

## Board of Directors/ Audit & Supervisory Board Members and Officers



#### Directors •

#### Noriaki Taneichi

Representative Director.

President and Chief Executive Officer

Nomination and Compensation Advisory Committee Member

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

#### Kunio Mizuki

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

Nomination and Compensation Advisory Committee Member

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

#### Hiroshi Kurimoto

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 Executive Advisor of OILES

#### Harutoshi Sato

- 2 Director, Senior Executive Officer Dept. Manager, Research and Development Dept.
- 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 Div. 3
  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. (to the present)

#### Yuichi Murakami

**5** Director, Officer Dept. Manager, Manufacturing Dept President, TOK Advanced Materials Co., Ltd.

- 2009 General Manager, Accounting Division 2014 Deputy Dept. Manager, Manufacturing Dept.
- 2015 Officer, Deputy Dept. Manager, Manufacturing Dept. 2020 Director, Officer; Dept. Manager, Manufacturing Dept. (to the present)

#### Noriko Sekiguchi

 Outside Director (Representative of Sekiguchi Noriko CPA Office) Nomination and Compensation Advisory Committee Member

- 1986 Joined Manufacturers Hanover Bank (present JPMorgan Chase Bank, N.A.)
- 1991 Joined Asahi-Shinwa Kaikeisha audit corporation (present KPMG AZSA LLC) 1994 Registered as certified public accountant
- 1998 Joined Japan Broadcasting Corporation
- 2001 Joined Triumph International (Japan) Ltd.
- 2002 Reregistered as certified public accountant
- 2004 Joined Ernst & Young ShinNihon (present Ernst & Young ShinNihon LLC)
   2010 Representative of Sekiguchi CPA Office
   (present 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 (to the present)
- 2012 Registered as certified tax accountant
- 2015 Director (Outside Director) of the Company (to the present)
- 2019 Executive Officer of Chifure Holdings
- 2021 Independent Outside Audit & Supervisory Board Member of Oji Holdings Corporation (to the present)

#### Yoichi Shibamura

- 3 Director, Senior Executive Officer Dept. Manager, Accounting and Finance Dept
- 1980 Joined The Mitsubishi Bank, Limited (present MUFG Bank, Ltd.)
- 2006 General Manager, Corporate Human Resources Dept. of The Bank of Tokyo-Mitsubishi UFJ, Ltd. (present MUFG Bank, Ltd.) 2007 General Manager, Kyobashi Branch of The Bank of Tokyo-Mitsubishi
- 2009 General Manager, Finance Division of the Company
- 2010 Officer; Deputy Dept. Manager, Administration Dept. and General Manager, Finance Division 2012 Officer; Dept. Manager, Accounting Dept.

- 2013 Executive Officer; Dept. Manager, Accounting Dept.2017 Senior Executive Officer; Dept. Manager, Accounting Dept.
- 2020 Director; Senior Executive Officer; Dept. Manager,
  Accounting and Finance Dept. (to the present)

#### Yusuke Narumi

- Director, Officer
   Dept. Manager, New Business Development Dept.
- 1988 Joined the Company
- 2012 Div. Manager, Market Development Div
- 2019 Div. Manager, Panel Material Marketing Div. 2019 Div. Manager, Imaging Material Marketing Div.
- 2020 Officer; Dept. Manager, New Business Development Dept. 2021 Director; Officer; Dept. Manager, New Business Development Dept.

#### Kazuo Ichiyanagi

Outside Director

Nomination and Compensation Advisory Committee Member

- 1977 Joined Teikoku Tsushin Kogyo Co., Ltd.
- 2005 Executive Officer in charge of Development Dept; General Manager, Development Department 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.
- Director Texecutive Officer supervising Development Division of Teikoku Tsushin Kogyo Co., Ltd.
   President of Teikoku Tsushin Kogyo Co., Ltd.
- 2019 Director and Advisor of Teikoku Tsushin Kogyo Co., Ltd.
- 2020 Director (Outside Director) of the Company (to the present)

#### Skills and experience required for directors of TOK

			Nomination	Skills and experience						
Name	Position	Outside	and Compensation Advisory Committee	Outside management experience	R&D/ engineering/ production	Sales/ marketing	Legal affairs/ compliance/ risk management	Finance/ accounting	Global experience	Personnel/ labor
Noriaki Taneichi	Representative Director President and Chief Executive Officer		•		•	•			•	
Harutoshi Sato	Director				•				•	
Yoichi Shibamura	Director							•		•
Kunio Mizuki	Director		•				•			•
Yuichi Murakami	Director				•			•	•	
Yusuke Narumi	Director				•	•			•	
Hiroshi Kurimoto	Director	•	•	•	•	•	•		•	•
Noriko Sekiguchi	Director	•	•	•				•		
Kazuo Ichiyanagi	Director	•	•	•	•	•			•	

## Audit & Supervisory Board Members •

#### **Nobuo Tokutake**

10 Standing Audit and Supervisory Board Member

1984 Joined the Company 2003 Chairman and President of TOK TAIWAN CO., LTD. 2007 General Manager, Quality Assurance Div.

2009 Senior General Manager, Production Control Div. and General Manager, Quality Assurance Div. 2013 Officer; Deputy Dept. Manager, Manufacturing Dept. 2015 Director; Officer; Dept. Manager, Manufacturing Dept.

2020 Standing Audit and Supervisory Board Member (to the present)

#### Nobuyuki Takeuchi

1 Outside Audit and Supervisory Board Member

1981 Joined Mitsubishi Trust and Banking Corporation ("MTB," present Mitsubishi UFJ Trust and Banking Corporation)

2005 Manager, Real Estate Planning Division of MTB 2005 Manager, Sales Division 9 of Mitsubishi UFJ Trust and Banking Corporation ("MUTB")

2007 Manager, Sales Division 3 of MUTB 2009 Officer; Manager of Kyoto Branch and Central Kyoto Branch of MUTB

2011 Managing Executive Officer of MUTB

2013 Senior Managing Director of MUTB 2015 President and CEO of Mitsubishi UFJ Real Estate Services Co., Ltd.

2016 Corporate Auditor (Outside Corporate Auditor) of Maruzen Showa Unyu Co., Ltd. 2019 Outside Audit and Supervisory Board Member of the Company (to the present)

2019 Representative Director and Chairman of Mitsubishi UFJ Real Estate Services Co., Ltd. 2019 Advisor of Mitsubishi UFJ Real Estate Services Co., Ltd.

#### Tadaharu Uehara

Outside Audit and Supervisory Board Member

1979 Joined Tokio Marine and Fire Insurance Company, Limited ("TMFI") (present Tokio Marine & Nichido Fire Insurance Co., Ltd.)

2004 Division Manager, Management Planning Division of Millea Holdings, Inc. (present Tokio Marine Holdings, Inc.) 2007 Division Manager, Overseas Business Planning Division of Millea Holdings

2008 Division Manager, Europe, Asia, and Middle East Division of TMFl 2011 Officer, Tokio Marine & Nichido Fire Insurance

2012 Executive Officer of TMFI
2015 Director, Nippon Export and Investment Insurance (present Nippon Export and Investment Insurance)

2017 Corporate Advisor of TMFI 2017 Joined the Ministry of Foreign Affairs of Japan

2017 Ambassador Extraordinary and Plenipotentiary to Georgia 2020 Corporate Advisor of TMFI

2021 Outside Audit and Supervisory Board Member of the Company (to the present)

#### Teruki Umezaki

Outside Audit and Supervisory Board Member

1985 Joined Meiji Life Insurance Company ("MLI") (present Meiji Yasuda Life Insurance Company)

2010 Division Manager, Investigation Division of MLI

2014 Officer and Division Manager, Personnel Division of MLI

2016 Executive Officer of MLI

2019 Executive Officer and Group Compliance Director of MLI 2020 Senior Executive Officer and Group Compliance Director of MLI

2021 Outside Audit and Supervisory Board Member of the Company (to the present)

2021 Senior Executive Officer of MLI (to the present)

## Officers •

#### Koichi Irino

Senior Executive Officer TOK Taiwan Co., Ltd.

#### Gitae Kim

Officer TOK Advanced Materials Co., Ltd.

#### **Kosuke Doi**

Executive Officer Dept. Manager, Marketing Dept.

#### Hirotaka Yamamoto

Dept. Manager, Corporate Planning Dept.

#### Tsukasa Honkawa

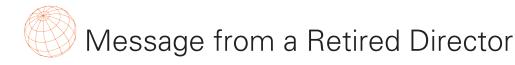
Dept. Manager, Process Equipment Manufacturing Dept.

#### Katsumi Ohmori

Deputy Dept. Manager, Research and Development Dept.

#### Naoki Watanabe

Chairman, TOK China Co., Ltd.



TOK will continue governance reform and support the attainment of TOK Vision 2030.

#### Ikuo Akutsu

Advisor, Former Representative Director, Chairman

#### Achievements and problems of long-term vision

I retired as representative director in March this year, the position in which I was appointed in 2011. I express sincere gratitude to shareholders, investors, customers, and other stakeholders who supported and advised me during the term.

While I served as the president for more than seven years from 2011, I established the overarching aspiration (long-term vision) for 2020 at the core of management as a ten-year vision, in order to encourage employees who were losing their motivation through business restructuring that followed the financial crisis in 2008, and aim for a new growth stage. In particular, I made a bold decision to establish TOK Advanced Materials Co.. Ltd., in South Korea in 2012, in order to focus on customeroriented strategies in Asia with a remarkable growth in the semiconductor industry. Although I received many pros and cons from stakeholders at that time, the site substantially contributed to the improvement of our competitiveness in the cutting-edge semiconductor fields, and to the record-high performance in FY 2020/12. The site is also effectively functioning in terms of risk distribution and BCP as diverse global risks emerge. On the other hand, inspiring customers with high value-added products as announced as our management vision had yet to be fulfilled, and several measures for strengthening management foundation scheduled in FY 2020/12 had to be postponed due to coronavirus. These attempts are inherited as qualitative targets and strategies in TOK Vision 2030, and I will support them toward the attainment of the Vision as necessary.

#### Promoting governance reform without becoming complacent

Regarding corporate governance, I increased one outside audit & supervisory board member in 2013, and one female outside director in 2015, during my tenure as the president. After I became chairman and one of the two representative directors along with President Taneichi in 2019, we could accelerate governance reform by creating the Executive Fellow system, formulating the Corporate Governance Guidelines, increasing

outside directors (to one-third of all directors), and introducing a new remuneration system for directors and audit & supervisory board members. In February this year, we resolved to discontinue the anti-takeover measures, advancing our corporate governance to a new stage. Following my retirement from the position, TOK returned to the structure where the president and chief executive officer serves both as the chair of the board of directors and as executive officer. However, the ratio of outside directors and audit & supervisory board members on the Board of Directors is 46.2%, and they make proposals during deliberation extremely vigorously. I am confident that governance reform at TOK will further proceed in coming years.

#### Paving the way through cooperation with stakeholders and contribution to society

Utilizing global personnel (development of human resources and organizations and diversity and inclusion) has been my focus since my tenure as the president and one of the key strategies for TOK Vision 2030. There still remain many requirements in this area. Under the requirement of human resource development with the pursuit of happiness as its concept, I consider that relationships with customers and other external stakeholders enhance happiness most effectively and develops human resources. Therefore, I hope that the development and manufacturing departments will accumulate on-site experience together with external stakeholders, though there are constraints on activities due to COVID-19. In the meantime, noncontact communication is becoming the new normal in the back-office departments with increased ratio of work from home. It is the largest requirement how to form happiness in these departments. I believe that we will be able to find the way by continue practicing our management principles that pursue making sure that all management resources and initiatives ultimately lead to contributing to society.

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

Aiming for Sustainability Our Value Creation Long-Term Strategy Our Foundation Data Section





#### Hiroshi Kurimoto

Outside Director, Chairman of the Nomination and Compensation Advisory Committee

#### Decided to discontinue anti-takeover measures

In the process that led to the resolution of discontinuation of anti-takeover measures ("these measures") in February this year, I participated in discussions on various occasions that included meetings of the Board of Directors as the chair of the special committee. We resolved not to continue these measures through careful review, taking into consideration the opinions of institutional investors and other shareholders in Japan and overseas, recent trends on anti-takeover measures, changes in our business environment, and other factors. These measures were introduced in 2006, primarily aiming to acquire sufficient and necessary information and time in the event of receiving an offer for takeover in order to examine and evaluate the offer at the Board of Directors. We determined to discontinue these measures because the requirement above was guaranteed to a certain extent, though not sufficient, through the subsequent amendments of law, including the strengthened regulation of foreign capital by the amended Foreign Exchange Act, which took effect in May 2020. We will leverage the decision to discontinue these measures as a kind of stimulation, thereby urging the Board of Directors to ensure careful management.

# Toward upgrading the new remuneration system for directors and audit & supervisory board members

The new remuneration system for directors and audit & supervisory board members was started March this year, increasing the ratio of performance-linked remuneration to 45%, and introducing a system where annual bonus and performance-linked share-based remuneration can vary in a broad range from 0 to 200% in accordance with the achievement rate of numerical targets, while using ROE as one of the evaluation indicator for the performance-linked share-based remuneration. I highly evaluate this system in that it has established a mechanism that urges directors and audit & supervisory board members to deeply commit to the sustainable growth of the TOK Group, and to the medium- to long-term corporate value enhancement. To further upgrade this system, we will focus on the following

two requirements. First, we will examine how to further improve annual bonus and performance-linked share-based remuneration as evaluation indicators, considering the macro environment, business environment, historical performance trends, market expectations, and other factors. The Nomination and Compensation Advisory Committee, the majority of which consists of outside directors including me, will undertake monitoring to avoid arbitrary target setting. Second, we need to evaluate the system whether or not it appropriately functions in a downward performance trend. In particular, it is necessary to identify how the unexpected scale of deterioration in external environment and performance caused by tail risks, such as the pandemic and natural disasters, should be incorporated into the evaluation process. We will deepen discussion on this requirement in FY 2021/12

## Focusing on risk management and medium- to long-term strategies

Regarding the monitoring of ongoing business deployment under TOK Medium-Term Plan 2021, inside directors and audit & supervisory board members will take the lead in business execution, while five other outside directors and I will focus on making proposals on risk management, thereby coping with diversifying and frequent unexpected risks. In particular, I consider that the skills and risk recognition of the three outside audit & supervisory board members from financial institutions will effectively function in the governance of TOK as a technology-oriented company.

In addition, I recognize that discussion needs to be increased at the meetings of the Board of Directors concerning medium- to long-term strategic topics under TOK Vision 2030, as well as initiatives related to ESG and SDGs. In particular, our purpose (meaning of existence) to contribute to a sustainable future through chemistry is the source of motivation for all human resources throughout the group. Therefore, we will powerfully support, from outside directors' viewpoint, information provision and discussion that the products of TOK are indispensable for society.



## Advancing risk management and diversity and inclusion as a global company

## Noriko Sekiguchi

Outside Director, Member of the Nomination and Compensation Advisory Committee



#### Governance reform-Initiatives taken to date

In the course of governance reform implemented by TOK, I particularly highly evaluate the establishment of the executive fellow system because it has formally established a process for internally motivated corporate value enhancement, rather than responding to soft laws. I used to be against the discontinuation of anti-takeover measures for a concern that TOK could easily become a target of takeover as a niche top company in the semiconductor industry. However, I finally agreed to discontinuation, reaching a conclusion that corporate value enhancement through incessant efforts would be the most effective anti-takeover measure, given dialogs with investors and changes in the business environment.

As a member of the Nomination and Compensation Advisory Committee, I suggested that the first year of the new remuneration system for directors and audit & supervisory board members should be carefully reviewed, so that the shortterm incentive indicators will be set considering the latest trends in the economy and the semiconductor industry. In the interviews with executive officers for the election of director candidates, I assessed their personality, motivation, and attitude toward duties, while striving to grasp the characteristics of each candidate, such as what they had accomplished, what difficulties they had and episodes at work. Discussion also progressed concerning succession planning. While the process, requirements for election and dismissal, and other elements have been specified, I consider that more details need to be identified through continued discussion on medium- to longterm initiatives.

#### Toward strengthening global risk management

As TOK pursues the attainment of TOK Vision 2030 as "The e-Material Global Company," the Group Management System (GMS) continues to be the core of risk management in Japan and overseas. In the immediate future, traveling abroad seems difficult because the containment of the COVID-19 pandemic remains unclear. Therefore, we consider that it is an urgent

requirement to achieve close cooperation with overseas sites online. It is also considered necessary to steadily operate the PDCA cycle on measures for the sound development of the China business, as the presence of the Chinese market continues to increase

To cope with the diversifying and frequent unexpected risks, it will be critical to implement thorough measures to handle expected risks, to monitor the changes and signs of risks and to share information and take rapid action to minimize negative impact if an unexpected risk emerges. TOK Vision 2030 assumes several external environment risks in its formulation stage. The continuous check of the BCP status for each risk at the relevant sites will enable a rapid response to unexpected

#### Making proposals for establishing a mechanism to further advance diversity and inclusion

TOK pursues diversity and inclusion as an initiative for the material issue "Enhancement of personnel measures on a global basis." It has promoted employment and promotion based on abilities, regardless of gender or nationality, thereby achieving a steady increase in the ratios of female employees and non-Japanese employees.

Work from home and staggered commuting increased in the COVID-19 pandemic, and led to the progress of work-style reform. They also contributed to the establishment of a comfortable work environment for all employees, thereby enhancina diversity.

In the coming years, it may be useful to indicate the Company's attitude for diversity and inclusion more clearly as a visible company system, so that the attitude will permeate the awareness of individual employees through measures of adding diversity and inclusion to the evaluation items of managers and providing an annual occasion to boost diversity and inclusion through group reports and events.

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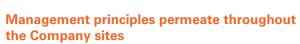


# Message from Outside Directors and Audit & Supervisory Board Members

Making proactive proposals on business portfolio reform from a long-term perspective

## Kazuo Ichiyanagi

Outside Director, Member of the Nomination and Compensation Advisory Committee



After being appointed an outside director in March last year, I visited the Sagami Operation Center and the Shonan Operation Center, and participated in the technological report meetings held by the Research and Development Department whenever I could spare time in order to see the front lines of manufacturing at TOK. By doing so, I recognized that the management principles of TOK ("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") have permeated throughout each site. I was also deeply impressed by vigorous discussions at the technological report meetings in line with the four management principles. They refreshed my memory of Professor Yasujiro Niwa,\* who served as the president of the university from which I graduated, stating, "In the technology breathes its creator, because technology embodies the personality of the creator of the technology." I would like to support TOK, with this corporate culture inherited, in attaining TOK Vision 2030 and developing into a 100-year company in 2040.

\* Yasujiro Niwa (1893 to 1975): An engineer who is sometimes selected as one of the ten greatest Japanese inventors; developed the first facsimile in Japan; the first president of Tokyo Denki University

# Reviewing my first year as an outside director and member of the Nomination and Compensation Advisory Committee

It is characteristic to the TOK Board of Directors that the share of outside directors and audit & supervisory board members is relatively high at 46.2%. This structure adequately protects the benefit of general shareholders, and also enables outside directors and audit & supervisory board members to make frank and straightforward suggestions, with the help of moderation by the chair (former Chairman Akutsu/present President Taneichi) to induce many opinions from outside directors and audit & supervisory board members.

As a member of the Nomination and Compensation Advisory Committee, the majority of which consists of outside directors and audit & supervisory board members, I have been engaged in the operation of the new remuneration system for directors and audit & supervisory board members and the election of director candidates. As it was my first year as outside director, I endeavored to have close communication with inside directors and audit & supervisory board members. In interviews with executive officers, I carefully evaluated them from an objective standpoint.

In the discussion that led to the discontinuation of anti-takeover measures, I agreed to discontinuation because the retention of the conventional pre-warning anti-takeover measures might be disadvantageous for investors and stakeholders due to the potential inhibition of proper stock price formation and because other legally acceptable measures could replace the conventional anti-takeover measures to a certain extent and because corporate value enhancement through incessant efforts would be the most effective anti-takeover measure.

A gender goal has been achieved to a certain extent in the skill matrix of the entire TOK Board of Directors. In coming years, I consider it desirable to elect non-Japanese outside director candidates.

#### To establish a new earnings driver from a longterm perspective

Semiconductor needs in society will continue increasing. I consider that TOK will be able to attain TOK Vision 2030 by continuously upgrading its strengths to win competition in the front-end processes, back-end processes, cutting-edge fields, and legacy fields of semiconductors over the next 10 years. However, in the path from 2030 onward aiming to become a 100-year company in 2040, it will be critical to establish a new earnings driver because TOK will probably face difficulties in further development with the business portfolio dependent on photoresists. President Taneichi and the management executives clearly recognize this requirement and have promoted the development of new businesses, such as life science materials, optical materials, and functional films, with certain achievements made. I consider that it will be also worth examining to enter the fields closely related to photoresists, such as mask blanks, reviewing the market conditions, and the competitive environment in the entire photolithography processes. In this way, I will make proactive proposals on business portfolio reform from a long-term perspective.



## Message from Outside Directors and Audit & Supervisory Board Members

#### Aiming for sustainable development in cooperation with customers and society

Despite the intensifying geopolitical risks, including infectious diseases, climate change, and geopolitical risks, TOK achieved the recordhigh performance, while fulfilling its supplier responsibility to provide materials indispensable for semiconductor production, and aims to take another leap under the new long-term vision TOK Vision 2030. To attain this vision, TOK needs to further upgrade its sales power for anticipating and grasping both individual customer needs and broad social needs featuring SDGs, development power for creating

new added value with innovative ideas and accumulated know-how leveraging networks inside and outside the Company, and production power for efficiently and stably supply reliable products even at the time of disasters and other emergency situations. In addition, TOK needs to have robust financial foundation as the basis of all investments and corporate activities, as well as firmer governance structure to properly handle various risks.

To this end, I will fulfill my responsibility as an outside director through audit and other duties, so that TOK can maintain organization that enables each employee to maximize their abilities by combining vigor and order.



Nobuvuki Takeuchi Outside Audit & Supervisory **Board Member** 



Tadaharu Uehara Outside Audit & Supervisory **Board Member** 

#### Advancing integrated risk management

I am Tadaharu Uehara, appointed outside audit & supervisory board member in March this year. I would like to contribute to the global development of TOK by leveraging my experience abroad at financial institutions, the Ministry of Foreign Affairs, and other organizations.

Business management in the semiconductorrelated industries, which lead the fourth industrial revolution, is becoming increasingly difficult and complicated, calling for strategic technological innovation and bold reform, including alliances and partnerships, under the circumstances with increased geopolitical risks, changing global supply chain, knowledge integration for technological innovation driven by Al and 5G, response to climate

change risks as an urgent requirement, adaptation to the new work style in the post-COVID-19 era, and other factors.

TOK is on the growth trajectory stated in TOK Medium-Term Plan 2021 and TOK Vision 2030, but it must be noted that successful business management in the upcoming business environmental changes will not be achieved by the same means as in the past successes.

I will fulfill my mission as audit & supervisory board member so that TOK can advance integrated risk management toward the "overarching aspiration for 2030" as a milestone of its going concern, and establish a new business portfolio with high profitability through bold strategic investments and enhanced geopolitical intelligence.

#### Increasing competitiveness while strengthening governance structure

I am Teruki Umezaki, appointed as a new outside audit & supervisory board member in March this year. I am serving as a senior executive officer at a life insurance company in Japan, and would like to contribute to the sustainable development of TOK by leveraging my experience.

The semiconductor industry is expected to further develop as digital transformation (DX) accelerates across the world in the COVID-19 pandemic. To enhance its sustainable

corporate value taking advantage of this situation, it is critical for TOK to increase competitiveness utilizing cutting-edge technologies and human resources as its strengths. At the same time, the Company needs to establish a governance structure that suits a global company by broadly considering the response to geopolitical risks and social requirements, including environmental issues. From this perspective, I will contribute to the advancement of governance structure at TOK, in addition to contribution in the personnel and compliance fields that I experienced and have knowledge of.



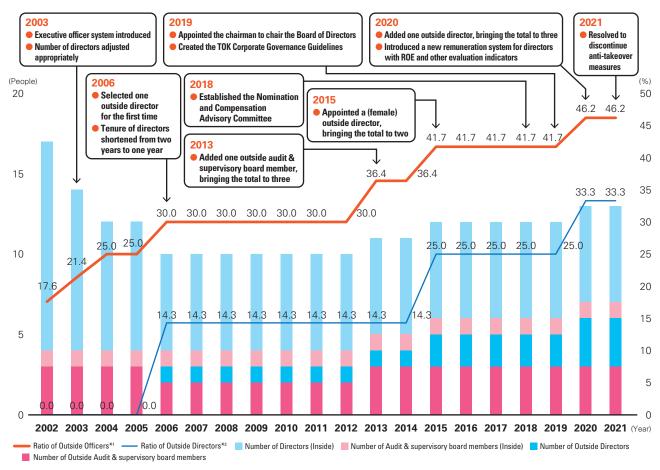
Teruki Umezaki Outside Audit & Supervisory **Board Member** 



## Corporate Governance

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

#### **TOK's Path to Stronger Corporate Governance**



<sup>\*1</sup> Ratio of Outside Officers = (Number of Outside Directors + Number of Outside Audit & Supervisory Board Members) / (Number of Directors + Number of Audit & Supervisory Board Member)

#### **Basic Concept**

We have had a management vision of aiming to become "The e-Material Global Company" contributing to a sustainable future through chemistry under our management principles since the foundation ("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"). We believe that realizing this will lead to benefits shared by shareholders and all other stakeholders and improve corporate value.

We strive to realize the management vision, placing enhancement of corporate governance as one of the most important issues. That is to ensure transparency and solidness of the management and efficiency by expediting decision-making process.

One of TOK's material issues and company-wide strategies in the TOK Medium-Term Plan 2021 is improving corporate governance. The Company created and published the TOK Corporate Governance Guidelines in April 2019 as a compilation of its basic policies and approaches to continuously improve corporate governance.

<sup>→</sup> TOK Corporate Governance Guidelines https://www.tok.co.jp/content/download/4719/77678/file/gov\_guidline0403.pdf (in Japanese)

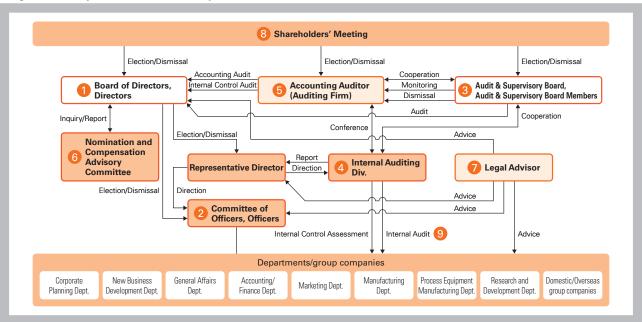


<sup>\*2</sup> Ratio of Outside Directors = Number of Outside Directors / Number of Directors

#### Type of System

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

#### Diagram of Corporate Governance System (As of March 30, 2021)



#### Directors/Board of Directors Diagram 1

To rapidly respond to changes in the operating environment and to clarify the management responsibility of directors in each accounting period, the tenure of directors has been shortened from two years to one year since June 2006. To increase transparency in the Board of Directors and to strengthen its oversight function, it was decided in June 2006 to appoint one outside director who has independence. The number of outside directors was increased by one in June 2015 and one in March 2020, leading to three independent outside directors at present. As a result, outside directors take up one-third of the nine directors in total.

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

As of March 30, 2021, the Board of Directors is chaired by Director and President Noriaki Taneichi, and consists of nine directors (three of whom are outside directors). In principle, the Board of Directors meets once a month on a regular basis and holds extraordinary meetings as required. The meetings are held to decide important matters of business execution with the goal of supervising the business duties executed by the representative director and directors.

The number of directors on the Board of Directors is set to not exceed 10 directors in the Company's Articles of Incorporation. The articles also stipulate that resolutions for the election of directors must be approved by a non-cumulative

majority vote at a General Meeting of Shareholders with a third or more of the shareholders in attendance.



#### Assessment of the Effectiveness of the Board of Directors

Our directors and audit & supervisory board members conduct an assessment and discuss at meetings of the Board of Directors using an anonymous self-evaluation questionnaire of the composition of the Board of Directors, the effectiveness of the Board of Directors, information related to the Board of Directors, the decision-making process, and external communications. This offers an analysis and assessment of the effectiveness of the Board of Directors as a whole.

(Conducted evaluation of the Board of Directors for FY2019/12 and made improvements on identified issues) Standards for the preparation and operation of materials were established concerning the issues identified in the previous evaluation such as 1) clarification of agenda items, 2) deepening discussion on company-wide managerial requirements, and 3) further enhancement of training. Improvement was also made to review the training details and promote related discussion. (Revised the content of the questionnaire for the Board of Directors evaluation for FY2020/12)

In this sixth session of self-evaluation, questions were included concerning the promotion of DX and during-/post-COVID-19 era, which were identified as requirements and social issues in the previous evaluation. The questionnaire was also reviewed by including continuous questions that required descriptive responses concerning company-wide managerial requirements.

Time of evaluation	December 2020 (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	<ul> <li>○ Having a balanced composition of inside directors, in terms of experience and track record with thorough understanding of each field</li> <li>○ Maintaining diversity by incorporating outside directors with different backgrounds, knowledge, and expertise</li> <li>○ The share of independent outside directors has been increased to one-third</li> <li>○ The size of the Board of Directors, frequency of meetings, matters discussed, and time spent on discussions are all appropriate</li> <li>○ In an atmosphere of frank and open discussions, rapid decision-making has done well having the outside directors and outside audit &amp; supervisory board members with high levels of transparency</li> <li>○ Generally good self-improvement and in-house check-and-balance functions</li> <li>▲ There should be deeper discussions about mediumto long-term management strategies toward the resolution of sustainability requirements regarding business domains, risk management, appointment of human resources, and utilization of IT</li> <li>▲ Preliminary briefing and reporting systems should be improved for important matters</li> </ul>			

Measures to be implemented/matters to be examined based on the evaluation results

- 1 Deepening discussions on company-wide managerial requirements
- 2 Preliminary briefings to outside directors and audit & supervisory board members concerning important agenda items
- 3 Further enhancing communication among directors and audit & supervisory board members
- 4 Review of directors and audit & supervisory board
- 5 Establishing a mechanism to facilitate discussion and providing preliminary briefing sessions for outside directors and audit & supervisory board members



#### Review of Decision-Making Authority of the Board of Directors

Within the context of strengthening the functions of the Board of Directors and changes in the business environment, the decision-making authority of the Board of Directors was reviewed in April 2019, such as delegating decision-making authority to the Committee of Officers. We also revised the regulations of the Board of Directors, the regulations of the Committee of Officers, the Specific Authority by Position, and the Duty and Authority regulations. The decision-making authority of subsidiaries in Japan and overseas was also revised in FY 2020/12.



#### Establishment of Meetings of Outside Directors and Audit & Supervisory **Board Members**

TOK has established meetings of outside directors and audit & supervisory board members with the participation of all outside directors and all outside audit & supervisory board members. They are held with the same frequency as meetings of the Board of Directors. The standing audit & supervisory board members also attends the meetings.

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

- Exchange of opinions on themes to be taken up at the next meeting of the Board of Directors, as well as on the operation and proceedings of the said meetings of the Board of Directors
- Commentary on cutting-edge technological matters and other measures, as well as reporting circumstances inside and outside the Company in a timely manner. In this way, the meetings aim 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 Board of Directors' functions in management decision-making and supervision, TOK has the Committee of Officers made up of all officers to reinforce its business execution capabilities. The committee members include the chief executive officer, the chief operating officer, senior executive officers, executive officers, and officers, allowing for their business responsibilities, capabilities, and other considerations.

As of March 30, 2021, the Committee of Officers was chaired by President Noriaki Taneichi and comprised 13 officers, including six officers also serving as directors. In principle, the Committee of Officers meets once a month on a regular basis and holds extraordinary meetings as required. The meetings are held to share instructions and orders resolved by the Board of Directors and information among the officers, and with the goal of planning management strategies and then deliberating and approving certain important decisions that are not subject to a Board of Directors resolution.



#### Audit & Supervisory Board Members and Audit & Supervisory Board (Diagram 3)

As of March 30, 2021, TOK has four audit & supervisory board members, including three outside audit & supervisory board members. To receive reports from audit & supervisory board members regarding important audit-related matters, to discuss the matters, and/or to make resolutions, the Audit & Supervisory Board meets once a month on a regular basis and holds extraordinary meetings as required. Audit & supervisory board members comply with the Audit Standards (Audit & Supervisory Board Members Auditing Regulations) established by the Audit & Supervisory Board and participate in meetings of the Board of Directors in accordance with the audit policy and the division of duties. They also receive reports from directors and others on the execution of duties, and require explanation when necessary, thereby auditing the execution of duties by the directors. The audit & supervisory board members receive reports from the accounting auditor (auditing firm) on the execution of duties concerning accounting matters, and require explanation when necessary, thereby verifying the validity of audit methods and results

To improve the effectiveness of corporate audits, and to ensure smooth execution of audit duties, one person is assigned to assist the duties of the audit & supervisory board members 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 6

The accounting auditor undertakes accounting audit of TOK from a fair and independent standpoint. The accounting audit of TOK for FY 2020/12 was executed by two certified public accountants: Mr. Hiroki Kitagata and Mr. Yohei Masuda, both of whom are 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 eight 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 2020/12 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): ¥58 million



#### Nomination and Compensation Advisory Committee (Diagram 6)

TOK established the Nomination and Compensation Advisory Committee, 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 85–86

In the process of determining remuneration amounts for directors in FY 2020/12, the Nomination and Compensation Advisory Committee formulated the remuneration table for relevant directors, proposed remuneration amount for each director, and proposed remuneration amount for each outside director, referring 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 Board of Directors meeting.

As of March 30, 2021, the majority 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, Kunio Mizuki, a director, and Noriko Sekiguchi and Kazuo Ichiyanagi, who are outside directors.



#### Legal Advisers Diagram 2



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



#### Efforts to Invigorate the Shareholders' Meeting and Facilitate Smooth Exercise of Voting Rights (Diagram (8))

To facilitate the exercise of voting rights by shareholders, we hold our General Meeting of Shareholders in March, when most other Japanese companies' shareholder meetings are not hosted, set a period for reviewing the resolutions for approval by the meeting that is longer than the number of days required by law, and publish 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. It is also sent out early (21 days [three weeks] before the day of the meeting. Shareholders who cannot attend the General Meeting of Shareholders are able to exercise their 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 better understanding by institutional investors overseas. We also describe the reported matters using narrated video footage to promote understanding by shareholders who attended the General Meeting of Shareholders, and upload the Notice of Convocation, Notice of Resolution, and Results of the Exercise of Voting Rights to the General Meeting of Shareholders for disclosure, each of which is in Japanese and English, on the Company website.

## Cooperation between the Audit & Supervisory Board Members, Internal Auditing Division and Accounting Auditor

#### Internal Audit and Corporate Audit Diagram O [Cooperation between the audit & supervisory board members and accounting auditor]

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

[Mutual coordination among audits by outside audit & supervisory board members, internal audits, audit & supervisory board members audits, and accounting audits, and their relationship with the internal control department] To enable outside audit & supervisory board members to audit the directors' performance of duties, they attend the meetings of the Board of Directors. They also receive internal audit reports from the Internal Auditing Division, reports on the results of audits conducted by the standing audit & supervisory board member after attending important meetings (such as the executive officers meeting and the sales meeting), and audits performed by viewing and surveying important decision-making documents (such as requests for approval), and audit reports from the accounting auditor. Moreover, information and opinions are exchanged with the Internal Auditing Division, the standing audit & supervisory board member, and the accounting auditor on a periodic basis. In addition, the outside audit & supervisory board members receive reports as appropriate from the Internal Auditing Division regarding its evaluation of the effectiveness of internal controls over financial reporting and from the accounting auditor regarding its opinion on the internal control audit.

Aiming for Sustainability Our Value Creation Long-Term Strategy Our Foundation Data Section

#### **Election of Outside Directors and Outside Audit & Supervisory Board Members**

The Company has nine directors, three of whom are outside directors, or one-third of them. Similarly, the Company has four audit & supervisory board members of whom three are outside audit & supervisory board members. The Company has established the following criteria and policies regarding independence in the election of outside directors and outside audit & supervisory board member.



#### 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/entity for which the Group is a major client (Note 1) or who executes the business of such a person/entity.
- c. A major customer of the Group (Note 2) or a person who executes the business of such customer.
- d. A major lender of the Group (Note 3) or a person who executes the business of such lender.
- e. A person who, apart from receiving officer compensation from the Group, belongs to a consulting, accounting, or legal firm (corporate entity, cooperative, or other such group) receiving large amounts of cash or other assets (Note 4) from the Group.
- f. A person to whom the above b. through e. applied in the previous three years.
- g. A person who in the past three years has received donations from the Group averaging more than ¥3 million per year.
- h. Major shareholders of the Group (Note 5) or a person who executes the business of such shareholder.
- i. A person who executes the business of a company with a mutual relationship between outside officers. (Note 6)
- j. A person whose spouse or a relative within the second degree of kinship comes under any one of above items a. through i.

- k. A person who has served a total of more than eight years as an outside officer.
- I. Regardless of the above provisions, a person for whom it is deemed likely that conflicts of interest will arise with the Company.

#### Notes

- 1. A person/entity for which the Group is a major client means a supplier that provides the Group with products or services, the amount of which transactions averaged more than ¥10.0 million per year over the past three years and represented more than 2% of the supplier's consolidated annual revenue in the most recent fiscal year.
- 2. A major customer of the Group means a customer to which the Group provides products and services, the amount of which transactions averaged more than ¥10.0 million per year over the past three years and represented more than 2% of the Group's consolidated annual revenue in the most recent fiscal year.
- 3. A major lender of the Group means a financial institution that has lent an amount equivalent to more than 2% of the Group's consolidated total assets.
- 4. A large sum of cash or other assets means assets that averaged more than ¥10.0 million per year over the past three years and which in the most recent fiscal year had an economic value in excess of 2% of 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 per year over the past three years and which in the most recent fiscal year had an economic value in excess of 2% of the said organization's consolidated annual revenue).
- 5. Major shareholder means a shareholder with a ratio of voting rights of more than 10%.
- 6. A mutual relationship between outside officers means a relationship in which a person who executes the business of the Group is also an outside officer at another company, and in which a person who executes the business of 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 further development through the measures in the Medium-Term Plan. Thus, Taneichi can be expected to continue contributing to the management of the Company.
<b>Harutoshi Sato</b> Director	Sato has held important positions in the Group, serving in such roles as representative at the U.S. subsidiary, person responsible for quality assurance, and person responsible for product development before assuming the position of department manager, Research and Development Department. Owing to this experience, he is well acquainted with the Company's business characteristics and customers and consequently possesses necessary and sufficient knowledge of such matters as important decision-making by the Board of Directors and supervision of duties executed by other directors. Thus, Sato can be expected to continue contributing to the management of the Company.
<b>Yoichi Shibamura</b> Director	Shibamura possesses not only rich experience in financial institutions but also knowledge of management, particularly accounting and finance, having served first as the general manager, Finance Division, after joining the Company and then department manager, Accounting and Finance Department, and contributed to developing the finance strategy, including capital policy. He also has the necessary and sufficient knowledge of such matters as important decision-making by the Board of Directors and supervision of duties executed by other directors. Thus, Shibamura can be expected to contribute to the management of the Company.
Kunio Mizuki Director Nomination and Compensation Advisory Committee Member	Mizuki, since assuming the position of department manager of the General Affairs Department after serving as the general manager of the General Affairs Division, has been working to strengthen corporate governance, including development of the information management system, the risk management system, and the compliance system, as well as improvement of investor relations. Furthermore, through his experience with the business operations in his charge, he possesses necessary and sufficient knowledge of such matters as important decision-making by the Board of Directors and supervision of duties executed by other directors. Thus, Mizuki can be expected to continue contributing to the management of the Company.
<b>Yuichi Murakami</b> Director	Murakami has held important positions in the Group, serving in such roles as representative at the U.S. subsidiary, representative director and president of the South Korean subsidiary, and department manager of the Manufacturing Department. 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 decision-making by the Board of Directors and supervision of duties executed by other directors. Thus, Murakami can be expected to contribute to the management of the Company.
<b>Yusuke Narumi</b> Director	Narumi has held important positions in the Group, serving in such roles as representative at the China office, person responsible for the sales and marketing of key products, before assuming the position of department manager, New Business Development Department. Owing to this experience, he is well acquainted with the Company's existing and new business fields, and consequently possesses necessary and sufficient knowledge of such matters for important decision-making by the Board of Directors and the supervision of duties executed by other directors. Thus, Narumi 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 was elected as outsider director on the expectation that he would continue supervision of 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, as well as his contribution to enhancement of the corporate governance with his advice on the general management of the Company.
Noriko Sekiguchi Nomination and Compensation Advisory Committee Member	Sekiguchi was elected as outside director on the expectation that she would continue supervision of 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 in several companies, and thorough understanding of internal control in her capacity as an external committee member for fraudulent accounting conducted in multiple listed companies. Thus, Sekiguchi can be expected to contribute to enhancement of the corporate governance with her advice on the general management of the Company.
Kazuo Ichiyanagi Nomination and Compensation Advisory Committee Member	Ichiyanagi was elected as outside director on the expectation that he would continue supervision of 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, as well as his contribution to enhancement of the corporate governance with his advice on the general management of the Company.

#### Reasons for the Election of Outside Audit & Supervisory Board Members

Name	Reasons for election and Independence
Nobuyuki Takeuchi	Takeuchi was elected to contribute to auditing TOK's management from an objective and neutral point of view based on his experience as audit & supervisory board member of another company, as well as his abundant experience and considerable insight as an executive of financial institutions. Takeuchi was previously representative director and chairman of Mitsubishi UFJ Real Estate Services Co., Ltd., and is still serving there as an advisor as of December 31, 2020. There is a business relationship between Mitsubishi UFJ Real Estate Services Co., Ltd., and the Company, but it is general in nature. Moreover, Takeuchi was once a business executive with Mitsubishi UFJ Trust and Banking Corporation, which owns stock in TOK and conducts cash deposit, stock administration agent, and other transactions with the Company under routine and standard business conditions. However, these capital and business relationships were deemed not to affect Takeuchi's independence as an outside audit & supervisory board member of TOK.
Tadaharu Uehara	Uehara was elected to contribute to auditing TOK's management from a globally objective and neutral point of view based on his abundant experience at financial institutions, the Ministry of Foreign Affairs, and other organizations, as well as considerable insight as a management executive. Uehara was once a business executive with Tokio Marine & Nichido Fire Insurance Co., Ltd., which owns stock in TOK and conducts insurance transactions with the Company under routine and standard business conditions. However, these capital and business relationships were deemed not to affect Uehara's independence as an outside audit & supervisory board member of TOK.
Teruki Umezaki	Umezaki was elected to contribute to auditing TOK's management from an objective and neutral point of view based on his abundant experience and considerable insight as an executive of financial institutions. Umezaki serves as a senior executive officer at Meiji Yasuda Life Insurance Company, which owns stock in TOK and conducts insurance transactions with the Company under routine and standard business conditions. However, these capital and business relationships were deemed not to affect Umezaki's independence as an outside audit & supervisory board members of TOK.

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

Name	Attendance record and activities at Board of Directors and Audit & Supervisory Board Members meetings
<b>Hiroshi Kurimoto</b> Outside Director	Kurimoto attended all 14 of the 14 meetings of the Board of Directors (attendance rate 100%) held during the fiscal year ended December 2020. He voiced timely opinions as required when discussing resolutions based on his broad experience and abundant expertise as a management executive of listed companies. Kurimoto attended all of the five Nomination and Compensation Advisory Committee meetings (attendance rate 100%), mainly discussing successor planning, the operation check of the revised remuneration system for directors, changes in managing executive appointments, the selection of executive fellows, and the selection of new director candidates and new independent audit & supervisory board member 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 13 out of the 14 meetings of the Board of Directors (attendance rate 93%) held during the fiscal year ended December 2020. 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. Sekiguchi also attended all of the five Nomination and Compensation Advisory Committee meetings (attendance rate 100%), mainly discussing successor planning, the operation check of the revised remuneration system for directors, changes in managing executive appointments, the selection of executive fellows, and the selection of new director candidates and new independent audit & supervisory board member 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 of the 11 meetings of the Board of Directors (attendance rate 100%) held since his appointment on March 27, 2020. He voiced timely opinions as required when discussing resolutions based on his broad experience and abundant expertise as a management executive of listed companies. Ichiyanagi also attended all of the five Nomination and Compensation Advisory Committee meetings (attendance rate 100%), mainly discussing successor planning, the operation check of the revised remuneration system for directors, changes in managing executive appointments, the selection of executive fellows, and the selection of new director candidates and new independent audit & supervisory board member candidates. He appropriately fulfilled his responsibilities as a member of the Nomination and Compensation Advisory Committee, making appropriate suggestions.
Kazumasa Fukada Outside Audit & Supervisory Board Member	Fukada attended all of the 14 meetings of the Board of Directors (attendance rate 100%) and all of the 14 meetings of the Audit & Supervisory Board (attendance rate 100%) held during the fiscal year ended December 2020. He voiced and raised timely opinions and questions as required at the meetings based on his broad experience including at a financial institution, and his abundant expertise as a business executive.
Koichiro Takahashi Outside Audit & Supervisory Board Member	Takahashi attended all of the 14 meetings of the Board of Directors (attendance rate 100%) and all of the 14 meetings of the Audit & Supervisory Board (attendance rate 100%) held during the fiscal year ended December 2020. He voiced and raised timely opinions and questions as required at the meetings based on his experience as an audit & supervisory board member of another company, as well as abundant experience and considerable insight as a business executive, including at financial institutions.
Nobuyuki Takeuchi Outside Audit & Supervisory Board Member	Takeuchi attended all of the 14 meetings of the Board of Directors (attendance rate 100%) and all of the 14 meetings of the Audit & Supervisory Board (attendance rate 100%) held during the fiscal year ended December 2020. He voiced and raised timely opinions and questions as required at the meetings based on his experience as an audit & supervisory board member of another company, as well as abundant experience and considerable insight as a business executive, including at financial institutions.

#### The Major Decisions and Agenda of Board of Director Meetings in the Fiscal Year Ended December 2020

- ◆ Implementation of measures against COVID-19 and related support (donation)
- External environmental risks, management vision, overarching aspiration (qualitative/quantitative), and management strategies under TOK Vision 2030
- Enhancement of development equipment, manufacturing equipment, and storage equipment for cutting-edge semiconductor materials (Japan, South Korea, etc.)
- ◆ Postponement of the introduction of the new personnel system
- ◆ Addition of import management function to GMS
- ◆ Revision of the remuneration system for directors and executive officers
- ◆ Future structure of the TOK Group in China (resolution on the direction)
- ◆ Formulation of the CSR Policy
- ◆ Revenue of the Basic Policy on the Establishment of Internal Control System
- Continued possession and selling of cross-shareholdings

### **Remuneration for Directors and Audit & Supervisory Board Members**

## [Basic Policy on Determination of Remuneration for Directors (Excluding Outside 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 has held deliberations to examine the preferred remuneration system for the Company, giving consideration to the outlook for the management environment and the approach to corporate governance in Japan based on which the Company's remuneration policy for directors (excluding outside directors) has been determined as follows.

#### [Basic Principle of Remuneration]

Remuneration for directors (excluding outside directors) is determined based on the following basic concepts.

#### Aim to support the Company's sustainable value creation

- Set the composition and level of remuneration so as to provide healthy motivation to generate sustainable growth and corporate value in the medium to long term
- · Clarify responsibility for each fiscal year's results by fairly and impartially reflecting quantitative evaluations based on financial performance and evaluation of efforts to address issues taking into consideration medium- to long-term strategy in annual 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 payment 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 and, based on verification through comparisons with corporate groups of the same size using objective data from outside, also taking into account recent public opinion.
- Proactively disclose information necessary for stakeholders including shareholders, to monitor the relations between remuneration and corporate value

#### [Remuneration Structure]

The Company's remuneration structure for directors (excluding outside directors) consists of basic remuneration, which is a fixed salary, and performance-linked remuneration. Performance-linked remuneration consists of an annual 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.



Headquarters

#### **Outline of Remuneration Components**

Type of remuneration	Objective/summary
Basic remuneration	Fixed cash salary based on position
Annual bonus	Performance-linked cash remuneration to evaluate steady achievement of targets for each fiscal year  To clarify responsibility for results in each fiscal year, the payment rate is determined in a range from 0% to 200% of the standard amount, in proportion to the degree of achievement of the targets for consolidated operating 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 decided within the range of 0% to 200% of the standard amount (the "payment rate"), according to the achievement rate for numerical targets such as earnings during the performance evaluation period.*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 remunera- tion system	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  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 their position before the restriction period expires by reason of expiration of their 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 & supervisory board member, employee or any other equivalent position stipulated in advance by the Board of Directors of the Company.

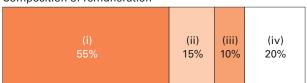
<sup>\*1</sup> The initial performance evaluation period for the performance-linked share-based remuneration system is the two-year period from the fiscal year ending December 31, 2020 through the fiscal year ending December 31, 2021. Aiming to sustainably create corporate value, the Company will use the ROE target, which is a strategic indicator in the Medium-Term Plan, during the initial performance period.

#### [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 corporate value in the medium -to long term. The ratio of basic remuneration to the annual 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.

The indicators used for specific calculation of performancelinked remuneration are decided by a resolution adopted by the Company's Board of Directors after deliberation by the Nomination and Compensation Advisory Committee.

#### Composition of remuneration



- (i) Basic remuneration (ii) Annual bonus (standard amount)
- (iii) Performance-linked share-based remuneration (standard amount)
- (iv) Restricted share-based remuneration (standard amount)

#### [Level of Remuneration]

The level of remuneration for the Company's directors (excluding outside directors) is appropriately set according to each position in order to provide healthy incentives to excellent personnel who generate sustainable growth and corporate value in the medium to long term. The level is specified by setting benchmarks upon a selection of comparable corporate groups and considering 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 objectivity and transparency in the process of determination of the remuneration amounts for eligible directors, the Nomination and Compensation Advisory Committee formulates standard amounts for the respective remuneration components ("remuneration table"), the proposed remuneration amount for each eligible director, and the Board of Directors deliberates and resolves whether the president and chief executive officer may determine the remuneration table and the remuneration amount for each eligible director based on the propositions above. The president and chief executive officer then determines the remuneration table and the remuneration amount for each eligible director within the range approved at the General Meeting of Shareholders.

<sup>\*2</sup> Determined by the Board of Directors in accordance with the rank of each eligible director

#### Remuneration Amount for Directors (Excluding Outside Directors)

The remuneration amounts for directors (excluding outside directors) are 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 ¥400 million per year
Annual bonus	Within ¥220 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 58,000 shares multiplied by the stock price at the time of 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 ¥150 million per year.

#### [Basic Policy on Determination of Remuneration for Outside Directors]

Remuneration for outside directors, who serve as oversight function from an independent standpoint from business execution, consists only of basic remuneration of a set amount, which is determined taking into consideration the result of comparison with corporate groups of the same size. The Nomination and Compensation Advisory Committee formulates

the proposed remuneration amount for each outside director, and the Board of Directors deliberates and resolves whether the president and chief executive officer may determine the remuneration amount for each outside director based on the propositions above. The president and chief executive officer then determines the remuneration amount for each outside director within the range (up to ¥50 million per year) approved at the General Meeting of Shareholders.

#### [Basic Policy on Determination of Remuneration for Audit & Supervisory Board Members]

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

Total Remuneration Paid to Directors and Audit & Supervisory Board Member (Fiscal Year Ended December 31, 2020)

		Total of various types of remuneration (Millions of yen)					
Position	Total remuneration (Millions of yen)	Annual honus		Restricted share-based remuneration system	Stock options	Number of eligible personnel	
Directors (Excluding outside directors)	523	274	128	37	69	13	8
Audit & supervisory board members (Excluding outside audit & supervisory board members)	23	23	_	_	_	_	2
Outside directors and audit & supervisory board members	56	56	_	_	_	_	6

Note: The amounts for total remuneration and total of various types of remuneration for directors (excluding outside directors) include the portion paid as salary for officer duties undertaken by directors who also serve as officers.

#### Remuneration Amounts for Directors and Audit & Supervisory Board Members (FY 2020/12)

nemaneration Amounts for Directors and Addit & Supervisory Board Members (F1 2020/12)									
	Total			Total of various types of remuneration (Millions of yen)					
Name	remuneration (Millions of yen)	Position	Company	Basic remuneration	Annual bonus	Performance- linked, share-based remuneration	Restricted share-based remuneration system	Stock options	
Ikuo Akutsu	134	Director	Submitting company	70	32	9	17	3	
Noriaki Taneichi	123	Director	Submitting company	64	30	8	16	3	

Note: The table only includes officers who receive remuneration of \$100 million 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 increasing presence, and the establishment of compliance systems. In this section, an overview is provided on activities related to group management system, compliance system, risk management system, and the improvement of information management.

→ For further details on internal control, please see the Corporate Governance Report at https://www.tok.co.jp/content/download/6608/98796/file/210611.pdf (in Japanese)





#### Group Management System (GMS)

As the TOK Group continues to expand within and outside of Japan, a unified Group management system is needed. We have therefore been focusing on initiatives under the Group Management System (GMS), which manages various fields such as compliance and risk management across the entire Group. By promoting these initiatives, we will tie the Group's value creation to the steady enhancement of sustainable corporate value.

#### [Organization Structure for Promoting GMS]

TOK has established the GMS Committee to ensure that GMS properly functions. The Committee has divided GMS management functions into 15 fields for Group management. It continuously works in a PDCA cycle, deliberating on action plans and activity reports for each field and making adjustments between relevant organizations to resolve issues and so forth.

We will continue to deepen dialog with overseas subsidiaries, maintain compatibility between GMS management functions, integrate with CSR promotion activities, and strengthen the functions of Headquarters, which controls these initiatives. In this way, the TOK Group will make a united effort to promote GMS activities.

#### GMS Committee Diagram



<sup>\*</sup> Chaired by the Department Manager of the Corporate Planning Department

#### 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	Safe export management	SCM					
Research and development	Import management	GMS (as the basis)						

#### [GMS Initiatives]

To achieve enhancement of sustainable corporate value, the entire Group needs to be optimized. Therefore, we manage progress on targets for each management function and subsidiary, investigate issues and identify points for improvement (self-evaluation), and provide continuous support and monitoring of these.

In 2020, we conducted a self-evaluation of the development and operation of GMS for two GMS management functions and two subsidiaries. We also revised our rules and processes, creating and revising over 70 new documents. We also made progress with a 98% resolution rate on key issues.



#### Compliance

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

#### [Compliance Promotion System and Standards of Conduct]

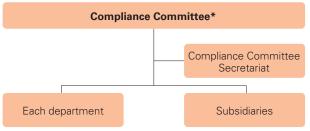
Compliance promotion activities are being promoted with the participation of all employees, led by the Compliance Committee, which consists of TOK officers and undertakes awareness raising and dissemination activities at Group companies with the support of the Legal Division (Compliance Committee Secretariat). To prevent the violation 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 & supervisory board member and the Internal Auditing Division as the internal audit department attend the Compliance Committee to share key points in audit, thereby improving the quality and effectiveness of audit.

In addition, the Ethics and Anti-Corruption Policy was

established as a subordinate policy under the CSR Policy, aiming to improve compliance awareness in 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 its officers and employees.

#### Compliance Committee Diagram



\* Chaired by President and Chief Executive Officer

#### Initiatives for ensuring compliance with laws and regulations

To prevent compliance-related risks from emerging, it is essential that all officers and employees absorb compliance into business practices. To achieve this, the Company is working to construct a system that can respond rapidly to revisions to laws and regulations in each country. It 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 2020/12, the revision of the group compliance rules was promoted based on activities in the previous fiscal year (listing of laws applicable to business, monitoring for amendments in laws at an increased frequency, and interview results concerning the legal management and information collection). The major

revised points are the requirement for the establishment of legal management structure at each site in Japan and overseas, and the increased frequency of monitoring on legal compliance status from twice to four times a year. These changes have enabled the establishment of a process for timely information collection on changing laws and incorporating the information into practice. To help better understanding of compliance, e-learning on overall compliance was implemented for all employees in Japan, through which the changing concepts of compliance were shared, and the examples of violation in society were presented.

#### 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 the three channels that respectively report to the Compliance Committee Secretariat (internal), the standing audit & supervisory board member (internal), and the legal advisor (external). Whistleblowing and consultation may be made by phone, in writing, in person, or by other means, and an anonymous whistleblowing is acceptable. It is clearly stated that a whistleblower is protected from dismissal or any other disadvantageous treatment because of whistleblowing, unless it is conducted for an illegitimate purpose. In FY 2020/12, three reports were received concerning labor and workplace environment. After identifying the specific facts and assessing the objective status, instructions and training for correction were provided to the relevant individuals. To establish a more reassuring environment for whistleblowing, we will further enhance the system and disseminate it to all employees, officers and directors.



#### Risk Management

The Group's perpetual development depends on being able to precisely deal with various risks that have major impacts on business. Through communications with stakeholders, we strive to identify and prevent a variety of potential risks. If a risk emerges, we will take the necessary measures to minimize the negative impacts 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 various risks, we have established the Risk Management Rules and the *Risk Management Manual*. Based on the *Manual*, we implement 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 President and Chief Executive Officer

#### Initiatives to strengthen risk management system

Reaffirming the importance of contingency management after the Great East Japan Earthquake, the Group has taken steps to address various 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 deal with a broader range of risks in accordance with the Company's global expansion.

In FY 2020/12, 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 continuous production). The COVID-19 Response Center was also established, headed by the president, to continue the production and supply of products while assuring the safety of employees. We will continue striving for the prevention of infection spread, while taking risk reduction measures toward the long-term development of the TOK Group (see page 93).

#### Strengthened crisis management

The Group believes 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 operation of this system and to raise awareness among employees. In the fiscal year ended December 31, 2020, three drills were implemented out of the four planned drills, and the response rate was maintained at a high level.

#### 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 reality by running desktop drills that simulate real-world damage that may interrupt order taking and placement, product shipment, and essential utilities. In 2020, a survey was conducted on the transportation means of suppliers, and alternative means for material transportation were secured in the event of disaster. This enabled TOK to receive supplies without failure when a torrential downpour occurred in Kyushu in July, interrupting the operation of a railroad company that transported raw materials. We also formulated flood prevention plans for sites with the high risk of flooding, and preventive measures have been taken at some sites including the installation of water bars (see page 100). In FY 2021/12, we will continue to expand flood prevention equipment, while formulating BCP scenarios in the event of flooding.

#### Improving Information Management

The environment surrounding information management is drastically changing. Leaks of information assets could greatly damage the competitive advantages of the TOK Group and threaten its existence as an ongoing concern. For this reason, reinforcing the information management system is a priority issue in terms of preserving corporate value and fulfilling our social responsibility. From this standpoint, we are redoubling our efforts in ensuring information security by establishing 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, 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 has established an Information Management Committee and will continue to build, maintain, and promote management structure to properly govern an information asset 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 held by the TOK Group.

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 when an information security incident occurs and implement measures to prevent its recurrence.

#### **Audits and continuous improvements**

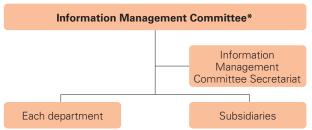
The TOK Group will implement regular audits and make continuous improvements as a part of its management of information assets.

#### [Maintain, Manage, and Improve Information Management Systems]

The TOK Group has created the TOK Information Management Committee, headed by the manager of the General Affairs Department. The Committee determines policies and measures related to information security and personal information protection. The overseas subsidiaries have 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 across the Group. During the fiscal year ended December 31, 2020, the TOK Group worked to promote paperless practice, while utilizing and protecting information assets. The Company worked to maintain and instill information management standards throughout the organization, including the preparation of the Files and Folders Classification Guidebook, the review of information security measures and information management rules in response to changing work styles (when working outside the office or using a web conferencing system), and the implementation of internal training on risk management.

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

#### Information Management Committee Diagram



\* Chaired by the Department Manager, General Affairs Department

#### Strengthening information management through each responsible division

The TOK Information Management Committee has identified key topics based on information management policy and put the respective responsible divisions in charge in a bid to strengthen information management.

#### Key topics for information management

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

#### Risk management

#### To achieve stable supply in the COVID-19 pandemic —

While the TOK Group continues to expand its activities in Japan and overseas, supported by the strong semiconductor demand, the COVID-19 has yet to subside with the spread of variants. We will continue to implement thorough measures to prevent both getting infected and infecting others inside and outside the Company, thereby protecting the safety of employees, customers, and business partners, and playing our role in the supply chain.

#### Measures and purposes

#### Safety of employees

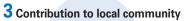
- ◆ Implement thorough infection prevention measures at each business site
- Implement work from home
- Restrict traveling in Japan and overseas



Temperature taking and hand antisepsis are emented for all employees and visit

#### 2 Safety of external stakeholders

- Use online operations whenever possible (business negotiations, coordination, audits, etc.)
- ◆ On-site collaboration through non-contact operations



- Contribute monetary donations
- ◆ Donate relief goods



Web conferencing system is introduced throughout



Received letters of appreciation from Kanagawa Prefecture and



Hideo Ohhashi

Head of Risk Management Secretariat

#### To fulfill the supplier responsibility while assuring the safety of employees

The business of the TOK Group is to supply chemicals and manufacturing equipment to support the production of semiconductors that are indispensable for a sustainable future. Therefore, the Company is required to reduce infection risks during the COVID-19 pandemic, while minimizing the impact on business activities to sustain corporate activities. To establish and maintain an environment where all employees can feel safe and concentrate on their duties, the Company will continue to promote infection prevention measures with cooperation from internal and external stakeholders.

## 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, it encounters a variety of risk factors that may have a detrimental impact on its financial conditions and management performance. The risks described below are solely those that the Group assesses as most significant as of December 31, 2020, and are not exhaustive of all risks associated with the TOK Group.

Theme	Risk	Countermeasure	Opportunities
Industrial and economic change	The electronics market is subject to major cyclical changes in demand; in particular, materials and devices for semiconductors and displays are extremely 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.	<ul> <li>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, which has large fluctuations in demand and price, the logic field which has relatively small fluctuations, and the power device field that has a broad base.</li> <li>→ See pages 30–37 and 56–57</li> <li>The Group will mitigate the impact of demand and price fluctuations for old products and fluctuations in economic conditions by constantly acquiring business in cutting-edge fields.</li> <li>The Group will expand new business in fields</li> </ul>	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.
		such as life science, which has a different demand fluctuation cycle from semiconductors.  → See pages 44–45	
Exchange rate fluctuation	The Group has production and sales sites in North America, Asia, and Europe, and hedges exchange risks by carrying out some of its over- seas transactions in yen and by using forward exchange contracts. However, the Group may be affected if exchange rate fluctuations are greater than forecast.	● 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 46–49  ● The Group receives advice on exchange rate risk hedging from three outside audit & supervisory board members who have backgrounds in finance.	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 its 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 due to 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 30–37 and 58–59  The Group will go beyond simply responding to its 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 58–59	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 Company will use open innovation to acquire a wide range of technological seeds to enable a response to any market that may launch in the future, making a full-scale investment in its resources in line with the launch of new markets.
Intellectual property	● The Group has a diverse portfolio of intellectual property, for which it grants licenses to third parties, also acquiring licenses from third parties when they are necessary or useful. If the Group is unable to safeguard and maintain or acquire these rights as anticipated, it may become a party in a dispute or lawsuit relating 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 such as reducing costs, streamlining operations, and switching 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	Risk	Countermeasure	Opportunities
Product liability	Within the process in which customers use our products, faults may occur that originate in a product defect. The Group has insurance to cover product liability compensation payments, but as 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 in-line support and reduces defects through the trinity of sales, development, and manufacturing, while reducing the risk of faults through thorough understanding of customers' manufacturing lines.  → See pages 30–37 and 52 and 64–67	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	<ul> <li>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 its production activities 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.</li> <li>If COVID-19, influenza or other infectious diseases spread among its employees, the Group may be forced to temporarily suspend its operations.</li> </ul>	<ul> <li>The Group has created a unified BCP.         → See pages 91–92</li> <li>The Risk Management Committee plays a central role in reviewing the risk management system and formulating risk management policy.         → See pages 91–92</li> <li>"Disaster/accident risks" was added as a category in the Risk Management Rules and the Risk Management Manual. The Company identifies risks that may cause serious outcomes, analyzes such risks, and determines, implements, and evaluates actions required, among other activities.         → See pages 91–92</li> <li>The Group has established appropriate management systems for preventing infection and the spread of infection.         → See pages 91–93</li> </ul>	<ul> <li>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.</li> <li>The Group will acquire trust from stakeholders, such as customers, employees, and local communities, over the medium- to long term and increase its brand capabilities.</li> </ul>
Environment	<ul> <li>◆ The Group uses various 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 countermeasuries, and it may have to suspend production activities.</li> <li>◆ 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.</li> </ul>	<ul> <li>The Group has reassessed its production lines and work procedures based on lessons learned from accidents caused by highly corrosive chemical substances.</li></ul>	<ul> <li>By preventing accidents, the Group will maximize its upside potential.</li> <li>The Group will foster greater loyalty among employees by ensuring safety on its manufacturing sites.</li> <li>The Group will maintain and increase social trust in local communities overseas.</li> </ul>
Laws and regulations	● If the Group fails to precisely understand their requirements, or for any reason it is unable to observe the laws and regulations such as approval for business and investment, trade, monopolies, international taxation, the environment, and recycling when they are significantly revised, this may have an impact on the Group's business results.	<ul> <li>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.</li> <li>→ See pages 108</li> </ul>	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 U.S., South Korea, and Taiwan to minimize emergent risks by coordinating between them.  → See pages 21 and 124–125	Reducing the Group's overall environmental risk and natural disaster and accident risk will enable it to continue fulfilling its responsibili- ties as a supplier.
Information leakage	● The Group implements thorough measures to ensure the security of confidential business information, information relating to various other companies, and personal information. However, if some unforeseeable event information leaks outside of the Group, this may damage its reputation within society, and it may have to pay liability payments for the damage caused to a company or an individual whose information was leaked, which could have an impact on the Group's business results.	<ul> <li>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.</li> <li>→ See pages 92–93</li> </ul>	A solid information management system will increase customer trust, helping to expand business opportunities.     The Group's brand capabilities will increase in Japan, the U.S., South Korea, Taiwan, China, and other regions in and outside of Japan where the Group operates.



## Global Environmental Conservation

The scope of reporting on Global Environmental Conservation (pages 96-105) is on Tokyo Ohka Kogyo Co., Ltd., and consolidated subsidiaries in Japan.

**Reduction in Environmental Impact from Corporate Activities** 

#### **Environmental Performance\***

TOK conducts daily quantitative and qualitative evaluations of the effects of its corporate activities on the environment and takes a variety of different initiatives to minimize the impact.

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





	INPUT
Total energy consumed	16,141 kL crude oil equivalent
Electric power	11,038 kL crude oil equivalent
Petroleum (heavy oil)	503 kL crude oil equivalent
City gas	4,507 kL crude oil equivalent
Used water	370,000 m <sup>3</sup>
Chemical substances (Class 1 Designated Chemical Substances under the PRTR Law)	1,113 t

OUTPUT		
CO <sub>2</sub>		31,000 t-CO <sub>2</sub>
S0x*1		0.7 t
BOD*2		0.2 t
General adminis	trative waste	33 t (Recycling rate: 40%)
Industrial waste	General industrial waste	1,900 t (Recycling rate: 38%)
	Specially controlled industrial waste	2,480 t (Recycling rate: 93%)
* January 2020 to December 2020		

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/csr/env-activity/s\_management.html#e-data



#### **Emissions of Greenhouse Gases**

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). TOK will advance the initiatives for the realization of a sustainable society by identifying issues throughout the value chain where corporate activities can have an impact.

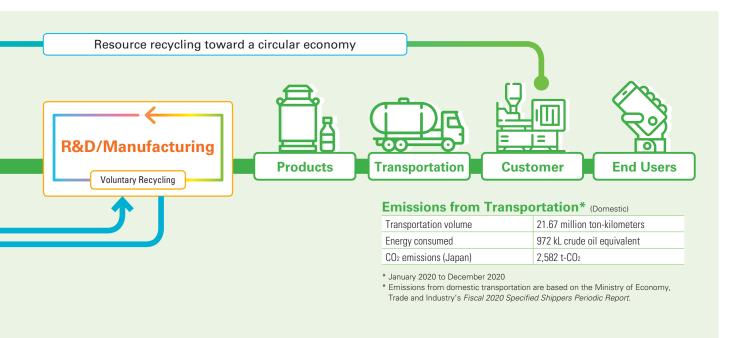
Scope 1	10,313 t-CO₂	Scope 2	20,627 t-CO <sub>2</sub>	
Scope 3 Emissions by Category				
Purchased goods and services	31,297 t-CO <sub>2</sub>	Upstream leased assets	_	
Capital goods	Not applicable	Downstream transportation and distribution	Domestic: 2,582 t-CO <sub>2</sub> Overseas: 3,812 t-CO <sub>2</sub>	
Fuel-and energy-related activities not incl in Scope 1 or 2	uded	Processing of sold products	Not applicable	
Upstream transportation and distribution	Not applicable	Use of sold products	Not applicable	
Waste generated in operations	9,018 t-CO <sub>2</sub>	End-of-life treatment of sold products	Not applicable	
Business travel	397 t-CO <sub>2</sub>	Downstream leased assets	_	
Employee commuting	602 t-CO <sub>2</sub>	Franchises	_	
Employee commuting	00Z L-CO2	Investments	Not applicable	

<sup>\*</sup> January 2020 to December 2020 (Waste generated in operations: April 2020 to March 2021)

<sup>\*1</sup> SOx: Abbreviation for Sulfur Oxides. Produced from the combustion of fossil fuels containing sulfur and are considered the substances that cause acid rain.

<sup>\*2</sup> BOD: Abbreviation for Biochemical Oxygen Demand. Refers to the volume of oxygen required when pollutants in the water (organic substances) are turned into inorganic substances or gases through the action of microorganisms. BOD is a major indicator used when evaluating the degree of contamination of rivers and other bodies of water. A higher value for BOD means that the water is more contaminated.

<sup>\*</sup> Excludes people seconded to other companies.



#### **Environmental Accounting\***

TOK has been using environmental accounting since 2000. In 2020, environmental conservation expenses totaled ¥1,025 million, mainly for the prevention of pollution and the recycling of resources.

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

(Millions of yen)

	Category of the cost	Key initiatives	Investment	Cost
Business	Pollution prevention cost	Air, water, and other pollution prevention equipment and the renewal, operation, maintenance, and management of equipment Installation of flood control facilities	69	74
area cost	Global environmental conservation cost	Energy conservation activities	467	11
	Resource circulation cost	Installation of melting equipment	0	173
Upstream/D	Downstream cost	Green purchasing, collection of used products	0	9
Administrat	ion cost	Approach to environmental management system	104	64
R&D cost		Research and development related to environmental conservation (costs for chemical substance screening)	0	51
Social activ	ity cost	Cleanup activities around the production plants	0	0
Environmen	tal remediation cost	Treatment of soil pollution by the construction of a new building	3	0
Total			643	382

<sup>\*</sup> January 2020 to December 2020

#### **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 are 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 ven)

	Effects	Amount
Revenue	Gain on the sale of recycled products	22
Cost savings	Reduction in disposal costs through a reduction in the volume of waste	103
Total		125

<sup>\*</sup> January 2020 to December 2020

<sup>\*1</sup> Scope of environmental accounting covers production facilities in Japan and distribution centers, excluding the headquarters and marketing offices. The reference used is the Environmental Accounting Guidelines 2005 published by the Ministry of the Environment.

<sup>\*2</sup> Amounts of less than one million ven have been rounded off.

## **Address Climate Change Issues toward Decarbonization**



Key initiatives/Results in 2020





**Energy consumption** per base unit



(year-over-year)



Energy-related CO<sub>2</sub> emissions per base unit

(year-over-year)



**Fuel consumption** in distribution

(vear-over-vear)



#### **Basic Concept**

The TOK Group quantitatively measures the environmental impact throughout the value chain and works to reduce the environmental load with a full understanding of the impact our production activities have on the environment. We aim to achieve sustainable development alongside society through the development of products that conserve resources and energy.

Improve Energy Consumption per Base Unit and CO<sub>2</sub> **Emissions** 

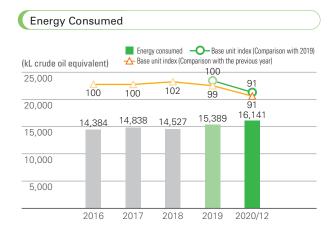
When equipment is introduced or replaced, we endeavor to select models with higher energy efficiency in order to improve the system of each site and optimize the system as a whole.

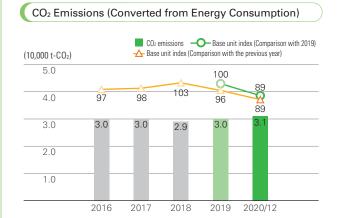
Energy consumption in 2020 increased by 5% year-overyear because the new R&D Building, which was completed at the Sagami Operation Center in 2019, and one more new building, started full-scale operation, while a variety of improvement measures were implemented, including the replacement of air-conditioning equipment and the shift to LED lighting at certain sites, review of air-conditioning temperature settings, and the survey of illuminance and lighting followed by adjustment to optimal illuminance.

Energy consumption per base unit decreased by 9 points year-over-year, reflecting more efficient production at the Koriyama plant, Gotemba plant, and several other plants. Energy-related CO<sub>2</sub> emissions per base unit decreased by 11 points year-over-year owing to increased net sales, coupled with the shift of the total amount of electricity used at the headquarters to renewable energy starting January 2020.

The Company set a new 10-year target in 2020 to reduce energy consumption per base unit and emissions per base unit by 15 points compared with 2019 by 2030, and the Company

has been striving to reach this target.





#### Improve Energy Consumption per Base Unit in Distribution

For the quality and safety management of products, the Company ensures rigorous temperature control during product storage and transportation. The product storage warehouse is single-storied and requires refrigeration and freezing equipment. Product transportation also requires freezer trucks.

TOK endorses the aim of the White Logistics Promotion Movement and is taking steps to realize sustainable logistics, while working with partner logistics companies to improve energy consumption. In 2020, we introduced new vehicles to improve fuel efficiency. We reviewed the efficiency of transportation routes (such as closure of the Ibaraki SP\* among the product storage sites in Japan and distribution starting from neighborhood plants) and kept CO2 emissions at the same level as last year. At present, we are preparing for logistics optimization ranging from the purchase of raw materials to the distribution of products based on the monitoring of warehouse occupancy at each site.

\* Stands for constant-temperature constant-humidity stock point

#### CO<sub>2</sub> Emissions in Distribution



#### **Future Issues and Initiatives**

Over the past several years, climate change has been evident in large typhoons and torrential rainfall causing major damage to society. Climate change is thought to be caused by fluctuations in the oceans and changes in solar activity, as well as 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. The Group will address these issues by steadily carrying out initiatives to reduce its environmental impact in order to achieve the new medium- to long-term targets related to energy consumption, which started in 2020.

#### Measures to Prevent Global Warming at Overseas Manufacturing Sites

The overseas ratio of energy consumption temporarily decreased in 2019 but started to increase again in 2020. The probable causes are the increased production equipment and extended cleanrooms at production sites in the United States and South Korea combined with an increase in production volume. 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 2019 regarding the overseas ratio in 2016 and the overseas total in 2017 and 2018 have been corrected.

#### **TOK Human Resources**

Kunio Kido

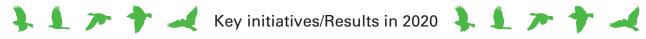
Section Manager, Facilities Section, Facilities and Construction Div.

#### **Proactively proceeding** with more advanced measures and the attainment of targets



Saving energy and reducing CO<sub>2</sub> emissions are always key themes in the industry, and TOK has implemented proactive measures. In 2020, we introduced equipment that focused on energy efficiency (e.g. super-high efficiency transformers and LEDs) when a new business building was established. Other diverse activities included the energy-saving initiative and other continuous efforts toward the same goal. Climate change has become a major social issue and call for more advanced countermeasures and target setting. Under these circumstances, the TOK Group will gear up related activities and implement proactive measures to attain the set targets.

## **Promotion of Resource Recycling: Initiatives to Address Water Risk**







Risk reduction measures

## Implemented at sites in Japan



#### **Basic Concept**

Amid increasing public attention to the social issue of water resources, the Group's products and manufacturing processes use water as an essential resource. Therefore, we strive to minimize the volume of water consumed in production activities and to maintain and improve the quality of wastewater. We aim to contribute more through business activities that consider the global water risks.

#### Changes in Water Use Volume

Water use volume changes when 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 2020, water use volume in Japan increased slightly from the previous year to 370,000 m³. Overseas, water use volume at our sites increased by 11,000 m³ from the previous year to 354,000 m³ due to the increased production volume.

## Changes in Water Use Volume at Sites in Japan and Overseas



\* Starting with the target of FY 2021, the base year was shifted from 2017 to 2019

#### Water Risk Management

Water risks and other natural resource risks are widely recognized as serious worldwide risks that are ranked among the five greatest risks in the Global Risks Report 2021 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 restriction 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 risk in 2018 and has worked toward company-wide targets since 2019. In 2020, we examined 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. We will continue to implement risk reduction measures to attain the medium- to long-term target of reducing water use by 15% from the 2019 level by 2030.



Installed water bars at the entrances to buildings to reduce flooding risks (Sagami Operation Center)

#### Worldwide Water Risk (0-100%) Projections for 2030

In a business-as-usual (BAU) scenario, the map shows water use as a percentage of the water supply in each region, assuming both economic growth and higher  $CO_2$  emissions.

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

- Low risk (under 10%)
- Low to medium risk (10% to 20%)
- Medium to high risk (20% to 40%)
- High risk (40% to 80%)
- Extremely high risk (over 80%)
- Water shortage

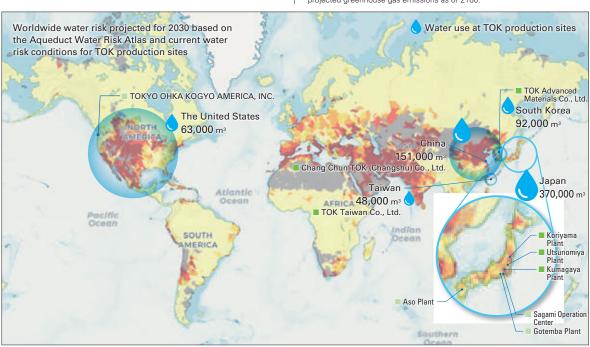
#### Overall Water Risk

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

- Low risk (0-1)
- Low to medium risk (1–2)
- Medium to high risk (2–3)
- High risk (3-4)
- Extremely high risk (4-5)

#### The business as usual (BAU) scenario (RCP8.5).

One of the four scenarios for representative concentration pathways outlined in the *Fifth Assessment Report* by the Intergovernmental Panel on Climate Change (IPCC). This scenario assumes no further efforts being made to suppress emissions after already introduced or currently planned reduction measures. This scenario assumes the largest emission volume among the projected greenhouse gas emissions as of 2100.



Aqueduct Water Risk Atlas

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



#### **Future Issues and Initiatives**

There are concerns about the impact of water stress caused by climate change on water resources. Difficulties may increase in the environment surrounding product manufacturing due to water intake restrictions and discharge limitations imposed by more stringent regulations. To protect equipment from floods, flood control work is in progress at the Sagami Operation Center as our R&D hub, and standards of conduct in the event of a flood are being formulated at each site. We continue working to minimize water stress and water risk by reducing water use, reducing pollution risks, and examining the impact of natural disasters.

#### TOK Human Resources

Kazuyuki Nitta Div. Manager,

Production Functionality Characterization Div.

# Risk reduction to achieve stable product supply and peace of mind for stakeholders



Serious climate change risks have become apparent in catastrophic natural disasters. Extreme torrential rainfall and drought referred to as once in several tens of years now occur almost annually. The Sagami Operation Center is the R&D hub of the TOK Group and is the place where critical equipment and devices are installed. Because the Center adjoins a river, we consider the reduction of flood risks as a key requirement; consequently, we have implemented flood control measures since 2020, including the water cutoff/control work around and inside the buildings. Our water use will continue to increase for air conditioning, manufacturing equipment, devices, and other purposes as the miniaturization and lamination of semiconductors advance and our business scale expands. We will implement measures to effectively use and reuse limited water resources and reduce flooding risks in order to achieve a stable product supply and peace of mind for stakeholders.

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



Key initiatives/Results in 2020











Volume of industrial waste per base unit

Up 15 points (year-over-year)



**Zero emissions** Achieved for Seven consecutive years



#### **Basic Concept**

We conduct 3R activities (reduce, reuse, and recycle) for the effective use of limited natural resources. By restricting the volume of generated waste, thoroughly sorting all waste by type, and increasing the volume that is recycled, we are working to make more effective use of resources. We strive 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

#### Volume of Industrial Waste\*1, \*2



- \*1 The base unit index is calculated after adding general industrial waste and specially controlled industrial waste
- \*2 We are committed to reducing the volume of generated industrial waste, and our goal is to reduce this amount by 5 points (1 point per year) by 2020, taking the index for 2015 as the base unit

#### Reduce Industrial Waste Emissions

In 2016, TOK set a new medium-term target to reduce industrial waste (per base unit) by 5 points by 2020 compared with 2015 (reduction of 1 point annually). With this target in mind, TOK has been working to reduce industrial waste by refining and reusing process effluents, internal effluent processing, internal recovery, and converting waste into items of value.

In 2020, as the final target year, our efforts to proactively reuse process effluents and convert waste into items of value succeeded in attaining the target by reducing our waste generation by 11 points compared with 2015 as the base year of the Medium-Term Management Plan, though the value was an increase by 15 points from the previous year due to the increased production volume. In 2021, TOK will set new targets indexed to 2019 and further continue reduction efforts.

#### Achieved Zero Emissions

In 2020, industrial waste for landfill disposal after intermediate treatment stood at less than 1% of total waste, so we have achieved zero emissions for seven consecutive years since 2014

#### Techniques for Recycling Organic Solvent Effluents

TOK strives to effectively use the waste generated by its plants. 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 differing calories and water content. In addition, at the Gotemba plant, we recycle waste oil by distilling it at an external partner company and reuse it in the production process (the circular economy to reuse generated waste through the purification process). TOK will continue its efforts to reduce industrial waste generation by effectively using resources.

#### To realize a circular economy Recycle activities Reduce activities Reuse activities Voluntary recycling of process effluents Other waste recyclina New raw materials /lanufacture of raw materials Reduce Used solvents Recycled materials (organic solvents) Recycle Reuse **Products** Cannot be reused within the plant process effluents Recycling (organic solvents) Users company distillation Used organic solvent Reduce activities **Reuse activities Recycle activities** We conduct a range of activities to reduce waste to Products incorporating organic solvents have been We recover the organic solvents (process effluents) the fullest extent possible at all TOK manufacturing placed in stainless steel containers since the la used in the manufacturing processes and refine sites inside and outside Japan, including the internal 1970s. This allows empty containers to be returned those solvents on-site, so these chemicals can processing of waste fluid through water treatment to TOK for reuse. In addition, some products be reused for the same processes, among other facilities, converting waste into items of value by are transported using tanker trucks. We are also measures to reduce industrial waste generation. At

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 of materials 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 these materials or sending them to a landfill, thereby conserving resources and preventing pollution.

beginning to use reusable containers for some

photoresist products, chiefly those used in the

manufacture of LCD panels

#### **TOK Human Resources**

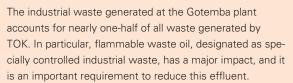
Hiroshi Sugawara Plant Administration Section, Gotemba Plant

processes

# Advancing environmental conservation activities through cooperation with stakeholders

promoting sorting, and reducing the generated

waste through modifications of the manufacturing



Through reduction efforts in cooperation with a partner company, it is now possible to recycle one-half the specified waste oil generated since 2017. We are happy with this accomplishment, which was attained by overcoming many difficulties, including repeated consultations with the administration. The Gotemba plant continued to consult with the partner for further reductions and achieved additional reductions in 2020.

We will continue striving to further reduce waste by asking for cooperation from stakeholders and related entities.

#### **TOK Stakeholders**

the same time, raw materials that can be reused through distillation and refining are recycled with

the help of trusted partners (recycling companies).

Mr. Kensaku Horie Tokyo Sales Department Nippon Refine Co., Ltd.



#### To realize a circular economy

Since its foundation, the business of our company has been based on refining and recycling toward a society that enables the sustainable development of humankind.

We have done business with Tokyo Ohka (TOK) for many years. At present, we collect used solvent from TOK's Gotemba plant, other plants in Japan, and the Taiwan sites, and refine it for delivery to TOK. The refining of used solvent by our company affects the quality of TOK products. Therefore, we have repeated inspections and consultations with the persons in charge from TOK whenever there is a change in the collection volume and process. Recently, we have started triangular recycling, where we refine the used solvent from TOK's customers for reuse by TOK in their product manufacturing. We plan to expand this initiative in cooperation with the persons in charge from the EHS Division, which leads environmental activities at TOK, and establish a system for achieving a circular economy.

## Air, Water and Soil/Biodiversity



**NOx emissions** to the air

(vear-over-vear)



156<sub>t-C02</sub>





#### **Basic Concept**

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 our livelihoods 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 has shifted to boilers that use natural gas to reduce the emissions of sulfur oxide (SOx) and nitrogen oxide (NOx), which are major contributors to air pollution. Boilers at all plants now use low-emission natural gas as fuel with the exception of plants without access to city gas supplies. In 2020, SOx emissions related to production activities decreased by 0.1 tons year-over-year. NOx emissions decreased by 3.3 tons yearover-year, mainly because of the review of the operating program and other improvements in the method of operation of the electric power generator at the Koriyama plant.

#### · Monitoring soil pollution

The TOK Group manages the risk of soil and underground water pollution by recognizing the concerns 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

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.

#### · Reducing emissions of water-polluting substances

TOK set its own management standards for treating the wastewater from its sites. The standards are 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 for compliance with its own standards and public laws and regulations. TOK will continue to reduce emissions by maintaining and managing its process wastewater treatment facilities so that water can be released after satisfying all applicable standards.

BOD emissions in the water discharged into public waters in 2020 were approximately 0.2 tons, while COD emissions were 0.4 tons.

#### SOx/NOx/BOD/COD Emissions



## 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 equipment that uses 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 implementing the appropriate measures, TOK's estimated leakage of CFCs in 2020 was approximately 156 t-CO<sub>2</sub> based on the Act. 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 2020 to March 2021

#### Comply with PRTR Law

Under the Japanese Pollutant Release and Transfer Register (PRTR) Law, companies must manage and report to the government the production, release, and transfer of designated chemical substances. To accurately calculate and report these figures, TOK relies on its chemicals and PRTR management system.

Of the Class I Designated Chemical Substances, a list of 462 substances defined by the PRTR Law, TOK handled 44 substances (a total of 1,113 tons) in 2020, including an estimated 2 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 2020 to March 2021

#### **Preserve Biodiversity**

The TOK Biodiversity Protection Declaration guides the TOK Group's activities to preserve biodiversity. In 2020, 185 employees participated in biodiversity training, and six employees were dispatched to help with afforestation projects in cooperation with local residents through the Kanagawa Trust Midori Foundation. We will continue to preserve biodiversity with the intention of starting a ripple effect inside and outside the Company and spreading them throughout society.

TOK Biodiversity Protection Declaration https://www.tok.co.jp/eng/csr/env-activity/s\_management.html#biodiversity



## Regarding Groundwater Pollution at the Sagami Operation Center

In December 2020, voluntary inspections of groundwater pollution detected arsenic and arsenic compounds exceeding standard values at the Sagami Operation Center. We took careful action to prevent the spread into the surrounding areas and have adequately responded to all administrative instructions, including the prompt conduct of a flow survey. As of May 2021, no pollution has been detected by these substances. We will continue to conduct periodic monitoring.



#### **Future Issues and Initiatives**

The TOK Group has implemented a variety of activities and measures to prevent global warming and the pollution of the air, soil, and water and has worked to maintain biodiversity. In all these categories, we will continue to appropriately maintain and manage our facilities and equipment to ensure continuous normal operation, thereby fulfilling our social responsibility as a company handling chemical substances.

**TOK Human Resources** 

Shinji Okada Facilities Section, Koriyama Plant

#### Resolving environmental issues by accumulating basic analysis and endeavor



Regarding activated sludge processing at the wastewater treatment facilities at the Koriyama plant, the high COD value had been a problem for many years. We analyzed the wastewater from each building in an effort to explore measures for improvement and found out that the trace resin content mixed into the wastewater from a specific building could not be adequately treated with activated sludge. We shifted the treatment of this wastewater from activated sludge processing to industrial waste processing, which led to a substantial improvement in the value. At present, we reuse this wastewater to further reduce its environmental impact. We will continue to resolve environmental issues by accumulating basic analyses and endeavors.



## Chemical Substance Management

## Strengthening Activities Related to Product Responsibility and Product Stewardship







Key initiatives/Results in 2020













**Accurately evaluated chemical** substance risks in a timely fashion and properly managed these risks



Maintain upstream management system



#### **Basic Concept**

Management of chemical substances is a key priority for the Company from the perspective of social responsibility. In addition to observing all laws and regulations, our group-wide efforts ensure the correct management of chemical substances while we remain mindful of globally expanding environmental issues. To this end, we have defined the responsibility to local and international communities as one of the TOK Group Creeds, which break down the management principles, and have been working to reduce our impact on the environment, including combating global warming, managing chemical substances, effectively utilizing resources, and reducing waste, thereby gearing up our product stewardship activities.

#### 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.

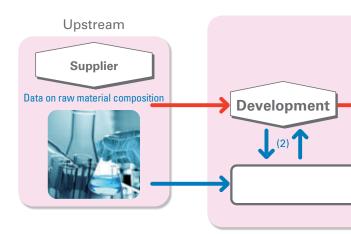
Regarding the risk management of chemical substances, our continued efforts culminated in the elimination of PFOA\* in 2020. Through these efforts, we have eliminated PFOA and its salts. We will also eliminate the use of PFOA-related substances within 2021. (see page 108, TOPICS, "Response to the Revised Chemical Substances Control Law")

\* Perfluorooctanoic Acid

#### Risk management in each part of supply chain

Flow of materials

Flow of information



#### (1) Obtaining information about revisions to laws and regulations and treaties

For the chemical substances handled by the TOK Group, we put in place a system for complying with legal requirements and ascertaining the use of regulated substances under laws and regulations and treaties that include chemical substance management laws and the regulations in each country, such 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 due to tighter regulations, we have proposed and are managing the progress of elimination plans for all products to ensure that the use of such substances is discontinued and inventories are disposed of prior to the implementation of the applicable laws and regulations.

#### (2) Development stage

For newly developed raw materials, in addition to the legal and regulatory information, we check to confirm whether they contain chemical substances identified in our own TOK Group Standards on Chemical Substances Management, which stipulate substances whose use is prohibited or should be eliminated. Moreover, we check the developed products with respect to customer's requirements as well. If the specified substances exceed the levels in the TOK Group Standards on Chemical Substances Management, we propose an alternative plan and strive to eliminate them.

#### Maintain Upstream Management System

TOK is working to establish a system for properly conveying information on the chemical substances throughout the supply chain as part of its product stewardship activities, a key pillar of Responsible Care. Timeliness and the accuracy of information are vital when conveying such information about chemical substances. Upstream management is very important for the timely and accurate receipt of information about chemical substances from upstream suppliers. In addition to the information about chemical substances received from these suppliers, TOK must manage the latest information about chemical substance

regulations in each country and then display the information in product safety data sheets (SDS) and labels to present its customers with accurate and relevant information about the chemical substances in a timely manner.

In 2020, we streamlined the internal information sharing process so that the timeliness of SDS information would not be compromised during the COVID-19 pandemic. On the other hand, we found problems with work efficiency and information security in the process of obtaining raw material information from suppliers. We will examine how to rationalize the operation of this process.

# Waste disposal service providers (5)

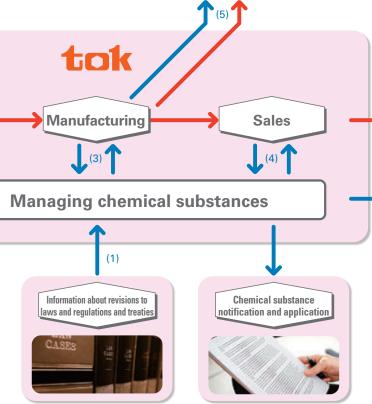
#### (5) Disposal stage

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, we provide information about the type of waste and handling precautions through the Waste Data Sheets (WDS). The Company periodically visits al service providers for on-site audits and to ensure that all waste is being properly disposed of in accordance with the contractual agreements.

Downstream

Customer

SDS/Product labels



#### (4) Sales stage

TOK has connected its ERP system, which manages product shipment volumes, and its chemicals and PRTR management system, which manages chemical substance composition, to create a framework for automatically calculating the volume of transferred chemical substances. With this framework, TOK can appropriately report chemical substance volumes and apply for their usage in accordance with the Chemical Substances Control Law\*3 and the PRTR Law\*4 in Japan, as well as the laws and regulations of the countries that import its products.

#### (3) Production stage

All raw materials used to manufacture products are subject to occupational health and safety risk assessments. The Company identifies hazardous factors in the production environment, clarifies the hazard level, 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.

- \*1 REACH regulation: Registration, Evaluation, Authorization and Restriction of Chemicals; This is an EU regulation that manages the registration, evaluation, and accreditation of chemical substances through an integrated system.
- \*2 Conflict minerals: Refer to four types of minerals that include tin, tantalum, tungsten, and gold mined in the Democratic Republic of the Congo and adjoining countries experiencing armed conflicts. These minerals are regulated under the U.S. Dodd-Frank Act (financial regulatory reform act).
- \*3 Chemical Substances Control Law: Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.
- \*4 PRTR Law: Act on Confirmation of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof

## **TOPICS**

Response to the Revised Chemical Substances Control Law

The Cabinet Order for Partial Revision of the Enforcement Order of the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture (Chemical Substances Control Law) was promulgated on April 21, 2021 (effective date: October 22, 2021). This Cabinet Order adds PFOA and its salts to the Class I Specified Chemical Substances under the Chemical Substances Control Law, following the listing of new substances subject to elimination at the Ninth Meeting of the Conference of Parties to the Stockholm Convention on Persistent Organic Pollutants (POPs) in May 2019. In 2022. PFOA-related substances will also be included into the Class I Specified Chemical Substances in 2022. PFOA, its salts, and PFOA-related substances had been commonly used for photoresists and anti-reflectives for semiconductor production until several years ago. However, the PFOA should be categorized as a persistent organic pollutant based on the review by the Persistent Organic Pollutants Review Committee under the Conference of Parties to the Stockholm Convention on POPs, and the Japanese government promulgated the Cabinet Order above.

Considering the impact of this movement, TOK developed substitute substances in 2012. Efforts have also been promoted to reduce these substances from existing products, and we have already eliminated PFOA and its salts. The amount of PFOA-related substances used in our

products has been reduced by 98.6% in 2020 from 2015 as the base year. We will also eliminate PFOA-related substances within 2021, owing to our systematic efforts for elimination. We will continue to implement measures for the prompt acquisition of information on legal revision, thereby minimizing the environmental impact and ensuring the continuity of product supply.

Properly Comply with PCB Special Measures Act For low-concentration PCBs,\* we have 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 2020, we formulated a road map to dispose of all electrical substation facilities and related waste used and stored at all sites by the legally mandated deadline of 2027. The Company intends 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; PCB was formerly used for thermal media, insulating oils, coatings, and other applications because it excels in terms of heat resistance and electrical insulation. However, because of its 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

As semiconductor demand has been rising more than ever, the supply-demand conditions have also become tight for certain chemicals used in semiconductor production. It may not be commonly known that this undersupply results not only from material procurement issues and under capacity at manufacturers but also from restrictions on the acceptable manufacture volume for new chemicals based on the volume reporting requirement stipulated by the Chemical Substances Control Law. In some cases, it takes about two years from reporting to permission when acceptable manufacture volumes can be changed. In our industry with technological innovation, it is difficult to forecast customer demand in advance and report planned changes in time. Our requirement for the coming years is to devise a system that enables adaptation to global changes.

**TOK Human Resources** 

Mihye Yoo Chemical Substances Management Section, EHS Div.

#### To support worldwide chemical substances management



Because the overseas sales ratio of the TOK Group stands at approximately 80%, it is essential to collect information from around the world for chemical substance management as well. The daily occurrence in our office is that I make a phone call in Korean to the Korean site and hear my colleagues speaking with the Taiwanese site in Taiwanese/Chinese. While regulatory requirements vary by country, we share information within the division on a periodic basis to deepen the understanding of the laws in other countries. Chemical substance regulation is no longer a domestic requirement but has become a worldwide trend. I recognize the importance of a global perspective every day. We will continue to promote appropriate chemical substance management that matches the situation of each country and information sharing featuring horizontal connections.

Aiming for Sustainability Our Value Creation Long-Term Strategy Our Foundation



## Occupational Health and Safety/ Security and Disaster Prevention

## **Occupational Health and Safety/Reducing Risks Posed by Chemical Substances**







\* Key initiatives/Results in 2020











#### Acquired ISO 45001 Certification

(Gotemba Plant)



Severity rate of workplace accidents/ Frequency rate of workplace accidents (Tokyo Ohka Kogyo Co., Ltd., only)



#### **Basic Concept**

The Company recognizes that ensuring the safety and health of workers is the social responsibility of any company and that this is demanded by all stakeholders. We aim to foster and entrench a safety culture and increase the happiness of our employees by providing comfortable, safe workplaces.

#### 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 countermeasures to improve safety and rolls them out horizontally across the organization.

Occupational Health and Safety System at TOK https://www.tok.co.jp/eng/csr/employees/conditions.html

#### Acquiring ISO 45001 Certification

Currently, we are receiving an increasing number of questions and requests on CSR from stakeholders. We 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, we are promoting the acquisition and expansion of ISO 45001 certification of the occupational health and safety management system. Through these activities, we are seeking solutions to health and safety issues, including the aging workforce, labor saving, and mental health.

In 2020, we acquired the first ISO 45001 certification in Japan at the Gotemba plant. Preparation is in progress to complete acquisition at all sites in Japan by 2023.

We have also started initiatives to achieve compliance with the RBA Code of Conduct. As part of this initiative, we established the Lockout/Tagout\*1 rules on equipment repair and inspection at the Koriyama plant and have started the implementation of a system to prevent accidents caused by the malfunction and misoperation of equipment. We will expand the system to other sites by monitoring the implementation status at the Koriyama plant.

The plant received the RBA\*2 audit from 2020 to 2021 and was certified as a workplace that satisfies the RBA Code of Conduct. We will further strengthen our systems to provide safe and comfortable workplaces to our employees not only at the plant but also at all group company sites, as well as for the employees of affiliated companies.

- \*1 Lockout: Locking the starting gear of machinery/system to prevent activation Tagout: Putting up a tag that indicates the lockout state to prevent misoperation
- \*2 Responsible Business Alliance: An industry coalition comprising electronic equipment manufacturers and suppliers thereto dedicated to the protection of workers' rights and safety

#### Initiatives for Workplace Accident Risk Reduction

#### · Improvement of risk assessment

In 2020, we promoted risk reduction activities on risks with high seriousness at all sites by learning lessons from past accidents of being caught, chemical injuries, and the turnover of heavy objects. We also started risk assessment and hazard prediction activities for infrequent operations and set the points for enhancement for the next fiscal year. In May 2021, we received the Prize for Effort in the Responsible Care Awards from the Japan Chemical Industry Association for the evaluation of our "Utilization of Risk Assessment for the Prevention of Chemical Industries" to reduce chemical industry risks by performing chemical hazard assessments based on the GHS Classification.

#### · Established and started operation of internal standards for highly corrosive substances and poisonous/ deleterious substances

The Company uses chemical substances with corrosive properties in the manufacture of semiconductor-related products. We constantly reassess all manufacturing lines and work procedures and share information about safety measures among sites that use the same chemical substances in an effort for further risk reduction. In 2020, the Company further enhanced its internal guidelines for the handling of highly corrosive chemical

#### Occupational Health and Safety/Security and Disaster Prevention

substances, which were formulated in 2019, established the guidelines as international standards, and started implementation.

#### Promoted improvement activities incorporating inputs from internal audit and third-party review

We started the ISO 45001 internal audit last year and are utilizing it for information sharing on workplace accident control and environmental contamination prevention by proactively assigning internal auditors from other sites. We also consider 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 to lead them to implement activities to improve.

#### Prevention of Workplace Accidents

TOK has 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. In addition, we are working to improve the safety level of the entire Group through measures to prepare manuals for emergency action in the event of workplace or other accidents and by providing systematic training and drills for employees, as well as fostering employee safety awareness.

In 2020, there were seven workplace accidents (0 without and 7 with lost workdays) but we achieved 0% as the frequency rate of workplace accidents. Fortunately, no serious workplace accident occurred. For each accident that occurred, we reviewed the risks and took the necessary action for recurrence prevention. We will continue conducting risk reduction activities and employee safety awareness raising by aiming to achieve zero workplace accidents.



#### **Future Issues and Initiatives**

Under the Occupational Health and Safety Policy, the TOK Group places the utmost priority on the maintenance of the health and safety of workers. "Workers" refer not only to the employees of the TOK Group but also to all persons who provide service in the work environment of the TOK Group. We will continue to observe occupational health and safety-related laws and regulations in each country/ region, and aim to acquire the ISO 45001 certification at each site, while building a robust management system to prevent workplace accidents.





\* 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 (%) (Tokyo Ohka Kogyo Co., Ltd., only)



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**

#### Max Peng

Process Management Div. Tongluo Plant TOK Taiwan Co., Ltd.

#### Aiming to achieve zero workplace accidents while fulfilling supplier responsibility in Taiwan

The Tongluo plant of TOK Taiwan Co., Ltd., was established in 2014 mainly to supply products to customers in Taiwan. Our customers are aware of the environment and occupational health and safety, in addition to product quality. In the year following plant establishment, we acquired the ISO 9001 and ISO 14001 certifications. In 2017, we started activities toward the acquisition of ISO 45001 certification and formulated the health and safety policy. We observe these policies, implement the risk assessment of each task to prevent and improve risks, and strengthen training and emergency drills for employees. Through these continued efforts, we acquired the ISO 45001 certification in 2019. We will continue to fulfill supplier responsibility as the No. 1 manufacturer of photoresists for semiconductors, while maintaining workers' health and safety and comfortable work environments toward zero workplace accidents.