years after 2019 because of slowing demand for smartphones, PCs, consumer electronics, and other goods. On the other hand, continued steady demand is expected for power semiconductors for EVs and renewable

Changes and target of R&D efficiency as KPI



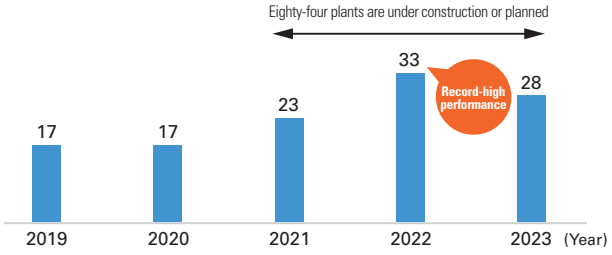
* Calculated based on figures announced on February 13, 2023

energy systems, as well as for logic semiconductors for generative AI. Driven by these fields, the global semiconductor market is expected to grow by 11.8% year over year to the largest scale ever again in 2024.*1 In 2030, the market is considered to grow to about 1.5-fold of the present scale to one trillion US dollars.*2

Under these circumstances, semiconductor mass production plants are being constructed around the world. From 2021 to 2023, more than 500 billion US dollars is to be invested in 84 semiconductor mass production plants.*3 Therefore, in the TOK Medium-Term Plan 2024, TOK will strengthen mass production structures with investments in plants and equipment on the largest scale ever, thereby fully grasping the maximized opportunities.

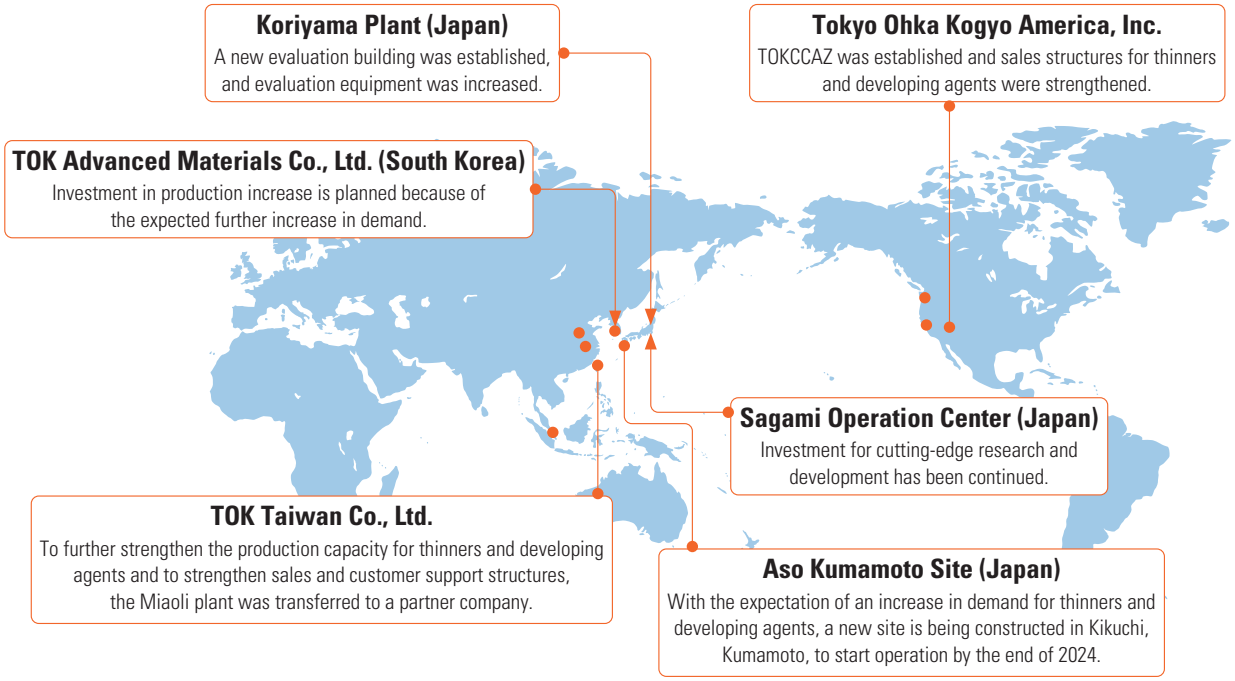
*1 Source: *World Semiconductor Trade Statistics* (June 2023)
*2 Source: German Electrical and Electronic Manufacturers Association (ZVEI) (February 2023)
*3 Source: *SEMI World Fab Forecast Report* (December 2022)

Semiconductor mass production plants under construction or planned across the world



* Source: prepared by TOK based on *SEMI World Fab Forecast Report* (December 2022)

Progress updates in TOK investment in plant and equipment



Strengthening risk measures from short-term, medium- to long-term, and super-long-term perspective

On the other hand, because risks are also maximized in line with maximized opportunities, we will reduce risks and turn them into opportunities by strengthening risk measures from the short-term, medium-to-long-term, and super-long-term perspective.

First, in response to the rapidly increasing number of semiconductor mass production plants around the world, we strive to grasp opportunities, as mentioned earlier, while incessantly reforming and diversifying our product portfolio in preparation for the emergence of oversupply risks in the future, thereby pursuing risk reduction through continued full-portfolio strategy.

In response to the escalating natural disaster risks, fire risks, and geopolitical risks emerging in the present semiconductor industry, we strengthen responses by the Risk Management Committee chaired by the president, coupled with continued risk diversification by operating in five regions (Japan, USA, China, South Korea, and Taiwan).

In response to the risk of escalating price competition due to the increase of emerging photoresist manufacturers in Asia and elsewhere, we will continue strengthening the competitiveness of TOK in future high-value-added fields.

Reducing R&D risks through advanced marketing activities

TOK is a manufacturer of semiconductor photoresists with the largest global market share at nearly 30%.*4 We will continue to practice the proprietary business model in order to keep winning the competition against competitors that are larger and that have a cash generation structure or business portfolio differing from that of TOK **(See pages 22–23, CULTURE & BUSINESS MODEL)**, while further reducing R&D risks **(See page 90)**.

As specific measures, we will continue to advance our marketing activities that feature customer-oriented strategies combined with marketing activities led by the Sales Strategy Division because more than one technological approach is always present in the cutting-edge fields of semiconductors toward the resolution of technological issues and the achievement of innovation, and the future market share depends substantially on the selection of an approach for the investment of management resources. In this way, we will upgrade our ability to analyze future markets, lead to a breakthrough through appropriate and proactive risk taking as an R&D-driven company, and pursue a further increase in market share.

*4 Based on the projected shipment volume of EUV, ArF, KrF, g-Line and i-Line photoresists in 2022 (calculated based on Fuji Chimera Research Institute, "Current Status and Future Outlook of Cutting-edge/Noticeable Semiconductor-related Markets 2023")

Reducing environmental risks and achieving supply chain sustainability

To achieve supply chain sustainability as a material issue through business, we are accelerating the business strategy for reducing cutting-edge environmental risks in semiconductor materials through collaboration of the Sales Strategy Division and the EHS Division. As specific measures, we have continuously ensured compliance with the environmental regulations applicable to our products, and we are sincerely responding to new environmental regulations. As we receive an increasing number of requests from customers to further reduce the environmental impact of existing products and any influence on human health, we steadily satisfy these needs with safer substrate materials, thereby pursuing increased earnings.

We are also implementing measures for PFAS*5, for which regulations are being strengthened in the United States and Europe by promoting research and development by computational chemistry and MI through collaboration of dedicated staff and the Sales Strategy Division.

*5 Per- and polyfluoroalkyl substances

Turning super-long-term risks into opportunities through cutting-edge long-run R&D

While medium- to long-term growth is expected in the semiconductor industry as mentioned earlier, there are also risks that the material technologies that the TOK Group has accumulated may become obsolete in the event of further miniaturization of the front-end processes, advancement of back-end technologies, 3D packaging, and/or the emergence of the optical semiconductor or quantum computer market for the next generations. In response, the Sales Strategy Division and the Strategic Alliance Division are promoting research and marketing for the next ten years onward and strengthening countermeasures in close collaboration with the Research and Development Department.

In particular, there is practical progress in technological development for the achievement of optical semiconductors with emerging opportunities for the development of various materials. Because the achievement of optical semiconductors will have a substantial social impact in both processing speed and energy saving, we are promoting long-term R&D based on computational chemistry as part of the pursuit of knowledge explained earlier.

TOK Medium-Term Plan 2024, material issues, and initiatives toward TOK Vision 2030

Promoting full-portfolio strategy in the three areas of semiconductors: miniaturization, multilayer stacking, and legacy

The TOK Group will continue to pursue the enhancement of sustainable corporate value by closely linking new material issues with TOK Medium-Term Plan 2024 by backcasting from TOK Vision 2030.

In FY 2022/12 as the first year, we focused on the full-portfolio strategy to promote all items to all customers, including photoresists for different light sources (EUV, ArF, KrF, and g/i-Line), high-purity chemicals, and back-end process materials. As a result, sales increased not only in the cutting-edge fields of miniaturization, including ArF/EUV photoresists, as mentioned earlier, but also for KrF photoresists for 3D-NAND and other multilayer stacking purposes, as well as for g/i-Line photoresists for legacy use, such as power semiconductors and sensors, thereby achieving substantial progress in both the contribution to innovation and the creation of social value and in global environmental conservation considering future generations as material issues.

In FY 2023/12 as the second year onward, we will continue these initiatives. We will provide the technologies, quality, environment, and added value that contribute to the value creation process of customers while continuing development and improvement from a thoroughly customer-oriented perspective. By further accelerating the increase of global market shares for cutting-edge photoresists, we aim to acquire and maintain the largest global market shares for all cutting-edge photoresists for EUV, ArF, and KrF. We will also continue with the stable supply and sales increase of power semiconductors for i-Line photoresists, thereby contributing to the achievement of global carbon neutrality based on the lower power consumption of semiconductors while maintaining the largest market share for i-Line photoresists.

Why we continue pursuing the acquisition and maintenance of largest global market shares

We continue pursuing the acquisition and maintenance of the largest global market shares for semiconductor photoresists for mainly three reasons in marketing, development, and procurement while continuously aiming at the maximization of earnings.

First, in marketing, we provide customers with high-quality information and obtain high-quality information from customers by retaining the largest market shares based on TOK's proprietary knowledge, know-how, and relationships of trust with customers accumulated since we started the photoresist business on a full scale in 1968.

Next, in development, having the largest market share has important significance in negotiations with customers, which is one of the key factors in the development competition of semiconductor photoresists. By leveraging the abundant knowledge and know-how accumulated as a manufacturer with the largest market share, we can establish the baseline standpoint in the initial stage of photoresist selection by customers, thereby acquiring an advantage in development competition.

In procurement, we achieve a stable supply to customers and sustainable value creation by the TOK Group by leveraging the resilience underlain by the thick supplier base and the relationship of trust established through the continued production of photoresists in the largest quantities as a manufacturer with the largest market share.

TOK will continue to pursue further market share increases for semiconductor photoresists while creating greater economic value and social value by upgrading strengths in marketing, development, and procurement, thereby contributing to the generation of a social impact.

Further strengthening investment in marketing and development of human resources

For investment in human capital as the starting point, we will further invest in marketing and development of human resources toward the pursuit of happiness of personnel as a material issue.

First, as part of investment in marketing human resources, we established the TOK Shinka Award for the Marketing and other departments, as a new system equivalent to the technological recognition system, in order to reward outstanding sales performance. We also introduced the SP Position system as a career path for specialists into the Marketing Department as well, thereby further motivating marketing human resources.

For investments in R&D human resources, we maintain the existing Executive Fellow system, incentive payment system, and technological recognition system, while starting a verbal technological presentation sessions for young human resources in April 2022, so that they can upgrade their problem-solving skills from a thoroughly customer-oriented perspective through tough assignments based on customer proposals.

Message from the Director in Charge of New Businesses Development

Development of new businesses aiming to generate social impact

Yusuke Narumi

Director, Officer, Department Manager,
New Business Development Department

Aiming to generate social impact in a super-long time frame

Create new businesses with an eye on the business portfolio in 2040

TOK Vision 2030 was introduced in 2020 with the aim of becoming a 100-year company by 2040 based on its different achievements, economic value, and social value made over ten years. In the development of new businesses, TOK promotes the development of a new business that will become one of its mainstay businesses in the business portfolio by 2040.

As specific measures, the company strives to acquire and create core technologies for electronic materials and new fields as part of its key strategies under TOK Medium-Term Plan 2024 by backcasting from the Vision and through initiatives for its contribution to innovation and the creation of social value as a material issue. The key achievements made in FY 2022/12 were as follows.

Development of a radiating heat-dissipation material
— Social impact: resolution of the heat emission problem

In February of this year, TOK developed a radiating heat-dissipation material as a new concept material for heat emission parts without needing a cooling fan as one of the solutions to the heat emission problem of cutting-edge semiconductors and electronic parts as a major social issue. An anticipated application is to attach the product to the relevant devices and thereby produce a cooling effect without using a cooling fan. The development of the product started in April 2021. It was completed as a lightweight material with a high degree of forming freedom by combining the knowledge of radiating materials accumulated through continued cooperation with academia and compounding/coating techniques for polymers and inorganic materials as TOK's strength and incorporating the results of marketing such as research on competitors. TOK is promoting marketing activities toward its release, aiming at a large market growth in the future.

Progress in life science-related materials
— Social impact: more efficient viral analysis and enhanced patient QOL

TOK started full-scale marketing of biochip production materials in 2015 and achieved high performance by leveraging the microprocessing technology and MEMS material technology accumulated in the semiconductor segment. These materials are applied to the next-generation biochips (in DNA sequencers, etc.) that contribute to the time reduction and improved precision of base sequencing. Sales of these materials increased as demand for viral analysis rose during the COVID-19 pandemic, which contributed to the preparation of essential data for countermeasures against the spread of COVID-19 through the analysis of the initial viral properties and the rapid identification of variants. TOK is striving to develop new applications for non-COVID-19 use.

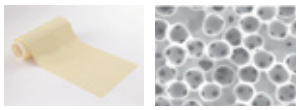
The SIEVEWELL™ cell sequencing chip was marketed as a TOK brand in 2019 from the internalized production processes comprising design and lithography. This product contributed to pathological diagnoses with a reduced physical burden on patients in a broad range from infectious diseases to oncology by sequencing and integrating many cells. In addition to its present use in research for collecting and analyzing circulating tumor cells (CTCs) in blood, which are responsible for cancer metastasis, the product will be applied to a variety of other fields that include cell screening for the production of antibodies for biopharmaceuticals and the analysis of plant cells that contain pharmaceutical materials.

Create new businesses envisioning a 100-year company

SDGs to which we contribute

Functional materials

- High-functional films
- Surface modifiers

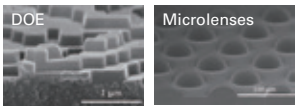


Life science

- Biochip materials
- Cell array chip, SIEVEWELL™

Optical materials

- Nanoimprint materials and high-refractive materials for AR/VR and 3D sensors



Technologies contributing to decarbonization

- Chemical looping

Message from the Officer in Charge of DX

Promoting DX from the standpoints of supply chain and society, to be directly linked to corporate value enhancement

Shoji Otaka
Officer, Department Manager, Corporate Planning Department

Value creation pursued by TOK through DX

Expedite product development

As "Promote DX" is one of the seven strategies under TOK Vision 2030, we promote materials informatics (MI) as part of DX in research and development for the TOK Medium-Term Plan 2024 as the first step. We have already started materials design using quantum chemical calculation, which has successfully led to expedited product development. In the coming years, we plan to transform our technological knowledge and the expertise accumulated in TOK over many years into a data library and establish a seamless IT platform for leveraging the library on various sites. We are also strengthening information security in line with the establishment of IT infrastructure and systems. Through these measures, TOK will link the R&D capabilities strengthened by DX to enhance corporate value.

Improve performance, product quality, and safety, coupled with cost reduction

To promptly respond to the rapid market and technological changes in the semiconductor industry, we achieve the stable supply of high-value-added and high-quality products by sharing information on product development, quality, and production forecasts with customers and suppliers. In the coming years, we plan to accelerate the shift of production plants to smart factories and thereby establish production structures that will appropriately satisfy the requests of customers and other stakeholders for performance, quality, cost, safety, and the environment.

Grasp and satisfy social needs for miniaturization

While the trends of the low birthrate and an aging population accelerate in Japan, the world population continues to increase. To sustain the ever-increasing digital data for both capacity and speed, semiconductor demand is expected to continuously increase. The performance and quality requirements for TOK products are also continuously escalated for the development and production of next-generation semiconductors. To satisfy these social expectations, TOK aims to further expedite product development and strengthen the supply chain for TOK Group products by combining the incessant technological improvement as its management principle with DX promotion.

Appropriately invest management resources and disclose transparent and accurate non-financial information

In addition to the utilization of MI in the ongoing R&D activities and the shift of production plants into smart factories, TOK is making steady progress in the quantitative management of human capital using employee engagement indicators and of other nonfinancial capital including information disclosure in accordance with the TCFD recommendations. Through DX promotion, TOK will accurately grasp the information and circumstances of the environment, society, and economy that surrounds the company and thereby achieve the appropriate disclosure of nonfinancial information.

Road map for DX promotion until 2030

SDGs to which we contribute

Supply chain
- Expedite product development
- Improve performance, product quality, and safety, coupled with cost reduction

Society
- Grasp and satisfy social needs for miniaturization
- Appropriately invest management resources and disclose transparent and accurate non-financial information

TOK Medium-Term Plan 2024
- Promote material development utilizing MI
- Shift to smart factories

2nd Step
- Achieve shift to smart factories with detection, prediction, and automation

3rd Step
- Achieve DX pursued by TOK

Overarching aspiration for 2030

Message from the Officer in Charge of General Affairs and Human Resources

Shedding light on all human resources, we will pursue further corporate value enhancement through increased human capital investment.

Yuichi Honma
Officer, Department Manager, General Affairs Department

For the enhancement of corporate value

Pursuing happiness for individuals as the starting point of value creation

Since its foundation, the TOK Group has always considered employees as valuable assets of the company. Under the Policy on Utilizing Human Resources, which defines to never forget that business always starts with people, the TOK Group pursues a sustainable future society filled with happiness – and this starts from the pursuit of happiness for individuals in the workplace. As part of these efforts, TOK has endeavored to improve employee engagement. Based on the results of the engagement survey conducted in 2019, the company has promoted personnel system reform to embody a company where employees can achieve personal growth and contribute to business performance. The new personnel system was subsequently introduced in January 2022. The new system shifts to a role grade system from a management by objectives system, which focuses on the expected roles in each position and proportionate performance. Fair treatment and promotion systems were established with the introduction of points-based rating system where employees can accumulate points during the entire period of the same grading to use as a promotion standard. TOK also has established specialist systems for each job type in order to leverage the specialty of individual human resources, such as the executive fellow system that treats specialists in higher positions equivalent to directors, and fellow positions and SP positions applicable to employees. These implementations give the employees further diversifying job courses.

It has passed one year since the introduction, and TOK has successfully created a work environment where every employee is able to perform their tasks with the clear recognition of what is expected for their own roles. On the other hand, however, we have observed an inadequate understanding of the new system in some employees; to solve this, periodic training will be implemented for managers and evaluators in order to increase their ability to provide an explanation to their staff and further disseminate the new system. The TOK Group will pursue the happiness for individuals through these measures based on the new personnel system, and it will create high added value through the higher performance of each employee, which shall result in further enhancing corporate value.

Policy on Utilizing Human Resources

Since its founding, employees have been the greatest asset of the TOK Group. The Company's human resource policy is based on the following five principles derived from its long-held philosophy that human resources are one of the company's best assets.

- Never forget that business always starts with people.
- Any discrimination within the Company and among employees is strictly prohibited.
- Ensure full compliance with applicable laws and regulations as well as fair and equal compensation.
- Educate personnel and promote creativity to become a company that develops innovative technologies.
- Make sure that personnel systems are based upon performance while emphasizing and ensuring transparency.

Management executives commit to the improvement of employee engagement

TOK sets an employee engagement indicator as one of the KPIs for the remuneration system for directors linked to medium-term and long-term performance since 2022, thereby strengthening the engagement of the Board of Directors in employee measures and enhancing sustainability governance. Under this scheme introduced with the strong intention of the president, the management executives pursue improvement in "employee engagement" and "employee-friendly environment" as the two key indicators. The results of the engagement survey conducted in October 2021 revealed that in the "employee engagement" category the TOK Group is globally competitive, while it showed the potential for improvement in the "employee-friendly environment." Therefore, TOK set KPI objectives to improve "employee engagement" by three points and "employee-friendly environment" by seven points and is promoting measures to attain these objectives. In FY 2022/12, the individual departments and subsidiaries promoted the following measures.

❶ Increasing education and training opportunities
❷ Personnel rotation and other measures for removing barriers among divisions and departments

❸ Evaluating challenges made based on the pluses rather than the negative aspects
❹ Preparation for a Self-Career Dock support system as career planning
❺ Establishing relationships of trust by strengthening communication between managers and employees
❻ Introducing innovative operating methods
❼ Accumulating praises and small successes to establish experience of success
❽ Increasing human resources by strengthening recruitment

The Board of Directors continues to monitor initiatives on the execution side concerning sustainability issues, such as employee engagement, carbon neutrality, and risk management. In the meantime, the operation of the Council of Directors started in June 2022, consisting of directors, executive officers, and the heads of related divisions. The Council has frank and open-minded discussions on broad management issues, including ESG and sustainability, which leads to decision-making by the Board of Directors.

KPI

**Employee engagement indicator*
Positive response rate**

Employee engagement

Objective for 2024: Improve by three points (vs. 2021)

Employee-friendly environment

Objective for 2024: Improve by seven points (vs. 2021)

* Based on responses in employee engagement surveys that are periodically conducted with the employees of the TOK Group

Megatrends

Competition for recruitment will further intensify

Even though the growth of the semiconductor industry is in an adjustment phase at present, the industry is expected to grow on an unprecedented scale on a medium- to long-term basis. Combined with increasing geopolitical risks, semiconductors are clearly strategic supplies that affect the economic security of countries and regions. Therefore, risk diversification is accelerated across the world by strengthening domestic production and distribution from multiple sites, while large-scale investments for the redevelopment of the semiconductor industry have started in Japan, resulting in intensified competition for recruitment by related industries in Japan and overseas.

In Japan with its persistent trends of a low birthrate and an aging population, there is an increasing shift from the conventional membership employment to job-oriented employment, especially among the youth. However, the effectiveness and successfulness of this trend remain unknown with concerns expressed about the severity of adverse reactions.

Under these circumstances, TOK will implement measures to guarantee its organizational power as conventional strength while focusing on job-oriented employment in the new personnel systems. The company will also implement successive measures of focusing on the appropriate workforce size, happiness, employee-friendly working environments, rewards for work, and health, safety, and hygiene issues from the perspective of the entire group, thereby increasing employee engagement and pursuing the ideal to become a company that is favored, selected, and respected. In this way, TOK will strengthen its human capital both qualitatively and quantitatively in order to achieve larger contribution to social impact based on the purpose of *contributing to a sustainable future through chemistry*.

TOK Medium-Term Plan 2024, material issues, and initiatives toward TOK Vision 2030

Linking investments in human capital to the enhancement of corporate value under the medium-term plan

To increase investments in human capital under the TOK Medium-Term Plan 2024, the company continues to increase recruitment while considering medium- to long-term operational expansion and future growth. In 2022, TOK recruited diverse human resources on the largest scale by combining new graduates and mid-career applicants. The company will continue to increase investments in human capital by emphasizing the continuation of recruitment and the strengthening of personnel development.

To guarantee retention of recruited employees, the TOK Group will continue to appoint appropriate human resources to appropriate positions based on talent management systems in Japan and overseas, while enhancing human resource exchange and support for career planning based on the introduction of a self-career dock system.

For the further improvement of the working environment, which is a key factor in the improvement of employee engagement, expansion of recruitment, and the high retention of recruited employees, TOK implements physical measures that include increased efficiency based on smart plants and the introduction of state-of-the-art equipment, combined with increased welfare facilities and improved office environments, while also enhancing related systems as exemplified by the acquisition of RBA certification rated at the highest class (Platinum Recognition) at two sites in the past two years, the expanded acquisition of the ISO 45001 certification, and the promotion of health & productivity management, thereby accelerating the establishment of a human-friendly working environment.

Human resource training that sheds light on human capital

In human resource training, TOK aims to help individual employees achieve personal growth coupled with the company's growth. The company provides human resource training that sheds light on human capital from youth to experienced employees.

While continuously improving the existing tier-based training programs for all layers, TOK also focuses on strategic management training for division heads to acquire the skills to provide clear explanations and disseminate company-wide strategies to field employees, thereby helping division heads upgrade skills to see the bigger picture and to invigorate their organizations. In the development of young field personnel, the company will continue to emphasize tough assignments entailing direct negotiations with local customers in the United States, South Korea, Taiwan, China, and other regions that continue to lead

the semiconductor industry. In the meantime, TOK will also improve the domestic training program and thereby enhancing cross-departmental training programs to acquire multi-faceted broad perspectives. TOK will particularly enhance business simulation training for sales departments as part of tough assignments, while also implementing simulations for the Corporate Planning Department, General Affairs Department, and Accounting/Financial Department. In the coming years, the TOK Group intends to promote the establishment of global career development plans with a focus on initiatives at the newly established Global HR Alliance Section.

For the further promotion of female personnel and the further appointment of international employees

As both risks and opportunities continue to become maximized in the business environment, innovations and risk management are indispensable for leveraging diverse insights, values, and specialties so that the TOK Group can continue practicing its purpose to *contribute to a sustainable future through chemistry*. Therefore, the Group will adhere to its diversity and inclusion policies and proactively pursue the further promotion of female personnel and the further appointment of international employees.

KPI

Ratio of women in senior and middle management

Objective for 2030: Increase by twofold (vs. 2020)

KPI

Childcare leave user rate among male employees

Objective: Maintain 30% or more

The TOK Group achieved a record-high ratio of women in senior and middle management and a record-high ratio of women among the overall employees in FY 2022/12, owing to the effects of continued efforts to recruit and retain female employees and to promote them to senior and middle management. The Group also achieved a record-low difference in average tenure figures for men and women. TOK will enhance the environment for the further promotion of female employees by improving the awareness of individual female employees and of their departments and supervisors. The lower childcare leave user rate among male employees has been a problem compared to the 100% user rate among female employees. However, male users are increasing as measured in the past few years. In FY 2022/12, 12 male employees used childcare leave with an increase by 1.5-fold from the previous year, and the user rate increased to 57%.* The company will aim to maintain the childcare leave user rate among male employees at 30% or more.

As a result of the continued efforts to increase local development and production sites and the emphasis on merit-based hiring aimed at the further employment of international human resources, both the number and percentage of international employees have consistently increased. The ratio of local hires in overseas management positions as one of the KPIs for material issues stood at a record-high 56.2%. These tendencies will continue as overseas sales increase. The Group has also continued intra-group human resource exchange for international synergies in insights and values, which is to be further enhanced.

* Errors in Integrated Report 2021 regarding the number of users for 2021 have been corrected.

Indices related to female employee participation*1

	2018	2019	2020	2021	2022/12
Ratio of female new graduates hired (%)	43.3	39.4	38.5	17.0	26.4
Ratio of women among the overall employees (%)	12.3	13.0	13.7	14.0	14.6
Difference in average tenure figures for men and women (years)	9.2	9.3	9.1	8.4	8.1
Ratio of women in senior and middle management (%)	2.4	3.3	3.2	3.8	4.0
Ratio of women on the Board of Directors (%)	8.3	7.7	7.7	7.1	10.0*2

*1 Unconsolidated (employees exclude those seconded from TOK to other companies and contract workers but include people seconded from other companies to TOK)
*2 The ratio of women on the Board of Directors is as of 2023.

Wage difference between male and female employees (percentage of female wage to male)*1

	2018	2019	2020	2021	2022/12
All workers (%)	47.8	49.7	59.1	65.5	65.4
Permanent employees*2 (%)	65.3	65.5	67.4	69.4	68.2
Fixed-term employees*3 (%)	31.5	33.9	49.8	60.4	61.5

*1 Wage: Includes base salary, payment for overtime work, and bonuses but excludes retirement allowance, commuting allowance, and other allowances.
*2 Permanent employees: Secondees exclude those seconded from TOK to other companies but include persons seconded from other companies to TOK
*3 Fixed-term employees: Include temporary employees but exclude dispatched temp staff

Supplementary explanation concerning difference:
The reasons for the differences include the low percentage of women in senior and middle management combined with the relatively many female workers at low wage levels as a result of the increased recruitment of new female graduates. In the coming years, TOK will promote the appointment of female managers toward a KPI objective for the material issue "Ratio of women in senior and middle management: Aim to increase to twice the level by 2030 (vs. 2020)."

Number of users of childcare-related systems

	2018	2019	2020	2021*	2022/12
Childcare leave system (number of users)	12	16	19	27	31
Shorter working hours (number of users)	6	13	12	16	17
Childcare time (number of users)	13	16	16	13	15
Childcare leave system (number of male users)	1	1	5	8	12

* Errors in Integrated Report 2021 regarding the number of users for 2021 have been corrected.

Number of non-Japanese employees

	2018	2019	2020	2021	2022/12
Number of non-Japanese employees (unconsolidated)	11	16	18	18	24
Number of non-Japanese employees (consolidated)	378	412	424	476	524
Ratio of non-Japanese employees (consolidated, %)	22.6	23.9	24.2	26.2	26.9

Human resource strategies to become a company selected by stakeholders

Under the TOK Medium-Term Plan 2024, the TOK Group sets the employee engagement indicator as one of the KPIs. By establishing an environment where employees of the TOK Group can work safely, vigorously, and with a sense of fulfillment, the company aims to enhance the happiness of employees and pursue the growth of the TOK Group. As the market environment that surrounds the TOK Group transforms year after year, the roles required of the TOK Group also continue to change. In response to these changes, it is essential that individual employees improve added value and pursue self-development. To this end, TOK introduced online training tools open to all employees and other measures to support skill upgrading of employees, thereby enhancing supportive systems for career development. Through these measures, TOK aims to become a company selected by employees and other stakeholders.

Motoko Samezawa
Deputy Department Manager, General Affairs Department, and General Manager, Human Resources Division

Human Rights Policy

The TOK Group respects the basic human rights and diverse values of individuals and acts in accordance with the laws of countries and regions and the social norms related to human rights* as a good member of the international community.

* The Universal Declaration of Human Rights, the Guiding Principles on Business and Human Rights, ISO 26000, the Responsible Business Alliance Code of Conduct, and other guidelines

- The TOK Group never conducts or accepts any kind of discriminatory treatment based on birth, nationality, race, ethnicity, religion, gender, sexual orientation, marital status, pregnancy, illness, age, disabilities, or any other causes prohibited by law in recruitment, employment, placement, training, remuneration, or promotion.
- The TOK Group prohibits child labor, forced labor, bonded labor, and human trafficking, regardless of employment status.
- The TOK Group prohibits all activities that may be regarded as harassment.
- The TOK Group pursues the development and fair treatment of human resources.
- The TOK Group ensures sound employment and labor to maintain a work environment that is comfortable both physically and mentally.
- The TOK Group respects and guarantees the basic rights of workers stipulated by the International Labor Standards as well as the constitutions and labor acts of countries/regions.
- The TOK Group appropriately protects and manages personal information.

Respect for human rights

Continued and enhanced human rights education under the Human Rights Policy

The TOK Group formulated its CSR Policy in October 2020. As subordinate policies, the company also formulated the Human Rights Policy in reference to the Universal Declaration of Human Rights, the Guiding Principles on Business and Human Rights, ISO 26000, the Responsible Business Alliance (RBA) Code of Conduct, and other guidelines. In FY 2022/12, TOK implemented CSR training for all directors, auditors, and employees at Japanese sites, as well as suppliers for some operation centers, aiming to disseminate the Policy throughout the Company. TOK will continue to further improve awareness and promote understanding within the Group.

Prohibition of child labor and forced labor

The Human Rights Policy clearly states that the TOK Group prohibits child labor, forced labor, bonded labor, and human trafficking, regardless of employment status. The Group has also promoted initiatives covering the entire supply chain, including the statement of procurement considering human rights, occupational health and safety, and other social requirements in the CSR Procurement Policy **(→ see page 89)**.

Prevention of harassment

The Human Rights Policy states that the TOK Group prohibits all activities that may be regarded as harassment. TOK has also codified the Detailed Rules concerning Harassment, which aim to prevent harassment and facilitate responsive improvement measures through the three whistleblowing channels (respectively reporting to the legal advisor, the Audit and Supervisory Committee members, and the Legal Division), self-declaration, direct reporting to the Human Resources Division, and the establishment of an outside counseling section. In FY 2022/12, TOK also improved information sensitivity to detect slightest signs and ensure the prevention, identification, and rapid handling of harassments while promoting further training for directors, the Audit and Supervisory Committee, executives, and employees.

Ensuring the health and safety of human resources

Continued initiatives for health & productivity management

The TOK Group issued the Declaration of Health and Productivity Management in June 2022. This Declaration was formulated on the basis of the idea that mentally and physically healthy employees who maximize their individual personalities and capabilities lead to the growth of the company. TOK was recognized in the 2023 Certified Health and Productivity Management Outstanding Organizations Recognition Program by the Ministry of Economy, Trade and Industry and Nippon Kenko Kaigi in March 2023 for the fifth time.

In cooperation with the Tokyo Ohka Kogyo Health Insurance Society, TOK implemented Collab Health for the prevention and identification of diseases while encouraging officers and employees to maintain and promote health. For example, the company launched the My Health Web as a portal to provide health-related information for improving health knowledge and awareness among officers and employees. The Company also holds periodic walking festivals with the participation of the president as well as many officers and employees. In February 2023, TOK was designated a "Sports Yell Company" by the Japan Sports Agency for the third time.

To provide counseling services on mental and physical health, public health nurses have been appointed at certain sites. The company also aims to reduce the percentage of employees who smoke while strengthening countermeasures against passive smoking on its premises. TOK will continue to enhance the PDCA cycle of health and productivity management through its aim to nourish a health culture where officers and employees autonomously manage their health.

Message from the Director in Charge of the Environment

Focusing on environmental and occupational safety measures as the basis of growth strategies and corporate value enhancement.

Hirotaka Yamamoto
Director, Officer, Department Manager, Manufacturing Department

For the enhancement of corporate value

Minimizing negative outcomes and reducing capital costs

To contribute to a sustainable future through chemistry as our Purpose, the TOK Group aims to contribute to society starting from the pursuit of happiness by stakeholders. To this end, we maximize outcomes through contributions to innovation and the creation of social value and pursuit of the happiness of personnel as material issues while minimizing negative outcomes through measures for supply chain sustainability and global environmental conservation in consideration of future generations.

As specific measures, our basic policy in the manufacture of photoresists, high-purity chemicals, and other products features the establishment of a safe, comfortable work environment and the stable supply of quality needed by customers at all sites in Japan and overseas. Our cardinal rule is to keep the plants operating and to keep customers' production lines operating, placing the first priority on the safety of all stakeholders (workers) who provide service in the work environment of the TOK Group. In this way, we properly advance activities based on the Environmental Policy and the Occupational Health and Safety Policy, thereby minimizing the risks of the interruption of operations and environmental risks. In this way, TOK will reduce short-term, medium-term, and long-term growth inhibitors, thereby reducing capital costs and enhancing sustainable corporate value.

Response to megatrends and maximized risks and opportunities

Accelerating measures toward carbon neutrality as a prerequisite for sustainable future and society filled with happiness

For carbon neutrality as the largest social requirement facing humankind and a prerequisite for a sustainable future and society filled with happiness, TOK continuously contributes to the generation of a practical impact by developing and providing cutting-edge photoresists that promote energy conservation through the miniaturization of semiconductors, as well as power semiconductor photoresists indispensable for energy-saving equipment. At the same time, TOK pursues the reduction of energy-related CO_2 emissions (per base unit) by 15 points from the 2019 level by 2030 as the first step toward achieving carbon neutrality of the TOK Group by 2050. We are also formulating a detailed roadmap of initiatives through to 2030 toward achieving carbon neutrality in 2050. TOK shifted more than 70% of purchased electricity to renewable energy sources at all key sites in Japan in September 2021, and 100% in February 2023.

Environmental Policy

TOK Group strives to do businesses by achieving a sustainable society through investing appropriate management resources and ensuring health, safety and an appropriate environment through the Responsible Care Initiatives.*

- Complies with all environmental laws and regulations in each country and region in which we operate.
- Strengthens the safe-and-environmentally-friendly handling and management of chemical substances.
- Promotes efficient use, reduce, reuse, and recycling of resources.
- Improves energy-saving and global warming prevention activities.
- Promotes environmental pollution prevention activities.
- Promotes a healthy biodiversity.

* Responsible Care Initiatives: to ensure the environment, health, and safety related to all processes of chemical substances from development, manufacturing, distribution, use, final consumption, and final disposition.

Occupational Health and Safety Policy

TOK Group, as prioritizing workers'* health and safety, fosters safety cultures by preventing accidents, disasters, and illnesses in the workplace.

- Complies with all laws related to occupational health and safety in each country and region.
- Reduces risks by completing job hazards analysis.
- Provides comprehensive education and training for employees.
- Strives to strengthen our safety and disaster prevention systems for the purpose of minimizing and mitigating damage for accidents, disasters, or any other unforeseen event.
- Makes effective and continuous improvements by investing appropriate resources.

* workers: any and all labor providers to TOK.

The Group will also reduce CO_2 emissions by about 20,000 tons annually from before the shifts in September 2021.

The Group is proactively promoting carbon neutrality measures at our sites in the United States, South Korea, Taiwan, and China in consideration of the local decarbonization targets and energy conditions. At two plants in Taiwan, TOK acquired ISO 14064 certification in December 2022. By establishing more precise PDCA cycles at each site and strengthening collaboration among the sites, the TOK Group will accelerate measures toward group-wide carbon neutrality in 2050.

KPI

Energy-related CO_2 emissions per base unit (Scopes 1 and 2)

2030 target: Reduce by 15 points (vs. 2019)

For the calculation of financial impact by initiatives to counter climate change risks

To measure the actual effects of initiatives for decarbonization and carbon neutrality, TOK started the formal operation of a cloud computing system for the efficient and rapid collection, centralized management, and streamlined data analysis of environment-related data in FY 2022/12. This has enabled reporting agility and monitoring precision in data collection while enabling the rapid formulation and implementation of countermeasures in the event of an incident and the seamless incorporation of the analyzed financial impact into the plant operation and budget planning and group-wide management planning.

In the coming years, the Group will integrate the CO_2 emissions data accumulated in this system with product-based material design data, thereby calculating the carbon footprint of each product and accelerating initiatives toward carbon neutrality.

Toward the quantified TCFD-based disclosure of financial impact, the introduction of internal carbon pricing, and the implementation of emission rights trading, TOK is estimating a provisional range for carbon prices/taxes, as well as the financial impact based on thereupon. In the coming years, the Group will practice disclosure at a proper time while strengthening linkage with the progress and outlook of financial targets and production plans under TOK Medium-Term Plan 2024 and TOK Vision 2030.

Leveraging impact generation through R&D in initiatives for carbon offset and circular economy

As initiatives for carbon offset in 2030 onward, TOK aims to pursue the further miniaturization of semiconductors, develop and market materials for SiC/GaN and other next-generation power semiconductors, promote multilayer stacking in back-end processes, and make contribution with a system for the separation and recovery of CO_2 based on chemical looping as a new business, in cooperation with a university and other external stakeholders.

Particularly for circular economy with high correlation to carbon neutrality, the Group is also considering the reduction of emissions by shifting chemical looping to internal use because waste oil and wastewater tend to increase as resin generation increases in line with the production increase of photoresist.

Pursuing best practice in decarbonization through participation in communities

To pursue best practice for the TOK Group by broadly and flexibly introducing external knowledge and knowing diverse initiatives in Japan and overseas toward carbon neutrality, TOK is promoting proactive participation in decarbonization consortia and communities. In November 2022, TOK participated as a founding member of the Semiconductor Climate Consortium (SCC), consisting of Japanese and international firms in the semiconductor value chain, as well as the Semiconductor Equipment and Materials International (SEMI), as an initiative for reducing GHG emissions in semiconductor value chain in cooperation with member firms.

In April of this year, TOK participated in the Japan Climate Initiative (JCI) established in July 2018 to strengthen information provision and opinion exchanges by companies, local governments, and NGOs that proactively counter climate change and endorsed the JCI message "Overcoming Two Crises with Renewable Energy and Carbon Pricing." This message demands that the Japanese government reduce its dependence on coal-fired power and other fossil fuels by accelerating the introduction of renewable energy and introducing highly effective carbon pricing at an early stage while announcing that JCI will also take leadership action.

Semiconductor Climate Consortium FOUNDING MEMBER

JAPAN CLIMATE INITIATIVE

Converting the strengthening of chemical substance regulations into business opportunities

The semiconductor-related industries use diverse old and new chemical substances in response to continuous needs for new technological innovation and the stable supply of high-quality products. On the other hand, the chemical substance management regulations and laws applicable to the environment and safety become increasingly more stringent in line with surging concerns over the biological impact and interest in sustainability. Under these circumstances, the TOK Group has endeavored to comply with the EU REACH regulation*1 and other applicable laws and regulations and to support customer products in the acquisition of CE Marking*2 and other certifications. The Group has also steadily removed persistent substances, bioaccumulative substances, and toxic substances from the list of candidate substances and has completely eliminated the use of PFOS*3 and PFOA*4 as of March 2021. The TOK Group also completely eliminated the use of PFHxS*5 in July 2022, ahead of the industry. This has also led to the creation of a new business opportunity as one of the group advantages.

*1 This is an EU regulation that manages the registration, evaluation, and accreditation of chemical substances through an integrated system with the aim of ensuring complete fulfillment of responsibility on the producers' part and thorough compliance with preventive principles.
*2 Marking that certifies product conformance to the essential EU requirements
*3 Perfluorooctane sulfonate
*4 Perfluorooctanoic acid
*5 Perfluorohexanesulfonic acid

Monitoring trends in PFAS regulations and making necessary preparations

Regarding PFAS*, which is broadly used for photoresists, other semiconductor materials, and semiconductor manufacturing equipment, a detailed draft regulation based on the EU REACH Regulation was published in February of this year with the intention of completely eliminating the use of PFAS in the EU by 2026 at the earliest and semiconductor-related use by 2038. This draft regulation is under consultation at present. The semiconductor-related industries have submitted a written opinion on the scope of the application, schedule, and other details of the draft regulation and are discussing its future direction. The TOK Group participates in these movements as a member of the semiconductor supply chain and will strengthen voluntary information collection and opinion expression, monitor the situation, and agilely respond to any changes. PFAS is especially broadly used for technological innovation in semiconductors, and it will take time to develop and switch to substitute substances that have equivalent properties. The TOK Group will continue to allocate resources equivalent to the development of innovative materials into the development of PFAS substitute substances toward supply chain sustainability as a material issue **(See pages 54–57, Message from the Director of Marketing and Development)**.

* Per- and polyfluoroalkyl substances

Tighter Environmental and Safety-Related Laws and Regulations, etc. across the World and Regions

- Japan
  - · Partial revision of the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture (Chemical Substances Evaluation Act) (March 2023)
  - · Partial amendment to governmental and ministerial ordinances related to the Industrial Safety and Health Act (February 2023)
  - · Partial amendment to the Enforcement Order of the Act on Confirmation of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (April 2023)
  - · Partial amendment to the approval of export of chemical substances (October 2022)
  - · Partial amendment to the Cabinet Order Specifying Narcotics, Narcotic Material Plants, Psychotropics, and Narcotic and Psychotropic Materials and to the Enforcement Order of the Narcotics and Psychotropics Control Act (August 2022)
  - · Partial amendment to the Cabinet Order for the Designation of the Poisonous and Deleterious Substances (May 2023)
- USA
  - · A significant new use rule (SNUR) was proposed for certain organic fluorine compounds (PFAS) (January 2023)
  - · The regulation of PFAS manufacturing and use was proposed at a state level (Maine, Minnesota, etc.)
- Europe
  - · Draft PFAS regulation (slated for 2026)
  - · The European Chemicals Agency (ECHA) list of chemical substances of very high concern
- South Korea
  - · Partial amendment to the Chemical Substances Control Act (June 2023)
- Taiwan
  - · Amendment to the Toxic and Concerned Chemical Substances Labeling and Safety Data Sheet Control Act (November 2022)
- Thailand
  - · Amendment to the Hazardous Substances Act (December 2022)

TOK Medium-Term Plan 2024, material issues, and initiatives toward TOK Vision 2030

Continue supporting cutting-edge value creation with the interaction of capitals

In response to the risks and opportunities in the environment and occupational safety as explained above, TOK creates new value through customer-oriented strategies based on the trifecta of marketing (social and relational capitals), development (intellectual capital), and manufacturing (manufactured capital), in close linkage with the EHS Division, thereby achieving further growth in cutting-edge fields and sustainable corporate value enhancement. For example, the EHS Division collects the latest information on the impact of PFAS and other SVHC* mentioned above on business, carefully discusses and formulates the necessary measures while sharing risk information with the core parts where the trifecta gathers, and pursues new business opportunities as an established corporate culture. The global multi-site operations of customers are accelerating because of the present risks in the environment and occupational safety and health, coupled with geopolitical risks. By disseminating a similar corporate culture to our global sites in the promotion of a local production and local consumption model and a centralized production model, TOK is globally contributing to a sustainable future through chemistry as the TOK Purpose.

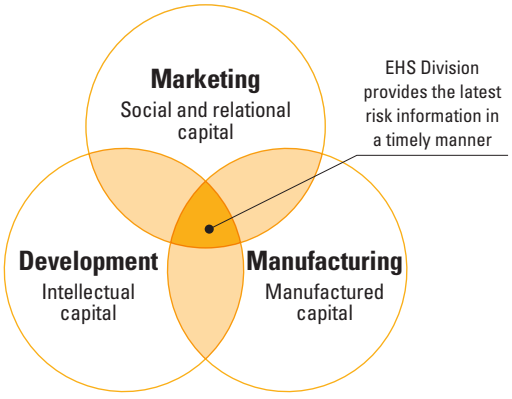
* SVHC stands for Substances of Very High Concern.

Quality Policy (revised July 2022)

The TOK Group aims to become
"The e-Material Global Company™" contributing to
a sustainable future through chemistry by providing
high value-added products and services through
incessant technological innovation, guaranteed product safety,
and quality control and enhancement.

- Through thoroughly customer-oriented viewpoints, TOK achieves social contribution as a sound and trusted company.
- TOK accelerates research and development and creates high value-added products that satisfy user needs in a continuous and timely manner.
- TOK aims to provide quality wanted by customers and establish stable supply structures that are never disrupted.

EHS Division closely engaged in interaction among capitals for customer-oriented strategies



Strengthening supply chain based on a global standard

Under TOK Medium-Term Plan 2024, the TOK Group allocates the largest cash ever to investments in plants and equipment in Japan and overseas, thereby strengthening global supply structures for major global customers. The Group will also pursue global standards in its initiatives for supply chain sustainability as a material issue. As specific measures, to advance supply chain from the perspectives of the environment and occupational health and safety, as well as in the aspects of human rights, ethics, and management, the TOK Group promotes measures in accordance with the RBA Code of Conduct as a global standard based on the Human Rights Policy, the Ethics and Anticorruption Policy, the Environmental Policy, the Occupational Health and Safety Policy, and the CSR Procurement Policy established in 2020. The Koriyama plant as the flagship plant and the Ebina Logistics Center as the manufacturing and distribution base were rated in the highest class (Platinum Recognition) in RBA-VAP audit* in 2021 and 2022, respectively. At present, measures are promoted to share the know-how and findings from these sites to other existing sites and to new sites that will be established.

The TOK Group also performs RBA-oriented assessment on raw material suppliers as part of the supply chain from the perspectives of the environment and occupational safety, as well as in the aspects of human rights. The Group started measures for leading this experience and know-how to the group-wide human rights due diligence **(See page 89, Corporate Governance)**.

External Evaluation

RBA-VAP audit (2022, Ebina Logistics Center)

Highest class (Platinum Recognition)

* RBA-VAP audit: Validated Audit Program conducted by Responsible Business Alliance

Completed the acquisition of ISO 45001 certification at all domestic sites

The TOK Group acquired ISO 45001 certification in accordance with the roadmap, aiming to upgrade our entire occupational health and safety based on a global standard. The certification was acquired at all domestic sites in July 2023. TOK will also increase acquisition at overseas sites, with the certification already acquired at the Taiwanese site in 2019, and the certification slated for September this year at the South Korean site.

Roadmap toward ISO 45001 certification

2019	2020	2021	2022	2023
Domestic	< Acquired certification > Gotemba Plant	< Acquired certification > Koriyama Plant, Utsunomiya Plant, Aso Plant, Shonan Operation Center	< Review in progress > Sagami Operation Center, Headquarters, Kumagaya Plant	< Review in progress > Logistics Center; 2023 Complete acquisition at all sites in Japan
Overseas < Acquired certification > TOK Taiwan Co., Ltd.				< Review in progress > TOK Advanced Materials Co., Ltd., South Korea

Accelerating shift to smart factories from a super-long-term perspective

The TOK Group aims to achieve carbon neutrality by 2050 and to become a 100-year company by 2040 from a super-long-term perspective. The Group intends to renovate production sites as one of the seven strategies under TOK Vision 2030. In TOK Medium-Term Plan 2024 backcasting therefrom, the Group promotes the shift to smart factories under the key strategy to stably supply high-quality products and to establish an optimal production system. The semiconductor market started to grow at an unprecedented speed, including power semiconductors and other legacy fields, and is expected to continue growing beyond 2050. In the meantime, employees of the TOK Group are likely to take a downturn after peaking out in 2032. TOK is promoting strategic recruitment activities considering the age composition, while accelerating the introduction of automation and RPA, thereby providing a human-friendly work environment of high operating efficiency.

As a company of unfading startup spirit, TOK also emphasizes a frank and open-minded business culture in the environment and occupational safety and health activities.

To respond to increasing demand from the semiconductor industry growing to an unprecedented scale, the business scale and employees of TOK are increasing on a medium- to long-term basis. TOK will continue to maintain the unfading startup spirit that has been inherited since its foundation and promote value creation through a frank and open-minded business culture not only on development and manufacturing sites but also in the environment and occupational health and safety activities. Following the downgrading of COVID-19 to Class 5, TOK conducted on-site ISO inspections for the first time in three years, which brought home the depth of in-person communication, the large amount of information obtained, and other benefits. TOK will reopen cross-border exchanges among EHS staff from Japan, South Korea, and Taiwan, which had been implemented before the COVID-19 pandemic and otherwise promote value creation as a company with unfading startup spirit through in-person communication.

Toru Miyano
General Manager, EHS Div.

TCFD-based Information Disclosure for Climate Change

In February 2022, TOK announced that it will pursue carbon neutrality by 2050. TOK shifted 100% of purchased electricity to renewable energy sources at all key sites in Japan and otherwise promoted investment in decarbonization and carbon neutrality. Through TCFD-based scenario analysis, TOK also promoted measures for quantifying the financial impact of response to risks and opportunities associated with climate change.

A society we aim at and climate change-related material issues

TOK pursues a sustainable future filled with happiness and considers that carbon neutrality is one of the keys to this goal. As a starting point for long-term initiatives toward this goal, TOK promotes initiatives for global environmental conservation considering future generations and TOK Medium-Term Plan 2024 by backcasting from TOK Vision 2030.

Governance

Under the top-down approach led by the president and chief executive officer, coupled with control by the director of the environment, the Group promotes measures to achieve carbon neutrality in 2050 **(See pages 64–65)**. At the Council of Directors, which was newly established in 2022, the department heads, executive officers, and directors broadly discuss ESG requirements that include countering climate change. The respective executive officers take the leadership in initiatives for decarbonization and other sustainability issues. These activities are monitored by the Board of Directors and updated in consideration of immediate climate change issues and changes in risks and opportunities.

Risk management

Under the governance structure above and the risk management structure centering around the Risk Management Committee, which comprises the president and the general managers **(See pages 87–88)**, TOK will ensure the PDCA cycle of each activity countering climate change and maintain continuous risk management with the president and chief executive officer as the chief risk management officer.

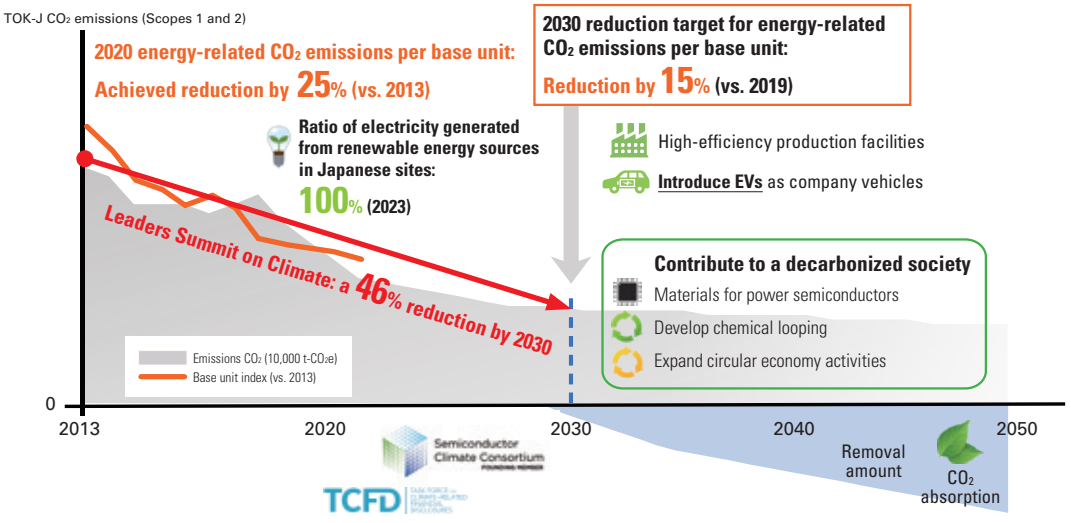
Strategies (scenario analysis)

TOK promoted scenario analysis on average temperature increases by the end of the 21st century by referring to the 1.5-degree scenario and the 4-degree scenario presented by the Intergovernmental Panel on Climate Change (IPCC) and then sorted the risks and opportunities for the overall group business, including the quantitative analysis of opportunities **(See pages 10–11, IMPACT ENABLER and the next page)**. Both in the 1.5-degree scenario and in the 4-degree scenario, the TOK Group re-recognized through the process above that it would be reasonably possible to enhance corporate value on a medium- to long-term basis by taking abundant business opportunities in the miniaturization and multilayer stacking of semiconductors and in the demand for power semiconductors, as well as by adequately responding to the anticipated physical risks and strengthening resilience.

Indicators and targets

TOK formulated the long-term environmental targets in 2020 to reduce energy-related CO_2 emissions (per base unit) by 15 points from the 2019 level by 2030. The Group introduced a cloud computing system for the efficient and rapid collection, centralized management, and streamlined data analysis of environment-related data in FY 2022/12. In the scenario analysis mentioned above, TOK estimated the financial impact assuming the introduction of internal carbon pricing and the implementation of emission rights trading. In the coming years, the company will disclose the data at an appropriate time, while strengthening linkage with medium- to long-term performance objectives and the progress and outlook thereof.

Initiatives toward achieving carbon neutrality



Response to climate-related risks and opportunities (scenario analysis)

Risk type	Category	Risks on TOK business	Expected apparent time range*1	Key initiatives (countermeasures against risks)
Transition risks Mainly assuming the 1.5-degree scenario	Policy and regulatory risks	● Increase in costs due to carbon pricing (introduction of carbon tax and expansion of emission rights trading)	Medium term to long term	● Curb cost increases by accelerating the reduction of CO_2 emissions per base unit through shifts to more energy-efficient manufacturing equipment and increased use of renewable energy **→ See pages 64–65** ● TOK shifted 100% of purchased electricity to renewable energy sources at all key sites in Japan in February 2023. If a carbon tax is introduced in Japan in the coming years, imposing ¥10,000 per ton, the payment of the tax will be reduced through this shift by ¥10,000 x 20,000 tons, equaling ¥200 million **→ See pages 64–65** ● TOK completed the estimation of the financial impact assuming the future introduction of internal carbon pricing and implementation of emissions right trading **→ See pages 64–65**
		● Increase in costs for responding to more stringent policies and regulations to reduce CO_2 emissions in Japan and other countries where TOK has manufacturing sites	Short term to long term	● Take the necessary action without delay through careful information collection and negotiations with governmental agencies in each country, thereby coping with climate change as a member of local communities **→ See pages 65 and 94–95**
Physical risks Mainly assuming the 4-degree scenario	Acute risks	● Damage to facilities due to increase in natural disasters	Short term to long term	● Take continuous precautions for water risks that have become apparent in the inundation of the Sagami Operation Center as our R&D hub by a typhoon in 2019 **→ See pages 35 and 96–97** ● Emphasize BCP and resilience to natural disasters in the capital investment plan under the TOK Medium-Term Plan 2024 toward TOK Vision 2030 **→ See pages 66–67 and 87–88**
	Chronic risks	● Increase in costs for process temperature control and product temperature control due to global warming	Short term to long term	● Develop more efficient and cost-effective means and methods for the control of process temperatures and product temperatures **→ See pages 64–65 and 94–95**
		● Increase in water stress due to global warming and difficulty in acquiring water resources	Medium term to long term	● Implement continuous measures in Japan and overseas to minimize water consumption in production activities and to maintain and improve effluent quality **→ See pages 96–97**

Opportunities	Expected apparent time range*1	Key initiatives (how to grasp opportunities)
Further miniaturization of semiconductors Assuming both 1.5-degree scenario and 4-degree scenario	Short term to long term	● Stable supply, sales increase, development, and maintenance of the largest global market share for EUV photoresists for line widths 7 to 3 nm ● Expected reduction in semiconductor power consumption through the provision of EUV photoresists for line widths 7 to 2 nm (estimate for 2030): **▲ 105 TWh (equivalent to 0.3% of estimated global power consumption in 2030)*2**
Expansion of the power semiconductor market Assuming both 1.5-degree scenario and 4-degree scenario	Short term to long term	● Maintain the largest global market shares for g/i-Line photoresists ● Stably supply and increase sales of g-Line and i-Line photoresists for power semiconductors **→ See pages 10–11 and 54–57**
Increase in the need for the development of next-generation power semiconductors with even lower power consumption Assuming both 1.5-degree scenario and 4-degree scenario	Medium term to long term	● Strengthen advantage in g-Line and i-Line photoresists for silicon carbide (SiC) power semiconductors as the emerging market and further strengthen the development and marketing thereof ● Gear up the development and marketing of g-Line and i-Line photoresists for gallium nitride (GaN) gallium oxide (Ga_2O_3) power semiconductors **→ See pages 10–11 and 54–57** ● Expected reduction in power in solar/wind power generation, EVs, and data centers, through the provision of g-Line and i-Line photoresists for SiC, GaN, and other next-generation power semiconductors (estimate for 2030): **▲ 155 TWh (equivalent to 0.4% of estimated global power consumption in 2030)*3**
Increase in demand for energy recycling systems Assuming both 1.5-degree scenario and 4-degree scenario	Medium term to long term	● Accelerate measures for development, sales, and shift to internal activities of chemical looping energy recycling system **→ See page 65**

*1 "Short term" is defined as until 2024, "medium term" as until 2030, and "long term" as until 2050. *2 See Note 2 to page 11. *3 See Note 4 to page 11.

Directors and Officers

Directors

Noriaki Taneichi
❶ Representative Director,
President and Chief Executive Officer
Nomination and Compensation Advisory Committee Member

1986 Joined the Company
2009 General Manager, Marketing Development Div.
2011 General Manager, New Business Development Div.
2015 Officer; Deputy Dept. Manager, New Business Development Dept.
2017 Director; Officer; Dept. Manager, New Business Development Dept.
2019 Representative Director, President and Chief Executive Officer (to the present)

Harutoshi Sato
❷ Director

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.
2019 Director; Senior Executive Officer; Dept. Manager, Research and Development Dept.
2022 Director (to the present)

Yusuke Narumi
❸ Director, Officer
Dept. Manager, New Business Development Dept.

1988 Joined the Company
2012 General Manager, Marketing Div.
2019 General Manager, Display and PV Panel Material Marketing Div.
2019 General Manager, Imaging Material Marketing Div.
2020 Officer; Dept. Manager, New Business Development Dept.
2021 Director; Officer; Dept. Manager, New Business Development Dept. (to the present)

Kousuke Doi
❹ Director, Senior Executive Officer
Dept. Manager, Marketing Dept. and
Dept. Manager, Research and Development Dept.

1986 Joined the Company
2009 General Manager, Advanced Material Development Div. 1
2011 President and Director of TOKYO OHKA KOGYO AMERICA, INC.
2016 Officer (President and Director of TOKYO OHKA KOGYO AMERICA, INC.)
2019 Officer; Dept. Manager, New Business Development Dept.
2020 Executive Officer; Dept. Manager, Marketing Dept.
2022 Director; Executive Officer; Dept. Manager, Marketing Dept. and Dept. Manager, Research and Development Dept.
2023 Director; Senior Executive Officer; Dept. Manager, Marketing Dept. and Dept. Manager, Research and Development Dept. (to the present)

Hirotaka Yamamoto
❺ Director, Officer
Dept. Manager, Manufacturing Dept.

1992 Joined the Company
2013 Plant General Manager of TOK ADVANCED MATERIALS CO., LTD.
2019 Deputy Dept. Manager, Corporate Planning Dept. of the Company
2020 Officer; Dept. Manager, Corporate Planning Dept.
2023 Director; Officer; Dept. Manager, Manufacturing Dept. (to the present)

Hiroshi Kurimoto
❻ Outside Director
Nomination and Compensation Advisory Committee Chairman

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 Advisor of OILES

Skills and experience required for directors of TOK

Name	Position	Outside	Nomination and Compensation Advisory Committee	Skills and experience						
				Management experience in other corporate groups	Research & development/ technology/ production	Sales/ marketing	Legal/ compliance/ risk management	Finance/ accounting	Global experience	Personnel/ labor
Noriaki Taneichi	Representative Director President		●		●	●			●	
Harutoshi Sato	Director				●				●	
Yusuke Narumi	Director				●	●			●	
Kousuke Doi	Director				●	●			●	
Hirotaka Yamamoto	Director				●				●	
Hiroshi Kurimoto	Director	●	●	●	●	●	●		●	●
Nobuo Tokutake	Director (Standing Audit and Supervisory Committee Member)				●				●	
Noriko Sekiguchi	Director (Audit and Supervisory Committee Member)	●	●	●				●		
Kazuo Ichiyanagi	Director (Audit and Supervisory Committee Member)	●	●	●	●	●			●	
Hisashi Ando	Director (Audit and Supervisory Committee Member)	●	●	●	●	●				

Nobuo Tokutake

❼ Director
Standing Audit and Supervisory Committee Member

1984 Joined the Company
2003 Chairman and President of TOK TAIWAN CO., LTD.
2007 General Manager, Quality Assurance Div. of the Company
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.
2020 Standing Audit & Supervisory Board Member
2023 Director (Standing Audit and Supervisory Committee Member) (to the present)

Noriko Sekiguchi

❽ Outside Director
Audit and Supervisory Committee Member
Nomination and Compensation Advisory Committee Member

1994 Registered as a certified public accountant
2002 Reregistered as a certified public accountant
2010 Representative of Sekiguchi CPA Office (currently Sekiguchi Noriko CPA Office) (to the present)
2011 Contract Monitoring Committee Member of Japan International Cooperation Agency ("JICA")
2011 External Assessment Committee Member of JICA
2012 Registered as certified tax accountant
2015 Director (Outside Director) of the Company
2019 Executive Officer of Chifure Holdings Corporation
2021 Audit & Supervisory Board Member of Oji Holdings Corporation (Independent Outside Audit & Supervisory Board Member) (to the present)
2022 Corporate Auditor (Outside Corporate Auditor) of Ryoden Corporation (to the present)
2022 Auditor of JICA (to the present)
2023 Director (Audit and Supervisory Committee Member) (Outside Director) of the Company (to the present)

Kazuo Ichiyanagi

❾ Outside Director
Audit and Supervisory Committee Member
Nomination and Compensation Advisory Committee Member

1977 Joined Teikoku Tsushin Kogyo Co., Ltd.
2005 Executive Officer in charge of Development Dept.; General Manager, Development Dept. of Teikoku Tsushin Kogyo Co., Ltd.
2008 Executive Officer supervising Development Technology and in charge of Development Dept. of Teikoku Tsushin Kogyo Co., Ltd.
2008 Executive Officer supervising Development Technology of Teikoku Tsushin Kogyo Co., Ltd.
2009 Director; Executive Officer supervising Development Technology of Teikoku Tsushin Kogyo Co., Ltd.
2009 Director; Executive Officer supervising Development Div. of Teikoku Tsushin Kogyo Co., Ltd.
2010 President of Teikoku Tsushin Kogyo Co., Ltd.
2019 Director and Advisor of Teikoku Tsushin Kogyo Co., Ltd.
2020 Director (Outside Director) of the Company
2023 Director (Audit and Supervisory Committee Member) (Outside Director) (to the present)

Hisashi Ando

❿ Outside Director
Audit and Supervisory Committee Member
Nomination and Compensation Advisory Committee Member

1979 Joined Sony Chemical Co., Ltd. (currently Dexerials Corporation)
2006 Corporate Executive; Kanuma Plant Manager of Sony Chemical & Information Device Corporation (currently Dexerials Corporation)
2007 Executive Officer; Kanuma Plant Manager of Sony Chemical & Information Device Corporation
2010 Director; Kanuma Plant Manager of Sony Chemical & Information Device Corporation
2012 Director and Executive Officer; Senior General Manager, Research & Development Div.; Kanuma Plant Manager of Dexerials Corporation
2014 Director and Senior Executive Officer; Senior General Manager, Research & Development Div.; Procurement, New Business Planning & Promotion of Dexerials Corporation
2016 Director and Managing Executive Officer; Officer in charge of Manufacturing & Technology; Corporate R&D Div. Head of Dexerials Corporation
2016 Representative Director and Senior Managing Executive Officer; Corporate R&D Div. Head of Dexerials Corporation
2019 Representative Director and Senior Managing Executive Officer of Dexerials Corporation
2019 Director and Managing Executive Officer; Lieutenant President of Dexerials Corporation
2020 Director and Managing Executive Officer; Lieutenant President of Dexerials Corporation; President of Dexerials America Corporation
2020 Technical Advisor of Dexerials Corporation
2022 Director (Outside Director) of the Company
2022 Director (Outside Director) of AeroEdge Co., Ltd. (to the present)
2023 Director (Audit and Supervisory Committee Member) (Outside Director) of the Company (to the present)

Officers

Yuichi Murakami
Executive Officer
President, TOK ADVANCED MATERIALS CO., LTD.

Okikuni Takase
Officer
Dept. Manager, Accounting and Finance Dept.

Shoji Otaka
Officer
Dept. Manager, Corporate Planning Dept.

Yuichi Honma
Officer
Dept. Manager, General Affairs Dept.

Tsukasa Honkawa
Officer
TOK ENGINEERING CO., LTD.
President

Naoki Watanabe
Officer
Chairman and President, TOK CHINA CO., LTD.

Kazuyuki Shiotani
Officer
President, TOKYO OHKA KOGYO AMERICA, INC.

Atsushi Sawano
Officer
Chairman and President, TOK TAIWAN CO., LTD.

Gitae Kim
Officer
Vice President, TOK ADVANCED MATERIALS CO., LTD.

Katsumi Ohmori
Officer
Deputy Dept. Manager, Research and Development Dept.

Naoki Tatsuno
Officer
Deputy Dept. Manager, Marketing Dept.

Messages from Outside Directors

Continue self-reformation in response to the increasing risks and opportunities under a new governance structure.

Hiroshi Kurimoto
Outside Director, Chairman of the Nomination and Compensation Advisory Committee

Establish a new governance structure that suits the increasing risks and opportunities

Following the establishment of a Nomination and Compensation Advisory Committee in 2018, corporate governance reform in TOK has been rapidly implemented over the past several years through the establishment of a new executive fellow system, the formulation of Corporate Governance Guidelines, and the continuous increase in the number of outside directors combined with the introduction of a new remuneration system for directors, the introduction of an employee engagement indicator as a KPI for the system, and the discontinuation of anti-takeover measures. Further advances have been made through the shift to a company with an Audit and Supervisory Committee in March of this year. Compared to the former structure as a company with a Board of Auditors, the new structure enables more agile decision-making and a strengthened supervisory function by the Audit and Supervisory Committee members who have voting rights. We are confident that a robust governance structure has been established to suit the TOK Group with increased risks and opportunities under the present circumstances. I was appointed the only outside director who was not an Audit and Supervisory Committee member among the four outside directors. I will further increase the effectiveness of my role through discussions at the Council where all outside directors participate and through close information exchange with directors who are Audit and Supervisory Committee members.

In the meantime, the company has both a Nomination and Compensation Advisory Committee and an Audit and Supervisory Committee at present, which raises concerns about the increased burden on outside directors due to the additional audit duties. While operating the new structure, we will make the necessary improvements. The risk monitoring function that was undertaken by auditors from financial institutions in the former structure is now handled by outside directors who are Audit and Supervisory Committee members in the present structure. Therefore, it becomes even more important to appoint outside directors with enhanced adequacy and diversity. In the present era of VUCA, the capabilities to calmly and positively handle risks and flexibly respond to environmental changes are essential requirements for achieving the material issue of the *establishment of a resilient organization*. To this end, I recognize that the future requirement is to increase diversity on the Board of Directors and throughout the entire workforce of the TOK Group, thereby increasing ideas, options, and the range of available actions in response to environmental changes and risks.

Continue profound discussion concerning self-reformation toward a desirable business portfolio

The latest performance of the equipment business was relatively steady. However, the Board of Directors concluded that it would be difficult to achieve growth and profitability as high as those of the material business, considering the present structure and management resources of TOK from the medium- to long-term perspectives. While having natural expectations for the growth and synergy achieved through M&E strategies with AIMECHATECH as a new business partner, it is also considered necessary to continue persistent self-reformation and discussions concerning the business portfolio. Whereas the semiconductor industry is growing on an unprecedented scale, I will propose profound discussions at the Board of Directors as to any blind spots and risks in the growth strategies based on the material business as the only segment, the probability of the creation or acquisition of new businesses to become a 100-year company in 2040, and other agenda items.

Further strengthen sustainability governance

Performance-linked remuneration accounts for 45% of the entire remuneration for directors. This system has been steadily in operation with continuous improvement since its introduction in 2020. In 2022, an employee engagement indicator was introduced as a KPI to be coupled with ROE. I believe that effective sustainability governance has been established to a certain extent. However, further advancement is required in the succession planning and appointment of directors and others. In 2023 and after, I will focus on measures to strengthen these aspects. In particular, I will implement specific measures to further improve sustainability governance regarding the required aptitudes of directors and the election process of candidates.

Messages from Outside Directors

As a specialist in accounting and internal control, I will also monitor value creation with non-financial capital.

Noriko Sekiguchi
Outside Director, Audit and Supervisory Committee Member, and Nomination and Compensation Advisory Committee Member

Monitor value creation concerning non-financial information

As one of the Nomination and Compensation Advisory Committee members, I conduct annual reviews on the performance-linked remuneration introduced in 2022. At present, I believe that there are no problems with the ongoing system and target values. However, I think that to establish measures in response to performance declines due to geopolitical risks, emerging infectious diseases, other emerging risks, disruption of the supply chain, rapid exchange rate fluctuations, the silicone cycle, and other external factors remain a requirement and some of the immediate agenda items. The evaluation period for the performance-linked share-based remuneration system, which uses an employee engagement indicator as one of the KPIs, is the three years subject to the TOK Medium-Term Plan 2024. I will carefully monitor the effectiveness of personnel measures, including the results of the employee engagement survey. In particular, I will leverage my expertise as a certified public accountant to monitor the nonfinancial capital components of human capital, intellectual capital, and social and relationship capital, as well as sustainable value creation through the interaction thereof in reference to the IFRS Sustainability Disclosure Standards finalized by the ISSB. For value creation, TOK starts from the pursuit of happiness for all employees and pursues the happiness of all stakeholders and of the entire society. This value creation is consistent with Basic Principle 2 of the Corporate Governance Code: "A listed company should be keenly aware that its sustainable growth and medium- to long-term corporate value creation depend on the resource provision and contribution by various stakeholders, including employees, customers, suppliers, creditors, and local communities, and strive to maintain appropriate collaboration with these stakeholders." In the course of progress toward the desirable society, many tradeoffs may occur internally and externally. I expect that TOK's value chain, the value provided to respective stakeholders, and sustainability will be continuously enhanced by resolving each of the tradeoffs.

In pursuit for the essence of diversity and inclusion

Diversity and inclusion (D&I) is a major factor in the improvement of employee engagement. The disclosure of the relevant systems is also in progress in the capital market of Japan. Based on my experience, it is clear that opinions are more readily accepted with a larger number. I hope that TOK will continue to improve the ratio of women in senior and middle management roles and the childcare leave user rate among male employees. In addition to the attainment of these KPIs, it is important that everyone finds happiness in working for TOK through the further promotion of continued workstyle reforms, the further nourishment of mutual help awareness during life events, and other measures. Therefore, I will carefully listen to the voices of employees on the employee engagement survey. The original essence of D&I was to induce competitiveness through a corporate culture where employees respect one other and can express their opinions without anyone feeling like minorities. Instead of being bound by the attainment of the KPIs, I hope that TOK will present more ideas for communication among employees from different specialties, generations, countries, and gender.

Leverage my expertise for strengthening the functions of the monitoring board

Because I was appointed an Audit and Supervisory Committee member following TOK's shift to a company with an Audit and Supervisory Committee, I will strive to strengthen the supervisory function by leveraging my expertise accumulated as a specialist in internal control, considering that TOK will pursue the further monitoring functions of its Board of Directors. As a part of these efforts, I consider it necessary to achieve a deeper understanding of the immediate management issues through frank discussions by the Council of Directors* and to strengthen group governance, including overseas subsidiaries, with a focus on strengthening the management departments of each site as the second line by balancing delegation to each site with control by the headquarters.

* A unique meeting body of TOK where directors and related executive officers, the heads of related departments, and persons in charge exchange opinions concerning management issues through open-minded discussions

Messages from Outside Directors

Promote advancement toward a governance structure that suits TOK, which contributes to a sustainable future through chemistry.

Kazuo Ichiyanagi

Outside Director, Audit and Supervisory Committee Member, and Nomination and Compensation Advisory Committee Member

Exercise both a viewpoint of a representative of shareholders and a sensitivity to risks

Following the shift to a company with an Audit and Supervisory Committee, all participants, including Audit and Supervisory Committee members, have voting rights on the Board of Directors and seem to have even more frank and open-minded discussions, which is one of TOK's management principles. Following the shift from a company with a Board of Auditors, which is a system only in Japan, to a company with an Audit and Supervisory Committee, I expect that internal institutional investors and ESG evaluation agencies will raise the evaluation of TOK's governance structure and its effectiveness.

As an outside director and member of the Audit and Supervisory Committee, I will continue to have the viewpoint of a representative of shareholders at all times as before in fulfilling my duties. As an Audit and Supervisory Committee member, I will also conduct on-site inspections of key sites and headquarters with a keen sensitivity to risks, thereby strengthening the supervisory functions. All Audit and Supervisory Committee members share the awareness that it is important to collaborate with Mr. Kurimoto, an outside director who is not an Audit and Supervisory Committee member. We will ensure communication among the outside directors through his participation on the Audit and Supervisory Committee as an observer.

Pursue the improvement of employee engagement based on mutual trust between the management executives and employees

A key strategy of the TOK Medium-Term Plan 2024 and one of the major initiatives concerning material issues is to *improve employee engagement and promote people-oriented management*. As a prerequisite, it is necessary for the company and its employees to have a shared ambition and establish a robust relationship of mutual trust. As far as I have observed employees in the monthly technological report meeting and the annual Mukai Technology Award presentation meeting, TOK's management principles, management vision, and purpose to contribute to a sustainable future through chemistry are certainly shared among the management executives and among employees. In addition, internal communication has also taken effect through the group journal *TOK Style* and by other means. I recognize that adequate trust has been established with employees and the company. During discussions by the Nomination and Compensation Advisory Committee, when the outside directors suggest certain performance objectives, President Taneichi presents even higher objectives, as an example of frequently observed occasions that prove the deep trust of the management executives on employees. Therefore, I think that the base has been adequately established for the improvement of employee engagement at TOK. In the coming years, I will pursue the further strengthening of sustainability governance by including the achievement of diversity among core human resources into the requirements and by increasing the effectiveness of the Nomination and Compensation Advisory Committee.

For the further advancement of corporate governance

Through reforms over the past few years, I evaluate TOK's corporate governance as having been steadily upgraded. For further advancement, I consider it necessary to strengthen diversity on the Board of Directors, to systematize succession planning or formulate specific program for management executives, and to promote dialogs between the outside directors and institutional investors. As specific measures in the midst of maximizing risks and opportunities that face TOK, it is necessary to enhance diversity among management executives, acquire medium- to long-term value creation power and resilience by increasing our abilities to lead innovation and handle risks, and to establish a permanent framework for these abilities through specific succession planning. I also intend to broadly incorporate external viewpoints by proactively participating in stakeholder engagement, thereby leading to corporate governance specific to TOK, which contributes to a sustainable future through chemistry.

Messages from Outside Directors

Support collaborative creation with stakeholders, regarding changes as opportunities.

Hisashi Ando
Outside Director, Audit and Supervisory Committee Member, and Nomination and Compensation Advisory Committee Member

Promote self-reformation through collaborative creation with external stakeholders

As one of the key reformations of 2022, TOK introduced a new M&E strategy based on the transfer of the equipment business. The reformation of the business portfolio signifies how to realize the company's growth and contribution to society by using management resources. It is an extremely important theme of corporate management. Considering the resources and core competences of TOK, it is reasonable to regard the material business as a growth driver in the future. To maximize the effects of the M&E strategies, the two businesses must always be at the top of the industry. Therefore, I think that the management resources of TOK should be concentrated on the material business at present. However, TOK has accumulated substantial management resources, which are one of the sources of value creation unique to TOK, through M&E strategies for more than 50 years. Therefore, I believe that the development of these strategies through the partnership with AIMECHATECH is an essential proposition toward the sustainable corporate value enhancement of the TOK Group. In addition, reformation through collaborative creation with other companies becomes increasingly important as immediate business opportunities become maximized. Therefore, I will provide occasional suggestions to lead the initiative with AIMECHATECH to success.

Bold risk taking is required in the midst of the increasing risks and opportunities

Risks and opportunities are certainly increasing on a short-, medium-, and long-term basis. I consider it important to regard changes not only as risks but also as opportunities for business expansion and self-reformation in the midst of these circumstances. Since its foundation, TOK has grasped growth opportunities within the semiconductor industry and other markets during rapid technological changes and continuously converted risks into opportunities, thereby achieving sustainable growth. I believe that TOK should maintain this policy, while looking considering diverse viewpoints and further nourishing a culture that facilitates flat and open-minded discussions. Because geopolitical risks, infectious disease risks, and natural disaster risks cannot be avoided and handled by a single company, I will offer suggestions for minimizing the impact as an outside director who is an Audit and Supervisory Committee member.

Pursue sustainable growth as a prerequisite for the achievement of happiness

I consider the remuneration system for directors, of which 45% is accounted for by the performance-linked portion, as important from the perspective of the transparency of remuneration and the sharing of interests with shareholders. Because we receive opinions from institutional investors that share price indicators should also be incorporated into evaluations, the Nomination and Compensation Advisory Committee will continue to discuss this theme. I recognize that a plan that uses the employee engagement indicator as one of the evaluation parameters is at the core of sustainability governance toward the accomplishment of the key strategy to improve employee engagement and promote people-oriented management under the TOK Medium-Term Plan 2024 and the material issue of pursuit for the happiness of all personnel. At present, the positive response rates to questions concerning employee engagement and employee-friendly environments in the employee engagement surveys are used as the KPIs. To further increase the effectiveness, we will have continued discussions concerning the setting and upgrading of KPIs.

Through these measures, TOK aims to pursue the happiness of employees and to enhance the happiness of external stakeholders and of the entire society. To this end, the prerequisites are that the Company maintains sustainable growth and that it continuously establishes win-win relationships with shareholders and investors, suppliers and startups, the academia, and other external stakeholders. Leveraging my experience in the management of an R&D-oriented materials manufacturer operating in the semiconductor field with a high overseas sales ratio, just as TOK, I intend to continue offering suggestions for the sustainable growth of TOK and the enhancement of stakeholder engagement.

Corporate Governance

Further strengthen corporate governance to sustainably enhance corporate value.

TOK's Path to Stronger Corporate Governance

2003	● Executive officer system introduced ● Number of directors adjusted appropriately
2006	● Selected one outside director for the first time ● Tenure of directors shortened from two years to one year
2013	● Added one outside auditor, bringing the total to three
2015	● Appointed a (female) outside director bringing the total to two
2018	● Established the Nomination and Compensation Advisory Committee
2019	● Appointed a chairperson to chair the Board of Directors ● Formulated the Corporate Governance Guidelines
2020	● Added one outside director bringing the total to three ● Introduced a new remuneration system for directors with ROE and other evaluation indicators
2021	● Resolved to discontinue anti-takeover measures
2022	● Appointed four outside directors with an increase by one; elected one non-operating director ● Introduced an employee engagement indicator into the evaluation of the remuneration system for officers
2023	**● Shifted to a company with an Audit and Supervisory Committee**

Basic Concept

TOK has had the management vision of aiming to become The e-Material Global Company™, contributing to a sustainable future through chemistry under the management principles since the establishment of TOK: Create a frank and open-minded business culture, continue its efforts to enhance technology, raise the quality levels of our products, and contribute to society. TOK believes that realizing this will lead to benefits shared by shareholders and all other stakeholders and improve corporate value.

The company strives to realize the management vision by placing the enhancement of corporate governance as one of the most important issues as well as to ensure transparency and the solidity of management and efficiency by expediting the decision-making process.

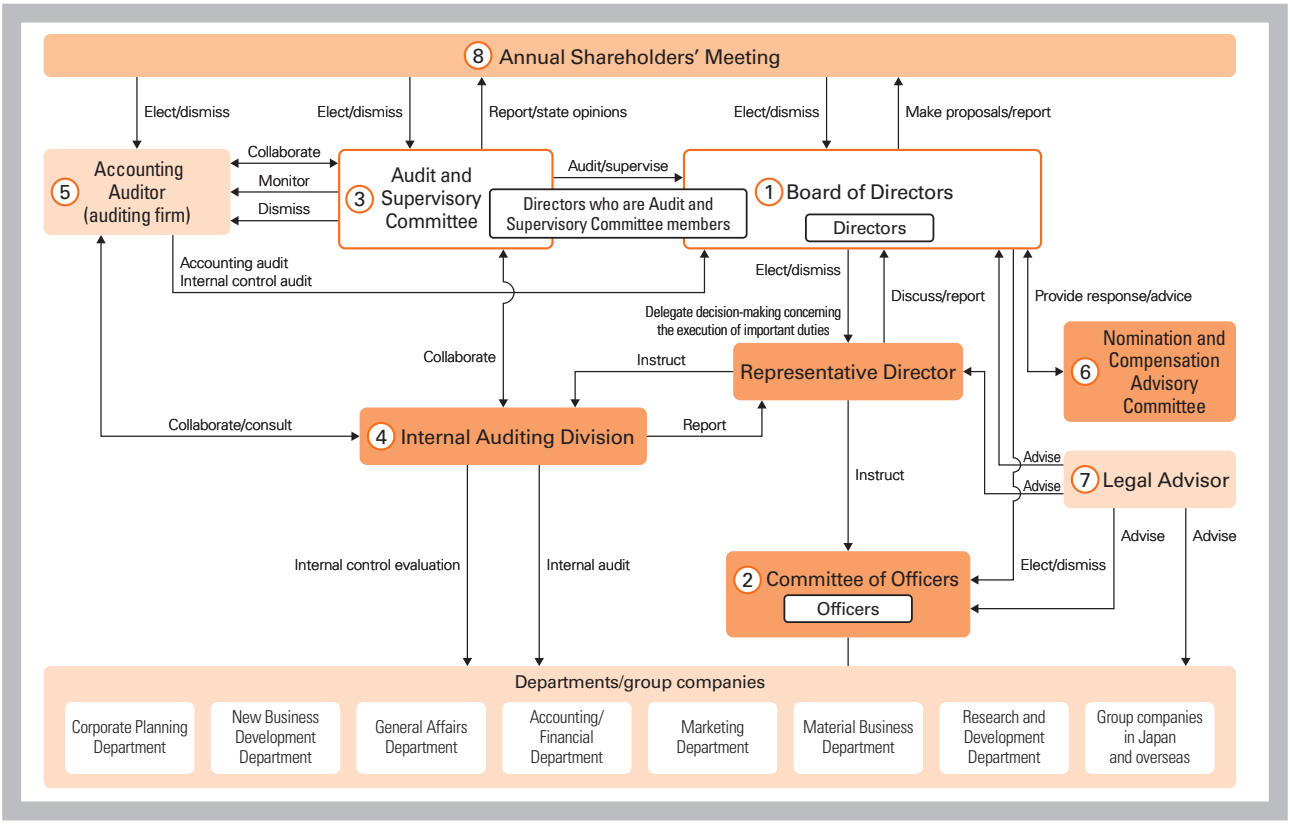
TOK promotes the enhancement of corporate governance toward the establishment of a resilient organization as a material issue, and as part of the strategies under the TOK Medium-Term Plan 2024: section 5, "Establish a sound and efficient management foundation"). The Company promotes activities in accordance with the TOK Corporate Governance Guidelines that indicate its basic policies and approaches to continuously improve corporate governance.

→ TOK Corporate Governance Guidelines
https://www.tok.co.jp/application/files/3816/8255/6695/20230331-2.pdf

Type of System

Based on a resolution of the 93rd general meeting of shareholders that convened on March 30, 2023, TOK shifted to a company with an Audit and Supervisory Committee. The shift has been made because it is considered the most effective for the enhancement of corporate governance and to achieve more transparent management through the Audit and Supervisory Committee. The majority of members consists of independent outside directors who undertake audits and supervision of the legitimacy and validity of the execution of duties, while establishing a structure that more accurately caters to the expectations of stakeholders in Japan and overseas, as well as to enable the delegation of the executive decision-making authority of the Board of Directors to directors, thereby strengthening management with more agile managerial decision-making and execution under appropriate supervision by the Board of Directors.

Diagram of Corporate Governance System (As of March 30, 2023)



Directors/Board of Directors Diagram ①

To increase the transparency of the Board of Directors and to strengthen its oversight function, one non-operating director and four independent outside directors were appointed. As a result, outside directors account for more than one-third of all ten directors.

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

As of March 30, 2023, the Board of Directors is chaired by Director and President Noriaki Taneichi and consists of ten directors: six directors who are not Audit and Supervisory Committee members, including one outside director and one non-operating director, with four directors who are Audit and Supervisory Committee members, including three outside directors. 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 with regard to business execution with the goal of supervising the business duties executed by the representative director and directors.

Assessment of the Effectiveness of the Board of Directors

The directors and auditors (directors who are Audit and Supervisory Committee members at present) conduct assessments and discussions at meetings of the Board of Directors using an anonymous self-evaluation questionnaire of the composition of the Board of Directors for rating 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.

[Conducted an evaluation of the Board of Directors for the fiscal year ended December 31, 2021, and made improvements on identified issues]

Improvements have been made in the issues identified in the evaluation of the Board of Directors during the previous fiscal year: 1) deepening discussions on company-wide managerial requirements; 2) checking the progress of resolutions made; 3) streamlining agenda items, time consumed, and materials; and 4) discussions concerning risk analyses.

[Revised the questionnaire for the Board of Directors evaluation for the fiscal year ended December 31, 2022]

In the eighth self-evaluation, questions that became obsolete were reviewed to improve the evaluation of the Board of Directors. Descriptive questions were included concerning company-wide managerial requirements as part of the further review of the questionnaire.

Time of evaluation	December 2022 (questionnaire survey)
Evaluation item	◆ Composition of Board of Directors ◆ Effectiveness of Board of Directors ◆ Information related to Board of Directors ◆ Decision-making process ◆ External communication
Evaluation results ○ Favorable/appropriate ▲ Requiring improvement	○ Have an impartial composition offering inside directors with a thorough understanding of each field, and a good balance between experience and actual performance ○ Maintain diversity by incorporating outside directors with differing backgrounds, knowledge, and expertise ○ The size of the Board of Directors, frequency of meetings, matters discussed, and time spent on discussions are all appropriate ○ In an atmosphere of frank and open discussions, rapid decision-making has been achieved by having outside directors and outside Audit and Supervisory Board members providing high levels of transparency ○ Self-improvement and in-house check-and-balance functions are mostly favorable ▲ There should be deeper discussions about medium- to long-term management strategies toward the resolution of sustainability requirements regarding risk management, appointment of human resources (employee engagement), business strategies, and the merger of other companies ▲ The governance structure should be further strengthened following the shift to a company with an Audit and Supervisory Committee
Measures to be implemented/matters to be examined based on the evaluation results	❶ Deepening discussions on company-wide managerial requirements ❷ Review of time consumed ❸ Analysis of management risks ❹ Review of agenda items ❺ Preparation of understandable materials and continued streamlining To improve the points above, review the operation of meetings and streamline materials for agenda items, thereby enhancing discussions.

Establishment of the Council of Directors

The Council of Directors consists of directors, executive officers, the heads of related departments, and other members. The Council holds sessions for discussions to reduce the distance between the Board of Directors and employees and to achieve more transparent management. Its specific activities include the following:

- Exchange of different opinions concerning management issues through open-minded discussions
- Identification of issues and discussions on investment in human capital, risk management, and carbon neutrality initiatives
- Provision of the issues identified to the Board of Directors and the Committee of Officers

These activities within the Council lead to discussions and resolutions by the Board of Directors concerning ESG and sustainability issues and initiatives concerning material issues.

Establishment of the Council of Outside Directors

The Council of Outside Directors consist of all outside directors. The Council holds sessions for discussions. The activities of the Council include the following:

- Discussions and opinion exchanges concerning the desirable officer development at TOK
- Discussions and opinion exchanges concerning the enhancement of the supervisory functions of the Board of Directors

Through these activities, the Council aims to strengthen the effectiveness and add vigor to discussions by the Board of Directors.

Officers and Committee of Officers Diagram ②

While taking steps to strengthen the functions of the Board of Directors with regard to 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, which allow for their business responsibilities, capabilities, and other considerations.

As of March 30, 2023, the Committee of Officers was chaired by President Noriaki Taneichi and comprised 15 officers, including four 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 initiatives of each officer with the goal of planning management strategies and then deliberating and approving certain important decisions that are not subject to a resolution adopted by the Board of Directors.

Audit and Supervisory Committee Diagram ③

As of March 30, 2023, the Company has four directors who are Audit and Supervisory Committee members, three of whom are outside directors. To discuss important audit-related matters received from Audit and Supervisory Committee members and to propose resolutions, the Audit and Supervisory Committee meets once a month on a regular basis and holds extraordinary meetings as required. The Audit and Supervisory Committee members audit the execution of duties by the directors (excluding directors who are Audit and Supervisory Committee members), receiving reports from the said directors, and requesting explanations when necessary. The auditing is complied with the Audit Standards established by the Audit and Supervisory Committee and the audit policy and the division of duties. The Audit and Supervisory Committee receives reports from the accounting auditors (auditing firm) on the execution of duties concerning accounting matters and verify the validity of audit methods and results, requesting explanations, when necessary.

To improve the effectiveness of Audit and Supervisory Committee audits and ensure the smooth execution of audit duties, one person is assigned to assist the duties of the Audit and Supervisory Committee while serving in other positions.

Internal Auditing Division Diagram ④

The Internal Auditing Division is under the direct control of the president. 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 Diagram ⑤

The accounting auditor undertakes accounting audits of TOK from a fair and independent standpoint. The accounting audit of TOK for FY 2022/12 was executed by two certified public accountants: Mr. Hiroki Kitagata, a designated limited liability partner and executive member of Deloitte Touche Tohmatsu LLC., and Mr. Daijiro Furuya, also a designated limited liability partner and executive member of Deloitte Touche Tohmatsu LLC. There were nine other certified public accountants, three persons who have passed the certified public accountant examination, and 19 other people who assisted in conducting the accounting audit of TOK. The details of the remuneration paid from TOK to the accounting auditor (Deloitte Touche Tohmatsu LLC) regarding accounting audit for FY 2022/12 was 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): 60 million yen

Nomination and Compensation Advisory Committee Diagram ⑥

TOK established the Nomination and Compensation Advisory Committee, which is chaired by an outside director with more than half of its members consisting of outside directors, to enhance corporate governance by strengthening the fairness, transparency, and objectivity of procedures related to the nomination, dismissal, and remuneration of directors. **(See pages 82–85)**

In the process of determining the remuneration for directors in FY 2022/12, the Nomination and Compensation Advisory Committee formulated the remuneration table for relevant directors, proposed the remuneration for each director, including outside director, in reference to the performance of the TOK Group, contribution by the relevant directors to the medium-term plan and the budget for the previous fiscal year, and comparison with companies of the same scale. These proposed remuneration amounts for directors were deliberated and resolved at the meeting of the Board of Directors.

As of March 30, 2023, the majority of the members of the Nomination and Compensation Advisory Committee consists of outside directors, and the Committee is chaired by an outside director. The chair is Hiroshi Kurimoto, an outside director, and the members are Noriaki Taneichi, the president, and Noriko Sekiguchi, Kazuo Ichiyanagi, and Hisashi Ando, who are outside directors.

Legal Advisers Diagram ⑦

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

Efforts to Invigorate the Shareholders' Meetings and Facilitate Smooth Exercise of Voting Rights Diagram ⑧

To facilitate the exercise of voting rights by shareholders, TOK convenes the general meeting of shareholders in March, when most other Japanese companies' shareholder meetings are not convened, sets the period for reviewing the resolutions for approval at the meeting and is longer than the number of days required by law, and publishes the Notice of Convocation of the General Meeting of Shareholders on our website ahead of time, or 28 days (four weeks) before the day of the meeting. The notice is also sent out early (21 days [three weeks]) before the day of the meeting. Shareholders who cannot attend the general meeting of shareholders can exercise voting rights in writing and by electromagnetic means (including the use of a voting rights exercise platform for institutional investors). In addition, the notice of convocation is also prepared in English to help institutional investors overseas develop a better understanding. TOK also describes the reported matters using video and narration to promote understanding by shareholders who attended the general meeting of shareholders. Also, the Notice of Convocation, Notice of Resolution, and Results of the Exercise of Voting Rights to the General Meeting of Shareholders are uploaded on the Company website for disclosure, each of which is in Japanese and English. Starting with the ordinary general meeting of shareholders convened in 2022, a participative virtual meeting style is applied to increase the opportunity for participation by the distant shareholders and to improve the transparency of the meeting.

Cooperation between the Audit and Supervisory Committee, Internal Auditing Division, and Accounting Auditor

Internal Audit and Audit by the Audit and Supervisory Committee

[Cooperation between Audit and Supervisory Committee and accounting auditor]

The Audit and Supervisory Committee receives reports on the results of accounting audits and other work from the accounting auditor (auditing firm) four times a year. The Committee also receives an explanation of the auditing plan from the accounting auditor once a year. In addition, the Audit and Supervisory Committee also accompanies the accounting auditor to the factory audits that the accounting auditor conducts, if necessary, and can examine the auditing method of the accounting auditor. The Audit and Supervisory Committee also exchanges information and opinions with the accounting auditor when necessary.

[Mutual coordination among supervision/audit by outside directors, internal audit, audit by the Audit and Supervisory Committee, and accounting audit, and their relationship with the internal control department]

Outside directors supervise the execution of duties by the respective directors through participation in the sessions of the Board of Directors. In addition to the supervision, outside directors as Audit and Supervisory Committee members receive internal audit reports both from the Internal Auditing Division and the accounting auditor, thereby auditing the execution of duties by directors. They also exchange information and opinions with the Internal Auditing Division and the accounting auditor. In addition, they also receive reports as appropriate from the Internal Auditing Division regarding the evaluation of the effectiveness of internal controls over financial reporting and from the accounting auditor regarding its opinion on the internal control audit.

Status of the Election of Outside Directors

The Company has ten directors, four of whom are outside directors.
The Company has established the following criteria and policies regarding independence in the election of outside directors.

Independence Standards for Outside Officers

Independent outside officers under these 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 or an entity for which the Group is a major client (Note 1) or who executes the business of such a person or an 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, association, 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 million yen 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 comes under any one of above items a through i.
k. Regardless of the above provisions, a person for whom it is deemed likely that conflicts of interest will arise with the Company

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

Reasons for the Election of Inside Directors

Name	Reasons for election
Noriaki Taneichi Representative Director President and Chief Executive Officer Nomination and Compensation Advisory Committee Member	Since assuming the position of representative director, president, and chief executive officer, Taneichi has led the management of the Group as its top executive and contributed to the Group's development through measures set forth in the medium- and long-term plans. Thus, Taneichi can be expected to continue contributing to the management of the Company.
Harutoshi Sato Director	Sato has held important positions within the Group by serving 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 of the Research and Development Department. Owing to this experience, he is well acquainted with the Company's business characteristics and customers and consequently possesses the necessary and sufficient knowledge of such matters as important decisions made by the Board of Directors and supervision of duties executed by other directors. Thus, Sato can be expected to continue contributing to the strengthening of the oversight function of the Board of Directors by providing beneficial advice for the management of the Company.
Yusuke Narumi Director	Narumi has held important positions within the Group by serving as representative at the China office as the person responsible for the sales and marketing of key products before assuming the position of department manager of the New Business Development Department. Owing to this experience, he is well acquainted with the Company's existing and new business fields and consequently possesses the necessary and sufficient knowledge of important decisions made by the Board of Directors and the supervision of duties executed by other directors. Thus, Narumi can be expected to continue contributing to the management of the Company.
Kosuke Doi Director	Doi has held important positions within the Group by serving as the president of the U.S. subsidiary, the department manager of the New Business Development Department, the department manager of the Marketing Department, and the department manager of the Research and Development Department. Owing to this experience, he is well acquainted with the Company's existing business fields and new business fields, as well as the Company's business characteristics and customers, combined with the necessary and sufficient knowledge of such matters as important decisions made by the Board of Directors and supervision of duties executed by other directors. Thus, Doi can be expected to continuously contribute to the management of the Company.
Hirotaka Yamamoto Director	Yamamoto has held important positions within the Group by serving as representative at the U.S. subsidiary, plant manager at the South Korean subsidiary, and department manager of the Corporate Planning Department. He has also served as the manager of medium- and long-term planning for the TOK Group. Owing to this experience, he is well acquainted with the Company's business characteristics and possesses the necessary and sufficient knowledge of such matters as important decisions made by the Board of Directors and supervision of duties executed by other directors. Thus, he can be expected to contribute to the management of the Company.

Reasons for the Election of Outside Directors

Name	Reasons for election
Hiroshi Kurimoto Nomination and Compensation Advisory Committee Chairman	Kurimoto is expected to supervise the Company's management from an objective and neutral point of view based on abundant experience and considerable insight as an executive of a listed company and to contribute to strengthening corporate governance with advice on the general management of the Company. As the chair of the Nomination and Compensation Advisory Committee, he is also expected to fulfill the oversight function in the selection of executive candidates and the determination of officer compensation from an objective and neutral standpoint.
Noriko Sekiguchi Nomination and Compensation Advisory Committee Member	Sekiguchi is expected to supervise and audit the Company's management from an objective and neutral point of view based on her sophisticated expertise in accounting as a certified public accountant, abundant experience working in several companies, and thorough understanding of internal control in her capacity as an external committee member against fraudulent accounting at multiple listed companies. Thus, Sekiguchi can be expected to contribute to strengthening corporate governance with her advice on the general management of the Company. As a member of the Nomination and Compensation Advisory Committee, she is also expected to fulfill the oversight function in the selection of executive candidates and the determination of officer compensation from an objective and neutral standpoint.
Kazuo Ichiyanagi Nomination and Compensation Advisory Committee Member	Ichiyanagi is expected to supervise and audit the Company's management from an objective and neutral point of view based on his abundant experience and considerable insight as an executive of a listed company and to contribute to strengthening corporate governance with his advice on the general management of the Company. As a member of the Nomination and Compensation Advisory Committee, he is also expected to fulfill the oversight function in the selection of executive candidates and the determination of officer compensation from an objective and neutral standpoint.
Hisashi Ando Nomination and Compensation Advisory Committee Member	Ando is expected to supervise and audit the Company's management from an objective and neutral point of view based on his abundant experience and considerable insight as an executive of a listed company and to contribute to strengthening corporate governance with his advice on the general management of the Company. As a member of the Nomination and Compensation Advisory Committee, he is also expected to fulfill the oversight function in the selection of executive candidates and the determination of officer compensation from an objective and neutral standpoint.

The Main Activities of Outside Directors and Outside Audit and Supervisory Board Members

* Indicated in the former diagram until FY 2022/12

Name	Attendance record and activities at Board of Directors and Audit and Supervisory Board meetings
Hiroshi Kurimoto Outside Director	Kurimoto attended all 15 of the meetings of the Board of Directors (attendance rate 100%) held during the fiscal year ended December 2022. He voiced timely opinions as required when discussing resolutions based on his broad experience and abundant expertise as a former management executive of a listed company. He attended all eight of the Nomination and Compensation Advisory Committee meetings (attendance rate 100%) mainly discussing remuneration for directors and the selection of director candidates. He appropriately fulfilled his responsibilities as chair of the Nomination and Compensation Advisory Committee, moderating the agenda, and reporting to the Board of Directors.
Noriko Sekiguchi Outside Director	Sekiguchi attended all 15 of the meetings of the Board of Directors (attendance rate 100%) held during the fiscal year ended December 2022. 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. She also attended all eight of the Nomination and Compensation Advisory Committee meetings (attendance rate 100%) mainly discussing remuneration for directors and the selection of director candidates. She appropriately fulfilled her responsibilities as a member of the Nomination and Compensation Advisory Committee, making appropriate suggestions.
Kazuo Ichiyanagi Outside Director	Ichiyanagi attended all 15 of the meetings of the Board of Directors (attendance rate 100%) held during the fiscal year ended December 2022. He voiced timely opinions as required when discussing resolutions based on his broad experience and abundant expertise as a former management executive of a listed company. He also attended all eight of the Nomination and Compensation Advisory Committee meetings (attendance rate 100%) mainly discussing remuneration for directors and the selection of director candidates. He appropriately fulfilled her responsibilities as a member of the Nomination and Compensation Advisory Committee, making appropriate suggestions.
Hisashi Ando Outside Director	Ando attended all 12 of the meetings of the Board of Directors (attendance rate 100%) held since his appointment on March 30, 2022. He voiced timely opinions as required when discussing resolutions based on his broad experience and abundant expertise as a management executive of listed companies. He also attended all three of the Nomination and Compensation Advisory Committee meetings (attendance rate 100%) mainly discussing remuneration for directors and the selection of director candidates. He appropriately fulfilled his responsibilities as a member of the Nomination and Compensation Advisory Committee, making appropriate suggestions.
Nobuyuki Takeuchi Outside Audit and Supervisory Board Member	Takeuchi attended all 15 of the meetings of the Board of Directors (attendance rate 100%) and all of the 15 meetings of the Audit and Supervisory Board (attendance rate 100%) held during the fiscal year ended December 2022. He voiced and raised timely opinions and questions as required at the meetings of the Board of Directors and the Audit and Supervisory Board based on experience as a corporate auditor of another company as well as abundant experience and considerable insight as a business executive, including at financial institutions.
Tadaharu Uehara Outside Audit and Supervisory Board Member	Uehara attended all 15 of the meetings of the Board of Directors (attendance rate 100%) and all of the 15 meetings of the Audit and Supervisory Board (attendance rate 100%) held in FY 2022/12. He voiced and raised timely opinions and questions as required at the meetings of the Board of Directors and the Audit and Supervisory Board based on his abundant experience mainly at financial institutions and the Ministry of Foreign Affairs combined with considerable insight as a business executive.
Teruki Umezaki Outside Audit and Supervisory Board Member	Umezaki attended all 15 of the meetings of the Board of Directors (attendance rate 100%) and all 15 of the meetings of the Audit and Supervisory Board (attendance rate 100%) held in FY 2022/12. He voiced and raised timely opinions and questions as required at the meetings of the Board of Directors and the Audit and Supervisory Board based on his considerable insight mainly as a business executive of financial institutions.

Major Decisions and Agenda of Meetings of the Board of Director in the Fiscal Year Ended December 2022 and after

- ◆ Strengthening user support in the United States (establishment of TOKCCAZ, LLC.)
- ◆ Determining important requirements (material issues) for enhancing corporate value
- ◆ Promotion of health & productivity management
- ◆ Transfer of the processing equipment business
- ◆ Transfer of Miaoli Plant, TOK Taiwan Co., Ltd.
- ◆ Partial sale and continued possession of cross-shareholdings
- ◆ Merger of Kumagaya Ohka Co., Ltd.
- ◆ Shift to a company with an Audit and Supervisory Committee

Remuneration for Directors and Audit and Supervisory Board Members

TOK determines the basic policy of remuneration for directors and Audit and Supervisory Board members as follows.

Remuneration for Directors and Audit and Supervisory Board Members

[Basic Policy on Determination of Remuneration for Directors (Excluding Directors Who Are Audit and Supervisory Committee Members, Outside Directors and Non-operating Directors)]

The Company has established a Nomination and Compensation Advisory Committee chaired by an outside director to serve as an advisory function to the Board of Directors. The committee held deliberations to examine the preferred remuneration system for the Company in consideration of the outlook for the business environment and the approach to corporate governance in Japan based on which the Company's remuneration policy for directors (excluding directors who are Audit and Supervisory Committee members, outside directors, and non-operating directors; hereinafter referred to as "eligible director") has been determined as follows.

[Basic Principle of Remuneration]

Aim to support the Company's sustainable value creation

- · Set the composition and level of remuneration to provide healthy motivation to generate sustainable growth and corporate value in the medium to long term
- · Clarify responsibility for results in each fiscal year by fairly and impartially reflecting quantitative evaluations based on financial performance and evaluation of efforts to address issues taking into consideration the medium- to long-term strategy in performance-linked bonuses
- · Strive to create sustainable corporate value by continuously providing long-term incentives linked to the Company's medium- to long-term performance
- · Promote the long-term holding of shares while serving in management and share interests with shareholders

Ensure objectivity and transparency in remuneration decisions

- · Determine the remuneration decision policy and the individual amount of payments upon deliberation by the Nomination and Compensation Advisory Committee, which is composed primarily of outside directors
- · Employ an independent remuneration advisor and set an appropriate remuneration level taking into consideration the Company's business characteristics based on verification through comparisons with corporate groups of the same size using objective data from outside while taking into account recent public opinion
- · Proactively disclose information necessary for stakeholders, including shareholders, in order to monitor the relationship between remuneration and corporate value

[Remuneration Structure]

The Company's remuneration structure for eligible directors consists of basic remuneration, which is a fixed salary, and performance-linked remuneration. Performance-linked remuneration consists of a performance-linked bonus that is linked to company-wide performance for each fiscal year, a performance-linked share-based remuneration system (performance share units) that is linked to the sustainable creation of corporate value, and a restricted share-based remuneration system that is provided to continually share value with shareholders through the continued holding of stock. An outline of each remuneration component is presented below.

Outline of Remuneration Components

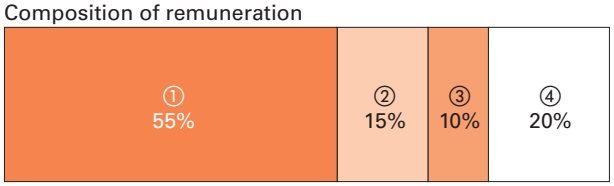
Type of remuneration	Objective/summary
Basic remuneration	Fixed cash salary based on position
Performance-linked bonus	Performance-linked cash remuneration to evaluate steady achievement of targets for each fiscal year · To clarify the responsibility for results in each fiscal year, the payment rate is determined within a range from 0% to 200% of the standard amount in proportion to the degree of achievement of the targets for EBITDA margin and consolidated net sales for each fiscal year, which are key performance indicators · In some cases, the payment rate determined above may be multiplied by any of 0.95, 1.00, or 1.05 depending on discretionary evaluation by the Nomination and Compensation Advisory Committee or by the president · Paid in a lump sum after the end of each fiscal year
Performance-linked share-based remuneration (performance share unit)	Performance-linked share-based remuneration to provide an incentive to sustainably increase corporate value · The number of shares to grant is determined within the range of 0% to 200% of the standard amount (the "payment rate") calculated as designated by the Board of Directors of the Company according to the achievement rate for numerical targets, such as earnings during the performance evaluation period · The Board of Directors of the Company determines the indicators required for the calculation of numerical targets, performance-linked coefficients, and specific shares granted.*1 · The method for calculating the number of the Company's shares granted and amount of cash paid is as follows. First, the number of the Company's shares to be granted to each eligible director is calculated in accordance with formula (i) below (fractions of less than 100 shares being rounded down), then the amount of cash paid to each eligible director (cash for payment of taxes) is calculated in accordance with formula (ii) below. (i) Number of the Company's shares granted to each eligible director Standard share unit number*2 × Payment rate × 50% (ii) Amount of cash to be paid to each eligible director (Standard share unit number × Payment rate − Number of the Company's shares calculated in (i) above) × Stock price at the time of grant · Grant shares in a lump sum after the end of a performance evaluation period
Restricted share-based remuneration	Share-based remuneration to further facilitate the alignment of interests with shareholders by promoting long-term holding of stock · Grant restricted shares in the number determined by the Company's Board of Directors each fiscal year in accordance with the rank of each eligible director · The restriction on transfers is lifted when conditions are met, such as when the restriction period expires, or when an eligible director retires or resigns from the position before the restriction period expires by reason of the expiration of the term of office, death, or some other reason the Company's Board of Directors deems justifiable, and ceases to serve as a director, officer, Audit and Supervisory Committee member, employee, or any other equivalent position stipulated in advance by the Board of Directors of the Company.

*1 The performance evaluation period for the performance-linked share-based remuneration system as of March 30, 2022, is the three-year period from the fiscal year ending December 31, 2022, through the fiscal year ending December 31, 2024. With the aim of creating sustainable corporate value, the Company will use the ROE target, which is a strategic indicator in the Medium-Term Plan, and an employee engagement indicator as a non-financial indicator, for evaluation during this evaluation period.
*2 Determined by the Board of Directors in accordance with the rank of each eligible director

[Payment Rate of Basic Remuneration and Performance-Linked Remuneration]

As for the weight of each remuneration component, the ratio of basic remuneration as a fixed salary to performance-linked remuneration was set at 55:45 in order to provide a healthy incentive to generate sustainable growth and increase corporate value in the medium to long term. The ratio of basic remuneration to the performance-linked bonus (standard amount) to performance-linked share-based remuneration (standard amount) to restricted share-based remuneration (standard amount) is set at roughly 1 (55%) to 0.27 (15%) to 0.18 (10%) to 0.36% (20%). The composition of remuneration is indicated in the figure below.

Composition of remuneration



① Basic remuneration
② Performance-linked bonus (standard amount)
③ Performance-linked share-based remuneration (standard amount)
④ Restricted share-based remuneration (standard amount)

[Level of Remuneration]

The level of remuneration for eligible directors is appropriately set according to each position in order to provide healthy incentives to excellent personnel who generate sustainable growth and increase corporate value in the medium to long term. The level is specified by benchmarking against comparable corporate groups selected based on the Company's business characteristics using the officer remuneration survey data managed by an external remuneration advisor and other data.

[Remuneration Decision Process]

To guarantee the objectivity and transparency of the process of determination of the remuneration for eligible directors, the Nomination and Compensation Advisory Committee formulates standard amounts for the respective remuneration components "remuneration table") and the proposed remuneration for each eligible director, and the Company's Board of Directors deliberates and resolves whether the president and chief executive officer may determine the remuneration table and the remuneration for each eligible director based on the propositions above. The president and chief executive officer then determines the remuneration table and the remuneration for each eligible director within the range approved at the general meeting of shareholders.

[Remuneration for Eligible Directors]

The remuneration for eligible directors is determined by the process described above within the range approved at the general meeting of shareholders. The remuneration range includes the portion paid as salary and bonuses for officer duties undertaken by directors who also serve as officers. The ranges for remunerations are as follows.

Type of remuneration	Remuneration range
Basic remuneration	Within ¥330 million per year (including the portion for non-operating directors)
Performance-linked bonus	Within ¥180 million per year
Performance-linked share-based remuneration (performance share unit)	The total amount of monetary remuneration claims and cash for tax payment provided to eligible directors as remuneration related to the new performance-linked, share-based remuneration system is within an amount per fiscal year equivalent to 47,000 shares multiplied by the stock price at the time of the grant.
Restricted share-based remuneration system	The total amount of monetary remuneration claims provided as remuneration related to the restricted share-based remuneration system is within ¥120 million per year.

[Basic Policy on Determination of Remuneration for Outside Directors (excluding Directors Who Are Audit and Supervisory Committee Members)]

Remuneration for outside directors, who serve in the oversight function from an independent standpoint from business execution (excluding directors who are Audit and Supervisory Committee members), consists only of basic remuneration of a set amount, which is determined after taking into consideration the result of a comparison with corporate groups of the same size.

The Nomination and Compensation Advisory Committee formulates the proposed remuneration for each outside director (excluding directors who are Audit and Supervisory Committee members), and the Company's Board of Directors deliberates and resolves whether the president and chief executive officer may determine the remuneration for each outside director (excluding directors who are Audit and Supervisory Committee members) based on the propositions above. The president and chief executive officer then determines the remuneration for each outside director (excluding directors who are Audit and Supervisory Committee members) within the range (up to ¥40 million per year) approved at the general meeting of shareholders.

[Basic Policy on Determination of Remuneration for Non-operating Directors]

Remuneration for non-operating directors, who serve in the oversight function from an independent standpoint from business execution, consists only of basic remuneration of a set amount, which is determined after taking into consideration the result of a comparison with corporate groups of the same size. The Nomination and Compensation Advisory Committee formulates the proposed remuneration for each non-operating director, and the Company's Board of Directors deliberates and resolves whether the president and chief executive officer may determine the remuneration for each non-operating director based on the propositions above. The president and chief executive officer then determines the remuneration for each non-operating director within the range (up to ¥330 million per year) for directors (excluding directors who are Audit and Supervisory Committee members and outside directors) approved at the general meeting of shareholders.

[Basic Policy on Determination of Remuneration for Directors Who Are Audit and Supervisory Committee Members]

Directors who are Audit and Supervisory Committee members are responsible for supervising and auditing the execution of duties by directors (excluding directors who are Audit and Supervisory Committee members) in a position independent of the execution of duties. They receive only a basic remuneration in the form of a fixed salary, which is decided and paid out following discussions by the Audit and Supervisory Committee within a remuneration framework (within ¥100 million per year) approved at a general meeting of shareholders.

Total Remuneration Paid to Directors and Audit & Supervisory Board Members (Fiscal Year Ended December 31, 2022)

* Indicated in the former diagram until FY 2022/12

Position	Total remuneration (Millions of yen)	Total of various types of remuneration (Millions of yen)				Number of eligible personnel
		Basic remuneration	Performance-linked bonus	Performance-linked, share-based remuneration	Restricted share-based remuneration system	
Directors (excluding outside directors)	420	221	87	43	67	7
Audit & Supervisory Board members (excluding outside Audit & Supervisory Board members)	25	25	—	—	—	1
Outside directors and Audit & Supervisory Board members	75	75	—	—	—	7

Notes 1. The total remuneration for directors includes the portion paid as salary for officer duties undertaken by directors who also serve as officers.

2. As the performance indicators pertaining to performance-linked remuneration, EBITDA margin and consolidated net sales as key managerial indicators are applied to the performance-linked bonus in order to clarify responsibility for the results of each fiscal year, while ROE and nonfinancial employee engagement as strategic indicators in the medium-term plan are applied to performance-linked share-based remuneration in order to pursue the creation of sustainable corporate value. In the current business year, the EBITDA margin stood at 21.1%, consolidated net sales at ¥175,434 million, ROE at 12.1%, and employee engagement indicator at around the standard value.

Remuneration Amounts for Individual Officers (FY 2022/12)

Name	Total remuneration (Millions of yen)	Position	Company	Total of various types of remuneration (Millions of yen)			
				Basic remuneration	Performance-linked bonus	Performance-linked, share-based remuneration	Restricted share-based remuneration system
Noriaki Taneichi	129	Director	Submitting company	62	29	14	23

Note: The table only includes officers who receive remuneration of 100 million yen or more in total.

Internal Control System

Initiatives are taken to bolster the group internal control system, including the strengthening of business management at overseas subsidiaries with an increasing presence, and the establishment of compliance systems. In this section, an overview is provided on the initiatives: the group management system, compliance system, risk management system, the improvement of information management, and supply chain management.

→ For further details on internal control, please see the Corporate Governance Report at https://www.tok.co.jp/application/files/3016/8255/6694/20230331.pdf

Group Management System (GMS)

To establish and maintain the global business management systems, the TOK Group defined 15 fields for group-wide consistent initiatives as management functions, established group-wide common rules, and promoted the operation and maintenance of the Group Management System (GMS) as the basis for continuous improvement. Through these initiatives, TOK will steadily reduce group risks and enhance its corporate value.

[Organization Structure for Promoting GMS]

The department manager of the Corporate Planning Department in charge of supervising subsidiaries was appointed the chief officer for GMS in order to maintain GMS as an important mechanism within the TOK Group. The Planning Division under the Corporate Planning Department was determined to function as a secretariat for GMS. In this way, TOK will maintain group-wide activities for corporate value enhancement and risk reduction, while enhancing dialog with subsidiaries and strengthening the headquarters function to supervise them.

[GMS Initiatives]

To achieve enhancement of sustainable corporate value, the entire Group needs to be optimized. Therefore, the Company will implement self-inspection to check the management functions and identify problems at the subsidiaries, provide support for improvement, and perform post-improvement monitoring.

In FY 2022/12, TOK conducted self-inspections on the development and operation of GMS for two GMS management functions and one subsidiary. The minor findings identified in the inspection were resolved with a rate of 100%. The Company also made progress with a 91% resolution rate on key issues.

15 GMS Management Functions

Business management	Sales management	Accounting/ Financial management	Purchase/ Procurement management
Risk management	Human resource management	Production management	EHS management
Compliance	Information management	Security export control	SCM
Research and development	Import control	(as the basis) GMS	

Compliance

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

[Compliance Promotion System and Standards of Conduct]
Compliance activities are being promoted with the participation of all employees and led by the Compliance Committee, which consists of TOK officers and undertakes awareness raising and dissemination activities at Group companies with the support of the Legal Affairs Division (Compliance Committee Secretariat). To prevent violations of compliance, the Compliance Committee collects information about potential problems and compliance issues from each site, along with corrective actions and the planned time of correction, and monitors progress on a periodic basis. The standing Audit and Supervisory Committee member and the Internal Auditing Division as the internal audit department attend the Compliance Committee to share key points in audits, thereby improving the quality and effectiveness of audits.

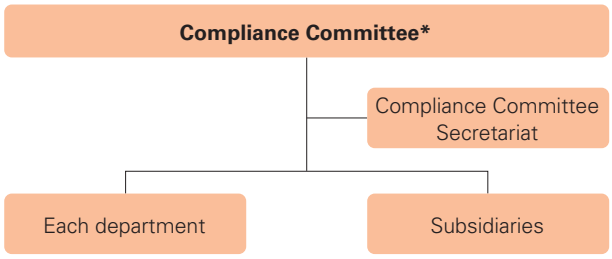
In addition, the Ethics and Anticorruption Policy has been established as a subordinate policy under the CSR Policy with the aim of improving compliance awareness by each officer and employee and to clarify the values and code of conduct to be shared. This policy is also applicable to subsidiaries in Japan and overseas and is translated into the local language of each group company to be distributed to all officers and employees.

Ethics and Anti-Corruption Policy

The TOK Group promotes fair and impartial business activities in compliance with the laws of countries/regions and the social norms.

- The Group prohibits anti-competitive behavior and maintains fair free competition.
- The Group prohibits the abuse of dominant bargaining position and ensures equal and proper transactions.
- The Group does not engage in dishonest acts that may interfere with international peace and security.
- The Group prohibits entertainment and gifts beyond the range of common sense.
- The Group prohibits conflicts of interest.
- The Group stringently manages confidential information that it possesses or acquires on business.
- The Group prohibits the dishonest use of corporate assets.
- The Group properly protects and uses intellectual property, while respecting the intellectual property rights of third persons.
- The Group discloses corporate information in a timely and fair manner.
- The Group will place correct advertisements and provide accurate information on products and services.
- The Group prohibits insider trading.
- The Group makes donations and political contributions in accordance with the laws of the countries/regions.
- The Group will never have a relationship with antisocial forces.
- The Group prohibits political activities and soliciting activities on the company premises without permission by the company.

Compliance Committee Diagram



* Chaired by the President and Chief Executive Officer

Initiatives for ensuring compliance with laws and regulations
To prevent compliance-related risks from emerging, all officers and employees must absorb compliance into business practices. To achieve this, the Company is working to construct a system to respond rapidly to revisions to laws and regulations in each country. TOK also conducts its own unique compliance training that considers conditions at each department and site within the Group and goes through a PDCA cycle to prevent risks from materializing.

In FY 2022/12, based on the activities in the previous fiscal year, TOK revised the Group Compliance Rules (requiring the establishment of management systems for laws and regulations at sites in Japan and overseas, and increasing the frequency of check on laws and regulations from twice annually to four times annually as the major revised points), followed by the preparation and dissemination of the list of applicable laws and regulations and the procedures for the management

of laws and regulations, and the start of operation of the check on laws and regulations (four times annually). These changes led to the establishment of a continuous process for timely information collection on changing laws and incorporating the information into practice. To help employees better understand compliance, CSR training was implemented for all employees in Japan, through which the changing concepts of compliance were shared, and the importance of compliance was re-emphasized.

Internal reporting system

To identify and improve or prevent compliance risks in business activities at an early stage, the Company has an internal reporting system based on the Whistleblower Protection Act. A whistleblower may select one of three channels that respectively report to the Compliance Committee Secretariat (internal), the Standing Audit and Supervisory Committee member (internal), and the legal advisor (external). Whistleblowing and consultation may be made by phone, in writing, in person, or by other means, and anonymous whistleblowing is acceptable. It is clearly stated that a whistleblower is protected from dismissal or any disadvantageous treatment because of whistleblowing unless it is conducted for an illegitimate purpose. Apart from the whistleblowing system, TOK also has an outside counseling section that can be accessed anonymously to receive complaints concerning harassment. In FY 2022/12, this section received 15 complaints and implemented guidance and corrective training for the relevant persons. To establish a more reassuring environment for whistleblowing, TOK will further enhance the system and continue disseminating it to managers.

Risk Management

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

[Risk Management System]

The Risk Management Committee plays a central role in reviewing the risk management system and formulating risk management policy. To appropriately handle the different risks, TOK established the TOK Group Risk Management Rules and the TOK Group Emergency Response Standards. Based on the Rules and the Manual, the Company implements preventive measures at normal times by identifying risks that may cause serious outcomes, analyzing such risks, and determining, implementing, and evaluating actions required, among other risk management activities in the categories of management risks, social risks, and disaster/accident risks.

Risk Management Committee Diagram

* Chaired by the President and Chief Executive Officer

Strengthen the risk management structure

Reaffirming the importance of contingency management after the Great East Japan Earthquake, the Group has taken steps to address a variety of risks, including disasters and other accidents and environmental risks, with the establishment of the Contingency Management Committee (present Risk Management Committee). In 2016, the TOK Group Risk Management Committee was established to handle a broader range of risks in accordance with the Company's global expansion.

In FY 2022/12, efforts were made to reduce risks that were considered to have high impact on business continuity based on risk assessment in the previous fiscal year (such as risks in material supply and occupational health and safety). Starting FY 2023/12, TOK will promote risk reduction activities toward the long-term development of the TOK Group, including the further strengthening of countermeasures against economic security risks and the risks of infringement on human rights by suppliers.

Strengthened crisis management

The Group believes that the business continuity plan (BCP) begins with the safety of our employees. In Japan, TOK operates a safety confirmation system for confirming whether Group employees are safe in the event of natural disasters, including major earthquakes. Safety confirmation drills are conducted every year to ensure the smooth and efficient operation of this system and to raise awareness among employees. In the fiscal year ended December 31, 2022, four drills were implemented, and the response rate was maintained at a high level in all sessions.

Large-scale natural disaster preparedness

Based on lessons learned from the Great East Japan Earthquake and the Kumamoto Earthquake, TOK has put in place a BCP that envisions damage simultaneously striking the headquarters and multiple sites from earthquakes directly beneath the greater Tokyo area. TOK reviews its BCP every year so it is grounded in actuality by estimating actual damage that may disrupt order taking and placement, product shipment, and essential utilities.

As other disaster preparedness measures in FY 2022/12, TOK mostly completed flood prevention work at sites with the highest risk of flooding and started the formulation and operation of initial response guidelines on occasions with anticipated flooding risks **(See pages 96–97)**.

Improving Information Management

Leaks of information assets could substantially compromise the competitive advantages of the TOK Group and threaten its survival as a business entity. The environment surrounding business entities is drastically changing. Cybersecurity risks may impose a significant threat to TOK as a single company and its entire supply chain. Reinforcing the information management system is a priority issue in terms of preserving corporate value and fulfilling its social responsibility. From this standpoint, the Company is redoubling its efforts to ensure information security by maintaining a PDCA cycle.

[TOK Group Information Management Policy]

The TOK Group (comprising Tokyo Ohka Kogyo Co., Ltd., and its subsidiaries, hereinafter collectively the "TOK Group") is implementing measures in line with the following policies, after having positioned risk management related to information assets as a priority management issue to fulfill its corporate social responsibility.

Definition, protection, and effective utilization of information assets

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

Update and maintain tools and security platforms

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

Organizational structure and organized activities

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

Completeness, confidentiality, and availability

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

Education

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

Incident response

The TOK Group will endeavor to minimize the damage in the event of an information security incident and implement measures to prevent its recurrence.

Audits and continuous improvements

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

[Information Management Structure]

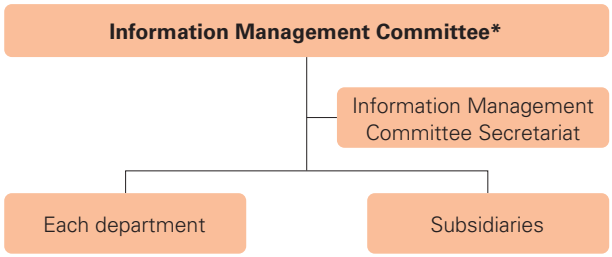
The TOK Group created the TOK Information Management Committee headed by the department manager of the Corporate Planning Department as the chair. The Committee determines policies and measures related to information security and cybersecurity. The overseas subsidiaries established their information management organizations, which develop systems and rules to collaborate under the guidance of the TOK Information Management Committee, thereby strengthening information management systems throughout the Group.

In addition, the Internal Auditing Division regularly audits compliance with rules and other matters on information management as part of its internal audits. The Division aims to improve the information management system by giving guidance, proposals, and advice to relevant departments.

[Initiatives for Information Management]

In FY 2022/12, TOK clarified the cybersecurity systems of the TOK Group, promoted measures against cyberattacks, and changed information management rules to make them more understandable for employees, thereby further improving understanding and dissemination. The Group also improved the information management standard by responding to amendments to personal information protection acts in Japan and Europe and implementing measures to prevent the outflow of human resources and technologies from the viewpoint of economic security.

Information Management Committee Diagram



* Chaired by the department manager of the Corporate Planning Department

Key topics for information management

Management of trade secrets, training and rules, human security, IT security, physical security, and supplier management

Supply Chain Management (CSR Procurement)

With its overseas sales ratio exceeding 80% and its supply chain spreading across the world, the TOK Group operates its business activities in accordance with the RBA Code of Conduct.

Establishing the Human Rights Policy and the CSR Procurement Policy under the CSR Policy Based on the Social Norms

In 2020, TOK formulated the CSR Policy based on the laws of countries/regions and the social norms (referring to the Universal Declaration of Human Rights, the Guiding Principles on Business and Human Rights, ISO 26000, the RBA Code of Conduct, and other guidelines), under which the Company also established the Human Rights Policy and the CSR Procurement Policy. TOK also formulated the CSR Procurement Guidelines to help suppliers understand our CSR Procurement Policy and request them to consider social issues, including the maintenance of respect for human rights, regulatory compliance, environmental conservation, and occupational health and safety.

Furthermore, the Company asks key suppliers to agree to its CSR Policy and submit written agreements. TOK also conducts a CSR questionnaire survey to research the status of response to social issues.

CSR Procurement Policy

The TOK Group promotes sustainable procurement based on the spirit of co-existence and co-prosperity with business partners and in accordance with the laws and the social norms.

- TOK promotes procurement activities with adequate quality, prices, and delivery time.
- TOK maintains equal and proper purchase activities with suppliers.
- TOK considers human rights, occupational health and safety, and other social issues.
- TOK promotes environmental consideration and green procurement.
- TOK promotes business continuity management in preparation for risks.
- TOK stringently manages all confidential information that we come to possess or acquire on business.
- TOK promotes the responsible procurement of minerals throughout our supply chain.

Main Business Risks, Countermeasures, and Opportunities

The TOK Group conducts business activities in every region of the world in a diverse range of fields. When carrying out these business activities, the Group 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 assesses as most significant as of December 31, 2022, and are not exhaustive of all risks associated with the TOK Group.

Theme	Risks	Countermeasure	Opportunities
Industrial and economic change	● The electronics is subject to major cyclical changes in market conditions; in particular, materials for semiconductors and displays are significantly affected by such demand trends. ● The Group may also be affected by market changes and price fluctuations driven by the rapid speed of technological innovation and the complexity and diversity of user needs.	● The Group will conduct rapid flexible sales and marketing strategies based on a deep understanding of the characteristics of each market in the semiconductor industry, including the memory field with large fluctuations in demand and price, the logic field with relatively small fluctuations, and the power device field that has a broad base. **→ See pages 30–35 and 54–57** ● The Group will mitigate the impact of demand and price fluctuations for older products and fluctuations in economic conditions by constantly acquiring business in cutting-edge fields. ● The Group will expand new business in such fields as life science, which has a different demand fluctuation cycle from semiconductors. **→ See page 58**	● The Group will realize long-term stable growth and stable increase in corporate value through its business portfolio, which is highly resilient to economic fluctuations and centered on high value-added products. ● The Group will use marketing and development to create opportunities from structural changes in its target markets and contribute to innovation.
Exchange rate fluctuation	● The Group has production and marketing sites in North America, Asia, and Europe, where the markets are expected to further expand, and a part of its overseas transactions are calculated in yen, combined with risk hedge through forward exchange contracts. However, the Group may be affected by exchange rate fluctuation exceeding the anticipated level.	● As a part of balance sheet management, the Group is evolving global cash management, including adjusting the balance of cash positions between overseas sites. Through these measures, the Group will enhance financial risk controls for exchange rate fluctuations and liquidity. **→ See pages 36–39**	● By minimizing exchange rate fluctuation risk, the Group will minimize the risk of fluctuations in its business performance due to focusing on the highly volatile semiconductor industry.
Research and development	● The Group carries out R&D to provide products that precisely reflect user needs to maintain competitiveness in the electronics industry where technological innovation occurs at a rapid pace. However, since it is difficult to realize technological innovation and anticipate changes to user needs, the Group may be unable to produce the intended results for unforeseeable reasons, regardless of how much management resources it invests into R&D.	● The Group will continue to deepen the customer relationships it has cultivated at customer-oriented sites in Japan and overseas. Meanwhile, the Group will work in many fields and flexibly set its focus themes, while strengthening proactive marketing in R&D. **→ See pages 30–35 and 54–57** ● The Group will go beyond simply responding to customers' technology needs, expanding technological seeds through venture capital investment, open innovation, and collaboration with industry and academia and continue development in major themes until it succeeds. **→ See pages 54–57**	● The Group will form development communities with stakeholders in Japan and overseas in the cutting-edge fields of electronics materials, such as semiconductor materials. ● The Group will pursue strategic sales activities, R&D, and resource allocation while upgrading product-based marketing in order to respond to any market that may launch in the future. ● The Group will acquire a broad range of technological seeds using open innovation in order to input internal resources in full scale as soon as a market takes off.
Intellectual property	● The Group has a diverse portfolio of intellectual property for which it grants licenses to third parties and acquiring licenses from third parties as necessary or when useful. If the Group is unable to safeguard and maintain or acquire these rights as anticipated, it may become a party and incur cost payment in a dispute or lawsuit related to these rights.	● Management of intellectual property, such as granting and acquiring licenses, is conducted without delay by a dedicated department. The Group also conducts awareness raising and training about intellectual property rights for relevant divisions such as development, sales, and manufacturing.	● The Company will conduct stable management of intellectual property, while building an intellectual property portfolio that supports corporate value enhancement more effectively by discerning whether to employ open or closed strategy on a case-by-case basis.
Raw material procurement	● The Group aims to stably procure 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 accidents at the manufacturers. ● An increase in the price of raw materials may also impact the Group.	● By strengthening supplier engagement, the Group continuously tracks potential risks for each supplier. ● While continuing internal efforts to reduce costs, streamline operations, and switch to alternative materials, the Group passes on price changes for products to customers where this can be rationally justified.	● The Group will reduce factors that could impede future growth by strengthening its BCP on the assumption of emergent risks at suppliers. ● The Group will increase capital efficiency by securing appropriate profits from its high value-added products.

Theme	Risks	Countermeasure	Opportunities
Product liability	● Within the process in which customers use the Group's products, faults may occur that originate in a product defect. The Group has insurance to cover product liability compensation payments, but because insurance may not be able to cover the entire amount that has to be paid, there could be an impact on the Group's business results.	● The Group provides inline support and reduces defects through the trinity of development, manufacturing, and sales, while reducing the risk of faults through thorough understanding of customers' manufacturing lines. → **See pages 23–25**	● The Group will further improve customer satisfaction and increase its brand capabilities by increasing customers' manufacturing yields. ● Profitability and capital efficiency will be increased by adding higher value to products.
Natural disaster and accident	● In the event of a natural disaster, such as an earthquake, or an unforeseen accident, such as a fire or an explosion, the Group may have to suspend production at its manufacturing plants in Japan and overseas with a resulting delay in product shipments. The Group may also have to pay repair or replacement costs at the damaged plant. ● If COVID-19, influenza, or other infectious diseases spread among the employees, the Group may be forced to temporarily suspend operations.	● The Risk Management Committee plays a central role in reviewing the risk management system and formulating risk management policy. → **See pages 87–88** ● "Disaster/accident risks" was added to the major risks of the TOK Group identified through risk assessment specified in the Risk Management Rules. The Company identifies risks that may cause serious outcomes, analyzes such risks, and determines, implements, and evaluates actions required, among other activities. → **See pages 87–88** ● The Group has established appropriate management systems for preventing the spread of infections.	● By limiting the impact of natural disasters and accidents as far as possible, the Group will minimize its downside risk and maintain its upside potential. ● The Group will acquire trust from stakeholders—customers, employees, and local communities—over the medium to long term and increase brand capabilities.
Environment	● The Group uses the different types of chemical substances within its production activities and has strict rules to ensure that they are handled safely. However, in the event of an accident involving the discharge of chemical substances into the external environment from Company premises, the Group's reputation within society may be affected, it may have to pay costs as compensation or in order to carry out countermeasures, and it may have to suspend production activities. ● If environment-related laws and regulations in each country where the Group conducts its business activities are made stricter, the Group may face additional costs or limits on its business activities.	● The Group has reassessed its production lines and work procedures based on lessons learned from accidents caused by highly corrosive chemical substances. → **See pages 105–106** ● The Group had a third-party institution (such as ISO and RBA) conduct a health and safety audit to further improve the level of occupational health and safety by identifying potential sources of danger. → **See pages 67 and 105–106** ● The Group coordinates closely with local subsidiaries overseas to obtain the latest information on revisions to laws and regulations. → **See pages 102–104** ● The Group will automate its processes and develop systems to lighten the workload from registrations and filing.	● By preventing accidents, the Group will maximize its upside potential. ● The Group will foster greater loyalty among employees by ensuring safety at all manufacturing sites. ● The Group will maintain and increase social trust in local communities overseas.
Laws and regulations	● When conducting 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, the Group must observe laws and regulations related to trade, monopolies, international taxation, the environment, and recycling. If there are major revisions to any of these laws and regulations, 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.	● The Group has accelerated the process of registering and receiving approval for chemical substances by having local non-Japanese employees interpret the laws and regulations and negotiating with local government institutions. → **See pages 102–104**	● Developing products that use alternatives to prohibited substances may give rise to new product characteristics and added value. ● The Company will differentiate itself from competitors through its ability to comply with local laws and regulations.
Overseas business activity	● The Group's overseas business activities may be obstructed by the emergence of such risks as unexpected revisions to laws and regulations, weakening of the industrial base, difficulties in securing personnel, terrorist attacks, wars, and natural disasters.	● The Group uses its strength of having production sites in five regions around the world: Japan, China, the United States, South Korea, and Taiwan to minimize emergent risks by coordinating between them. → **See page 19**	● Reducing the Group's overall environmental risk and natural disaster and accident risk will enable it to continue fulfilling its responsibilities as a supplier.
Information leakage	● The Group implements thorough measures to ensure the security of confidential business information, information related to other companies, and personal information. However, because of unforeseeable events, if information leaks outside of the Group, this may damage the reputation of the TOK Group within society, and it may have to pay liability payments for the damage caused to a company or individual whose information was leaked, which could have an impact on the Group's business results.	● Reinforcing the information management system is a priority issue in terms of preserving corporate value and fulfilling our social responsibility. From this standpoint, the Group is redoubling its efforts to ensure information security by establishing and running the PDCA cycle. → **See pages 88–89**	● A solid information management system will increase customer trust and help to expand business opportunities. ● The Group's brand capabilities will increase in Japan, the United States, South Korea, Taiwan, China, and other regions in and outside of Japan where the Group operates.

Global Environmental Conservation Considering Future Generations

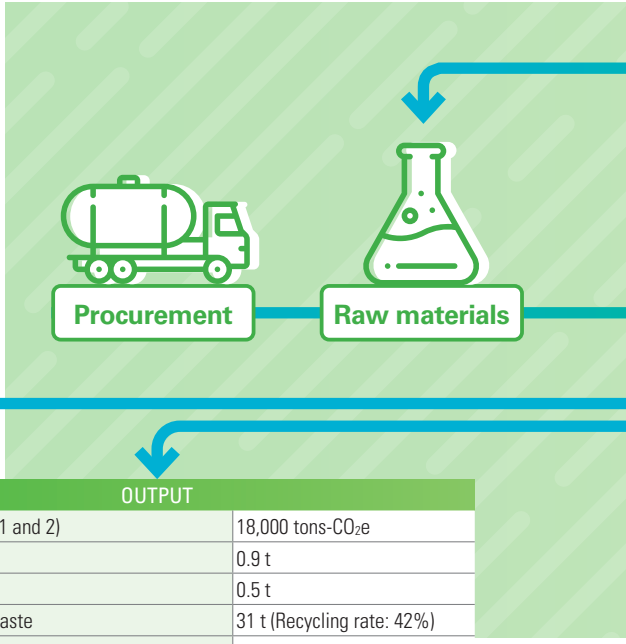
* The scope of reporting on global environmental conservation considering future generations (pages 92–101) is on an unconsolidated basis and consolidated subsidiaries in Japan. In other cases, the scope of coverage is listed on each page.

Reduction in Environmental Impact from Corporate Activities

Environmental Performance*

Aiming at global environmental conservation considering future generations as a new material issue, the TOK Group conducts daily quantitative and qualitative evaluations of the effects of its corporate activities on the global environment and implements a variety of different initiatives to minimize its impact.

* Environmental performance: Environmental performance evaluations are a method of evaluating in qualitative and quantitative terms the environmental activities and the results achieved by an organization in accordance with its environmental policy, objectives, and goals.



INPUT	
Total energy consumed	17,630 kL crude oil equivalent
Electric power	11,841 kL crude oil equivalent
Petroleum (heavy oil)	659 kL crude oil equivalent
City gas	5,043 kL crude oil equivalent
Used water	447,000 m^3
Chemical substances (Class 1 Specified Designated Chemical Substances under the PRTR Law)	3 t
Chemical substances (Class 1 Designated Chemical Substances under the PRTR Law)	1,157 t

*January 2022 to December 2022 (Chemical substances: April 2022 to March 2023)

OUTPUT		
CO_2 (sum of Scopes 1 and 2)		18,000 tons-CO_2e
SOx*1		0.9 t
BOD*2		0.5 t
General industrial waste		31 t (Recycling rate: 42%)
Industrial waste	General industrial waste	1,956 t (Recycling rate: 46%)
	Specially controlled industrial waste	3,450 t (Recycling rate: 95%)

* January 2022 to December 2022

*1 SOx: Abbreviation for Sulfur Oxides; Produced from the combustion of fossil fuels containing sulfur and considered substances that cause acid rain.
*2 BOD: Abbreviation for biochemical oxygen demand. Refers to the volume of oxygen required when pollutants in the water (organic substances) turn into inorganic substances or gases through the action of microorganisms. BOD is a major indicator used when evaluating the degree of contamination of rivers and other bodies of water. A higher value for BOD means a higher level of contamination of the water.

Please follow the URL below for more detailed information on the environmental impact by site.

Information on environmental impact by site **https://www.tok.co.jp/eng/sustainability/env-activity/greenhouse-gases**

Emissions of Greenhouse Gases — Scopes 1, 2, and 3

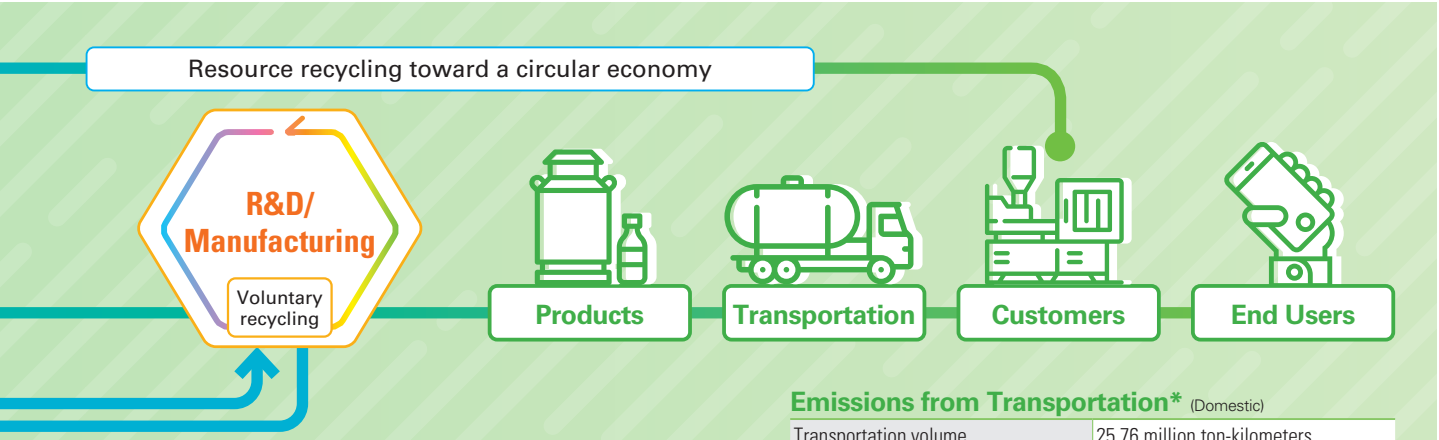
Because climate change has become more serious in recent years, companies are expected to measure greenhouse gas emissions from their own properties and across the entire value chain. The TOK Group measures and calculates greenhouse gas emissions based on the Ministry of the Environment's Basic Guidelines on Accounting for Greenhouse Gas Emissions throughout the supply chain within the context of emissions from business activities (Scope 1 and Scope 2) and indirect emissions from nonbusiness activities (Scope 3). In 2021, TOK also started to calculate Scopes 1 and 2 at all overseas sites. TOK will advance the initiatives for the realization of a sustainable society by identifying issues throughout the value chain where corporate activities have an impact.

Scope 1	11,757 t-CO_2e	Scope 2	6,346 t-CO_2e
Scope 1 (overseas total)	3,163 t-CO_2e	Scope 2 (overseas total)	16,579 t-CO_2e

Scope 3 Emissions by Category (domestic total)

Purchased goods and services	435,191 t-CO_2e	Upstream leased assets	Not applicable
Capital goods	36,939 t-CO_2e	Downstream transportation and distribution	—
Fuels and other substances excluded from Scopes 1 and 2	5,795 t-CO_2e	Processing of sold products	—
Upstream transportation and distribution	Domestic: 4,058 t-CO_2e Overseas: 9,221 t-CO_2e	Use of sold products	Not applicable
Waste generated in operations	5,104 t-CO_2e	End-of-life treatment of sold products	Not applicable
Business travel	3,487 t-CO_2e	Downstream leased assets	—
Employee commuting	2,415 t-CO_2e	Franchises	—
		Investments	Not applicable

* January 2022 to December 2022 (Waste generated in operations: April 2022 to March 2023)
* Business trips and employees commuting exclude people seconded to other companies.
* The calculation method for Scope 3 was reviewed in 2021.



Emissions from Transportation* (Domestic)

Transportation volume	25.76 million ton-kilometers
Energy consumed	1,149 kL crude oil equivalent
CO_2 emissions (domestic)	3,053 t-CO_2e

* January 2022 to December 2022
* Emissions from domestic transportation are based on the METI Fiscal 2022 *Specified Shippers Periodic Report.*

Environmental Accounting*

TOK has been using environmental accounting since 2000 in order to identify expenses required for environmental conservation activities as well as the effects of such activities and to help promote the environmental management. In 2022, environmental conservation expenses totaled ¥829 million for the prevention of pollution and the recycling of resources.

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

(Millions of yen)

Category of the cost		Key initiatives	Investment	Cost
Business area cost	Pollution prevention cost	Air, water, and other pollution prevention equipment and the renewal, operation, maintenance, and management of equipment	219	102
	Global environmental conservation cost	Energy conservation activities: non-FIT non-fossil fuel certificate electricity purchase	112	85
	Resource circulation cost	Installation of melting equipment	8	216
Upstream/Downstream cost		Green purchasing, collection of used products	0	8
Administration cost		Approach to environmental management system	10	47
R&D cost		Research and development related to environmental conservation (costs of chemical substance screening)	0	19
Social activity cost		Cleanup activities around the production plants	0	1
Environmental remediation cost		Treatment of soil pollution by the construction of a new building	0	0
Total			350	479

* January 2022 to December 2022

Environmental Conservation Cost

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

Economic Benefits Associated with Environmental Conservation Measures

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

(Millions of yen)

Effects		Amount
Revenue	Gain on the sale of recycled products	39
Cost savings	Reduction in disposal costs through a reduction in the volume of waste	745
Total		784

* January 2022 to December 2022
* Scope of environmental accounting covers all production facilities and the distribution centers in Japan, excluding the headquarters and marketing offices. The reference used is the *Environmental Accounting Guidelines 2005* published by the Ministry of the Environment.
* Amounts of less than one million yen have been rounded off.

Initiatives toward Achieving Carbon Neutrality

Key initiatives/Results in 2022

KPI

Energy-related CO_2 emissions per base unit
(equivalent to energy under the Act on Rationalizing Energy Use)

2022 result
Reduce by 58 points
(vs. 2019)

2030 targets
Reduce by 15 points
(vs. 2019)

Basic Concept

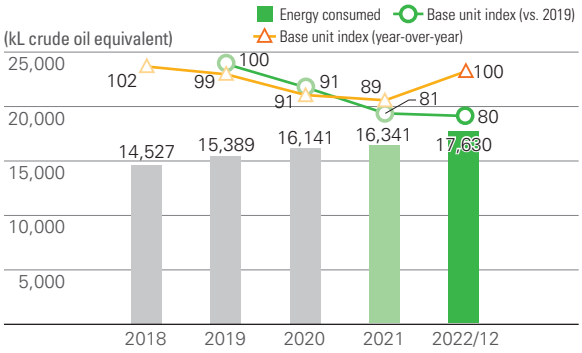
Toward the goal of carbon neutrality in 2050 for global environmental conservation considering future generations as a material issue, the TOK Group quantitatively measures the environmental impact throughout the value chain and works to reduce the environmental load, including CO_2, with a full understanding of the impact that production activities have on the environment. TOK aims to achieve sustainable development alongside society through the development of photoresists and new products that further conserve resources and energy.

Improve Energy Consumption per Base Unit and CO_2 Emissions

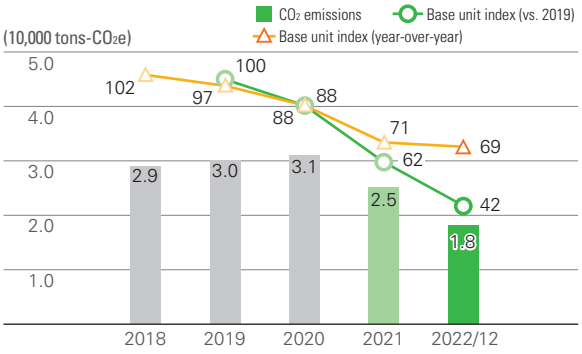
In operation, TOK continues to modify air conditioning temperature settings and operating hours, prioritizes the operation of energy-efficient cooling and heating source equipment, turns off unnecessary ventilation systems at night, turns off unnecessary lights outside business hours, and implements other relevant measures. In the renewal of existing equipment, the company pursues the further reduction of energy consumption and CO_2 emissions in consideration of energy efficiency by selecting LED lights and by other means. In 2022, energy consumption increased by 8% year-over-year (an increase of 2% in 2021 year-over-year). However, the energy consumption per base unit had no increase or decrease (± 0 points) year-over-year and a decrease of 20 points from 2019 due to the activities mentioned above and increased net sales. Energy-related CO_2 emissions per base unit substantially improved with a decrease of 31 points year-over-year and 58 points from 2019 due to increased net sales and the annual contribution of the shift of more than 70% of purchased electricity at all key domestic sites to renewable energy.

In 2023, TOK continues to advance toward a reduction of 15 points by 2030 (vs. 2019) and carbon neutrality by 2050.

Energy consumed



CO_2 emissions (converted from energy consumption)



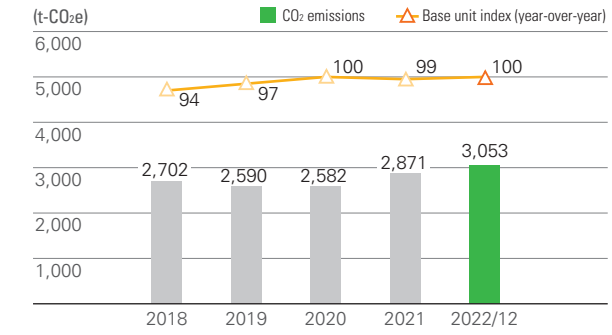
* Indicated for Scopes 1 and 2; For the latest figures for Scope 3, see page 94.
* Errors in *Integrated Report 2021* regarding the base unit index for 2018–2021 have been corrected.

Improve Energy Consumption per Base Unit in Distribution

Most products are delivered to customers in Japan and overseas by refrigerated transportation and classified as hazardous materials. Because shipments have been increasing in recent years, it is becoming increasingly important to reduce energy consumption. Therefore, TOK is examining measures to reduce energy consumption by securing storage places and optimizing transportation routes and modes. In 2022, the company examined the preparation for contracting with external warehouse service for the shipment of export products from the Koriyama plant and product storage and shipment at the Gotemba plant in order to restructure the logistics bases and optimize transportation routes.

In 2023, TOK plans to build roofs on the premises and install solar panels, thereby reducing purchased electricity as counter-heat measures and operating efficiency improvement. The TOK Group continues to examine diverse means, including a modal shift with railway and marine transport, and plans measures for the improvement of energy consumption per base unit and the reduction of CO_2 emissions.

CO_2 emissions in distribution



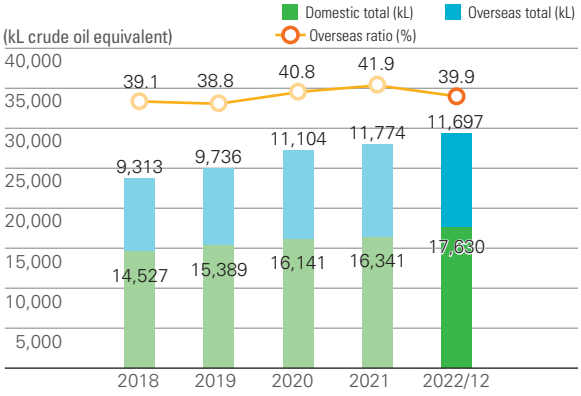
Future Issues and Initiatives

Over the past several years, climate change has been manifested in stronger typhoons and torrential rainfall resulting in major damage to society. Climate change is thought to be caused by fluctuations in the oceans and changes in solar activity, as well as the global warming caused by the build-up of greenhouse gases and the warming of the oceans due to hot water discharged from electric power stations and other factors. Toward the target of achieving carbon neutrality in Scopes 1 and 2 by 2050, the TOK Group steadily implements a variety of CO_2 emission reduction measures and energy conservation activities.

Measures to Prevent Global Warming at Overseas Manufacturing Sites

The overseas ratio of energy consumption took a downturn in 2022. This was because R&D and evaluation buildings were newly established or extended in Japan. Going forward, TOK will continue its production activities with a focus on energy conservation through a PDCA cycle for environmental management systems.

Energy consumption at sites in Japan and overseas



* Errors in *Integrated Report 2021* regarding overseas energy consumption for 2017–2021 have been corrected.

TOK Human Resources

Takashi Aoki

Corporate Communication Division

Aiming to further integrate measures for countering climate change with management strategies

Stakeholders are becoming increasingly more stringent with regard to the measures of companies countering climate change. TOK is also receiving many inquiries from customers, investors, and others concerning its measures to reduce greenhouse gas emissions and attain its reduction targets.

Under these circumstances, the TOK Group started to respond to the CDP* Questionnaire last year. The CDP Questionnaire questions corporate measures for countering climate change, including governance, business strategies, and the identification of risks and opportunities, in addition to data on greenhouse gas emissions and reduction targets. The Questionnaire provides a good opportunity to identify the activities that need to be strengthened, while laying the groundwork for the quantitative disclosure of risks and opportunities in future TCFD-based disclosures and incorporation into management strategies. The Group will continue to strengthen and enhance its response to the CDP Questionnaire, thereby further integrating measures for countering climate change with management strategies.

* The Carbon Disclosure Project (CDP) is an NGO originating in the U.K. that operates an information disclosure system for investors, firms, national governments, local governments, and municipalities to manage their respective environmental impacts.

Promotion of Resource Recycling: Initiatives to Address Water Risk

Key initiatives/Results in 2022

KPI **Water use volume in Japan**

2022 result
Increase by 22%
(vs. 2019)

2030 targets
Reduce by 15%
(vs. 2019)

Basic Concept

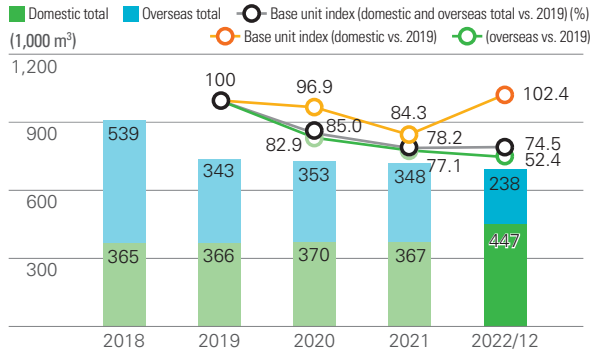
Amid increasing public attention for water resources as a global sustainability requirement, the Group's products and manufacturing processes use water as an essential resource. Therefore, TOK strives to minimize the volume of water consumed in production activities and to maintain and improve the quality of wastewater. The Group will continue to make environmental contributions through its business activities while monitoring water risks for global environmental conservation considering future generations as a material issue.

Changes in Water Consumption

Water use volume changes as the manufacturing processes and output change. TOK works to reduce its use by constantly monitoring the state of industrial water and city water use and reviewing related equipment.

In 2022, water use volume in Japan was 447,000 m^3 with an increase of 21.8% year-over-year and 22.1% compared to 2019. Water use volume at overseas sites decreased by 110,000 m^3 year-over-year to 238,000 m^3. Although water use volume increased in Japan, the base unit index (sum of domestic and overseas) decreased by 4 points year-over-year because of production increases and reduced water use volume overseas.

Changes in water use volume at domestic and overseas sites



* Errors in the *Integrated Report 2020* regarding the base unit index for 2020 and 2021 and regarding the overseas total of water consumption in 2020 have been corrected.

Water Risk Management

Water risks and other natural resource risks are ranked among the ten greatest risks over the next ten years in the *Global Risks Report 2023* published by the World Economic Forum. To better understand water use volume at all sites around the world, the TOK Group has clarified the respective risks in the stages of water supply, raw materials supply, manufacturing processes, and wastewater emissions from plants. TOK then examined the measures to implement for water risks in the supply chain, including water intake restrictions and flooding risks due to natural disasters and the risk of business interruption resulting from water contamination.

Set a Medium- to Long-term Target

The company implemented proactive measures to reduce water risks in 2018 and worked toward the attainment of company-wide targets since 2019. In 2022, TOK examined its reduction measures for the risk of contamination of piping and equipment at each site, water use operation, and measures to reduce natural disaster risks, and performed the relevant activities based on the plans. As part of the activities, the company installed a new high-yield system for pure water production at the Koriyama plant to reduce water use volume in the future through the centralized supply of pure water.

TOK will continue to implement risk reduction measures to attain the medium- to long-term target of reducing domestic water use by 15% from the 2019 level by 2030.

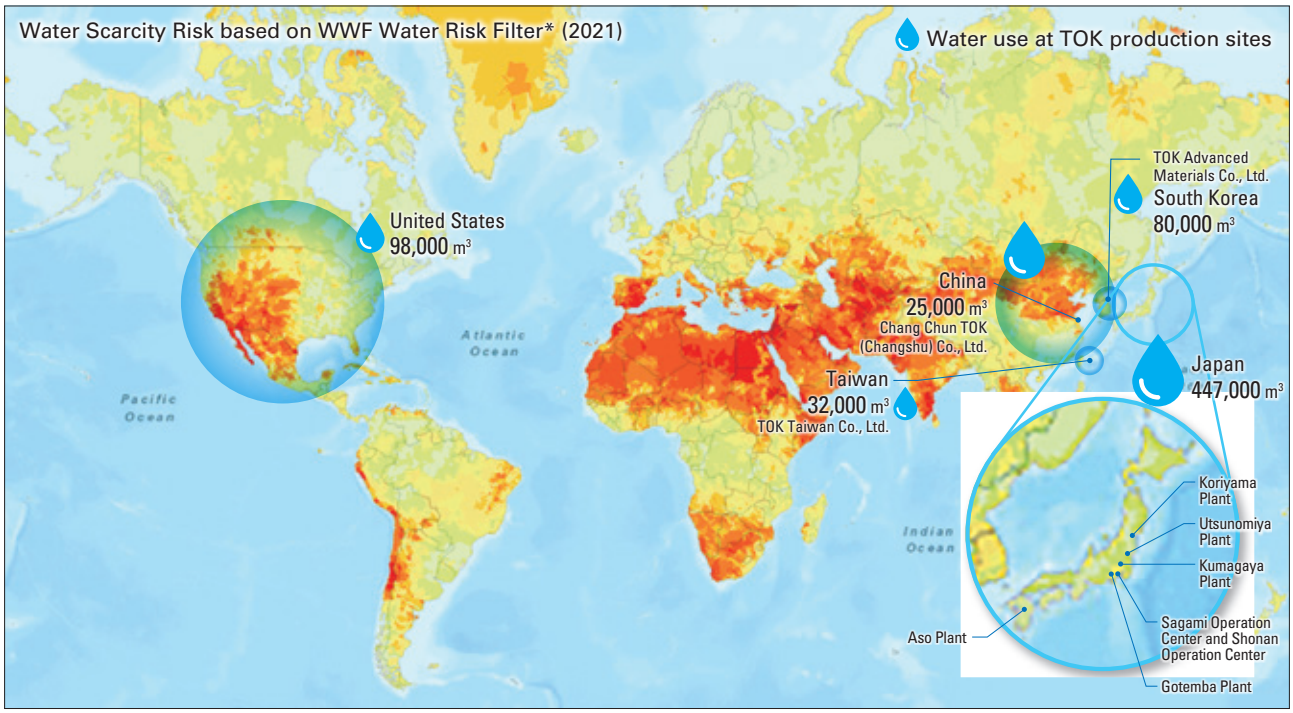
New pure water building at the Koriyama plant

Worldwide Water Scarcity Risks as of 2021

The risk map below indicates the water scarcity risks closely related to the semiconductor industry, including the manufacturing of materials, using the WWF Water Risk Filter.* In this map, water scarcity represents the physical abundance or scarcity of freshwater resources, which has a significant effect on business production, the supply chain, operational cost, and business growth. Water scarcity caused by human activities may also deteriorate from natural conditions (such as dryness and drought). The risks below are calculated using the functions of water consumption and demand in proportion to the volume of available water in each region.

No serious water scarcity risk has emerged at the production bases of the TOK Group. However, transient risks of water scarcity that occurred in Taiwan in 2022 are likely to recur. To counter this, the Company will strengthen its BCP measures.

Very low risk Very high risk



* Water Risk Filter: The water risk assessment database developed by the World Wildlife Fund and the German Investment and Development Cooperation (DEG)

Future Issues and Initiatives

The company has a plant in Aso, Kumamoto, and has participated in forest preservation activities that led to watershed cultivation in the Aso region since 2022 **(See page 101, "Preserve biodiversity")**. Concerns are rising about the water stress that climate change may impose on water resources. If water intake restrictions, drainage restrictions, or other regulations are strengthened in the future in the regions where the TOK Group operates, water use by the TOK Group plants may also be affected. The company continues to reduce water consumption through the cyclic use of water and to reduce contamination risks, not only for the reduction of environmental impact but also for business continuity.

TOK Human Resources

Ryoichi Takasu

Head of Risk Management Secretariat

To establish a robust supply chain, we are implementing flood risk control measures

Water is an indispensable resource for the semiconductor industry and the TOK Group. At the same time, floods caused by typhoons and torrential rains may affect the supply of raw materials and the manufacturing and transportation of products. To fulfill its responsibility to supply products, the TOK Group secures alternative means of transport for raw materials in a disaster and implements other measures that include the identification of sites with a high risk of flooding and the strengthening of equipment. In 2022, TOK mostly completed flood prevention work at the sites above and started the formulation and operation of initial response guidelines on occasions with anticipated flooding risks. The TOK Group continues to undertake risk management to establish a robust supply chain.

Promotion of Resource Recycling: Reducing Industrial Waste Emissions and Landfill Disposal

Key initiatives/Results in 2022

KPI **Volume of industrial waste per base unit**

2022 result
Up 23 points
(vs. 2019)

2030 targets
Reduce by 15 points
(vs. 2019)

Basic Concept

As measures toward a circular economy, the company promotes the 3R (Reduce, Reuse, and Recycle) activities. By restricting the volume of generated waste, thoroughly sorting all waste by type, and increasing the volume that is recycled, TOK is working to make more effective use of resources. The company strives to maintain zero emissions* by reducing the landfill disposal volume by processing waste products through combustion or crushing, which is called intermediate treatment, and through stabilization and volume reduction initiatives.

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

Reduce Industrial Waste Emissions

In fiscal year 2020, TOK set a new medium-term target to reduce industrial waste generation (per base unit) by 15 points compared to 2019 by fiscal year 2030 (a reduction of approximately 1.4 points annually). With this target in mind, TOK has been working to reduce the various types of waste by refining and reusing process effluents, internal effluent processing, internal recovery, and converting waste into items of value.

In 2022, the company reused process effluents and proactively converted waste into items of value. However, the medium-term target was left unattained because the industrial waste per base unit increased by 12 points year-over-year and by 23 points from 2019 as the base year. The TOK Group will continue to promote measures to attain the medium-term targets, including the increase of items of value and internal processing.

Achieved Zero Emissions

In 2022, industrial waste for landfill disposal after intermediate treatment stood at less than 1% of total waste, and thus TOK achieved zero emissions for nine consecutive years since 2014.

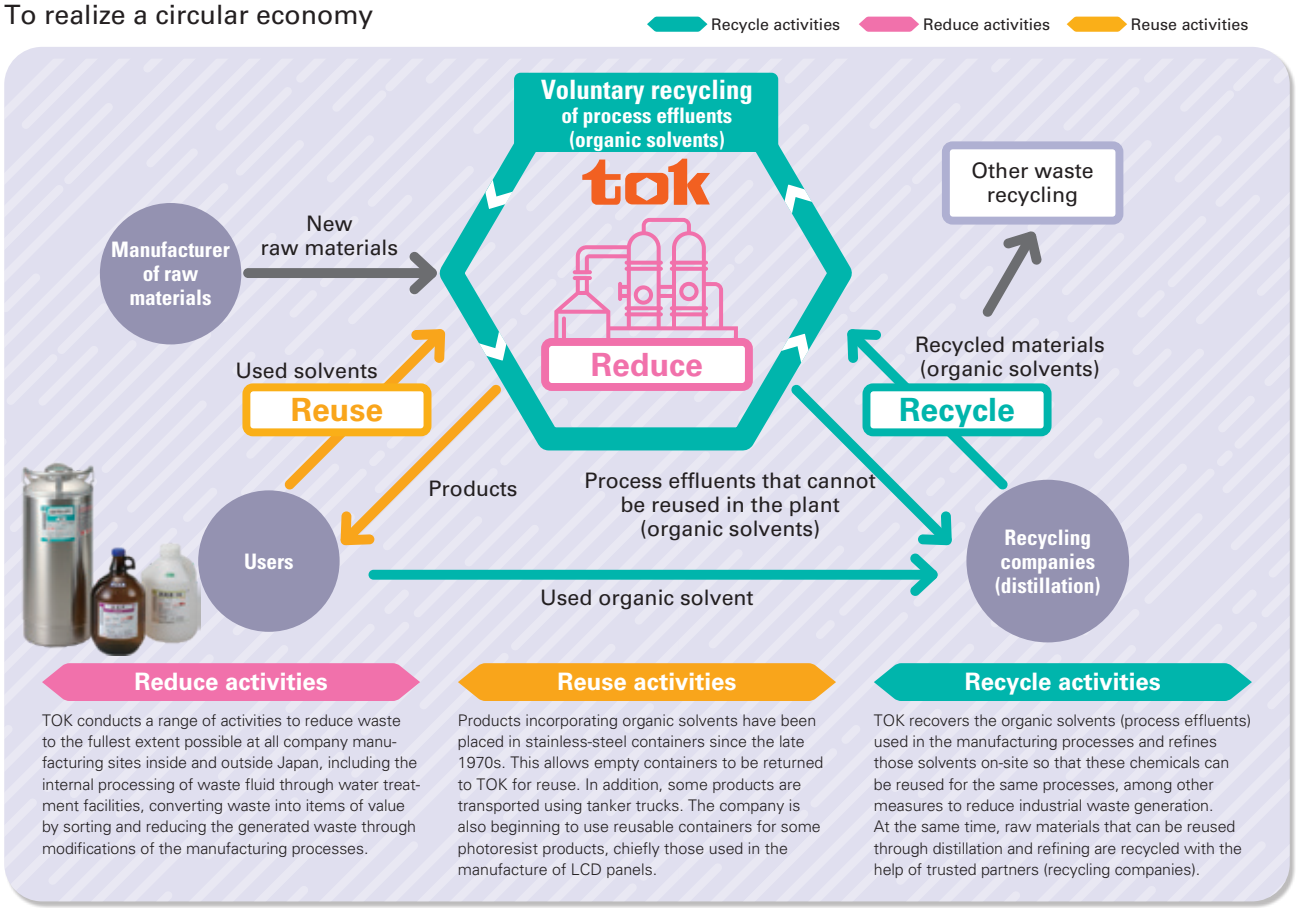
Amount of industrial waste generation*

* The base unit index is calculated after calculating general industrial waste and specially controlled industrial waste.
* Errors in the *Integrated Report 2021* regarding the base unit index for 2020 and 2021 and regarding the figures for general industrial waste and specially controlled industrial waste for 2019 to 2021 have been corrected.

Techniques for Recycling Organic Solvent Effluents

TOK strives to effectively use the waste generated by its plants. For example, waste oil is sorted by type of recyclable solvent, and ratings of impurities and purity are introduced with strengthened control applied. In this way, it is possible to reuse waste oil that was previously disposed of as industrial waste. It is now also possible to use waste oil with a mixture of organic solvents as combustion improvers by blending with other waste oil of different calories and water content. At the Aso plant, TOK promotes the conversion of solid resin drums into items of value, the recycling of Styrofoam as ingots, and other recycling activities. TOK will continue contributing to a circular economy through the effective use of resources as described above.

To realize a circular economy



Reduce: This refers to reducing the volume of waste material generated. Reduction involves minimizing the volume of materials in products in order to minimize the volume that is eventually discarded.
Reuse: This refers to the repeated use of manufactured goods, containers, and other products in order to reduce the volume of waste materials generated and to conserve resources.
Recycle: This refers to the use of waste materials as resources rather than incinerating the materials or sending them to a landfill, thereby conserving resources and preventing pollution.

TOK Stakeholders

TOK supports market growth on an unprecedented scale in the semiconductor industry from the perspective of environmental conservation

Shinji Iwasaki (left)
Representative Director and President
Shoichiro Abe (right)
Director
Kyushu Solvent Co., Ltd.

As our main business, we collect effluent and waste solvent from companies in the electronic industry as raw materials for our company, which we then distill and deliver to raw material manufacturers. This solvent collection initiative reduces industrial waste generation and contributes to the establishment of a circular society.

In Kyushu, investments in plants and equipment and business operation by semiconductor-related companies are rapidly in progress on an unprecedented scale. In the electronic industry, impurities must be reduced to a ppt level (less than 1/1,000,000,000,000) with an increasing requirement to control contamination during sampling and elution from containers.

As a company that collects solvent downstream of the semiconductor business, we promote measures for stabilizing the purification level of collected effluent and for satisfying further quality requirements through periodic information exchange and quality cross-check with Tokyo Ohka Kogyo Co., Ltd.

In the coming years, the effluent and waste solvent that we collect from companies are likely to increase in the Kyushu region where our company operates. Solvent purified by our company substantially reduces CO_2 emissions compared to virgin (new) solvent. In this way, we promote the effective use of resources by undertaking solvent recycling, and thus we contribute to the continuation of zero emissions by the TOK Group, reduction of environmental impacts, promotion of a circular economy, and engage in global environmental conservation.

Air, Water, and Soil/Preserve Biodiversity

Key initiatives/Results in 2022

KPI

NOx emissions to the air
Increased by 2.9 tons
(year-over-year)

Estimated CFC leakage volume
Approx. 141 t-CO_2e

Employee training on CSR
Participation rate: 100%

Basic Concept

For global environmental conservation considering future generations as a material issue, the Group takes steps to lighten its environmental impact by reducing the emissions of greenhouse gases* and chemical substances and by upgrading equipment, switching fuels, and reviewing the manufacturing processes to preserve the air, water, and soil environments upon which the livelihood of employees depend.

* Greenhouse gas: Gas in the atmosphere that allows sunlight to pass through but absorbs infrared rays emitted from the ground and seas. These gases are believed to cause global warming.

Prevent Air, Water, and Soil Pollution

· Reducing the emissions of air-polluting substances

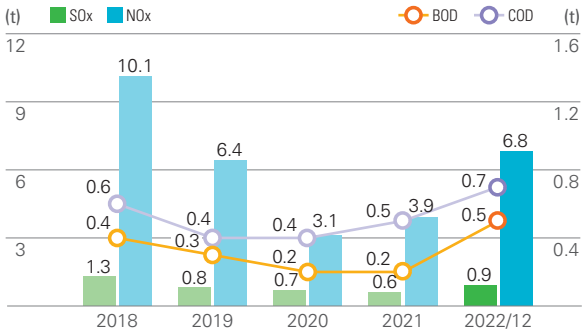
TOK endeavors to reduce the emissions of sulfur oxides (SOx) and nitrogen oxides (NOx) as key substances related to air pollution and uses natural gas-based boilers with low emissions at all plants, except those that have no city gas supplies in the surrounding areas. In 2022, SOx emissions related to production activities increased by 0.3 tons year-over-year. NOx emissions increased by 2.9 tons year-over-year, despite efforts that included the improvement of the operating method of power generators at the Koriyama Plant.

· Monitoring soil pollution

The TOK Group manages the risk of soil and underground water pollution by recognizing the concern that such pollution could threaten the safety and health of local residents and employees. In the event surveys discover soil or underground water pollution, the company rapidly discloses information and takes remedial action to ensure the health and safety of local residents.

In addition, the Sagami Operation Center of TOK is a member of the Koza River Purification Association, which comprises the plants, offices, and municipalities located along the rivers in the Koza District of Kanagawa Prefecture. As such, the Center endeavors to conserve water quality and maintain and improve the environment of the rivers in the neighborhood.

SOx/NOx/BOD/COD emissions



· Reducing emissions of water-polluting substances

TOK set its own management standards for treating the wastewater discharged from its sites. The standard is stricter than the regulations, laws, and local ordinances for purifying wastewater, such as activated sludge processing, at its process wastewater treatment facilities. Only water that satisfies the standards for cleanliness is released into the public water system.

The company also periodically evaluates water quality to ensure compliance with its voluntary standards and with laws and regulations. In fiscal year 2022, the emissions were lower than the voluntary standards and lower than the values specified in laws and regulations. TOK will continue to reduce emissions by maintaining and managing its process wastewater treatment facilities so that water can be released that satisfies all applicable standards.

BOD emissions in the water discharged into public waters in 2022 were approximately 0.5 ton, while COD emissions were 0.7 ton.

Countermeasures against Ozone-Depleting Substances

The TOK Group uses the ozone-depleting chlorofluorocarbons CFC-11 and CFC-12 as coolants in refrigerators and freezers. The entire Group is working to reduce the use of these substances and to switch to alternative substances and green coolants (non-CFC). The revised Act on the Rational Use and Proper Management of Fluorocarbons mandates regular inspections and reporting of any leakage volume, and TOK is updating its environmental system for the proper management, filling, and disposal of CFCs. As a result of these appropriate actions, the leakage volume stood at approx. 141 t-CO_2e in 2022. TOK will continue to conduct group-wide inspections and periodically replace fire extinguishers that use ozone-depleting substances with the aim of further strengthening management to prevent any CFC leakage.

* Data collection period: April 2022 to March 2023

Comply with PRTR Act

Under the Japanese Pollutant Release and Transfer Register (PRTR) Act, companies must manage and report to the government the production, release, and transfer of designated chemical substances. TOK relies on its chemicals and PRTR management system to accurately calculate and report these figures.

Of the Class I Designated Chemical Substances, a list of 515 substances defined by the PRTR Act, TOK handled 47 substances (a total of 1,160 tons) in 2022, including an estimated 3 tons released into the atmosphere and public water systems. TOK measures the emissions of VOCs and harmful air-polluting substances through PRTR surveys with the Japan Chemical Industry Association, of which it is a member.

* Data collection period: April 2022 to March 2023

Preserve Biodiversity

The TOK Biodiversity Protection Declaration guides the TOK Group's activities to preserve biodiversity. In 2022, TOK implemented CSR training for all directors, auditors, and employees at its domestic sites, as well as employees of partner companies for some operation centers. The company also dispatched six employees to the afforestation activities with residents of Kanagawa Prefecture through the Kanagawa Trust Midori Foundation. TOK will continue to preserve biodiversity with the intention of starting a ripple effect inside and outside the Company and spreading them throughout society.

At the Aso plant, personnel participate in the forest preservation activities organized by Aso Green Stock, a public interest incorporated foundation, aiming to improve and enhance the watershed cultivation function* within the Aso region and establish an environment with a sustainable ecosystem. TOK designated an area on the north somma of Mt. Aso (736 m^2) as the "TOK Forest." In 2022, 11 employees worked hard to weed, cut bamboo, and engage in other activities. At the Koriyama plant, personnel collected stranded aquatic plants in Lake Inawashiro, located in the approximate center of Fukushima Prefecture. Because stranded aquatic plants decrease the water quality by decaying, the removal of aquatic plants is an important environmental conservation activity that maintains water quality.

Considering the impact of marine microplastics on the ecosystem, TOK is also considering the shift of petroleum product packaging materials to bioplastic materials. The Group started the selection of materials in 2022.

* Functions of forest to reduce flooding under rainfall, reservation of water resources, and water purification

Future Issues and Initiatives

The TOK Group implemented a variety of activities and measures to prevent global warming and the pollution of the air, soil, and water and worked to maintain biodiversity. In all these categories, the Group will continue to appropriately maintain and manage its facilities and equipment to ensure continuous normal operation, thereby fulfilling its social responsibility as a company handling chemical substances.

TOK Human Resources

Hirokazu Sunoki

Plant General Affairs Office, Aso Plant

Turning the TOK Forest into one of the bases for biodiversity initiatives

In August 2022, the Aso plant joined the Aso Plateau Corporate Supporter Certification system, operated by Kumamoto Prefecture and Aso Green Stock, a public interest incorporated foundation and national park management organization designated by the Ministry of the Environment, and became a certified supporter. Aso Green Stock has been engaged in open burning and other forest maintenance activities for many years as part of its efforts to maintain the globally renowned natural environment of Aso. The Aso plant donates to open burning and promotes forest management and maintenance through the weeding and felling of assorted trees in the TOK Forest above. Forest maintenance activities not only contribute to the preservation of biodiversity but also provide diverse other effects, including the prevention of mountain disasters and watershed cultivation. Through these initiatives, TOK will continue to strive for biodiversity preservation and global environmental conservation.

Supply Chain Sustainability

Strengthening Activities Related to Product Responsibility and Product Stewardship

Key initiatives/Results in 2022

Key measures

Establish chemical substance information management system

Continue to strengthen and operate chemical substance management system

Basic Concept

Management of chemical substances is one of the key priorities for TOK from the perspective of social responsibility. In addition to observing all laws and regulations, the group-wide efforts ensure the proper management of chemical substances in the supply chain while TOK remains mindful of globally expanding environmental issues. The Group defined the responsibility to local and international communities as one of the TOK Group Creeds, which break down the management principles, and has been working to reduce the impact on the environment by combating global warming, managing chemical substances, effectively utilizing resources, and reducing waste, thereby gearing up the product stewardship activities toward *supply chain sustainability* as a material issue.

Establish Chemical Substance Information Management System

To stringently control the different chemical substances handled within the TOK Group, the company started to operate a chemical substances management system in 2005 with which TOK performs the centralized management of chemical substances by collecting information on such substances and the diverse laws and regulations.

In 2022, the chemical substance management system was revised to strengthen the company's response to international environmental laws and regulations. As a specific revision, a function was introduced to rapidly determine the applicability of laws and regulations in each country to the chemical substances handled by TOK. After full-scale operation in 2023 onward, the revised system will help to improve chemical substance research efficiency.

Continue to Strengthen and Operate Chemical Substance Management System

TOK is working to maintain and strengthen the system to properly convey information on chemical substances throughout the supply chain as part of its product stewardship activities, a key pillar of Responsible Care. In response to international laws and regulations and customer requirements, the company clarifies the chemical substances to be managed under the TOK Group Chemical Management Standards and uses them as a means for properly conveying information on chemical substances in the supply chain. It is impossible to permanently use these standards once established, but the Group needs to update them with the latest information of the time for proper operation.

In 2022, the TOK Group Chemical Management Standards were updated to Version 8 in order to incorporate the latest information on environmental laws and regulations in Japan and overseas and then revised the response forms for suppliers. In addition to these activities to collect and manage the latest information on international chemical substance regulations, TOK will promptly update chemical substance information on the raw materials received from suppliers and reflect that information into the SDS and labels of all products, thereby further providing timely and accurate chemical substance information to customers.

Accurately Evaluated Chemical Substance Risks in a Timely Fashion and Properly Managed These Risks

The risk management of chemical substances can be interpreted as risk management in each part of the supply chain. To this end, it is necessary to provide information in accordance with the flow of materials. In each of the development, manufacturing, sales, and disposal stages, TOK creates and implements procedures for complying with all laws and regulations and managing risks.

Chemical substance risk management in each stage of supply chain

*1 REACH regulation: Registration, Evaluation, Authorization and Restriction of Chemicals; This EU regulation manages the registration, evaluation, and accreditation of chemical substances through an integrated system with the aim of ensuring complete fulfillment of responsibility on the producers' part, as well as thorough compliance with preventive principles.
*2 Conflict minerals: Four minerals (tin, tantalum, tungsten, and gold) produced in the Democratic Republic of the Congo and surrounding conflict zones; These minerals are regulated under the U.S. Dodd-Frank Act (financial regulation reform act). From the perspective of responsible mineral procurement, the TOK Group includes cobalt and mica in the scope of investigations, in addition to the four minerals above.
*3 SDS: Safety Data Sheet
*4 TOK Group Chemical Management Standards: Clarifies chemical substances to be managed in order to respond to international laws and regulations and customer requirements
*5 Chemical Substances Control Act: Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (Japan)
*6 PRTR Act: Act on Confirmation of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (Japan)

1 Obtaining information about revisions to laws, regulations, and treaties

For the chemical substances handled by the TOK Group, the company has in place a system for complying with legal requirements and ascertaining the use of regulated substances under such laws and regulations as the REACH regulation*1 and laws governing conflict minerals,*2 and determining whether or not such substances may be used. Moreover, for high-risk chemical substances whose use will be prohibited in the future because of tighter regulations, TOK proposed and is managing the progress of elimination plans for all products to ensure that the use of such substances is discontinued prior to the enforcement of the applicable laws and regulations.

2 Procurement stage

In addition to SDS*3 for raw materials, TOK asks suppliers to submit the Warranty of Nonuse of Prohibited Substances to guarantee that the prohibited substances in the TOK Group Chemical Management Standards*4 are not contained in raw materials. TOK shares chemical substance information with suppliers based on the obtainment of these forms and pursues the correct identification of chemical substances contained in raw materials.

3 Development stage

For newly developed raw materials, in addition to the legal and regulatory information, TOK checks whether they contain chemical substances subject to the TOK Group Chemical Management Standards. Furthermore, the company performs similar checks for customer requirements concerning newly developed products and formulate a substitution plan in the event of excess of a specified standard.

4 Production stage

All raw materials used to manufacture products are subject to occupational health and safety risk assessments. TOK identifies hazardous factors in the production environment, clarifies the hazard level, implements measures to mitigate and eliminate the hazardous factors based on the risk level, and then takes action to lower the risk. In this way, TOK maintains the proper work environment for all employees.

5 Marketing stage

By linking the ERP system for managing product shipment volumes and the chemical substance management system that contains product composition data, the company automatically calculates the transfer volume of chemical substances, reports the proper volumes, and requests their applications in accordance with the Chemical Substances Control Act*5 and the PRTR Act*6 of Japan and with environmental laws and regulations of importing countries. The company also enabled the issuance of SDS documents in accordance with the current local laws and regulations using the SDS*3 preparation system, so that proper safety information will be provided to users.

6 Disposal stage

Waste from each site is thoroughly sorted by type and recycled, and properly disposed of when necessary. For industrial waste disposal service providers contracted to dispose of waste, TOK provides information about the type of waste and handling precautions through the Waste Data Sheets (WDS). The company periodically visits service providers for on-site audits to ensure that all waste is being properly disposed of in accordance with the contractual agreements.

TOPICS

Initiatives in Response to Global Environmental Regulations

In 2022, PFHxS was newly added to Annex A (global ban) of the POPs Convention. The overall regulation of PFAS was also examined in the EU REACH Regulation and the United States TSCA. In this way, the global regulation on persistent and highly accumulative chemical substances proceeded in this year. In Japan, major chemical substances management regulations have been amended one after another, such as the Industrial Safety and Health Act and the PRTR Act. TOK personnel need to properly disclose the information and safety of chemical substances contained in our chemical products to our customers and employees and to develop and manufacture beneficial chemical products while taking environmental considerations into account. In particular, the PFAS restriction proposed by the EU in 2023 is targeted at a wide range of chemical substances and will affect not only TOK and other chemical manufacturers but also a broad range of industries engaged in equipment, containers, and packaging materials. TOK not only complies with the regulations but also proactively provides information concerning safe handling through communication with industrial associations and regulatory authorities in order to minimize the impact of environmental regulations on our production.

Properly Comply with PCB Special Measures Act

For low-concentration PCBs, the company has undertaken proper storage and management in accordance with the prescribed storage standards for waste containing PCBs at three sites (Sagami Operation Center, Shonan Operation Center, and Gotemba plant), while also filing the necessary reports with the government. In 2022, TOK undertook activities to dispose of all electrical substation facilities and related waste used and stored at all sites by the legally mandated deadline of 2027, in accordance with the road map formulated in the previous year.

The company will continue to dispose of this waste in stages by drawing up plans to update equipment in a way that does not interfere with the production activities at each site.

* Polychlorinated biphenyl (PCB): A kind of organic compound; PCBs were formerly used for thermal media, insulating oils, coatings, and other applications because they excel in terms of heat resistance and electrical insulation. However, because of poor degradability and high toxicity, PCB production was discontinued in 1972. Nevertheless, little progress has been made with regard to disposal, and the managers responsible for storage are required to place it under strictly controlled conditions.

Future Issues and Initiatives

In the understanding of chemical substances management, a shift from hazard management to risk management is indispensable. TOK regards the enhancement and use of risk assessment as a key requirement. TOK also considers that the communication of risk information through supply chain leads to the matured chemical substances management throughout the entire supply chain in all industries. Under the concept of the material issue of *supply chain sustainability*, the Company strives to establish a system for the timely and proper communication of risk information.

TOK Human Resources

Hirokazu Sugane

General Manager,
Chemical Substances Management Office, EHS Division

Contributing to the sustainable development of society by reasonably handling chemical substances

Chemical substances may become beneficial or hazardous, depending on their usage. For example, the salt that we consume every day is one of the chemical substances, and it is well known that excess salt intake can negatively affect human health. However, most people understand that completely salt-free diet is just an extremity. In this way, we understand the hazards of chemical substances and reasonably handle them in our daily lives without being aware of the dangers. The same applies to the chemical products that we handle. Our activities are aimed at sharing with as many people as possible the idea that, instead of completely eliminating hazardous substances, we should properly manage and reasonably handle chemical substances in order to contribute to the sustainable development of society.

Occupational Safety and Health

Key initiatives

Acquired ISO 45001 certification at all domestic sites

Basic Concept

The TOK Group recognizes that ensuring the safety and health of workers who support supply chain sustainability is the social responsibility of a company that operates businesses and is a requirement from all stakeholders. By providing a safe, comfortable workplace, TOK also aims to improve employee engagement as a key strategy in the TOK Medium-Term Plan 2024, while fostering and setting in place a safety culture.

Health and Safety System

In its initiatives for occupational health and safety, TOK works to prevent accidents based on the annual action plan of the Safety and Health Committee. Company-wide issues that a single site cannot address on its own are examined by the Safety and Health Liaison Unit, which is headed by the department manager of the General Affairs Department. The Safety and Health Liaison Unit shares information about the measures that must be horizontally developed across all sites. Based on this organizational structure, the Company promotes the prevention of injuries and fire accidents caused by chemical substances, as well as severe injuries caused by machinery or heavy objects. In the event of a workplace accident, TOK implements thorough safety measures and occupational health measures to improve safety and rolls them out horizontally across the organization.

Acquiring ISO 45001 Certification

Currently, TOK receives an increasing number of questions and requests on CSR from stakeholders. The company formulated the TOK CSR Policy and strengthened the management system for occupational health and safety as a component of the CSR Policy. Under these circumstances, the company is promoting the acquisition and expansion of ISO 45001 certification of the occupational health and safety management system. Through this activity, the Group also promotes measures to counter the aging of employees, measures for labor saving, and measures for mental health care. The ISO 45001 certification was acquired by the Gotemba plant in 2020; by the Koriyama plant, Utsunomiya plant, and Aso plant in 2021; and by the Headquarters, Sagami Operation Center, and Kumagaya plant in 2022. With the acquisition at the Logistics Center in 2023, the company completed the acquisition of ISO 45001 certification at all domestic sites **(See page 67)**.

The company has also implemented measures in accordance with the RBA Code of Conduct. The Koriyama plant was rated in the highest class (Platinum Recognition) in RBA audit in 2021, and the Logistics Center was also rated in the highest class (Platinum Recognition) in RBA audit in 2022. The TOK Group will continue to establish the necessary systems at domestic sites and will provide a safe and comfortable workplace for TOK employees at each site and to employees of affiliated companies, thereby achieving supply chain sustainability as a material issue and enhancing happiness of workers.

Initiatives for Workplace Accident Risk Reduction

· Foster safety culture by reestablishing the 5S

The review of the practice of the 5S activities confirmed that it would be necessary to reestablish the 5S activities in order to foster safety culture. In 2022, TOK identified issues in the activities, determined the activity policy for coming years, and started the reestablishment.

· Promoted reduction activities for risks with high severity (unacceptable high risks)

In 2022, TOK promoted reduction activities on risks with high severity (unacceptable high risks) at each site by learning lessons from past accidents of being caught, chemical injuries, and the turnover of heavy objects. The Group also strengthened risk assessment and hazard prediction activities for infrequent operations, in addition to the risk assessment of frequent operations.

For equipment and operations with the risk of static electricity, TOK implements the periodic inspection of antistatic equipment to reduce static electricity risks in accordance with the Procedure for Antistatic Measures.

For highly corrosive substances and poisonous/deleterious substances, TOK further strengthens management through the proper operation of the Internal Guidelines for the Handling of Highly Corrosive Chemical Substances.

· Promoted improvement activities incorporating inputs from internal audit and third-party review

TOK conducts integrated internal audit concerning occupational safety, quality, and the environment. By proactively appointing internal auditors from other sites and new internal auditors, the company promotes skill upgrading of internal auditors, as well as information sharing concerning workplace accident control and environmental pollution control. The company also considers reviews by external institutions to be valuable opportunities to obtain third-party evaluations and inputs concerning the handling of chemical substances, antistatic measures, and workplace accident control, and leads them to improvement activities.

Prevention of Workplace Accidents

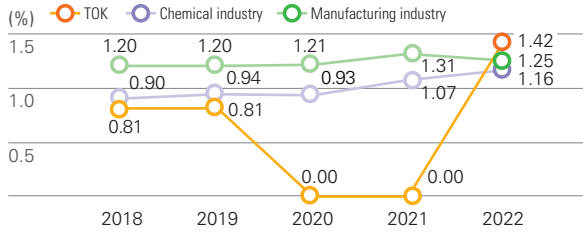
TOK established the Occupational Health and Safety Policy linked to the CSR Policy. In its production activities, the company places the utmost priority on the maintenance of the health and safety of workers and implements measures to prevent accidents, natural disasters, and diseases in the workplace, thereby fostering group safety. In particular, the Safety and Health Committees at each site have been working to prevent accidents, while aiming to maintain and improve all related factors. However, nine workplace accidents (four with lost workdays and five without) in 2022, resulting in more accidents with lost workdays than in the past several years. The causes of these accidents included infrequent operations, chemical injuries, falls, getting accustomed, inadequate countermeasures, and inadequate risk assessment.

In response to this increase in workplace accidents, the president declared a state of emergency with regard to occupational safety in April of this year in order to share the resolution never to cause or have others cause new workplace accidents among all officers and employees of the TOK Group, to implement effective measures for preventing workplace accidents, and to otherwise improve the group-wide safety level and undertake risk reduction activities, such as the formulation of manuals stating emergency actions in the event of workplace accident, planned education and training for employees, and raising safety awareness among employees.

Future Issues and Initiatives

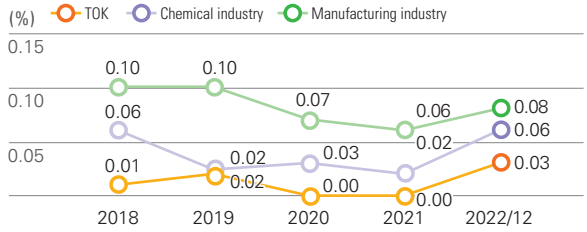
Based on its Occupational Health and Safety Policy, TOK acquired and maintained the ISO 45001 certification at increasing sites and has advanced initiatives for occupational health and safety. The Company strives to further reduce risks by strengthening emergency response drills assuming accident, fire, explosion, and other disasters. Personnel at TOK continue to comply with laws in each country or region and establish a robust base for safety culture by strengthening safety-first risk management, thereby leading to the enhanced engagement of all persons working in the TOK Group.

Frequency rate of workplace accidents (unconsolidated)



* Frequency rate: shows the frequency of accident occurrences as the number of deaths and injuries due to workplace accidents per million work hours
Frequency rate = (number of deaths and injuries due to workplace accidents/number of work hours) × 1,000,000
(Number of deaths and injuries due to workplace accidents = number of deaths and injuries resulting 1 or more lost workdays)

Severity rate of workplace accidents (unconsolidated)



* Severity rate: shows the severity of accidents as the number of lost workdays per thousand work hours
Severity rate = (number of lost workdays/number of work hours) ×1,000
(Number of lost workdays = number of lost workdays of dead and injured workers due to workplace accidents)
Source of data for chemical and manufacturing industries: Ministry of Health, Labour and Welfare's Survey on Industrial Accidents

TOK Human Resources

Eiji Yoshino

General Manager,
Plant General Affairs Office,
Plant Administration Division

Linking on-site health and safety activities to corporate value enhancement

The Sagami Operation Center as one of the core bases of the TOK Group in manufacturing and development acquired the ISO 45001 certification in April 2022. The Operation Center is an important site where the Manufacturing Department, the Research and Development Department, and other departments are located. For the acquisition of certification, the Center worked to standardize conventional procedures in each department. The Center is also reviewing the risk assessment method considering the safety of external service providers who visit the site on several thousands of occasions annually. The Center also promotes health and productivity management by appointing a public health nurse earlier than other sites within the Group. The company will further promote health and safety activities so that all stakeholders can work safely on the sites of the TOK Group and link these activities to the sustainable enhancement of corporate value.

Data Section

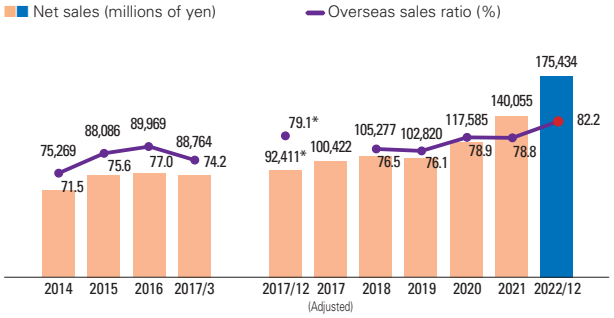
Data Section

Trends of Key Ten-Year Data and Analysis

Ten-Year Financial Highlights

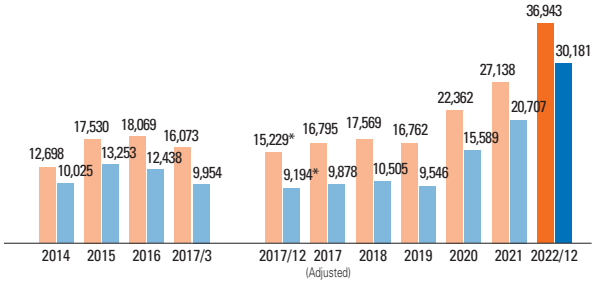
Net sales/Overseas sales ratio*

¥175,434 million **82.2%**



EBITDA/Operating income*

¥36,943 million **¥30,181 million**

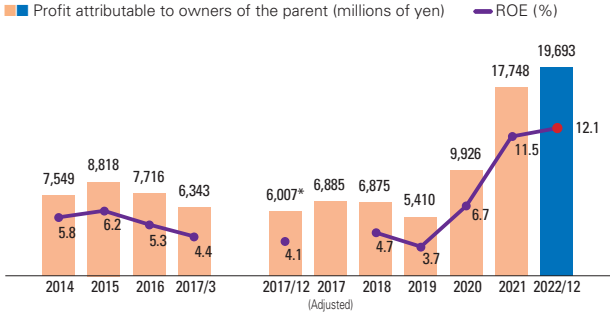


Even though TOK mainly operates in the semiconductor industry with its rapid technological changes and cyclical nature, both net sales and cash generation capability (EBITDA) show a long-term trend for stable growth due to management from a long-term perspective in units of ten years, coupled with efforts made in both cutting-edge and legacy fields. Toward the overarching aspiration for 2020 as the long-term vision formulated in 2010, TOK promoted long-term R&D while upgrading its world-leading microprocessing technology and high-purity processing technology based on customer-oriented strategies and marketing. The Company also made the largest investments in plants and equipment under the three preceding medium-term plans, which led to record-high net sales and EBITDA for three consecutive years in FY 2022/12. In the TOK Vision 2030, which was formulated in 2020, the aim was to achieve EBITDA of ¥45 billion by 2030. Under the TOK Medium-Term Plan 2024, which is backcasting from the Vision, the Company attained the final-year EBITDA target of ¥35 billion, two years ahead of schedule, because of the increase in market share and the grasping of the growth of the semiconductor industry on an unprecedented scale.

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

Profit attributable to owners of the parent*/ROE

¥19,693 million **12.1%**

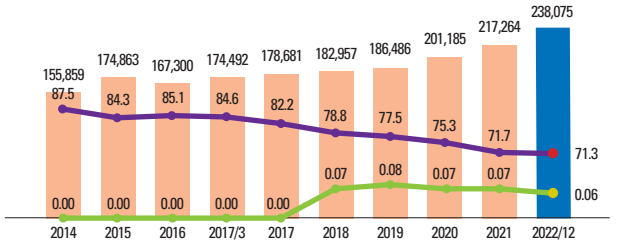


Because of the influence of increased depreciation and amortization resulting from large-scale capital investments, the volatility of the operating income and of profit attributable to owners of the parent was large relative to EBITDA. However, current net income for FY 2022/12 broke record highs for three consecutive years, coupled with the record high ROE. In the TOK Vision 2030, the Company promotes measures to emphasize ROIC as a new KPI in the promotion of BS management, equivalent to ROE **(See pages 36–39, "Message from the Director in Charge of Accounting and Finance")**.

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

Total assets/Equity ratio/Debt-to-equity ratio

¥238,075 million **71.3%** **0.06 times**

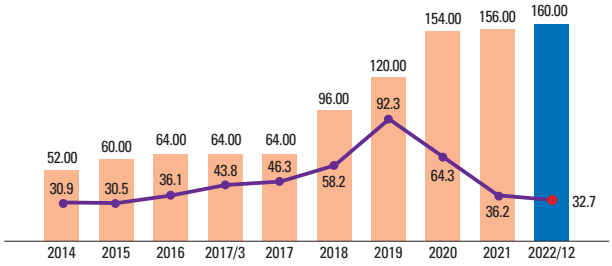


Under the cash reserve policy with the objective of *developing technologies in anticipation of a super-long time frame, continuing to make challenges over a super-long time frame, and responding rapidly when the unexpected happens (restoration and rebuilding following major disasters)*, TOK promoted BS management that keenly recognizes cash allocation **(See pages 36–39, "Message from the Director in Charge of Accounting and Finance")**. The equity ratio remained above 80% for many years but has been adjusted to around 70% as a consequence of long-term debt financing, better shareholder returns, large-scale share buybacks, and other measures.

Dividends applicable to the year per share/Payout ratio

¥160.00 **32.7%**

Dividends applicable to the year per share (yen) — Payout ratio (%)

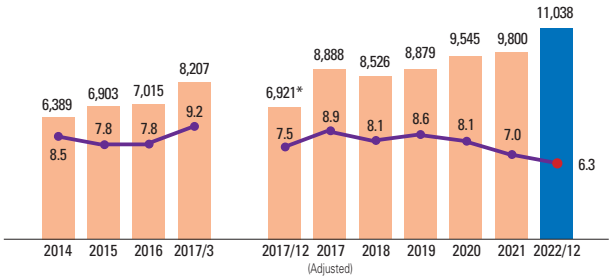


Departing from the basic policy of maintaining the consolidated payout ratio of 30% or more until FY 2016/3, and of 40% or more from FY 2017/3, TOK introduced a new dividend policy targeted at DOE of 3.5%, starting with the year-end dividend in FY 2018/12 and furthermore, at DOE 4.0%, starting with the year-end dividend in FY 2021/12, in order to more clearly respond to the expectations of long-term investors **(See pages 36–39, "Message from the Director in Charge of Accounting and Finance")**.

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

¥11,038 million **6.3%**

R&D costs (millions of yen) — Ratio of R&D costs to net sales (%)



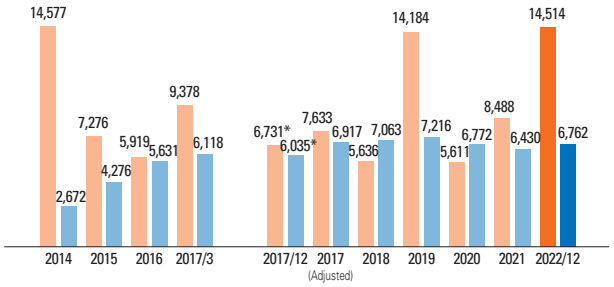
TOK continuously invests about 8% of net sales in R&D. The Company also aims to achieve and maintain 200% R&D efficiency (operating income over the past five years divided by R&D costs over the preceding five years) as an R&D KPI, while apportioning any surplus over 200% to R&D investment in long-term themes for the next ten years and thereafter. In this way, the personnel at TOK further upgrades skills as a long-running R&D-driven company and company with an unfading startup spirit, thereby leading to the sustainable enhancement of corporate value **(See pages 54–57, Message from the Director in Charge of Marketing and Development)**.

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

Investment in plant and equipment/ Depreciation and amortization

¥14,514 million **¥6,762 million**

Investment in plant and equipment (millions of yen) — Depreciation and amortization (millions of yen)



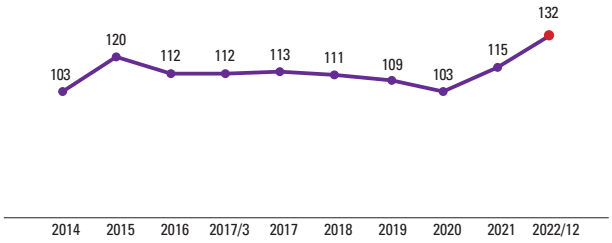
Depreciation and amortization increased as a result of large-scale capital investments during the TOK Medium-Term Plan 2015 and the TOK Medium-Term Plan 2018; however, under the TOK Medium-Term Plan 2021, the Company planned to invest in production equipment with longer depreciation periods so that depreciation and amortization would increase at a more moderate pace. In the TOK Medium-Term Plan 2024, backcasting from the TOK Vision 2030 aimed at achieving net sales of ¥200.0 billion in 2030, the Company also promotes the largest capital investments featuring investments in production equipment.

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

Exchange rate

¥132

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

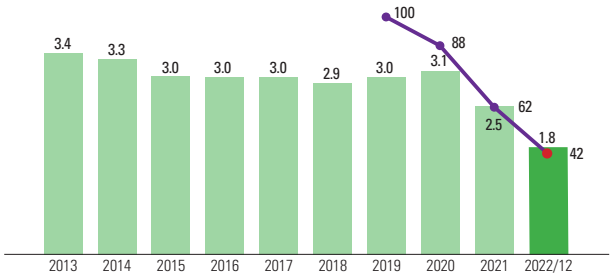


For the control of financial risks due to exchange rate changes and liquidity, the Company implements risk hedge measures through forward exchange contracts while promoting BS management considering the recent increases in global risks. As part of these efforts, the Company intends to advance global cash management to include the adjustment of the balance of cash positions among overseas sites.

Ten-Year Nonfinancial Highlights

CO_2 emissions (converted from energy consumption)*

18,000 tons-CO_2e **42** base unit index

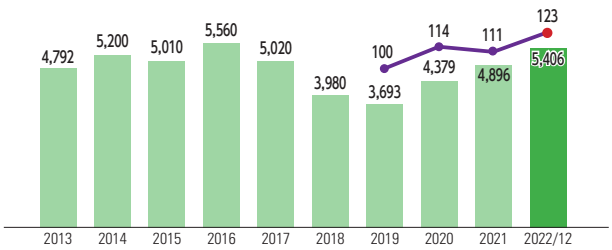


TOK is pursuing the reduction of energy-related CO_2 emissions per base unit of 15 points by FY 2030 (compared to 2019) and envisioning carbon neutrality by FY 2050. The figure in 2022 decreased by more than 31 points year-over-year due to the shift in September 2021 of more than 70% of purchased electricity at all key domestic sites to renewal energy.

* Unconsolidated basis and consolidated domestic subsidiaries in Scopes 1 and 2.

Volume of industrial waste*1

5,406 tons **123** base unit index

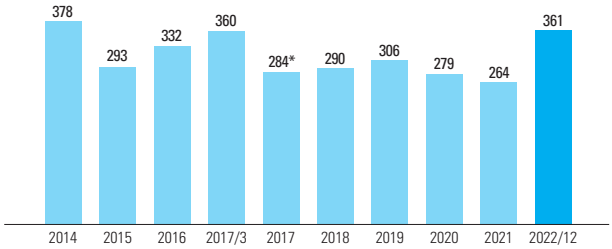


TOK achieved zero emissions*2 for nine consecutive years as the volume of its industrial waste headed to landfill disposal via intermediate treatment was kept below 1% of the total. TOK targets a reduction of 15 points in total for industrial waste by 2030 compared to 2019 (per base unit). The figure increased by 23 points in 2022 due to production increases despite efforts to refine and reuse process effluents to internally process effluents, to internally collect waste, and to convert waste into items of value.

*1 Total sum of general industrial waste and specially controlled industrial waste
Unconsolidated basis and consolidated subsidiaries in Japan
*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 registrations

361
(patents)

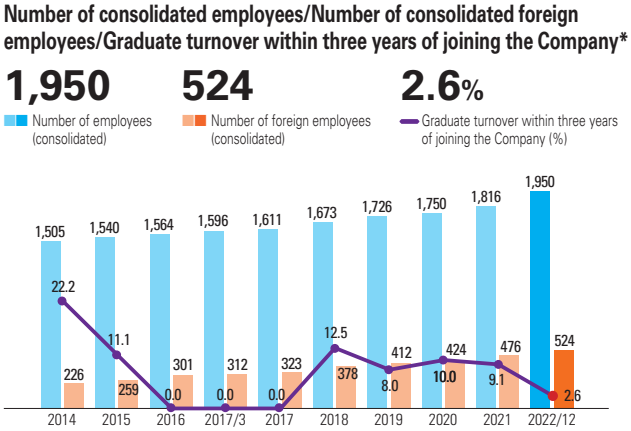


TOK acquires patents in a strategic manner in the innovative semiconductor segment, new businesses, and new materials. Going forward, TOK will aim for the stable pursuit of business development through new and promising technologies while building barriers to entry through patent acquisition for enhanced intellectual capital. The Company will formulate a more effective patent portfolio by selecting open or closed strategies for each case thereby pursuing the enhancement of competitiveness and corporate value.

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

Number of consolidated employees/Number of consolidated foreign employees/Graduate turnover within three years of joining the Company*

1,950 **524** **2.6%**



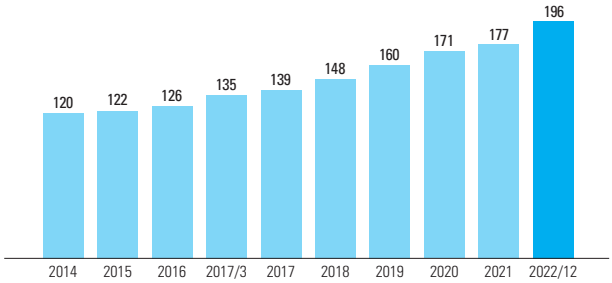
At TOK, the number of foreign employees has increased as a result of the expansion of local customer-oriented strategies at overseas sites, an increase in the number of overseas development and production sites, and the emphasis on the merit-based hiring of new graduates. Based on a frank and open-minded business culture as a management principle, as well as the basic philosophy that human resources are a company asset, TOK expanded the different personnel systems and training programs. As a result, the ratio of new graduate hires who quit within three years of joining the Company remained at a low rate. In March 2023, TOK was recognized for the 2023 Certified Health and Productivity Management Outstanding Organizations Recognition Program for the fifth consecutive year.

* Unconsolidated

Number of female employees*

196

(People)



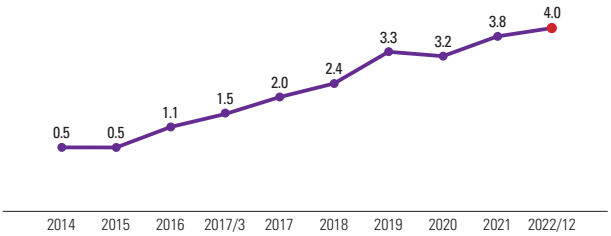
The number of female employees has increased as a result of proactive recruitment of new graduates, coupled with enhanced supportive measures to retain women and promote them to the senior and middle management. TOK continues to enhance flexible work styles, support career formation plans, support childrearing, and implement other measures.

* Unconsolidated (employees exclude those seconded from other companies to TOK, and include people seconded from TOK to other companies and contract workers)

Ratio of women in senior and middle management

4.0%

(%)



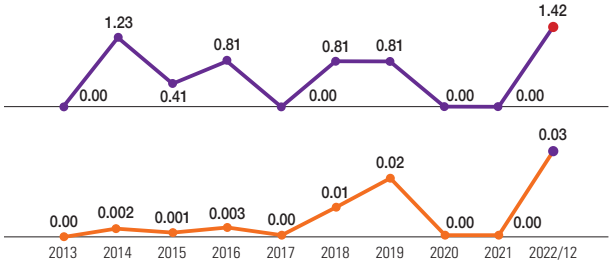
TOK achieved a record-high ratio of women in senior and middle management in FY 2022/12 from the effects of its continued efforts to recruit and retain female employees and to promote them to senior and middle management positions. The Company continues to promote the appointment of female human resources toward the 2030 target (two-fold increase vs. 2020).

* Unconsolidated (excluding employees who undertake managing jobs but are not in management positions)

Frequency rate of workplace accidents/ Severity rate of workplace accidents*

1.42% Frequency rate of workplace accidents (%)

0.03% Severity rate of workplace accidents (%)



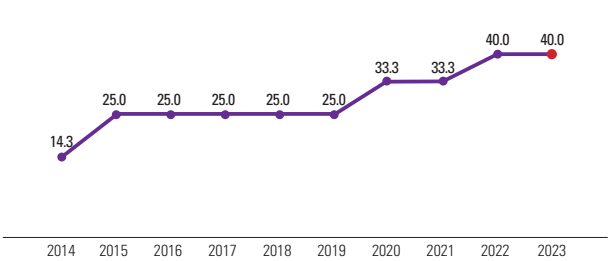
Nine workplace accidents (four with lost workdays and five without) occurred in FY 2022/12. Therefore, the Company reviewed the risks through factor analysis and then formulated and implemented measures for recurrence prevention. After the Koriyama plant in 2021, the Ebina Logistics Center was also rated in the highest class (Platinum Recognition) in RBA audit. The acquisition of ISO 45001 certification has also been completed at all domestic sites. TOK continues to make concerted group-wide efforts to prevent workplace accidents, including the sharing of the RBA audit results and the establishment of systems at all domestic sites.

* Unconsolidated

Ratio of outside directors

40.0%

(%)



TOK increased the number of outside directors by one each in 2015 and 2020, and one in 2022, to four. Therefore, the ratio of outside directors is now 40.0%. The Company maintains this ratio after its shift to a company with an Audit and Supervisory Committee.

* Based on a resolution adopted at the 93rd general meeting of shareholders that convened on March 30, 2023, TOK shifted to a company with an Audit and Supervisory Committee.

Trends in Key Data and Analyses

Changes in Medium-Term Plans and Ten-Year Key Data

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 human resources

TOK Medium-Term Plan 2018

Strategies:
- Reform business portfolios
- Upgrade the customer-oriented strategies
- Develop human resources capable of global operation
- Strengthen management foundation

Fiscal years ended March 31 until 2017 and the fiscal years ended December 31 after 2017	2014/3	2015/3	2016/3	2017/3
Results of operation:				
Net sales	75,269	88,086	89,969	88,764
Materials Segment	72,866	84,611	87,280	86,558
Equipment Segment	2,402	3,475	2,689	2,205
EBITDA	12,698	17,530	18,069	16,073
Operating income	10,025	13,253	12,438	9,954
Income before income taxes	11,666	14,301	11,777	9,220
Profit attributable to owners of the parent	7,549	8,818	7,716	6,343
Free cash flow	(2,610)	3,380	7,517	(926)
Investment in plant and equipment	14,577	7,276	5,919	9,378
Depreciation and amortization	2,672	4,276	5,631	6,118
R&D cost	6,389	6,903	7,015	8,207
Per share data (yen/US dollars):				
Per share basic profit	168.54	196.61	177.30	146.18
Cash dividends applicable to the year per share	52.00	60.00	64.00	64.00
Net assets per share	3,044.24	3,285.81	3,298.00	3,384.14
At year-end:				
Total assets	155,859	174,863	167,300	174,492
Total noncurrent liabilities	1,518	3,569	2,899	2,024
Interest-bearing debt	366	814	534	135
Net assets	139,962	151,999	147,270	152,931
Key performance indicators (%):				
Operating margin	13.3	15.0	13.8	11.2
ROE	5.8	6.2	5.3	4.4
Ratio of R&D costs to net sales	8.5	7.8	7.8	9.2
Equity ratio	87.5	84.3	85.1	84.6
Debt-to-equity ratio (Times)	0.00	0.00	0.00	0.00
Payout ratio	30.9	30.5	36.1	43.8
DOE	1.8	1.9	1.9	1.9
ESG-related data:				
Number of employees (consolidated)	1,505	1,540	1,564	1,596
CO_2 emissions (converted from energy consumption) (10,000 t)*6	3.3	3.0	3.0	3.0
Industry trends:				
Worldwide semiconductor market (millions of US dollars)*1 (Year)	335,843	335,168	338,931	412,221
Worldwide photoresists sales (thousands of US dollars)*2	1,288,713	1,230,022	1,358,009	1,504,224
Exchange rate (JPY/USD)*4	103	120	112	112

*1 Source: World Semiconductor Trade Statistics
*2 Source: Calculated by TOK based on data aggregated by SEMI (total sales of ArF and KrF excimer lasers and g- and i-Line photoresists)
Because of the change in the fiscal year-end, the same values are indicated for FY 2017/3 and for FY 2017/12.

TOK Medium-Term Plan 2021

Long-term vision up to FY 2020/12:

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

Features:

- Strengthen business portfolio reforms
- Return to a growth trajectory
- Strengthen balance sheet management and introduce a new dividend policy

TOK Medium-Term Plan 2024

TOK Vision 2030:

The Global e-Material Company™ contributes to a sustainable future through chemistry

Strategies:

[1] Increase global market shares of cutting-edge photoresists
[2] Acquire and create core technologies for electronic materials and new fields
[3] Secure stable supplies of high-quality products and establish an optimal production system for the Group.
[4] Improve employee engagement and promote people-oriented management
[5] Establish a sound and efficient management foundation

Despite the bearish trend in semiconductor demand, TOK achieved record high performance for three consecutive years because of the market share increase in the cutting-edge miniaturization field and other factors.

					Millions of yen	Thousands of US dollars
2017/12*5	2018/12	2019/12	2020/12	2021/12	2022/12	2022/12
92,411	105,277	102,820	117,585	140,055	175,434	1,329,052
90,531	102,621	98,986	114,773	137,725	170,329	1,290,376
1,880	2,655	3,833	2,811	2,329	5,105	38,676
15,229	17,569	16,762	22,362	27,138	36,943	279,871
9,194	10,505	9,546	15,589	20,707	30,181	228,650
9,492	9,814	8,657	15,349	25,799	30,790	233,260
6,007	6,875	5,410	9,926	17,748	19,693	149,195
4,169	6,298	(4,543)	19,472	15,182	6,608	50,061
6,731	5,636	14,184	5,611	8,488	14,514	109,954
6,035	7,063	7,216	6,772	6,430	6,762	51,227
6,921	8,526	8,879	9,545	9,800	11,038	83,625
138.31	164.92	130.02	239.42	430.73	489.56	3.70
64.00	96.00	120.00	154.00	156.00	160.00	1.21
3,490.97	3,459.37	3,491.23	3,651.20	3,880.18	4,214.27	31.92
178,681	182,957	186,486	201,185	217,264	238,075	1,803,600
3,421	10,723	14,437	15,997	12,416	16,333	123,737
—	10,000	11,272	10,962	10,611	10,222	77,441
153,517	150,857	151,733	159,994	165,190	180,960	1,370,910
9.9	10.0	9.3	13.3	14.8	17.2	
4.1	4.7	3.7	6.7	11.5	12.1	
7.5	8.1	8.6	8.1	7.0	6.3	
82.2	78.8	77.5	75.3	71.7	71.3	
0.00	0.07	0.08	0.07	0.07	0.06	
46.3	58.2	92.3	64.3	36.2	32.7	
1.9	2.8	3.5	4.3	4.1	4.0	
1,611	1,673	1,726	1,750	1,816	1,950	
3.0	2.9	3.0	3.1	2.5	1.8	
468,778	412,307	440,389	555,893	574,084	515,095*3	
1,504,224	1,631,851	1,679,654	2,027,350	2,420,373	2,589,575	
113	111	109	103	115	132	

Equity ratio:
The equity ratio remained around 85% for a long time, but the Company is continuing to pursue the optimal balance, which may be decreasing because of stronger balance sheet management.
(See pages 36–39, "Message from the Director in Charge of Accounting and Finance")

CO_2 emissions:
The base unit index has steadily decreased through a variety of reduction measures, including the shift of 70% of electricity used at the headquarters to renewable energy sources starting in September 2021.
(See pages 94–95, "Initiatives toward Achieving Carbon Neutrality")

*3 Forecast-based amount for 2023 *4 As of the end of each fiscal year
*5 Because of the change in the fiscal year-end, the fiscal year ended December 31, 2017, was an irregular nine-month period in Japan and 12 months overseas.
*6 Unconsolidated basis and consolidated subsidiaries in Japan. Because of the change in the fiscal year-end, totals for FY 2017/3 also represent the data from January to December. Accordingly, the same values are indicated for FY 2017/3 and for FY 2017/12.

FY 2022/12 Market Trends, Results of Operations, Financial Position, and FY 2023/12 Performance Outlook

Business Environment

In the current term (FY 2022/12), the trend for a slow recovery continued in the global economy overall, despite the effects of the prolonged U.S.-China trade friction, COVID-19, and the Russia-Ukraine situation, combined with lasting uncertainties in financial settings due to policy interest rates raised by national governments in response to the rapidly proceeding price increases.

The trend for depreciation of the yen remained from the previous year as reflected in the JPY/USD exchange rate, which temporarily leveled off in August due to concerns about the economic slowdown in the United States, subsequently increased until October, and turned into a trend for appreciation of the yen in November onward due to the reduced margin of policy interest rate hike in the U.S.

Net Sales and Operating Income

In the fiscal year ended December 31, 2022, consolidated net sales increased by ¥35,379 million (25.3%) year-over-year to ¥175,434 million. Net sales in the first half increased by ¥19,903 million (30.7%) to ¥84,711 million year-over-year. Net sales in the second half increased by ¥15,476 million (20.6%) to ¥90,723 million year-over-year.

In the electronics market of semiconductors, displays, and other devices, which are the main source of demand for the products of the TOK Group, the demand for smartphones and PCs was lower than in the previous fiscal year. However, the increase in the demand for data servers, coupled with the dissemination of 5G and IoT, semiconductor demand was higher than in the preceding year.

Cost of sales increased by ¥21,789 million (24.1%) from the previous fiscal year to ¥112,319 million. The cost of sales ratio dropped 0.6 percentage points year-over-year to 64.0%. As a result, gross profit increased by ¥13,590 million (27.4%) to ¥63,115 million.

Selling, general, and administrative (SG&A) expenses increased by ¥4,116 million (14.3%) year-over-year to ¥32,934 million.

Operating income increased by ¥9,474 million (45.8%) year-over-year to ¥30,181 million owing to the effects of sales activities and the increased sales of high value-added products, coupled with the yen depreciation, despite the raised raw material prices.

Income before Income Taxes and Profit Attributable to Owners of the Parent

Income before income taxes increased by ¥4,991 million (19.3%) from the previous fiscal year to ¥30,790 million.

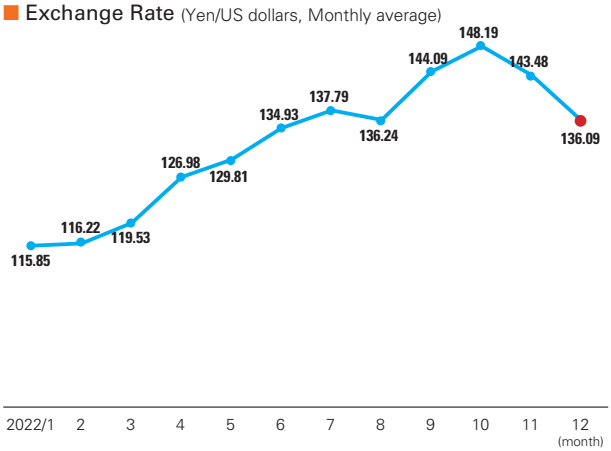
Profit attributable to owners of the parent increased by ¥1,944 million (11.0%) year-over-year to ¥19,693 million.

Performance by Segment

Materials segment:

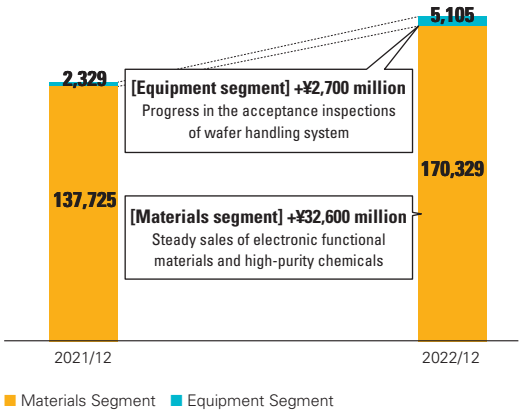
Net sales by the segment, excluding internal

■ Exchange Rate (Yen/US dollars, Monthly average)



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

■ Net Sales by Segment Year-over-year Comparison (millions of yen)



transactions, increased by ¥32,604 million (23.7%) year-over-year to ¥170,329 million. Operating income increased by ¥8,317 million (31.5%) to ¥34,755 million. This was mainly because sales remained steady in the Electronic Functional Materials Division and the High-Purity Chemicals Division.

■ Electronic Functional Materials Division

In the electronic functional materials segment, net sales increased by ¥12,376 million (15.6%) year-over-year to ¥91,868 million. This was mainly due to increased net sales because the sales of semiconductor photoresists and high-density integration materials used in the cutting-edge semiconductor process remained steady and led to increased net sales.

■ High-Purity Chemicals Division

Net sales in the high-purity chemicals division increased by ¥19,656 million (34.0%) year-over-year to ¥77,460 million. This mainly owed to the substantial increase in the sales of chemicals attached to semiconductor photoresists, resulting from the continued sales activities and the steady demand for the cutting-edge semiconductor process.

Equipment Segment:

■ Process Equipment Division

Net sales of the process equipment division, excluding internal transactions, increased by ¥2,775 million (119.1%) year-over-year to ¥5,105 million. Operating income increased by ¥1,081 million to ¥790 million. This mainly owed to progress in the acceptance inspections of the wafer handling system Zero Newton® and other ordered products.

Financial Condition

Total assets at the current year-end (December 31, 2022) increased by ¥20,811 million from the previous year-end to ¥238,075 million.

Total current assets increased by ¥11,752 million from the previous fiscal year-end to ¥130,636 million. This increase reflected the respective increase of ¥4,628 million in raw materials and supplies and of ¥1,815 million in accounts receivable.

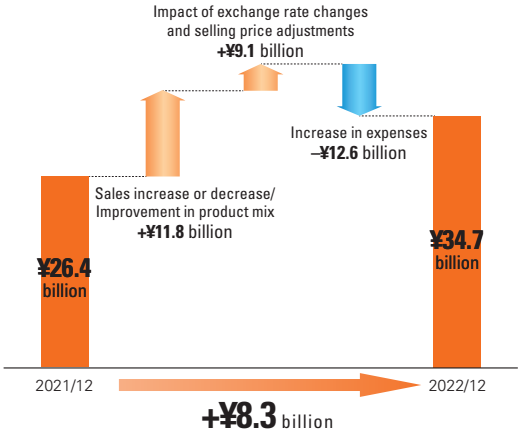
Total noncurrent assets increased by ¥9,058 million from the previous fiscal year-end to ¥107,439 million. This mainly reflected the increase in expenses for the purchase of property, plant, and equipment by ¥9,077 million.

Total liabilities at the current year-end increased by ¥5,041 million from the previous year-end to ¥57,115 million. This mainly reflected the respective increase of ¥2,367 million in trade notes and accounts payable and of ¥2,675 million in arrears.

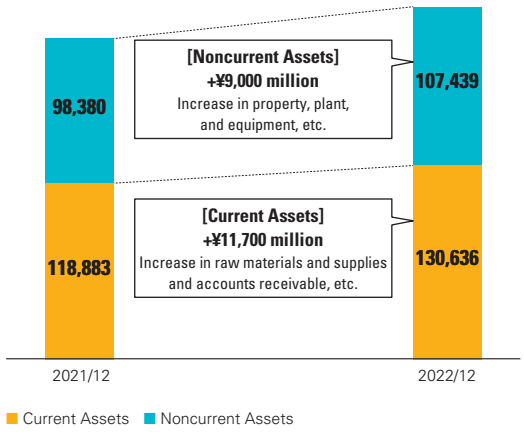
Total equity as of December 31, 2022, increased by ¥15,769 million from the previous fiscal year-end to ¥180,960 million. This mainly reflected the increase of retained earnings by ¥12,745 million.

As a result, the equity ratio stood at 71.3% at the end of the current consolidated fiscal year.

■ Breakdown of Change in Materials Segment Operating Income



■ Total Assets Year-over-year Comparison (millions of yen)



Cash Flows

Net cash provided by operating activities during the current fiscal year decreased by ¥766 million year-over-year to ¥18,991 million. This mainly reflected the increase in expenses resulting from the change in inventory and increased corporate income tax paid or refunded, despite the increased earnings due to the increase in income before income taxes.

Net cash used in investment activities increased by ¥7,807 million year-over-year to ¥12,383 million. This mainly reflected expenses for the purchase of property, plant, and equipment.

Net cash used in financial activities decreased by ¥9,503 million year-over-year to ¥8,610 million. This was mainly because there were no expenses for the share buyback at the end of the current year-end.

As a result, the balance of cash and cash equivalents decreased by ¥612 million to ¥40,856 million from the previous year-end.

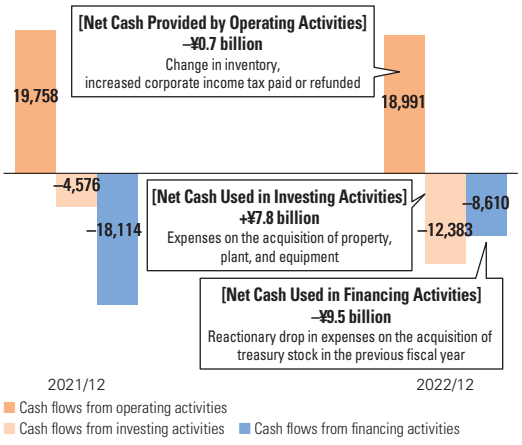
FY 2023/12 Performance Outlook*

Net sales in FY 2023/12 are estimated to increase by 6.9% compared to FY 2022/12 to ¥187.5 billion, assuming the recovery of semiconductor demand from the second half.

Operating income is estimated at ¥31.0 billion with an increase of 2.7% because of the increased sales of high value-added products. The profit attributable to owners of the parent is estimated at ¥19.4 billion with a decrease of 1.5% in consideration of business restructuring costs, despite the expected increase in operating income.

* Figures announced on February 13, 2023

■ Cash Flows Comparison (millions of yen)



■ Earnings Forecasts*

(millions of yen, %)

	FY 2022/12	FY 2023/12 Forecast		
			Change	%
Net sales	175,434	187,500	+12,066	+6.9
Operating income	30,181	31,000	+819	+2.7
Profit attributable to owners of the parent	19,693	19,400	–293	–1.5
EBITDA	36,943	38,300	+1,357	+3.7
ROE	12.1%	11.0%	–1.1	—

* Figures announced on February 13, 2023

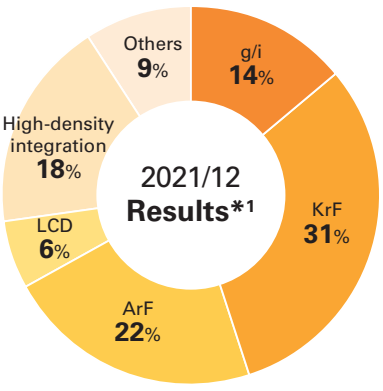
Reference: Information Related to Electronic Functional Materials and Semiconductor Photoresist

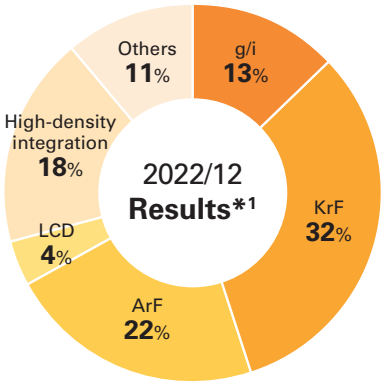
TOK photoresists are compatible with a variety of line widths along the semiconductor miniaturization spectrum

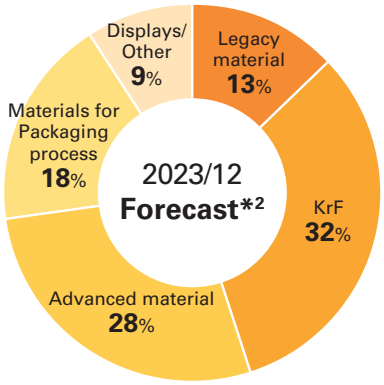
	i-Line photoresists	KrF excimer laser photoresists	ArF excimer laser photoresists	EUV photoresists
				
Light source for lithography	i-Line	KrF (krypton fluoride) excimer lasers	ArF (argon fluoride) excimer lasers	EUV (Extreme Ultraviolet)
Wavelength of light source	365 nm (i-Line)	248 nm	193 nm	13.5 nm
	Long			Short
Line width of semiconductors*	350 nm > – ≥ 250 nm	250 nm > – ≥ 130 nm	130 nm > – ≥ 10 nm	10 nm > –
	Wide			Narrow
Main applications and end products	Automotive power semiconductors Sensors LEDs	Smartphones High-performance servers Game consoles	Smartphones Wearable devices High-performance servers	Cutting-edge smartphones Next-generation servers Next-generation supercomputers Generative AI/ next-generation communications systems

*Only rounded figures for primary ranges are shown.

Changes in sales composition of electronic functional materials by type







*1 EUV photoresists are classified under "Other"
High-density integration: packaging materials and MEMS materials
*2 The estimates for FY 2023/12 are calculated based on the new segments **(See page 48)**.
Legacy materials: g-/i-Line photoresists, etc.,
Advanced materials: ArF/EUV photoresists, etc.,
Materials for Packaging process: Photoresist for package, MEMS material, WHS-related material, etc.
LCD materials: classified as display/others

Consolidated Financial Statements

Consolidated Balance Sheets

TOKYO OHKA KOGYO CO., LTD. and Consolidated Subsidiaries
December 31, 2022 and 2021

ASSETS	Millions of yen 2022	2021	Thousands of U.S. dollars 2022
CURRENT ASSETS:			
Cash and deposits	¥ 39,856	¥ 40,469	$ 301,945
Time deposits	15,514	16,366	117,534
Receivables:			
Trade notes receivable	911	810	6,907
Accounts receivable	34,900	33,084	264,396
Securities	3,999	3,999	30,302
Allowance for doubtful accounts	(89)	(120)	(674)
Inventories	30,006	21,350	227,319
Prepaid expenses and other current assets	5,535	2,921	41,935
Total current assets	130,636	118,883	989,667
PROPERTY, PLANT AND EQUIPMENT:			
Land	10,570	8,662	80,083
Buildings and structures	83,665	76,095	633,832
Machinery and equipment	68,318	64,907	517,565
Furniture and fixtures	26,873	23,429	203,584
Right-of-use assets	1,060	984	8,032
Construction in progress	3,565	3,896	27,013
Total	194,054	177,976	1,470,110
Accumulated depreciation	(128,044)	(121,043)	(970,033)
Net property, plant and equipment	66,010	56,932	500,077
INVESTMENTS AND OTHER ASSETS:			
Intangible assets	1,295	837	9,817
Investment securities	16,097	16,505	121,947
Investments in and advances to an unconsolidated subsidiary and associated companies	7	7	56
Investment in capital	100	100	757
Net defined benefit asset	3,682	4,658	27,901
Deferred tax assets	1,176	504	8,911
Long-term time deposits	18,000	18,000	136,363
Other assets	1,069	834	8,100
Total investments and other assets	41,429	41,447	313,856
TOTAL	¥ 238,075	¥ 217,264	$1,803,600

LIABILITIES AND EQUITY	Millions of yen 2022	Millions of yen 2021	Thousands of U.S. dollars 2022
CURRENT LIABILITIES:			
Payables:			
Trade notes and accounts payable	¥ 21,617	¥ 19,250	$ 163,769
Short-term loans payable	—	3,900	—
Construction and other payables	8,114	5,227	61,473
Income taxes payable	3,308	4,278	25,065
Accrued expenses	2,720	2,488	20,613
Provisions	3,322	3,107	25,167
Other current liabilities	1,698	1,404	12,864
Total current liabilities	40,781	39,656	308,952
NON-CURRENT LIABILITIES:			
Long-term loans payable	10,222	6,711	77,441
Deferred tax liabilities	1,084	1,614	8,212
Net defined benefit liability	853	609	6,468
Asset retirement obligations	80	81	608
Other non-current liabilities	4,092	3,399	31,006
Total non-current liabilities	16,333	12,416	123,737
EQUITY:			
Common stock—authorized, 197,000,000 shares in 2022 and 2021 —issued, 42,600,000 shares in 2022 and 2021	14,640	14,640	110,912
Capital surplus	15,303	15,207	115,937
Retained earnings	137,551	124,806	1,042,057
Treasury stock—at cost, 2,321,258 shares in 2022 and 2,439,651 shares in 2021	(11,276)	(11,818)	(85,425)
Accumulated other comprehensive income:			
Unrealized gain on available-for-sale securities	5,280	6,851	40,000
Foreign currency translation adjustments	8,877	5,618	67,250
Remeasurements of defined benefit plans	(630)	522	(4,779)
Total	169,745	155,829	1,285,952
Stock acquisition rights	174	215	1,324
Non-controlling interests	11,039	9,146	83,633
Total equity	180,960	165,190	1,370,910
TOTAL	¥238,075	¥217,264	$1,803,600

Consolidated Statement of Income

TOKYO OHKA KOGYO CO., LTD. and Consolidated Subsidiaries
Years Ended December 31, 2022 and 2021

	Millions of yen		Thousands of U.S. dollars
	2022	2021	2022
NET SALES	¥175,434	¥140,055	$1,329,052
COST OF SALES	112,319	90,529	850,901
Gross profit	63,115	49,525	478,150
SELLING, GENERAL AND ADMINISTRATIVE EXPENSES	32,934	28,817	249,500
Operating income	30,181	20,707	228,650
OTHER INCOME (EXPENSES):			
Interest and dividend income	644	530	4,883
Foreign exchange gain—net	280	477	2,121
Interest expense	(73)	(72)	(555)
Loss on valuation of derivatives	(326)	(162)	(2,474)
Treasury stock acquisition cost	—	(50)	—
Gain on sale of investment securities	243	4,820	1,848
Impairment loss on long-lived assets	(195)	(439)	(1,483)
Loss on retirement of non-current assets	(239)	(163)	(1,812)
Environmental costs	—	(83)	—
Other—net	275	234	2,083
Other income (expenses)—net	608	5,091	4,610
INCOME BEFORE INCOME TAXES AND NON-CONTROLLING INTERESTS	30,790	25,799	233,260
INCOME TAXES:			
Current	7,537	6,464	57,104
Deferred	97	(191)	735
Total income taxes	7,634	6,273	57,840
NET INCOME BEFORE NON-CONTROLLING INTERESTS	23,155	19,526	175,420
NON-CONTROLLING INTERESTS IN NET INCOME	3,461	1,777	26,225
PROFIT ATTRIBUTABLE TO OWNERS OF THE PARENT	¥ 19,693	¥ 17,748	$ 149,195

	Yen		U.S. dollars
PER SHARE OF COMMON STOCK:	2022	2021	2022
Basic earnings per share	¥489.56	¥430.73	$3.70
Diluted earnings per share	488.81	429.91	3.70
Cash dividends attributable to the year	160.00	156.00	1.21

Consolidated Statement of Comprehensive Income

TOKYO OHKA KOGYO CO., LTD. and Consolidated Subsidiaries
Years Ended December 31, 2022 and 2021

	Millions of yen		Thousands of U.S. dollars
	2022	2021	2022
NET INCOME BEFORE NON-CONTROLLING INTERESTS	¥23,155	¥19,526	$175,420
OTHER COMPREHENSIVE INCOME:			
Unrealized gain on available-for-sale securities	(1,571)	(817)	(11,904)
Foreign currency translation adjustments	3,649	3,881	27,644
Remeasurements of defined benefit plans	(1,153)	409	(8,740)
Total other comprehensive income	923	3,472	6,999
COMPREHENSIVE INCOME	¥24,079	¥22,998	$182,419
(Breakdown)			
TOTAL COMPREHENSIVE INCOME ATTRIBUTABLE TO:			
Owners of the parent	¥20,226	¥20,352	$153,234
Non-controlling interests	3,852	2,646	29,185

Consolidated Statement of Changes in Equity

TOKYO OHKA KOGYO CO., LTD. and Consolidated Subsidiaries
Years Ended December 31, 2022 and 2021

	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 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, JANUARY 1, 2021	41,508	¥14,640	¥15,207	¥125,795	¥(14,477)	¥ 7,669	¥2,606	¥ 113	¥151,556	¥304	¥ 8,133	¥159,994
Profit attributable to owners of the parent	—	—	—	17,748	—	—	—	—	17,748	—	—	17,748
Cash dividends paid:												
Final for prior year, ¥94.0 per share	—	—	—	(3,925)	—	—	—	—	(3,925)	—	—	(3,925)
Interim for current year, ¥62.0 per share	—	—	—	(2,592)	—	—	—	—	(2,592)	—	—	(2,592)
Purchase of treasury stock	(1,444)	—	—	—	(10,002)	—	—	—	(10,002)	—	—	(10,002)
Disposal of treasury stock	2,596	—	45	—	395	—	—	—	441	(89)	—	352
Retirement of treasury stock	(2,500)	—	(45)	(12,220)	12,266	—	—	—	—	—	—	—
Net change in items other than shareholders' equity during the year	—	—	—	—	—	(817)	3,011	409	2,603	—	1,012	3,615
BALANCE, DECEMBER 31, 2021	40,160	¥14,640	¥15,207	¥124,806	¥(11,818)	¥ 6,851	¥5,618	¥ 522	¥155,829	¥215	¥ 9,146	¥165,190
Profit attributable to owners of the parent	–	–	–	19,693	–	–	–	–	19,693	–	–	19,693
Cash dividends paid:												
Final for prior year, ¥94.0 per share	–	–	–	(3,794)	–	–	–	–	(3,794)	–	–	(3,794)
Interim for current year, ¥78.0 per share	–	–	–	(3,153)	–	–	–	–	(3,153)	–	–	(3,153)
Purchase of treasury stock	0	–	–	–	(0)	–	–	–	(0)	–	–	(0)
Disposal of treasury stock	118	–	95	–	542	–	–	–	638	(40)	–	598
Net change in items other than shareholders' equity during the year	–	–	–	–	–	(1,571)	3,258	(1,153)	533	–	1,893	2,426
BALANCE, DECEMBER 31, 2022	40,278	¥14,640	¥15,303	¥137,551	¥(11,276)	¥ 5,280	¥8,877	¥ (630)	¥169,745	¥174	¥11,039	¥180,960

	Thousands of U.S. dollars										
					Accumulated other comprehensive income (loss)						
	Common stock	Capital surplus	Retained earnings	Treasury stock	Unrealized 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, DECEMBER 31, 2021	$110,912	$115,211	$ 945,500	$(89,530)	$ 51,905	$42,565	$ 3,961	$1,180,526	$1,631	$69,288	$1,251,445
Profit attributable to owners of the parent	–	–	149,195	–	–	–	–	149,195	–	–	149,195
Cash dividends paid:											
Final for prior year, $0.71 per share	–	–	(28,746)	–	–	–	–	(28,746)	–	–	(28,746)
Interim for current year, $0.59 per share	–	–	(23,892)	–	–	–	–	(23,892)	–	–	(23,892)
Purchase of treasury stock	–	–	–	(7)	–	–	–	(7)	–	–	(7)
Disposal of treasury stock	–	725	–	4,112	–	–	–	4,838	(306)	–	4,531
Net change in items other than shareholders' equity during the year	–	–	–	–	(11,904)	24,684	(8,740)	4,039	–	14,345	18,384
BALANCE, DECEMBER 31, 2022	$110,912	$115,937	$1,042,057	$(85,425)	$ 40,000	$67,250	$(4,779)	$1,285,952	$1,324	$83,633	$1,370,910

Consolidated Statement of Cash Flows

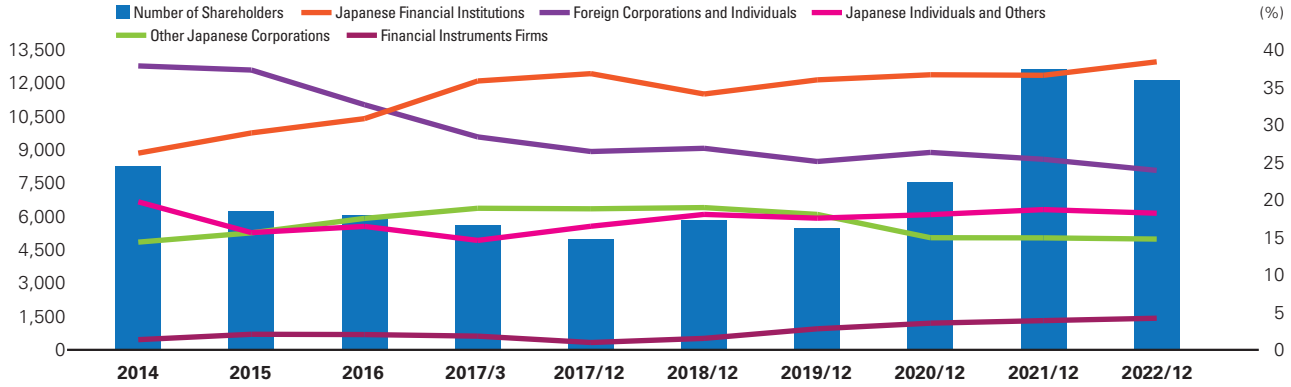
TOKYO OHKA KOGYO CO., LTD. and Consolidated Subsidiaries
Years Ended December 31, 2022 and 2021

	Millions of yen		Thousands of U.S. dollars
	2022	2021	2022
OPERATING ACTIVITIES:			
Income before income taxes and non-controlling interests	¥ 30,790	¥ 25,799	$ 233,260
Adjustments for:			
Depreciation and amortization	6,762	6,430	51,227
Impairment loss on long-lived assets	195	439	1,483
(Decrease) increase in provision for doubtful accounts	(31)	16	(239)
Increase in provision for bonuses	593	90	4,493
(Decrease) increase in provision for officers' bonuses	(401)	343	(3,044)
Increase in net defined benefit asset	(371)	(273)	(2,811)
Decrease in net defined benefit liability	(77)	(11)	(584)
Interest and dividend income	(644)	(530)	(4,883)
Interest expenses	73	72	555
Foreign exchange gain—net	(1,066)	(918)	(8,079)
Loss on valuation of derivatives	326	162	2,474
Gain on sale of non-current assets	(14)	1	(113)
Loss on retirement of non-current assets	239	163	1,812
Gain on sale of investment securities	(243)	(4,820)	(1,848)
Increase in trade receivables	(858)	(6,052)	(6,502)
Increase in inventories	(7,510)	(2,830)	(56,895)
Increase in trade payables	1,870	4,515	14,168
Increase in advances received	66	16	501
Interest and dividend received	646	532	4,898
Interest paid	(73)	(72)	(555)
Income taxes paid	(8,557)	(4,650)	(64,827)
Other—net	(2,721)	1,334	(20,614)
Net cash provided by operating activities	18,991	19,758	143,876
INVESTING ACTIVITIES:			
Purchase of securities	(12,000)	(13,000)	(90,909)
Proceeds from redemption of securities	12,000	12,000	90,909
Purchases of property, plant and equipment	(10,698)	(7,833)	(81,048)
Proceeds from sale of property, plant and equipment	10	39	79
Purchases of intangible assets	(752)	(296)	(5,699)
Purchases of investment securities	(2,082)	(399)	(15,778)
Proceeds from sale of investment securities	371	5,008	2,813
Net decrease in time deposits	982	—	7,443
Payments into long-term time deposits	(14,000)	(4,000)	(106,060)
Withdrawal of long-term time deposits	14,000	4,000	106,060
Other—net	(214)	(93)	(1,625)
Net cash used in investing activities	(12,383)	(4,576)	(93,815)
FINANCING ACTIVITIES:			
Proceeds from long-term loans payable	3,900	—	29,545
Repayments of long-term loans payable	(4,289)	(350)	(32,498)
Proceeds from issuance of stock	184	195	1,399
Proceeds from sale of treasury stock	769	469	5,826
Purchases of treasury stock	(0)	(10,053)	(7)
Dividends paid	(6,941)	(6,511)	(52,590)
Dividends paid to non-controlling interests	(2,160)	(1,829)	(16,369)
Other—net	(71)	(34)	(540)
Net cash used in financing activities	(8,610)	(18,114)	(65,234)
FOREIGN CURRENCY TRANSLATION ADJUSTMENTS ON CASH AND CASH EQUIVALENTS	¥ 1,389	¥ 1,673	$ 10,529
NET DECREASE IN CASH AND CASH EQUIVALENTS	(612)	(1,258)	(4,643)
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	41,469	42,728	314,164
CASH AND CASH EQUIVALENTS, END OF YEAR	¥ 40,856	¥ 41,469	$ 309,520

Stock Information

Ten-year Trends of Shareholder Composition

Changes in number and composition (shareholding ratio) of shareholders



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

Major Shareholders (Top 10)

(As of December 31, 2022)

Shareholder	Numbers of shares held (Thousand)	Ratio of shareholding (%)
The Master Trust Bank of Japan, Ltd. (Trust Account)	5,489	13.58
Custody Bank of Japan, Ltd. (Trust Account)	2,870	7.10
Meiji Yasuda Life Insurance Company	1,826	4.52
BNYM AS AGT/CLTS NON-TREATY JASDEC	1,541	3.81
MUFG Bank, Ltd.	1,207	2.99
The Bank of Yokohama, Ltd.	1,026	2.54
Tokyo Ohka Foundation for the Promotion of Science and Technology	984	2.44
Mitsubishi UFJ Trust and Banking Corporation	953	2.36
Mitsubishi UFJ Capital Co., Ltd.	860	2.13
Tokio Marine & Nichido Fire Insurance Co., Ltd.	857	2.12

(Notes)
1. The Company owns 2,166,000 shares of treasury stock, which are excluded from the above major shareholders.
2. The ratio of shareholding is calculated from the number of shares (40,433,142 shares) obtained by subtracting the number of shares of treasury stock from the total number of shares issued.

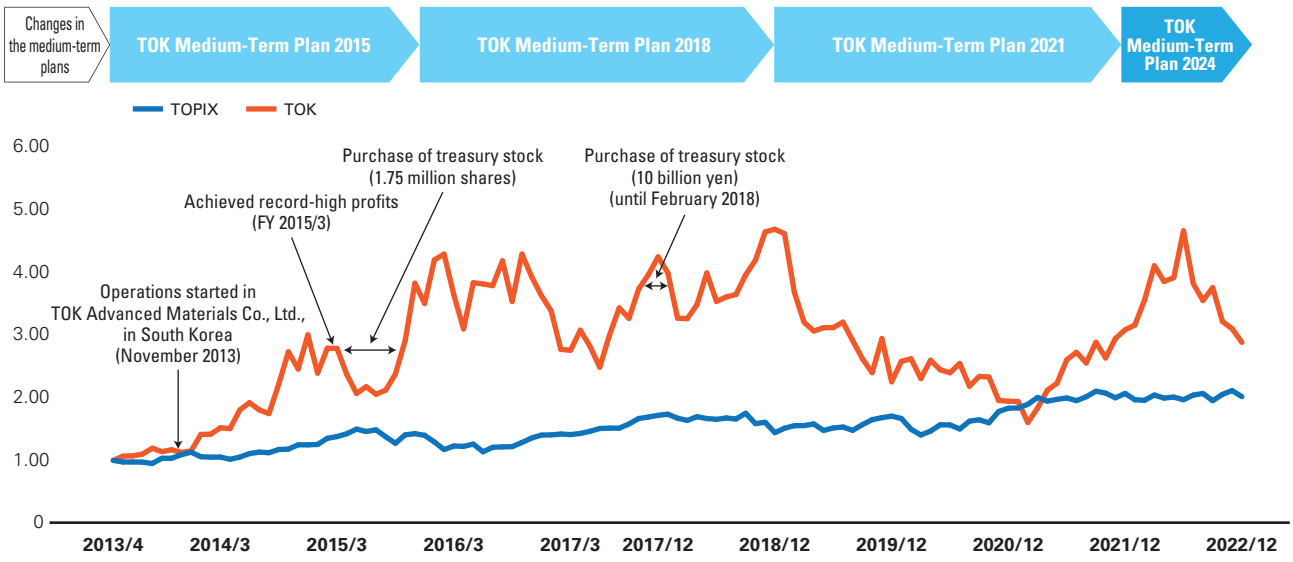
Basic Stock Information

Stock listing	Prime Market, 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, 2022)
Number of shares issued	42,600,000 shares (As of December 31, 2022)

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

Ten-year Trends of TOK TSR

Relative comparison with April 2013 being 1 (monthly, closing price basis)



Global Network

Tokyo Ohka Kogyo Co., Ltd.

1 Headquarters
- Sagami Operation Center (including Sagami plant)
- Shonan Operation Center
- Koriyama Plant
- Utsunomiya Plant
- Kumagaya Plant
- Gotemba Plant
- Aso Plant

2 Singapore Office

3 Europe Branch

Tokyo Ohka Kogyo America, Inc.

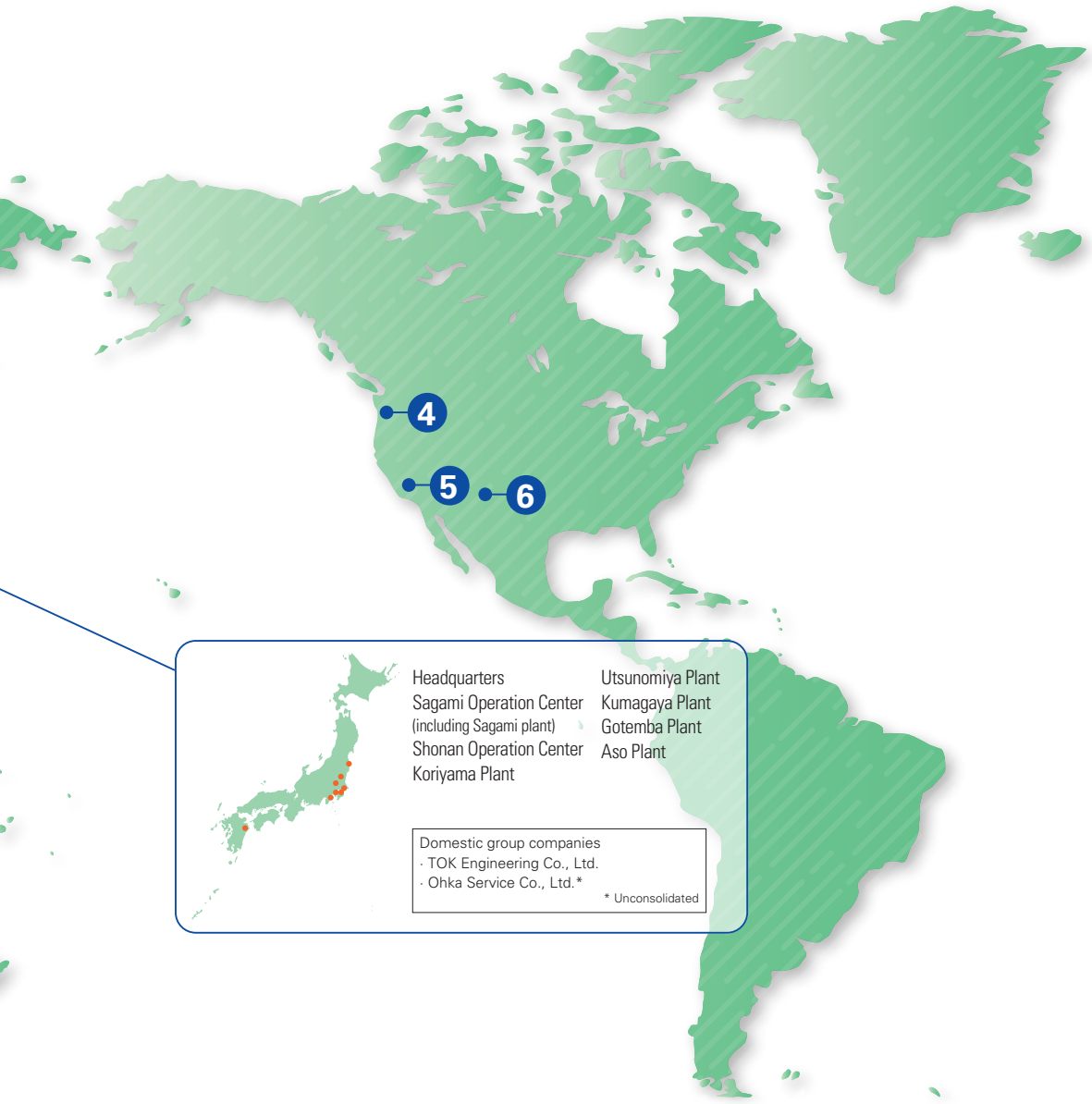
Established: April 1989

Business: Manufacture and sales of photoresists, and the development, manufacture, and sales of photoresist-related chemicals

4 Headquarters/Oregon Plant (Oregon)

5 Sales Office (California)

6 TOKCCAZ, LLC. (Arizona)



TOK Taiwan Co., Ltd.

Established: January 1998

Business: Manufacture and sales of photoresists, and the development, manufacture, and sales of photoresist-related chemicals

7 Headquarters (Hsinchu City)
Tongluo Plant (Miaoli County)

TOK Advanced Materials Co., Ltd.

Established: August 2012

Business: Development, manufacture, and sales of photoresists and related chemicals

8 Headquarters/Incheon Plant (South Korea)

TOK China Co., Ltd.

Established: January 2021

Business: Marketing of photoresists for semiconductor and display production and of related high-purity chemicals in China

9 Headquarters (China)

Corporate Information/External Evaluation

Corporate Information

(As of December 31, 2022)

Headquarters

Corporate name	Tokyo Ohka Kogyo Co., Ltd.
Established	October 25, 1940
Headquarters	150 Nakamaruko, Nakahara-ku, Kawasaki-shi, Kanagawa 211-0012 JAPAN
Number of employees	1,950 (Consolidated)
Paid-in capital	¥14,640,448,000
Website	https://www.tok.co.jp/eng
Stock listing	TSE Prime Market
Investor relations contact for this report	Public Relations Section, Corporate Communication Division 150 Nakamaruko, Nakahara-ku, Kawasaki-shi, Kanagawa 211-0012 JAPAN TEL. 044-435-3000 FAX. 044-435-3020

External Evaluation

Selected or recognized for ESG-related indices

- Sompo Sustainability Index
  (Constituent stock in fiscal 2023, selected for 12 consecutive years)

- FTSE Blossom Japan Sector Relative Index
  (2022)

- S&P/JPX Carbon Efficient Index
  (As of March 23, 2022)

- Certified Health & Productivity Management Outstanding Organizations Recognition Program 2023
  (2018 to 2020, 2022, and 2023)

- MSCI ESG Rating
  (2018 to 2022)

  Tokyo Ohka Kogyo Co., Ltd., was rated A in the MSCI ESG rating.

- MSCI Japan ESG Select Leaders Index
  (Selected for four consecutive years in FY 2023)

(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.

- iSTOXX MUTB Japan Platinum Career 150
  (2023)

Evaluations and commendations for various activities

- Intel Corporation
  Preferred Quality Supplier Award
  (2016, 2018, 2020, and 2021)

  EPIC Distinguished Supplier Award (2022)

- Micron Technology
  Micron Supplier Award (2022)

- Texas Instruments Inc.
  Supplier Excellence Award (2018 and 2022)

- Nikkei Integrated Report Award
  Semi-Grand Prize (2nd session, 2022)

- Nikkei Annual Report Award
  Special Prize (22nd session, 2020)
  Excellence Prize
  (23rd session, 2021;
  20th session, 2018;
  and 18th session, 2016)

- WICI Japan Integrated Report Award
  Bronze Award (2020 and 2021)

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

- Global Niche Top Companies Selection 100
  (Ministry of Economy, Trade and Industry)
  (2014 and 2020)

- Excellent Integrated Report and Report with Substantial Improvement
  (2020 and 2021)

  Selected by the contract operator of the domestic stocks of Government Pension Investment Fund (GPIF)

- Nikkei Science Advertising Awards
  Grand Prize (45th session, 2016)
  First Prize (44th session, 2015)

Third-Party Verification Report

Responsible Care®
OUR COMMITMENT TO SUSTAINABILITY

Integrated Report 2022
Third-Party Verification Report

July 20, 2023

To: Noriaki Taneichi
Representative Director, President & Chief Executive Officer
TOKYO OHKA KOGYO CO., LTD.

■ **Purpose of Verification**

The purpose of this verification is to express the opinions of chemical industry experts with respect to the following matters covering the Integrated Report 2022 (hereinafter referred to as "Report") prepared by Tokyo Ohka Kogyo Co., Ltd.. The scope of verification excludes financial information.

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

■ **Verification Procedure**

- At the Sagami Operation Center, we inspected the rationality of the methods used to calculate the figures reported from the sites (offices and plants) and the accuracy of non-numerical information. The inspection was performed by asking questions of the people responsible for the relevant operations and the people responsible for preparing the Report, receiving materials, and providing explanations.
- At the Aso plant, we inspected the rationality of the methods used to calculate the figures reported to the Sagami Operation Center and the accuracy of numerical and non-numerical information. The inspection was performed by asking questions of the people responsible for the relevant operations and the people responsible for preparing the Report, receiving materials and explanations, and crosschecking them against the evidence.
- We applied the sampling method for investigating numerical figures and stated information.

■ **Opinions**

1) Rationality of the methods for calculating and compiling performance indicators (numerical figures) and the accuracy of these numerical figures
- We confirmed that performance figures have been reasonably and correctly calculated and tabulated at the Sagami Operation Center and the Aso Plant.

2) Accuracy of non-numerical information in the Report
- We confirmed that the data included in the Report are accurate. We pointed out a few issues regarding appropriateness of expressions and readability in the draft stage, but all of these issues are edited in the current Report, and we do not find any significant matters requiring correction.

3) Responsible Care and CSR activities
- In the occupational health and safety area, we promoted the acquisition of ISO 45001 certification, and all sites in Japan have acquired certification.
- The Company has vigorously promoted measures for reducing workplace accidents as planned, including the risk assessment and hazard prediction activities for infrequent operations, the horizontal expansion of incidents, and the implementation of risk assessment.
- It is worth evaluating that The Company has an established chemical substances management system linked to product information and production/shipment information, thereby ensuring traceability concerning where and how chemical substances are used and the system is also linked to laws and regulations information so that regulated substances can be screened.
- The Company has declared the commitment to achieving carbon neutrality by 2050 and promotes measures for reducing greenhouse gas (GHG) emissions. It is worth evaluating that The Company has shifted the purchase of electricity at all key sites to renewable energy sources.
- At the Aso plant, measures have been implemented to reduce risks in the workplace and operation through routine risk assessment, thereby preventing accidents and workplace accidents. The Company contributes to the promotion of a circular economy through the proactive promotion of the effective reuse of waste, such as the recycling of waste organic solvents.
- It is worth evaluating that no major accident occurred at the Aso plant in FY 2022.

4) Distinctive characteristics of the Report
- Under the top-down approach by the president, measures are promoted toward carbon neutrality, accelerating the introduction of renewable energy and energy conservation systems. The provided information suggests that initiatives for reducing GHG emissions are being accelerated.
- Whereas this Integrated Report has a volume exceeding 100 pages, related pages are referred to in detail concerning material issues and other sections in which many readers are interested so that readers can easily access the related information. The provided information is well-balanced for investors and employees. TOK's Report has been highly evaluated by external accreditation bodies.

Satoshi Ozaki

OZAKI Satoshi
Chief Director, Responsible Care Verification Center
Japan Chemical Industry Association

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