

# TOKYO OHKA KOGYO CO., LTD.

## Business Results

— The 1st Half of Fiscal Year ending Dec. 2019 —

Aug. 8, 2019

TOKYO OHKA KOGYO CO., LTD.

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# Consolidated Business Results for the 1st Half of FY2019

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## Summary

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(Millions of yen)

	FY2018/12 1H	FY2019/12 1H		
			Change	%
Net sales	50,748	48,932	(1,815)	(3.6)
Operating income	4,674	4,428	(246)	(5.3)
Ordinary income	4,675	4,407	(268)	(5.7)
Profit attributable to owners of parent	3,210	2,924	(286)	(8.9)

- Average exchange rate (US\$) :  
¥107.6/\$ (FY2018/12 1H) ⇒¥109.0/\$ (FY2019/12 1H)
- Net sales :  
Decreased year on year due to a downward trend in semiconductor demand.
- Operating income : Decreased 5.3% year on year due to a decrease in sales.
- Profit attributable to owners of parent :  
Decreased 8.9% year on year partly due to a decrease in operating income.

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# Non-operating Expenses or Income/ Extraordinary Losses or Income

04

(Millions of yen)

	FY2018/12 1H	FY2019/12 1H	YoY
<b>Non-operating Expenses or income</b>	<b>1</b>	<b>(20)</b>	<b>(21)</b>
Interest and dividend income	+193	+224	+30
(Foreign exchange related losses/gains)	(121)	(186)	(64)
Foreign exchange (loss) gain	(514)	(471)	+43
Loss(gain) on valuation of derivatives	+392	+284	(107)
<b>Extraordinary losses or Income</b>	<b>(64)</b>	<b>(27)</b>	<b>+36</b>
Gain on sale of fixed assets	+3	+19	+16
Loss on sales and retirement of noncurrent assets	(68)	(46)	+21

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# Results by Business Segment

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(Millions of yen)

	FY2018/12 1H	FY2019/12 1H		
		Change	%	
<b>Net sales</b>	<b>50,748</b>	<b>48,932</b>	<b>(1,815)</b>	<b>(3.6)</b>
Material business	49,686	47,791	(1,895)	(3.8)
Electronic functional materials	27,814	27,847	+33	+0.1
High purity chemicals	21,818	19,903	(1,914)	(8.8)
Other	53	40	(13)	(24.7)
Equipment business	1,061	1,141	+79	+7.5
<b>Operating income</b>	<b>4,674</b>	<b>4,428</b>	<b>(246)</b>	<b>(5.3)</b>
Material business	6,656	6,423	(233)	(3.5)
Equipment business	(321)	(270)	+50	-
Eliminations and corporate	(1,661)	(1,724)	(63)	-

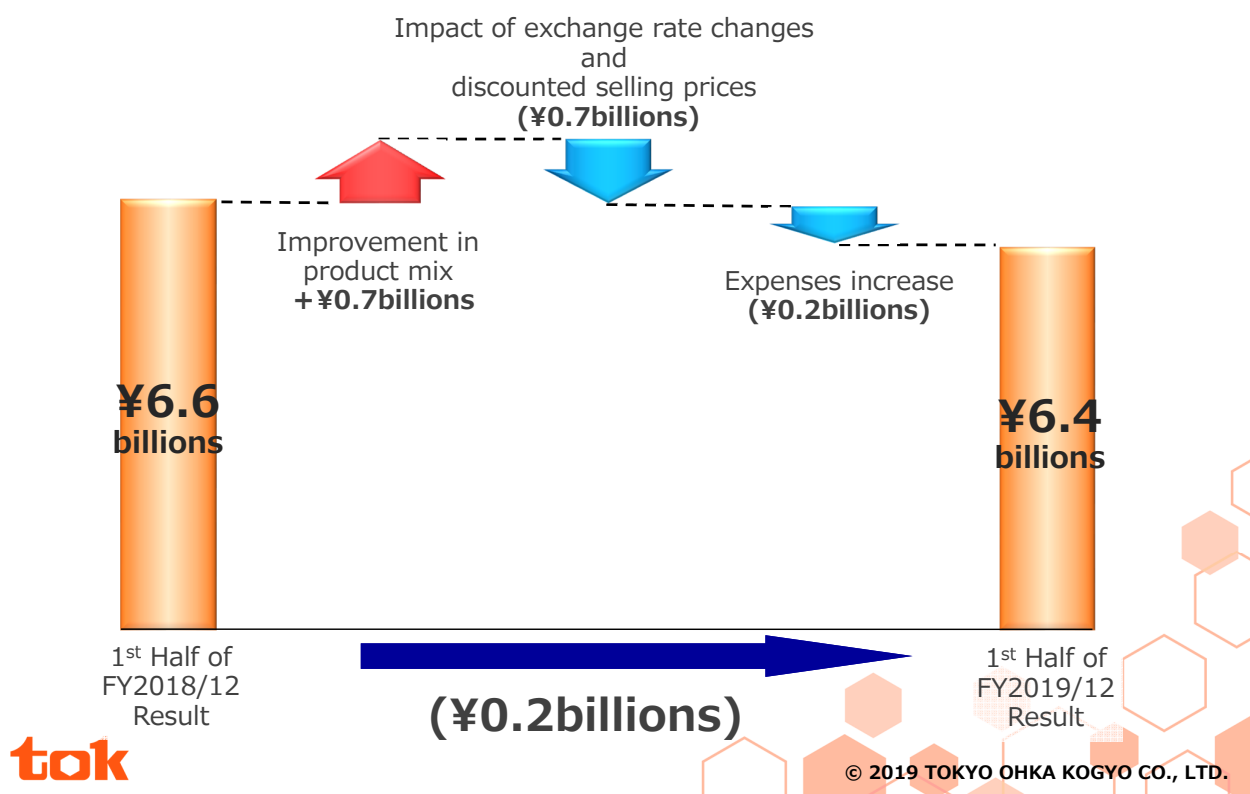
Note: Effective January 1, 2019, TOK changed the cost allocation method to evaluate and manage financial results by business segment more appropriately, and part of corporate expenses was allocated to Material Business. Following this change, the year-on-year comparison is conducted using the figures reclassified under the new allocation method.

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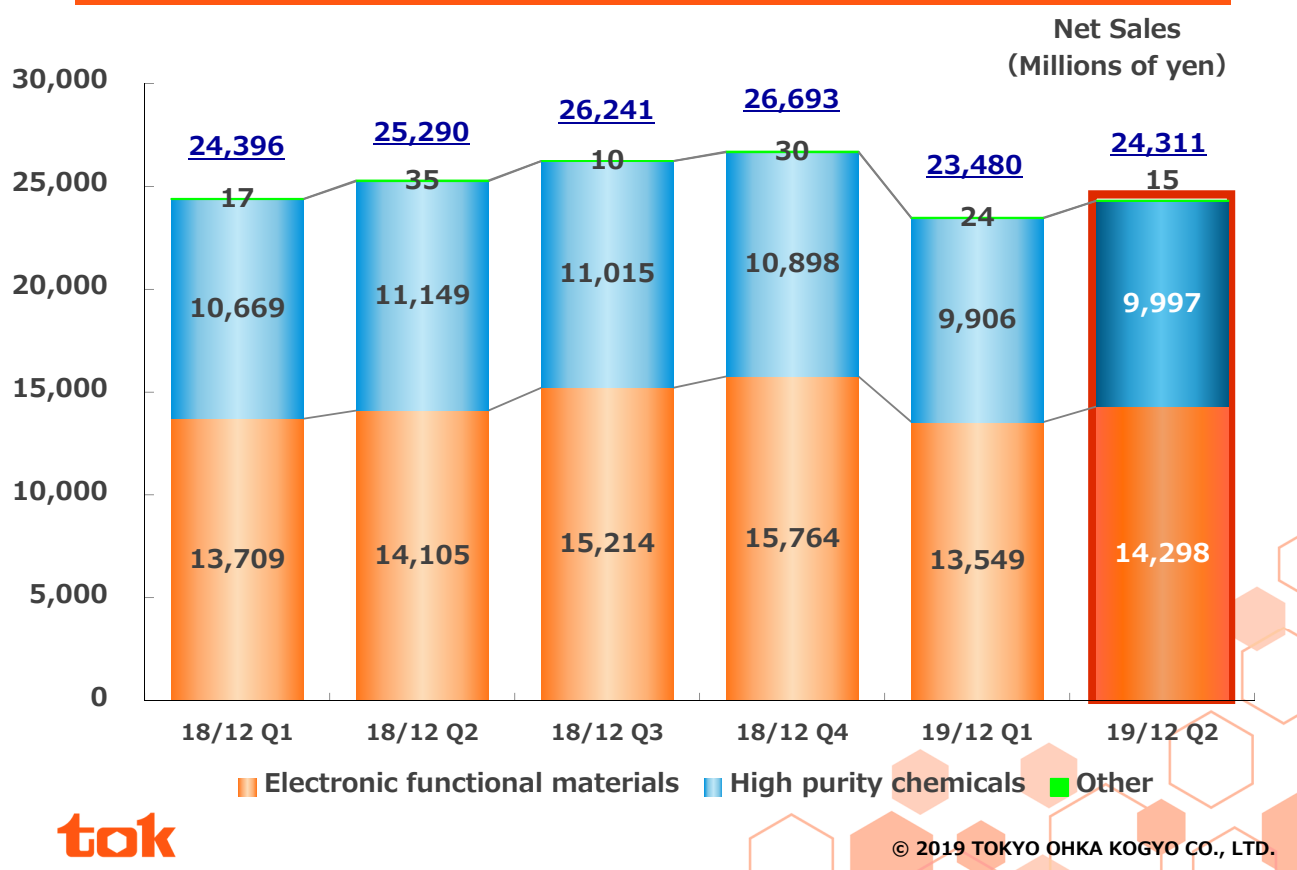
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# Breakdown of the Charge in Operating Income (Material Business)

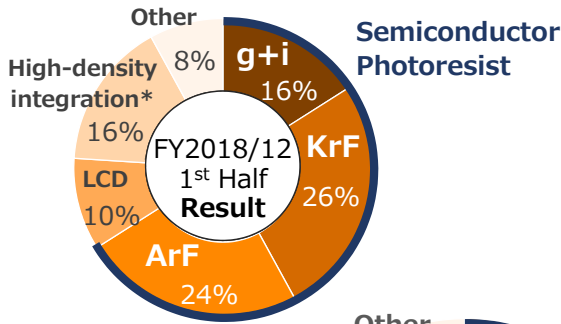
## 1<sup>st</sup> Half of FY2018/12 Result v.s. 1<sup>st</sup> Half of FY2019/12 Result



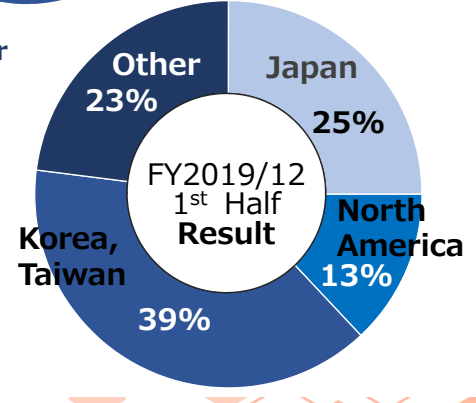
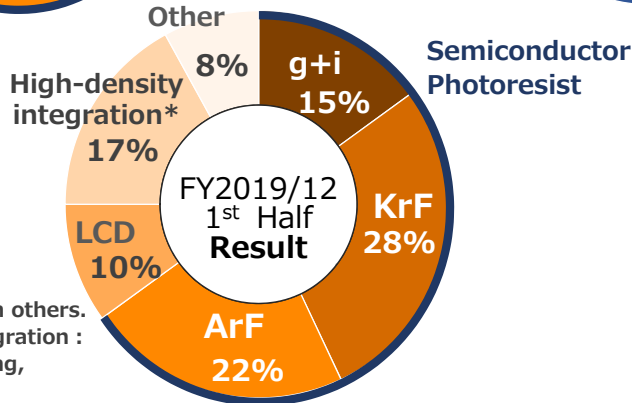
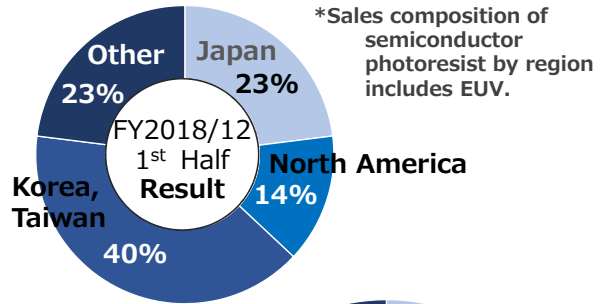
# Sales Breakdown of Material Business



Sales Composition of Electric Function Materials by Type



Sales Composition of Semiconductor Photoresist by Region



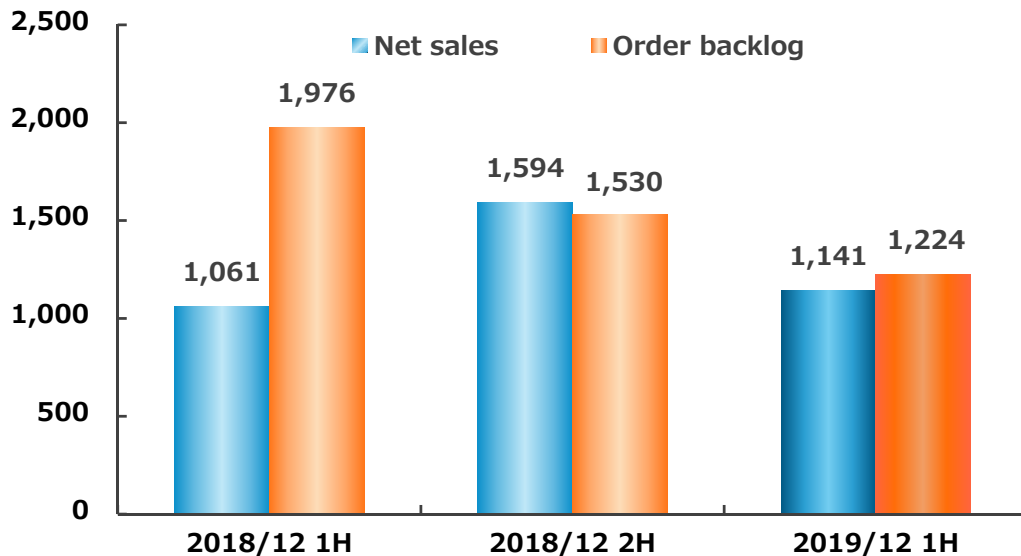
\* EUV is included in others.  
\* High-density integration : Resist for Packaging, MEMS Materials

※Regional segmentation has been changed from current term. "Other" includes Europe and Asia including China but excluding Korea and Taiwan.



## Equipment Business

Net sales/Order backlog (Millions of yen)



(Millions of yen)	2018/12 1H	2018/12 2H	2019/12 1H
Year-end order backlog	2,291	2,472	2,757



# Capital Investments/Depreciation/R&D

10

(Millions of yen)

	FY2018/12 1H	FY2019/12 1H		
			Change	%
Capital Investments	2,045	9,068	+7,022	+343.4
Depreciation	3,532	3,546	+13	+0.4
R&D	4,098	4,383	+285	+7.0

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# Balance Sheets

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(Million of yen)

	As of June 30, 2019	v.s. December 31, 2018	
<b>Current Assets</b>	<b>96,037</b>	<b>(3,863)</b>	
Cash and deposits	51,401	(4,692)	
Notes and accounts receivable	20,883	(1,656)	
Inventories	18,557	+1,312	
Property, plant and equipment	53,484	+5,125	Buildings and structures (732) Machinery (1,784) Furniture and fixtures (302) Land (141) Construction in progress +7,625
Intangible assets	506	(51)	
Investments and other assets	34,726	+587	
<b>Current Liabilities</b>	<b>23,916</b>	<b>+2,540</b>	
Notes and accounts payable	9,670	(1,710)	
Long-Term Liabilities	10,969	+245	Retained earnings +374 Treasury stock +115 Unrealized gain on available-for-sale securities +220 Foreign currency translation adjustments (1,221)
<b>Total net asset</b>	<b>149,869</b>	<b>(988)</b>	
<b>Total asset</b>	<b>184,755</b>	<b>+1,798</b>	

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(Millions of yen)

	FY2018/12 1H	FY2019/12 1H
Cash flows from operating activities	+7,693	+5,205
Income before income taxes and minority interests	+4,611	+4,379
Depreciation	+3,532	+3,546
Decrease (increase) in trade notes and accounts receivable	+829	+1,307
Decrease (increase) in inventories	(496)	(1,707)
Decrease (increase) in trade notes and accounts payable	(321)	(1,648)
Increase (decrease) in advances received	+95	+265
Income taxes paid	(1,014)	(1,158)
Cash flows from investing activities	(4,225)	(5,873)
Cash flows from financing activities	+5,807	(3,247)
Translation adjustments	(686)	(699)
Net increase (decrease) in cash and cash equivalents	+8,587	(4,615)

Major breakdown  
Purchases of property,  
plant and equipment  
(4,529)

Major breakdown  
Proceeds from sales  
of treasury stock  
+51  
Dividends paid  
(3,267)  
(incl. minority shareholders)

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## Consolidated Performance Forecasts for FY2019 (2019.1-2019.12)

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# Earnings Forecasts (Full-year)

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(Millions of yen)

	FY2018/12	FY2019/12 Forecasts		
			Change	%
Net sales	105,277	100,500	(4,777)	(4.5)
Operating income	10,505	8,300	(2,205)	(21.0)
Ordinary income	10,734	8,500	(2,234)	(20.8)
Profit attributable to owners of parent	6,875	4,900	(1,975)	(28.7)

■ Exchange rate assumptions (US\$) :

¥109.5/\$ (2018/12) ⇒ ¥105.0 /\$ (2019/12 2H)

■ Net sales :

Will decrease 4.5% year on year based on the 1st half results although Material Business expects a gradual recovery in semiconductor materials.

■ Operating income :

Will decrease 21.0% year on year due to a decrease in sales of Material Business.

■ Profit attributable to owners of parent :

Will decrease 28.7% year on year due to a decrease in operating income.

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# Performance Forecasts by Business Segment

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(Millions of yen)

	FY2018/12	FY2019 /12 Forecasts		
			Change	%
Net sales	105,277	100,500	(4,777)	(4.5)
Material business	102,621	96,600	(6,021)	(5.9)
Electronic functional materials	58,793	55,700	(3,093)	(5.3)
High purity chemicals	43,733	40,800	(2,933)	(6.7)
Equipment business	2,655	3,900	+1,244	+46.9
Operating income	10,505	8,300	(2,205)	(21.0)
Material business	14,765	12,200	(2,565)	(17.4)
Equipment business	(883)	(400)	+483	-
Eliminations and corporate	(3,376)	(3,500)	(123)	-

Note: Effective January 1, 2019, TOK changed the cost allocation method to evaluate and manage financial results by business segment more appropriately, and part of corporate expenses was allocated to Material Business. Following this change, the year-on-year comparison is conducted using the figures reclassified under the new allocation method.

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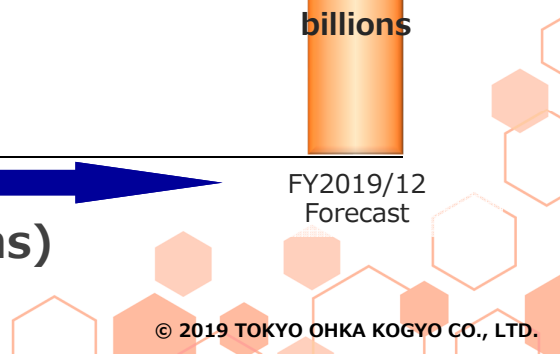
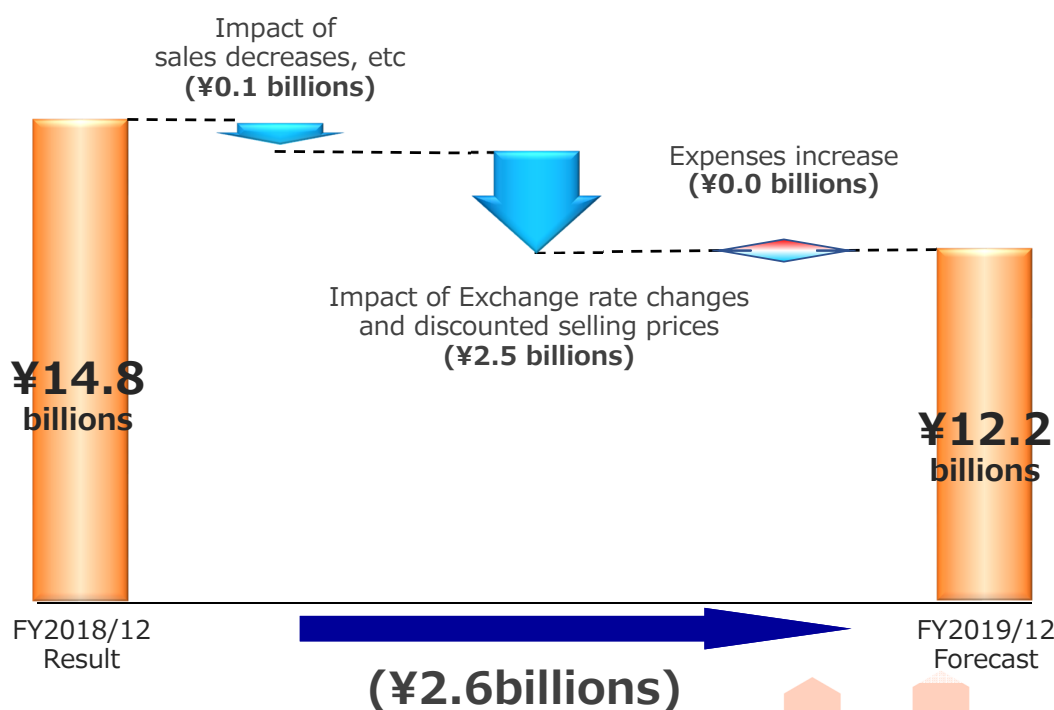
(Millions of yen)

	FY2018/12	FY2019/12 Forecast		
			Change	%
Capital Investments	5,636	16,700	+11,063	+196.3
Depreciation	7,063	7,500	+436	+6.2
R&D	8,526	9,000	+473	+5.6

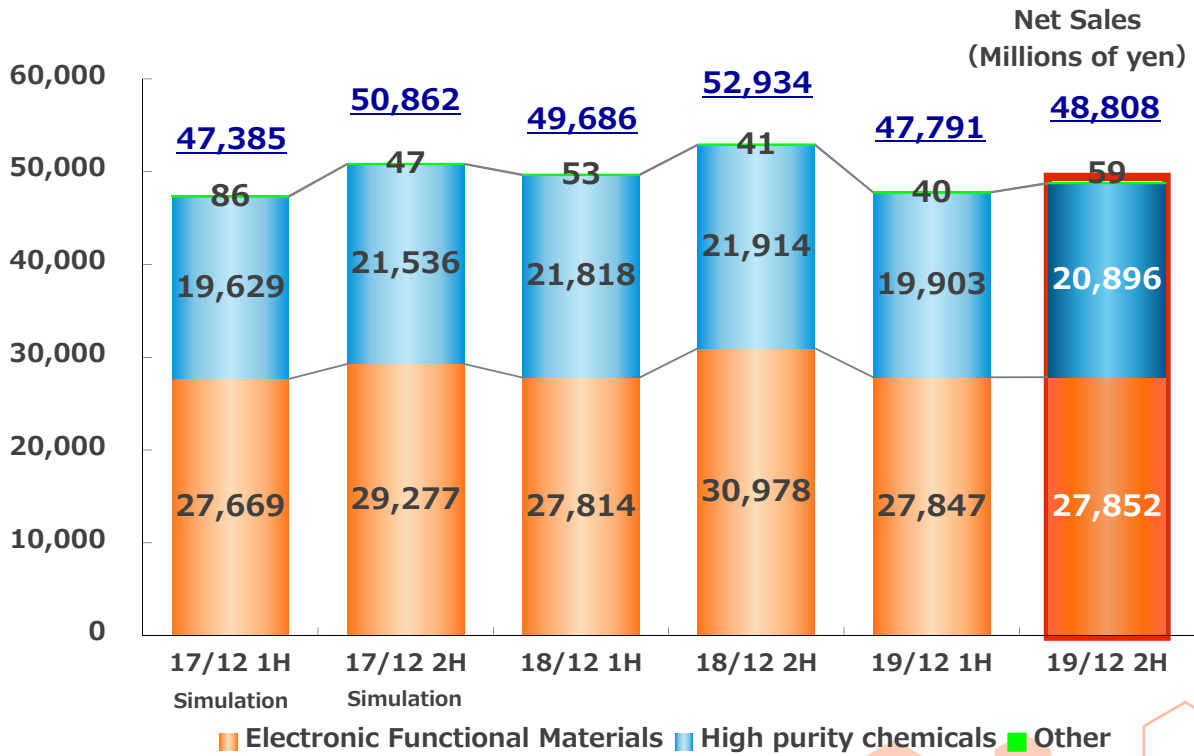


## Breakdown of the Charge in Operating Income (Material Business)

### FY2018/12 Result v.s. FY2019/12 Forecast



# Sales Breakdown of Material Business (Forecast)<sup>18</sup>



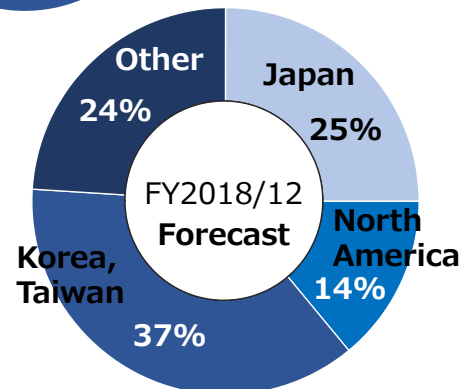
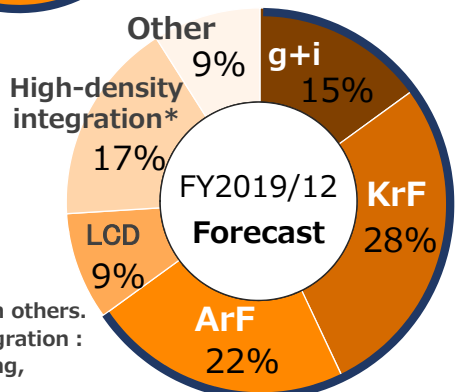
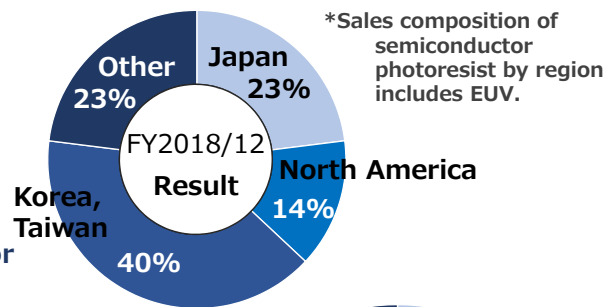
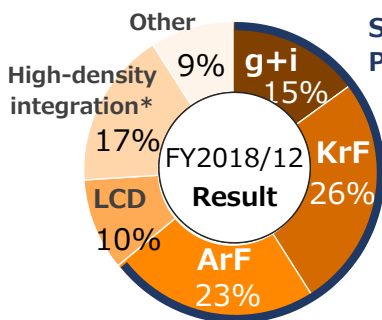
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# Electronic Functional Materials Division

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Sales Composition of Electric Function Materials by Type

Sales Composition of Semiconductor Photoresist by Region



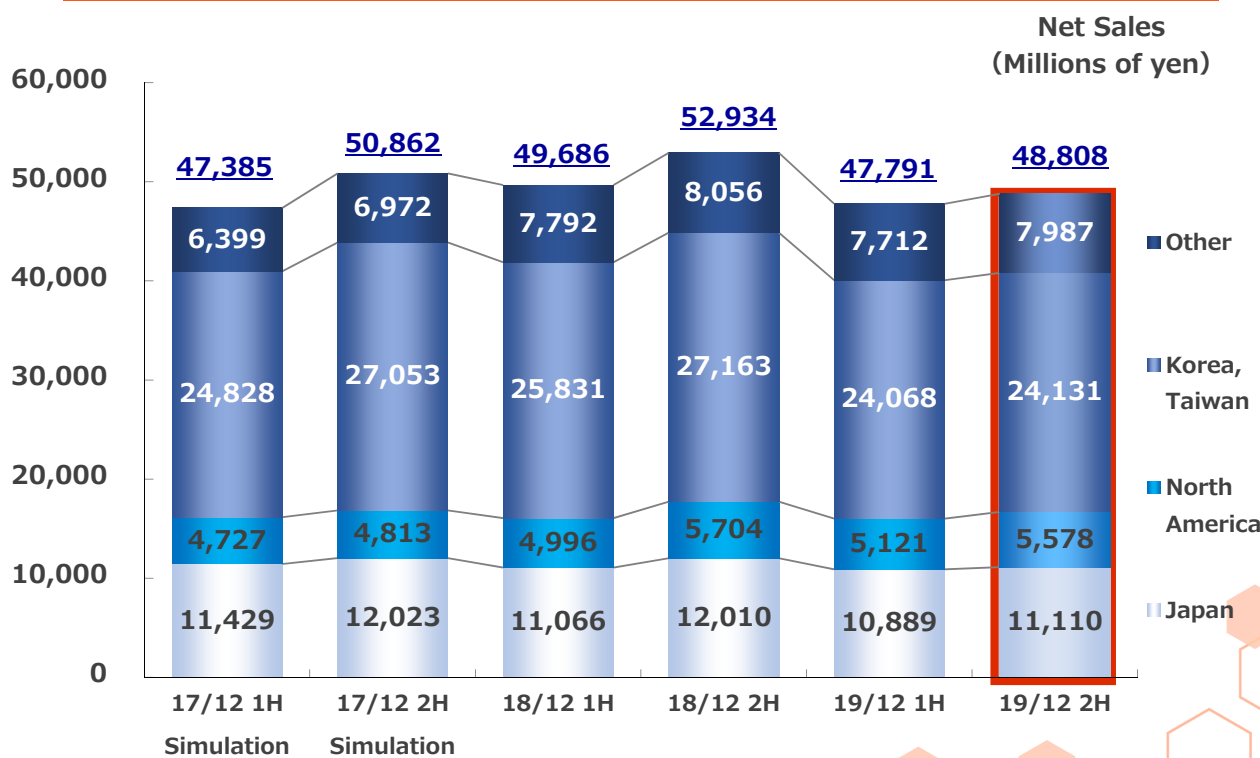
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# Appendix : Sales Breakdown of Material Business by Region(Forecast)<sup>20</sup>



Note : "Other" includes Europe and Asia including China but excluding South Korea and Taiwan.



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## Initiatives in TOK Medium-Term Plan 2021



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## 1. Strengthen business portfolio reforms

-Ambitiously develop the technologies required by 5G, IoT & Innovation.

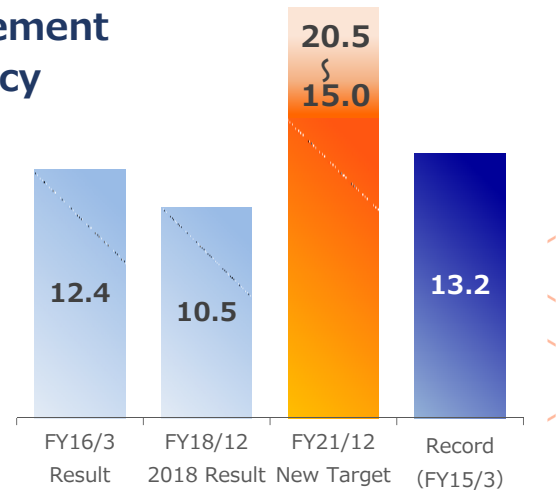
## 2. Return to a growth trajectory

-Operating income target: 15.0 billion to 20.5 billion yen  
(Fiscal year ending December 31, 2021)

## 3. Strengthen balance sheet management and introduce a new dividend policy

- A new dividend policy targeting a dividend on equity ratio (DOE) of 3.5%.
- Flexibly conduct share buyback as a means of returning profits to shareholders.

Operating income



(Billions of yen)

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## 5G·IoT&Innovation

Logic/Memory Power devices

Higher capacity/ Higher processing speed/ Lower power consumption

### More Moore

- EUV : Logic/DRAM

### More than Moore

- 3D-NAND
- FO WLP/PLP

Semiconductor photoresist

Next-generation high purity chemicals

Cutting-edge packages

: EUV·ArF·KrF (Thick film)

: Clean Solution

: Packaging photoresists, MEMS materials, 3D packaging equipment



### Core products

- Aggressive development of the next-generation technologies.
- Enhancement of production capacities.

### New Business

- Light control materials

Optical sensor etc.

- Life science-related materials

Bio-chip materials etc.

- Heat control materials

Lithium-ion batteries etc.



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## ■ EUV photoresists

### Medium-Term Plan

- Obtain our qualified 3nm/5nm process aiming for our further growth after 2022.

- Qualified our EUV photoresists for 5nm process

## ■ KrF photoresists

### Medium-Term Plan

- Further multilayer stacking of 3D-NAND. Address 9x-stacked to 1xx-stacked

- Qualified our thick KrF photoresist for 1xx-stacked 3D-NAND

## ■ High purity chemicals

### Medium-Term Plan

- Increasing demand for new products for cutting-edge processes will drive sales growth.  
 - Step up development of new Clean Solution and new thinners for next-generation process.

- Enhance production capacity of Clean Solution  
 - Qualified our Surface Modifier



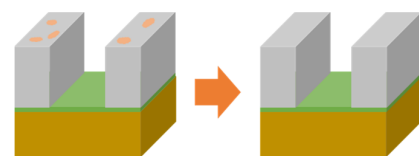
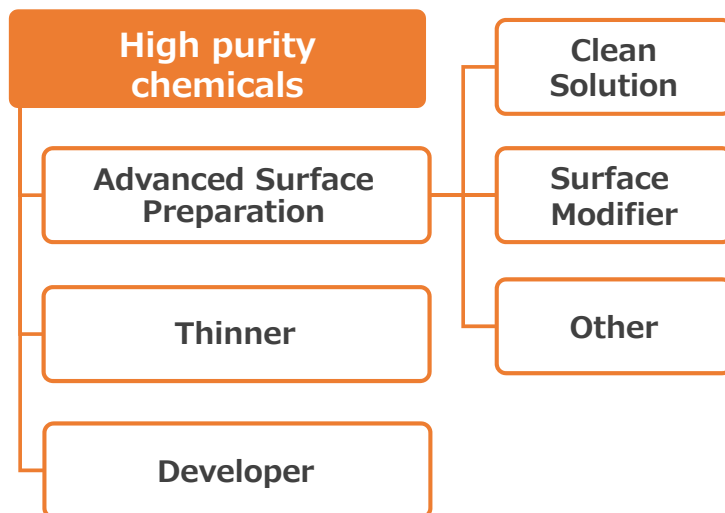
# Advanced Surface Preparation

Strategically reinforce

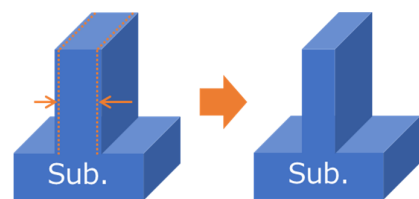
## “Advanced Surface Preparation”

business among high purity chemicals

- Advanced Surface Preparation is a high value-added product with abundant business opportunities.
- Active promotion of global business development.

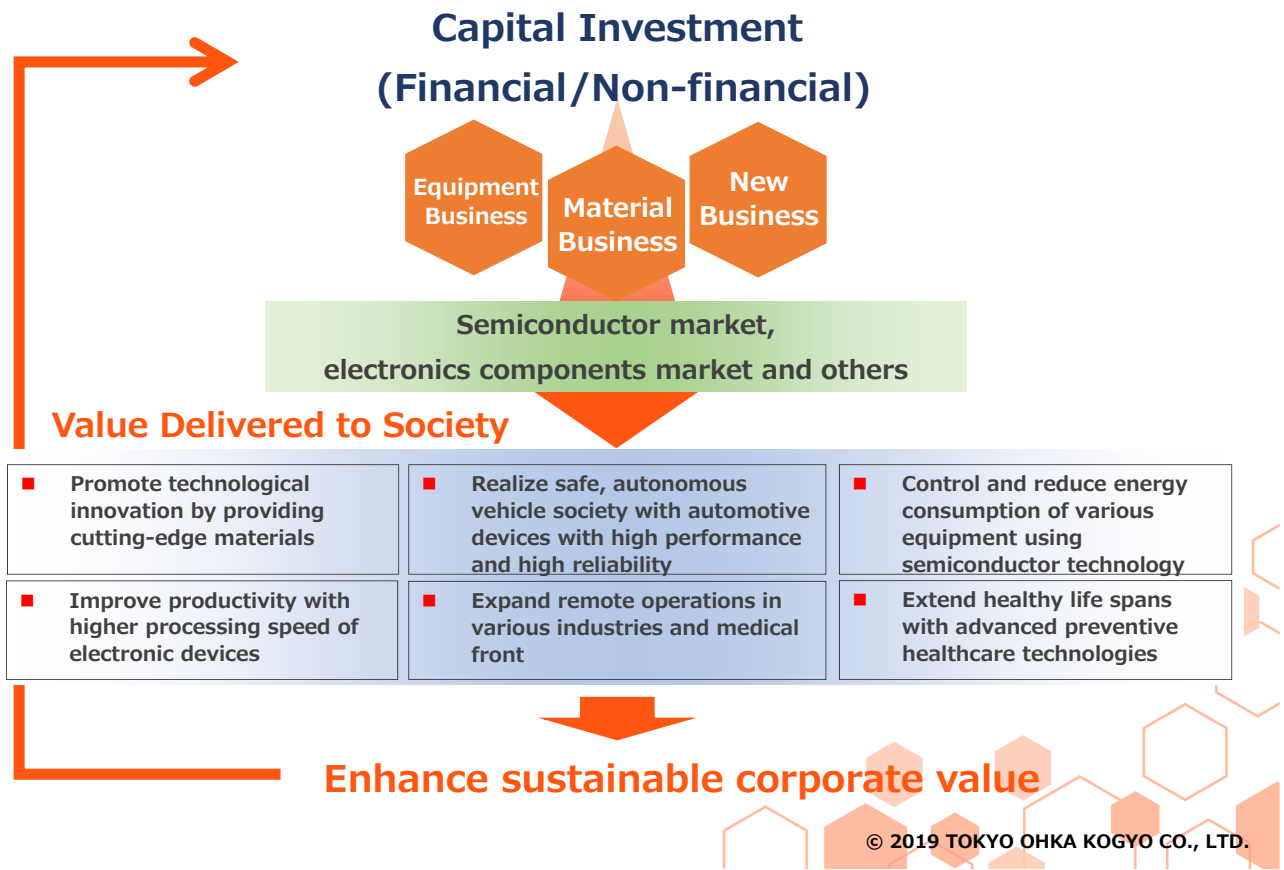


Clean Solution



Surface Modifier





## Identification of Material Issues 27

Improve sustainable corporate value and create shared value through efforts to contribute to achievement of SDGs related to our material issues

- Development and provision of high value-added products that will contribute to innovation



# Explore New Technologies and Enhance Technological Capabilities to Meet Social Expectations with Chemicals for a Sustainable Earth

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(Note)

This presentation material 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 judgement, 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.

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