

**tok** TOKYO OHKA KOGYO CO., LTD.

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# *Maximize the Value We Deliver*

Annual Report 2015

Year Ended March 31, 2015

# Maximize the Value We Deliver

## Management Principles

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

## Management Vision

Aim to be a globally trusted corporate group by inspiring customers with high value-added products that have satisfying features, low cost and superior quality.

## The Source of the Value We Deliver —Microprocessing Technologies That Create Inspiration

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

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

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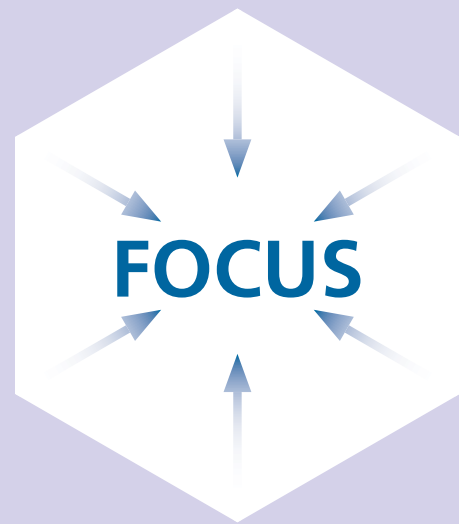
This annual report contains forward-looking statements that describe future prospects of TOKYO OHKA KOGYO CO., LTD. (the Company) in terms of business planning, earnings and management strategies. Such statements are based on management’s judgment, derived from information available to it at the time such information was prepared. Readers are cautioned not to rely solely on these forward-looking statements, as actual results and strategies may differ substantially according to changes in the Company’s business environment.





# World's No. 1\* Manufacturer of Semiconductor Photoresists

TOK is an innovation-driven enterprise that continues to seek leadership in niche fields by adopting a pioneering spirit and taking on globally unprecedented challenges.

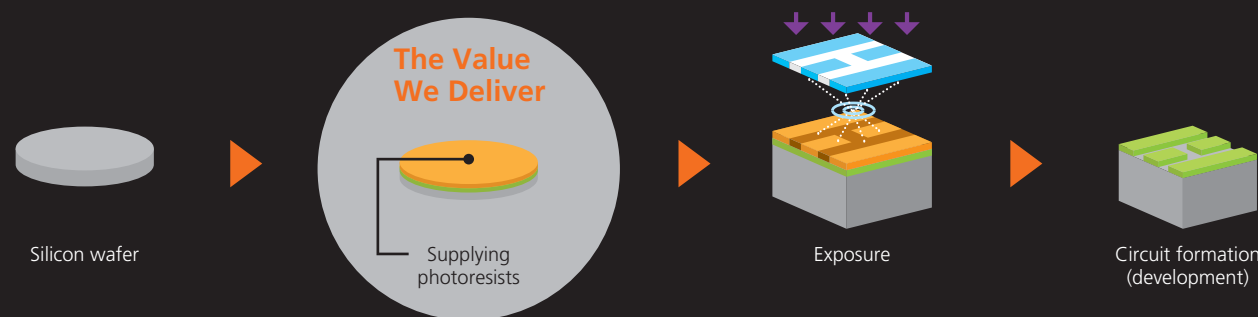


on Niche Markets



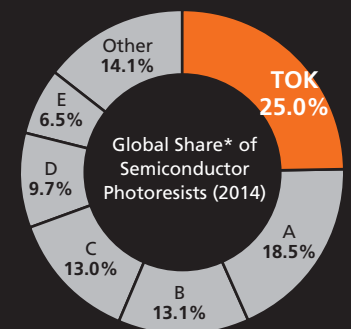
the Value We Deliver

## The Role of Photoresists in Forming Semiconductor Circuits (Microprocessing)



Most of the world's semiconductors are manufactured by microprocessing technology using photoresists. TOK has the largest share\* of the global market for semiconductor photoresists.

## Accelerate Global Strategy and Expand Worldwide Market Share



\* Based on 2014 total sales volume of ArF, KrF excimer laser and g- and i-line photoresists (Calculated based on Status and Outlook for Semiconductor Materials Market 2015 / Fuji Keizai Co., Ltd. data)



# World-Leading Technology Changes Our Lives Like Magic.

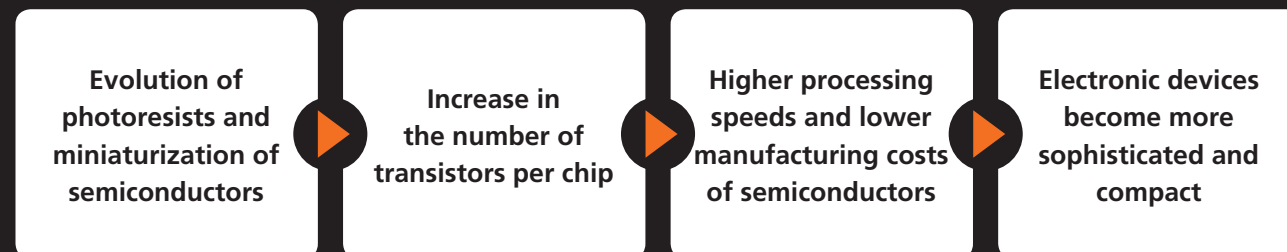
Microprocessing technology plays a major role as a key to developing innovative products. We believe that it continues to deliver new value for the future.



on Microprocessing Technology

Joy in Daily Life

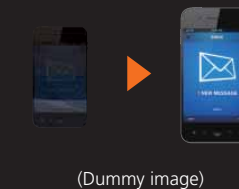
## Miniaturization of Semiconductors through Photolithography Contributes to Making Electronic Devices More Sophisticated and Compact



Evolution of photoresists and miniaturization of semiconductors in line with the evolution of smartphones and tablet devices make peoples' lives more convenient and comfortable.

Data capacity of major company A's smartphone

Approx. **700% increase** in seven years



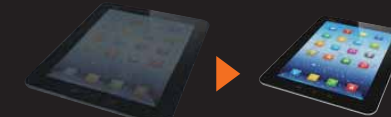
(Dummy image)

Company A's current model smartphones are 4.4% lighter yet have approx. 700% greater (8 times) data capacity than initial models\*. Their tablet devices are approx. 36% lighter and less than half the thickness of initial models (approx. 55%).

Much of this evolution can be attributed to the miniaturization of semiconductors, including the evolution of photolithography.

Thickness of major company A's tablet devices

Approx. **55% reduction** in four years



(Dummy image)

\* Compared with the smallest of current models



# Accelerate Semiconductor Evolution and Contribute to Global Environmental Conservation

Microprocessing technology contributes significantly to solving social issues essential for realizing a sustainable society.

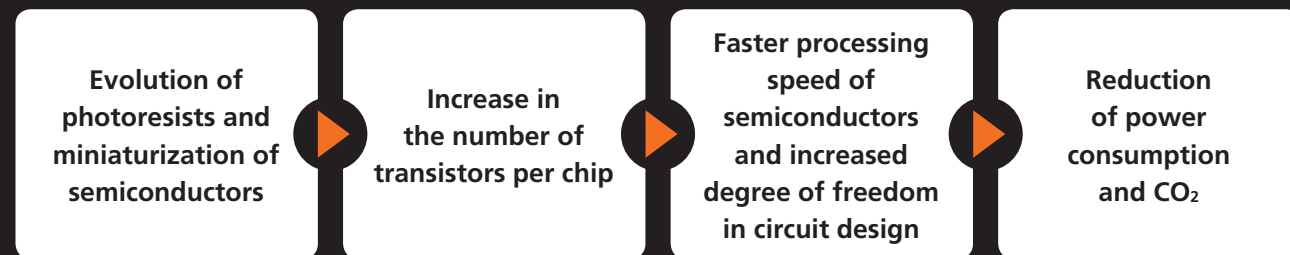


on Social Issues



Environmental Benefits

## Miniaturization of Semiconductors through Photolithography Contributes to Reducing Power Consumption and CO<sub>2</sub>



Evolution of photoresists and miniaturization of semiconductors reduce power consumption in semiconductors and electronic devices and related CO<sub>2</sub> emissions, thereby helping to realize a green society.

Power consumption of LED lighting vs incandescent light bulbs

Reduce CO<sub>2</sub> by approx. 87%



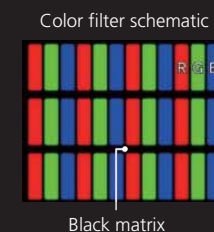
Incandescent light bulb LED light

LEDs (light-emitting diodes), which are increasingly being used for lighting, are also a type of semiconductor device. TOK's photolithography technology is also used in the LED field.

Environmentally friendly black resist is used mainly with color filters for LCDs instead of conventional chromium. TOK has a leading share in the manufacture of black resist.

Black resist for liquid crystal displays

Lighten environmental burden



Black matrix





# Maximize Added-Value by Building Close Relationships with Customers

Customers' success in business is success for TOK.  
In the ever-changing electronics industry, we build firm win-win relationships.



on Our Customers' Needs



Customer Satisfaction

## Rapid Response through an Optimal Production System



We have a state-of-the-art prototype production line equal to the customer's line in order to commercialize the results of the development as rapidly as possible.  
We win the deep trust of customers by enhancing close relationships with them, and have received many supplier awards.

Awarded by Intel Corporation  
2014 **PQS\*** award

\* Preferred Quality Supplier



Awarded by Texas Instruments Incorporated

2014 **Supplier Excellence Award**



Intel Corporation highly evaluated TOK for our performance and ability to meet cost, quality, availability, technology, environmental, social and governance goals.

Texas Instruments Incorporated highly evaluated TOK for our delivery of high quality materials, stable supply and support structure.

# New Technological Development Continues Increasing the Value We Deliver

There is no end to how far technology can evolve, as highlighted by our starting to manufacture 3D semiconductors. By continuing to take on the challenges of the unexplored, TOK can achieve sustained growth.



on Technological Advancement

## Start-Up of the 3D Semiconductor Market

Semiconductor manufacturers have started mass production of 24-layer 3D-NAND and 48-layer 3D-NAND



(Dummy image)

Mass production of the 3D-NAND has kicked off the full-scale expansion of the semiconductor 3D packaging market. The market for the through-silicon-via (TSV) process, a 3D packaging technology beyond the paradigm of miniaturization, is also starting up.

TOK is engaged in technological development and has lined up competitive products in both markets. At the same time, we expend all efforts to continue increasing the value we deliver.

New multilayering method superior to microprocessing technology TSV market year on year growth

Up by 13.2%\*



TOK's TSV equipment: the wafer handling system Zero Newton

\* Projection for 2015 on a number of packages basis  
Source: Status and Outlook for Semiconductor Materials Market 2015 / Fuji Keizai

We Will **MAXIMIZE** Our Value



“We will continue to increase the social value that TOK is uniquely positioned to deliver.”

Ikuo Akutsu  
President &  
Chief Executive Officer



See the Message from the President on page 19

## 10-Year Financial and Non-Financial Highlights

### Third "TOK Challenge 21" Medium-Term Plan

#### Strategies:

- Evolution of microprocessing technology
- Establishment of the TOK brand in the global market
- Enhancement of management structure / Reform of corporate culture

Lehman Shock  
(September 2008)

### Urgent business profitability and structural reforms

#### Majors to cope with new business environment:

- Cost reduction
- Establishment of low-cost structure

### Rebirth of TOK

#### Direction:

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

### TOK Medium-Term Plan 2015

\* Refer to page 21

#### Management vision:

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

#### Objectives:

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

#### Strategies:

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

Fiscal years ended March 31													Millions of yen	Thousands of U.S. dollars
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2015			
<b>Results of operation:</b>														
Net sales .....	98,514	101,955	102,482	83,850	70,645	80,016	80,037	72,919	75,269	88,086	734,055			
Material Business .....	80,338	83,038	86,186	72,589	65,091	71,482	66,645	67,697	72,866	84,611	705,091			
Equipment Business .....	18,252	18,991	16,363	11,350	5,632	8,622	13,500	5,302	2,484	3,581	29,841			
Operating income (loss) .....	10,544	10,884	8,447	(1,367)	364	6,123	6,102	7,872	10,025	13,253	110,442			
Income (loss) before income taxes and minority interests .....	11,324	11,119	7,352	(5,325)	114	6,427	6,577	8,031	11,666	14,301	119,180			
Net income (loss) .....	6,656	6,660	4,259	(4,656)	254	3,649	3,818	5,443	7,549	8,818	73,487			
Free cash flow .....	(5,797)	(7,078)	(8,169)	8,493	6,504	12,435	(6,641)	12,363	(2,610)	3,380	28,171			
Investment in plant and equipment .....	6,962	8,531	6,574	3,270	1,320	1,699	3,162	5,332	14,577	7,276	60,633			
Depreciation and amortization .....	5,502	5,931	7,693	7,297	5,418	4,393	4,038	3,758	2,672	4,276	35,641			
R&D costs .....	5,683	6,487	8,095	8,542	6,949	6,360	6,157	6,211	6,389	6,903	57,525			
<b>Per share data (Yen / U.S. Dollars):</b>														
Basic net income (loss) .....	142.34	142.37	91.50	(102.00)	5.66	81.08	84.86	121.69	168.54	196.61	1.63			
Cash dividends applicable to the year .....	33.00	36.00	36.00	35.00	30.00	33.00	38.00	44.00	52.00	60.00	0.50			
Net assets .....	2,650.51	2,750.82	2,775.38	2,591.43	2,578.30	2,597.72	2,641.28	2,796.37	3,044.24	3,285.81	27.38			
<b>At the year-end:</b>														
Total assets .....	165,681	166,610	159,633	139,338	138,122	147,085	138,767	145,664	155,859	174,863	1,457,194			
Total long-term liabilities .....	2,222	2,108	2,198	2,205	2,350	2,105	2,613	2,811	1,518	3,569	29,742			
Interest-bearing debt .....	249	463	449	458	57	0	610	488	366	814	6,783			
Net assets .....	123,915	131,074	129,834	118,377	117,658	118,567	119,590	127,838	139,962	151,999	1,266,658			
<b>Key performance indicators (%):</b>														
Operating margin .....	10.7	10.7	8.2	(1.6)	0.5	7.7	7.6	10.8	13.3	15.0				
ROE .....	5.6	5.3	3.3	(3.8)	0.2	3.1	3.3	4.5	5.8	6.2				
Ratio of R&D costs to net sales .....	5.8	6.4	7.9	10.2	9.8	7.9	7.7	8.5	8.5	7.8				
Equity ratio .....	74.8	77.3	79.9	83.7	84.0	79.5	85.1	85.9	87.5	84.3				
Debt-to-equity (Times) .....	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00				
Payout ratio .....	23.2	25.3	39.3	—	530.0	40.7	44.8	36.2	30.9	30.5				
<b>Industry trend:</b>														
Worldwide semiconductor market (\$ Million)* <sup>1</sup> , (Year) ....	247,716	255,645	248,603	226,313	298,315	299,521	291,562	305,584	335,843	347,248* <sup>3</sup>				
Worldwide photoresists sales (Thousands of U.S. dollars)* <sup>2</sup> ...	861,773	1,119,406	1,087,982	897,827	1,129,893	1,220,078	1,279,726	1,152,306	1,290,698					
Exchange rate (¥ / \$)* <sup>4</sup> .....	117	117	99	98	93	83	82	94	103	120				
<b>Non-financial data:</b>														
Number of patents (in Japan and overseas) .....	160	260	240	259	285	247	253	271	378	293				
Number of employees .....	1,592	1,667	1,703	1,715	1,579	1,443	1,443	1,487	1,505	1,540				

\*1 Source: World Semiconductor Trade Statistics \*2 Source: SEMI (Total sales of ArF and KrF excimer laser and g- and i-line photoresists)

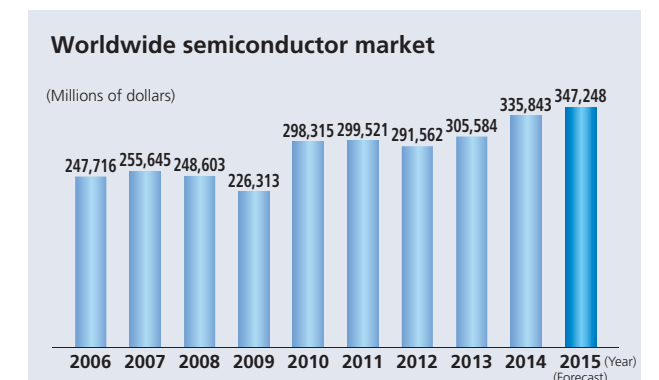
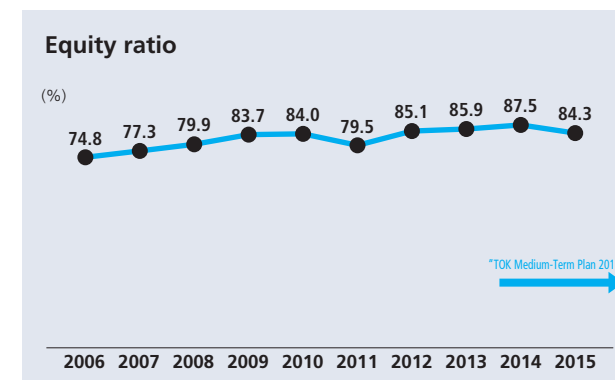
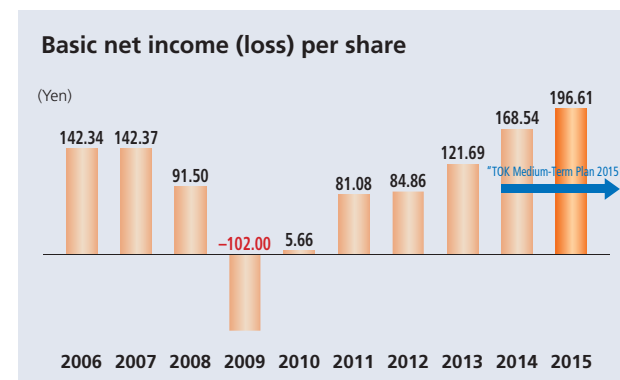
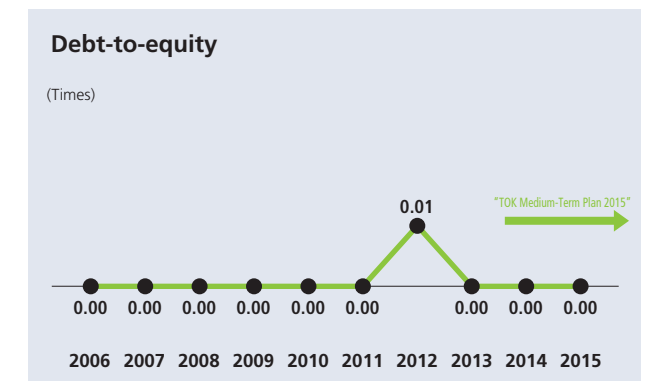
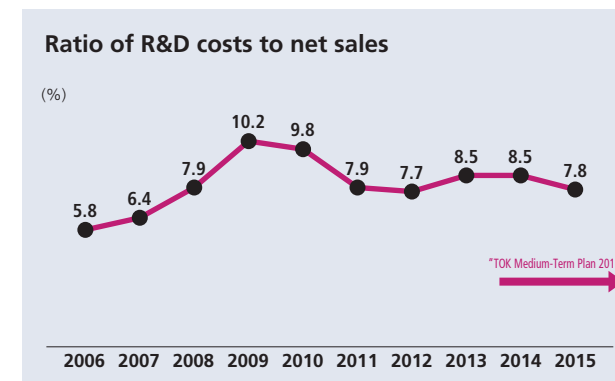
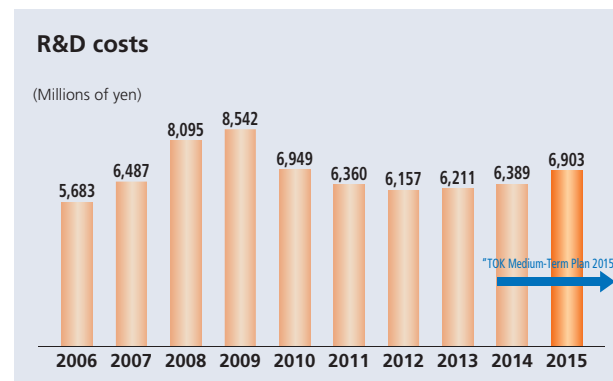
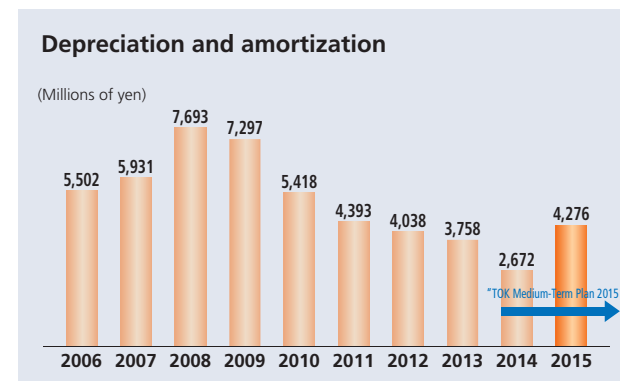
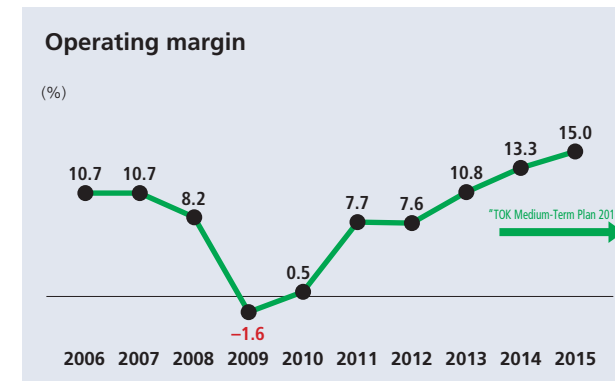
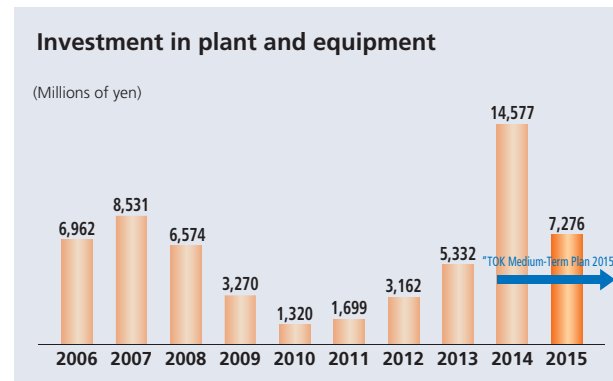
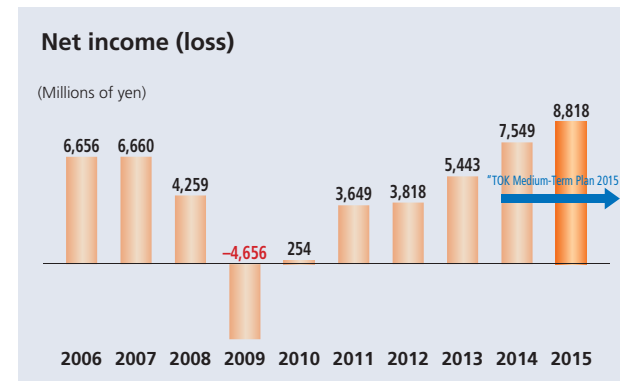
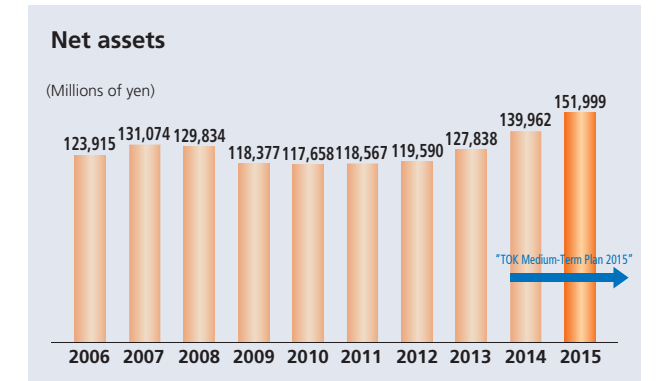
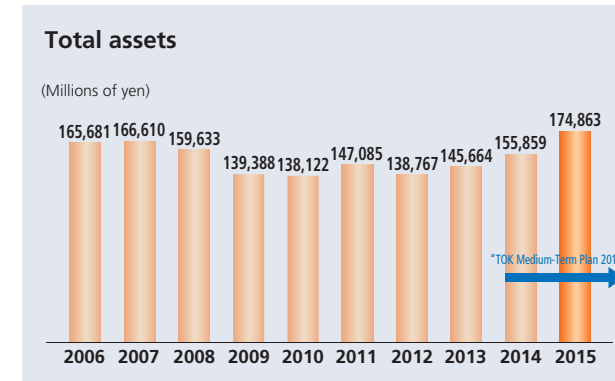
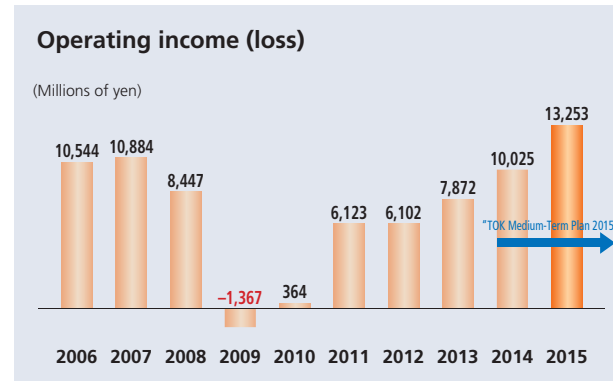
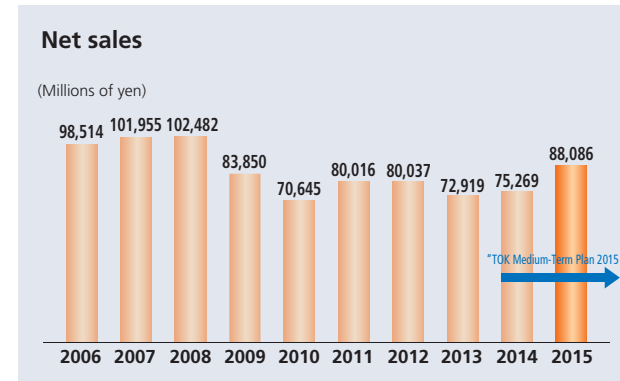
\*3 Forecast-based amount for 2015 \*4 As of March 31



# Trend in Major Indicators

Fiscal years ended March 31

The Value TOK Delivers



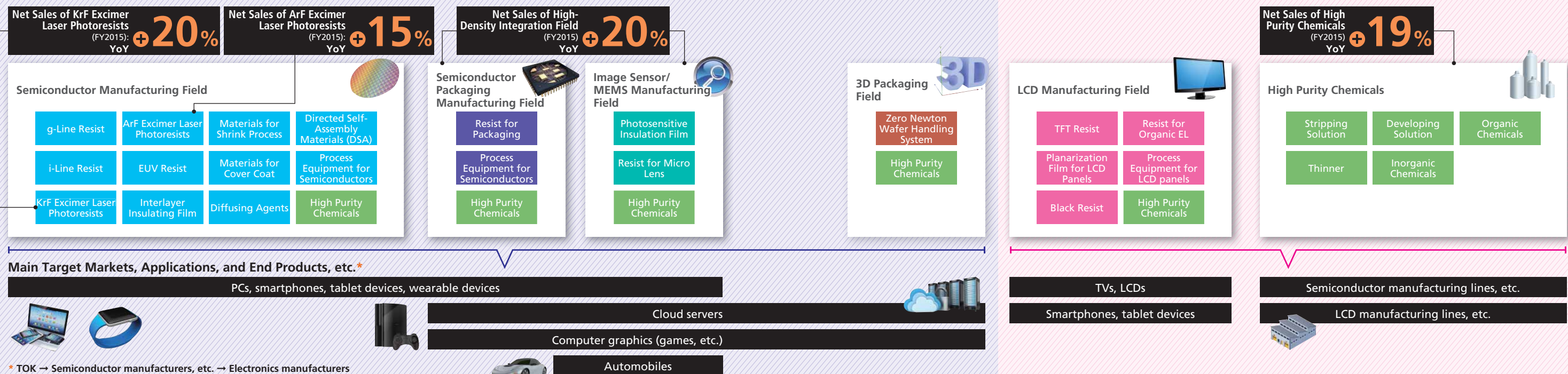


**Business Portfolio** We are leveraging our Material Business to drive our present earnings and realize the synergy of nurturing our Equipment Business as a pillar of new growth.



The Value TOK Delivers

**Product Portfolio & 2015 Highlights** In the fiscal year ended March 31, 2015, we developed the following product portfolio centered on the Material Business and made significant progress in four fields.





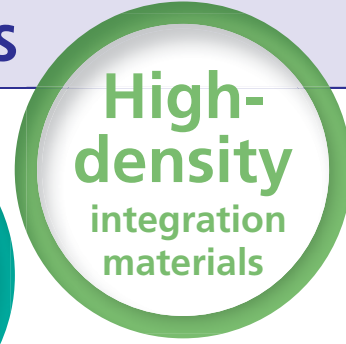
## Three Earnings Drivers



**ArF**  
excimer laser  
photoresists



**KrF**  
excimer laser  
photoresists



**High-  
density**  
integration  
materials

## Delivering Value

The following explains the characteristics of and value we deliver in ArF and KrF excimer laser photoresists and high-density integration materials, driving our earnings growth at present.

### Earnings driver 1 ArF excimer laser photoresists



#### Characteristics

An ArF excimer laser is one of the laser beams used as the light source in photolithography. It is also used in formulating circuits in the most miniaturized, cutting-edge semiconductors, more advanced than the 1X nm generation, because the beam produces the shortest wavelength (193nm) that can be used in mass production. ArF excimer laser photoresists are photoresists with characteristics best suited for this laser beam.

#### Value delivered

Cutting-edge semiconductors that are manufactured using ArF excimer laser photoresists are used in smartphones, tablet devices, wearable devices, etc., and contribute to their increasing performance, compactness, and reduced power consumption.

### Earnings driver 2 KrF excimer laser photoresists



#### Characteristics

A KrF excimer laser photoresist is compatible with a KrF excimer laser (248nm), a previous-generation light source preceding the ArF excimer laser, and is mainly used in formulating circuits on cutting-edge, 90nm to 350nm semiconductors.

#### Value delivered

Cutting-edge semiconductors such as 3D-NAND that are manufactured using KrF excimer laser photoresists contribute to the increasing performance and reduced power consumption of cloud servers and gaming consoles.

### Earnings driver 3 High-density integration materials



#### Characteristics

- We provide the high-purity materials for “packaging,” integrating semiconductors and peripheral components inside electronic devices or electronic components, and photoresists integrating the micrometer-level 3D structures on the substrate of micro electro mechanical systems (MEMS).
- We supply packaging material such as positive thick-film photoresists for forming high-resolution microbumps and MEMS material such as permanent-film photoresists for forming structures on MEMS substrates by leaving behind layers of film.

#### Value delivered

- Electronic components that use thick-film photoresists and MEMS photoresists contribute to the increasing compactness, performance, and reduced power consumption of smartphones, tablet devices, and wearable devices.

“ We will keep maximizing the value we deliver in cutting-edge electronics fields.”



Advances in areas like semiconductors and electronic devices help make people’s lives more convenient and comfortable. They also fuel innovations in safety and security.

With our microprocessing technology as our key core competence, we will continue to leverage our strengths in cutting-edge electronics fields to maximize the value we deliver and forge ahead towards sustainable growth.

*Ikuo Akutsu*

Ikuo Akutsu  
President & Chief Executive Officer



## The Value TOK Delivers

### Harnessing microprocessing technology to help make daily life convenient, comfortable, safe, and secure

TOK is rooted in R&D. Our microprocessing and high purity processing technologies are the source of our competitive force.

We leverage the microprocessing technology that we have built up over the years to swiftly develop products that meet the sophisticated needs of our customers, which include semiconductor and electronic device manufacturers. By doing so, we contribute to a better quality of life in terms of convenience, comfort, safety, and security. That is the value that TOK provides to society.

The TOK Group engages in B-to-B business, and our products are not seen in the course of everyday life.

I would therefore like to provide some details on how exactly our microprocessing technology makes everyday life better. To demonstrate, I will look at the TOK Group's mainstay photoresists, which are vital to semiconductor manufacturing.

### History: Staying at the edge of innovation throughout the decades

TOK's semiconductor photoresist business began in 1968 with the development of negative photoresists that met customers' needs for stable quality. In the 1970s, products such as color TVs and calculators became more sophisticated, and new products like word processors and PCs emerged. What made that possible was semiconductor (Large Scale Integration: LSI) advancement. We developed synthetic rubber photoresists, which are indispensable in LSI manufacturing. Further, we utilized our extensive experience in positive photoresists for

printing to successfully produce in Japan positive photoresists with superior resolution that were suitable for the further miniaturization of integrated circuits. Ever since, we have grown our market share in mainstay photoresists used in LSI manufacturing, while precisely meeting customers' requests for improvements.

In the 1980s, miniaturization evolved from LSI to very large scale integration (VLSI). VLSI helped make products like videocassette recorders and video cameras more sophisticated and compact. It also contributed to the spread of items like CD players and home game consoles. TOK developed high-resolution positive photoresists suitable for highly integrated circuits, and established them as the standard for 64KB DRAM manufacturing.

In the 1990s, VLSI evolved further to ultra-large scale integration (ULSI). ULSI enhanced the functions of game consoles, PCs, and mobile phones. It also contributed to the emergence of products like DVD players and hybrid cars. The positive, chemically-amplified photoresists that we developed became the standard used by ULSI manufacturers around the globe.

Also in the 1990s and 2000s, liquid crystal displays (LCDs) became larger and quality improved. Armed with our microprocessing technology and know-how gained hitherto in the semiconductor field, TOK made a full-fledged entry into the LCD photoresist market and went on to grow sales there.

By developing and manufacturing photoresists crucial to the evolution of products including LCDs and semiconductors for over four decades since the late 1960s, TOK has played a role in building the foundation for today's convenient and comfortable IT society. That is the cornerstone of our sustainable growth now.

market share globally at over 20%. \*1 Immersion ArF excimer laser\*2 photoresists for state-of-the art miniaturization at the 1Xnm (10nm level) are especially tricky technologically. In such high value-added fields as well, we are expanding adoption of our products by customers. In semiconductor photoresists, our share is the highest\*3 in the world.

\*1 Source: Status and Outlook for Semiconductor Materials Market 2015 / Fuji Keizai

\*2 An exposure technology filling ultra-pure water between lens and wafers

\*3 Based on the total quantity sold of ArF, KrF and g/i-line photoresists in 2014 (Calculated based on the above)

## TOK's Strengths

### Top-class share in cutting-edge semiconductors

From the late 2000s to the present time, PCs have been getting even more compact and sophisticated, and products such as smartphones and tablets have been evolving. This is being supported by cutting-edge, highly miniaturized and integrated semiconductor devices including DRAM, NAND Flash Memory, and logic semiconductors such as MPU and ASIC. The TOK Group develops KrF excimer laser photoresists, a state-of-the-art semiconductor material. We also develop ArF excimer laser photoresists, which are used in advanced semiconductor production processes. We have a top-class

### Our strengths are world-leading microprocessing technology and close relationships with customers.

The TOK Group's growth is a result of our customers, including semiconductor and electronic device manufacturers, using our products to enhance their products' functions and quality, and, in turn, realize profit growth.

As such, it is not enough to just have world-leading microprocessing technology. In the development race in the cutting-edge semiconductor, electronic device, and other fields, customers want different features from photoresists even when they are for processes with the same line width. Those unique customer needs are often the very source from which added value flows. For that reason, whether our products are adopted hinges on our ability to work closely with customers and precisely meet their individual needs.

The TOK Group rallies its sales engineers, R&D staff, manufacturing technicians, and quality control staff together in giving top priority to close information exchange with customers, with a focus on quickly meeting customer needs.

"World-leading microprocessing and high purity processing technology, plus a close relationship with customers." Those are TOK's strengths.

### Microprocessing technology's horizons keep expanding

We expect these kinds of fields where we can capitalize on our strengths to grow in leaps and bounds moving ahead.

The next trend in areas like smartphones and tablets is on the way. This trend heralds the era of the Internet of Things (IoT). Further technological advances and ultra-miniaturization of semiconductors and electronic devices will continue to drive innovation in the field of IoT. That means TOK's microprocessing technology arena will expand to all sorts of everyday products. We will seize these opportunities and continue to grow the value that we deliver to society.

### Realizing our management vision to maximize corporate value

In the three-year medium-term plan that began in the fiscal year ended March 2014, we set out our management vision, which is to "Aim to be a globally trusted corporate group by inspiring customers with high value-added products." It is an overarching aspiration looking to 2020, and we are working to make it a reality.

With microprocessing technology as our core competence, we will continue to deliver new added value that inspires people, including customers and end users. We will also remain committed to being a corporate group that is trusted around the world. By implementing this management vision, we will strive to maximize our corporate value and build a business foundation for sustainable growth.

## Management Vision/Objectives/Numerical Targets of "TOK Medium-Term Plan 2015"

### Management Vision

- "Aim to be a globally trusted corporate group by inspiring customers with high value-added products."
- Consolidated operating income: ¥20 billion (Fiscal 2021 target)

### Management Objectives

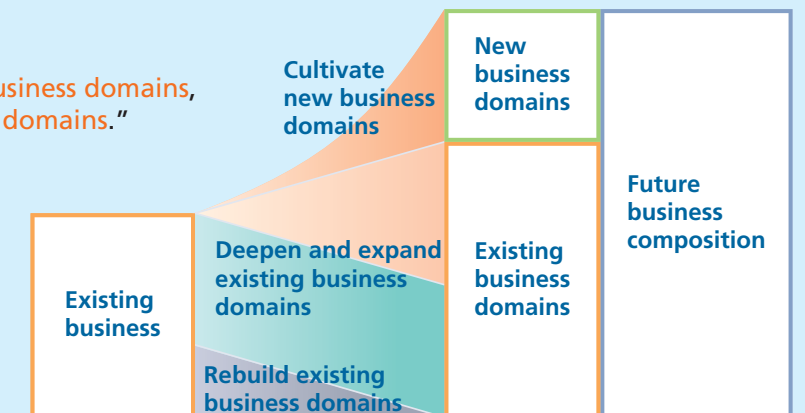
- "Deepen and expand existing business domains, and swiftly launch new business domains."

### Numerical Targets (FY2016)

- Net sales: ¥99 billion
- Operating income: ¥15 billion

### Features of "TOK Medium-Term Plan 2015"

- Surpass record-high earnings
- Enhance business foundations
- Expand business domains



## Our Take on the Market Climate

### Semiconductor market grew 9.9% year on year in 2014

The TOK Group generates about 85% of its sales from semiconductor-related products (results for the fiscal year ended March 2015).

In 2014, the global semiconductor market grew 9.9% year on year to \$335.8 billion. Overall growth was driven by DRAM, NAND Flash, and other types of high value-added semiconductor memories, which expanded 18.2% on the back of growth in markets like smartphones and tablets, as well as extraordinary replacement demand associated with the ending of support for certain PC operating systems. Moreover, semiconductor markets for automobiles and industrial equipment each grew 20% or more.

(Source: World Semiconductor Trade Statistics; the sentence underlined in black is quoted from the Nikkei Business Daily June 3, 2015 and translated into English)

### Market expected to sustain average growth of 3.2% until 2017

The global semiconductor market is projected to continue expanding in 2015, growing 3.4% year on year to \$347.2 billion (about ¥41.39 trillion). Extraordinary PC-related replacement demand is expected to wind up and only mild growth is anticipated for game console processors. However, semiconductor memory is forecast to sustain growth of 4–5% per year, driven by products like smartphones, tablets, and

wearable devices, as well as demand from data centers for use in big data analysis. LSI for automotive applications is also expected to expand at a similar pace. Further, sensors used in items like home appliances, automobiles, and industrial equipment are projected to potentially grow at around 7% per year as the IoT market gains steam.

Put all of these projections together, and the outlook for the global semiconductor market is ongoing stable average growth of 3.2% from 2014 to 2017.

(Source: World Semiconductor Trade Statistics)

### Asia-Pacific region driving market growth

The Asia-Pacific region accounts for 57.8% of the global semiconductor market (2014). It is also a core for TOK business sites. The region's share of the global semiconductor market is forecast to surpass 60% in 2017, as average annual growth around 5.0% is sustained on the back of smartphone and digital home appliances market growth in China, India, and ASEAN.

(Source: World Semiconductor Trade Statistics)

### TOK's cyclical growth in the silicon cycle

The semiconductor industry is a typically cyclical sector. For companies involved in the industry, impact from the silicon cycle comes with the territory.

As the chart on the next page shows, TOK's operating income and the silicon cycle are quite closely related. In the fiscal year ended March 2015, TOK achieved record-high operating income. A key factor was the silicon cycle being in an uptrend.

Further, TOK's growth trajectory shows long-term sustained upward cyclical growth, though with repeated swings based on the economic cycle. It is imperative that we maintain upward cyclical growth, even while being affected by the silicon cycle.

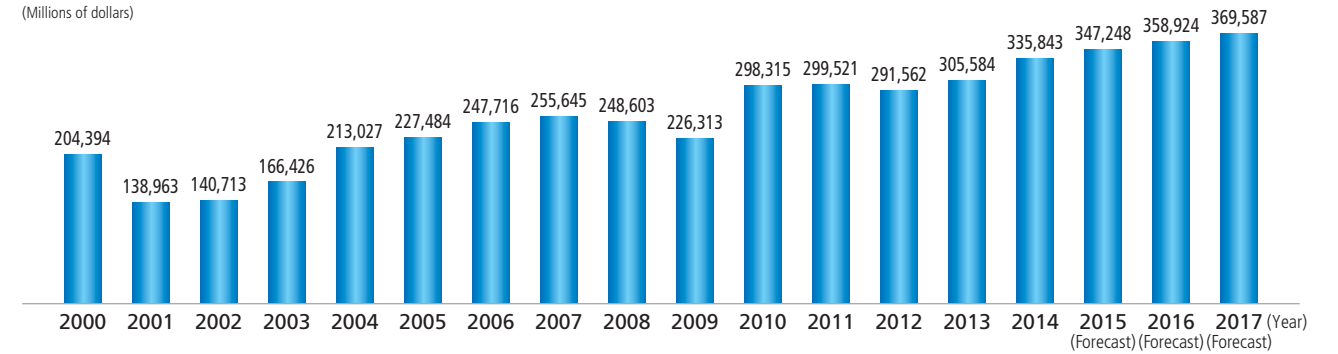
In the semiconductor industry, technology advances at breakneck speed. Unless we can keep offering even better functionality, performance, and so forth, we will fall into price competition with our products or we will be forced to withdraw them from the market. In other words, we must constantly take on cutting-edge fields and continue to deliver a high degree of added value in order to sustain growth.

Our mission is to make our strengths in high value-added domains shine even brighter, and deliver as much value as possible in cutting-edge technological advances—regardless of whether they happen to be existing or new business domains.



## Global semiconductor market

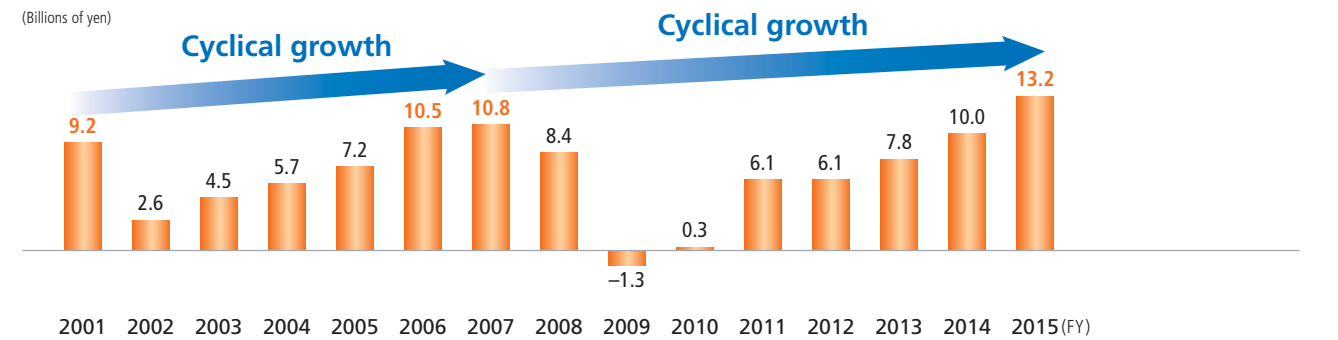
(Millions of dollars)



Source: World Semiconductor Trade Statistics

## TOK's operating income or loss

(Billions of yen)



## Progress in Year Two of the "TOK Medium-Term Plan 2015"

### Operating income hit a record high. Net income did too for the second consecutive year.

The fiscal year ended March 31, 2015 marked the second year of the "TOK Medium-Term Plan 2015." We worked with all our might to "build close relationships with regional users," "reform business portfolios," and "develop global personnel." Thanks to our efforts on those components of the Company-wide strategy, we brought operating income to an all-time high, and achieved record-high net income for the second consecutive year.

While yen depreciation did help boost profit, the key contributors were higher sales of high value-added products such as KrF and ArF excimer laser photoresists and high-density integration materials, in addition to high purity chemicals' sharp growth.

### Earnings drivers diversified, while LCD materials, the Equipment Business, and new business need work.

In the fiscal year ended March 2015, our achievement most worthy of mention is earnings driver diversification.

Earnings recovery subsequent to March 2010 long relied on KrF excimer laser photoresists, but we have achieved stable earnings growth. Our success is owed to the additions of sales growth for ArF excimer laser photoresists and high-density integration materials, plus growth for high purity chemicals.

On the other hand, progress is trailing our initial plans in LCD materials, the Equipment Business, and new business. We recognize that bolstering those areas is vital to fully achieving our medium-term plan.



## Priority Initiatives for the Final Fiscal Year of the "TOK Medium-Term Plan 2015"

### Giving greater speed to three vehicles for earnings growth

In the fiscal year ending March 2016, which is the current medium-term plan's final year, we will start with accelerating expansion of electronic functional materials' three earnings drivers as we keep aiming for record-breaking profit.

Miniaturization using ArF excimer laser photoresists, our first earnings driver, is expected to reach its physical limits with the 1Xnm (10nm level) node. Accordingly, the photoresists adopted in this final generation will continue to be used thereafter. Therefore, the success or lack thereof in capturing 1Xnm market share will affect photoresist manufacturers' future earning capacity. We have emphasized our products' features, quality, and response through close relationships with customers, and have sufficient market share, that includes orders from major semiconductor manufacturers, to secure our future earning capacity. We expect this ArF excimer laser photoresist business to start contributing to earnings from the second half of the fiscal year ending March 2016, and hope for a year-round contribution in the fiscal year ending March 2017. Further, we will focus on sales in the 2Xnm (20nm level) node where demand remains strong. Our sights are on the top market share globally for ArF excimer laser photoresists.

The second driver is KrF excimer laser photoresists. TOK has top global market share of 28.2% (fiscal year ended 2015, source: Status and Outlook for Semiconductor Materials Market 2015 / Fuji Keizai). We are working now to reinforce our top position by tapping into major customers' new needs to expand supply. We have got orders of thick film KrF excimer laser photoresists from a major customer who is starting mass production of 3D-NAND from the fiscal year ending March 2016, and this will expand our market share even more.

The third driver is high-density integration materials. Here, we will expand sales of MEMS materials and packaging materials (thick film photoresists), which are integration materials for advanced processes. In packaging materials, demand is growing in the high-density integration field for semiconductor post-processes where even greater functionality and compactness are desired for products such as smartphones, tablets, wearable devices, and healthcare equipment. We will leverage our high-resolution positive photoresists' strengths to grow sales. In MEMS materials, increasing demand for sensors in products like smartphones and IoT-related items, coupled with growing emphasis on performance translates to opportunities for TOK to grow its market share. We will strive to gain a deeper understanding of what customers want. At the same time, we will keep up our widespread efforts on the sales and development fronts to win new customers.

### High purity chemicals

High purity chemicals, including stripping solution, thinners and developing fluids, are vital for manufacturing semiconductors and LCDs. With manufacturing processes for cutting-edge semiconductors in the 2Xnm generation and later, customers' yields hinge not just on photoresists but the quality of such chemicals (i.e., higher purification). High purification technology is another core technology for TOK. We have straightforwardly pursued its development since our founding as a technology inseparable from microprocessing. In the fiscal year ended March 2015, that value was recognized again in the cutting-edge semiconductor field, and we grew our share—mainly for major customers. We will keep developing high-quality chemicals that are just right for customers' manufacturing processes, and meet demand in new growth markets such as clean solutions (stripping solutions).

### Positioning Equipment Business as a new foothold for future earnings

Semiconductor miniaturization is believed to be approaching its physical limits due the bounds of Moore's Law. As such, 3D packaging is expected to be the next new growth field after the 1Xnm generation.

3D packaging technology entails stacking thinned semiconductor chips in layers. In addition to three dimensional shape, it realizes higher density and miniaturization of devices. TOK's wafer handling system "Zero Newton" (TSV: Through Silicon Via equipment) helps make this manufacturing process more efficient.

The 3D semiconductor market is gradually taking shape, chiefly for graphics processing units (GPUs) for high-end cloud servers, games, PCs, and high-end workstations.

3D packaging will probably see mass production demand gain further steam as one major trend on the semiconductor industry horizon. We are thus positioning it as a foothold for future business earnings. We will broaden our earnings base by approaching new customers, along with existing customers.

### Building new businesses to reach our operating income target of ¥20 billion in the fiscal year ending March 2021

The TOK Group targets operating income of ¥20 billion in the fiscal year ending March 2021. Achievement of this numerical management target is modeled on "growth for existing products, plus establishment and growth of new business domains". By developing multiple new businesses with sales at the ¥5 billion level, we aim to generate sales of ¥50 billion from new businesses in the fiscal year ending March 2021.

Through multifaceted development of our core competence in microprocessing technology, and collaborations and alliances with external parties including consortiums and university laboratories, we aspire to expand our business domains.

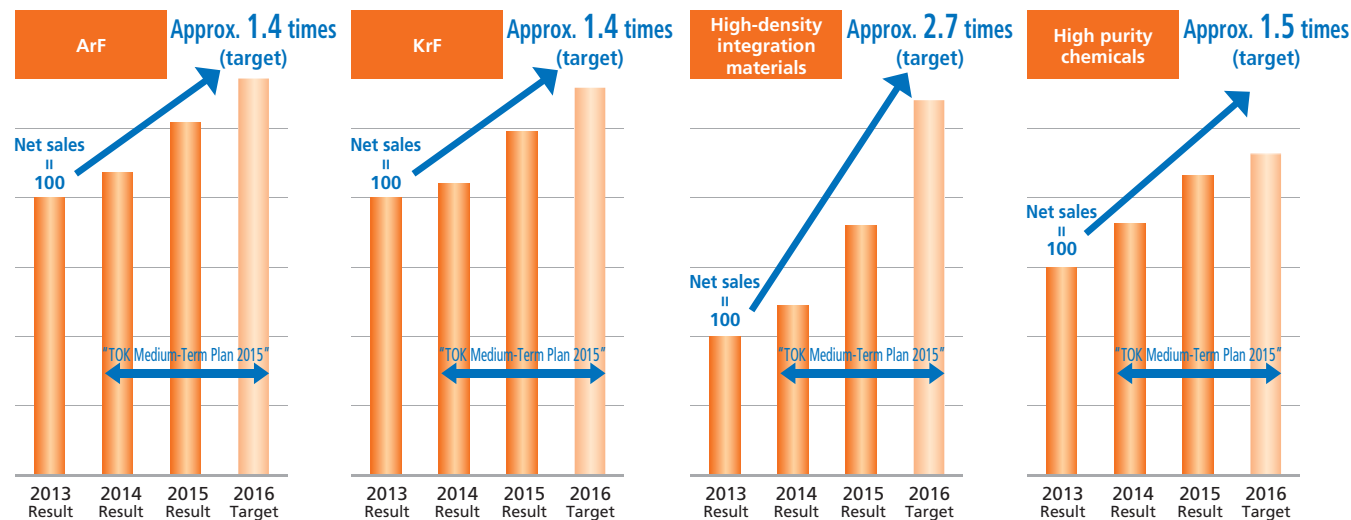
Albeit behind initial plans, sales of TSV equipment, which is a new business domain, are expanding as 3D packaging is starting to take off in the semiconductor industry.

In addition, we are working to expand sales of "EPLUS®," a diffusing agent for manufacturing crystalline silicon solar cells, that was developed by TOK and contributes greatly to the more efficient production of solar panels. Further, we are searching harder for themes for new business candidates such as optoelectronics, life sciences, rechargeable batteries, IoT.

Looking to the next medium-term plan as well, we will speed up efforts towards commercialization and bringing promising projects to the next level, while steadily implementing the plan, do, check, act (PDCA) cycle.

### Sales targets of three earnings drivers and high purity chemicals

Fiscal years ended March31



Note: The above figures for the sales of ArF and KrF include adjustments for the changes in sales routes in the fiscal year ended March 31, 2014.

## Heading for Greater Capital Efficiency and Shareholder Value

### Next medium-term plan to clarify our ROE target and the roadmap to reach it

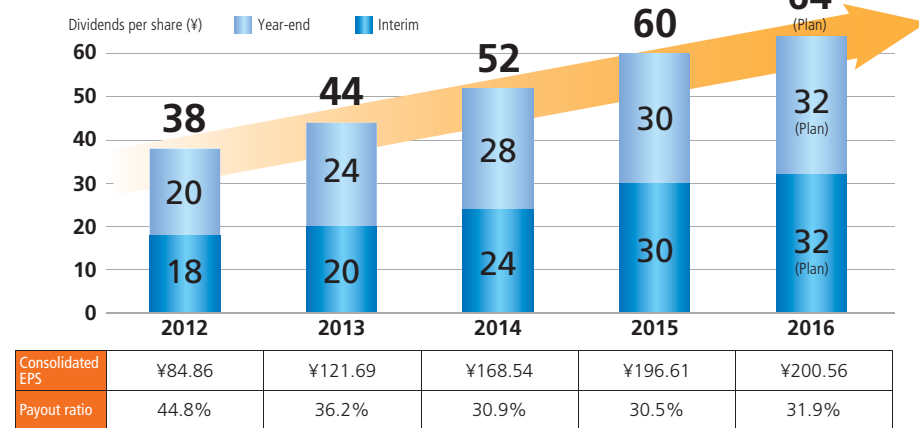
In the fiscal year ended March 2015, TOK's return on equity (ROE) rose 0.4 percentage points to 6.2%. While we attained record-high net income, ROE was at the 6% level. We attribute this mainly to a high equity ratio (84.3%), and greater foreign currency translation adjustments as yen depreciation progressed at the same time as profits reached a record high.

Though we will continue to advance our growth strategy targeting earnings expansion, we are acutely aware that

bolstering ROE is vital to our relationship with shareholders and investors.

We therefore plan to clarify a numerical ROE target and set a course for its achievement in the next medium-term plan. We are diligently working to establish an ROE target for the next medium-term plan's final year—the fiscal year ending March 2019, as well as key measures to attain it from both the numerator (steps to raise profit) and denominator (capital policy) sides of ROE.

**Dividends/Payout ratio**



**Forecasts for consolidated performance in the fiscal year ending March 2016**

<b>Net sales:</b>	<b>¥96.7 billion</b>
	(+9.8% year on year)
<b>Operating income:</b>	<b>¥13.3 billion</b>
	(+0.4% year on year)
<b>Net income attributable to owners of parent:</b>	<b>¥9 billion</b>
	(+2.1% year on year)

\* Includes a 75th anniversary dividend of ¥4

**Policy of returns to shareholders**

At TOK, we consider returning profits to shareholders to be one of our most important management objectives, and while taking a long-term perspective, we return profits to shareholders based on a comprehensive consideration of factors such as our financial position and business performance. Going forward, it will be based on comprehensive consideration of factors such as our financial position and business performance as before and we will also continue to ensure sufficient internal reserves necessary for us to become increasingly competitive and profitable. Our basic policy on dividends is to ensure that distributions result in a consolidated dividend payout ratio over 30%, while taking into account current dividend levels.

Based on this policy, we have distributed dividends of ¥60 per share for the fiscal year ended March 2015, which is an increase of ¥8 year on year, for a dividend payout ratio of 30.5%.

In the fiscal year ending March 2016, based on the performance forecasts shown above, we plan to distribute annual dividends of ¥64 per share, including a 75th anniversary dividend of ¥4, for a dividend payout ratio of 31.9%.

**Purchase of treasury stock to enhance shareholder returns**

Our shareholder returns policy provides for flexibly purchasing treasury stock as a part of initiatives looking to the long term. Accordingly, we recently executed a stock buyback of up to 1.75 million shares or total purchase price of ¥7 billion (May 11–July 10, 2015), and cancelled 1.5 million shares (September 16, 2015).

We decided to purchase treasury stock for the first time in seven years for two key reasons. Firstly, our performance is strong with record-high profit. Secondly, we carefully examined the amount needed for capital investments in our three-year medium-term plan. We determined that even ensuring for fully adequate levels in the future, the necessary amount is lower than the initial investment projection (¥33.5 billion).

Moving ahead, we will continue to consider flexibly purchasing treasury stock, while keeping an eye to the balance between shareholder returns and growth investments. We plan to establish a basic policy once again in concert with the dividend policy and steps to bolster ROE, and provide information on it along with the details of the next medium-term plan at a future date.

**CSR Activities Underpinning Our Foundation for Sustainable Growth**

**Management showing leadership, including in collaboration with stakeholders**

The TOK Group is honored to celebrate its 75th anniversary in October 2015.

We recognize that a good relationship with all of our stakeholders has been integral to our continued business operations and provision of value to society to date. In addition to shareholders and investors, our stakeholders include customers, business partners, employees, and local communities.

By continuing to polish our microprocessing technology and putting our strategy of building close relationships with

customers into full play, we will maximize the value we deliver to customers. At the same time, we will proactively work to shape a sustainable society by deepening collaboration with shareholders and investors, business partners, employees, and local communities.

In advancing these initiatives, all members of management including myself will lead by example as we work to increase TOK's sustainable growth, value delivered over the medium-to long term, and corporate value.

We kindly request your ongoing support and understanding.

**Dialogue between the President and an Analyst**



**TOKYO OHKA KOGYO CO., LTD.**  
President & Chief Executive Officer **Ikuo Akutsu**

**Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.**  
Equity Research Division Senior Analyst **Nobuhito Owaki**

We invited Nobuhito Owaki, chemical sector analyst at Mitsubishi UFJ Morgan Stanley Securities concerning recent business trends, business investments, and financial and capital strategies for TOKYO OHKA KOGYO, to interview President & CEO Ikuo Akutsu.

**Recent Business Trends**

**Owaki** In the fiscal year ended March 31, 2015, TOK had record profits. In your view, what are the primary factors behind this? In addition, tell me about the performance forecasts for the fiscal year ending March 31, 2016 and current conditions.

**Akutsu** There are many factors behind the record profits in fiscal 2015 including currency exchange factors resulting from the yen's further depreciation, increased sales of high value-added products, and improvements in the earnings structure due to withdrawal from unprofitable businesses after the collapse of Lehman Brothers. On the other hand, the performance forecast for the fiscal year ending March 31, 2016 is for operating income to remain unchanged (¥13.3 billion) from the previous fiscal year, despite higher sales, due to the difficulty of achieving the operating income target of ¥15.0 billion initially set for the final year of the medium-term plan as a result of increased depreciation and amortization. Under this forecast, we posted operating income of ¥3.8 billion in the first quarter,

a record since reporting of quarterly results was begun, so we are of the opinion that things aren't bad. However, for the second quarter onward, we expect increased depreciation and amortization and repair and maintenance expenses together with an anticipated weaker semiconductor market, so we can't rest on our laurels.

**Owaki** What is the operational status of TOK Advanced Materials Co., Ltd. in South Korea?

**Akutsu** The transfer of production was completed in December 2014 and currently continues to surpass initial production targets, so utilization is robust. An advanced photoresist R&D facility has been built on its premises and since we can quickly exchange information with our major South Korean customers, we are steadily seeing effects such as getting our products adopted in the logic semiconductor field where we had little success in the past. Looking ahead, we will focus on R&D and expect the adoption of advanced photoresists will contribute to earnings growth.



## Business Investments >>

**Owaki** The best way to effectively spend cash is in your core business. Looking at it from the outside, in TOK's Material Business, mainly in semiconductor materials, R&D and capital investment are doing well. However, the Equipment Business is not expected to achieve the same growth as the Material Business. That said, selling the Equipment Business to accumulate cash is not a good idea. Can the Equipment Business achieve growth with a strategy to wait for the TSV market to take off?



**Akutsu** The Equipment Business experiences intense swings in supply and demand and the current circumstances remain harsh. Depending solely on TSV equipment will make future growth difficult, therefore we are working to develop second and third earning pillars. We are expanding new equipment to include UV curing machines and next-generation flexible display manufacturing equipment, and as the response has been good, we would like to aim for additional growth in addition to TSV equipment. In the fiscal year ending March 31, 2016, we expect increased sales for TSV materials and to generate synergistic effects with the Material Business.

## Financial and Capital Strategies (including ROE) and Corporate Governance >>

**Owaki** Approach to investment efficiency is changing within the stock market. The debate about ROE and asset efficiency has been addressed many times before, but this time I think it has really picked up steam. The current social trend is to view companies with an ROE of less than 8%, even with high profitability, as having not met public expectations.

As an analyst with more than 20 years of experience, I think people tend to put too much emphasis on ROE. Therefore, to those companies that overemphasize ROE, I say, "Manage with conviction." However, that too is a matter of degree. The fact that TOK's cash holdings are excessively high is undeniably a management issue, and while there is no need to pander to social trends, in that case too, conviction is needed when holding large amounts of cash.

**Akutsu** I know from experience that interest in ROE has been rising over the last year or two. Although I cannot clearly pinpoint what the appropriate level of cash holdings for TOK should be at this time, we must consider some sort of balance. As for the appropriate capital structure and ratio, we are now thinking of creating a coefficient indicator to continue running simulations to determine the medium- to long-term balance. Once the data is in, I would like to provide an explanation to the market. In addition, I realize that our cash holdings are high considering the size of our business, but our competitors with huge assets are expanding business in multiple directions, so we need a certain lump sum to quickly accommodate capital investments, M&A and other contingencies.

**Owaki** Because of the business environment in which TOK operates and the fact that its competitors are huge companies, the need for minimum capital in units of ¥10 billion is understandable. What worries the stock market is an unlimited accumulation of cash, therefore you need to establish a measure that serves as a benchmark. It doesn't matter whether it's an absolute amount or a percentage, but it is important to know the form (concept) and size (quantitative benchmarks) of the "cup." The overflow from that establishes a clear indicator for shareholder returns and offers a sense of reassurance to investors. Among chemical manufacturers there are some that disclose their standards for retaining cash. Showing the size and shape of the "cup" is an effective message to investors.

**Owaki** In June, you increased the number of independent officers by two (one outside director and one outside auditor). What are the positive and negative aspects of this move?

**Akutsu** I don't see any negatives to increasing the number of outside directors. Obtaining the views of managers and specialists from other industries is a positive stimulus.



**Owaki** As rules are made concerning how presidents should be doing their jobs by setting ROE targets and increasing the number of outside directors, I believe that the president's choices have narrowed. I think it is becoming difficult for presidents to exert their distinctive characteristics and individuality.

**Akutsu** When people serve as managers for a long time, sometimes before they know it, they become unrestrained. Being aware of outside opinions and ideas, such as those from investors and outside directors, is a positive in the sense that management is able to stay vigilant.

## Dividends and Purchase of Treasury Stock >>

**Owaki** North American and Hong Kong investors favor the purchase of treasury stock, while European investors tend to favor dividends, in my view. The purchase of treasury stock benefits only the shareholder at the time of the purchase. But the effect of a dividend increase extends even to "future shareholders" who will buy that company's shares at a future date. Moreover, while a dividend decrease is an experience that every manager in the world wants to avoid at all costs, a dividend increase enables you to see the confidence and preparedness that management has for future performance.

The purchase of treasury stock, as a capital flow, is the reverse of equity financing. According to the textbook, fund raising done through equity finance and shareholder returns done through share buy-backs are advocated. However, in Japan, the equity finance market sometimes essentially freezes when a financial crisis arises, therefore financing is not always available. Which is to say, in real terms, it is difficult to think that the purchase of treasury stock and equity financing are economic activities that are merely reversed.

**Akutsu** Our basic approach is to continue returning profits to shareholders taking into account the balance with capital investment. On the basis of stable dividend payments, we have increased dividends for the sixth consecutive fiscal year. As for the purchase of treasury stock carried out in May, because the change in the investment amount and investment schedule for new businesses, which had been scheduled for the fiscal year ending March 31, 2016 in the "TOK Medium-Term Plan 2015," generated a ¥7.5 billion difference with our original plan, we decided to purchase ¥7.0 billion in treasury stock as part of a policy to raise ROE. Further, as I previously stated, since we need a sizable amount of funds on standby and maintain such funds, we are not thinking of procuring outside financing at this time.

## Conclusion >>

**Owaki** One of the important jobs of security analysts is to objectively and logically examine the management policies and basic strategies of each company as accurately as possible and communicate their opinions to the stock market. At the same time, it is important that analysts accurately communicate the substance and scale of the stock market's expectations for these companies and predict how the market will react to specific policies and strategies.

**Akutsu** The views of industry-savvy analysts are often valuable and I look forward to continually receiving their honest opinions.

Nobuhito Owaki  
(Profile)

Joined Nomura Research Institute, Ltd. in 1992, covering the chemicals sector since 2000. Previously worked for JPMorgan Securities Japan Co., Ltd. and joined Mitsubishi UFJ Morgan Stanley Securities Co., Ltd. in 2013

## Material Business

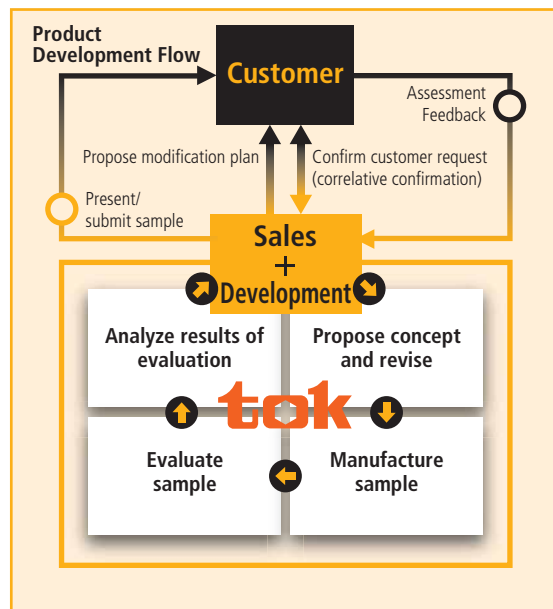
### Manufacturing and sales of electronic functional materials and high purity chemicals



#### Customer-Oriented Business Model

##### Strategy of Building Close Relationships with Customers

In the Material Business, we seek to accurately identify and fulfill increasingly sophisticated and diverse customer needs. To this end, we are focused on implementing a strategy of building close relationships with customers that is designed to deliver speedy results by harnessing our collective capabilities spanning development, manufacturing (technologies and production) and sales (marketing).



#### FY2015 Performance

##### Delivered Record-High Net Sales and Segment Income

In the electronics industry, demand for smartphones, tablets and other devices continued to expand. In addition, the downturn in demand for PCs subsided. Against this backdrop, firm conditions were evident in the semiconductor market. Sales of semiconductor photoresists such as KrF and ArF excimer laser photoresists increased sharply in Asia and North America as a result of the focused implementation of our strategy of building close relationships with customers.

In high-density integration materials, sales of thick-film photoresists for semiconductor package materials, permanent photoresists for MEMS and other products trended favorably in Asia and North America.

Although sales of LCD materials were down from the previous fiscal year, sales of high purity chemicals grew. Higher sales were recorded for developing fluids and thinners for Taiwanese customers, as well as for stripping solutions for North American customers.

As a result, net sales rose 16.1% year on year, reaching an all-time high for the segment.

In addition to this top-line growth, the impact of foreign exchange fluctuation (¥99.3 in the fiscal year ended March 2014 to ¥109.3 in the fiscal year ended March 2015) pushed up segment income by 16.1% year on year to a record-high for the segment.

#### Market Conditions

##### The Race to Increase Semiconductor Integration Enters a New Phase

The main battleground of the race to increase semiconductor integration has shifted to the 1Xnm (10 nm level) generation, driven by advances in smartphones and wearable devices, the increasing performance of cloud servers and the full-scale emergence of the IoT market. Moreover, with improvements in two-dimensional integration approaching a physical limit, the 3D-NAND market has started to grow.

TOK commands leading global shares of the market for ArF excimer laser photoresists in the 1Xnm generation sector and the market for KrF excimer laser photoresists in the 3D-NAND market. We also have R&D frameworks based on close relationships with our customers in place in both of these areas. Going forward, we intend to hone these strengths to the fullest extent possible.

#### Growth Strategy

##### Maximize Strengths in KrF Excimer Laser Photoresists in the 3D-NAND Market

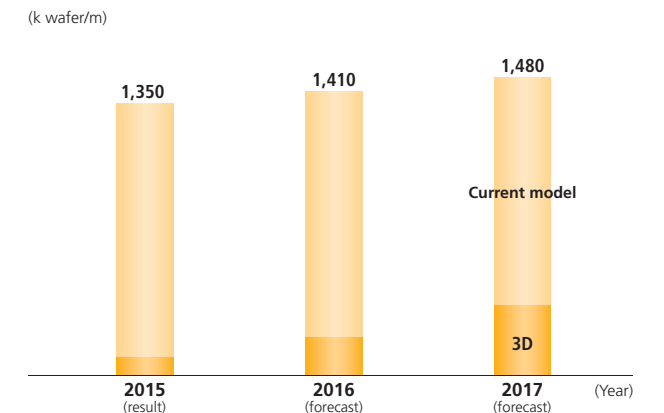
In the 3D-NAND flash memory multi-layering process, there is a growing range of new needs for KrF excimer laser photoresists. Unlike the miniaturization capabilities required of cutting-edge ArF excimer laser photoresists, KrF excimer laser photoresists are needed for their thick-film forming properties, etc., when used as a thick-film photoresist in the 3D multi-layering process. Preparations for mass production are currently underway primarily at major NAND flash memory

manufacturers in Japan and Korea, and TOK's products have been adopted by a major customer.

3D-NANDs are being increasingly used in solid state drives (SSDs) to replace hard disk drives (HDDs). Because of their fast processing speeds, demand for 3D-NANDs are expanding for use in online gaming servers, data centers, PCs and more. By the end of 2016, 3D-NANDs are projected to account for nearly 20% of all NAND flash memories.

TOK will continue working to increase the number of its products that are adopted by customers through efforts to improve product properties in step with an increase in integration layers. Our goal is to solidify our position as the global market share leader in KrF excimer laser photoresists.

#### Wafer Capacity in the NAND Flash Memory Market

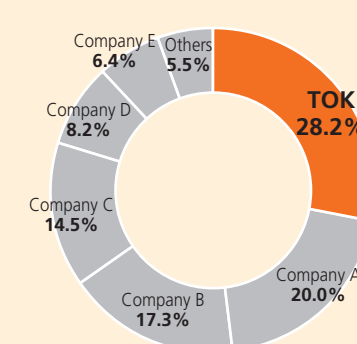


Source: Research by Electronic Device Industry News

#### Material Business Performance and Outlook

	FY2011	FY2012	FY2013	FY2014	FY2015 (result)			FY2016 (forecast)		
					Change	%		Change	%	
Net sales	71,482	66,645	67,697	72,866	84,611	+11,744	+16.1%	92,300	+7,688	+9.1%
Electronic functional materials	42,573	43,246	43,116	43,261	49,818	+6,556	+15.2%	54,600	+4,781	+9.6%
High purity chemicals	25,124	22,789	24,144	29,194	34,844	+5,650	+19.4%	37,500	+2,655	+7.6%
Other	3,693	609	435	410	(52)	(463)	—	200	+252	
Segment income	10,796	8,303	10,716	14,086	16,355	+2,269	+16.1%	16,400	+44	+0.3%
Segment income margin	15.1%	12.5%	15.8%	19.3%	19.3%			17.8%		
Segment assets	61,921	57,798	68,686	79,147	92,440					
Depreciation	3,787	3,526	3,221	2,241	3,894					

#### Worldwide Share of KrF Excimer Laser Photoresists



Company	Sales volume (Thousands of gallons)
TOK	155
Company A	110
Company B	95
Company C	80
Company D	45
Company E	35
Others	30
Total	550

Source: Status and Outlook for Semiconductor Materials Market 2015 / Fuji Keizai



- Multiple earnings drivers (ArF and KrF excimer laser photoresists, high-density integration materials, high purity chemicals)
- Strategy of building close relationships with customers in South Korea, Taiwan and North America
- Technology development capabilities in cutting-edge miniaturization and high purification

**S**  
Strengths

**W**  
Weaknesses

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

**O**  
Opportunities

**T**  
Threats

- Fewer customers due to industry consolidation
- Increased investment outlays for inspection and production equipment in connection with ultra-high purification
- Higher costs of next-generation exposure equipment

**SWOT Analysis of the Materials Business**

- More opportunities for adoption of products due to faster technology replacement cycles
- Growth of China's semiconductor market
- Technology prospects in the IoT field



Flagship product: ArF excimer laser photoresists



Circuit pattern formed by an ArF excimer laser photoresist

Line width: 21 nm  
(approx. one 5-thousandth width of a human hair)

**Prevailing with the Final Generation of Immersion ArF Excimer Laser Photoresists**

The development race for the 1Xnm generation, which is regarded as the final generation of immersion ArF excimer laser photoresists, is approaching its last stretch. TOK is pursuing development with a focus on changes in customers' photoresist evaluation methods.

When launching new processes, semiconductor manufacturers previously evaluated the products of photoresist manufacturers by comparing them side by side. For cutting-edge processes, semiconductor manufacturers increasingly tend to carry over photoresists they can continue to use from previous processes, and revise the use of only those photoresists that will require higher performance in the new processes.

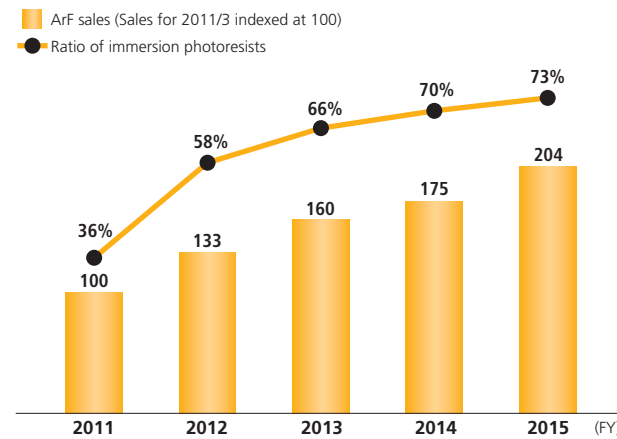
The photoresists that need to be revised are not put through evaluation tests all at once; semiconductor manufacturers first ask their current photoresist manufacturers to enhance product performance. Therefore, photoresist manufacturers can be contacted by customers fairly easily, and this underscores the importance of a strategy of building close relationships with customers.

In addition, when photoresists used in customer's new processes are superior to existing products, semiconductor manufacturers may retrospectively switch photoresists, going all the way back to photoresists used in processes for which mass production is being launched. For this reason, ensuring a dominant competitive edge in new processes will help to

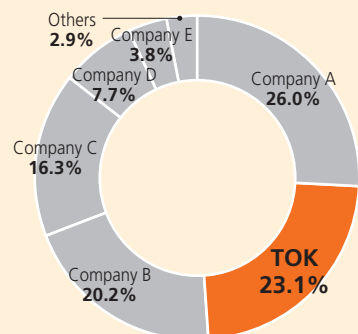
enhance the overall competitiveness of our ArF excimer laser photoresist products, including products other than immersion photoresists.

TOK currently has a leading global share of immersion ArF excimer laser photoresists. We expect 1Xnm generation semiconductors, which use these products, to continue growing for use in smartphones, tablets and wearable devices. Therefore, we will continue to focus on our strategy of building close relationships with customers as we seek to capture an even greater market share.

**Sales of ArF Excimer Laser Photoresists and Ratio of Immersion Photoresists**



**Worldwide Share of Immersion ArF Excimer Laser Photoresists**



(2014 results)

Company	Sales volume (Thousands of gallons)
Company A	27
<b>TOK</b>	<b>24</b>
Company B	21
Company C	17
Company D	8
Company E	4
Others	3
<b>Total</b>	<b>104</b>

Source: Status and Outlook for Semiconductor Materials Market 2015 / Fuji Keizai



**Insight**

**Photoresist Market**

**Strong Presence of Japanese Manufacturers**

Many Japanese chemical manufacturers are global leaders in their respective fields, and hold top market shares in numerous chemical material sectors. Photoresists are no exception. Japanese manufacturers hold an approx. 90% worldwide market share for ArF excimer laser photoresists, and an approx. 85% for KrF excimer laser photoresists.

In view of these reasons, Japanese photoresist manufacturers certainly have outstanding strengths. In addition, many chemical manufacturers supplying the core raw materials for photoresists, such as polymers,

resins and photoacid generators, are Japanese. As a result, Japanese photoresist manufacturers are able to maintain consistent high quality across the entire supply chain, from upstream to downstream.

One source of strength for Japanese manufacturing is its culture of close coordination among all related parties. Photoresist manufacturers and raw materials manufacturers share details on customer needs with one another, and closely coordinate performance requirements, specifications and other aspects of products in great detail. This coordination is crucial to achieving high-quality photoresist manufacturing.

**Photoresist Supply Chain (Example of KrF and ArF excimer laser photoresists)**



**Long-Term Outlook for ArF Excimer Laser Photoresist and KrF Excimer Laser Photoresist Markets**

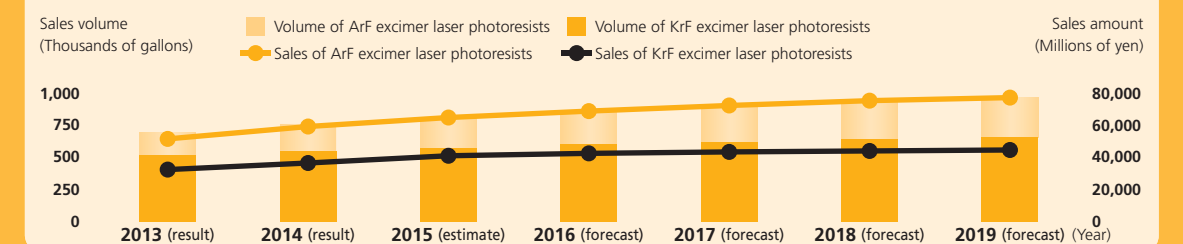
The global market (sales volume) for ArF excimer laser photoresists and KrF excimer laser photoresists is expected to grow at an average of 7.9% and 4.1% from 2014 to 2019, respectively.

Demand for ArF excimer laser photoresists is currently growing for semiconductors used in smartphones and tablets. Demand is also projected to expand over the

long term based on future changes of generations in terms of miniaturization. These changes will be driven by increases in the capacity, processing speed and integration of semiconductor devices.

Demand is also expected to remain firm for KrF excimer laser photoresists, despite the fact that photoresists have shifted from KrF to ArF in fields where miniaturization has proceeded the most. This outlook is based on expanding applications for 3D-NAND, as well as the fact that even cutting-edge devices still have a certain number of layers whose circuits are formed using KrF.

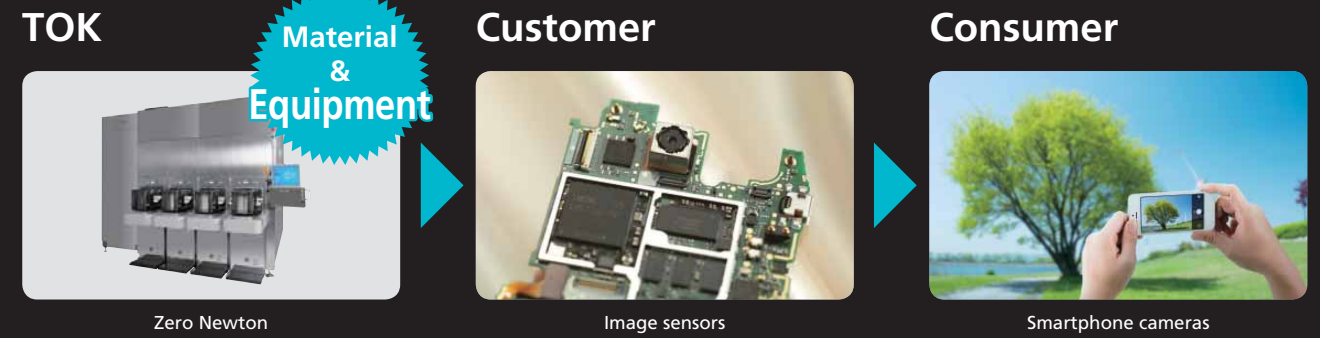
**Global Market Projections for ArF Excimer Laser Photoresists and KrF Excimer Laser Photoresists**



Source: Status and Outlook for Semiconductor Materials Market 2015 / Fuji Keizai

## Equipment Business

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

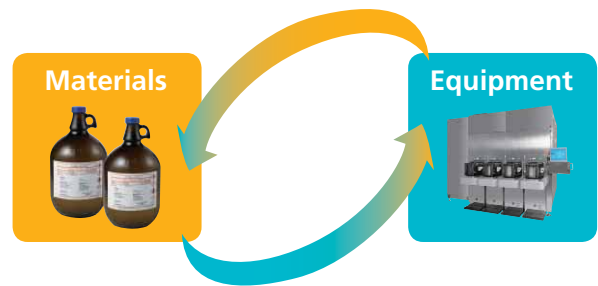


### M&E Strategy

We are driving forward our Materials & Equipment (M&E) strategy, which is designed to generate synergies by fostering close coordination between the Material Business and the Equipment Business in advanced technologies in the semiconductor and liquid crystal-related fields.

Notably, in the semiconductor-related field, lithography technology is entering its physical limit as Moore's Law approaches the limit of miniaturization. So we are focused on honing the competitiveness of our photoresists for 3D-NAND, which is a new technology. In the Equipment Business, we seek to strengthen our competitive edge in both the 2D and 3D packaging markets by focusing on our Zero Newton through-silicon-via (TSV) process system, which is one of our 3D packaging technologies.

### Strengthening Our Competitive Edge in Both the 2D and 3D Semiconductor Markets



### FY2015 Performance

#### A Turnaround in Earnings

In the fiscal year ended March 31, 2015, the Equipment Business returned to profitability, owing to a year-on-year improvement of ¥0.9 billion in segment profitability. This improvement was underpinned by sales of Zero Newton, semiconductor equipment, flexible display manufacturing equipment and other products. In addition to cost cutting efforts, this turnaround reflected the fact that we steadily captured demand for TSV (through-silicon-via) that had gradually started to pick up in the 3D packaging market related to semiconductor manufacturing.

#### Positioning of the Equipment Business Segment

In the fiscal year ended March 31, 2015, net sales in the Equipment Business represented just under 4% of the Group's overall net sales. Investors sometimes tell us, "The Equipment Business has very little significance as a segment," and "Why not combine this segment with the Material Business segment?" The characteristics of the Equipment Business are very different from the Material Business. Unlike the Material Business, it is based on a development-focused fabless production method that does not employ its own factory. Other differences include long lead times from ordering to sales, as well as a high cost and price per product.

To achieve our M&E strategy and sharpen our competitive edge in both the 2D and 3D semiconductor markets, our first

priority must be to steadily expand the scale of the Equipment Business. By bolstering this business as an independent segment, we intend to nurture the Equipment Business into a core future earnings driver.

### Market Conditions

#### Trends in the Market for 3D Packaging Using TSV

Nanoscale microprocessing has so far driven significant advances in semiconductor manufacturing processes. Therefore, the multilayering of semiconductors marks a major turning point in semiconductor manufacturing. There are several methods of multilayering, i.e. increasing the density per chip by vertically layering semiconductor chips. 3D-NAND is one of these methods that has already entered the practical implementation phase. Another method, TSV, is attracting high hopes as the most promising technology. For TSV, a market for practical applications has also started to emerge. In fact, TOK has been fielding more and more inquiries about its TSV equipment, and orders are on a growth trajectory.

The most promising applications for semiconductors using 3D packaging through TSV include image sensors, cloud servers, and high-end computer graphics. Cost reduction measures implemented over many years have started to chip away at the high cost structure that had impeded sales in the past. Therefore, TOK's strategy of building close relationships with customers will be fully brought to bear to expand sales in this field.

### Growth Strategy

#### Establishing a Competitive Edge in the TSV Market

TOK has been pushing ahead with development of TSV from an early stage, based on the expectation that semiconductor multilayering technology would come to the fore. By taking full advantage of its accumulated technologies and expertise, TOK will make steady strides to establish a competitive edge in the TSV market.

First, TOK will strive to expand its customer base by proactively approaching new target users, as well as existing ones as a matter of course, primarily through its core product Zero Newton.



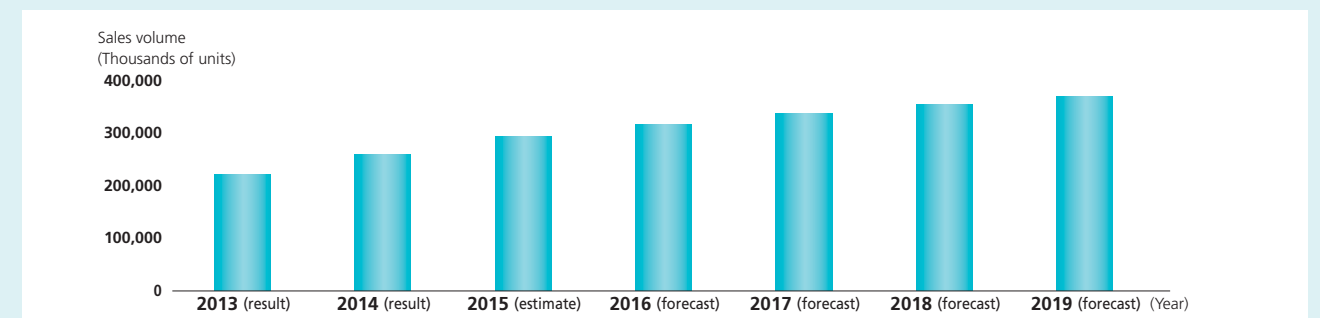
TSV equipment: the wafer handling system Zero Newton

### Equipment Business Performance and Outlook

	FY2011	FY2012	FY2013	FY2014	FY2015 (result)			FY2016 (forecast)		
					Change	%		Change	%	
Net sales	8,622	13,500	5,302	2,484	3,581	1,096	+44.2	4,400	924	+26.6%
Segment income (loss)	(1,381)	908	232	(889)	20	909	—	200	179	+887.5%
Segment income margin	—	6.7%	4.4%	—	0.6%			4.5%		
Segment assets	16,551	6,954	4,553	4,168	3,694					
Depreciation	269	203	254	204	167					

Note: The forecast net sales for FY2016 is the figure after elimination of inter-segment sales.

### Outlook for the TSV Market (Number of Packages)



Source: Status and Outlook for Semiconductor Materials Market 2015 / Fuji Keizai



- Adoption of TSV equipment by various companies, primarily in the memory market
- Lower break-even point using the fabless production method
- Technological edge as a first mover in development
- Knowledge of materials developed in the Material Business

**S**  
Strengths

**W**  
Weaknesses

- High cost structure in the dawn of market where mass production has yet to start
- Delays in the takeoff of the TSV market due to high process costs

SWOT Analysis of the Equipment Business

- Growth in the 3D packaging market as miniaturization approaches physical limits
- High-resolution technology and coating technology developed in the LCD field
- Equal opportunities for products to be adopted in a new market

**O**  
Opportunities

**T**  
Threats

- Full-fledged entry of major companies
- Displacement of TOK's multilayering technology by third-party technologies in the 3D packaging sector

Development of Next-Generation Display Devices

In the LCD- and display-related fields, we will focus on UV (Ultraviolet) curing machines and next-generation flexible display manufacturing equipment.

UV curing machines enables forming high-resolution TFT (Thin-Film Transistor) arrays without heat. Accordingly, there are growing needs for UV curing machines in the production of high-resolution displays for next-generation smartphones and tablet devices. So TOK is stepping up activities to win orders for UV curing machines, targeting small and medium-sized LCD panels, in the quest to bolster UV curing machines as a core earnings driver following TSV equipment. Efforts are currently focused on enhancing the competitiveness and expanding sales of the TUV ssi series of UV curing machines that combine improved heat resistance and dry etch resistance while maintaining detachability.

As for next-generation flexible display manufacturing

equipment, flexible displays that are thin, lightweight and pliable and that can be rolled up are attracting interest. Therefore, TOK is developing new manufacturing equipment for electronic paper and flexible organic electroluminescent (EL) displays. We are primarily working on process development using coating machines, baking machines, and stripping systems.

In the Equipment Business, TOK posted record-high segment income of ¥3,007 million in the fiscal year ended March 31, 2007. Our main earnings driver at the time was LCD panel processing equipment. Although earnings in the LCD panel sector have declined in step with structural changes in the LCD panel market, TOK will harness its wealth of accumulated technologies and expertise to establish a competitive edge in UV curing machines and next-generation flexible display manufacturing equipment.



UV curing machine

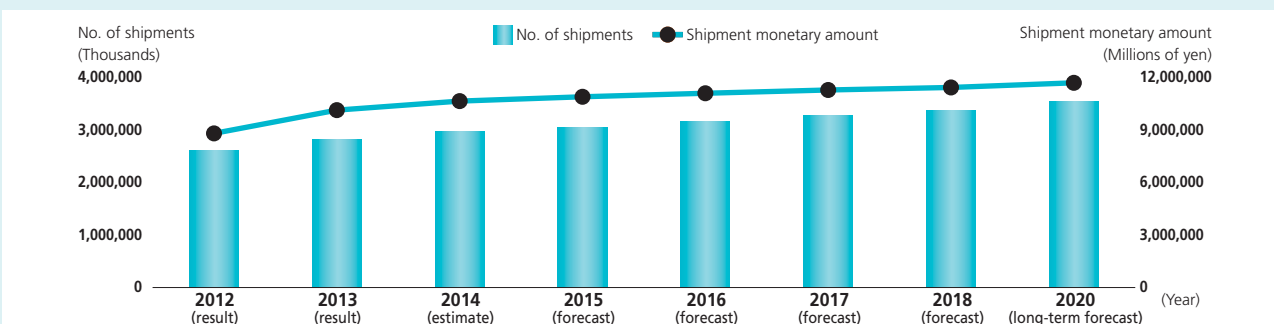


Coating machine for R&D



Baking machine

Outlook for the LCD Market



Source: Human Interface Related Market 2014: Comprehensive Survey / Fuji Chimera Research Institute, Inc.



Insight

Three Methods of 3D Semiconductor Packaging

3D semiconductor packaging will play a vital role in achieving "More Moore"—that is, further progress of Moore's Law. At present, there are three major trends in 3D semiconductor packaging methods: FinFET, 3D-NAND, and TSV.

1. FinFET (3D Transistor)

FinFET builds a three-dimensional gate and electrode structure upon a planar substrate. For the same substrate area, FinFET dramatically enhances operating performance and reduces power consumption compared with conventional transistors. FinFET entered into commercial use in 2013. 3D semiconductors employing this method are used in smartphones and other devices.

TOK supplies photoresists used to manufacture semiconductors, high purity chemicals, and other products for use in the manufacturing processes of customers in South Korea and Taiwan that employ the FinFET method.

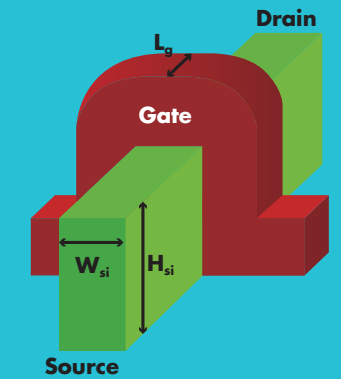


Diagram of basic FinFET architecture

2. 3D-NAND

With 3D-NAND, the chip area is reduced without changing the data capacity because the bit density is increased vertically compared with conventional NAND flash memories with 2D structures. The data capacity per area of current NAND flash memories has been increased through miniaturization in the manufacturing process. However, various NAND manufacturers have adopted the 3D-NAND method because multilayering allows them to avoid being reliant solely on 2D microprocessing technology and to reduce costs. Full-scale mass production is expected to begin from the fiscal year ending March 31, 2016.

TOK supplies various materials, mainly KrF excimer laser photoresists, for use in the 3D-NAND manufacturing processes of major customers.

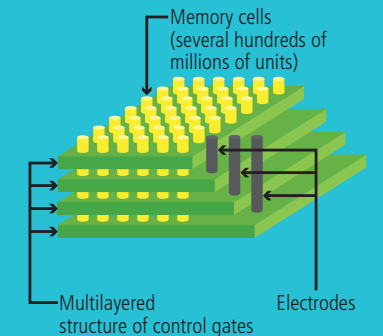


Diagram of basic 3D-NAND architecture

3. TSV (Through silicon via)

Through Silicon Via (TSV) is a multilayering technology that introduces multi-layer wiring to semiconductor chips using holes that pass through the chip. In the market, full-scale production of 3D semiconductors using the TSV method is expected to take off during the year ending March 31, 2016. TSV is a technology that achieves high density semiconductor chips without relying on miniaturization, by vertically stacking semiconductors with different performances, such as NAND, DRAM and logic. There is an extensive range of applications for products made using the TSV process. For that reason, most observers believe that TSV will eventually become the mainstream multilayering technology.

TOK supplies TSV equipment and materials to customers centered on semiconductor manufacturers in Asia, Japan and the U.S. Orders for TSV equipment are currently on a growth track.

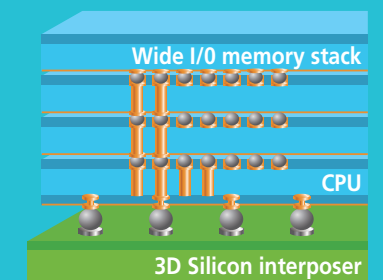


Diagram of basic TSV architecture



## Marketing Strategy

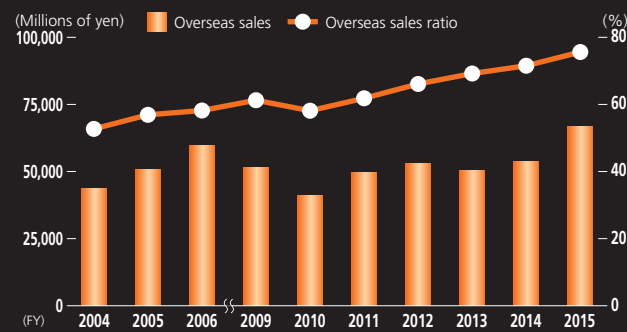
“Further deepen and broaden our close relationships with customers”

**Kobun Iwasaki**  
 Director, Senior Executive Officer,  
 Department Manager, Marketing Dept.,  
 President and CEO of TOK Advanced Materials Co., Ltd.

### Drawing up a marketing strategy with a global perspective

Our overseas net sales ratio has increased year by year, and exceeded 75% in the fiscal year ended March 2015. As the standing of our overseas customers has increased, so have the importance and earnings contributions of our subsidiaries around the world. The TOK Group understands the profound importance of aligning with the intentions of its subsidiaries and local needs, removing misunderstandings between the

#### TOK's Overseas Sales



### Further broadening our close relationships with customers

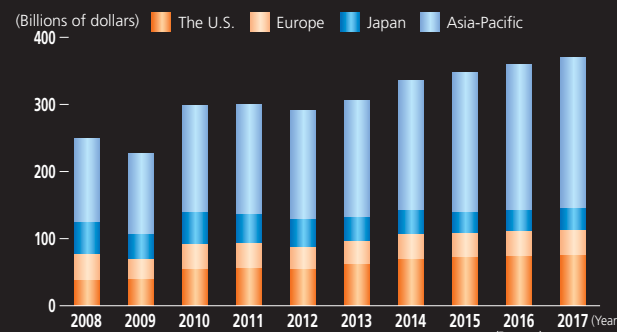
In 2013, we commenced R&D at our South Korean subsidiary TOK Advanced Materials Co., Ltd. (TOKAM), which has led to the adoption of our immersion ArF excimer laser photoresists for cutting-edge logic semiconductors by the largest chipmaker in South Korea. Only a few years earlier, we had a negligible presence in this field. We have seen a tangible impact from localization, such as the adoption of our advanced photoresists by a customer who had declined to use them in the past.

In terms of speed, we earned a high level of confidence

Headquarters and overseas subsidiaries, and taking a unified approach in its worldwide marketing strategy.

Accordingly, we are drawing up strategies for the practical implementation of our next three-year medium-term plan (fiscal 2017 to fiscal 2019), while reassessing the allocation of resources in marketing and all other business processes, including sales, development, field engineering (technical work provided to customers on-site) and production in each region.

#### Global Semiconductor Market: Net Sales by Region



Source: World Semiconductor Trade Statistics

from our customers by reducing development times at TOKAM to one third the time it formerly took via business trips from Japan to South Korea. At TOKAM, development managers are spending more time discussing technical details with customers, and the developers perform the data acquisition, mounting, and sample production on their own, making it possible to conduct pre-screening and fine-tuning locally. We are now able to deliver samples to customers within a few days of the initial meeting, and can ensure the correlation with customers' data thanks to evaluations using cutting-edge equipment at TOKAM. This has resulted in a major improvement in customer confidence in our quality.

Although competition in semiconductor photoresists is still heavy, localization has shortened the distance and time between us and our customers, led to improvements in quality, and the development of new products in collaboration with our customers. The localization has been a key factor behind the building of even more trust with our customers.

We believe establishing a cutting-edge R&D base in South Korea was the right decision, considering our track record of adoption in the country, future growth potential in advanced areas, and the government's "Buy Korea" policy that encourages domestic companies to prioritize the purchase of products made locally.



TOK Advanced Materials Co., Ltd. (TOKAM), our strategic base in South Korea for building close relationships with customers

### Focusing on the Chinese market which has a growing presence

The global centers for semiconductor manufacturing are now located in South Korea, Taiwan, and North America, but within five to ten years, China is expected to become the world's largest production base, including in state-of-the-art fields.

As for our business in China, we produce and sell high-purity chemical products as well as semiconductor-related and FPD-related materials through Chang Chun TOK (Changshu) Co., Ltd. and the Shanghai Representative Office. This business does not account for a high ratio of the Group's net sales (approx. 5% of total sales in the fiscal year ended March 2015). In the next medium-term plan, we must make concrete preparations for stepping up measures in the Chinese market.

The Chinese government intends to lessen reliance on imports for semiconductors by increasing domestic production, and plans to invest ¥1-2 trillion per year in infrastructure going forward. Since the government aims to have production take place in China, we think that companies will introduce technologies through acquisitions instead of starting from scratch with basic research. We envision this process starting with the acquisition and enticement of chipmakers, followed by the emergence of wafer, resist, gas and other materials makers. We see the possibility of China becoming the center of mass production of single-digit node semiconductors around 2025.

We believe the formation of a B2B market within the world's largest B2C market is highly significant, and that its impact will be on a different scale altogether. The Chinese government is likely to provide capital assistance and tax breaks, and device makers in South Korea, Taiwan and North America are already getting in on the action. The Chinese system of government administration can be an impediment at times, often throwing away the best-laid plans, leaving companies to stumble along. While paying close attention to our customers and competitors, we will diligently examine the best way forward with our strategy of building close relationships with customers in China.

### Growth Potential of Chinese Semiconductor Market



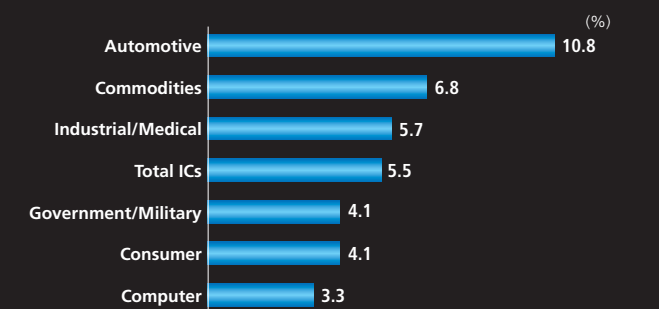
Source: IC Insights

### Anticipating expansion of the image sensor market mainly for vehicles

In the post-smartphone market, wearable devices are considered promising, but as a photoresist manufacturer, TOK views the vehicle-related market, in which it can comprehensively engage, as the most promising. Although application of state-of-the-art miniaturization technology for the vehicle market has thus far been limited, the use of semiconductor devices, such as CMOS image sensors, will continue to expand after moves to accelerate the application of IoT in vehicles and shift to autonomous vehicles achieve critical mass. On this point, we expect that areas where we can display our strength in microprocessing will expand.

Even in non-vehicle-related areas, we think that demand for semiconductor devices such as image sensors will grow. In this field, even though we will compete with manufacturers that are strong in basic materials development, we recognize our superior ability to understand and respond to customers' development and manufacturing processes, as well as their needs. TOK, with its deep knowledge of materials and in-depth understanding of customer needs, can clearly differentiate its products. Therefore, we are very optimistic about future growth in this field.

### Average Annual Growth Rate of the Semiconductor Market by Application Field (2013-2018)



Source: IC Insights



## R&D Strategy

“Continue to provide cutting-edge value in the pre-process and post-process of semiconductor manufacturing”

Harutoshi Sato  
Director, Officer,  
Department Manager,  
Research and Development Dept.



### Pre-process of semiconductor manufacturing: Actions to win market share in the 1Xnm (10 nm level) node or less of integration

As a technological trend for increasing the integration of semiconductors, we have worked with our customers on development of DSA\* materials to use it in the 1Xnm node process. But due to lingering issues with the completeness of the process, it will be a while longer before we can give the go-ahead for mass production.

EUV (Extreme Ultraviolet) lithography has been gaining attention as a technology that may replace immersion ArF excimer laser photoresists, and solid progress has been made in improving the performance of light sources, so the technology is a front-runner for commercialization. Development has

advanced with the aim of deploying EUV lithography on some processes below 10 nm by 2018, mainly at logic-related semiconductor manufacturers. TOK has dispatched researchers to the IMEC research consortium in Belgium to help with the development of photoresists for EUV lithography. We are also advancing this project in collaboration with our customers.

In cutting-edge microprocessing technologies of 2Xnm (20 nm level) or less, the level of technological difficulty is rising significantly, such as for controlling performance at the molecular level, and for handling ultra-high purity chemicals, including support materials. For this reason, it is more important than ever before to discover and precisely understand the specifications and needs of our customers from the outset, and then clearly define the functionality. In addition, we are

ITRS 2013 Roadmap		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
MPU/ASIC Metal 1/2 pitch (nm)		40	31.8	31.8	28.3	25.3	22.5	20.0	17.9	15.9	14.2
DRAM 1/2 pitch (nm)		28	26	24	22	20	18	17	15	14	13
Flash 1/2 pitch (nm)		18	17	15	14.2	13	11.9	11.9	11.9	11.9	11.9
Minimum 1/2 pitch	TOK resist/Technology candidate										
	30 to 20 nm	ArF double patterning									
<20 to 15 nm	ArF quadruple patterning										
	EUV										
	ArF extension/Litho assist										
	Directed Self Assembly (DSA) + Litho										
<15 to 10 nm	EUV double patterning										
	ArF quadruple patterning										
	Directed Self Assembly (DSA) + Litho										
	Imprint										
<10 nm	EUV extension										
	DSA extension										
	Imprint										
	Innovation										

concentrating harder on following the PDCA cycle, reviewing everything down to raw materials, in order to achieve the required specifications.

\* DSA: Directed Self Assembly

### A more elaborate strategy of building close relationships with customers in R&D

Even in R&D, TOK is enhancing the strategy of building close relationships with customers overseas. At our South Korean subsidiary TOK Advanced Materials Co., Ltd. (TOKAM), we initiated the development of cutting-edge photoresists. In the U.S., we set up a clean solutions (stripping solution) testing room in 2013. In Taiwan, TOK is ramping up development with inspection equipment newly installed in 2015 with an eye on the future adoption of products. The level of technological difficulty has steadily risen alongside the miniaturization of semiconductors. We are therefore sending our engineers out with sales staff to our customers in order to gather more detailed information and implement a more elaborate strategy of building close relationships with customers.

### Constantly proposing new added value in high-purity chemicals

Among high-purity chemicals, stripping solutions require an even stronger local presence than for the development of photoresists because their performance needs to be evaluated using the customer's wafers. Since establishing a local laboratory in Taiwan in 2015, we now better understand the needs of our customers there, leading to an increase in development projects that has prompted us to increase the number of local engineers. In light of the long time it takes to prepare proposals after needs are identified, TOK aims to put in place a system that constantly proposes new added value to customers, by advancing R&D in Japan with a firm grasp of their future needs.

### Post-process of semiconductor manufacturing: Upfront investment in packaging materials

Demand for packaging materials has increased due to advances made toward higher resolutions in the post-process of semiconductor manufacturing. TOK has been involved in the development of packaging materials from the outset, and its products have recently been increasingly adopted by customers.

We attribute this growth to our basic development of new polymers used in packaging materials that reflect the specifications required by customers, based on our long-standing forecast that the post-process market would expand.

Because it is difficult to set the initial conditions when we introduce a new packaging material, we prioritize close relationships with customers and support them from the early stage of product development. Our major advantages include

the provision of products that match customer needs in a timely fashion, and a quick-response structure for fine-tuning.

TOK is making upfront investments to reinforce its global structure to meet the growing demands for packaging materials in each region. TOK is also a member of the Institute of Microelectronics (IME, Singapore), a consortium of companies specializing in the post-process of semiconductor manufacturing, and working on the development of next-generation applications. IME is creating processes that use TOK's materials. Inquiries from new customers have increased based on the outcomes of these evaluations.

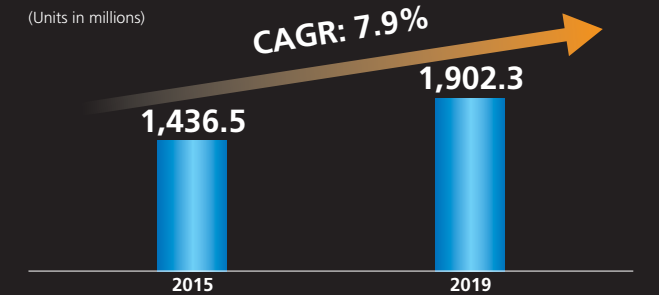
### Development of MEMS materials: Applying existing technologies to create new value propositions

MEMS (Micro Electro Mechanical Systems) materials are structured with the photoresist as a permanent layer. Recently, sales of MEMS materials have increased for SAW\*1 and BAW\*2 filters, which is mounted in communication devices including smartphones. As electronic components become more compact and dense, the need to apply lithography technologies has grown. TOK is therefore bringing to bear all of its accumulated technologies in the development of new applications for new customers.

In the MEMS field, for example, customer needs are increasing for film photoresists as well as liquid photoresists. TOK is working on the development of advanced MEMS materials based on its extensive technologies accumulated in its dry film photoresist business. Although the development of completely new technologies is also important, we believe a key resource for new value propositions is the effective utilization of existing technologies in other fields and new applications.

\*1 SAW filter = surface acoustic wave filter  
\*2 BAW filter = bulk acoustic wave filter

### Worldwide Smartphone Forecast



Source: Worldwide Smartphone Growth Expected to Slow to 10.4% in 2015, Down From 27.5% Growth in 2014, According to IDC, 25 Aug 2015

## New Business Development Strategy

“Delivering first-in-the-world products to the world”

Hiroji Komano  
Director, Officer,  
Department Manager,  
New Business Development Dept.

### Progress in new business development

TOK's business portfolio has a high ratio of sales made by the Material Business, and consequently the establishment of new businesses that will be new earnings pillars is essential to sustained and stable growth. As outlined in our long-term vision, our target is to achieve sales of ¥50 billion in new businesses by the fiscal year ending March 31, 2021, and therefore, we are pushing forward with new business development.

Currently, we continue to take on the challenge of “delivering first-in-the-world products to the world” under themes that include rechargeable microbatteries for the IoT market and life sciences. In the fiscal year ended March 31, 2015, our growth took us to the point where we could provide product samples to customers for these themes.

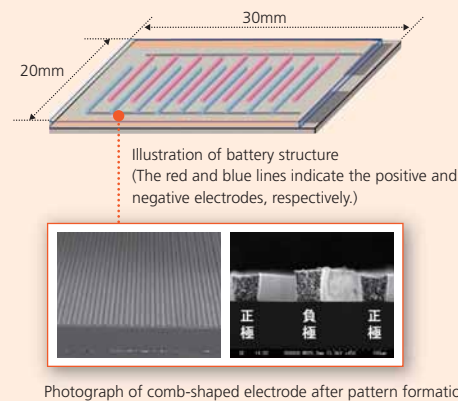
### Rechargeable microbatteries for the IoT market

To accelerate the expansion of the IoT market, the supply of power to huge numbers of mounted sensors is critical. So, the commercialization of ultra-small batteries capable of large-capacity discharge that are compact and can be charged even with a weak current is needed.

Currently, we are drawing on our core technology of photolithography technology to develop an ultra-small lithium-ion battery that is arranged with alternating minute electrodes on a wafer. By using this type of electrode with its “comb-shaped structure,” it is possible to structurally lower the internal resistance of the battery, creating a battery with the merit of allowing high levels of electric current to be taken out when charging or discharging. We are hoping to leverage this merit in the IoT field and the wireless sensor network\*1 field to find various applications as an energy harvesting\*2 hybrid power source that can provide self-sustaining electric power. Currently, we are conducting evaluations by customers in Japan and overseas, while increasing the amount of data that shows the reliability of battery cells together with other

important features. Furthermore, we are not only supplying the battery materials, we are participating in a consortium and moving ahead with joint R&D, with the aim of developing a device that will be the final product. Performance evaluations of TOK samples that have been incorporated into wireless sensor devices are now underway. Going forward, we will increase the presence of TOK batteries, and conduct R&D to realize their applications by being incorporated into a wide variety of devices, forging ahead to deliver a first-in-the-world battery to the world.

#### Battery structure of our proof-of-concept prototype of rechargeable microbatteries

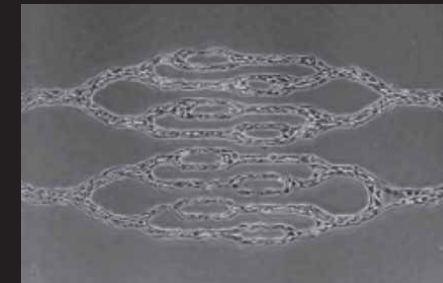


\*1 Wireless sensor network: A network that enables information including temperature, humidity, vibration, pressure, and light and shade, to be collected from many wireless sensors that have been installed.

\*2 Energy harvesting: A power generation system that “harvests” weak energy such as the light, heat and vibrations we find in our surroundings.

### Life science

Life science is a field in which we utilize the technology and expertise developed in semiconductor microprocessing. Currently, we are pursuing the development of antibody screening devices, microchannels, and cell culture substrates, which help streamline and reduce costs of the drug discovery process and bring efficiency to pathological diagnosis.



Blood vessel pattern formed by microprocessing technology

### How do we compete in the markets without roadmaps?

What differentiates new business development most from existing business is the fact that it has no roadmap. All development personnel are enthusiastic about “meeting the challenge of developing products that entail difficulties but are useful to society and are not offered by other companies,” a trait that has been part of our DNA since founding. Therefore, we are working to achieve “first-in-the-world” products and to lead niche markets.

The target markets for new businesses are undergoing extremely rapid change and we always face competition with alternative technologies in terms of price and performance. In the semiconductor miniaturization, winning (adoption by the customer) is determined by each generation of layers including 2Xnm and 1Xnm. However, in a market with an alternative technology, if the alternative technology is better suited to mass-production, our technology will no longer be needed, even if it has the top performance. In other words, in the markets we target, providing good products does not necessarily mean they will be adopted by customers.

### Define an exit strategy and identify mainstream of business

When competing with alternative technologies, the key to winning is to define an exit strategy and figure out how to increase development speed. Most important of all is the exit strategy. To succeed in a new business we must identify what is current or mainstream in the business and have the ability to look well into the future and judge whether a customer will really be a winner in the market, and whether this technology really be commercialized.

Further, there are many other hurdles in reaching our goal (of sales) in new businesses. We seek to attain higher individual and organizational performance in our technology development, and we will persistently continue the process of commercialization with the passion to achieve the goal, the drive to never give up, and true expertise as professionals.

### Return to the origin: A “solutions provider business model”

While defining an exit strategy, we will create a new business with the concept of a “solutions provider business model,” the origin of our strategy of building close relationships with customers.

We entered the photoresist market, where dozens of competitors were engaged in research and development, in 1968. The reason why we have succeeded, despite our late start, is because we deployed the same evaluation equipment as our customers, including exposure systems and inspection equipment, and established a business model that creates solutions together with customers from their point of view. As the origin of our strategy of building close relationships with customers, we consider this as an effective business model, even for creating new business.

### Goals for the next medium-term plan

Thanks in part to the fact that we are working with hopeful product themes with good prospects, we are forging ahead to our goal of achieving annual sales of ¥50.0 billion in new business fields by the fiscal year ending March 31, 2021. If we can develop these themes, we expect to achieve a business of ¥10 billion size for each theme. Since we will be straying from our goal if we don't achieve a specific level of performance within the period covered by the next medium-term plan, which starts in the fiscal year ending March 31, 2017, we will mobilize the collective efforts of development staff and steadily develop those items for which seeds have already been planted, based on an accurate and error-free approach. At present, we are dealing with about 20 different themes including the three previously mentioned. We expect about one-third of these themes to be commercialized by the fiscal year ending March 31, 2021. In addition, we will continue to collaborate with the many customers and research institutions with whom we are currently working and further reinforce our collaboration.



## Human Resource Development Strategy and “Growth-Oriented” Corporate Governance

### “Laying the groundwork for strengthening our “earning power” ”

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



#### Basic policy on utilizing human resources

Human resources are the core for putting into practice the marketing strategy, R&D strategy, and new business development strategy that we have explained thus far, and for expanding the value we deliver. In essence, we will need to enhance our profitability and productivity over the medium- and long-terms. To borrow a phrase from the Japanese government’s Japan Revitalization Strategy revised in 2015, we will need to strengthen our “earning power.” It is no exaggeration to say that our success will depend on how we develop and effectively utilize our human resources.

At TOK, in line with one of our management principles, namely the creation of a frank and open-minded business culture, we are committed to developing a safe and sound working environment where each and every one of our employees can work in a motivated manner. TOK has established a consistent philosophy of regarding human resources as one asset of the company since our establishment. We view all employees as valuable assets, and have stipulated the following items in line with this belief.

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

#### A reformed human resource development program

In the cutting-edge field of the semiconductor market that TOK is focusing on, a fierce competition in technology development is spreading globally. The speed of changes and technical difficulty are increasing year by year. To continue expanding the value we deliver under these conditions, it is essential that TOK develop human resources who have information gathering capabilities and the sensitivity to foresee changes, accurately grasp potential market needs, and can

rapidly create business. Therefore, under the “TOK Medium-Term Plan 2015” we have made “Develop global personnel” one of our companywide strategies. From the fiscal year ended March 31, 2014, we reformed our Level-based Training Programs and have implemented the TOK Global Practical Training for Selected Members with the goal of developing human resources that fulfill the three points listed below.

1. Self-reliant human resources who can display competence while shouldering risks by themselves in any business situation in Japan or abroad
2. Human resources who can work effectively and proactively pitch-in with a positive mindset, attitude, and ability to take action in an unknown world and a sometimes harsh environment
3. Human resources who have firm values and a strong presence without losing their identity of being a TOK employee

#### TOK Global Practical Training for Selected Members

TOK Global Practical Training for Selected Members, which started from the fiscal year ended March 31, 2014, is for employees mainly around the age of 30. We select the qualified people based on the criteria of “Achieved excellent results at current position” “Have what it takes to proactively take on challenges on a global stage” “Are routinely aware of problems related to their own job and can explain in their own words” “Are capable of being senior management in the future” and conduct intensive 6-months long selective training, including overseas training. Participating employees are rigorously trained in various basic skills, including



communication skills in English with foreigners who have different cultural backgrounds, negotiation skills needed to build win-win relationships, and problem solving skills for foreign countries, by means of accomplishing various assigned tasks in Singapore, and leadership and mental toughness. As the final task of the training program, the employees identify a theme and discuss it in depth with TOK management.

For example, in the strategy of building close relationships with customers, employees learn through this training to understand and accept the differences between themselves and others in various business environments in Japan or abroad, to compete with skills that are second to none and to complete business rapidly by cooperating with customers. This strategy will become a major motivating force for further expanding the value we deliver. This system is recognized as the most important key accelerating the progress of the Group’s globalization and we are firmly committed to carrying it through to nurture future executives who can succeed globally.



#### Creation of new value we deliver with greater diversity

In the fiscal year ended March 31, 2014, the percentage of non-Japanese among new employees was 15% and women 45%. In the fiscal year ended March 31, 2015, the percentage of non-Japanese was 10% and women 40%, thereby comparison with the previous year shows that TOK’s diversity management is steadily making progress. However, merely expanding employment is not enough. Effectively using the diverse human resources of the Group is important. Therefore, the idea is to take the previously mentioned Level-based Training Programs and TOK Global Practical Training for Selected Members and link them to efforts to fully form a corporate culture of “diversity and inclusion.”

Specifically, we encourage all the Group employees in the world to take pride in being members of the TOK Group. Also, we focus on developing human resources who can develop a strong identity learning the history and culture of their own country, while flexibly accepting foreign cultures and customs. We will more rapidly develop human resources who can adequately assert their point of view and at the same time listen to the views of others. We will forge ahead to create an aggressive corporate culture that creates entirely new value out of the collision between and the mixing of differing sets of values.

#### “Growth-Oriented” corporate governance

As noted earlier, the Japanese government is successively implementing policy measures to restore the “earning power” of Japanese companies. As part of these efforts, the Japanese government has formulated a Corporate Governance Code. Corporate governance has many dimensions and can be interpreted in several different ways. With this in mind, I believe that corporate governance can be defined, in essence, as “a framework for maximizing business performance and corporate value for shareholders and all other stakeholders by ensuring appropriate compliance with rules.”

Over the years, TOK has focused on taking steps to strengthen corporate governance such as developing and operating a compliance system as well as a contingency management and information management systems; reforming the Board of Directors by introducing an executive officer system; and increasing the number of outside auditors who have the professional experience of having worked at financial institutions from two to three. More recently, TOK has further accelerated efforts to strengthen corporate governance by appointing multiple outside directors. Specifically, the Company has appointed a certified public accountant who has a thorough understanding of internal control, in addition to an individual who has management experience at a listed company. Against this backdrop, we have never lost sight of the importance of maximizing business performance and corporate value. But in fact, up to now we have tended to focus on strengthening corporate governance with an emphasis on a defensive approach in tandem with mitigating downside risks.

Needless to say, we will need to continue to rigorously implement a defensive approach to corporate governance, including reinforcing the Group’s internal controls, to ensure that we prevent any incidents that could potentially impair our corporate value. Looking ahead, we will systematically develop our systems based on a “Growth-Oriented” corporate governance. We will strive to make certain that we can flexibly and appropriately implement both proactive and defensive approaches to a variety of business situations.

TOK endorses the letter and spirit of the Corporate Governance Code and is fully committed to complying with all of its provisions. In terms of creating a “Growth-Oriented” corporate governance, we are further strengthening the effectiveness of the Board of Directors primarily by appointing outside directors and auditors, developing an environment that supports appropriate risk-taking by management, and maintaining a highly qualified management team.

Concurrently, we recognize that Japan’s newly issued Stewardship Code underscores the growing importance of engaging in constructive dialogue with investors. Accordingly, we will endeavor to enhance both our shareholder and investor relations activities worldwide. In conjunction with providing timely and appropriate disclosure of information, we will listen closely to the opinions of shareholders and other investors with the intention of further enhancing the quality of TOK’s corporate governance.

## Interview with an Outside Director

In this section, we interviewed Hiroshi Kurimoto, an outside director of the TOK Group. Mr. Kurimoto shared his frank views on the Group's corporate governance, steps to enhance corporate value, and collaboration with stakeholders.



Hiroshi Kurimoto, *Outside Director (Independent Officer)*

### Q1 How do you define your roles as an outside director?

#### Taking Ownership of Opinions while Fulfilling Obligations as an Independent Officer

I have eight years of management experience as a representative director of a listed company. Based on my experience, I believe that the roles of outside directors proposed by Japan's new Corporate Governance Code make extremely good sense. I intend to proactively voice opinions that contribute to the TOK Group's management policies and help enhance its businesses. By doing so, I hope to help the Group deliver sustainable growth and enhanced corporate value over the medium and long-term.

In the course of fulfilling these roles, I believe that an outside director must wear two different hats—performing a role as both an outside supervisor and a director. In other words, an outside director combines both of these two roles.

My duties as an outside supervisor are to provide oversight to ensure that there are no conflicts of interest between the Company, management, and shareholders and other stakeholders. Another duty is to appropriately reflect the views of various stakeholders to the Board of Directors. I believe that these duties are generally considered to be the roles of an outside director.

That said, I would like to personally emphasize my role as a director. Even without the detailed knowledge of the TOK Group's operations that an internal director would attain over time, I believe that all directors have a basic duty to

help increase corporate value, regardless of whether they are internal or outside directors. I was involved in the management of OILES CORPORATION, a machinery manufacturer. Although it operates in different business fields than those of the TOK Group, I believe it shares much in common with the Group in terms of where it takes risks and its mentality as a manufacturer. Drawing on my experience, I stand ready to proactively support business risk-taking that paves the way for the TOK Group's growth. At the same time, I will develop my own knowledge, learning in depth from internal directors and auditors what kind of corporate governance we should be aiming for.

### Q2 What is your assessment of the TOK Group's corporate governance?

#### Trust the Integrity of Management, before Looking at Governance Structures

Since the previous year, the restructuring of corporate governance at Japanese companies has been proceeding faster than ever. I believe that this trend is very much in force at the TOK Group. One example is its appointment of an additional independent officer. The late economist Herbert A. Simon proposed that all economic actors are subject to the concept of "bounded rationality." He focused his research on organizations and their struggle to overcome this problem. Similarly, I believe that business managers should approach their task with the recognition that managers, no matter how talented, will not necessarily make absolutely flawless decisions all the time. Therefore, I believe that the policy to increase independent officers will strengthen the competitiveness of Japanese companies in the right direction.

However, the question of whether corporate governance will function effectively will ultimately depend to a significant degree on the personal integrity of the managers involved, not just the development of formal governance structures. The Board of Directors of TOK engages in elaborate yet vigorous discussions at every meeting, so I am confident that governance is functioning effectively. Above all, let me stress that TOK's management has tremendous personal integrity, backed by lofty ambitions, superior abilities, and unshakable ethics.

#### A Technologically-Oriented Management Team, Supported by Experts with Backgrounds in Finance

Another feature of the TOK Group's corporate governance is that all three outside auditors have professional experience

working at financial institutions. The TOK Group is an R&D-driven enterprise. To maintain its leadership in niche fields, the TOK Group must continue to preserve its world-leading technological capabilities in cutting-edge fields. When considering technology-development projects and investments to preserve this competitive edge, it is crucial to respect the ideas of researchers and developers. At the same time, we must conduct appropriate risk management to ensure that these technology-development projects and investments lead to profits and deliver value to all stakeholders.

In this sense, the opinions put forward by the outside auditors with financial backgrounds always offer tremendous insight and practical value. This leads me to believe that the outside auditors are performing their roles effectively. For example, one important theme on the agenda of Board of Directors meetings held during the fiscal year ended March 31, 2015 was the plan for recovering the TOK Group's investment in TOK Advanced Materials Co., Ltd., a subsidiary that has been operating in South Korea for the past two years. The outside auditors actively voiced strategic opinions reflecting their experience in the financial industry, including views on measures to mitigate foreign currency risk.

### Q3 What must TOK do to drive sustainable growth and continuously enhance its corporate value?

#### Further Broadening a Close Relationship with Customers and Expanding New Business Domains

One point that we must consider with regard to our external environment going forward is the increasing uncertainty in our roadmap for the entire semiconductor-related business. With some observers noting that the semiconductor industry is approaching the limits of Moore's Law, I believe that conditions in the semiconductor industry will become increasingly uncertain and difficult to predict in the years ahead.

That is precisely why I believe that we must further enhance the strategy of building close relationships with customers, which we are currently focused on. We must continue to maintain close relationships with customers at the forefront of the semiconductor industry and stay abreast of new developments, as we expand our customer-focused strategies to regions that we have yet to develop in earnest.

Another key point is to expand new business domains. Expanding the breadth of its businesses will allow the TOK Group to put its sustainable growth on more stable footing. The management team is well aware of this point, and has incorporated it into the "TOK Medium-Term Plan 2015" as one of its key strategies. The key priority is how to make a success of this strategy. To this end, I believe that the TOK Group will need to conduct a process of repeated trial and

error. The TOK Group has already fostered a corporate culture that encourages ambitious undertakings and does not penalize setbacks. It is a culture that gives employees a second chance to prove their mettle. I am convinced that the TOK Group will be met with success if it maintains this corporate culture and demonstrates its signature technological strengths.

### Eyeing Enhanced Capital Efficiency

In the fiscal year ended March 31, 2015, the TOK Group achieved a high operating margin of 15%, and earnings growth has become relatively stable. For those reasons, I believe that the Group has now arrived at a stage where it should focus on enhancing capital efficiency, as measured by indicators such as ROE. However, the Group's ROE is currently growing at a slow pace. That being said, considering the extent to which the Group is focusing on cutting-edge fields, the Group needs to have adequate cash reserves on hand to be prepared for risks. The key theme is to set an appropriate level of cash reserves. The Board of Directors has begun discussions on setting a clear direction for these matters in anticipation of the next medium-term plan. I also intend to consider these issues in earnest and share my opinions with management going forward.

### Q4 Could you please share your perspectives on what the TOK Group should be working on as it collaborates with stakeholders besides shareholders and investors?

#### Steadfastly Continuing CSR Activities over the Long Term

In the course of collaborating with stakeholders besides shareholders and investors, I believe that the TOK Group should steadfastly continue its CSR activities over the long term. In terms of collaboration with employees, the TOK Group implements initiatives such as "Conversations with the President," which are meetings between the President and young employees, and the TOK Global Personnel Development Program. In the area of collaboration with local communities, the TOK Group conducts volunteer activities, educational support programs, and other activities in various communities. I would like the TOK Group to steadfastly continue these activities in the years to come. I believe that one effective means of doing this will be to continue strengthening our management's leadership in the field of CSR. This can be done by putting a review of CSR activities on the agenda of Board of Directors meetings, as well as having the president and directors continue to set a clear example by taking the lead in CSR activities. Considering that the TOK Group is adept at implementing solid PDCA cycles, I believe that this approach would be highly compatible with the Group's culture.



# Corporate Governance System

Type of system	Company with corporate auditors
Number of directors	8
Of which, number of outside directors	2
Tenure of the directors	1 year
Incentives granted to directors	Introduction of stock option system
Number of auditors	4
Of which, number of outside auditors	3
Number of independent officers	5 (2 outside directors, 3 outside auditors)
Independent external auditor	Deloitte Touche Tohmatsu LLC
Employment of an executive officer system	Yes

## Basic Concept

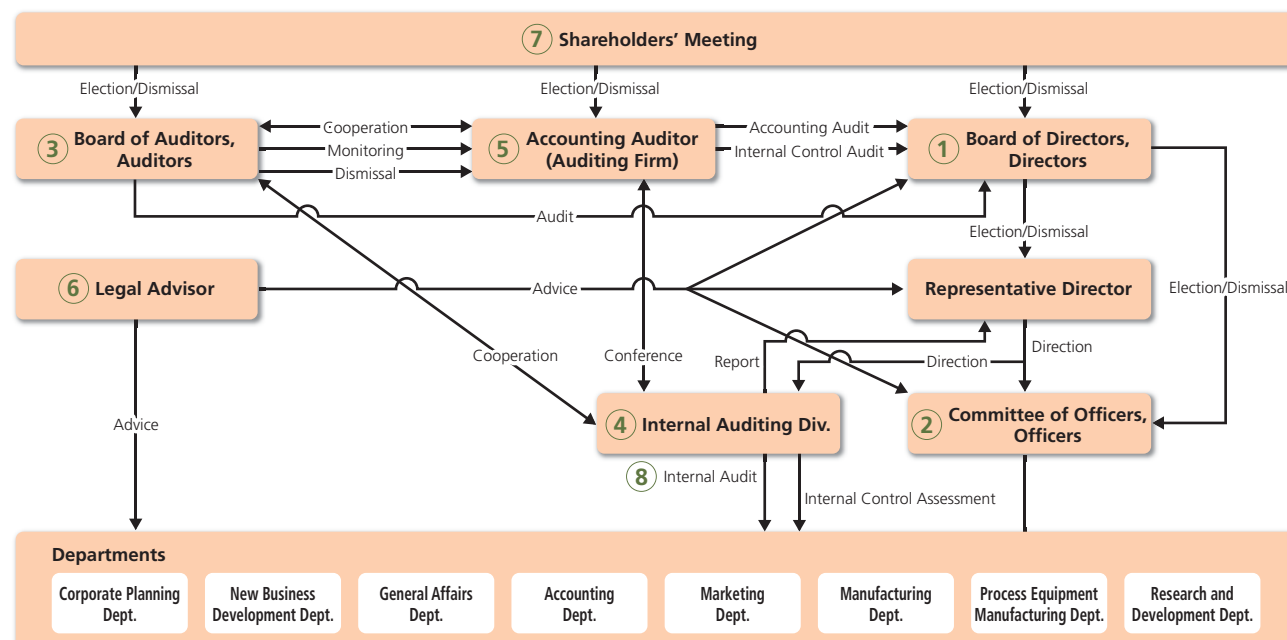
We have a management vision of aiming to be a globally trusted corporate group by inspiring customers with high value-added products that have satisfying features, low cost and superior quality, under our business principles since our establishment (“Continue efforts to enhance our technology,” “Raise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

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

## Type of System

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

Diagram of Corporate Governance System (As of June 25, 2015)



## Directors and Board of Directors (Diagram ①)

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

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

As of June 25, 2015, we had eight directors, including two outside directors. In principle, the Board of Directors meets once a month on a regular basis and holds extraordinary meetings as required. The meetings are held to decide important matters of business execution, with the goal of supervising the business duties executed by the representative director and directors.

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

## 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 officers to reinforce its business execution capabilities. The committee members include the chief executive officer, the chief operating officer, senior executive officers, executive officers and officers. Those officers' ranks derive from differences in business responsibilities and other considerations.

As of June 25, 2015, we had 16 officers, including six officers also serving as directors. In principle, the Committee of Officers meets once a month on a regular basis and holds extraordinary meetings as required. The meetings are held to share instructions and orders resolved by the Board of Directors and information among the officers, and with the goal of deliberating and approving certain important decisions that are not subject to a Board of Directors resolution.

## Auditors and Board of Auditors (Diagram ③)

As of June 25, 2015, we had four auditors, including three outside auditors. In principle, the Board of Auditors meets once a month on a regular basis and holds extraordinary meetings as required. The meetings are held to receive reports regarding important auditing matters from each auditor, with the goal of deliberating and reaching resolutions on those matters. The auditors attend the Board of Directors, the Committee of Officers, and other important meetings. Their duties are performed in accordance with auditing standards (Corporate Auditor Auditing Regulations), the auditing policy, the division of tasks, and other considerations. In addition, the auditors check the performance of directors by receiving reports from directors and other corporate staff, and requesting an explanation if necessary. For financial audits, the auditors receive reports from the accounting auditor

and use other means, including requesting an explanation if necessary, to verify the suitability of financial accounting methods and the results of these audits.

## Internal Auditing Division (Diagram ④)

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

## Accounting Auditor (Diagram ⑤)

The accounting auditor conducts accounting audits of the Company from an impartial and independent standpoint. There were two certified public accountants who conducted the accounting audit of the Company in the fiscal year ended March 31, 2015: Yasuhiro Ohnaka and Masato Shoji, both of whom are designated limited liability partners and executive members of accounting auditor Deloitte Touche Tohmatsu LLC. Moreover, there were five other certified public accountants, three junior accountants, and eleven other people who assisted in conducting the Company's accounting audit. The details of the remuneration of the Company's certified public accountants (Deloitte Touche Tohmatsu LLC) for conducting the accounting audit during the fiscal year ended March 31, 2015 are as follows:

- Remuneration in relation to the services set forth in Article 2, Paragraph 1 of the Certified Public Accountants Act (Act No. 103 of 1948): ¥52 million

## Legal Adviser, etc. (Diagram ⑥)

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 ⑦)

To facilitate the exercise of voting rights by shareholders, we try to avoid holding our General Meeting of Shareholders on days when most other Japanese companies hold their meetings. We also set a period for reviewing the resolutions for approval by the meeting that is longer than the number of days required by law, and send our Notice of Convocation of the General Meeting of Shareholders out early (21 days (three weeks) before the day of the meeting). Furthermore, for shareholders unable to attend the General Meeting of Shareholders, we allow the exercise of voting rights in writing or electromagnetic method such as an electromagnetic platform for institutional investors. At the same time, we prepare a Notice of Convocation in English to help overseas institutional investors understand the resolutions.

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

## Cooperation between the Auditors, Internal Auditing Division and Accounting Auditor

### Internal Audit and Corporate Audit (Diagram ⑧) Cooperation between the auditors and accounting auditor

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

### Relationship between internal audits, corporate audits, accounting audits and the internal control department

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

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

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

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

## Appointment of Outside Directors and Outside Auditors

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

The election of TOK's outside directors and outside auditors is premised on following the proscriptions set forth by the Tokyo Stock Exchange's Enforcement Rules for Securities Listing Regulations, and on avoiding conflicts of interest with TOK's general shareholders.

In addition to seeking to secure the function and role of supervising and auditing TOK's management from an

independent standpoint, the elections take into general consideration factors such as the character, expertise and experience of the candidates.

### Proscriptions Followed in Electing TOK's Outside Directors and Outside Auditors (quoted from the Tokyo Stock Exchange's Enforcement Rules for Securities Listing Regulations)

- a. A person who executed business of the Company or its subsidiaries in the past (meaning a person who executes business as prescribed in Article 2, Paragraph 3, Item 6 of the Enforcement Rules of the Companies Act (Ministry of Justice Ordinance No.12 of 2006) (including, in cases where an outside auditor is designated as an independent officer, directors who did not execute business, and persons who were accounting advisors)
- b. A person who executed business of the Company's parent company in the past (including directors who did not execute business, and, in cases where an outside auditor is designated as an independent officer, persons who were accounting advisors)
- c. A person who executed business of the Company's fellow subsidiary in the past
- d. A person/entity for which the Company was a major client in the past or a person who executed business for such person/entity
- e. A consultant, accounting expert, or legal expert who receives large amounts of cash or other assets in addition to director/auditor compensation from the Company (meaning, in cases where the entity receiving such assets is a group such as a juridical person or association, or other such group, a person belonged to in the past.)
- f. A major shareholder of the Company (meaning, in cases where such major shareholder is a corporation, a person who executes or executed business in the past of such corporation)
- g. A close relative of a person provided in a through f (excluding persons of no significance)
- h. A client of the Company or a person who executes or executed business for such client in the last ten years
- i. A person who executed business for another company in cases where a person who executes business for the Company is an outside director/auditor of such other company
- j. A person receiving contributions from the Company (meaning, in cases where the entity receiving such contributions is a group such as a juridical person or association, a person executing business or an equivalent person thereto)

## Reasons for the Election of Outside Directors

Name (Election date)	Reasons for election
Hiroshi Kurimoto (June 2014)	Kurimoto was elected on the expectation he would supervise TOK's management from an objective and neutral point of view, based on his abundant experience and considerable insight as a business executive of a listed company, and advise the Company on management in general. He was deemed as being capable of fulfilling the supervisory function and role of an outside director from an independent standpoint. No conflicts of interest in terms of personal, capital, business or other relationships exist between Kurimoto and TOK.
Noriko Sekiguchi (June 2015)	Sekiguchi was elected on the expectation she would supervise TOK's management from an objective and neutral point of view, based on her professional expertise in accounting and abundant hands-on business experience with several companies as a certified public accountant, and her thorough understanding of internal control, including from her experience as a member of external committees investigating fraudulent accounting at several listed companies, and advise the Company on management in general. No conflicts of interest in terms of personal, capital, business or other relationships exist between Sekiguchi and TOK.

## Reasons for the Election of Outside Auditors

Name (Election date)	Reasons for election
Seiichi Shimbo (June 2013)	Shimbo was elected on the expectation he would contribute to auditing TOK's management from an objective and neutral point of view, based on his abundant experience and considerable insight as a business executive including at financial institutions. No conflicts of interest in terms of personal, capital, business or other relationships exist between Shimbo and TOK. Shimbo 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 Shimbo's independence as an outside auditor of TOK.
Katsumi Yoneda (June 2013)	Yoneda was elected on the expectation he would contribute to auditing TOK's management from an objective and neutral point of view, based on his abundant experience and considerable insight as a business executive including at financial institutions. No conflicts of interest in terms of personal, capital, business or other relationships exist between Yoneda and TOK. Yoneda was once a business executive with Meiji Yasuda Life Insurance Company, which owns stock in TOK and conducts insurance transactions with the Company under routine and standard business conditions. However, these capital and business relationships were deemed not to affect Yoneda's independence as an outside auditor of TOK.
Hiroshi Saito (June 2015)	Saito was elected on the expectation he would contribute to auditing TOK's management from an objective and neutral point of view, based on his abundant experience and considerable insight as a business executive including at financial institutions. No conflicts of interest in terms of personal, capital, business or other relationships exist between Saito and TOK. Saito was once a business executive with Mitsubishi UFJ Trust and Banking Corporation, which owns stock in TOK and conducts cash deposit, stock administration agent and other transactions with the Company under routine and standard business conditions. However, these capital and business relationships were deemed not to affect Saito's independence as an outside auditor of TOK. Saito was also once a business executive with Mitsubishi UFJ Financial Group, Inc., which owns stock in TOK. However, this capital relationship was also deemed not to affect Saito's independence as an outside auditor of TOK.

## The Main Activities of Outside Director and Outside Auditors

Name	Attendance record and activities at Board of Directors and Auditors meetings
Hiroshi Kurimoto (Outside Director)	Since he was elected on June 26, 2014, Kurimoto attended all 11 of the 11 remaining Board of Directors meetings (attendance rate 100%) held during the fiscal year ended March 2015. He voiced timely opinions as required when discussing resolutions, based on his broad experience and abundant expertise as a business executive.
Yukio Muro (Outside Auditor)	Muro attended all 15 of the 15 Board of Directors meetings (attendance rate 100%) and all 15 of the 15 Board of Auditors meetings (attendance rate 100%) held during the fiscal year ended March 2015. He voiced and raised timely opinions and questions as required at the meetings, based on his broad experience including at a financial institution and as an auditor, and his abundant expertise as a business executive.
Seiichi Shimbo (Outside Auditor)	Shimbo attended all 15 of the 15 Board of Directors meetings (attendance rate 100%) and all 15 of the 15 Board of Auditors meetings (attendance rate 100%) held during the fiscal year ended March 2015. 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.
Katsumi Yoneda (Outside Auditor)	Yoneda attended all 15 of the 15 Board of Directors meetings (attendance rate 100%) and all 15 of the 15 Board of Auditors meetings (attendance rate 100%) held during the fiscal year ended March 2015. 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.



## Remuneration of Directors and Auditors

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

### Directors' Remuneration

Company directors' remuneration consists of basic remuneration in the form of a fixed salary, performance-related bonuses for each fiscal year, and medium- to long-term performance-related stock options (subscription warrants).

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

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

Stock options (subscription warrants) consist of regular stock options and stock compensation-type stock options. Regular stock options are granted to directors within a separate compensation framework (of within ¥42 million

per year) approved at the 82nd Ordinary General Meeting of Shareholders held on June 27, 2012, in addition to the above-mentioned remuneration framework. The Board of Directors decides the number of subscription warrants to be allocated to each director. Stock compensation-type stock options were set as a part of the above-mentioned remuneration framework (of within ¥420 million per year) when revisions to TOK's remuneration system were approved by the 84th Ordinary General Meeting of Shareholders held on June 26, 2014. Based on certain standards set forth by TOK, the Board of Directors decides the amount of fixed salary of each director to be replaced by stock compensation-type stock options. This is done to bolster morale and motivate each director to raise the corporate value of TOK by contributing to an increase in earnings, and thereby the stock price of TOK, over the long term. Outside directors do not receive stock options (subscription warrants) in consideration of their roles.

### Auditors' Remuneration

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

## Remuneration Totals Paid to Directors and Auditors (Fiscal Year Ended March 2015)

Position	Total remuneration (Millions of yen)	Total of various types of remuneration (Millions of yen)			Number of eligible personnel
		Basic remuneration	Stock options	Bonuses	
Directors (Excluding outside director)	191	154	17	18	6
Auditors (Excluding outside auditors)	21	21	—	—	1
Outside director and auditors	35	35	—	0	5

#### Notes:

- The amounts for total remuneration and total of various types of remuneration for directors (excluding outside director) do not include the portion paid as salary for employee activities undertaken in parallel with director activities.
- The amounts for total remuneration and total of various types of remuneration for directors (excluding outside director) and outside director and auditors include payments to one outside director who retired at the end of the 84th Ordinary General Meeting of Shareholders held on June 26, 2014 ("84th Ordinary General Meeting of Shareholders").
- In addition to the above, a directors' retirement benefit was paid to one outside director who retired at the end of the 84th Ordinary General Meeting of Shareholders, based on a final payment resolution passed in connection with the scrapping of the directors' retirement benefit system at the 78th Ordinary General Meeting of Shareholders held on June 26, 2008. The said director's retirement benefit has been booked as the liability for retirement benefit for prior years. Because there are no officers who received a total consolidated remuneration of over ¥100 million, the total consolidated remuneration of individual officers has not been provided.



### Noriko Sekiguchi

- April 1986: Joined Manufacturers Hanover Bank (present JPMorgan Chase Bank, N.A.)
- October 1991: Joined Asahi-Shinwa Kaikeisha Audit Corporation (present KPMG AZSA LLC)
- March 1994: Registered as a certified public accountant
- February 1998: Joined Japan Broadcasting Corporation
- December 2001: Joined Triumph International (Japan) Ltd.
- January 2002: Reregistered as certified public accountant
- July 2004: Joined Ernst & Young ShinNihon (present Ernst & Young ShinNihon LLC)
- November 2010: Representative of Sekiguchi CPA Office (current position)
- April 2011: Contract Monitoring Committee Member of Japan International Cooperation Agency ("JICA") (current position)
- July 2011: External Assessment Committee Member of JICA (current position)
- July 2012: Registered as certified tax accountant
- June 2015: Elected as a Director (Outside Director) of TOK (current position)

## Message from a New Outside Director

I have just been appointed an outside director of TOK. In this fluid and uncertain day and age, a company's Board of Directors needs the ability to promptly reach decisions and flexibly execute business duties. Under those circumstances, I think the main role of outside directors, who are supposed to distance themselves from the business execution duties to a certain extent, is to supervise the decision making by the Board of Directors and the execution of business duties by directors.

I plan to draw on my experience as a certified public accountant from an independent and professional standpoint to express my opinions frankly in supervising the management of TOK. In doing so, I will strive to understand the corporate character and culture of TOK and base my opinions on my own expertise, as well as common sense and social norms. In addition, I would also like to secure sound and transparent management as I strive to enhance the corporate governance needed to contribute further to transparency and corporate value.

At the same time, I would like to constantly reflect on the best vision of corporate governance for TOK as I go about discharging my duties as an outside director. In these ways, I promise to do my best to live up to the expectations of TOK's shareholders and other stakeholders.



### Hiroshi Saito

- April 1974: Joined Mitsubishi Trust and Banking Corporation ("MTB," present Mitsubishi UFJ Trust and Banking Corporation)
- May 1998: Manager, Foreign Exchange and Money Market Division of MTB
- April 2000: Manager, Asset Management Division 2 of MTB
- May 2002: Manager, Investment Planning Division of MTB
- June 2002: Officer and Manager, Investment Planning Division of MTB
- March 2004: Officer and Manager of Kyoto Branch of MTB
- June 2006: Representative Director and Managing Director of Mitsubishi UFJ Trust and Banking Corporation
- June 2007: Representative Director and Senior Managing Director of Mitsubishi UFJ Financial Group, Inc. Director (Outside Director) of The Bank of Tokyo-Mitsubishi UFJ, Ltd.
- June 2011: Representative Director and President of Mitsubishi UFJ Trust Investment Technology Institute Co., Ltd. ("MTEC")
- June 2012: Corporate Auditor (Outside Corporate Auditor) of Maruzen Showa Unyu Co., Ltd. (current position)
- June 2014: Advisor of MTEC (current position)
- June 2015: Elected as an Auditor (Outside Auditor) of TOK (current position)

## Message from a New Outside Auditor

My name is Hiroshi Saito, and I was just elected to become an auditor of TOK at the General Meeting of Shareholders.

The business needs that companies are expected to fulfill are growing increasingly diverse and complex as the business environment globalizes and changes dramatically in every conceivable field. Against this backdrop, the public attention corporate governance has gathered is placing demands on companies to build a track record in this area. More often than not, companies have focused on publicizing formalities, such as the number of outside directors they have, or the fact that they are a company with committees. However, more importantly, companies ought to be viewing this as a good opportunity to organize and get their identity and business directions in order, so that they can build a convincing case in corporate governance. Companies have individual characteristics just like people do. What's important is to build a corporate governance structure matching the individual characteristics. To this end, each of us at TOK need to put our thinking caps on, express and explain corporate governance as it applies to TOK in our own words, and then put our words into action. As Japan's Corporate Governance Code says, we must remember that we are not only being challenged to "prevent corporate scandals," which is a rather negatively minded goal, but to also proactively take up the positive challenge of building a foundation for "stimulating healthy corporate entrepreneurship."

In discharging my duties as an outside auditor, I will be mindful of the viewpoint of outsiders. I will also bring my experience of working at financial institutions for roughly 40 years—including in marketing, compliance, financial planning and investor relations (IR)—to bear on realizing even better corporate governance and contributing to the sustainable growth of TOK.

## Internal Control System

TOK is working in earnest to enhance its internal control system, which addresses priorities such as compliance and risk management. This is in order to prevent the materialization of various risks surrounding the Company, including the risk of corporate misconduct, in tandem with minimizing any damage from these risks to business activities. This section presents excerpts of the Company's internal control system, focusing on compliance, risk management, and information management activities.

(For further details on internal control, please see the Corporate Governance Report at [http://www.tok.co.jp/content/download/927/11053/file/gov\\_report.pdf](http://www.tok.co.jp/content/download/927/11053/file/gov_report.pdf). In Japanese only.)

## Compliance System

### Basic Policy

- The TOK Group has formulated the TOK Group Compliance Standards of Conduct and has created a system to ensure that all executives and employees observe laws and regulations, our Articles of Incorporation, and Company regulations.
- The TOK Group has set up a Compliance Committee, which is chaired by the Company President, to respond to any violations of laws, regulations, the standards of conduct, and other guidelines.
- The TOK Group has an internal reporting system in place to facilitate the early detection and resolution of the facts in connection with violations of laws, regulations, standards of conduct and other guidelines. The system has two main routes of reporting: the internal corporate auditor route and the external route. In parallel, the Group has structured the system to ensure that no individual is subject to disadvantageous treatment as a result of using this system for legitimate purposes.
- The TOK Group will appoint outside directors who do not have any conflicts of interest with the Company in order to ensure that directors execute their duties in compliance with the law.
- The TOK Group will develop and enhance a system to ensure the reliability of financial reporting.

### Development Status

- We have revised the TOK Group Compliance Standards of Conduct to expand its scope of application to key overseas subsidiaries, while remaining mindful of the globalization of business activities, the changing social landscape and other factors. Based on these revised standards, we are working in earnest to push ahead with compliance activities. Looking at the internal reporting system, we provide an internal route, a corporate auditor route and an external route (legal advisor route) for reporting purposes, along with setting a clear policy of preventing dismissals and other negative consequences for individuals who submit reports, except in cases where reports are dishonest or inappropriate.

- In the event of a violation of laws, regulations, the standards of conduct, and other guidelines, the Compliance Committee investigates and verifies the facts of the incident and imposes disciplinary action as required. In addition, the committee determines necessary measures to prevent a recurrence of such incidents, and ensures full understanding by all Company employees.
- We have appointed two outside directors who do not have any conflicts of interest with the Company. (Please see the Appointment of Outside Directors and Outside Auditors section.)
- We are working in earnest to ensure and enhance the reliability of financial reporting by, for example, developing and operating a system of internal control over financial reporting.

(Please see the Cooperation between the Auditors, Internal Audit Division and Accounting Auditor section.)

## Risk Management System

### Basic Policy

- The TOK Group has formulated contingency management regulations and set up a Contingency Management Committee, as well as a subordinate Contingency Management Secretariat. In addition, the Group has formulated a Business Continuity Plan (BCP) as its contingency plan. Under this framework, the Group shall identify contingencies (risks) in advance during normal times, establish preventive actions and policies, and rigorously implement these actions and policies within the Company, in tandem with working to rapidly and appropriately respond to emergencies.

### Development Status

- We have been working to strengthen our risk management activities to prevent the materialization of various risks surrounding the Company along with minimizing damage to our business activities. Specifically, we believe that accurately dealing with risks that could have a severe impact on business operations is vital to ensuring the sustained development of the Company. Based on this belief, we have compiled a contingency management manual in accordance with our contingency management regulations. Guided by this manual, we have categorized potentially significant risk into various categories—business risk, public risk, disaster and accident risk, manufacturing risk and environmental risk. We ensure that preventive measures are normally in place by analyzing these risks and determining and executing countermeasures, while at the same time carrying out appraisals and other forms of risk management. In the event that a risk event occurs despite our best efforts, leading to an emergency situation as specified above, we have created frameworks for responding rapidly and appropriately in accordance with the manual as well as the BCP.

## Information Management Structure

In the course of undertaking corporate activities, information management is an important business management issue from the two perspectives of “enhancing corporate value” and “fulfilling social responsibility.” In 2013, the TOK Group revised its Information Management Policies. Based on these revised policies, management and all employees have been taking organized measures through the Information Management Committee to strengthen the Group's information management structure.

### Basic Policy

- (1) 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 in order to efficiently execute the operations of the Group, within the stipulated scope of authority, and for the prescribed purpose.
- (2) Organizational structure and organized activities  
The TOK Group has established an Information Management Committee and will continue to build, maintain, and promote an information asset management structure for the overall Group.

- (3) Completeness, confidentiality, and availability  
The TOK Group will implement appropriate management through a range of human, physical, organizational and IT-based measures in order to prevent leakage, falsification, theft, destruction, and other damage to the information assets held by the TOK Group.
- (4) Education  
The TOK Group will implement in-house education regularly and continuously and work to raise awareness and keep everyone well informed of the in-house rules and other regulations.
- (5) Incident response  
In the case that accidents and other incidents related to information security occur, the TOK Group will endeavor to minimize the damage from such incidents and implement measures to prevent their recurrence.
- (6) Audits and continuous improvement  
The TOK Group will implement regular audits and make continuous improvements as a part of its management of information assets.

### Development Status

1. Appropriate protection and management of information assets
2. Enhance and expand the human, physical, organizational and IT-based information security operating structure
3. Awareness raising and educational activities
4. Responses to minimize harm in the case that an information leakage occurs
5. Establishment of an auditing structure and other frameworks

## IR Activities

We actively provide timely disclosure of corporate information and make various IR communication tools available in order to ensure the transparency of management and enhance corporate governance.

Activity	Description
Analysts/institutional investors meeting	<b>Meetings on business results are held twice a year.</b> The Company President explains business results, performance forecasts, policies for the future and other subjects.
Individual investor meetings	<b>Number of meetings held:</b> Eight (Twice in both Tokyo and Osaka, and once each in Nagoya, Fukuoka, Hiroshima, and Kobe)
IR-related materials available on our website	Materials that can be downloaded include presentation materials for investors' meetings (including video files of the meetings), corporate governance-related information, shareholders' meeting-related information, financial data, and other IR communication tools (Annual Report, Business Report, Annual and Quarterly Securities Report, CSR Report, etc.)





## Enhancing Corporate Value through "Growth-Oriented" and "Defensive" Approaches to Environmental Management

TOK's basic approach to corporate social responsibility (CSR) is to enhance corporate value in tandem with creating social value through highly unique corporate activities in collaboration with all stakeholders, targeting the needs of society as a whole. In particular, we recognize that our actions to address sustainability priorities such as environmental issues not only have a crucial bearing on the development and manufacture of cutting-edge photoresists for the electronics industry, but are also an integral part of our risk management activities. Based on this recognition, we are focused on both "Growth-Oriented" and "Defensive" approaches to environmental management.

## Contribute to a Sustainable Society by Creating Social Value Unique to TOK

For details on TOK's CSR activities and environmental management, please see the Corporate Social Responsibility (CSR) section of our website and CSR Report 2015.



<http://www.tok.co.jp/eng/csr>

### "Growth-Oriented" Approach to Environmental Management

**tok** Maximize the value we deliver by driving the evolution of photoresists

#### World-leading photoresists:

The source of social value that only TOK can deliver by fully harnessing its unique strengths



ArF excimer laser photoresists

KrF excimer laser photoresists

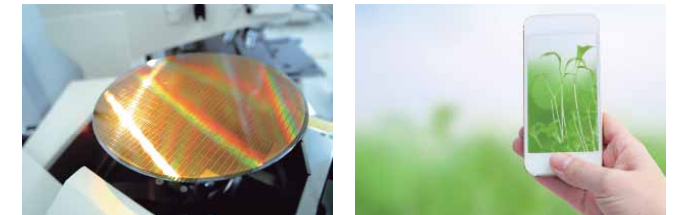


**Customers** Reducing the circuit element dimensions of semiconductor devices by half will cut power consumption to one-quarter\*

Advance to 10 nm generation semiconductors

20 nm generation semiconductors

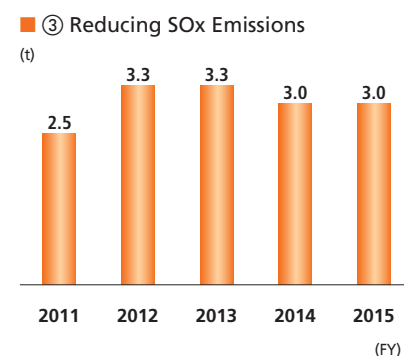
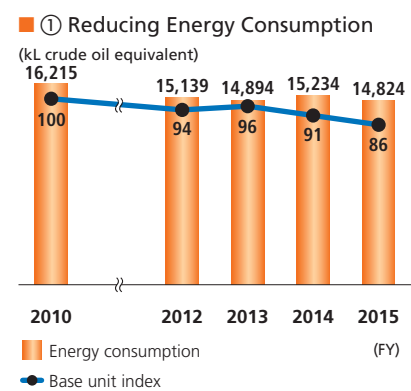
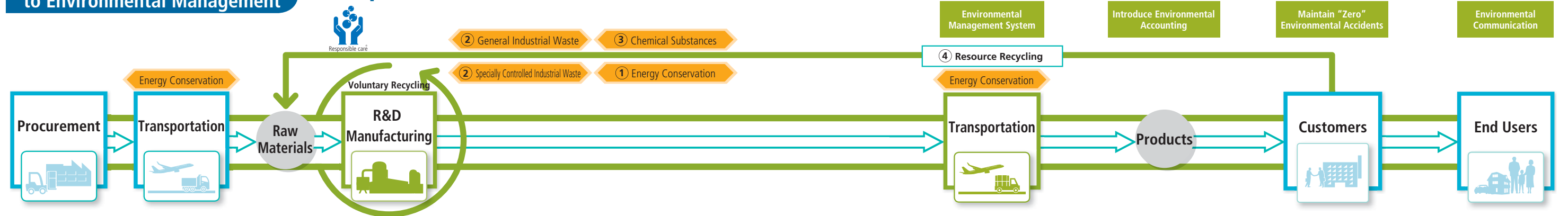
Achieve "further miniaturization of semiconductors" and "increase the energy efficiency of products"



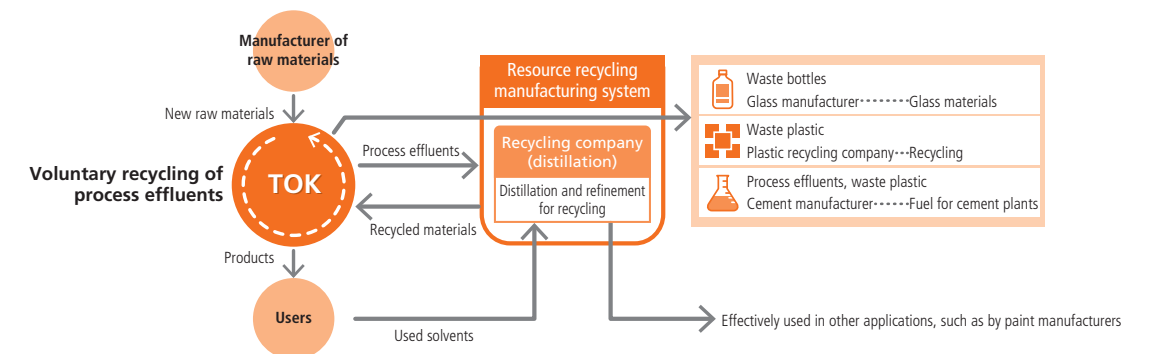
\* Based on scaling law

### "Defensive" Approach to Environmental Management

### Responsible Care



④ Recycling of Used Solvents and Effluents from the Production Processes



## Board of Directors / Corporate Auditors and Officers

### Board of Directors



(in the back row,  
from the left)

**Nobuo Tokutake**  
Director, Officer  
Department Manager,  
Manufacturing Dept.

**Hiroshi Kurimoto**  
Outside Director  
(Senior Advisor,  
OILES CORPORATION)

**Noriko Sekiguchi**  
Outside Director  
(Representative,  
Sekiguchi CPA Office)

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

(in the front row,  
from the left)

**Hiroji Komano**  
Director, Officer  
Department Manager,  
New Business  
Development Dept.

**Ikuo Akutsu**  
Representative Director,  
President & Chief Executive  
Officer

**Kobun Iwasaki**  
Director, Senior Executive Officer  
Department Manager,  
Marketing Dept.

**Harutoshi Sato**  
Director, Officer  
Department Manager,  
Research and Development Dept.

### Corporate Auditors



**Katsumi Yoneda**  
Outside Auditor

**Seiichi Shimbo**  
Outside Auditor

**Kenji Tazawa**  
Standing Statutory Auditor

**Hiroshi Saito**  
Outside Auditor

### Officers

**Yoichi Shibamura**  
Executive Officer  
Department Manager,  
Accounting Dept.

**Yoshio Hagiwara**  
Executive Officer  
Department Manager,  
Corporate Planning Dept.

**Atsuro Shibagaki**  
Officer  
Deputy Department  
Manager, Marketing Dept.

**Hajime Fujishita**  
Officer  
Department Manager,  
Process Equipment  
Manufacturing Dept.

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

**Keiichi Yamada**  
Officer  
Deputy Department Manager,  
Marketing Dept.

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

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

**Yuichi Murakami**  
Officer  
Deputy Department Manager,  
Manufacturing Dept.

**Noriaki Taneichi**  
Officer  
Deputy Department Manager,  
New Business Development Dept.

## Message from the Accounting Dept. Manager

“ Seeking to Enhance Capital Efficiency in Earnest ”

Yoichi Shibamura  
Executive Officer  
Department Manager, Accounting Dept.



### Working in Earnest to Enhance ROE

Our return on equity (ROE) was 6.2% for the fiscal year ended March 31, 2015. Until now, TOK has not announced a numerical ROE target. However, under our next medium-term plan (from April 1, 2016 to March 31, 2019), which is scheduled to be unveiled in May 2016. With this target in mind, we will work in earnest to enhance our ROE. We are currently taking a close look at this target while drawing up our business and capital structure strategies.

The rationale behind our considering about announcing a numerical ROE target reflects a dramatic shift in the momentum of the TOK Group's business performance. In the fiscal year ended March 31, 2009, immediately after the collapse of Lehman Brothers, the TOK Group posted its first operating loss since going public. Ever since, the TOK Group has undertaken various business restructuring measures from the standpoint of prioritizing businesses and concentrating resources. Notably, we closed a plant in Japan, along with divesting an overseas subsidiary and our printing material business. In parallel, the TOK Group has embraced the high-priority target of increasing its absolute operating income. This has meant giving top priority to establishing business platforms in growth fields, maintaining net sales, and creating business opportunities. We have been doing our utmost to dramatically reshape our business portfolio. Steps have included strengthening and expanding our presence in the fields of cutting-edge materials for semiconductors, strengthening a close relationship with customers overseas, and shifting our targeted fields in the Equipment Business.

During this time, we have been well aware of the importance of capital efficiency. However, we have given top priority to the urgent task of reshaping our business portfolio so that it will serve as a lasting core growth driver. Our first priority has been to ensure that we have business platforms in fields that offer solid prospects for future earnings.

As a result, we achieved record-high operating income in the fiscal year ended March 31, 2015. In our view, we have reached a stage where we are well positioned to accelerate our growth strategy initiatives in pursuit of high-quality profits. Operating income will remain our most important benchmark. Nevertheless, we will also work in earnest to enhance capital efficiency as measured by indicators such as ROE.

### Pursuing High-Quality Profits

To set our numerical target, we are currently reviewing the three component indicators of ROE: net margin, total asset turnover ratio, and financial leverage.

In the fiscal year ended March 31, 2015, we achieved an operating margin of 15%, which is relatively high for the chemicals sector. Even so, we recognize that stepping up the pursuit of high-quality profits will offer prospects for further margin growth. In existing businesses, we believe that we can boost the quality of earnings by increasing our focus on high value-added fields, in particular semiconductor-related materials such as cutting-edge photoresists and high-density integration materials. Looking at creating new businesses, we will rigorously check the marketability and commercial viability of prospective businesses, and nurture only those businesses that have clear exit strategies. All the while, we are committed to respecting the passion and flexible thinking of our engineers. By pursuing high-quality profits through these measures, we will put the TOK Group on a clear path to increase the numerator as part of our efforts to enhance ROE.

### Why We Are Focused on a Solid Financial Position

With an equity ratio of 84.3% and a debt-to-equity ratio of less than 0.01 as of March 31, 2015, the TOK Group is one of the most financially sound companies in the chemicals sector.



The main reason why we have focused on maintaining a solid financial position is that we are an R&D-driven company whose primary markets are niche business fields shaped by extremely disruptive and rapid cycles of technological change. No more is this true than in the cutting-edge semiconductor domains. Almost all of our mainstay products are either newly developed, or niche products in new business domains. This means that our business model requires us to maintain our lead in global niche markets by continuously launching a steady string of various newly developed products. For this reason, we require an appropriate amount of cash reserves.

Another reason is our unique competitive landscape. Many of our competitors are larger than us. Therefore, they are able to pioneer and develop cutting-edge domains in tandem with retaining their mass-produced commodity business models, such as bulk chemicals, as part of their existing business domains. To compete on equal grounds with rivals whose scale of operations and cash generating models differ from ours, the TOK Group must outperform its competitors not only in quality of investment, but also in other aspects of investment such as scale and speed. It is undoubtedly imperative that we hold an appropriate amount of cash reserves.

When making business investments, we take into account a comprehensive range of factors, including the target market's growth potential, possibilities for using our core technologies and their advantages, and estimated cash flows. We make a point of reaching swift investment decisions during this process. However, in cutting-edge semiconductor domains and new business domains that do not have a technology roadmap, we inevitably face a higher level of difficulty and uncertainty. This is true even when working exhaustively on R&D and technology development. In addition, some technologies such as high-density integration materials come to fruition only after many years of investment. In these cases, we must nurture prospective future businesses over the long term.

We will continue working to minimize business risks based on the knowledge we have developed in the electronics industry. Ultimately, however, we must take some degree of risk. Doing so is vital to driving the sustainable growth of an R&D-driven company like the TOK Group.

Therefore, a financial position that allows us to take risks when making highly uncertain business investments will remain essential. In addition, a solid financial position will prevent any unsuccessful investments from negatively impacting other investment plans and R&D plans. Accordingly, in our next medium-term plan, we will maintain our policy of holding an appropriate amount of cash reserves.

On the performance front, we strongly recognize that capital efficiency will become increasingly crucial now that we have advanced to a new, ambitious stage. As we maintain a solid financial position, I believe that we are very likely to take steps to further clarify investment criteria and revise the debt-to-equity ratio, while monitoring business conditions.

### A Focus on Balancing Growth Investments and Shareholder Returns

From the dividend of the fiscal year ended March 31, 2014, we have adopted a shareholder return policy of continuously distributing dividends with a consolidated dividend payout ratio of above 30%. In addition, we conducted a share buyback for the first time in seven fiscal years. Going forward, we plan to continue buying back our own shares flexibly. Under the next medium-term plan, while adhering to these basic guidelines, we also intend to more clearly define matters such as appropriate capital policies designed to enhance corporate value. Our foremost priority is to remain a company that achieves sustainable growth as a going concern. Guided by this rationale, we will formulate capital policies focused on balancing business investments for growth and returns to shareholders. Executing appropriate capital policies in addition to driving high quality profit growth will also have a positive signaling effect and help to reduce the weighted average cost of capital (WACC). I believe that these measures, albeit supplementary in nature, will provide a crucial means of increasing our corporate value.

In any case, we will remain focused on balancing business investments and returns to shareholders, as we seek to meet the expectations of all shareholders.



## Management's Discussion and Analysis



### Results of Operations

#### Net Sales

In the fiscal year ended March 31, 2015, consolidated net sales increased ¥12,817 million or 17.0% from the previous fiscal year, to ¥88,086 million. Net sales in the first half increased ¥2,985 million or 7.6% to ¥42,057 million, and in the second half increased ¥9,831 million or 27.2% to ¥46,029 million.

The electronics industry, the leading source of demand for our products, was generally strong due to the receding decline in PC demand and a continued expansion in demand for smartphones and tablet devices.

#### Cost of Sales, SG&A Expenses and Operating Income

Cost of sales increased ¥8,551 million or 18.4%, to ¥55,101 million from the previous fiscal year on higher material costs due to the sales increase and higher depreciation and amortization, and repair costs. The cost of sales ratio rose 0.8 percentage points year on year to 62.6%. As a result, gross profit increased ¥4,265 million or 14.9% to ¥32,984 million.

Selling, general and administrative (SG&A) expenses increased ¥1,038 million or 5.6% to ¥19,731 million due mainly to increases in depreciation and amortization, and utilities costs (water, gas and electricity), despite decreases mainly in patent royalty and subcontracting costs.

Operating income increased ¥3,227 million or 32.2% to a record high ¥13,253 million, due to higher gross profit, which outweighed an increase in SG&A expenses.

#### Income before Income Taxes and Minority Interests and Net Income

Income before income taxes and minority interests increased ¥2,635 million or 22.6% from the previous fiscal year to ¥14,301 million due to increases in foreign exchange gain and in a gain on revision of retirement benefit plan, despite increases in new plant related expenses and in the loss on valuation of derivatives.

Net income for the year increased ¥1,269 million or 16.8% to ¥8,818 million, which was a record high.

### Overview of Each Segment

\* Intersegment sales or transfers have not been eliminated.

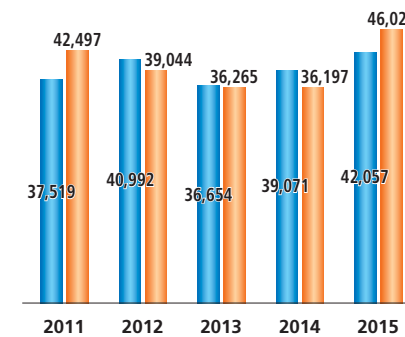
#### Results by Business Segment

##### [Material Business]

Sales in the Material Business increased ¥11,744 million or 16.1% from the previous fiscal year to ¥84,611 million. Operating income increased ¥2,269 million or 16.1% to ¥16,355 million due to an increase in the sales of high value-added products and foreign exchange fluctuation gains.

Net Sales (Half yearly basis)

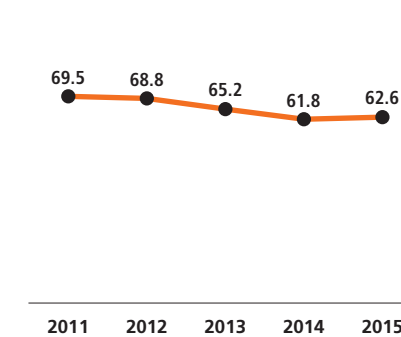
(Millions of yen)



■ First half  
■ Second half

Cost of Sales Ratio

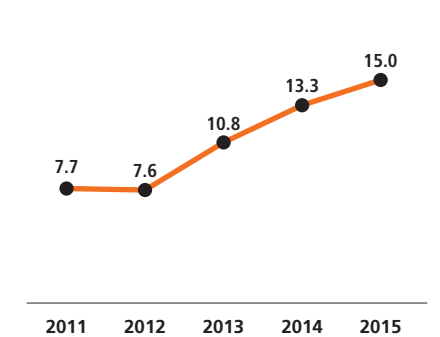
(%)



(FY)

Operating Margin

(%)



(FY)

### Electronic Functional Materials Division

In the electronic functional materials division, sales increased ¥6,556 million or 15.2% to ¥49,818 million.

Sales of photoresists used to manufacture semiconductors were solid as demand increased for smartphones and tablet devices and the market for products containing semiconductors expanded to include vehicles and electronic devices for industrial use. In contrast, sales of photoresists for LCDs decreased year on year as products for high-definition displays and general-purpose products were affected by changes in the demand environment and a drop in product prices. Sales of high-density integration materials grew substantially thanks to successful sales activities, mainly in Asia and North America, and higher sales of photoresists for semiconductor packages and photoresists for MEMS (microelectromechanical systems).

### High Purity Chemicals Division

Sales in the high purity chemicals division increased ¥5,650 million or 19.4% year on year to ¥34,844 million.

Sales of photoresist chemicals used to manufacture semiconductors grew significantly, especially in Asia, as high-quality products meeting customer needs captured growing demand in the thriving semiconductor market. Additionally, with demand for LCD TVs recovering, sales of photoresist-related chemicals used to manufacture LCDs increased in line with strong performance centered on the Asian market.

### [Equipment Business]

#### Process Equipment Division

Although the Zero Newton TSV process system was affected by the delay in the takeoff of the 3D packaging market and the delay in the acceptance inspection of products already shipped, we have worked to maintain the advantage of its strong reputation as our original process technology that fully meets user needs. Orders and sales increased as a result of our efforts to increase competitiveness, such as strengthening our sales force through organizational restructuring and reducing costs. On the other hand, sales of LCD panel manufacturing equipment decreased due to sluggish orders.

As a result, sales in the Equipment Business increased ¥1,096 million or 44.2% year on year to ¥3,581 million. Operating income came to ¥20 million, compared with an operating loss of ¥889 million in the previous fiscal year.

Orders increased ¥1,594 million or 83.7% year on year to ¥3,500 million. Orders in the first half totaled ¥1,629 million and in the second half ¥1,870 million. The year-end order backlog increased ¥21 million or 2.0% to ¥1,072 million.

### Financial Condition and Cash Flows

#### Balance Sheets

Total assets as of March 31, 2015 increased ¥19,004 million from the previous fiscal year-end to ¥174,863 million.

Total current assets increased ¥7,806 million year on year to ¥91,054 million. Trade notes and accounts receivable increased ¥2,798 million, securities by ¥2,000 million due to acquisition of negotiable certificates of deposit, inventories by ¥1,109 million, and cash and cash equivalents by ¥595 million.

Non-current assets increased ¥11,198 million from the previous fiscal year-end to ¥83,809 million. This was attributable to decreases in deferred tax assets and long-term loans of ¥363 million and ¥322 million, respectively, which were outweighed by increases in property, plant and equipment of ¥4,794 million due to capital investments, investment securities of ¥4,346 million on purchases of investment securities and rising market value, retirement benefit assets of ¥2,067 million, and intangible assets of ¥284 million.

Total liabilities increased ¥6,968 million year on year to ¥22,864 million. The main factors were a decrease of ¥692 million in advances from customers, which was outweighed by increases of ¥4,053 million in trade notes and accounts payable, ¥342 million in payables, ¥612 million in other current liabilities due to an increase in accrued expenses, ¥1,002 million in deferred tax liabilities under non-current liabilities, and ¥704 million in other non-current liabilities due to an increase in long-term accounts payable.

Total equity as of March 31, 2015 increased ¥12,036 million from the previous fiscal year-end to ¥151,999 million.

Cash dividends paid of ¥2,610 million were offset by net income of ¥8,818 million, foreign currency translation adjustments of ¥2,877 million, unrealized gain on available-for-sale securities of ¥1,471 million.

As a result, the equity ratio stood at 84.3% at the end of the fiscal year.

#### Cash Flows

Net cash provided by operating activities during the year under review came to ¥13,577 million, an increase of ¥1,696 million from the previous fiscal year-end. Increases in income before income taxes and minority interests and trade notes and accounts payable were partially offset by increases in notes and accounts receivable and retirement benefit assets, and the payment of income taxes.

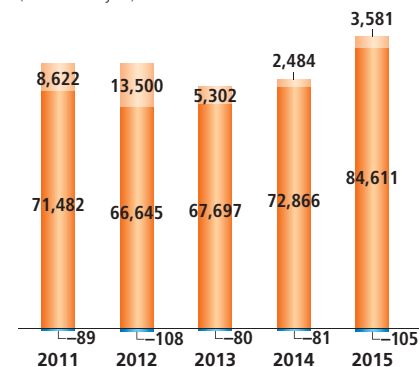
Net cash used in investing activities was ¥10,197 million, a decrease of ¥4,294 million year on year due to outflows from purchases of property, plant and equipment and investment securities, which were partially offset by inflows from sales of property, plant and equipment.

Net cash used in financing activities totaled ¥2,110 million, a decrease of ¥361 million year on year mainly due to dividends paid being partially offset by inflows from long-term loans payable and disposal of treasury stock.

As a result, cash and cash equivalents on March 31, 2015 increased ¥2,408 million to ¥41,565 million, from ¥39,157 million at the end of the previous fiscal year.

#### Net Sales by Business Segment

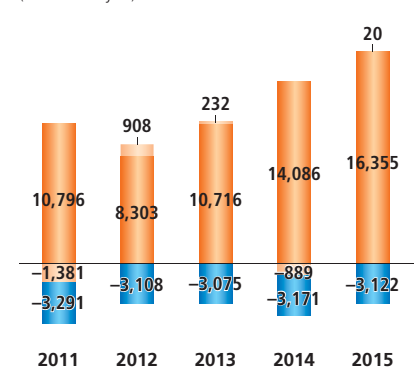
(Millions of yen)



Equipment Business  
Material Business  
Eliminations and Corporate

#### Segment Income (Loss)

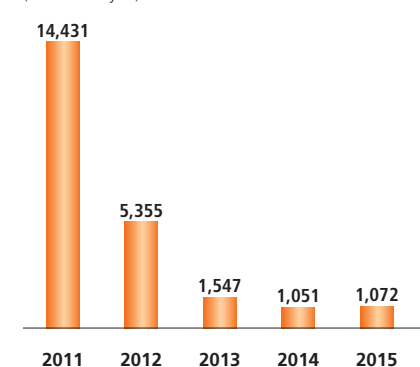
(Millions of yen)



Equipment Business  
Material Business  
Eliminations and Corporate

#### Order Backlog of Equipment Business

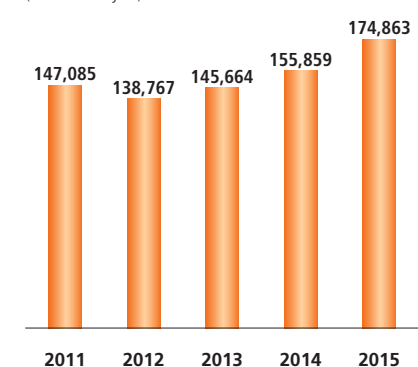
(Millions of yen)



(As of March 31)

#### Total Assets

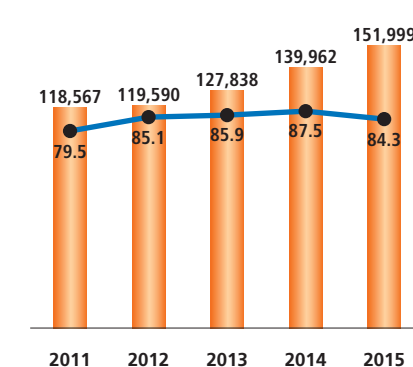
(Millions of yen)



(As of March 31)

#### Total Equity/Equity Ratio

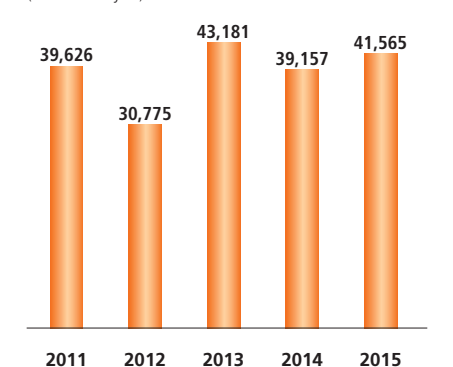
(Millions of yen)



Total Equity (Millions of yen)  
Equity Ratio (%)

#### Cash and Cash Equivalents

(Millions of yen)



(As of March 31)

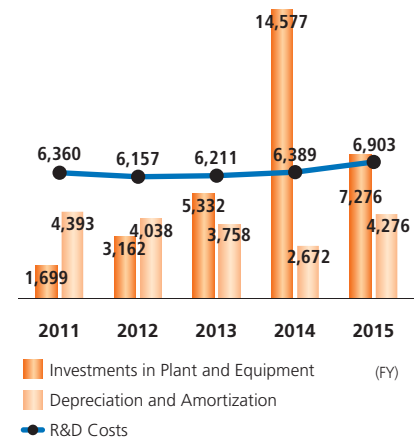


## FY2016 Performance Outlook

Net sales in the fiscal year ending March 31, 2016 are forecast to increase 9.8% year on year to ¥96,700 million, as electronic functional materials growth is driving sales growth and higher sales are expected in the Equipment Business. Operating income is forecast to increase only 0.4% year on year to ¥13,300 million despite higher depreciation, mainly at TOK Advanced Materials Co., Ltd. in South Korea. Net income is forecast to rise 2.1% to ¥9,000 million on expected foreign exchange gain and tax expense decreases.

The average exchange rate during the period is assumed to be ¥115 (¥109.3 in the previous fiscal year) to \$1.00.

Investments in Plant and Equipment/  
Depreciation and Amortization/R&D Costs  
(Millions of yen)



## Risk Information

The TOK Group conducts business activities in every region of the world in a diverse range of fields. When carrying out these business activities, it encounters a variety of risk factors that may have a detrimental impact on its financial conditions and management performance. The risks described below are solely those that the Group judged to be most significant as of March 31, 2015 and do not constitute all of its risk factors.

### 1. Industrial and economic change-related risk

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

## Earnings Forecasts

(Millions of yen, %)

	FY2015 Results	FY2016 Forecasts	
		Change	%
Net Sales	88,086	96,700	+8,613 +9.8
Operating Income	13,253	13,300	+46 +0.4
Net Income	8,818	9,000	+181 +2.1

### 2. Exchange rate fluctuation-related risk

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

### 3. Research and development-related risk

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

### 4. Intellectual property-related risk

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

### 5. Raw material procurement-related risk

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

### 6. Product liability-related risk

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

### 7. Natural disaster and accident-related risk

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

### 8. Environment-related risk

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

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

### 9. Legal risk

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

### 10. Overseas business activity-related risk

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

### 11. Information leakage risk

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

## Consolidated Balance Sheets

TOKYO OHKA KOGYO CO., LTD. and Consolidated Subsidiaries  
March 31, 2015 and 2014

ASSETS	Millions of yen		Thousands of U.S. dollars
	2015	2014	2015
<b>CURRENT ASSETS</b>			
Cash and cash equivalents.....	¥ 39,565	¥ 39,157	\$ 329,716
Time deposits.....	14,401	14,213	120,010
Receivables:			
Trade notes and accounts.....	19,422	16,623	161,850
Securities.....	2,000	—	16,666
Other.....	1,089	526	9,079
Allowance for doubtful accounts.....	(35)	(154)	(292)
Inventories.....	11,555	10,446	96,296
Deferred tax assets.....	1,821	1,563	15,182
Prepaid expenses and other current assets.....	1,232	871	10,274
Total current assets.....	91,054	83,247	758,783
<b>PROPERTY, PLANT AND EQUIPMENT</b>			
Land.....	9,205	9,014	76,716
Buildings and structures.....	55,881	52,936	465,679
Machinery and equipment.....	55,382	42,519	461,522
Furniture and fixtures.....	16,531	15,687	137,765
Leased assets.....	0	—	4
Construction in progress.....	5,420	13,892	45,172
Total.....	142,423	134,049	1,186,860
Accumulated depreciation.....	(93,051)	(89,472)	(775,431)
Net property, plant and equipment.....	49,371	44,577	411,429
<b>INVESTMENTS AND OTHER ASSETS</b>			
Investment securities.....	10,808	6,635	90,069
Investments in and advanced to an unconsolidated subsidiary and associated companies.....	789	920	6,576
Net defined benefit asset.....	2,964	896	24,701
Long-term time deposits.....	18,000	18,000	150,000
Deferred tax assets.....	60	424	507
Other assets.....	1,815	1,157	15,126
Total investments and other assets.....	34,437	28,034	286,981
<b>TOTAL</b> .....	¥174,863	¥155,859	\$1,457,194

LIABILITIES AND EQUITY	Millions of yen		Thousands of U.S. dollars
	2015	2014	2015
<b>CURRENT LIABILITIES</b>			
Payables			
Trade notes and accounts.....	¥ 9,797	¥ 5,744	\$ 81,648
Construction and other.....	3,051	2,600	25,428
Income taxes payable.....	2,176	1,988	18,135
Accrued expenses.....	3,633	3,018	30,280
Advances from customers.....	14	706	120
Deferred tax liabilities.....	40	4	336
Other current liabilities.....	581	314	4,844
Total current liabilities.....	19,295	14,377	160,793
<b>LONG-TERM LIABILITIES</b>			
Long-term loans payable.....	549	244	4,579
Allowance for retirement benefits.....	7	8	61
Deferred tax liabilities.....	2,036	1,034	16,972
Net defined benefit liability.....	134	93	1,119
Other long-term liabilities.....	841	138	7,009
Total long-term liabilities.....	3,569	1,518	29,742
<b>EQUITY</b>			
Common stock—authorized, 197,000,000 shares; issued, 46,600,000 shares.....	14,640	14,640	122,003
Capital surplus.....	15,207	15,207	126,732
Retained earnings.....	109,500	103,162	912,506
Treasury stock—at cost, 1,598,326 shares in 2015 and 1,597,486 shares in 2014.....	(3,183)	(3,280)	(26,529)
Accumulated other comprehensive income:			
Unrealized gain on available-for-sale securities.....	3,877	2,406	32,311
Foreign currency translation adjustments.....	5,813	2,936	48,449
Remeasurements of defined benefit plans.....	1,590	1,380	13,255
Total.....	147,447	136,453	1,228,729
Stock acquisition rights.....	191	83	1,593
Minority interests.....	4,360	3,425	36,335
Total equity.....	151,999	139,962	1,266,658
<b>TOTAL</b> .....	¥174,863	¥155,859	\$1,457,194



## Consolidated Statements of Income

TOKYO OHKA KOGYO CO., LTD. and Consolidated Subsidiaries  
Years Ended March 31, 2015 and 2014

	Millions of yen		Thousands of U.S. dollars
	2015	2014	2015
<b>NET SALES</b> .....	<b>¥88,086</b>	¥75,269	<b>\$734,055</b>
<b>COST OF SALES</b> .....	<b>55,101</b>	46,550	<b>459,181</b>
Gross profit .....	<b>32,984</b>	28,718	<b>274,873</b>
<b>SELLING, GENERAL AND ADMINISTRATIVE EXPENSES</b> .....	<b>19,731</b>	18,693	<b>164,431</b>
Operating income .....	<b>13,253</b>	10,025	<b>110,442</b>
<b>OTHER INCOME (EXPENSES)</b>			
Interest and dividend income .....	229	309	1,913
Foreign exchange gain—net .....	1,459	1,391	12,160
Insurance payment and dividend income .....	85	279	709
Loss on valuation of derivatives .....	(460)	—	(3,835)
Loss related to a new factory .....	(496)	—	(4,140)
Loss on impairment of long-lived assets .....	(665)	(856)	(5,545)
Gain on revision of retirement benefit plan .....	622	—	5,189
Other—net .....	274	516	2,286
Other income (expenses)—net .....	<b>1,048</b>	1,640	<b>8,737</b>
<b>INCOME BEFORE INCOME TAXES AND MINORITY INTERESTS</b> .....	<b>14,301</b>	11,666	<b>119,180</b>
<b>INCOME TAXES</b>			
Current .....	4,161	3,148	34,680
Prior years .....	40	75	334
Deferred .....	663	333	5,532
Total income taxes .....	<b>4,865</b>	3,557	<b>40,547</b>
<b>NET INCOME BEFORE MINORITY INTERESTS</b> .....	<b>9,435</b>	8,108	<b>78,632</b>
<b>MINORITY INTERESTS IN NET INCOME</b> .....	<b>(617)</b>	(559)	<b>(5,144)</b>
<b>NET INCOME</b> .....	<b>¥ 8,818</b>	¥ 7,549	<b>\$ 73,487</b>

	Yen		U.S. dollars
	2015	2014	2015
<b>PER SHARE OF COMMON STOCK</b>			
Basic net income .....	<b>¥196.61</b>	¥168.54	<b>\$1.63</b>
Diluted net income .....	<b>195.71</b>	168.41	<b>1.63</b>
Cash dividends applicable to the year .....	<b>60.00</b>	52.00	<b>0.50</b>

## Consolidated Statements of Comprehensive Income

TOKYO OHKA KOGYO CO., LTD. and Consolidated Subsidiaries  
Years Ended March 31, 2015 and 2014

	Millions of yen		Thousands of U.S. dollars
	2015	2014	2015
<b>NET INCOME BEFORE MINORITY INTERESTS</b> .....	<b>¥ 9,435</b>	¥ 8,108	<b>\$ 78,632</b>
<b>OTHER COMPREHENSIVE INCOME</b>			
Unrealized loss on available-for-sale securities .....	1,471	288	12,259
Foreign currency translation adjustments .....	3,168	4,544	26,400
Remeasurements of defined benefit plans .....	210	—	1,752
Share of other comprehensive income in associates .....	72	107	601
Total other comprehensive income .....	<b>4,921</b>	4,941	<b>41,013</b>
<b>COMPREHENSIVE INCOME</b> .....	<b>¥14,357</b>	¥13,050	<b>\$119,645</b>
<b>TOTAL COMPREHENSIVE INCOME ATTRIBUTABLE TO</b>			
Owners of the parent .....	<b>¥13,377</b>	¥11,943	<b>\$111,476</b>
Minority interests .....	<b>980</b>	1,106	<b>8,169</b>

## Consolidated Statements of Changes in Equity

TOKYO OHKA KOGYO CO., LTD. and Consolidated Subsidiaries  
Years Ended March 31, 2015 and 2014

	Thousands		Millions of yen									
	Number of shares of common stock outstanding	Common stock	Capital surplus	Retained earnings	Treasury stock	Unrealized gain on available-for-sale securities	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total	Subscription rights to shares	Minority interests	Total equity
<b>BALANCE, APRIL 1, 2013</b>	44,762	¥14,640	¥15,207	¥ 97,773	¥(3,398)	¥2,117	¥(1,168)	¥ —	¥125,172	¥ 17	¥2,649	¥127,838
Net income	—	—	—	7,549	—	—	—	—	7,549	—	—	7,549
Cash dividends paid:												
Final for prior year, ¥24.0 per share	—	—	—	(1,080)	—	—	—	—	(1,080)	—	—	(1,080)
Interim for current year, ¥24.0 per share	—	—	—	(1,080)	—	—	—	—	(1,080)	—	—	(1,080)
Purchase of treasury stock	(0)	—	—	—	(1)	—	—	—	(1)	—	—	(1)
Disposal of treasury stock	62	—	—	—	120	—	—	—	120	—	—	120
Net change in the year	—	—	—	—	—	288	4,104	1,380	5,774	65	776	6,616
<b>BALANCE, MARCH 31, 2014</b>	44,823	14,640	15,207	103,162	(3,280)	2,406	2,936	1,380	136,453	83	3,425	139,962
Cumulative effect of changes in accounting policy	—	—	—	129	—	—	—	—	129	—	—	129
<b>Beginning balance reflecting defined contribution pension plan</b>	<b>44,823</b>	<b>14,640</b>	<b>15,207</b>	<b>103,292</b>	<b>(3,280)</b>	<b>2,406</b>	<b>2,936</b>	<b>1,380</b>	<b>136,583</b>	<b>83</b>	<b>3,425</b>	<b>140,092</b>
Net income	—	—	—	8,818	—	—	—	—	8,818	—	—	8,818
Cash dividends paid:												
Final for prior year, ¥28.0 per share	—	—	—	(1,260)	—	—	—	—	(1,260)	—	—	(1,260)
Interim for current year, ¥30.0 per share	—	—	—	(1,350)	—	—	—	—	(1,350)	—	—	(1,350)
Purchase of treasury stock	(0)	—	—	—	(2)	—	—	—	(2)	—	—	(2)
Disposal of treasury stock	51	—	—	—	99	—	—	—	99	—	—	99
Net change in the year	—	—	—	—	—	1,471	2,877	210	4,558	108	934	5,601
<b>BALANCE, MARCH 31, 2015</b>	<b>44,873</b>	<b>¥14,640</b>	<b>¥15,207</b>	<b>¥109,500</b>	<b>¥(3,183)</b>	<b>¥3,877</b>	<b>¥ 5,813</b>	<b>¥1,590</b>	<b>¥147,447</b>	<b>¥191</b>	<b>¥4,360</b>	<b>¥151,999</b>

	Thousands of U.S. dollars		Millions of yen								
	Common stock	Capital surplus	Retained earnings	Treasury stock	Unrealized gain on available-for-sale securities	Foreign currency translation adjustments	Remeasurements of defined benefit plans	Total	Subscription rights to shares	Minority interests	Total equity
<b>BALANCE, MARCH 31, 2014</b>	\$122,003	\$126,732	\$859,687	\$(27,335)	\$20,052	\$24,472	\$11,502	\$1,137,115	\$ 693	\$28,548	\$1,166,357
Cumulative effect of changes in accounting policy	—	—	1,083	—	—	—	—	1,083	—	—	1,083
<b>Beginning balance reflecting defined contribution pension plan</b>	<b>122,003</b>	<b>126,732</b>	<b>860,770</b>	<b>(27,335)</b>	<b>20,052</b>	<b>24,472</b>	<b>11,502</b>	<b>1,138,198</b>	<b>693</b>	<b>28,548</b>	<b>1,167,440</b>
Net income	—	—	73,487	—	—	—	—	73,487	—	—	73,487
Cash dividends paid:											
Final for prior year, \$0.23 per share	—	—	(10,500)	—	—	—	—	(10,500)	—	—	(10,500)
Interim for current year, \$0.25 per share	—	—	(11,250)	—	—	—	—	(11,250)	—	—	(11,250)
Purchase of treasury stock	—	—	—	(22)	—	—	—	(22)	—	—	(22)
Disposal of treasury stock	—	—	—	827	—	—	—	827	—	—	827
Net change in the year	—	—	—	—	12,259	23,976	1,752	37,988	900	7,787	46,676
<b>BALANCE, MARCH 31, 2015</b>	<b>\$122,003</b>	<b>\$126,732</b>	<b>\$912,506</b>	<b>\$(26,529)</b>	<b>\$32,311</b>	<b>\$48,449</b>	<b>\$13,255</b>	<b>\$1,228,729</b>	<b>\$1,593</b>	<b>\$36,335</b>	<b>\$1,266,658</b>

## Consolidated Statements of Cash Flows

TOKYO OHKA KOGYO CO., LTD. and Consolidated Subsidiaries  
Years Ended March 31, 2015 and 2014

	Millions of yen		Thousands of U.S. dollars
	2015	2014	2015
<b>OPERATING ACTIVITIES:</b>			
Income before income taxes and minority interests.....	¥ 14,301	¥ 11,666	\$ 119,180
Adjustments for:			
Income taxes paid .....	(3,935)	(2,583)	(32,796)
Depreciation and amortization .....	4,276	2,672	35,641
Provision for doubtful accounts.....	(94)	(925)	(785)
Foreign exchange (gain) loss—net.....	(1,423)	(970)	(11,858)
Loss on impairment of long-lived assets.....	665	856	5,545
Loss on valuation of derivatives .....	460	—	3,835
Increase in net defined benefit asset.....	(1,855)	(297)	(15,462)
Increase in net defined benefit liability.....	39	21	330
(Increase) decrease in trade notes and accounts receivable .....	(2,119)	720	(17,658)
(Increase) decrease in inventories.....	(368)	1,018	(3,073)
Increase (decrease) in trade notes and accounts payable.....	3,121	(449)	26,009
Decrease in advances from customers .....	(692)	(652)	(5,768)
Other—net .....	1,200	804	10,008
Net cash provided by operating activities .....	13,577	11,881	113,148
<b>INVESTING ACTIVITIES:</b>			
(Deposit) disbursements for time deposits—net .....	(70)	(157)	(585)
Purchases of property, plant and equipment.....	(7,052)	(14,616)	(58,770)
Purchases of intangible assets.....	(456)	(424)	(3,803)
Payments into long-term time deposits .....	(13,000)	(13,000)	(108,333)
Withdrawal of long-term time deposits.....	13,000	13,000	108,333
Purchases of investment securities .....	(2,284)	—	(19,039)
Proceeds from sales of investment securities .....	—	382	—
Other—net.....	(333)	323	(2,779)
Net cash used in investing activities.....	(10,197)	(14,491)	(84,977)
<b>FINANCING ACTIVITIES:</b>			
Proceeds of long-term loans payable .....	523	—	4,362
Repayments of long-term loans payable .....	(122)	(122)	(1,016)
Dividends paid.....	(2,605)	(2,155)	(21,712)
Dividends paid for minority shareholder.....	(45)	(330)	(382)
Disposal of treasury stock .....	148	133	1,239
Purchases of treasury stock.....	(2)	(1)	(22)
Other—net.....	(6)	4	(57)
Net cash used in financing activities .....	(2,110)	(2,471)	(17,589)
<b>FOREIGN CURRENCY TRANSLATION ADJUSTMENTS ON CASH AND CASH EQUIVALENTS .....</b>	<b>1,138</b>	<b>1,058</b>	<b>9,487</b>
<b>NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS .....</b>	<b>2,408</b>	<b>(4,023)</b>	<b>20,069</b>
<b>CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR.....</b>	<b>39,157</b>	<b>43,181</b>	<b>326,313</b>
<b>CASH AND CASH EQUIVALENTS, END OF YEAR.....</b>	<b>¥ 41,565</b>	<b>¥ 39,157</b>	<b>\$ 346,382</b>



<b>1 TOKYO OHKA KOGYO CO., LTD.</b>		
<b>TOKYO OHKA KOGYO AMERICA, INC.</b>	<b>TOKYO OHKA KOGYO EUROPE B.V.</b>	<b>TOK Advanced Materials Co., Ltd.</b>
<b>2 Headquarters/Oregon Plant (Oregon)</b>	<b>5 Headquarters (The Netherlands)</b>	<b>8 Headquarters/Incheon Plant (South Korea)</b>
<b>3 Corporate Sales Office (California)</b>	<b>TOK TAIWAN CO., LTD.</b>	<b>9 Singapore Office</b>
<b>4 Texas Sales Office (Texas)</b>	<b>6 Headquarters (Hsinchu City) Miaoli Plant (Miaoli City) Tongluo Plant (Miaoli County)</b>	<b>10 Shanghai Representative Office</b>
	<b>CHANG CHUN TOK (CHANGSHU) CO., LTD.</b>	
	<b>7 Headquarters/Changshu Plant (China)</b>	



### Corporate Information (As of March 31, 2015)

**Corporate Name** TOKYO OHKA KOGYO CO., LTD.  
**Established** October 25, 1940  
**Headquarters** 150 Nakamaruko, Nakahara-ku, Kawasaki, Kanagawa 211-0012, JAPAN  
**Number of Employees** 1,540 (Consolidated)  
**Paid-In Capital** ¥14,640,448,000  
**Web Site** <http://www.tok.co.jp/eng>  
**Stock Listing** Tokyo  
**Investor Relations Contact** Public Relations Division  
 150 Nakamaruko, Nakahara-ku, Kawasaki, Kanagawa 211-0012, JAPAN  
 TEL. +81-44-435-3000  
 FAX. +81-44-435-3020

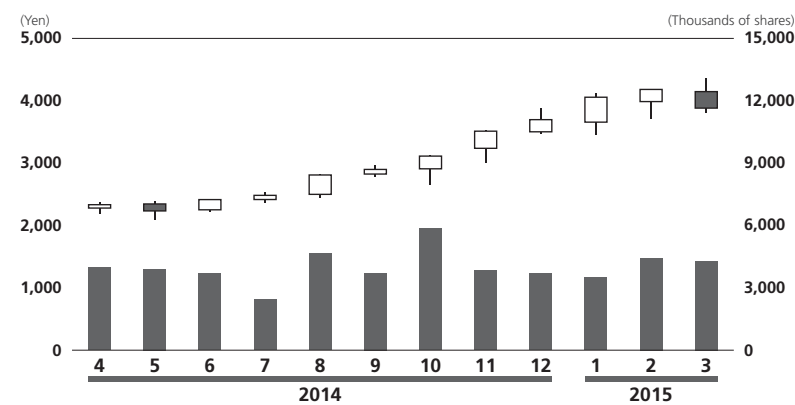


### Stock Information (As of March 31, 2015)

#### General Information

**Total Number of Shares Authorized** 197,000,000  
**Number of Shares Issued** 46,600,000  
**Number of Shareholders** 6,257

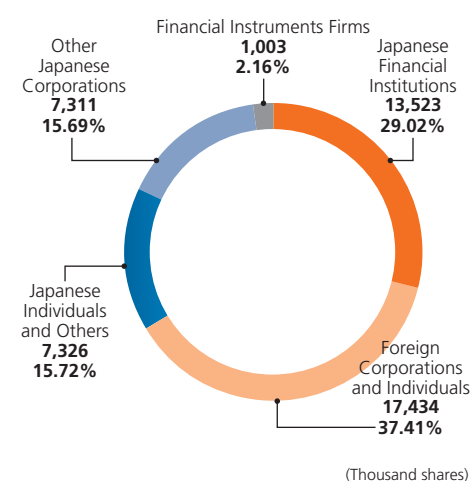
#### Change of Stock Price and Turnover



#### Major Shareholders

Name	Number of Shares Held (Thousands)	Ratio of Shareholding (%)
Japan Trustee Services Bank, Ltd. (Trust Account)	2,029	4.51
Meiji Yasuda Life Insurance Company	1,826	4.06
MLPFS CUSTODY ACCOUNT	1,494	3.32
The Master Trust Bank of Japan, Ltd. (Trust Account)	1,402	3.12
CBNY-EDGEPOINT GLOBAL PORTFOLIO	1,267	2.82
The Bank of Tokyo-Mitsubishi UFJ, Ltd.	1,207	2.68
The Bank of Yokohama, Ltd.	1,026	2.28
Tokyo Ohka Foundation for The Promotion of Science and Technology	984	2.19
Mitsubishi UFJ Trust and Banking Corporation	953	2.12
MSIP CLIENT SECURITIES	915	2.03

#### Classification of Shareholders



Notes:  
 1. The Company owns 1,598 thousand shares of treasury stock which is excluded from the above Major shareholders.  
 2. The ratio of shareholding is calculated based on the number of shares (45,001,674 shares) obtained by subtracting the number of treasury stock from the total number of shares issued.

#### CAUTIONARY STATEMENT

The Company's financial statements in English have not been audited by independent auditors. However, the original Japanese financial statements on which they are based have been audited by independent auditors.

For more detailed information, please refer to the Company's Annual Financial Report:  
<http://www.tok.co.jp/ir/library/annual>