

Trends of Key Data and Analyses

Trends of Key Data and Analyses

Changes in Medium-Term Plans and Ten-Year Key Data



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

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

Strategies:

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

Long-term management vision for fiscal 2020:

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

Features:

- Strengthen business portfolio reforms
- Return to a growth trajectory
- Strengthen balance sheet management and introduce a new dividend policy

Fiscal years ended March 31 until 2017 and fiscal years ended December 31 after 2017

	2012/3	2013/3	2014/3	2015/3	2016/3	2017/3	2017/12 ^{*5}	2018/12	2019/12	Millions of yen 2020/12	Thousands of US dollars 2020/12
Results of operation:											
Net sales	80,037	72,919	75,269	88,086	89,969	88,764	92,411	105,277	102,820	117,585	1,141,602
Materials Business	66,644	67,697	72,866	84,611	87,280	86,558	90,531	102,621	98,986	114,773	1,114,306
Equipment Business	13,392	5,222	2,402	3,475	2,689	2,205	1,880	2,655	3,833	2,811	27,295
Operating income	6,102	7,872	10,025	13,253	12,438	9,954	9,194	10,505	9,546	15,589	151,354
Income before income taxes	6,577	8,031	11,666	14,301	11,777	9,220	9,492	10,505	8,657	15,349	149,026
Profit attributable to owners of the parent	3,818	5,443	7,549	8,818	7,716	6,343	6,007	6,875	5,410	9,926	96,375
Free cash flow	(6,641)	12,363	(2,610)	3,380	7,517	(926)	4,169	6,298	(4,543)	19,472	189,050
Investments in plant and equipment	3,162	5,332	14,577	7,276	5,919	9,378	6,731	5,636	14,184	5,611	54,478
Depreciation and amortization	4,038	3,758	2,672	4,276	5,631	6,118	6,035	7,063	7,216	6,772	65,753
R&D costs	6,157	6,211	6,389	6,903	7,015	8,207	6,921	8,526	8,879	9,545	92,677
Per share data (Yen/US dollars):											
Basic profit	84.86	121.69	168.54	196.61	177.30	146.18	138.31	164.92	130.02	239.42	2.32
Cash dividends applicable to the year	38.00	44.00	52.00	60.00	64.00	64.00	64.00	96.00	120.00	154.00	1.49
Net assets	2,641.28	2,796.37	3,044.24	3,285.81	3,298.00	3,384.14	3,490.97	3,459.37	3,491.23	3,651.20	35.44
At year-end:											
Total assets	138,767	145,664	155,859	174,863	167,300	174,492	178,681	182,957	186,486	201,185	1,953,259
Total long-term liabilities	2,613	2,811	1,518	3,569	2,899	2,024	3,421	10,723	14,437	15,997	155,317
Interest-bearing debt	610	488	366	814	534	135	—	10,000	11,272	10,962	106,432
Net assets	119,590	127,838	139,962	151,999	147,270	152,931	153,517	150,857	151,733	159,994	1,553,343
Key performance indicators (%):											
Operating margin	7.6	10.8	13.3	15.0	13.8	11.2	9.9	10.0	9.3	13.3	13.3
ROE	3.3	4.5	5.8	6.2	5.3	4.4	4.1	4.7	3.7	6.7	6.7
Ratio of R&D costs to net sales	7.7	8.5	8.5	7.8	7.8	9.2	7.5	8.1	8.6	8.1	8.1
Equity ratio	85.1	85.9	87.5	84.3	85.1	84.6	82.2	78.8	77.5	75.3	75.3
Debt-to-equity (Times)	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.08	0.07	0.07
Payout ratio	44.8	36.2	30.9	30.5	36.1	43.8	46.3	58.2	92.3	64.3	64.3
DOE	1.5	1.6	1.8	1.9	1.9	1.9	1.9	2.8	3.5	4.3	4.3
ESG-related data:											
Number of employees (consolidated)	1,443	1,487	1,505	1,540	1,564	1,596	1,611	1,673	1,726	1,750	1,750
CO ₂ emissions (converted from energy consumption) (10,000 t) ^{*6}	3.0	3.4	3.3	3.0	3.0	3.0	3.0	2.9	3.0	3.1	3.1
Industry trends:											
Worldwide semiconductor market (millions of US dollars) ^{*1} , (Year)	291,562	305,584	335,843	335,168	338,931	412,221	468,778	412,307	440,389	527,223 ^{*3}	527,223 ^{*3}
Worldwide photoresists sales (thousands of US dollars) ^{*2}	1,279,706	1,152,306	1,288,713	1,230,022	1,358,009	1,504,224	1,504,224	1,631,851	1,679,654	2,027,350	2,027,350
Exchange rate (JPY/USD) ^{*4}	82	94	103	120	112	112	113	111	109	103	103

As semiconductor demand increased, TOK harvested the effect of long-running R&D activities and strategic investments, which led record-high performance.

Equity ratio:
The equity ratio remained around 85% for a long time, but the Company is continuing to pursue the optimal balance, which may be decreasing because of stronger balance sheet management. (See pages 46-49 "Message from the CFO.")

CO₂ emissions:
The base unit index has steadily declined through a variety of reduction measures, including the shift in the total amount of electricity used at the headquarters to renewable energy starting in January 2020. (See pages 98-99, "Address Climate Change Issues toward Decarbonization")

*1 Source: World Semiconductor Trade Statistics

*2 Calculated by TOK based on data aggregated by SEMI (total sales of ArF and KrF excimer laser and g- and i-Line photoresists). Due to the change in the fiscal year-end, the same values are indicated for FY 2017/3 and for FY 2017/12.

*3 Forecast-based amount for 2021

*4 As of the end of each fiscal year

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

*6 Tokyo Ohka Kogyo Co., Ltd., and consolidated subsidiaries in Japan. Due to the change in the fiscal year-end, totals for 2013 onward are from January through December, and those for 2012 are from April to March. Accordingly, the same values are indicated for FY 2017/3 and for FY 2017/12.

Trends of Key Data and Analyses

FY 2020/12 Market Trends, Results of Operations, Financial Position, and FY 2021/12 Performance Outlook

Business Environment

For the current term (FY 2020/12), the global and Japanese economies were slower than in the previous year because economic activities were suppressed as a result of the global COVID-19 pandemic.

In the foreign exchange market for the US dollar and the yen, the yen continued to depreciate as the US dollar strengthened until February due to an increase in the US policy interest rate. From March onward, the yen continued to appreciate because of the outflow of cash to leading currencies other than the US dollar, following the spread of the COVID-19 infections.

Net Sales and Operating Income

In the fiscal year ended December 31, 2020, consolidated net sales increased by ¥14,765 million (14.4%) from the previous fiscal year to ¥117,585 million. Net sales in the first half decreased by ¥8,271 million (16.9%) to ¥57,203 million. Net sales in the second half decreased by ¥6,493 million (12.1%) to ¥60,381 million.

The main source of demand for the Company's products is the electronics market for semiconductors and displays. The semiconductor demand for PCs and data servers remained steady in the electronics market, owing to the dissemination of 5G and IoT combined with increased work-from-home time and the use of cloud services.

Cost of sales increased by ¥6,767 million (9.7%) from the previous fiscal year to ¥76,372 million. The cost of

sales ratio dropped 2.7 percentage points year-on-year to 65.0%. As a result, gross profit increased by ¥7,996 million (24.1%) to ¥41,212 million.

Selling, general, and administrative (SG&A) expenses increased by ¥1,953 million (8.3%) from the previous fiscal year to ¥25,623 million.

Operating income increased by ¥6,043 million (63.3%) to ¥15,589 million because of the increased sales of high value-added products coupled with the reduced raw material cost that followed the decrease of crude oil price and decreased depreciation and amortization.

Income before Income Taxes and Profit Attributable to Owners of the Parent

Income before income taxes increased by ¥6,692 million (77.3%) from the previous fiscal year to ¥15,349 million because of the decreased loss on the valuation of investments.

The profit attributable to owners of the parent increased by ¥4,516 million (83.5%) from the previous fiscal year to ¥9,926 million.

Performance by Segment

Since the previous term (FY 2019/12), TOK changed the cost allocation method to evaluate and manage financial results by segment more appropriately, and some corporate expenses were allocated to the materials segment.

Materials Segment:

Sales in the materials segment, excluding internal transactions, increased by ¥15,786 million (15.9%) from the previous fiscal year to ¥114,773 million. Operating income increased by ¥6,933 million (51.5%) to ¥20,395 million. This was mainly because sales remained steady in the Electronic Functional Materials Division and the High-Purity Chemicals Division.

■ Electronic Functional Materials Division

In the Electronic Functional Materials Division, sales increased by ¥7,629 million (13.1%) from the previous fiscal year to ¥65,878 million. This mainly owed to the increased net sales because sales of semiconductor photoresists and high-density integration materials remained steady in Asia, supported by the strong semiconductor demand for PCs and data servers, though the sales of display photoresists decreased because of the changing demand environment for medium- to compact-sized LCD panels.

■ High-Purity Chemicals Division

Sales in the High-Purity Chemicals Division increased by ¥8,058 million (19.8%) from the previous fiscal year to ¥48,732 million. This was mainly due to increased net sales because the sales of chemicals attached to semiconductor photoresists for Taiwan used in the cutting-edge semiconductor production process remained steady, though the sales of chemicals

attached to display photoresists decreased because of the changing demand environment for medium- to compact-sized LCD panels.

Equipment Segment:

■ Process Equipment Division

Sales in the Process Equipment Division, excluding internal transactions, decreased by ¥1,022 million (26.7%) from the previous fiscal year to ¥2,811 million. Operating loss increased by ¥23 million to ¥310 million. This was mainly due to the acceptance inspections of the wafer handling system Zero Newton®, and semiconductor manufacturing equipment decreased to a level lower than the previous year.

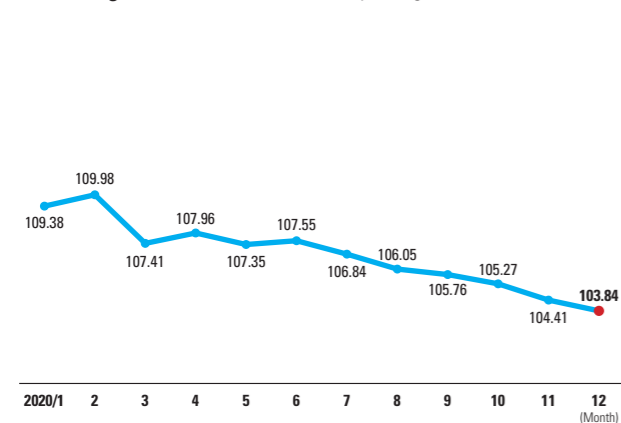
Financial Condition

Total assets as of December 31, 2020, increased by ¥14,699 million from the previous fiscal year-end to ¥201,185 million.

Total current assets increased by ¥3,661 million from the previous fiscal year-end to ¥96,943 million. This mainly reflected the respective increase of ¥2,415 million in trade notes and accounts and by ¥1,416 million in cash and deposits.

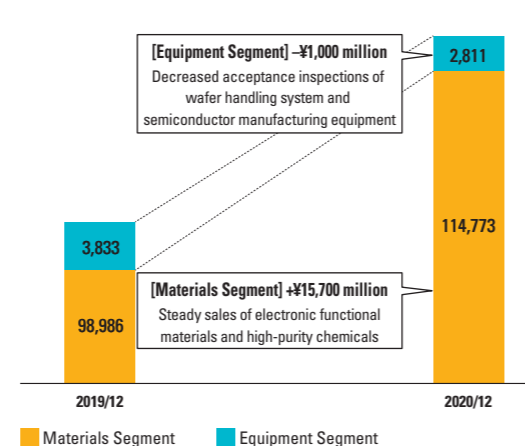
Total non-current assets increased by ¥11,038 million from the previous fiscal year-end to ¥104,242 million. This mainly reflected the respective increase of ¥10,000 million in long-term deposit in investments and other assets, and by ¥2,789 million in investment securities.

■ Exchange Rate (Yen/US dollars, Monthly average)

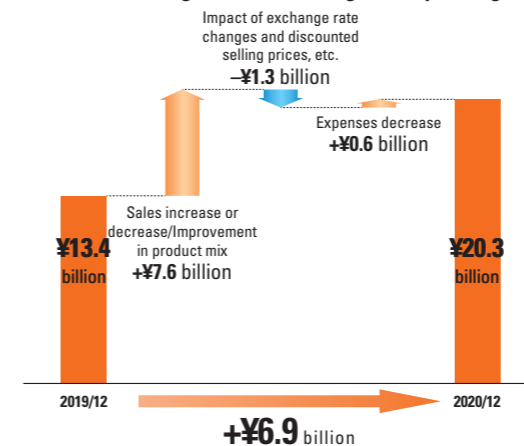


Source: Mitsubishi UFJ Research and Consulting Co., Ltd.

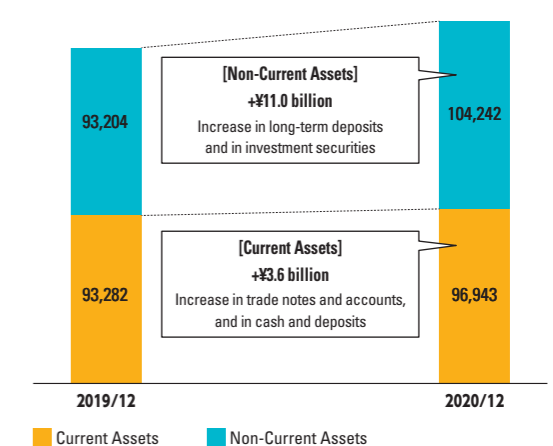
■ Net Sales by Segment Year-on-Year Comparison (Millions of yen)



■ Breakdown of Change in Materials Segment Operating Income



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



Total liabilities as of December 31, 2020, increased by ¥6,438 million from the previous fiscal year-end to ¥41,191 million. This mainly reflected the respective increase of ¥3,400 million in trade notes and accounts and the increase of ¥1,158 million in deferred tax liabilities.

Total equity as of December 31, 2020, increased by ¥8,260 million from the previous fiscal year-end to ¥159,994 million. This mainly reflected the accounting of ¥9,926 million as the profit attributable to owners of the parent despite the decrease of ¥5,007 million due to the dividend payment.

As a result, the equity ratio stood at 75.3% at the end of the fiscal year.

Cash Flows

Net cash provided by operating activities during the fiscal year under review came to ¥22,953 million, an increase of ¥10,209 million from the previous fiscal year. This mainly reflected the respective increase of ¥6,692 million in income before income taxes and the increase of ¥3,937 million in trade notes and accounts payable.

Net cash provided by investment activities came to ¥3,481 million, a decrease of ¥13,805 million from the previous fiscal year. This mainly reflected the decrease of ¥8,892 million in expenses on the purchase of property, plant, and equipment.

Net cash provided by financial activities came to ¥5,937 million, an increase of ¥148 million from the previous fiscal year. This mainly reflected the decrease of ¥1,369 million in the purchase of treasury stock, while the proceeds of long-term loans payable decreased by ¥1,372 million.

As a result, cash and cash equivalents on December 31, 2020, increased by ¥13,498 million to ¥42,728 million from ¥29,229 million at the previous fiscal year-end.

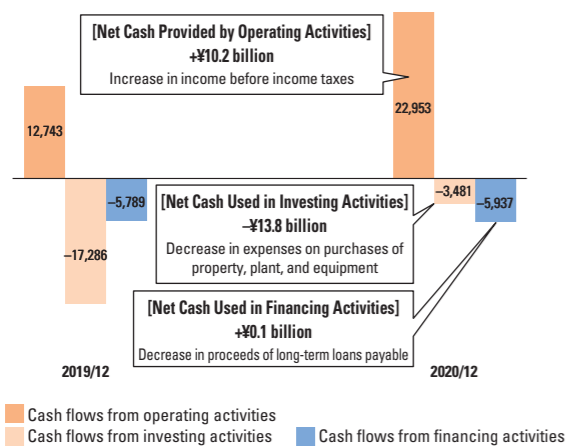
FY 2021/12 Performance Outlook*

Net sales for FY 2021/12 are estimated at ¥122.6 billion, an increase of 4.3% from FY 2020/12, and expects the high facility operation rate at customers to continue from the previous year, while incorporating the influence from the appreciation of the yen.

Operating income is estimated at ¥16.5 billion, an increase of 5.8%, owing to the increased sales of high value-added products despite the expected rise in raw material prices for high-purity chemicals. The profit attributable to owners of the parent is estimated at ¥10.8 billion, an increase of 8.8% based on the increased operating income and improved special profit/loss.

* Figures announced on February 15, 2021.

Cash Flows Comparison (Millions of yen)



Earnings Forecasts*

(Millions of yen, %)

	FY 2020/12	FY 2021/12 Forecast	
		Change	%
Net sales	117,585	122,600	+5,015 +4.3
Operating income	15,589	16,500	+911 +5.8
Profit attributable to owners of the parent	9,926	10,800	+874 +8.8

* Figures announced on February 15, 2021.

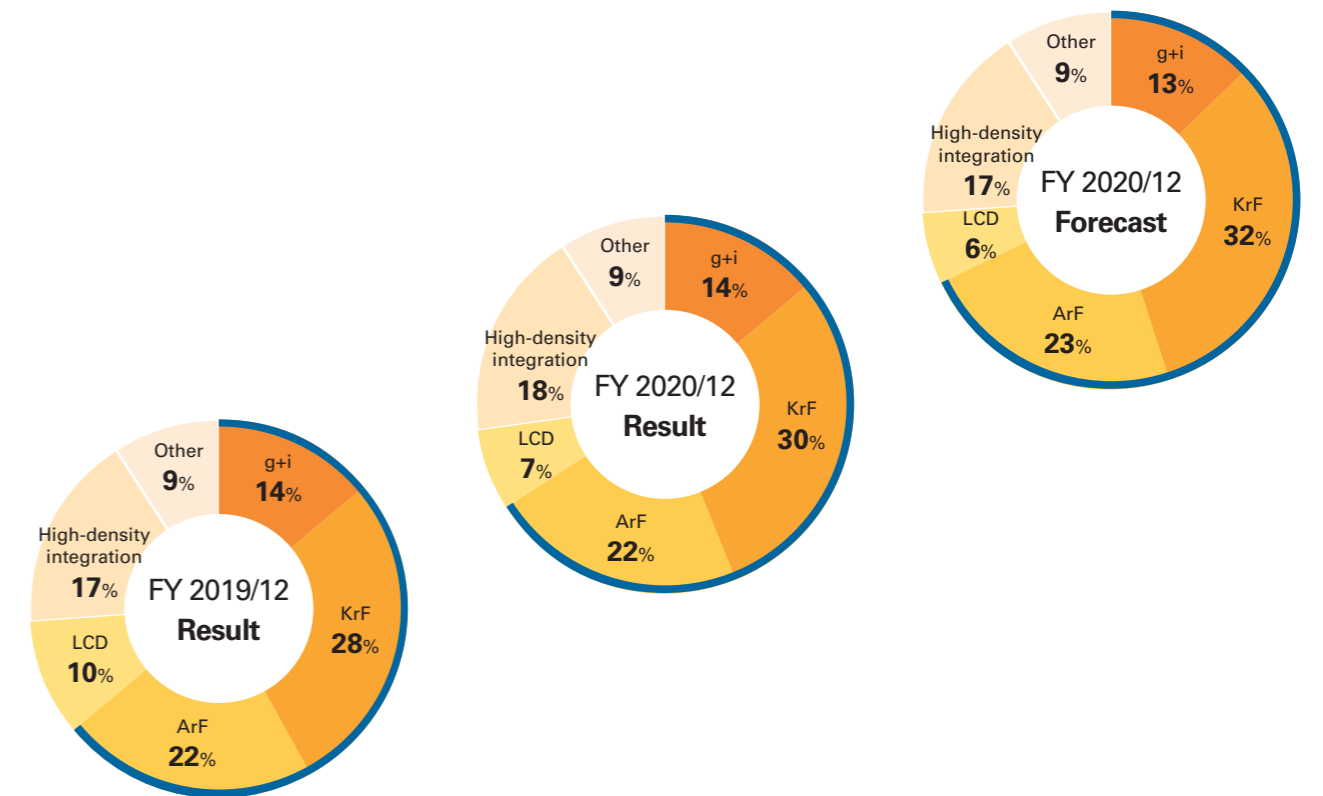
Reference: Information Related to Electronic Functional Materials & Semiconductor Photoresists

TOK's photoresists are compatible with a variety of line widths along the semiconductor miniaturization spectrum

	i-Line photoresists	KrF excimer laser photoresists	ArF excimer laser photoresists	EUV photoresists
Light source for lithography	i-Line	KrF (krypton fluoride) Excimer laser	ArF (argon fluoride) Excimer laser	EUV (extreme ultraviolet)
Wavelength of light source	365 nm (i-Line)	248 nm	193 nm	13.5 nm
Line width of semiconductors*	350 nm > to ≥ 250 nm	250 nm > to ≥ 130 nm	130 nm > to ≥ 10 nm	10 nm >
Main applications and end products	Automotive power semiconductors Sensors LEDs	Mass-market smartphones High-performance servers Game consoles	Cutting-edge smartphones Wearable devices High-performance servers and so on	Next-generation servers Next-generation supercomputers Next-generation communications systems

* Only rounded figures for primary ranges are shown.

Changes in Sales Composition of Electronic Functional Materials by Type



*1 EUV photoresists are classified under "Other"

*2 High-density integration: Packaging materials and MEMS materials