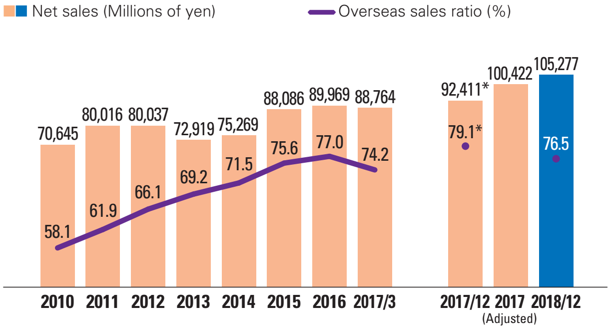
# Trends of Key Data and Analysis

## 10-Year Financial Highlights

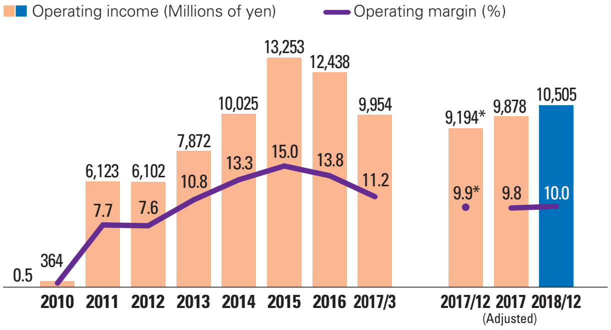
### Net sales/Overseas sales ratio*

**¥105,277 million** **76.5%**




### Operating income*/Operating margin

**¥10,505 million** **10.0%**

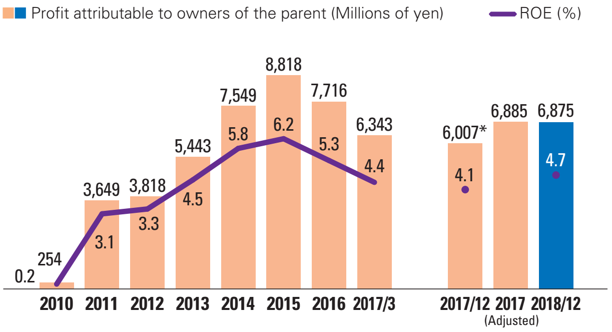



As a result of sales growth in core products for overseas customers in the U.S., South Korea, and Taiwan, the overseas sales ratio held steady at around 75%. Although TOK recorded its first operating loss since going public in the fiscal year ended March 31, 2009, soon after the collapse of Lehman Brothers, the Company has maintained a certain level of profits since the fiscal year ended March 31, 2011. In the fiscal year ended March 31, 2015, TOK achieved record-high operating income as a result of making large-scale strategic investments, concentrating on growth in cutting-edge materials for semiconductors, strengthening its strategy of building close relationships with customers overseas, and reshaping its business portfolio under the "TOK Medium-Term Plan 2015" that started in the fiscal year ended March 31, 2013. Under the "TOK Medium-Term Plan 2018" that started in the fiscal year ended March 31, 2017, net sales expanded in tandem with growth in the semiconductor market, but profit growth stalled due in part to an increase in depreciation and amortization that reflected heavy investments. Under the "TOK Medium-Term Plan 2021" that started in the fiscal year ending December 31, 2019, TOK is keen to record a new record high in profits by concentrating on strengthening business portfolio reforms and returning to a growth trajectory.

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

### Profit attributable to owners of the parent*/ROE

**¥6,875 million** **4.7%**

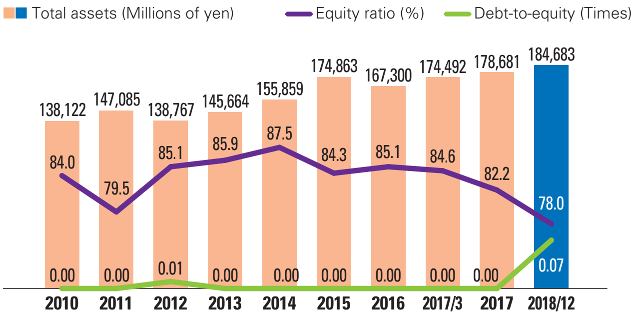



Under the "TOK Medium-Term Plan 2018," we have set a numerical target for ROE and are working to increase it by capturing high-quality profits through business portfolio reforms, attaining top-line expansion and a higher total asset turnover ratio, as well as considering review of the D/E ratio. As a result, ROE has stayed on an uptrend. Under the "TOK Medium-Term Plan 2021," the Company targets ROE of 8% or higher with profit growth continuing to be a driver, while enhancing its responsiveness to changes in the increasingly challenging business, investment, and financial environments.

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

### Total assets/Equity ratio/Debt-to-equity

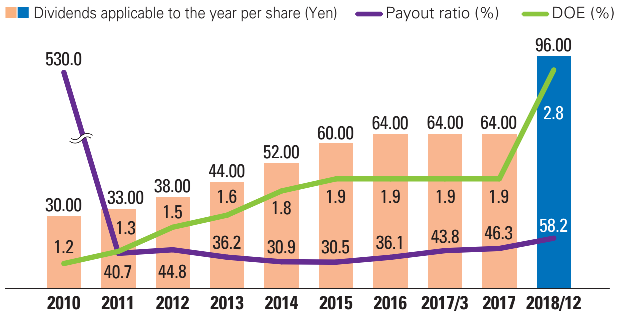
**¥184,683 million** **78.0%** **0.07 times**




As a long-run R&D-driven company that continues to target niche top markets, TOK's basic policy is to maintain sufficient cash reserves to compete in development with larger rivals and facilitate agile investments. The equity ratio has stayed at around 85%, but should gradually start to decline as a consequence of long-term debt financing, better shareholder returns, and one of the largest share buybacks the Company has undertaken, under balance sheet management that began during the "TOK Medium-Term Plan 2018."

### Dividends applicable to the year per share/Payout ratio/DOE

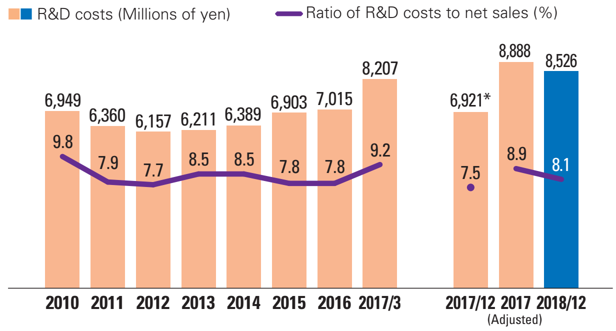
**¥96.00** **58.2%**




Until the fiscal year ended March 31, 2016, our basic policy targeted a consolidated dividend payout ratio of at least 30%. In the fiscal year ended March 31, 2017, we changed to a policy that targets a sustained dividend at a consolidated payout ratio of at least 40% while taking current levels into account. TOK has introduced a new dividend policy that targets DOE of 3.5%, beginning with year-end dividends in the fiscal year ended December 31, 2018 (see pages 52–55 "Message from the CFO").

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

**¥8,526 million** **8.1%**

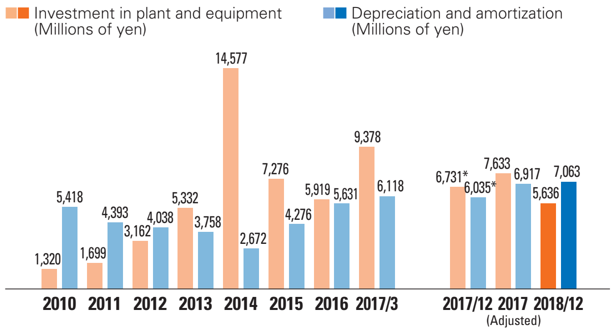



TOK's spending on R&D is equivalent to roughly 8% of net sales, much higher than the averages of 2.7%*2 for the chemical and petroleum industry and 4.0%*2 for the electrical equipment and precision machinery industry. The Company intends to increase development efficiency, even while R&D costs are on the rise for the development of high value-added materials and production technologies, and increase in the supply of samples for cutting-edge semiconductor fields (see pages 42–43 "Message from the Director in Charge of Research and Development").

*1 Due to a change in fiscal year-end, the fiscal year ended December 31, 2017 was an irregular nine-month period in Japan, and 12 months overseas.
*2 Average of totals for FY2014/3 through FY2016/3. Source: Nikkei Smart Work Survey on April 20, 2018

### Investment in plant and equipment/Depreciation and amortization

**¥5,636 million** **¥7,063 million**



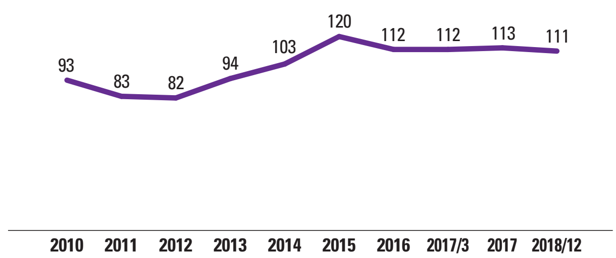

Depreciation and amortization increased as a result of large-scale investments during the "TOK Medium-Term Plan 2015" and the "TOK Medium-Term Plan 2018," but under the "TOK Medium-Term Plan 2021," the Company plans to invest in production equipment with long depreciation periods, so depreciation and amortization should increase at a more moderate pace.

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

### Exchange rate

**¥111**

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

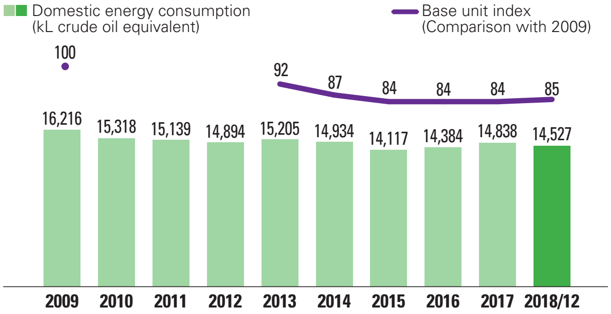



As the global economy enters a major turning point, the Company intends to advance global cash management, including adjusting the balance of cash positions among overseas sites, as a part of balance sheet management. We are thus enhancing financial risk controls for fluctuations in exchange rates and market liquidity.

# 10-Year Non-Financial Highlights

### Domestic energy consumption*

**14,527**kL crude oil equivalent **85** Base unit index

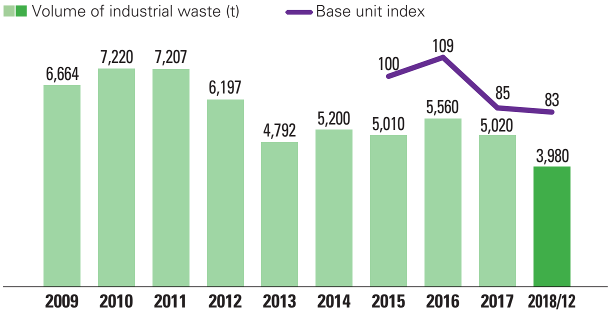



By 2019, TOK targets a reduction of 10 points in energy consumption compared with the base unit indexed to 2009. Thanks to smooth progress on various fronts, the Company achieved a reduction of 15 points in 2018, compared with the base unit indexed to 2009. The Company will carry on with efforts to reduce its environmental impact by improving production processes, increasing work efficiency, and reviewing equipment and their operational methods.

* Due to a change in fiscal year-end, totals for 2009, the reference year for medium-term targets, and 2013 onward are from January to December. Totals for 2010 to 2012 are from April to March.

### Volume of industrial waste*1

**3,980**t **83** Base unit index

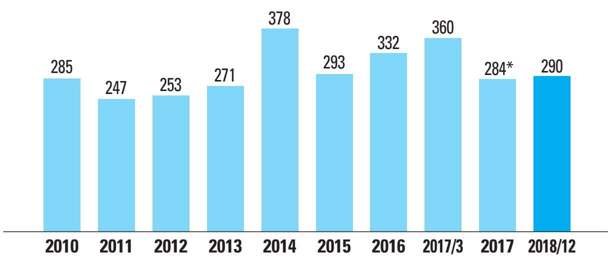



TOK has achieved zero emissions*2 for five consecutive years, as the volume of its industrial waste headed to landfill disposal via intermediate treatment has remained below 1% of the total. TOK targets a reduction of 5 points in total industrial waste by 2020 compared with the base unit indexed to 2015. The Company continues various activities to refine and reuse process effluents, as well as internally process and recover effluents while turning them into items of value.

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

### Number of patents

**290**

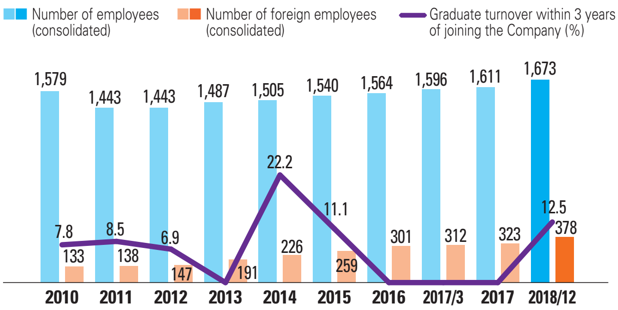



Our number of patent registrations in the cutting-edge semiconductor fields has been increasing at a slower rate alongside greater complexity in development, but patent registrations have been rising steadily for new businesses and new materials. Going forward, we will design our strategic patent portfolio for new and promising technologies to enable the stable pursuit of business development as well as to build barriers to entry.

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

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

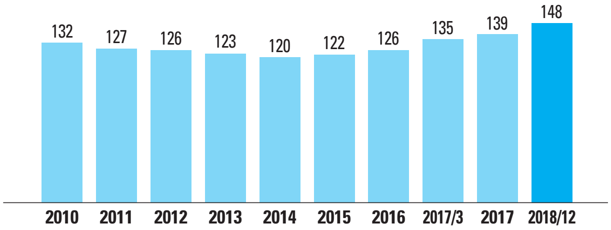
**1,673** **378** **12.5**%




At TOK, the number of foreign employees has been increasing as a result of an increase in the number of overseas development/production sites and emphasis on merit-based hiring of new graduates regardless of their nationality. Based on the spirit of a frank and open-minded business culture, one of our management principles, and the basic philosophy that human resources are a company asset, we have expanded our personnel systems and training programs. As a result, the ratio of new graduate hires who quit within three years of joining the Company has stayed at zero percent for a majority of years. In February 2019, TOK was recognized in the Certified Health & Productivity Management Outstanding Organizations Recognition Program (White 500) for a second consecutive year.

## Number of female employees*

**148**

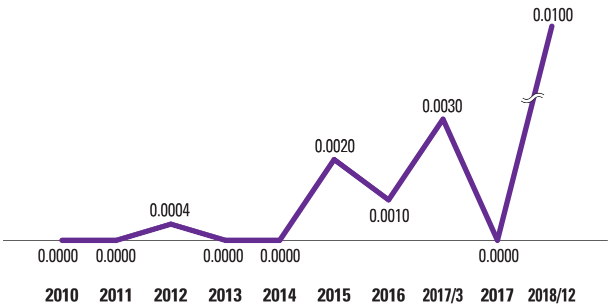



The ratio of female new graduate hires has held steady at about 40%, and the number of female employees has been increasing as a result of better supportive measures to retain and promote women. In recognition of our initiatives, such as offering flexible work styles and support with career formation plans, TOK was again selected as a constituent stock in 2019 for the MSCI Japan Empowering Women Index. Going forward, TOK will concentrate on initiatives to increase the ratio of women in management positions.

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

## Severity rate of workplace accidents

**0.01**

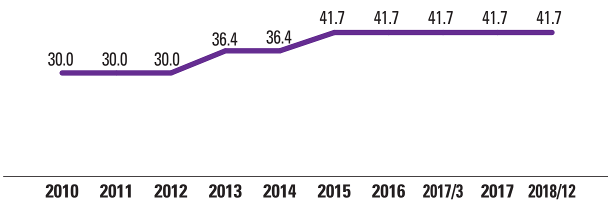



In the fiscal year ended December 31, 2018, the severity rate of workplace accidents increased due to two injuries resulting in lost workdays. We will continue to make concerted, company-wide efforts to prevent workplace accidents and achieve our goals of "zero accidents" as well as "zero accident risks," through ongoing training and drills for our employees via the Safety and Health Committee, the establishment of Safety and Health Liaison Unit, and updates to manuals for how to respond during emergencies.

## Ratio of outside officers in the Board of Directors

**41.7%**

(%)

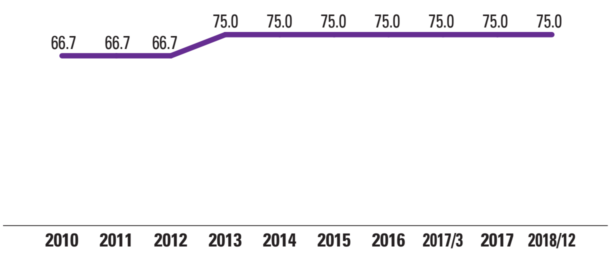



TOK increased the number of outside auditors by one to three in 2013, and increased the number of outside directors by one to two in 2015. The ratio of outside officers on the Board of Directors is now 41.7%.

## Ratio of outside auditors among corporate auditors

**75.0%**

(%)




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

# Changes in Medium-term Plans and 10-Year Key Data

**Urgent business profitability and structural reforms**

**Measures 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

| Fiscal years ended March 31 and fiscal years ended December 31 | 2010/3 | 2011/3 | 2012/3 | 2013/3 |
|---|---|---|---|---|
| **Results of operation:** | | | | |
| Net sales | 70,645 | 80,016 | 80,037 | 72,919 |
| Material Business | 65,091 | 71,482 | 66,645 | 67,697 |
| Equipment Business | 5,632 | 8,622 | 13,500 | 5,302 |
| Operating income | 364 | 6,123 | 6,102 | 7,872 |
| Income before income taxes | 114 | 6,427 | 6,577 | 8,031 |
| Profit attributable to owners of the parent | 254 | 3,649 | 3,818 | 5,443 |
| Free cash flow | 6,504 | 12,435 | (6,641) | 12,363 |
| Investment in plant and equipment | 1,320 | 1,699 | 3,162 | 5,332 |
| Depreciation and amortization | 5,418 | 4,393 | 4,038 | 3,758 |
| R&D costs | 6,949 | 6,360 | 6,157 | 6,211 |
| **Per share data (Yen/U.S. dollars):** | | | | |
| Basic profit | 5.66 | 81.08 | 84.86 | 121.69 |
| Cash dividends applicable to the year | 30.00 | 33.00 | 38.00 | 44.00 |
| Net assets | 2,578.30 | 2,597.72 | 2,641.28 | 2,796.37 |
| **At the year-end:** | | | | |
| Total assets | 138,122 | 147,085 | 138,767 | 145,664 |
| Total long-term liabilities | 2,350 | 2,105 | 2,613 | 2,811 |
| Interest-bearing debt | 57 | 0 | 610 | 488 |
| Net assets | 117,658 | 118,567 | 119,590 | 127,838 |
| **Key performance indicators (%):** | | | | |
| Operating margin | 0.5 | 7.7 | 7.6 | 10.8 |
| ROE | 0.2 | 3.1 | 3.3 | 4.5 |
| Ratio of R&D costs to net sales | 9.8 | 7.9 | 7.7 | 8.5 |
| Equity ratio | 84.0 | 79.5 | 85.1 | 85.9 |
| Debt-to-equity (Times) | 0.00 | 0.00 | 0.01 | 0.00 |
| Payout ratio | 530.0 | 40.7 | 44.8 | 36.2 |
| DOE | 1.2 | 1.3 | 1.5 | 1.6 |
| **Industry trend** | | | | |
| Worldwide semiconductor market (Millions of U.S. dollars)*1, (Year) | 298,315 | 299,521 | 291,562 | 305,584 |
| Worldwide photoresists sales (Thousands of U.S. dollars)*2 | 1,129,893 | 1,220,078 | 1,279,706 | 1,152,306 |
| Exchange rate (¥/$)*4 | 93 | 83 | 82 | 94 |

*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 2019 *4 As of the end of each fiscal year

## TOK Medium-Term Plan 2015

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

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

## TOK Medium-Term Plan 2018

### Long-term management vision for fiscal 2020:
Aim to be a globally trusted corporate group by inspiring customers with high value-added products

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

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

Material Business:
Segment net sales achieved a record high

| | 2014/3 | 2015/3 | 2016/3 | 2017/3 | 2017/12 | Millions of yen 2018/12 | Thousands of U.S. dollars 2018/12 |
|---|---|---|---|---|---|---|---|
| | 75,269 | 88,086 | 89,969 | 88,764 | 92,411 | 105,277 | 948,443 |
| | 72,866 | 84,611 | 87,280 | 86,558 | 90,532 | 102,626 | 924,566 |
| | 2,484 | 3,581 | 2,748 | 2,252 | 1,921 | 2,697 | 24,298 |
| | 10,025 | 13,253 | 12,438 | 9,954 | 9,194 | 10,505 | 94,645 |
| | 11,666 | 14,301 | 11,777 | 9,220 | 9,492 | 9,814 | 88,414 |
| | 7,549 | 8,818 | 7,716 | 6,343 | 6,007 | 6,875 | 61,945 |
| | (2,610) | 3,380 | 7,517 | (926) | 4,169 | 6,298 | 56,739 |
| | 14,577 | 7,276 | 5,919 | 9,378 | 6,731 | 5,636 | 50,775 |
| | 2,672 | 4,276 | 5,631 | 6,118 | 6,035 | 7,063 | 63,638 |
| | 6,389 | 6,903 | 7,015 | 8,207 | 6,921 | 8,526 | 76,814 |
| | | | | | | | |
| | 168.54 | 196.61 | 177.30 | 146.18 | 138.31 | 164.92 | 1.48 |
| | 52.00 | 60.00 | 64.00 | 64.00 | 64.00 | 96.00 | 0.86 |
| | 3,044.24 | 3,285.81 | 3,298.00 | 3,384.14 | 3,490.97 | 3,459.37 | 31.17 |
| | | | | | | | |
| | 155,859 | 174,863 | 167,300 | 174,492 | 178,681 | 184,683 | 1,663,812 |
| | 1,518 | 3,569 | 2,899 | 2,024 | 3,421 | 12,250 | 110,366 |
| | 366 | 814 | 534 | 135 | — | 10,000 | 90,090 |
| | 139,962 | 151,999 | 147,270 | 152,931 | 153,517 | 150,857 | 1,359,078 |
| | | | | | | | |
| | 13.3 | 15.0 | 13.8 | 11.2 | 9.9 | 10.0 | |
| | 5.8 | 6.2 | 5.3 | 4.4 | 4.1 | 4.7 | |
| | 8.5 | 7.8 | 7.8 | 9.2 | 7.5 | 8.1 | |
| | 87.5 | 84.3 | 85.1 | 84.6 | 82.2 | 78.0 | |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | |
| | 30.9 | 30.5 | 36.1 | 43.8 | 46.3 | 58.2 | |
| | 1.8 | 1.9 | 1.9 | 1.9 | 1.9 | 2.8 | |
| | | | | | | | |
| | 335,843 | 335,168 | 338,931 | 412,221 | 468,778 | 412,086*3 | |
| | 1,288,713 | 1,230,022 | 1,358,009 | 1,504,224 | 1,631,851 | | |
| | 103 | 120 | 112 | 112 | 113 | 111 | |

Equity ratio:
The equity ratio has stayed at around 85% for a long time, but the Company is continuing to pursue the optimal balance, which may be decreasing as a result of stronger balance sheet management. **(See pages 52–55 "Message from the CFO.")**

# FY2018/12 Market Trends, Results of Operations, Financial Position, and FY2019/12 Performance Outlook

**Change in Fiscal Year-End**

TOK changed its fiscal year-end from March 31 to December 31. The fiscal year-end was also changed to December for its subsidiaries with a fiscal year-end in March. To facilitate year-on-year comparisons, the results of the previous fiscal year have been adjusted to align with the current fiscal year.

## Business Environment

In the fiscal year ended December 31, 2018, the global economy continued to improve, but the outlook has grown increasingly uncertain due to the rise of protectionist economic policies accompanied by trade friction. The Japanese economy maintained a moderate recovery trend overall, with a turnaround in consumer spending amid ongoing improvement in employment and income conditions backed by strong corporate earnings.

On foreign exchange markets, the yen continued to appreciate from January through March, owing in part to rougher trade friction between the U.S. and China, but then the yen depreciated from April as the dollar strengthened on hikes in the U.S. policy interest rate. On average for the year, the yen was about ¥2 stronger compared with the same period in the previous year.

## Net Sales and Operating Income

In the fiscal year ended December 31, 2018, consolidated net sales increased ¥4,854 million, or 4.8%, from the same period in the previous year to ¥105,277 million. Net sales in the first half increased ¥2,684 million, or 5.6%, to ¥50,748 million. Net sales in the second half increased ¥2,170 million, or 4.1%, to ¥54,529 million.

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

Cost of sales increased ¥5,217 million, or 7.8%, from the same period in the previous year to ¥71,896 million, reflecting increases in depreciation and amortization and costs for consumables. The cost of sales ratio climbed 1.9 percentage points to 68.3%. As a result, gross profit decreased ¥362 million, or 1.1%, to ¥33,380 million.

Selling, general and administrative (SG&A) expenses decreased ¥989 million, or 4.1%, from the same period in the previous year to ¥22,875 million, mainly due to decreases in provision of allowance for doubtful accounts, depreciation and amortization and patent royalties.

Operating income increased by ¥627 million, or 6.4%, from the same period in the previous year to ¥10,505 million, mainly due to a decrease in SG&A expenses.

## Performance by Segment*

### Material Business Segment

Sales in the Material Business increased by ¥4,376 million, or 4.5%, from the same period in the previous year to ¥102,626 million. Operating income increased ¥207 million, or 1.4%, to ¥15,075 million, reflecting growth in sales of high value-added products, despite rising raw material prices including higher crude oil prices.

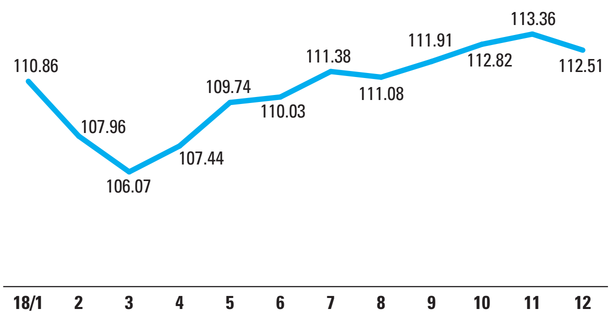
■ Electronic Functional Materials Division

In the electronic functional materials division, sales increased ¥1,845 million, or 3.2%, from the same period in the previous year to ¥58,793 million.

Sales of semiconductor photoresists expanded with brisk sales of excimer laser photoresists as major customers ramped up mass production of cutting-edge memory, in addition to sustained growth in the 3D memory market. Furthermore, in high-density integration materials, sales of photoresists

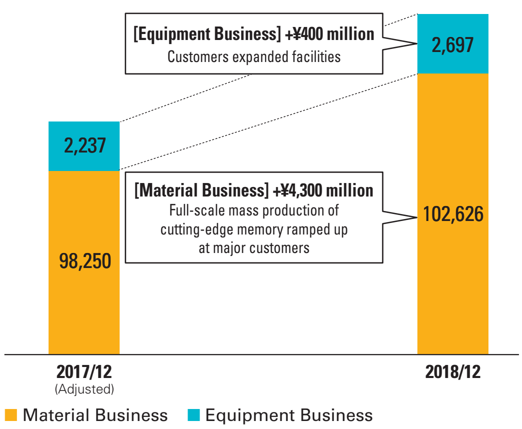
* Intersegment sales or transfers have not been eliminated.

■ **Exchange Rate in 2018** (Yen/U.S. dollars, Monthly average)




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

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



for semiconductor packaging grew on the back of higher production volumes at major customers thanks to the robust semiconductor market. Photoresists for displays, however, saw sales decline as domestic demand shrank on deterioration in conditions in the small- and medium-sized display market.

■ High-Purity Chemicals Division

Sales in the high-purity chemicals division increased ¥2,567 million, or 6.2%, to ¥43,733 million.

Sales increased for photoresists-related chemicals used to manufacture semiconductors, with new products being adopted for next-generation semiconductor manufacturing processes in North America, in addition to robust sales of products used in cutting-edge semiconductor manufacturing processes in Asia. However, sales of photoresists-related chemicals used to manufacture displays decreased as sales weakened in contracting markets for small- and medium-sized displays in Japan and Asia.

**Equipment Business Segment**

■ Process Equipment Division

Zero Newton is our wafer handling system used in the through-silicon-via process, which is vital for creating high-functional, high-performance semiconductors. Zero Newton struggled to grow because customers continued to refrain from increasing investments in production capacity amid weak growth momentum in the 3D packaging market, even though the system has steadily built up a track record in the market. Meanwhile, sales and orders both increased for semiconductor manufacturing equipment, benefitting from expansion of facilities at customers.

As a result, sales in the Equipment Business increased ¥459 million, or 20.5%, from the same period in the previous year to ¥2,697 million. Operating loss decreased by ¥189 million from the same period in the previous year to a loss of ¥883 million.

Orders in the period under review reached ¥3,507 million. Of this, orders in the first half totaled ¥1,976 million and in the second half ¥1,530 million. The year-end order backlog was ¥2,472 million.

## Financial Condition

Total assets as of December 31, 2018 increased by ¥6,001 million from the previous fiscal year-end to ¥184,683 million.

Total current assets increased ¥13,870 million from the previous fiscal year-end to ¥101,589 million. This mainly reflects increases of ¥1,351 million in inventories and ¥11,911 million in cash and deposits partly offset by a decrease of ¥15 million in trade notes and accounts.

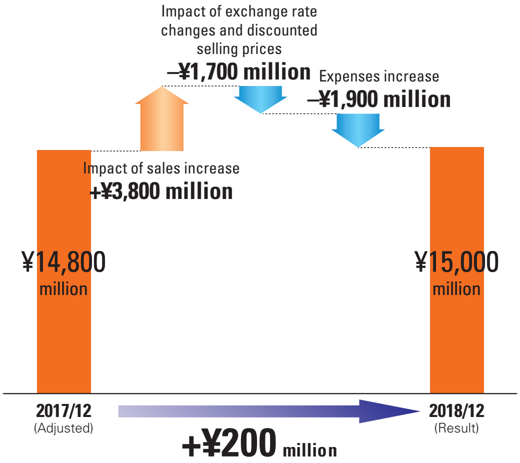
Non-current assets decreased ¥7,868 million from the previous fiscal year-end to ¥83,093 million. This mainly reflects a decrease of ¥3,345 million in property, plant and equipment as a result of depreciation, and decreases of ¥4,733 million in investment securities and ¥286 million in net defined benefit asset under investments and other assets.

Total liabilities as of December 31, 2018 increased ¥8,661 million from the previous fiscal year-end to ¥33,825 million. This primarily reflects an increase of ¥10,000 million in long-term loans payable, despite decreases of ¥1,037 million in deferred tax liabilities and ¥1,187 million in other payable.

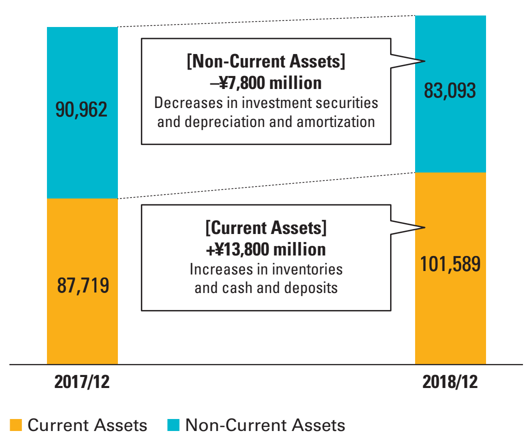
Total equity as of December 31, 2018 decreased ¥2,659 million from the previous fiscal year-end to ¥150,857 million. The decrease mainly reflects cash dividends paid of ¥2,846 million, purchase of treasury stock of ¥2,194 million and a decrease in accumulated other comprehensive income of ¥4,662 million, despite recording profit attributable to owners of the parent of ¥6,875 million.

As a result, the equity ratio stood at 78.0% at the end of the fiscal year.

**■ Breakdown of Change in Material Business Segment Operating Income**




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



### Cash Flows

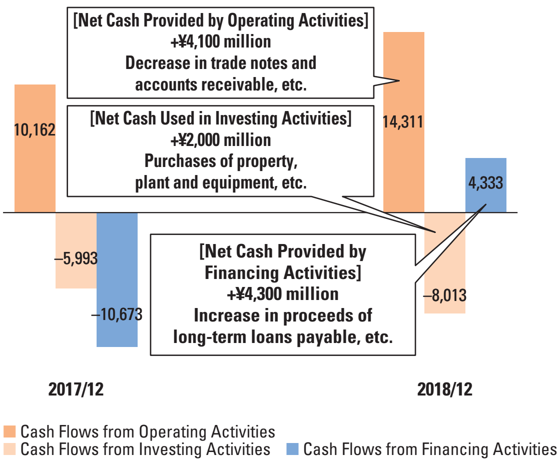
Net cash provided by operating activities during the fiscal year under review came to ¥14,311 million, an increase of ¥4,149 million from the end of the previous fiscal year. The increase reflected a decrease in trade notes and accounts receivable of ¥1,866 million, and an increase in depreciation and amortization of ¥1,028 million.

Net cash used in investing activities was ¥8,013 million, an increase of ¥2,020 million from the previous fiscal year. The increase reflected increases of ¥1,764 million in deposit for time deposits—net and ¥607 million in purchases of property, plant and equipment.

Net cash provided by financing activities was ¥4,333 million. This mainly reflected an increase of ¥10,000 million in proceeds of long-term loans payable compared with the previous fiscal year, and a decrease of ¥5,610 million in purchases of treasury stock.

As a result, cash and cash equivalents on December 31, 2018 increased ¥9,889 million to ¥39,851 million from ¥29,961 million at the previous fiscal year-end.

**■ Cash Flows Comparison** (Millions of yen)



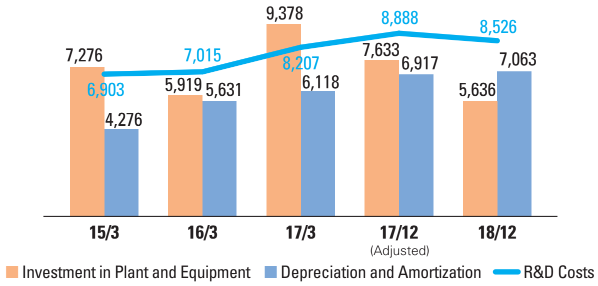

### FY2019/12 Performance Outlook*

Net sales in the fiscal year ending December 31, 2019 are forecast to increase 6.0% year on year to ¥111,600 million on the expectation that growth in the Material Business will resume in the second half after hitting bottom in the first half.

Although net sales growth is expected, operating income is forecast to decrease 0.1% to ¥10,500 million, owing to higher costs in the Material Business, while assuming a ¥105/$ exchange rate. TOK forecasts profit attributable to owners of the parent to expand 4.7% to ¥7,200 million, as there will no longer be the impact of the special factor related to tax effect accounting.

* Figures announced on February 14, 2019.

**■ Investment in Plant and Equipment/ Depreciation and Amortization/R&D Costs**
(Five-Year Summary) (Millions of yen)




**■ Earnings Forecasts***

(Millions of yen)

| | FY2018/12 | FY2019/12 Forecast | | |
|---|---|---|---|---|
| | | | Change | % |
| Net sales | 105,277 | 111,600 | +6,322 | +6.0 |
| Operating income | 10,505 | 10,500 | –5 | –0.1 |
| Profit attributable to owners of the parent | 6,875 | 7,200 | +324 | +4.7 |

* Figures announced on February 14, 2019.

# Risk Information

The TOK Group conducts business activities in every region of the world in a diverse range of fields. When carrying out these business activities, it encounters a variety of risk factors that may have a detrimental impact on its financial conditions and management performance. The risks described below are solely those that the Group judged to be most significant as of December 31, 2018 and do not constitute all of its risk factors.

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

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

## 2. Exchange rate fluctuation-related risk

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

## 3. Research and development-related risk

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

## 4. Intellectual property-related risk

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

## 5. Raw material procurement-related risk

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

## 6. Product liability-related risk

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

## 7. Natural disaster and accident-related risk

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

## 8. Environment-related risk

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

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

## 9. Legal risk

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

## 10. Overseas business activity-related risk

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

## 11. Information leakage risk

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