



Nissan Chemical
CORPORATION
WHERE IT ALL BEGINS

November 11, 2022

Presentation for Investors

2Q FY2022 (April 1- September 30, 2022) Financial Results

Translation of presentation materials for the conference call held on November 11, 2022

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Director, Managing Executive Officer & CFO

Q&A session: YAGI Shinsuke

Representative Director, President & COO



**Institutional
Investor**
2022 JAPAN EXECUTIVE TEAM
MOST HONORED COMPANY
NISSAN CHEMICAL CORP.

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1H vs. 1H FY2021

- Sales up ¥17.7 billion (+19%)
- OP up ¥6.9 billion (+32%)
- Net Income up ¥7.4 billion (+45%)
- **OP, Ordinary Income and Net Income set a new record for 2 consecutive years**

1H vs. 1H Outlook as of August 2022

- Sales above target ¥4.1 billion
- OP above target ¥0.6 billion
- Net Income above target ¥2.5 billion

Shareholder Returns

- Dividend 1H ¥70/share (¥20/share up vs. 1H FY2021)
- Completed a ¥5.0 billion share repurchase program (period: May - June 2022, 683 thousand shares)

Revision of Outlook

- Revised upward FY2022 Outlook announced in Aug 2022 (see p9)

1H FY2022 Financial Summary YOY Change

(¥billion)

	FY2021 Actual			FY2022 Actual			YOY Change		
	1Q	2Q	1H	1Q	2Q	1H	1Q	2Q	1H
Sales	46.5	45.3	91.8	58.3	51.2	109.5	+11.8 (+25%)	+5.9 (+13%)	+17.7 (+19%)
Operating Profit	11.9	9.4	21.3	17.3	10.9	28.2	+5.4 (+45%)	+1.5 (+15%)	+6.9 (+32%)
Non-Operating Income/Expenses	0.4	0.6	1.0	2.2	1.6	3.8	+1.8	+1.0	+2.8
Ordinary Income	12.3	10.0	22.3	19.5	12.5	32.0	+7.2 (+58%)	+2.5 (+26%)	+9.7 (+44%)
Extraordinary Income/Loss	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Income ¹	8.8	7.5	16.3	13.9	9.8	23.7	+5.1 (+57%)	+2.3 (+32%)	+7.4 (+45%)
EBITDA ²	14.2	11.8	26.0	19.7	13.6	33.3	+5.5	+1.8	+7.3
EPS (¥/share)	61.73	52.21	113.94	98.13	69.61	167.74	+36.40	+17.40	+53.80
Dividend (¥/share)	-	-	50	-	-	70	-	-	+20
Total amount of Dividend	-	-	7.1	-	-	9.9	-	-	+2.8
OP Margin	25.5%	20.9%	23.2%	29.6%	21.3%	25.7%	+4.1pt	+0.4pt	+2.5pt
FX Rate (¥/\$)	110	110	110	130	138	134	-	-	-
Crude Oil (JCC) (\$/bbl) ³	67	73	70	111	113	112	-	-	-

1. Net Income = Profit Attributable to Owners of Parent

2. EBITDA = Operating Profit + Depreciation and amortization

3. Based on Trade Statistics of Japan Ministry of Finance

1H FY2022 Financial Summary Compared to Outlook

(¥billion)

	FY2022 Outlook as of Aug 2022			FY2022 Actual			vs. Outlook
	1Q Actual	2Q	1H	1Q	2Q	1H	2Q·1H
Sales	58.3	47.1	105.4	58.3	51.2	109.5	+4.1
Operating Profit	17.3	10.3	27.6	17.3	10.9	28.2	+0.6
Non-Operating Income/Expenses	2.2	-0.3	1.9	2.2	1.6	3.8	+1.9
Ordinary Income	19.5	10.0	29.5	19.5	12.5	32.0	+2.5
Extraordinary Income/Loss	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Income ¹	13.9	7.3	21.2	13.9	9.8	23.7	+2.5
EBITDA ²	19.7	13.1	32.8	19.7	13.6	33.3	+0.5
EPS (¥/share)	98.13	51.99	150.12	98.13	69.61	167.74	+17.62
Dividend (¥/share)	-	-	70	-	-	70	0
Total amount of Dividend	-	-	9.9	-	-	9.9	0.0
OP Margin	29.6%	21.9%	26.2%	29.6%	21.3%	25.7%	-
FX Rate (¥/\$)	130	115	115	130	138	134	-
Crude Oil (JCC) (\$/bbl) ³	111	88	88	111	113	112	-

1. Net Income = Profit Attributable to Owners of Parent

2. EBITDA = Operating Profit + Depreciation and amortization

3. Based on Trade Statistics of Japan Ministry of Finance

Analysis of Changes in OP

(¥)

1H

	FY2022 Actual	FY2021 Actual	YOY Change	Outlook as of Aug 2022	vs. Outlook
	28.2 billion	21.3 billion	+6.9 billion(+32%)	27.6 billion	+0.6 billion
Chemicals	YOY Change -0.1 billion	OP decrease due to feedstock and raw materials cost up, shipping cost up and fixed cost up			
	vs. Outlook -0.4 billion	OP decrease due to feedstock and raw materials cost up			
Performance Materials	YOY Change +0.8 billion	Sales increase in Semis Materials			
	vs. Outlook -0.3 billion	Sales decrease in Display Materials			
Agro	YOY Change +5.2 billion	Sales increase due to strong sales of main products and partial shipment shifted			
	vs. Outlook +1.5 billion	Sales increase due to strong sales of main products and partial shipment shifted			
Healthcare	YOY Change +0.1 billion	Sales increase in LIVALO			
	vs. Outlook +0.2 billion	Sales increase in LIVALO			

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Full-Year Outlook is Revised Upward (FY2022 OP : ¥55.5 billion)

The Outlook is revised based on 1H results and current 2H outlook

Full-Year	vs. FY2021	<ul style="list-style-type: none"> ■ Sales up ¥26.2 billion (+13%) ■ OP up ¥4.5 billion (+9%), Net Income up ¥3.3 billion (+9%) ■ OP and Ordinary Income expected to renew the highest results of a full year for 9 consecutive years. Net Income expected to renew the highest results of a full year for 10 consecutive years. ■ ROE Outlook for FY2022 is 19.7%
Full-Year	vs. Outlook as of Aug 2022	<ul style="list-style-type: none"> ■ Sales above target ¥10.9 billion ■ OP above target ¥0.4 billion, Net Income above target ¥0.4 billion
2H	vs. Outlook as of Aug 2022	<ul style="list-style-type: none"> ■ Sales above target ¥6.8 billion ■ OP below target ¥0.2 billion, Net Income below target ¥2.1 billion

Shareholders Return (Full-Year Outlook)

- Based on Mid-Term Plan, Total Payout Ratio Target is 75% and Dividend Payout Ratio Target is 55% (unchanged from May 2022)
- Completed a ¥5.0 billion share repurchase (period: May - June 2022)
- Annual dividend increased to ¥164/share from the previous outlook of ¥162/share (2H dividend increased by ¥2/share)

Dividend	¥164/share (Full-Year) 1H ¥70/share, 2H ¥94/share (Dividend Payout Ratio : 54.9%) 【vs. FY2021】1H up ¥20/share, 2H up ¥22/share 【vs. Outlook as of August 2022】1H no change , 2H up ¥2/share
Share Repurchase	Completed ¥5.0 billion, 683 thousand shares (period: May - June 2022) (FY2021 Actual: ¥12.0 billion, 2,033 thousand shares)
Share Cancellation	Cancelled 1.7 million shares in May and August 2022
Total Payout Ratio Target	75% (66.8% based on ¥164/share dividend and ¥5.0 billion share repurchase)

FY2022 Financial Summary YOY Change

(¥billion)

	FY2021 Actual					FY2022 Outlook as of Nov 2022					YOY Change				
	1H	3Q	4Q	2H	Total	1H Actual	3Q	4Q	2H	Total	1H	3Q	4Q	2H	Total
Sales	91.8	49.5	66.7	116.2	208.0	109.5	49.7	75.0	124.7	234.2	+17.7 (+19%)	+0.2 (0%)	+8.3 (+13%)	+8.5 (+7%)	+26.2 (+13%)
Operating Profit	21.3	12.6	17.1	29.7	51.0	28.2	9.9	17.4	27.3	55.5	+6.9 (+32%)	-2.7 (-21%)	+0.3 (+2%)	-2.4 (-8%)	+4.5 (+9%)
Non-Operating Income/Expenses	1.0	0.9	0.8	1.7	2.7	3.8	-0.1	-0.9	-1.0	2.8	+2.8	-1.0	-1.7	-2.7	+0.1
Ordinary Income	22.3	13.5	17.9	31.4	53.7	32.0	9.8	16.5	26.3	58.3	+9.7 (+44%)	-3.7 (-27%)	-1.4 (-8%)	-5.1 (-16%)	+4.6 (+9%)
Extraordinary Income/Loss	0.0	0.2	0.3	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.3	-0.5	-0.5
Net Income ¹	16.3	9.3	13.2	22.5	38.8	23.7	7.1	11.3	18.4	42.1	+7.4 (+45%)	-2.2 (-24%)	-1.9 (-14%)	-4.1 (-18%)	+3.3 (+9%)
EBITDA ²	26.0	15.2	20.0	35.2	61.2	33.3	-	-	33.7	67.0	+7.3	-	-	-1.5	+5.8
EPS (¥/share)	113.94	65.64	92.30	157.94	271.88	167.74	-	-	130.85	298.59	+53.80	-	-	-27.09	+26.71
Dividend (¥/share)	50	-	-	72	122	70	-	-	94	164	+20	-	-	+22	+42
Dividend Payout Ratio (%)	-	-	-	-	44.9%	-	-	-	-	54.9%	-	-	-	-	+10.0pt
Total amount of Dividend	7.1	-	-	10.2	17.3	9.9	-	-	13.2	23.1	+2.8	-	-	+3.0	+5.8
OP Margin	23.2%	25.5%	25.5%	25.5%	24.5%	25.7%	19.9%	23.2%	21.9%	23.7%	+2.5pt	-5.6pt	-2.3pt	-3.6pt	-0.8pt
ROE	-	-	-	-	19.2%	-	-	-	-	19.7%	-	-	-	-	+0.5pt
FX Rate (¥/\$)	110	114	116	115	112	134	135	135	135	135	-	-	-	-	-
Crude Oil (JCC) (\$/bbl) ³	70	80	86	83	77	112	110	110	110	110	-	-	-	-	-

1. Net Income = Profit Attributable to Owners of Parent 2. EBITDA = Operating Profit + Depreciation and amortization 3. Based on Trade Statistics of Japan Ministry of Finance

FY2022 Financial Summary Compared to Outlook as of Aug 2022

(¥billion)

	FY2022 Outlook as of Aug 2022			FY2022 Outlook as of Nov 2022			vs. Outlook as of Aug 2022		
	1H	2H	Total	1H Actual	2H	Total	1H	2H	Total
Sales	105.4	117.9	223.3	109.5	124.7	234.2	+4.1	+6.8	+10.9
Operating Profit	27.6	27.5	55.1	28.2	27.3	55.5	+0.6	-0.2	+0.4
Non-Operating Income/Expenses	1.9	0.3	2.2	3.8	-1.0	2.8	+1.9	-1.3	+0.6
Ordinary Income	29.5	27.8	57.3	32.0	26.3	58.3	+2.5	-1.5	+1.0
Extraordinary Income/Loss	0.0	0.5	0.5	0.0	0.0	0.0	0.0	-0.5	-0.5
Net Income ¹	21.2	20.5	41.7	23.7	18.4	42.1	+2.5	-2.1	+0.4
EBITDA ²	32.8	33.9	66.7	33.3	33.7	67.0	+0.5	-0.2	+0.3
EPS (¥/share)	150.12	145.71	295.83	167.74	130.85	298.59	+17.62	-14.86	+2.76
Dividend (¥/share)	70	92	162	70	94	164	0	+2	+2
Dividend Payout Ratio (%)	-	-	54.8%	-	-	54.9%	-	-	+0.1pt
Total amount of Dividend	9.9	12.9	22.8	9.9	13.2	23.1	0.0	+0.3	+0.3
OP Margin	26.2%	23.3%	24.7%	25.7%	21.9%	23.7%	-0.5pt	-1.4pt	-1.0pt
ROE	-	-	19.6%	-	-	19.7%	-	-	+0.1pt
FX Rate (¥/\$)	115	115	115	134	135	135	-	-	-
Crude Oil (JCC) (\$/bbl) ³	88	88	88	112	110	110	-	-	-

Analysis of Changes in OP

(¥)

2H

	FY2022 Outlook as of Nov 2022	FY2021 Actual	YOY Change	Outlook as of Aug 2022	vs. Outlook
	27.3 billion	29.7 billion	-2.4 billion(-8%)	27.5 billion	-0.2 billion
Chemicals	YOY Change -1.2 billion	OP decrease due to feedstock and raw materials cost up, shipping cost up and fixed cost up			
	vs. Outlook +0.6 billion	OP increase due to sales price increase			
Performance Materials	YOY Change +1.9 billion	Sales increase in Semis Materials (even though fixed cost up ¥1.5 billion in total Performance Materials)			
	vs. Outlook +0.4 billion	Sales increase in Semis Materials			
Agro	YOY Change -1.4 billion	OP decrease due to fixed cost up (¥1.0 billion)			
	vs. Outlook +0.2 billion	OP decrease due to fixed cost above expectations			
Healthcare	YOY Change -0.1 billion	OP decrease due to fixed cost up in Custom Chemicals			
	vs. Outlook +0.3 billion	Sales increase in Custom Chemicals			

Full-Year

	FY2022 Outlook as of Nov 2022	FY2021 Actual	YOY Change		
	55.5 billion	51.0 billion	+4.5 billion(+9%)		
Chemicals	YOY Change -1.3 billion	OP decrease due to feedstock and raw materials cost up, shipping cost up and fixed cost up			
Performance Materials	YOY Change +2.7 billion	Sales increase in Semis Materials			
Agro	YOY Change +3.8 billion	Sales increase due to strong sales of main products			
Healthcare	YOY Change flat				

Breakdown of Non-Operating Income/Expenses and Extraordinary Income/Loss YOY Change

(¥billion)

	FY2021 Actual		FY2022 Outlook as of Nov 2022		YOY Change	
	1H	Total	1H Actual	Total	1H	Total
Non-Operating Income	1.36	3.82	4.43	4.30	+3.07	+0.48
Interest income, dividend income	0.32	0.82	0.45	1.11	+0.13	+0.29
Foreign exchange gains	0.10	1.13	3.02	0.98	+2.92	-0.15
Equity in earnings of affiliates, others	0.94	1.87	0.96	2.21	+0.02	+0.34
Non-Operating Expenses	0.42	1.09	0.60	1.50	+0.18	+0.41
Interest expense	0.05	0.07	0.09	0.23	+0.04	+0.16
Foreign exchange losses	0.00	0.00	0.00	0.00	0.00	0.00
Loss on disposal of non-current assets, others	0.37	1.02	0.51	1.27	+0.14	+0.25
Non-Operating Income/Expenses	0.94	2.73	3.83	2.80	+2.89	+0.07
Extraordinary Income	2.82	3.37	0.00	0.00	-2.82	-3.37
Extraordinary Loss	2.79	2.90	0.00	0.00	-2.79	-2.90
Extraordinary Income/Loss¹	0.03	0.47	0.00	0.00	-0.03	-0.47

1. FY2021 Actual:

Extraordinary Income ¥3.37 billion (Gain on sales of investment securities ¥3.37 billion, sales amount ¥4.33 billion, sold 9 companies shares, sold 100% of our shareholdings of 3 companies, including unlisted shares)

Extraordinary Loss ¥2.90 billion (melamine restructuring costs ¥1.79 billion, plant equipment removal cost of Nippon Phosphoric Acid* ¥0.63 billion, impairment loss of unlisted stock ¥0.48 billion)

*Nippon Phosphoric Acid: affiliated company (our share: 35%), Manufacturing and selling sulfuric acid and phosphoric acid liquid.

In accordance with the decision to stop the production of phosphoric acid liquid, companies bear the costs of removing facilities according to its investment ratio

Breakdown of Non-Operating Income/Expenses and Extraordinary Income/Loss Compared to Outlook as of Aug 2022

(¥billion)

	FY2022 Outlook as of Aug 2022		FY2022 Outlook as of Nov 2022		vs. Outlook as of Aug 2022	
	1H	Total	1H Actual	Total	1H	Total
Non-Operating Income	2.76	3.66	4.43	4.30	+1.67	+0.64
Interest income, dividend income	0.39	0.76	0.45	1.11	+0.06	+0.35
Foreign exchange gains	1.69	1.69	3.02	0.98	+1.33	-0.71
Equity in earnings of affiliates, others	0.68	1.21	0.96	2.21	+0.28	+1.00
Non-Operating Expenses	0.83	1.50	0.60	1.50	-0.23	0.00
Interest expense	0.06	0.09	0.09	0.23	+0.03	+0.14
Foreign exchange losses	0.00	0.00	0.00	0.00	0.00	0.00
Loss on disposal of non-current assets, others	0.77	1.41	0.51	1.27	-0.26	-0.14
Non-Operating Income/Expenses	1.93	2.16	3.83	2.80	+1.90	+0.64
Extraordinary Income	0.00	0.50	0.00	0.00	0.00	-0.50
Extraordinary Loss	0.00	0.00	0.00	0.00	0.00	0.00
Extraordinary Income/Loss¹	0.00	0.50	0.00	0.00	0.00	-0.50

1. FY2022 Outlook as of Aug 2022: Gain on sales of investment securities ¥0.50 billion

Free cash flow in FY2022 Outlook is ¥22.2 billion, a decrease of ¥7.3 billion from FY2021

(¥billion)

	FY2021 Actual		FY2022 Outlook as of Nov 2022		YOY Change	FY2022 Total Outlook as of May 2022
	1H	Total	1H Actual	Total	Total	
CF from operating activities	33.8	41.9	43.3	45.4	+3.5	43.3
Income before income taxes & non-controlling interests	22.3	54.2	32.0	58.3	+4.1	54.6
Extraordinary loss (income)	0.0	-0.5	0.0	0.0	+0.5	-0.5
Depreciation & Amortization ¹	4.7	10.2	5.1	11.5	+1.3	11.6
Income taxes paid	-7.4	-13.2	-8.5	-14.3	-1.1	-13.7
Working capital, others	14.2	-8.8	14.7	-10.1	-1.3	-8.7
CF from investing activities	-6.1	-12.4	-9.6	-23.2	-10.8	-21.2
Purchase of PPE	-5.3	-11.3	-8.4	-21.1	-9.8	-20.1
Purchase and sales of investment securities	3.4	4.1	-0.5	-0.5	-4.6	1.0
Others	-4.2	-5.2	-0.7	-1.6	+3.6	-2.1
Free cash flow	27.7	29.5	33.7	22.2	-7.3	22.1
CF from financing activities	-31.6	-27.8	-29.2	-25.0	+2.8	-27.5
Payout to shareholders (dividend)	-8.3	-15.5	-10.2	-29.1	-1.6	-27.5
Payout to shareholders (share repurchase)	-7.0	-12.0	-5.0			
Borrowings	-16.2	-0.3	-13.9	4.1	+4.4	0.0
Others	-0.1	0.0	-0.1	0.0	0.0	0.0
Effect of exchange rate change on cash & cash equivalents	-0.1	0.6	1.6	0.0	-0.6	0.0
Change in cash & cash equivalents	-4.0	2.3	6.1	-2.8	-5.1	-5.4
Increase in cash and cash equivalents resulting from change in scope of consolidation	0.0	0.0	3.1	3.1	+3.1	1.7
Cash & cash equivalents at end of period	28.4	34.7	43.9	35.0	+0.3	31.0

1. Including amortization of goodwill

(¥billion)

	2021/9	2022/3	2022/9	vs. 2022/3
Current assets	142.3	175.3	171.8	-3.5
Cash	28.4	34.7	43.9	+9.2
Accounts receivable	55.8	80.0	60.8	-19.2
Inventories	52.0	52.2	58.8	+6.6
Others	6.1	8.4	8.3	-0.1
Fixed assets	105.1	104.4	108.4	+4.0
Total PPE	51.0	53.2	60.7	+7.5
Intangible assets	12.1	11.8	11.8	0.0
Investment securities	32.1	30.2	29.9	-0.3
Others	9.9	9.2	6.0	-3.2
Total assets	247.4	279.7	280.2	+0.5

	2021/9	2022/3	2022/9	vs. 2022/3
Liabilities	50.0	71.7	60.8	-10.9
Accounts payable	16.0	19.0	19.0	0.0
Borrowings	6.5	22.7	9.7	-13.0
Others	27.5	30.0	32.1	+2.1
Net assets	197.4	208.0	219.4	+11.4
Shareholders' equity ²	186.3	196.7	205.3	+8.6
Valuation difference on available-for-sale securities	9.1	8.3	8.7	+0.4
Foreign currency translation adjustment	-0.2	0.9	1.9	+1.0
Non-controlling interests	1.8	2.1	3.1	+1.0
Remeasurements of defined benefit plans	0.4	0.0	0.4	+0.4
Total liabilities & net assets	247.4	279.7	280.2	+0.5

Breakdown of Investment Securities

	2021/9	2022/3	2022/9	vs. 2022/3
Listed shares¹ (Number of stocks held, Non-consolidated basis)	20.4 (30)	18.9 (30)	19.3 (30)	+0.4 (0)
Unlisted shares	2.8	2.6	3.2	+0.6
Subsidiaries/Associate shares	8.9	8.7	7.4	-0.7
Total	32.1	30.2	29.9	-0.3

Strategic shareholdings on net assets⁴	10.6%	9.5%	9.5%
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Equity Ratio	79.1%	73.6%	77.2%
D/E Ratio³	-11.7%	-6.1%	-16.7%

- 2022/3 18.9 + Acquisition 0.0 + Sales and valuation difference 0.4 = 2022/9 19.3
- Change in shareholders' equity +8.6 = Net Income 23.7 – Dividend and others 15.1
- D/E Ratio = (Borrowings - Cash) / Shareholders' equity
- Strategic shareholdings on net assets = strategic shareholdings (Non-consolidated basis, Listed shares + Unlisted shares) / Net assets (Consolidated basis)
Strategic shareholdings (Non-consolidated basis, ¥billion): 2021/9 20.9, 2022/3 19.8, 2022/9 20.7

Capex/Depreciation/R&D by Segment

(¥billion)

	Capex ¹						Depreciation ²						R&D expenses					
	2018	2019	2020	2021	2022E as of May 2022	2022E as of Nov 2022	2018	2019	2020	2021	2022E as of May 2022	2022E as of Nov 2022	2018	2019	2020	2021	2022E as of May 2022	2022E as of Nov 2022
Chem	2.0	3.1	4.9	2.3	3.9	4.1	1.8	1.9	2.2	2.5	2.6	2.6	0.6	0.4	0.3	0.3	0.4	0.3
Performance M. ³	3.3	3.3	3.2	5.8	8.3	9.0	6.0	5.2	4.5	3.9	4.7	4.7	8.2	7.7	7.0	7.0	7.8	7.3
Agro ⁴	3.3	7.9	6.4	1.5	4.1	5.8	1.7	2.3	2.6	2.7	3.0	2.9	4.5	4.6	4.4	4.2	4.5	4.4
Healthcare ⁵	0.5	0.6	0.5	0.5	0.5	0.4	0.6	0.6	0.5	0.4	0.4	0.4	2.5	2.5	2.4	0.6	0.7	0.6
Trading	0.1	0.1	0.1	0.0	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Others	0.7	0.7	0.7	0.9	1.2	1.2	0.7	0.4	0.5	0.6	0.6	0.6	2.0	2.0	2.4	3.9	4.0	4.2
Total	9.9	15.7	15.8	11.0	18.3	20.6	10.9	10.5	10.4	10.2	11.4	11.3	17.8	17.2	16.5	16.0	17.4	16.8

- Capex
Actual : Acceptance basis
Outlook : Production commencement basis (partly acceptance basis)
- Depreciation Method
SUNEVER, ARC®, Multi layer process materials : 4 year declining balance method (50.0% of initial capex amount in the 1st year)
Other products : 8 year declining balance method (25.0% of initial capex amount in the 1st year)
- Including NCK new plant (¥2.9 billion·acceptance basis) in FY2022E as of Nov 2022
- Including the acquisitions of QUINTEC in FY2019 (¥6.3 billion) and DITHANE in FY2020 (¥5.4 billion), and NBR 1st phase construction (¥4.4 billion·acceptance basis) in FY2022E as of Nov 2022
- Organizational change was implemented in April, 2022.
FY2017-2021 Actual figures are based on old segmentation (see p82, p84)

Semiconductor main capex plan⁶

Focus on investment in evaluation equipment, development facilities and production facilities in line with the progress of semiconductor miniaturization

(¥billion)

FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022E as of Nov 2022
1.1	5.6	4.0	0.4	0.4	0.2	1.5	0.4	3.7

6. Main capex : approval basis

Main Capex Items¹

(¥billion)

FY2019 Actual		FY2020 Actual		FY2021 Actual		FY2022 Outlook as of Nov 2022	
Items	Expenses	Items	Expenses	Items	Expenses	Items	Expenses
Isocyanuric acid ² (Production capacity expansion)	1.9	Materials Research Lab. (Instruments)	1.4	Agro (Production facilities)	4.3	NBR Agro ³ (Production facilities)	4.4
Chemical Research Lab. (Instruments)	0.7	Digital Transformation related	1.1	Digital Transformation related	1.3	NCK Semis ⁴ (Production facilities)	2.9
Materials Research Lab. (Instruments)	0.6	Agro (Production facilities)	0.9	Chemical Research Lab. (Instruments)	0.7	Digital Transformation related	2.1
Display (Production facilities)	0.5	Semis (Analysis instruments)	0.8	Materials Research Lab. (Instruments)	0.5	Chemical Research Lab. (Instruments)	0.9
Biological Research Lab. (Instruments)	0.3	Chemical Research Lab. (Instruments)	0.7	Display (Production facilities)	0.3	Materials Research Lab. (Instruments)	0.8
TEPIC (Production facilities)	0.2	NCK Semis (Production facilities)	0.4	Biological Research Lab. (Instruments)	0.3	Display (Production facilities)	0.6
		Biological Research Lab. (Instruments)	0.2			Biological Research Lab. (Instruments)	0.4
						SNOWTEX (Production facilities)	0.3

1. Main capex : Approval basis (partly acceptance basis) 2. Fine Chemicals materials (see p31)
 3. NBR 1st phase construction (acceptance basis) 4. NCK new plant (acceptance basis)

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1H FY2022 Financial Results YOY Change by Segment

(¥billion)

		FY2021 Actual			FY2022 Actual			YOY Change		
		1Q	2Q	1H	1Q	2Q	1H	1Q	2Q	1H
Chemicals	Sales	8.8	8.3	17.1	10.4	9.4	19.8	+1.6 (+18%)	+1.1 (+13%)	+2.7 (+16%)
	OP	1.3	-0.1	1.2	1.7	-0.6	1.1	+0.4 (+36%)	-0.5 (-)	-0.1 (-9%)
Performance Materials	Sales	20.0	19.6	39.6	21.8	20.2	42.0	+1.8 (+9%)	+0.6 (+3%)	+2.4 (+6%)
	OP	6.9	6.2	13.1	7.9	6.0	13.9	+1.0 (+14%)	-0.2 (-4%)	+0.8 (+6%)
Agrochemicals	Sales	13.4	11.6	25.0	19.7	16.0	35.7	+6.3 (+47%)	+4.4 (+38%)	+10.7 (+43%)
	OP	4.0	2.9	6.9	6.8	5.3	12.1	+2.8 (+69%)	+2.4 (+85%)	+5.2 (+75%)
Healthcare	Sales	1.1	2.2	3.3	1.7	1.5	3.2	+0.6 (+55%)	-0.7 (-30%)	-0.1 (-3%)
	OP	0.3	1.1	1.4	0.8	0.7	1.5	+0.5 (+153%)	-0.4 (-36%)	+0.1 (+5%)
Trading, Others, Adjustment	Sales	3.2	3.6	6.8	4.7	4.1	8.8	+1.5	+0.5	+2.0
	OP	-0.6	-0.7	-1.3	0.1	-0.5	-0.4	+0.7	+0.2	+0.9
Total	Sales	46.5	45.3	91.8	58.3	51.2	109.5	+11.8 (+25%)	+5.9 (+13%)	+17.7 (+19%)
	OP	11.9	9.4	21.3	17.3	10.9	28.2	+5.4 (+45%)	+1.5 (+15%)	+6.9 (+32%)

1. Including inter-segment sales/transfers

 2. Trading: Nissei Corporation, Others: Nissan Butsuryu, Nissan Green & Landscape, Nissan Engineering, Nihon Hiryo, and others
 Adjustment: Planning & Development Division and others (see p79, p80 for breakdown)

3. 1H FY2021 actual has been revised to reflect organizational change in April 2022 (see p82, p83)

1H FY2022 Financial Results Compared to Outlook by Segment

(¥billion)

		FY2022 Outlook As of Aug 2022			FY2022 Actual			vs. Outlook
		1Q Actual	2Q	1H	1Q	2Q	1H	2Q·1H
Chemicals	Sales	10.4	9.1	19.5	10.4	9.4	19.8	+0.3
	OP	1.7	-0.2	1.5	1.7	-0.6	1.1	-0.4
Performance Materials	Sales	21.8	20.6	42.4	21.8	20.2	42.0	-0.4
	OP	7.9	6.3	14.2	7.9	6.0	13.9	-0.3
Agrochemicals	Sales	19.7	13.5	33.2	19.7	16.0	35.7	+2.5
	OP	6.8	3.8	10.6	6.8	5.3	12.1	+1.5
Healthcare	Sales	1.7	1.4	3.1	1.7	1.5	3.2	+0.1
	OP	0.8	0.5	1.3	0.8	0.7	1.5	+0.2
Trading, Others, Adjustment	Sales	4.7	2.5	7.2	4.7	4.1	8.8	+1.6
	OP	0.1	-0.1	0.0	0.1	-0.5	-0.4	-0.4
Total	Sales	58.3	47.1	105.4	58.3	51.2	109.5	+4.1
	OP	17.3	10.3	27.6	17.3	10.9	28.2	+0.6

1. Including inter-segment sales/transfers

2. Trading: Nissei Corporation, Others: Nissan Butsuryu, Nissan Green & Landscape, Nissan Engineering, Nihon Hiryo and others

Adjustment: Planning & Development Division and others (see p79, p80 for breakdown)

FY2022 Financial Outlook YOY Change by Segment

		FY2021 Actual					FY2022 Outlook As of Nov 2022					YOY Change				
		1H	3Q	4Q	2H	Total	1H Actual	3Q	4Q	2H	Total	1H	3Q	4Q	2H	Total
Chemicals	Sales	17.1	10.5	10.0	20.5	37.6	19.8	11.0	11.6	22.6	42.4	+2.7 (+16%)	+0.5 (+5%)	+1.6 (+15%)	+2.1 (+10%)	+4.8 (+13%)
	OP	1.2	1.3	1.3	2.6	3.8	1.1	0.9	0.5	1.4	2.5	-0.1 (-9%)	-0.4 (-30%)	-0.8 (-59%)	-1.2 (-45%)	-1.3 (-34%)
Performance Materials	Sales	39.6	20.9	21.2	42.1	81.7	42.0	22.7	24.5	47.2	89.2	+2.4 (+6%)	+1.8 (+8%)	+3.3 (+16%)	+5.1 (+12%)	+7.5 (+9%)
	OP	13.1	7.6	6.9	14.5	27.6	13.9	8.1	8.3	16.4	30.3	+0.8 (+6%)	+0.5 (+7%)	+1.4 (+21%)	+1.9 (+14%)	+2.7 (+10%)
Agrochemicals	Sales	25.0	11.9	28.9	40.8	65.8	35.7	11.3	32.2	43.5	79.2	+10.7 (+43%)	-0.6 (-5%)	+3.3 (+11%)	+2.7 (+6%)	+13.4 (+20%)
	OP	6.9	3.0	8.2	11.2	18.1	12.1	1.6	8.2	9.8	21.9	+5.2 (+75%)	-1.4 (-47%)	0.0 (0%)	-1.4 (-13%)	+3.8 (+21%)
Healthcare	Sales	3.3	2.0	1.3	3.3	6.6	3.2	1.7	1.7	3.4	6.6	-0.1 (-3%)	-0.3 (-12%)	+0.4 (+25%)	+0.1 (+3%)	0.0 (0%)
	OP	1.4	0.9	0.5	1.4	2.8	1.5	0.7	0.6	1.3	2.8	+0.1 (+5%)	-0.2 (-23%)	+0.1 (+25%)	-0.1 (-6%)	0.0 (0%)
Trading, Others, Adjustment	Sales	6.8	4.2	5.3	9.5	16.3	8.8	3.0	5.0	8.0	16.8	+2.0	-1.2	-0.3	-1.5	+0.5
	OP	-1.3	-0.2	0.2	0.0	-1.3	-0.4	-1.4	-0.2	-1.6	-2.0	+0.9	-1.2	-0.4	-1.6	-0.7
Total	Sales	91.8	49.5	66.7	116.2	208.0	109.5	49.7	75.0	124.7	234.2	+17.7 (+19%)	+0.2 (0%)	+8.3 (+13%)	+8.5 (+7%)	+26.2 (+13%)
	OP	21.3	12.6	17.1	29.7	51.0	28.2	9.9	17.4	27.3	55.5	+6.9 (+32%)	-2.7 (-22%)	+0.3 (+2%)	-2.4 (-8%)	+4.5 (+9%)

1. Including inter-segment sales/transfers

2. Trading: Nissei Corporation, Others: Nissan Butsuryu, Nissan Green & Landscape, Nissan Engineering, Nihon Hiryo, and others, Adjustment: Planning & Development Division and others (see p79, p80 for breakdown)

3. Sales and OP for Planning & Development Division in FY2021 Actual, FY2022 Outlook as of Nov 2022 are disclosed on p69

4. FY2021 actual has been revised to reflect organizational change in April 2022 (see p82, p83)

FY2022 Financial Outlook

Compared to Outlook as of Aug 2022 by Segment

(¥billion)

		FY2022 Outlook as of Aug 2022			FY2022 Outlook as of Nov 2022			vs. Outlook as of Aug 2022		
		1H	2H	Total	1H Actual	2H	Total	1H	2H	Total
Chemicals	Sales	19.5	19.3	38.8	19.8	22.6	42.4	+0.3	+3.3	+3.6
	OP	1.5	0.8	2.3	1.1	1.4	2.5	-0.4	+0.6	+0.2
Performance Materials	Sales	42.4	46.5	88.9	42.0	47.2	89.2	-0.4	+0.7	+0.3
	OP	14.2	16.0	30.2	13.9	16.4	30.3	-0.3	+0.4	+0.1
Agrochemicals	Sales	33.2	42.2	75.4	35.7	43.5	79.2	+2.5	+1.3	+3.8
	OP	10.6	10.0	20.6	12.1	9.8	21.9	+1.5	-0.2	+1.3
Healthcare	Sales	3.1	2.9	6.0	3.2	3.4	6.6	+0.1	+0.5	+0.6
	OP	1.3	1.0	2.3	1.5	1.3	2.8	+0.2	+0.3	+0.5
Trading, Others, Adjustment	Sales	7.2	7.0	14.2	8.8	8.0	16.8	+1.6	+1.0	+2.6
	OP	0.0	-0.3	-0.3	-0.4	-1.6	-2.0	-0.4	-1.3	-1.7
Total	Sales	105.4	117.9	223.3	109.5	124.7	234.2	+4.1	+6.8	+10.9
	OP	27.6	27.5	55.1	28.2	27.3	55.5	+0.6	-0.2	+0.4

1. Including inter-segment sales/transfers

2. Trading: Nissei Corporation, Others: Nissan Butsuryu, Nissan Green & Landscape, Nissan Engineering, Nihon Hiryo, and others, Adjustment: Planning & Development Division and others (see p79, p80 for breakdown)

3. Sales and OP for Planning & Development Division in FY2022 Outlook as of Nov 2022 are disclosed on p69

FY2022 Financial Outlook

Compared to Outlook as of May 2022 by Segment

(¥billion)

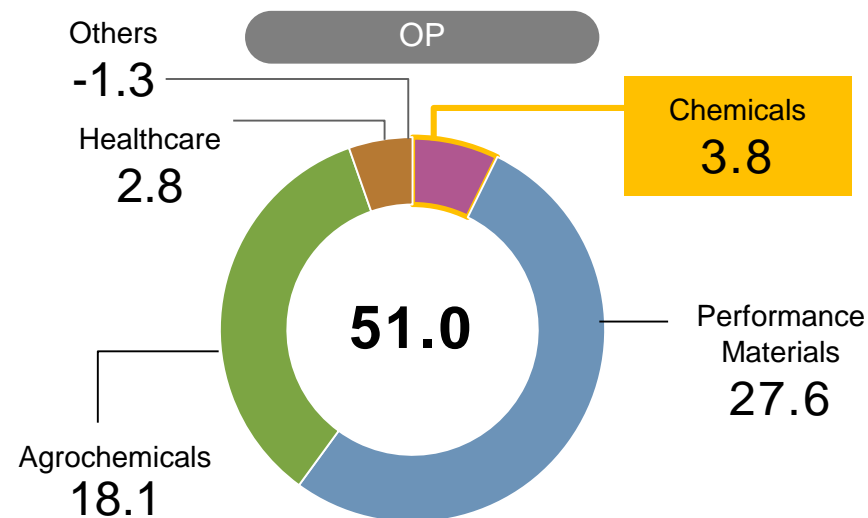
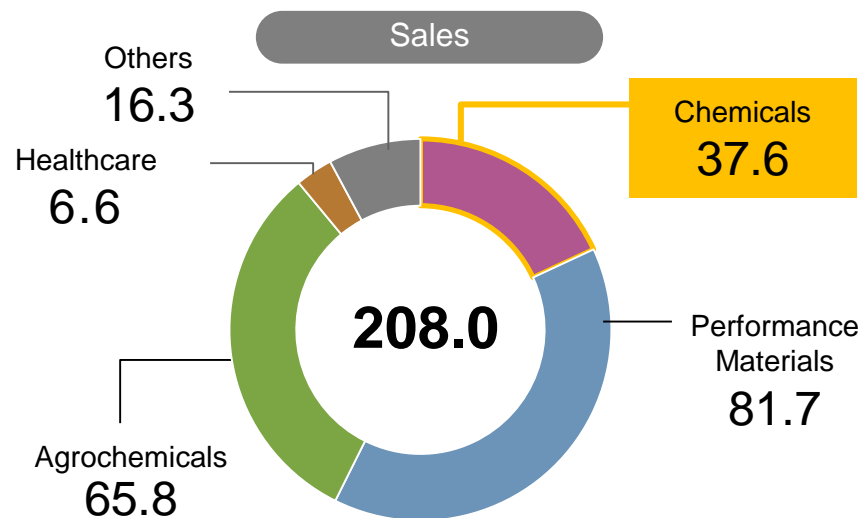
		FY2022 Outlook as of May 2022			FY2022 Outlook as of Nov 2022			vs. Outlook as of May 2022		
		1H	2H	Total	1H Actual	2H	Total	1H	2H	Total
Chemicals	Sales	19.3	19.3	38.6	19.8	22.6	42.4	+0.5	+3.3	+3.8
	OP	1.4	0.8	2.2	1.1	1.4	2.5	-0.3	+0.6	+0.3
Performance Materials	Sales	43.4	46.5	89.9	42.0	47.2	89.2	-1.4	+0.7	-0.7
	OP	14.5	16.0	30.5	13.9	16.4	30.3	-0.6	+0.4	-0.2
Agrochemicals	Sales	30.7	42.2	72.9	35.7	43.5	79.2	+5.0	+1.3	+6.3
	OP	9.5	10.0	19.5	12.1	9.8	21.9	+2.6	-0.2	+2.4
Healthcare	Sales	3.0	2.9	5.9	3.2	3.4	6.6	+0.2	+0.5	+0.7
	OP	1.1	1.0	2.1	1.5	1.3	2.8	+0.4	+0.3	+0.7
Trading, Others, Adjustment	Sales	4.7	7.0	11.7	8.8	8.0	16.8	+4.1	+1.0	+5.1
	OP	-0.5	-0.3	-0.8	-0.4	-1.6	-2.0	+0.1	-1.3	-1.2
Total	Sales	101.1	117.9	219.0	109.5	124.7	234.2	+8.4	+6.8	+15.2
	OP	26.0	27.5	53.5	28.2	27.3	55.5	+2.2	-0.2	+2.0

1. Including inter-segment sales/transfers

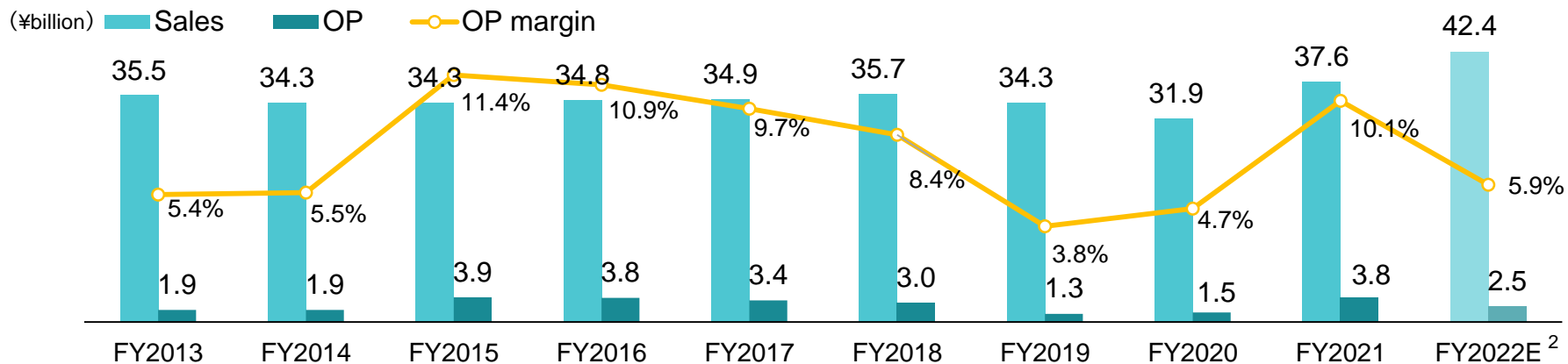
2. Trading: Nissei Corporation, Others: Nissan Butsuryu, Nissan Green & Landscape, Nissan Engineering, Nihon Hiryo, and others, Adjustment: Planning & Development Division and others (see p79, p80 for breakdown)

3. Sales and OP for Planning & Development Division in FY2022 Outlook as of Nov 2022 are disclosed on p69

FY2021 Actual by Segment (¥billion)¹



Chemicals – Recent Financial Performance



1. Organizational changes were implemented in April, 2022. FY2013-2020 Actual figures are based on old segmentation.

FY2021 actual has been revised to reflect organizational change in April 2022 (see p82, p83)

2. Outlook as of Nov 2022

- Fine Chemicals: 【1H】Sales YOY +23%, Sales below target, 【Full-Year Outlook】 Sales YOY +24%
- Basic Chemicals: 【1H】Sales YOY +11%, Sales above target, 【Full-Year Outlook】 Sales YOY +7%

Main Products	FY2022 Outlook as of Aug 2022 ¹			FY2022 Outlook as of Nov 2022		
	YOY Change			YOY Change		
	1H	2H	Total	1H Actual	2H	Total
TEPIC	+28%	+4%	+15%	+25%	+22%	+23%
Environmental related products	+17%	+13%	+15%	+17%	+36%	+26%
FINEOXOCOL	+31%	-7%	+9%	+36%	-4%	+13%
Total Fine Chemicals²	+24%	+7%	+15%	+23%	+24%	+24%
Melamine³	+17%	-	-58%	+28%	-96%	-51%
Urea/AdBlue[®]	+49%	+30%	+38%	+56%	+75%	+67%
High purity sulfuric acid	+3%	+9%	+6%	+1%	+8%	+4%
Nitric acid products⁴	-15%	-1%	-7%	-14%	+24%	+6%
Total Basic Chemicals⁵⁻⁶	+8% (+7%)	-12% (+10%)	-3% (+8%)	+11% (+8%)	+3% (+28%)	+7% (+19%)
Total Segment⁵	+14% (+14%)	-6% (+9%)	+3% (+11%)	+16% (+14%)	+10% (+27%)	+13% (+21%)

1. Figures for 1H and Total were not disclosed at the time of August 2022. Figures for 2H have been disclosed since May 2022 and remain unchanged

2. TEPIC, Environmental related products, and FINEOXOCOL account for 87% of total Fine Chemicals sales (1H FY2022 Actual)

3. The production of melamine terminated in June 2022 (see p32, Restructure based on Shutdown of Melamine Plant)

4. From April to June 2022, Nitric acid plant temporarily shutdown due to mechanical troubles, and restarted deliveries from June 17, 2022 (Estimated impact) (1Q FY2022) OP down ¥0.67 billion, (2Q) OP down ¥0.32 billion (1H) OP down ¥0.99 billion

5. Growth rate in parentheses for FY2022 Outlook is the growth rate excluding melamine for both FY2021 Actual and FY2022 Outlook.

6. Melamine, Urea/AdBlue[®], High purity sulfuric acid, and Nitric acid products account for 57% of total Basic Chemical sales (1H FY2022 Actual)

【1H】 Sales up ¥2.7 billion, OP down ¥0.1 billion

(¥billion)

	FY2022 Actual			FY2022 Actual			YOY Change	
	1Q	2Q	1H	1Q	2Q	1H	2Q	1H
Sales	8.8	8.3	17.1	10.4	9.4	19.8	+1.1	+2.7
Fine Chemicals	3.2	3.0	6.2	4.2	3.5	7.7	+0.5	+1.5
Basic Chemicals	5.6	5.3	10.9	6.2	5.9	12.1	+0.6	+1.2
OP	1.3	-0.1	1.2	1.7	-0.6	1.1	-0.5	-0.1

1. 1H FY2021 actual has been revised to reflect organizational change in April 2022 (see p82, p83)

【1H】 Sales up, OP up

Fine Chemicals	TEPIC for general applications	Sales up (price up)
	TEPIC for electronic materials	Sales down
	Environmental related products	Sales up (price up)
	FINEOXOCOL	Sales up (cosmetic use recovery)
Feedstock and raw materials cost up, shipping cost up		

【1H】 Sales up, OP down

Basic Chemicals	Melamine	Sales up (price up)
	Urea/AdBlue®	Sales up (price up)
	High purity sulfuric acid	Sales flat
	Nitric acid products	Sales down (nitric acid plant troubles, see p26)
Feedstock and raw materials cost up, fixed cost up ¥0.2 billion, shipping cost down		

【1H】 Sales above target ¥0.3 billion, OP below target ¥0.4 billion

(¥billion)

	FY2022 Outlook as of Aug 2022			FY2022 Actual			vs. Outlook
	1Q Actual	2Q	1H	1Q	2Q	1H	2Q·1H
Sales	10.4	9.1	19.5	10.4	9.4	19.8	+0.3
Fine Chemicals	4.2	3.6	7.8	4.2	3.5	7.7	-0.1
Basic Chemicals	6.2	5.5	11.7	6.2	5.9	12.1	+0.4
OP	1.7	-0.2	1.5	1.7	-0.6	1.1	-0.4

【1H】 Sales below target, OP above target

TEPIC for general applications Sales above target (price up)

TEPIC for electronic materials Sales below target

Environmental related products Sales in line with target

FINEOXOCOL Sales above target
(cosmetic use strong)

Feedstock and raw materials cost above expectations,
inventory adjustment cost below expectations ¥0.2 billion

Fine
Chemicals

【1H】 Sales above target, OP below target

Melamine Sales above target
(postponement of the end of sales)

Urea/AdBlue® Sales above target (price up)

High purity sulfuric acid Sales below target

Nitric acid products Sales in line with target

Feedstock and raw materials cost above expectations

Basic
Chemicals

【Full-Year】 Sales up ¥4.8 billion, OP down ¥1.3 billion

(¥billion)

	FY2021 Actual					FY2022 Outlook as of Nov 2022					YOY Change				
	1H	3Q	4Q	2H	Total	1H Actual	3Q	4Q	2H	Total	1H	3Q	4Q	2H	Total
Sales	17.1	10.5	10.0	20.5	37.6	19.8	11.0	11.6	22.6	42.4	+2.7	+0.5	+1.6	+2.1	+4.8
Fine Chemicals	6.2	3.7	3.2	6.9	13.1	7.7	4.0	4.6	8.6	16.3	+1.5	+0.3	+1.4	+1.7	+3.2
Basic Chemicals	10.9	6.8	6.8	13.6	24.5	12.1	7.0	7.0	14.0	26.1	+1.2	+0.2	+0.2	+0.4	+1.6
OP	1.2	1.3	1.3	2.6	3.8	1.1	0.9	0.5	1.4	2.5	-0.1	-0.4	-0.8	-1.2	-1.3

1. 1H FY2021 actual has been revised to reflect organizational change in April 2022 (see p82, p83)

【Full-Year】 Sales up, OP flat

TEPIC for general applications Sales up (price up)

TEPIC for electronic materials Sales down

Environmental related products Sales up (price up)

FINEOXOCOL Sales up (cosmetic use recovery)

Feedstock and raw materials cost up, shipping cost up, fixed cost up ¥0.1 billion

【Full-Year】 Sales up, OP down

Melamine Sales down (plant shutdown in June 2022)

Urea/AdBlue® Sales up (price up)

High purity sulfuric acid Sales up

Nitric acid products Sales up (price up)

Feedstock and raw materials cost up, fixed cost up ¥0.4 billion, shipping cost down, inventory adjustment cost down ¥0.3 billion

FY2022 Financial Outlook Compared to Outlook as of Aug 2022

【2H】 Sales up ¥3.3 billion, OP up ¥0.6 billion

(¥billion)

	FY2022 Outlook as of Aug 2022			FY2022 Outlook as of Nov 2022			vs. Outlook as of Aug 2022		
	1H	2H	Total	1H Actual	2H	Total	1H	2H	Total
Sales	19.5	19.3	38.8	19.8	22.6	42.4	+0.3	+3.3	+3.6
Fine Chemicals	7.8	7.4	15.2	7.7	8.6	16.3	-0.1	+1.2	+1.1
Basic Chemicals	11.7	11.9	23.6	12.1	14.0	26.1	+0.4	+2.1	+2.5
OP	1.5	0.8	2.3	1.1	1.4	2.5	-0.4	+0.6	+0.2

【2H】 Sales above target, OP below target

TEPIC for general applications Sales above target (price up)

TEPIC for electronic materials Sales below target

Environmental related products Sales above target (price up)

FINEOXOCOL Sales above target

Feedstock and raw materials cost above expectations,
shipping cost above expectations,
fixed cost above expectations ¥0.1 billion

Fine
Chemicals

【2H】 Sales above target, OP above target

Melamine Sales above target
(postponement of the end of sales)

Urea/AdBlue® Sales above target (price up)

High purity sulfuric acid Sales in line with target

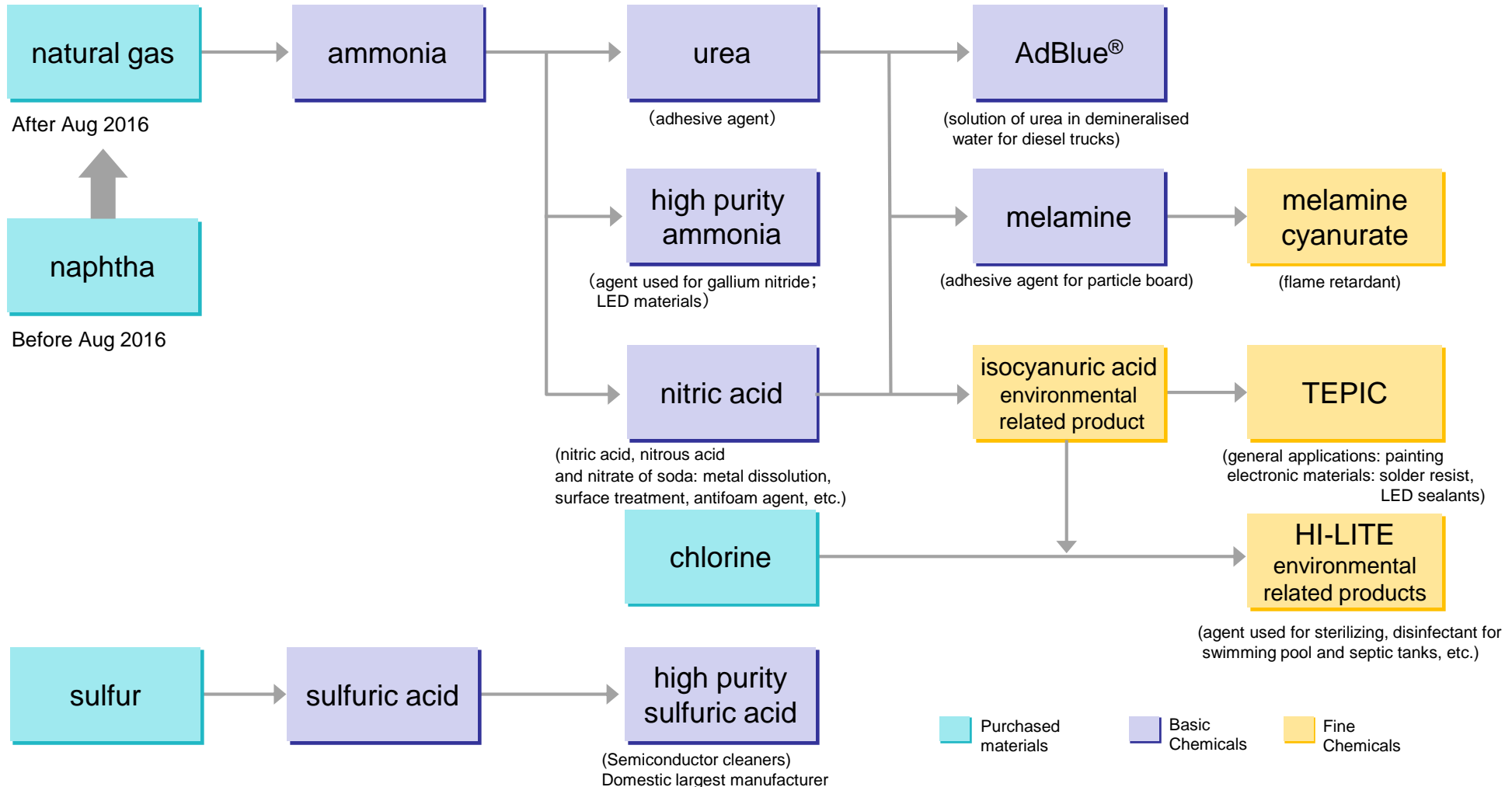
Nitric acid products Sales above target (price up)

Feedstock and raw materials cost above expectations

Basic
Chemicals

Flow Chart of Selected Basic and Fine Chemicals Products

- Core products are ammonia related products and sulfuric acid related products
- FY2021 ammonia domestic production capacity share 11%
- Focus on high value-added products, such as high purity sulfuric acid and TEPIC, instead of pursuing scale



Restructure based on Shutdown of Melamine Plant

- As announced in August 2021, the production of melamine terminated in June 2022
- We will concentrate its management resources on high value-added products and products with a high market share

1. Sales・OP distribution (Total FY2018-2021)

(¥billion)

	Sales	OP	Main products
Ammonia-related products	92.5(66%)	1.9(20%)	ammonia, urea/AdBlue®, high purity ammonia, melamine, nitric acid, isocyanuric acid, Hi-LITE, TEPIC, melamine cyanurate
Sulfuric acid-related products	47.0(34%)	7.7(80%)	sulfuric acid, purified sulfuric acid, high purity sulfuric acid
Others			FINEOXOCOL etc.
Total Chemicals	139.5(100%)	9.6(100%)	

*Among ammonia-related products, melamine has the highest sales but is in the red
 *Total profit of ammonia-related products other than melamine is in the black

2. Current status and prospects of melamine

Unlikely to secure stable profits in mid-long term, and to expect profit expansion by new investments

- World production capacity is twice of demand (our estimate)
- Domestic production capacity (2 companies including Nissan Chemical) is 3 times of demand (our estimate)
- Prices are on recovery trend, but always unstable due to cheaper Chinese products
(Chinese production capacity accounts for about 70% of the world)

3. Actions to be taken

- (1) Melamine: (A) stop production permanently in June 2022, (B) end sales when inventory eliminated
- (2) Expand sales of Chemicals segment by concentrating on high value and high share products
- (3) Reassign melamine plant operators in Toyama plant
- (4) Continue to sell melamine derivatives by purchasing melamine as raw materials

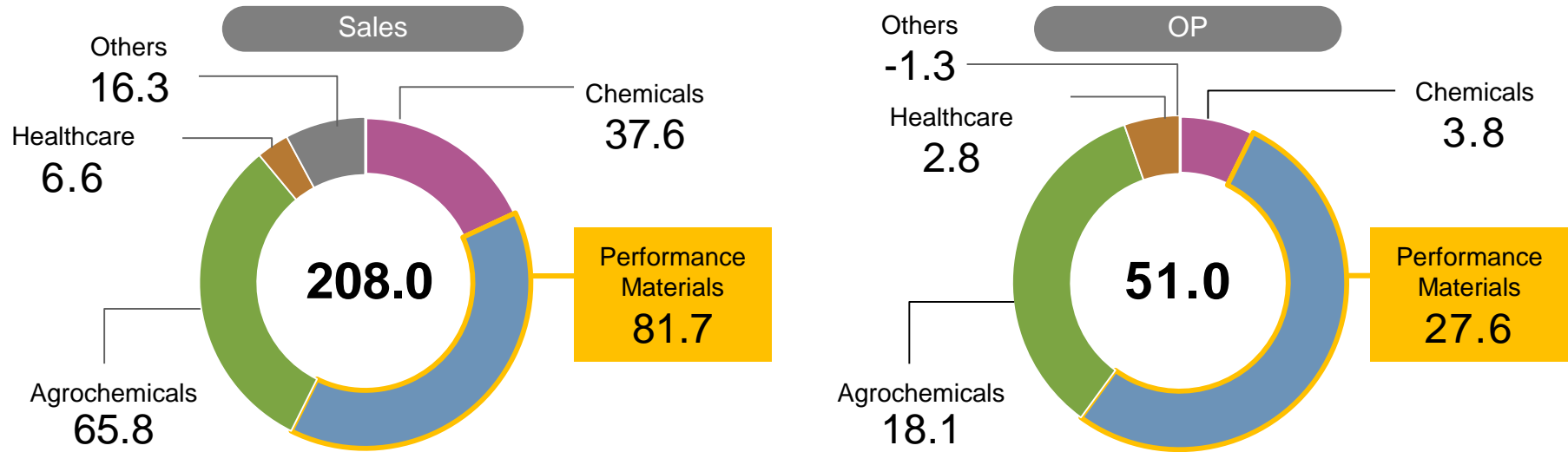
4. Restructuring costs

Melamine plant shutdown related costs (extraordinary loss of 1.79 billion yen) were compensated by gain on sales of investment securities (recorded in 2Q FY2021)

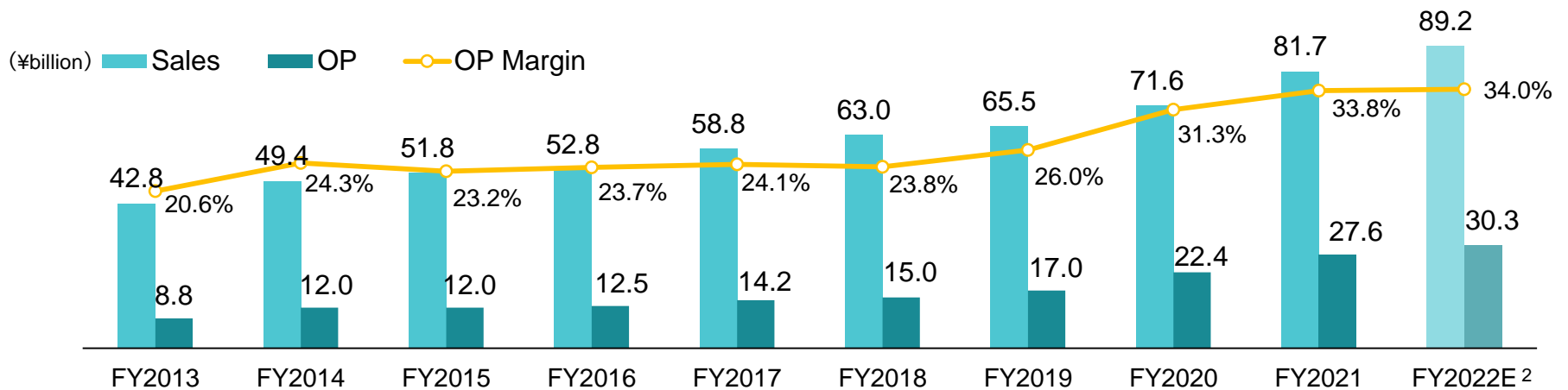
5. ESG

By shutdown of melamine, 26,000 GHG (t-CO₂) or equivalent to about 7% of FY2018 GHG (see p60) estimated to be reduced

FY2021 Actual by Segment (¥billion)¹



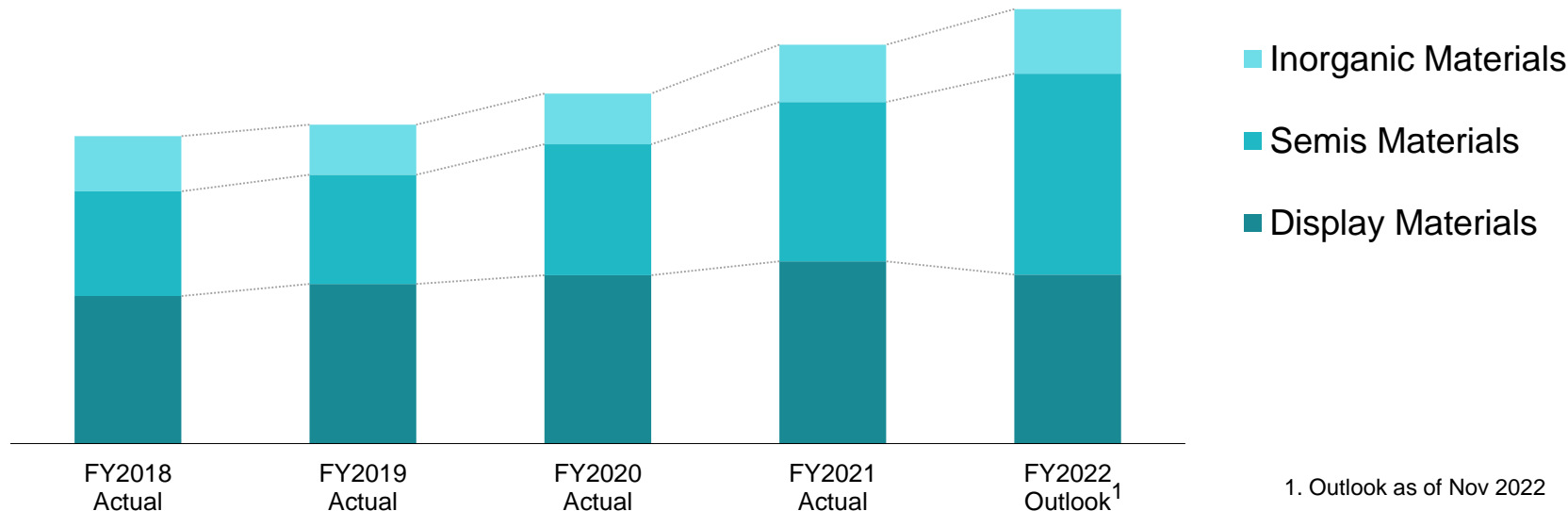
Performance Materials – Recent Financial Performance



1. Organizational changes were implemented in April, 2022. FY2013-2020 Actual figures are based on old segmentation.

FY2021 actual has been revised to reflect organizational change in April 2022 (see p82, p83)

2. Outlook as of Nov 2022



Main Products

Display Materials		Semis Materials		Inorganic Materials	
SUNEVER	LCD alignment coating	ARC®	Bottom anti-reflective coating for semis	SNOWTEX	Silica sol for polishing materials (silicon wafer, compound semiconductors, semiconductors CMP and etc.) and non-polishing materials (special steel sheet and etc.)
		Multi layer process materials	Multi layer process materials for Semis (OptiStack®)	Organo/Monomer Sol	Film surface treatment for electronic devices, resin additive
		Other new materials	EUV materials, 3D packaging process materials, CMOS image sensor materials	Oilfield materials	For enhancing oil recovery

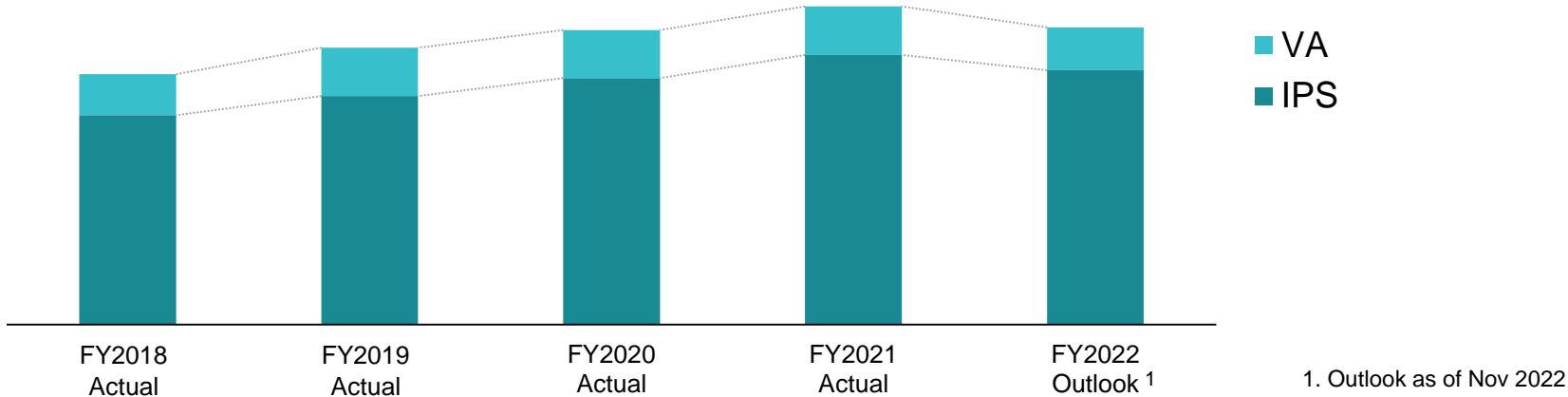
- DP Materials: 【1H】 Sales YOY +13%, Sales below target 【Full-Year Outlook】 Sales YOY -7%
- Semis Materials: 【1H】 Sales YOY +26%, Sales above target 【Full-Year Outlook】 Sales YOY +26%
- Inorganic Materials: 【1H】 Sales YOY +9%, Sales above target 【Full-Year Outlook】 Sales YOY +13%

Main Products	FY2022 Outlook as of Aug 2022 ¹			FY2022 Outlook as of Nov 2022			
	YOY Change			YOY Change			
	1H	2H	Total	1H Actual	2H	Total	
SUNEVER	-6%	+3%	-2%	-12%	-2%	-7%	
Total Display Materials	-6%	+3%	-2%	-13%	-2%	-7%	
ARC [®]	KrF (ARC [®])	+11%	+9%	+10%	+8%	+11%	+10%
	ArF (ARC [®])	+25%	+20%	+22%	+26%	+24%	+25%
Total ARC [®]	+23%	+18%	+20%	+23%	+21%	+22%	
Other Semis Materials ²	+23%	+29%	+26%	+35%	+37%	+36%	
Total Semis Materials	+23%	+21%	+22%	+26%	+26%	+26%	
SNOWTEX	+4%	+9%	+6%	+6%	+27%	+16%	
Organo/Monomer Sol	+7%	-1%	+3%	+10%	-9%	0%	
Oilfield Materials	+52%	-25%	+9%	+94%	+18%	+52%	
Total Inorganic Materials	+5%	+5%	+5%	+9%	+17%	+13%	
Total Segment	+7%	+10%	+9%	+6%	+12%	+9%	

1. Figures for 1H and Total were not disclosed at the time of August 2022. Figures for 2H have been disclosed since May 2022 and remain unchanged

2. Multi layer process materials (OptiStack[®]), EUV materials, CMOS image sensor materials, 3D packing process materials

SUNEVER sales YOY down, and sales below target due to the slowdown in the display market. Gradual recovery is expected from 2H FY2022.



Main Applications

- VA (Vertical Alignment) TV
- IPS (In-Plane Switching) Smartphone, Tablet, PC, Monitor

Sales Growth Rate by Mode

	1H FY2022 Actual		FY2022 Outlook as of Nov 2022
	YOY Change	vs. Outlook as of Aug 2022 (undisclosed)	YOY Change
VA	Down(-10 ~ -19%)	Below	Down(-10 ~ -19%)
IPS	Down(-10 ~ -19%)	Below	Down(-0 ~ -9%)
Total SUNEVER (including TN ²)	-12%	Below	-7%

2. TN (Twisted Nematic) main applications is PC, Monitor

【1H】 Sales up ¥2.4 billion, OP up ¥0.8 billion,

Fixed cost up ¥0.4 billion in total (including common expenses up ¥0.1 billion)

(¥billion)

	FY2021 Actual			FY2022 Actual			YOY Change	
	1Q	2Q	1H	1Q	2Q	1H	2Q	1H
Sales	20.0	19.6	39.6	21.8	20.2	42.0	+0.6	+2.4
OP	6.9	6.2	13.1	7.9	6.0	13.9	-0.2	+0.8

1. 1H FY2021 actual has been revised to reflect organizational change in April 2022 (see p82, p83)

【1H】 Sales down, OP down

Display
Materials

Photo IPS	Sales down
Rubbing IPS	Sales down
VA	Sales down

【1H】 Sales up, OP up

Semis
Materials

ARC®	Sales up
Other semis materials	Sales up (multi layer materials and other new materials ¹ up)

Semis market overall good performance, fixed cost up ¥0.2 billion

1. other new materials: EUV materials, CMOS image sensor materials, 3D packaging process materials total

【1H】 Sales up, OP up

Inorganic
Materials

SNOWTEX	Sales up (non-polishing and polishing up)
Organo/Monomer Sol	Sales up
Oilfield materials	Sales up

Fixed cost up ¥0.1 billion

1H FY2022 Financial Results Compared to Outlook

【1H】 Sales below target ¥0.4 billion, OP below target ¥0.3 billion,
Fixed cost below expectations ¥0.2 billion in total

(¥billion)

	FY2022 Outlook as of Aug 2022			FY2022 Actual			vs. Outlook
	1Q Actual	2Q	1H	1Q	2Q	1H	2Q·1H
Sales	21.8	20.6	42.4	21.8	20.2	42.0	-0.4
OP	7.9	6.3	14.2	7.9	6.0	13.9	-0.3

【1H】 Sales below target, OP below target

Display Materials

Photo IPS Sales below target

Rubbing IPS Sales below target

VA Sales below target

Fixed cost below expectations ¥0.1 billion

Semis Materials

【1H】 Sales above target, OP above target

ARC® Sales in line with target

Other semis materials Sales above target (multi layer materials and other new materials¹ above target)

Fixed cost below expectations ¥0.2 billion

1. other new materials: EUV materials, CMOS image sensor materials, 3D packaging process materials total

Inorganic Materials

【1H】 Sales above target, OP below target

SNOWTEX Sales above target
(non-polishing flat, polishing up)

Organo/Monomer Sol Sales above target

Oilfield materials Sales above target

Fixed cost above expectations ¥0.1 billion

【Full-Year】 Sales up ¥7.5 billion, OP up ¥2.7 billion,

Fixed cost up ¥1.9 billion in total (including common expenses up ¥0.3 billion)

(¥billion)

	FY2021 Actual					FY2022 Outlook					YOY Change				
	1H	3Q	4Q	2H	Total	1H Actual	3Q	4Q	2H	Total	1H	3Q	4Q	2H	Total
Sales	39.6	20.9	21.2	42.1	81.7	42.0	22.7	24.5	47.2	89.2	+2.4	+1.8	+3.3	+5.1	+7.5
OP	13.1	7.6	6.9	14.5	27.6	13.9	8.1	8.3	16.4	30.3	+0.8	+0.5	+1.4	+1.9	+2.7

1. FY2021 actual has been revised to reflect organizational change in April 2022 (see p82, p83)

【Full-Year】 Sales down, OP down

Display
Materials

Photo IPS

Sales flat
(Notebook PCs and automotive sales strong, but sales down in other applications)

Rubbing IPS

Sales down

VA

Sales down

Fixed cost up ¥0.3 billion

Semis
Materials

【Full-Year】 Sales up, OP up

ARC®

Sales up

Other semis materials

Sales up
(multi layer materials and other new materials¹ up)

Semis market overall good performance, fixed cost up ¥0.8 billion

1. other new materials: EUV materials, CMOS image sensor materials, 3D packaging process materials total

Inorganic
Materials

【Full-Year】 Sales up, OP up

SNOWTEX

Sales up
(non-polishing and polishing up)

Organo/Monomer Sol

Sales flat

Oilfield materials

Sales up

Fixed cost up ¥0.5 billion

FY2022 Financial Outlook Compared to Outlook as of Aug 2022

[2H] Sales above target ¥0.7 billion, OP above target ¥0.4 billion,
Fixed cost above expectations ¥0.6 billion in total

(¥billion)

	FY2022 Outlook as of Aug 2022			FY2022 Outlook as of Nov 2022			vs. Outlook as of Aug 2022		
	1H	2H	Total	1H Actual	2H	Total	1H	2H	Total
Sales	42.4	46.5	88.9	42.0	47.2	89.2	-0.4	+0.7	+0.3
OP	14.2	16.0	30.2	13.9	16.4	30.3	-0.3	+0.4	+0.1

[2H] Sales below target, OP below target

Display
Materials

Photo IPS Sales in line with target

Rubbing IPS Sales below target

VA Sales below target

Fixed cost above expectations ¥0.1 billion

Semis
Materials

[2H] Sales above target, OP above target

ARC® Sales above target

Other semis materials Sales above target (multi layer materials above target, other new materials¹ below target)

Fixed cost above expectations ¥0.2 billion

1. other new materials: EUV materials, CMOS image sensor materials, 3D packaging process materials total

Inorganic
Materials

[2H] Sales above target, OP below target

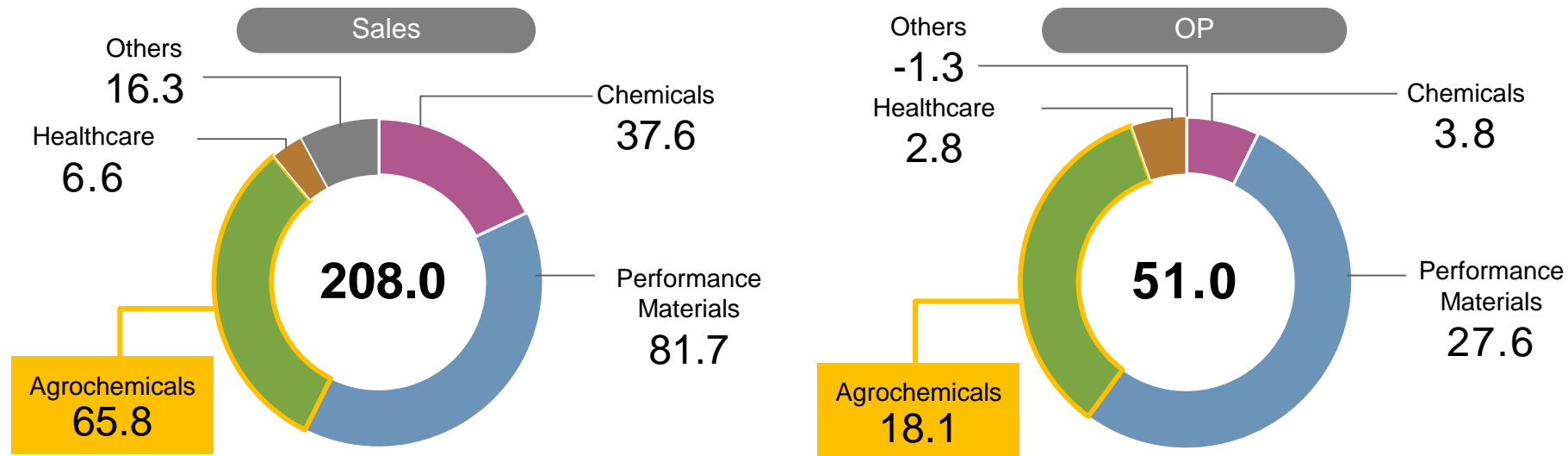
SNOWTEX Sales above target (non-polishing and polishing up)

Organo/Monomer Sol Sales below target

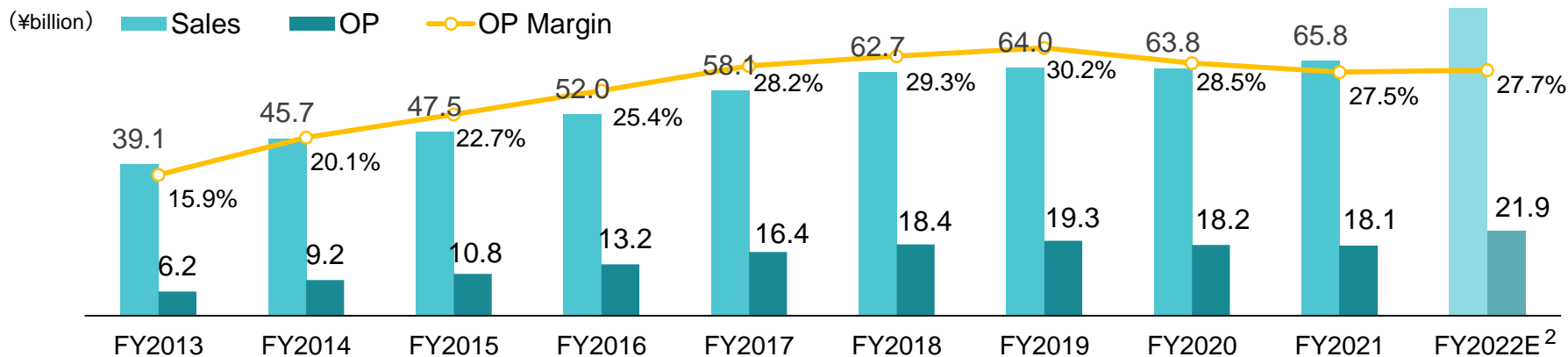
Oilfield materials Sales above target

Fixed cost above expectations ¥0.3 billion

FY2021 Actual by Segment (¥billion)¹



Agrochemicals – Recent Financial Performance



1. Organizational change was implemented in April, 2022. FY2013-2020 Actual figures are based on old segmentation.

FY2021 actual has been revised to reflect organizational change in April 2022 (see p82, p83)

2. Outlook as of Nov 2022

【1H】 Sales YOY +43%, Sales above target 【Full-Year Outlook】 Sales YOY +20%

Main Products (in order of FY2021 Sales amount)	Types	FY2022 Outlook as of Aug 2022 ¹			FY2022 Outlook as of Nov 2022		
		YOY Change			YOY Change		
		1H	2H	Total	1H Actual	2H	Total
ROUNDUP ²	Herbicide	+18%	+5%	+11%	+16%	+3%	+9%
Fluralaner	Animal Health products	+33%	+13%	+24%	+42%	+32%	+38%
ALTAIR	Herbicide	+23%	+2%	+6%	+31%	+10%	+14%
TARGA	Herbicide	+25%	-7%	+7%	+30%	-1%	+13%
DITHANE	Fungicide	+37%	+3%	+15%	+38%	+3%	+15%
PERMIT	Herbicide	+203%	-54%	0%	+190%	-45%	+4%
LEIMAY	Fungicide	+104%	+54%	+68%	+144%	+71%	+92%
GRACIA	Insecticide	+218%	+30%	+72%	+199%	+47%	+81%
QUINTEC	Fungicide	-85%	+5%	-24%	+121%	-97%	-26%
Total Segment³	-	+33%	+3%	+15%	+43%	+6%	+20%

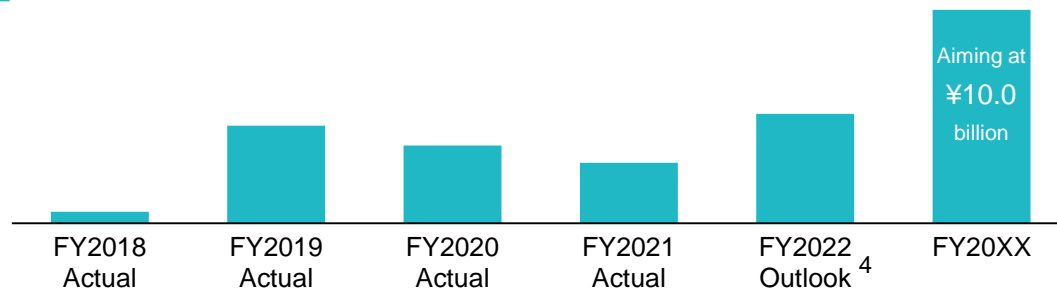
Reference

- No.1 in the domestic agrochemicals sales ranking (Oct 2019- Sep 2020)

ROUNDUP Business Briefing (January 22, 2020)

1. Figures for 1H and Total were not disclosed at the time of August 2022. Figures for 2H have been disclosed since May 2022 and remain unchanged
2. ROUNDUP AL for general household accounting for 32% of 1H FY2022 ROUNDUP sales
3. Total segment sales YOY include discount

GRACIA Sales



4. as of Nov 2022

[1H] Sales up ¥10.7 billion, OP up ¥5.2 billion,
Fixed cost up ¥0.7 billion, Inventory adjustment cost down ¥1.0 billion

(¥billion)

	FY2021 Actual			FY2022 Actual			YOY Change	
	1Q	2Q	1H	1Q	2Q	1H	2Q	1H
Sales	13.4	11.6	25.0	19.7	16.0	35.7	+4.4	+10.7
OP	4.0	2.9	6.9	6.8	5.3	12.1	+2.4	+5.2

1. 1H FY2021 actual has been revised to reflect organizational change in April 2022 (see p82, p83)

Main products	ROUNDUP(Herbicide)	Sales up (ML: price & volume up, AL: price up)
	Fluralaner(Animal health product)	Sales up (API: up due to shipment shifted from 4Q FY2021 to 1Q FY2022, end of inventory adjustment, royalties: up)
	ALTAIR(Herbicide)	Sales up (domestic & export: up, export: partial shipment shifted from 2H to 2Q FY2022)
	TARGA(Herbicide)	Sales up (demand increase)
	DITHANE(Fungicide)	Sales up (mainly up for export)
	PERMIT(Herbicide)	Sales up (export: shipment skewed to 2H FY2021)
	LEIMAY(Fungicide)	Sales up (export: sales up for mixture product application in Europe)
	GRACIA(Insecticide)	Sales up (domestic: sales up due to end of distribution inventory adjustment, export: sales up due to sales expansion in India & Indonesia)
	QUINTEC(Fungicide)	Sales up (shipment shifted from 2H to 2Q FY2022)

1H FY2022 Financial Results Compared to Outlook

【1H】 Sales above target ¥2.5 billion, OP above target ¥1.5 billion,
Inventory adjustment cost below expectations ¥0.3 billion

(¥billion)

	FY2022 Outlook as of Aug 2022			FY2022 Actual			vs. Outlook
	1Q Actual	2Q	1H	1Q	2Q	1H	2Q·1H
Sales	19.7	13.5	33.2	19.7	16.0	35.7	+2.5
OP	6.8	3.8	10.6	6.8	5.3	12.1	+1.5

Main products

ROUNDUP(Herbicide)	Sales below target (ML: in line with target, AL: below target)
Fluralaner(Animal health product)	Sales above target (royalties above target)
ALTAIR(Herbicide)	Sales above target (export: shipment shifted from 2H to 2Q FY2022)
TARGA(Herbicide)	Sales above target (shipment shifted from 2H to 2Q FY2022)
DITHANE(Fungicide)	Sales in line with target
PERMIT(Herbicide)	Sales below target (partial shipment shifted from 2Q to 2H FY2022)
LEIMAY(Fungicide)	Sales above target (shipment shifted from 4Q FY2021 to 1Q FY2022 and from 2H to 2Q FY2022, demand increase)
GRACIA(Insecticide)	Sales below target (domestic: below target, export: above target)
QUINTEC(Fungicide)	Sales above target (shipment shifted from 2H to 2Q FY2022)

【Full-Year】 Sales up ¥13.4 billion, OP up ¥3.8 billion,
Fixed cost up ¥1.7 billion, Inventory adjustment cost down ¥1.5 billion

(¥billion)

	FY2021 Actual					FY2022 Outlook as of Nov 2022					YOY Change				
	1H	3Q	4Q	2H	Total	1H Actual	3Q	4Q	2H	Total	1H	3Q	4Q	2H	Total
Sales	25.0	11.9	28.9	40.8	65.8	35.7	11.3	32.2	43.5	79.2	+10.7	-0.6	+3.3	+2.7	+13.4
OP	6.9	3.0	8.2	11.2	18.1	12.1	1.6	8.2	9.8	21.9	+5.2	-1.4	0.0	-1.4	+3.8

1. FY2021 actual has been revised to reflect organizational change in April 2022 (see p82, p83)

Main products	ROUNDUP(Herbicide)	Sales up (ML: price & volume up, AL: price up)
	Fluralaner(Animal health product)	Sales up (API: up due to shipment shifted from 4Q FY2021 to 1Q FY2022, end of inventory adjustment, API sales & royalties: up)
	ALTAIR(Herbicide)	Sales up (mainly up for domestic)
	TARGA(Herbicide)	Sales up (demand increase)
	DITHANE(Fungicide)	Sales up (mainly up for export)
	PERMIT(Herbicide)	Sales up
	LEIMAY(Fungicide)	Sales up (export: sales up for mixture product application in Europe)
	GRACIA(Insecticide)	Sales up (domestic: sales up due to end of distribution inventory adjustment, export: sales up due to sales expansion in India & Indonesia and sales recovery in Korea)
	QUINTEC(Fungicide)	Sales down (shipment shifted from 4Q FY2020 to 1Q FY2021)

FY2022 Financial Outlook Compared to Outlook as of Aug 2022

【2H】 Sales above target ¥1.3 billion, OP below target ¥0.2 billion,
Fixed cost above expectations ¥0.5 billion

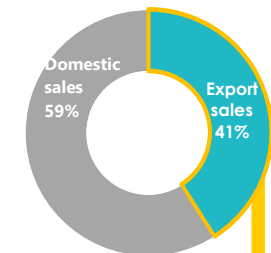
(¥billion)

	FY2022 Outlook as of Aug 2022			FY2022 Outlook as of Nov 2022			vs. Outlook as of Aug 2022		
	1H	2H	Total	1H Actual	2H	Total	1H	2H	Total
Sales	33.2	42.2	75.4	35.7	43.5	79.2	+2.5	+1.3	+3.8
OP	10.6	10.0	20.6	12.1	9.8	21.9	+1.5	-0.2	+1.3

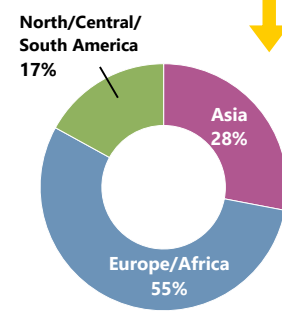
Main products	ROUNDUP(Herbicide)	Sales below target (ML: in line with target, AL: below target)
	Fluralaner(Animal health product)	Sales above target (API sales & royalties above target)
	ALTAIR(Herbicide)	Sales above target (domestic above target, export below target due to shipment shifted from 2H to 2Q FY2022)
	TARGA(Herbicide)	Sales above target (demand increase)
	DITHANE(Fungicide)	Sales in line with target
	PERMIT(Herbicide)	Sales above target (shipment shifted from 2Q to 2H FY2022)
	LEIMAY(Fungicide)	Sales above target (export: sales above for mixture product application in Europe)
	GRACIA(Insecticide)	Sales above target (mainly up for export)
	QUINTEC(Fungicide)	Sales below target (shipment shifted from 2H to 2Q FY2022)

	Launch	Products	Application	Product development type	Notes
Existing products	2002	ROUNDUP	Herbicide	Acquired	Acquired domestic business from Monsanto, continuing to grow
	2008	LEIMAY	Fungicide	In-house	
	2008	STARMITE	Insecticide	In-house	
	2009	PULSOR (THIFLUZAMIDE)	Fungicide	Acquired	Acquired world business from Dow
	2009	PREVATHON	Insecticide	Licensed-in	Licensed from DuPont
	2010	ROUNDUP AL	Herbicide	In-house	For general household shower-type herbicide market, launched ROUNDUP AL II in FY2016 and AL III in FY2017, growing sharply
	2011	ALTAIR	Herbicide	In-house	Launched in Korea in FY2011 and in Japan in FY2012
	2013	Fluralaner	Animal health product	In-house	Started to be supplied to MSD ¹ in July as scheduled
	2014	BRAVECTO ²	Veterinary medical product for companion animals	-	Launched in several countries in EU in April 2014, in the USA in June 2014 and in Japan in July 2015
	2015	TREFANOCIDE	Herbicide	Licensed-in	Acquired by Gowan from Dow, exclusive sales right in Japan transferred to Nissan Chemical
	2017	NEXTER	Fungicide	Licensed-in	Licensed from Syngenta
	2017	TRANSFORM™ / EXCEED™ / VIRESCO™	Insecticide	Licensed-in	Licensed from Dow
2017	EXZOLT ²	Veterinary medical product for poultry	-	Launched in EU in September for poultry red mites by MSD	
New products - Pipeline	2018	GRACIA	Insecticide	In-house	Effective against a wide range of serious pests, having less negative impact on honeybees. Launched in Korea in FY2018, in Japan in FY2019, and in India and Indonesia in FY2021 (expected peak sales ¥10.0 billion)
	2019	QUINTEC (QUINOXYFEN)	Fungicide	Acquired	Acquired world business from Corteva. Protective fungicide highly effective in controlling powdery mildew in fruits and vegetables
	2020	DITHANE (MANCOZEB)	Fungicide	Acquired	Acquired Japan and Korea business from Corteva in December 2020. Protective fungicide with significant efficacy against various plant diseases in fruits and vegetables
	2024	NC-653(DIMESULFAZET)	Herbicide	In-house	Effective against resistant weeds, having excellent safety to rice (expected peak sales ¥3.5 billion)
	2025	NC-520	Insecticide	Joint development	Insecticide for paddy rice co-developed with other companies. Highly effective against planthoppers (expected peak sales ¥2.5 billion including mixture products)
	2027	NC-656	Herbicide	In-house	Our first foliar application rice herbicide with excellent efficacy against resistant grass weeds (expected peak sales ¥10.0 billion)

Export ratio of agrochemicals business (FY2021 Actual)³



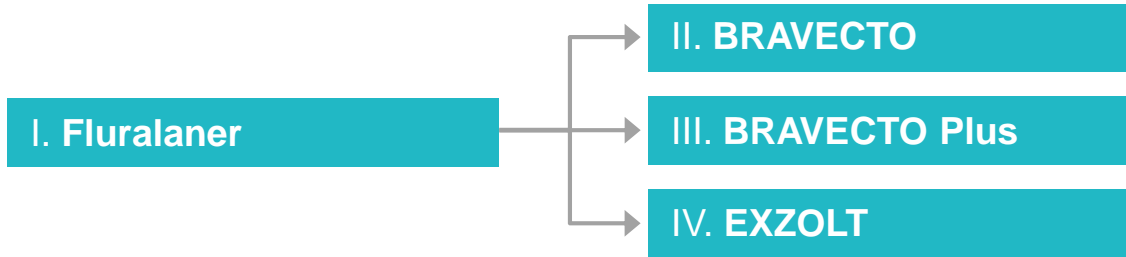
- Distribution by Region



Expected peak sales of new products
¥31.0 billion

1. MSD: MSD Animal Health, the global animal health business unit of Merck 2. BRAVECTO, EXZOLT: the product names developed by MSD, containing the active substance Fluralaner
 3. Including Fluralaner

- BRAVECTO series and EXZOLT, which contains the active pharmaceutical ingredient of Fluralaner invented by Nissan Chemical, are currently available in more than 100 countries.
- BRAVECRO's greatest feature is its effectiveness, which lasts up to 12 weeks (existing products last up to about 1 month)



I. Fluralaner

- Invented by Nissan Chemical and supplied to MSD¹ as the active pharmaceutical ingredient of BRAVECTO and EXZOLT
- Currently, BRAVECTO series and EXZOLT are available in more than 100 countries
- Compound patent
 - Fluralaner's compound patent expires in March 2025, but many countries have a patent term extension system
 - Some EU countries including UK, France, Germany – already extended to February 2029
 - USA, etc. – applications under examination

II. BRAVECTO

- Developed and launched by MSD
- Veterinary medical products providing 12 weeks² of continuous protection for dogs and cats against fleas and ticks with immediate effect, nearly 3 times longer than any monthly products in the market.
- Chewable tablet for dogs
 - April 2014 EU, June 2014 USA, July 2015 Japan, July 2019 China
 - July 2020 monthly chews for puppies in USA
- Spot-on solution for dogs and cats
 - for cats: July 2016 EU, December 2016 USA, June 2018 Japan
 - for dogs: January 2017 USA and EU, January 2021 Japan

III. BRAVECTO Plus

- A broad-spectrum combination spot-on solution for cats to treat internal and external parasite infestations
 - July 2018 EU, December 2019 USA, January 2021 Japan

IV. EXZOLT

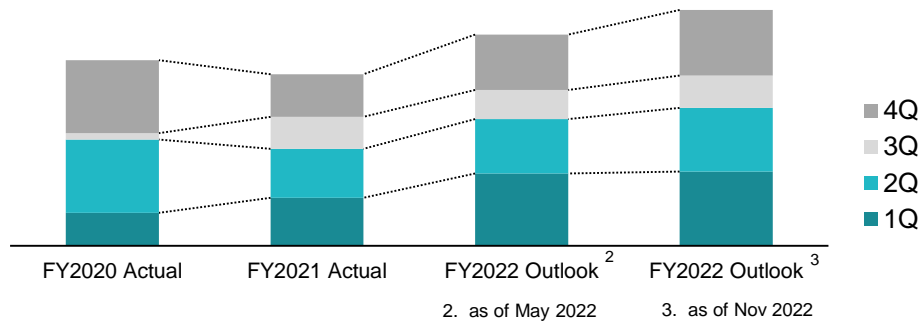
- A poultry medicine against red mite launched by MSD (administered via drinking water)
 - September 2017 EU, June 2018 Korea and Middle East etc., July 2021 Japan
- A cattle medicine
 - March 2022 approved in Brazil, May 2022 approved in Mexico

1. MSD: MSD Animal Health, the global animal health business unit of Merck 2. 8 weeks for *Rhipicephalus sanguineus* ticks

Nissan Chemical's Revenues are Consisted from Following Two Factors

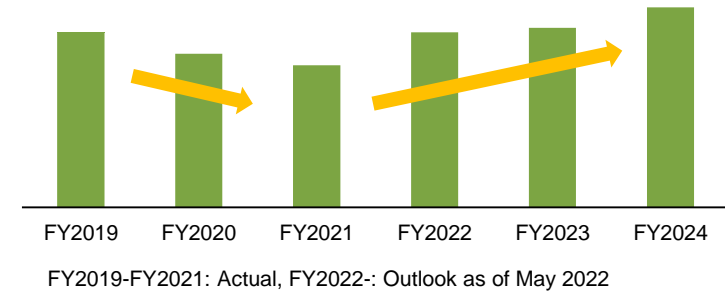
- Sales of Fluralaner to MSD as API¹ of BRAVECTO and EXZOLT products
 - Running royalties received from MSD
1. API: Active Pharmaceutical Ingredient

FY2020-FY2022 Fluralaner Quarterly Sales (including royalties)



FY2019-FY2024 Fluralaner Pro-forma Sales Image (including royalties)

(No change from FY2021 Presentation Materials announced in May 2022)



Royalties revenue used to be recognized in 2Q and 4Q until FY2020. Due to changes in accounting policies, it has been recognized in each quarter since FY2021 (see p81).

- Inventory adjustments for Fluralaner were completed in FY2021.
- Plan a large sales increase in FY2022, due to the shipments shifted from FY2021 to FY2022. Assumed exchange rate is ¥115/\$ (as of May 2022).
- Assumed exchange rate for FY2023 and beyond: ¥110/\$.
- The mid-term plan for FY2027 includes the forecast of patent extensions and expirations by country (see p48) and does not include the sales increase associated with the launch of newly developed BRAVECTO series and EXZOLT.

BRAVECTO series and EXZOLT R&D

MSD is developing several pipeline products which contain the API of Fluralaner (including new type of BRAVECTO for pets and spot-on solution for livestock)

Expand product portfolio through acquisition and introduction of new pesticides

QUINTEC (QUINOXYFEN)

- QUINTEC is Nissan Chemical's main product of fungicides containing QUINOXYFEN (active ingredient)
- Acquired the QUINOXYFEN product line of fungicides including QUINTEC brand from Corteva in November 2019
- Started to sell in December 2019
- Distributed as a fungicide for fruit trees and vegetables. Mainly sold in USA
- Protective fungicide highly effective in controlling powdery mildew in fruits (especially grapes) and vegetables

DITHANE (MANCOZEB)

- DITHANE is Nissan Chemical's main product of fungicides containing MANCOZEB (active ingredient)
- Acquired the MANCOZEB product line of fungicides in Japan and Korea including DITHANE brand from Corteva in December 2020
- Started to sell in January 2021 in Japan
- Protective fungicide with significant efficacy against various plant diseases in fruits (especially apples and citrus) and vegetables. Excellent rain fastness

- Average amortized period fixed at 5 or 16 years(straight-line method)(weighted average 15.6 years) after the accounting audit. (tentatively calculated under the condition of 5-year amortization period before audit)

DITHANE Acquisition's Estimated PL Impact¹

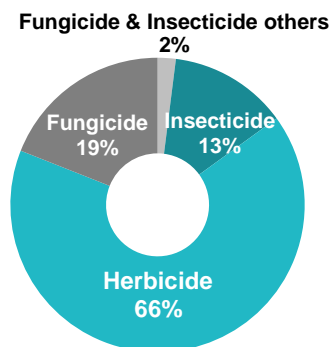
(¥billion)

	OP	OP + Amortization
FY2020	0.3	0.4
FY2021	0.7	1.1
Total FY2022-26	3.6	5.3

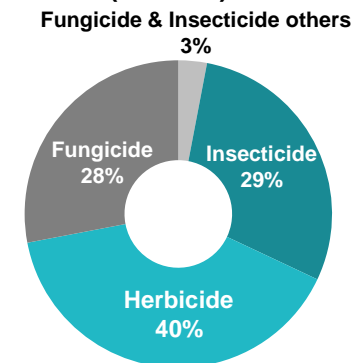
1. No change from FY2020 Presentation Materials announced in May 2021

Agrochemical Products Portfolio

Nissan Chemical Sales Distribution (FY2021)



Total Global Market Distribution (CY2021)



- Establish an API production site to ensure a stable global supply and reduce manufacturing costs
- NBR is added as a consolidated subsidiary from FY2022

Nissan Bharat Rasayan Private Limited (NBR)

Head Office	Gurgaon, Haryana (near New Delhi)
Plant Location	Newly built in Saykha, Gujarat (land leased by Gujarat Industrial Development Corporation)
Opening of Business	April 1, 2020
Business	Manufacturing active ingredients of agrochemicals (GRACIA, LEIMAY, QUINTEC, etc.) and exporting them to Nissan Chemical
Number of Operators	150-200 (assumptions as of 2022)
Plant Operating	4Q FY2022
Shareholders	Nissan Chemical 70%, Bharat Rasayan Ltd (BRL) 30%
Board of Directors	Nissan Chemical 5, BRL 2, Independent 1, Total 8

Bharat Rasayan Ltd (BRL)

Foundation	1989 (one of major Indian agrochemical companies)
Listing	National Stock Exchange of India(NSE), Bombay Stock Exchange (BSE)
Major Shareholders	Founders families including Sat Narain Gupta, Chairman 75.05%
2021 PL	Sales INR 13,012 million, Net Income after Taxes INR 1,760 million
Plant Location	2 plants: (A) Dahej, Gujarat (B) Rohtak, Haryana
Relationship with Nissan Chemical	BRL manufactures active ingredients and intermediates of Nissan Chemical's products. Bharat Certis Agriscience, a related company of Bharat group, distributes certain Nissan Chemical's products(TARGA, PULSOR, PERMIT) in India

Funding Plan (as of May 2022)

Plant	6.0	Capital	2.3
Working capital and others	2.8	Borrowings provided by Nissan Chemical	6.5
Total required funds	8.8	Total funding plan	8.8

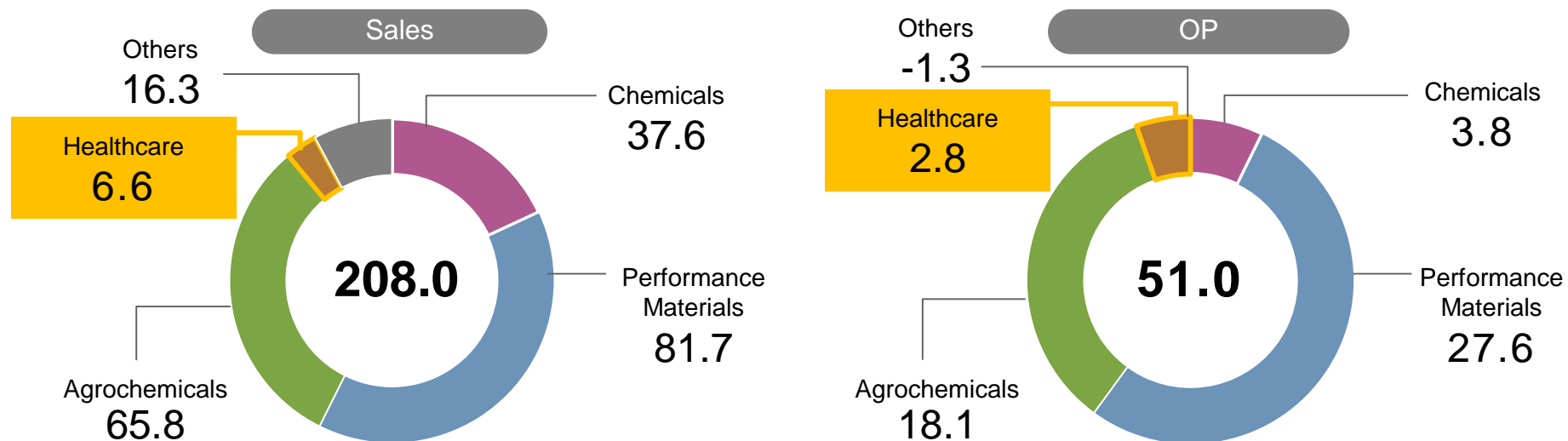
Expected Net Contribution to Nissan Chemical's Consolidated PL

FY	2021	2022	2023	2024	2025
OP	-	-0.2	1.0	2.4	2.9

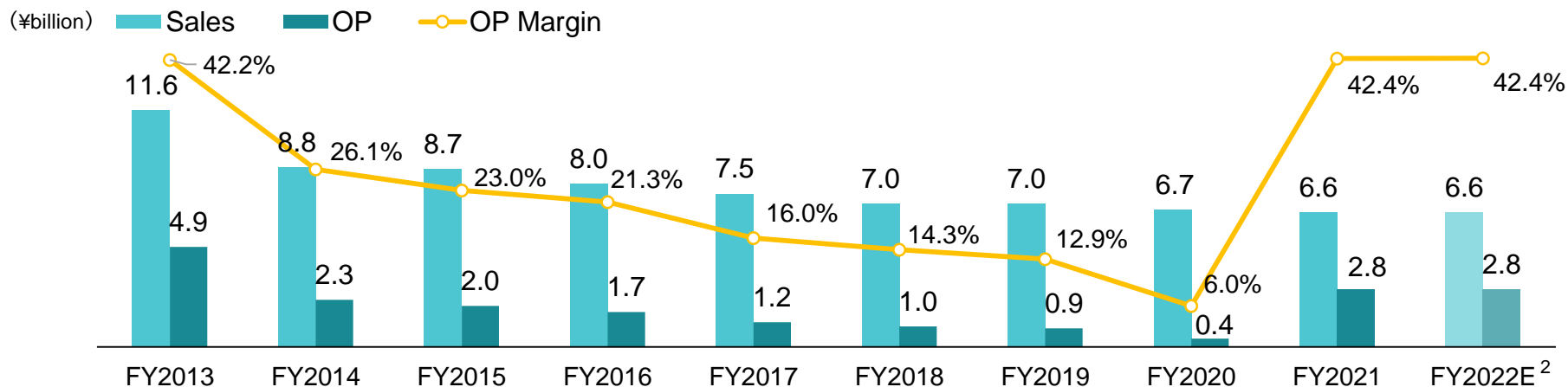
Advantages to Nissan Chemical

- Reliable and experienced local partner
- Diversify and secure sources of active ingredients and decrease materials shortage risks
- Lower production costs compared to plants in Japan
- Readily available plant site (official approval process for land lease already completed)
- Much less management and financial risks compared to M&A of an existing local company

FY2021 Actual by Segment (¥billion)¹



Healthcare – Recent Financial Performance



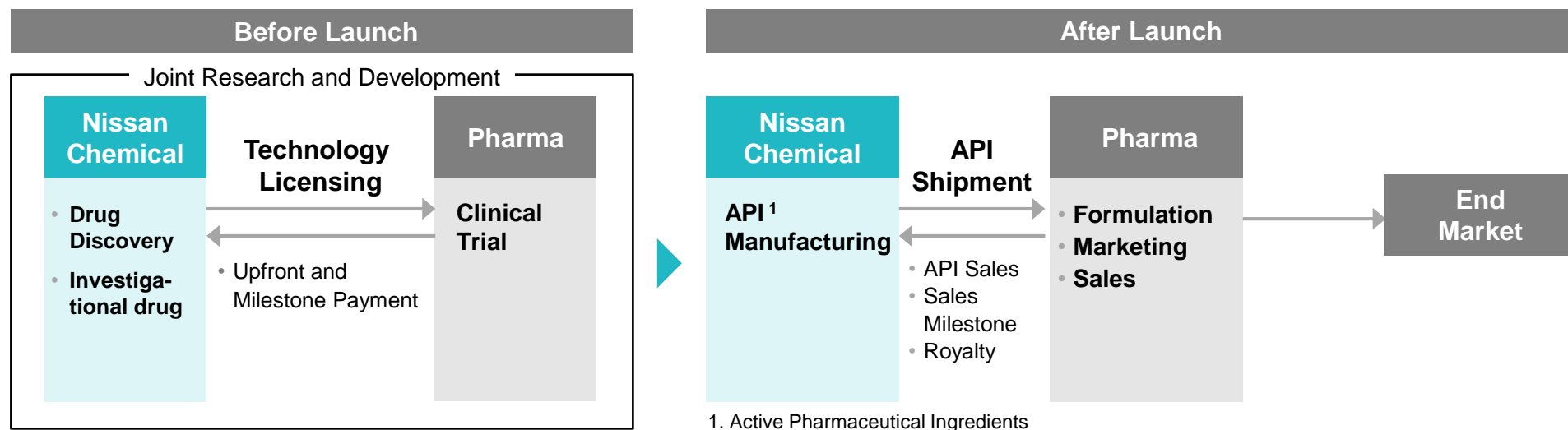
1. Organizational changes were implemented in April, 2022. FY2013-2020 Actual figures are based on old segmentation.

FY2021 actual has been revised to reflect organizational change in April 2022 (see p82, p83)

2. Outlook as of Nov 2022

Unique ethical pharma business model without sales force

Business Model (Drug Discovery)



LIVALO Anti-hyperlipidemia drug launched by Kowa in 2003. Currently sold in 30 countries around the world.

(¥billion)

Sales	FY2013 Actual ²	FY2020 Actual ³	FY2021 Actual	FY2022 Outlook as of Aug 2022 ⁴	FY2022 Outlook as of Nov 2022
Our Domestic and Export API Sales	10.2	2.8	2.3	2.1	2.3
API Sales YoY Change	-2%	-30%	-17%	-8%	0%
Domestic YoY Change	-2%	+6%	+30%	-8%	-17%
Export YoY Change	-1%	-35%	-28%	-8%	+8%

2. August 2013, domestic compound patent expired 3. August 2020, market exclusivity expired in EU 4. Figures were not disclosed at the time of August 2022

- Custom manufacturing and solution proposal business for new drug pharmaceutical ingredients and intermediates from pre-clinical to commercial production stages
- In addition, focusing on obtaining new contracts mainly for high potent and high-valued added GE API products

High-valued added GE API products

Launch	API	Indication
2016	Maxacalcitol	Psoriasis vulgaris / Secondary hyperparathyroidism
2017	Eldecalcitol	Osteoporosis

Custom Chemicals Sales Growth

Sales (FY2013-2027)

(¥billion)

FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022 Outlook as of Aug	FY2022 Outlook as of Nov	FY2024 Mid-Term Plan	FY2027 Mid-Term Plan
1.8	2.3	2.4	2.5	2.6	2.9	3.8	4.2	3.8	4.2	5.7	8.5

Sales YOY Change (FY2021-2027)

FY2021 Actual			FY2022 Outlook as of Aug 2022 ¹			FY2022 Outlook as of Nov 2022			FY2024 Mid-Term Plan (vs. FY2021)	FY2027 Mid-Term Plan (vs. FY2021)
1H	2H	Total	1H	2H	Total	1H Actual	2H	Total		
+29%	-2%	+11%	-4%	-12%	-8%	-6%	+5%	0%	+36%	+104%

1. Figures for 1H and Total were not disclosed at the time of August 2022. Figures for 2H have been disclosed since May 2022 and remain unchanged

【1H】 Sales down ¥0.09 billion, OP up ¥0.08 billion

(¥billion)

	FY2021 Actual			FY2022 Actual			YOY Change	
	1Q	2Q	1H	1Q	2Q	1H	2Q	1H
Sales	1.07	2.27	3.34	1.65	1.60	3.25	-0.67	-0.09
Healthcare	0.63	0.78	1.41	0.83	0.59	1.42	-0.19	+0.01
Custom Chemicals	0.44	1.49	1.93	0.82	1.01	1.83	-0.48	-0.10
OP	0.30	1.08	1.38	0.76	0.70	1.46	-0.38	+0.08
Healthcare	0.20	0.32	0.52	0.39	0.24	0.63	-0.08	+0.11
Custom Chemicals	0.10	0.76	0.86	0.37	0.46	0.83	-0.30	-0.03

1. Figures in p20, p21, p22, p23, p24, p78, p79, p80 may not match the numbers on this page due to rounding

2. 1H FY2021 actual has been revised to reflect organizational change in April 2022 (see p82, p83)

【1H】 Sales up, OP up

Healthcare

LIVALO

Sales up (domestic down, export up)

【1H】 Sales down, OP down

Custom
Chemicals

Sales down due to shipment skewed to 2H FY2022 in some products

1H FY2022 Financial Results Compared to Outlook

【1H】 Sales above target ¥0.18 billion, OP above target ¥0.24 billion

(¥billion)

	FY2022 Outlook as of Aug 2022			FY2022 Actual			vs. Outlook
	1Q Actual	2Q	1H	1Q	2Q	1H	2Q-1H
Sales	1.65	1.42	3.07	1.65	1.60	3.25	+0.18
Healthcare	0.83	0.39	1.22	0.83	0.59	1.42	+0.20
Custom Chemicals	0.82	1.03	1.85	0.82	1.01	1.83	-0.02
OP	0.76	0.46	1.22	0.76	0.70	1.46	+0.24
Healthcare	0.39	0.06	0.45	0.39	0.24	0.63	+0.18
Custom Chemicals	0.37	0.40	0.77	0.37	0.46	0.83	+0.06

1. Figures in p20, p21, p22, p23, p24, p78, p79, p80 may not match the numbers on this page due to rounding

Healthcare

【1H】 Sales above target, OP above target

LIVALO

Sales above target
(domestic and export above target)

Custom
Chemicals

【1H】 Sales in line with target, OP above target

Sales in line with target

【Full-Year】 Sales down ¥0.03 billion, OP down ¥0.01 billion

(¥billion)

	FY2021 Actual					FY2022 Outlook as of Nov 2022					YOY Change				
	1H	3Q	4Q	2H	Total	1H Actual	3Q	4Q	2H	Total	1H	3Q	4Q	2H	Total
Sales	3.34	1.92	1.33	3.25	6.59	3.25	1.68	1.63	3.31	6.56	-0.09	-0.24	+0.30	+0.06	-0.03
Healthcare	1.41	0.48	0.53	1.01	2.42	1.42	0.43	0.53	0.96	2.38	+0.01	-0.05	0.00	-0.05	-0.04
Custom Chemicals	1.93	1.44	0.80	2.24	4.17	1.83	1.25	1.10	2.35	4.18	-0.10	-0.19	+0.30	+0.11	+0.01
OP	1.38	0.92	0.51	1.43	2.81	1.46	0.66	0.68	1.34	2.80	+0.08	-0.26	+0.17	-0.09	-0.01
Healthcare	0.52	0.15	0.17	0.32	0.84	0.63	0.17	0.12	0.29	0.92	+0.11	+0.02	-0.05	-0.03	+0.08
Custom Chemicals	0.86	0.77	0.34	1.11	1.97	0.83	0.49	0.56	1.05	1.88	-0.03	-0.28	+0.22	-0.06	-0.09

1. Figures in p20, p21, p22, p23, p24, p78, p79, p80 may not match the numbers on this page due to rounding
2. FY2021 actual has been revised to reflect organizational change in April 2022 (see p82, p83)

【Full-Year】 Sales flat, OP up

Healthcare

LIVALO

Sales flat (domestic down, export up)

Fixed cost down ¥0.1 billion

【Full-Year】 Sales flat, OP down

Custom
Chemicals

Sales flat

Fixed cost up ¥0.1 billion

1H FY2022 Financial Results Compared to Outlook as of Aug 2022

[2H] Sales above target ¥0.38 billion, OP above target ¥0.33 billion

(¥billion)

	FY2022 Outlook as of Aug 2022			FY2022 Outlook as of Nov 2022			vs. Outlook as of Aug 2022		
	1H	2H	Total	1H Actual	2H	Total	1H	2H	Total
Sales	3.07	2.93	6.00	3.25	3.31	6.56	+0.18	+0.38	+0.56
Healthcare	1.22	0.95	2.17	1.42	0.96	2.38	+0.20	+0.01	+0.21
Custom Chemicals	1.85	1.98	3.83	1.83	2.35	4.18	-0.02	+0.37	+0.35
OP	1.22	1.01	2.23	1.46	1.34	2.80	+0.24	+0.33	+0.57
Healthcare	0.45	0.14	0.59	0.63	0.29	0.92	+0.18	+0.15	+0.33
Custom Chemicals	0.77	0.87	1.64	0.83	1.05	1.88	+0.06	+0.18	+0.24

1. Figures in p20, p21, p22, p23, p24, p78, p79, p80 may not match the numbers on this page due to rounding

Healthcare **[2H]** Sales in line with target, OP above target

Healthcare

LIVALO

Sales in line with target
(domestic below target, export above target)

Fixed cost below expectations ¥0.1 billion

Custom Chemicals **[2H]** Sales above target, OP above target

Custom
Chemicals

Generic APIs above target

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E

(Environment)


- April 2021 Announced its Diversity Statement and Diversity Vision
- May 2022 Decided to work on realization of carbon neutrality by 2050
Established new long-term target for reducing greenhouse gas (GHG) emissions(see p67)
- June 2022 Reduced GHG emissions by melamine production stop (26,000 tons, equivalent to about 7% of FY2018)
- October 2022 Published "[Integrated Report 2022](#) 

S

(Social)

G

(Governance)

- April 2019 Established Nomination and Remuneration Advisory Committee as an optional advisory body of the Board of Directors
- June 2019 Introduced a performance-linked stock compensation plan called a Board Benefit Trust for Board of Directors, etc.
- June 2021 One female Outside Director added, as a result, the Board of Directors includes 4 Outside Directors out of 10
- June 2022 Announced incorporating ESG indicators into the officers' remuneration system
(65% base remuneration, 28% performance-related remuneration, 7% remuneration in stock.
Out of the 28% performance-related remuneration, 90% is profit-linked and 10% is ESG-linked.)
- June 2022 Updated and disclosed "[Corporate Governance Report](#) 

ESG Index and Third-party Recognition

Dow Jones Sustainability Asia Pacific Index

- November 2021
Selected as a constituent
for 4 consecutive years

Member of
**Dow Jones
Sustainability Indices**
Powered by the S&P Global CSA

FTSE

- June 2022: Selected as a constituent of FTSE4Good Index Series, FTSE Blossom Japan Index for 3 consecutive years
- June 2022: Selected as a constituent of FTSE Blossom Japan Sector Relative

1. FTSE Russell confirms that Nissan Chemical has been independently assessed according to the index criteria, and has satisfied the requirements to become a constituent of the FTSE Blossom Japan Sector Relative Index. The FTSE Blossom Japan Sector Relative Index is used by a wide variety of market participants to create and assess responsible investment funds and other products.



CDP

- December 2021
Listed on Water Security “A List” for 3 consecutive years and Climate Change “A- List” for 3 consecutive years



Certified Health & Productivity Management Organization (White 500)

- March 2022
Acquired for 6 consecutive years



S&P/JPX Carbon Efficient Index

- March 2022
Selected as a constituent
for 4 consecutive years



MSCI Japan Empowering Women (WIN) Select Index

- June 2022
Selected as a constituent

2022 CONSTITUENT MSCI JAPAN
EMPOWERING WOMEN INDEX (WIN)

2. THE INCLUSION OF NISSAN CHEMICAL CORPORATION IN ANY MSCI INDEX, AND THE USE OF MSCI LOGOS, TRADEMARKS, SERVICE MARKS OR INDEX NAMES HEREIN, DO NOT CONSTITUTE A SPONSORSHIP, ENDORSEMENT OR PROMOTION OF NISSAN CHEMICAL CORPORATION BY MSCI OR ANY OF ITS AFFILIATES. THE MSCI INDEXES ARE THE EXCLUSIVE PROPERTY OF MSCI. MSCI AND THE MSCI INDEX NAMES AND LOGOS ARE TRADEMARKS OR SERVICE MARKS OF MSCI OR ITS AFFILIATES.

Task Force on Climate-related Financial Disclosures (TCFD)

- August 2020
Announced its support for
recommendations



Corporate Value Improvement Award hosted by TSE

- January 2020
Selected as one of the 50 candidates among all listed
companies by the Tokyo Stock Exchange for 2
consecutive years

Specified materiality that we should engage to realize corporate image of 2027.
Aim to have sustainable growth with society by promoting initiatives.

▶▶▶1

Provision of New Value for Helping to Enrich People's Lives

▶ Nissan Chemical Sustainable Agenda¹

Rate of total sales of products and services that contribute to solving social issues in consolidated net sales

Maintain at least 55%

1. A plan to pursue "what we can do for the future of the globe and human" by providing products and services that contribute to solving social issues

▶▶▶2

Strengthening of Nissan Chemical's Business Base

▶ Personnel retention and trainings

Positive response rate in survey of employee attitude

At least 65%

▶ Promote Diversity

Proportion of female researchers

At least 18%

▶▶▶3

Continuous Improvement of Responsible Care Activities

▶ GHG Emission Target

Reduced by **at least 30%** compared to FY2018

Our Materiality

Strengthening of Corporate Governance, Risk Management and Compliance

Provision of New Value for Helping to Enrich People's Lives

Provide products and services that contribute to solving social issues through four businesses, with the refining and fostering of core technologies

Materiality Factor	Major Initiatives
<p>Supply of environmental-friendly products and services</p>	<ul style="list-style-type: none"> ■ Develop materials that contribute to the expansion of renewable energy ■ Develop materials that contribute to the achievement of a circular economy ■ Reduce the application amount of agrochemicals ■ Introduce recyclable packaging materials ■ Supply exhaust gas removal materials ■ Supply disinfectants and water treatment for septic tanks ■ Supply materials that enable reduction of oil and fat waste
<p>Contribution to smart society</p>	<ul style="list-style-type: none"> ■ Supply materials that contribute to higher capacity/speed of data communication and sensing
<p>Contribution to food issues</p>	<ul style="list-style-type: none"> ■ Supply agrochemicals to increase crop yields and conserve agricultural labor in food production ■ Contribution to the maintenance of health of livestock
<p>Contribution to improvement of the quality of life</p>	<ul style="list-style-type: none"> ■ Supply disinfectants for drinking water ■ Contribute to maintaining the health of companion animals
<p>Contribution to health issues</p>	<ul style="list-style-type: none"> ■ Supply generic drugs ■ Offer contracted manufacturing and service for pharmaceuticals ■ Develop materials for regenerative medicine market ■ Develop drugs for intractable diseases

Provision of New Value for Helping to Enrich People's Lives

Provide products and services that contribute to solving social issues through four businesses, with the refining and fostering of core technologies

Materiality Factor	Major Products and Services	Target for FY2027 (Compared to FY2021)
Supply of environmental-friendly products and services	<ul style="list-style-type: none"> ■ Secondary battery materials ■ Photoelectric conversion materials ■ CCU and CCUS materials ■ ECOPROMOTE ■ ROUND NOZZLE ULV5 ■ GREENDITHANE ■ AdBlue® ■ HI-LITE, Water treatment for Septic Tank ■ Venus Oilclean 	Net Sales + 10%
Contribution to smart society	<ul style="list-style-type: none"> ■ Display materials ■ Semiconductor materials ■ Sensor materials ■ Optical interconnect materials 	Net Sales + 55%
Contribution to food issues	<ul style="list-style-type: none"> ■ Agrochemicals ■ Fluralaner (for livestock) 	Net Sales + 15%
Contribution to improvement of the quality of life	<ul style="list-style-type: none"> ■ HI-LITE (for drinking water) ■ Fluralaner (for companion animals) 	Net Sales + 15%
Contribution to health issues	<ul style="list-style-type: none"> ■ Maxacalcitol and other generic drugs ■ Contracted manufacturing and service for pharmaceuticals ■ Oigonucleotide therapeutics ■ FCeM series ■ Prevelex series 	Net Sales + 5%
Rate of total sales of products and services that contribute to solving social issues in consolidated net sales	Nissan Chemical Sustainable Agenda	Maintain at least 55%

Strengthen our business foundation, including the enhancement of human capital, in order to enhance our response capability to increasingly diverse and sophisticated demands from the market

Materiality Factor	Major Initiatives	Target for FY2027
Enhancement of R&D capability	<ul style="list-style-type: none"> Accelerate R&D through the use of AI Expand core technologies Use open innovation further 	Total number of patent applications (FY2022 to 2027): 2,500
Improvement of product quality	<ul style="list-style-type: none"> Prevent serious complaints Prevent quality fraud and data tampering 	<ul style="list-style-type: none"> Number of serious complaints: Zero Attendance rate of quality training: At least 90%
Maintenance and improvement of employees' health	<ul style="list-style-type: none"> Promote measures against lifestyle-related diseases Implement mental health measures Conduct awareness activities for employees on maintaining their health Promote female's health 	Rate of employees within appropriate weight*: At least 70% *BMI (body mass index): 18.5 to 25.0
Creation of a comfortable workplace	<ul style="list-style-type: none"> Promote work-life balance Implement measures against harassment Provide support for childcare and nursing care, encourage male employees to take parental leaves 	Utilization rate for annual paid leaves: At least 80%
Personnel retention and trainings	<ul style="list-style-type: none"> Introduce a new personnel system (role evaluation system) Strengthen career development Enhance self-development support programs 	Positive response rate in survey of employee attitude on HR development: At least 65%
Promotion of diversity	<ul style="list-style-type: none"> Promote female's activities Recruit international students Promote employment of persons with disabilities 	<ul style="list-style-type: none"> Proportion of females in the regular position: At least 13% Proportion of female researchers: At least 18%
Promotion of fair-trading	<ul style="list-style-type: none"> Hold in-house training sessions, and conduct other educational and awareness activities for fair-trading Conduct educational and awareness activities for compliance 	<ul style="list-style-type: none"> Zero violations of antitrust laws Zero bribery of foreign public officials
Promotion of sustainable procurement	<ul style="list-style-type: none"> Provide feedbacks on results of sustainable procurement survey Provide supports in improvement for suppliers that don't meet the Company's standards 	Provision rate of supports in improvement for suppliers that don't meet the Company's standards: At least 90%
Adaption to climate change	<ul style="list-style-type: none"> Maintain and improve the resilience of business activities in the event of natural disasters 	Update and maintain BCPs for products that account for 50% of ordinary income

Continuous Improvement of Responsible Care Activities

Continue our commitment to Responsible Care, with a focus on reducing GHG emissions to achieve carbon neutrality by 2050

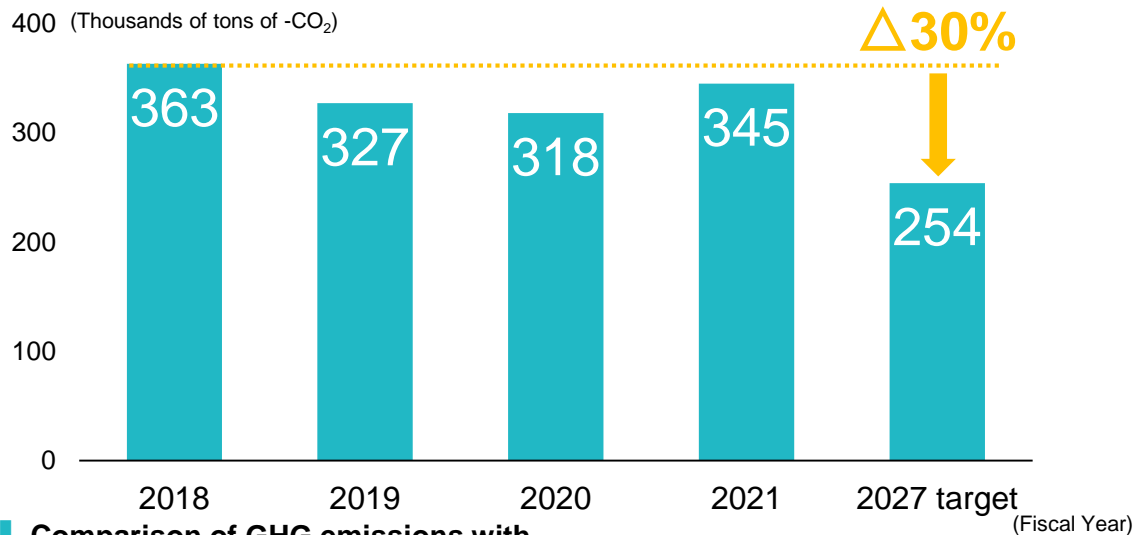
Materiality Factor	Major Initiatives	Target for FY2027
Mitigation of climate change	<ul style="list-style-type: none"> Reduce GHG emissions 	<p>GHG emissions: Reduce by at least 30% compared to FY2018 (3 years ahead of the target for FY2030)</p>
Promotion of occupational health and safety	<ul style="list-style-type: none"> Strengthen occupational safety management 	<ul style="list-style-type: none"> Zero accidents requiring staff time off from work Number of occupational accidents: Reduce by half compared to FY2020
Biodiversity conservation	<ul style="list-style-type: none"> Promote biodiversity conservation activities 	<p>Establish and operate Bio-Parks at Nissan Chemical's plants</p>
Management of chemical substances	<ul style="list-style-type: none"> Comply with laws and regulations regarding the use of chemical substances 	<p>Continue zero serious violations of laws and regulations</p>
Reduction of industrial waste and pollutant emissions	<ul style="list-style-type: none"> Reduce industrial waste and pollutant emissions for final disposal 	<p>Reduce final disposal ratio at Nissan Chemical's plants (compared to FY2020)</p>
Security and disaster prevention	<ul style="list-style-type: none"> Strengthen the management of security and disaster prevention 	<ul style="list-style-type: none"> Zero fires, explosions and chemical spills Zero security accidents

Reduction of GHG Emissions

- Focus on improving production technology and adopting renewable energy etc., in addition to conventional efforts, to achieve carbon neutrality by 2050
- GHG emissions in FY2021 increased by 27,000 tons-CO₂ compared to FY2020

(Factors for increase)

- Increase in production of ammonia related products (Increase in CO₂ emissions, natural gas consumption, and electricity consumption during production)
- Increase in production of nitric acid products (Increase in N₂O emissions during production)
- Increase in use of non-renewable electricity due to construction work of Toyama Kyodo Jikahatsuden (decrease in hydroelectric power supply)



Comparison of GHG emissions with general chemical manufacturers

(Thousands of tons -CO₂)

FY	2011	2018	2019	2020	2021
Nissan Chemical	448	363	327	318	345

Average of 4 major general chemical manufacturers (non-consolidated basis)	-	-	5,845	5,581
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Initiatives in Mid-Term Plan Vista2027 (FY2022-2027)

- Zero N₂O emissions from nitric acid plants (Planned investment of 500 million yen, variable cost of 50 million yen/year)
- Melamine production shutdown
- Converting fuels at Onoda Plant
- Promoting reduction of GHG emissions through full-scale introduction of ICP
- Reduction of CFC equipment
- Upgrade to energy-efficient equipment

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Mid-Term Plan Vista2027 (FY2022-2027) announced in May 2022

Sales and Income Targets by Segment

(¥billion)

		FY2021 Actual ¹	FY2022 Outlook ²	FY2024 Mid-Term Plan	FY2027 Mid-Term Plan	FY2024 vs. FY2021	FY2027 vs. FY2021
Chemicals	Sales	37.6	42.4	37.6	40.1	0.0	+2.5
	OP	3.8	2.5	3.5	3.9	-0.3	+0.1
Performance Materials	Sales	81.7	89.2	102.9	117.2	+21.2	+35.5
	OP	27.6	30.3	32.1	38.0	+4.5	+10.4
Agrochemicals	Sales	65.8	79.2	77.8	82.3	+12.0	+16.5
	OP	18.1	21.9	21.7	21.0	+3.6	+2.9
Healthcare	Sales	6.6	6.6	7.2	11.5	+0.6	+4.9
	OP	2.8	2.8	2.1	4.3	-0.7	+1.5
Trading, Others, Adjustment	Sales	16.3	16.8	29.5	33.9	+13.2	+17.6
	OP	-1.3	-2.0	-0.9	-0.2	+0.4	+1.1
Planning and Development ³	Sales	0.0	0.0	1.3	4.4	+1.3	+4.4
	OP	-4.9	-5.5	-4.7	-4.7	+0.2	+0.2
Total	Sales	208.0	234.2	255.0	285.0	+47.0	+77.0
	OP	51.0	55.5	58.5	67.0	+7.5	+16.0

1. FY2021 actual has been revised to reflect organizational change in April 2022 (see p82, p83)

2. Outlook as of Nov 2022 3. The figures of Planning and Development Division are internal figures of Trading, Others, Adjustment

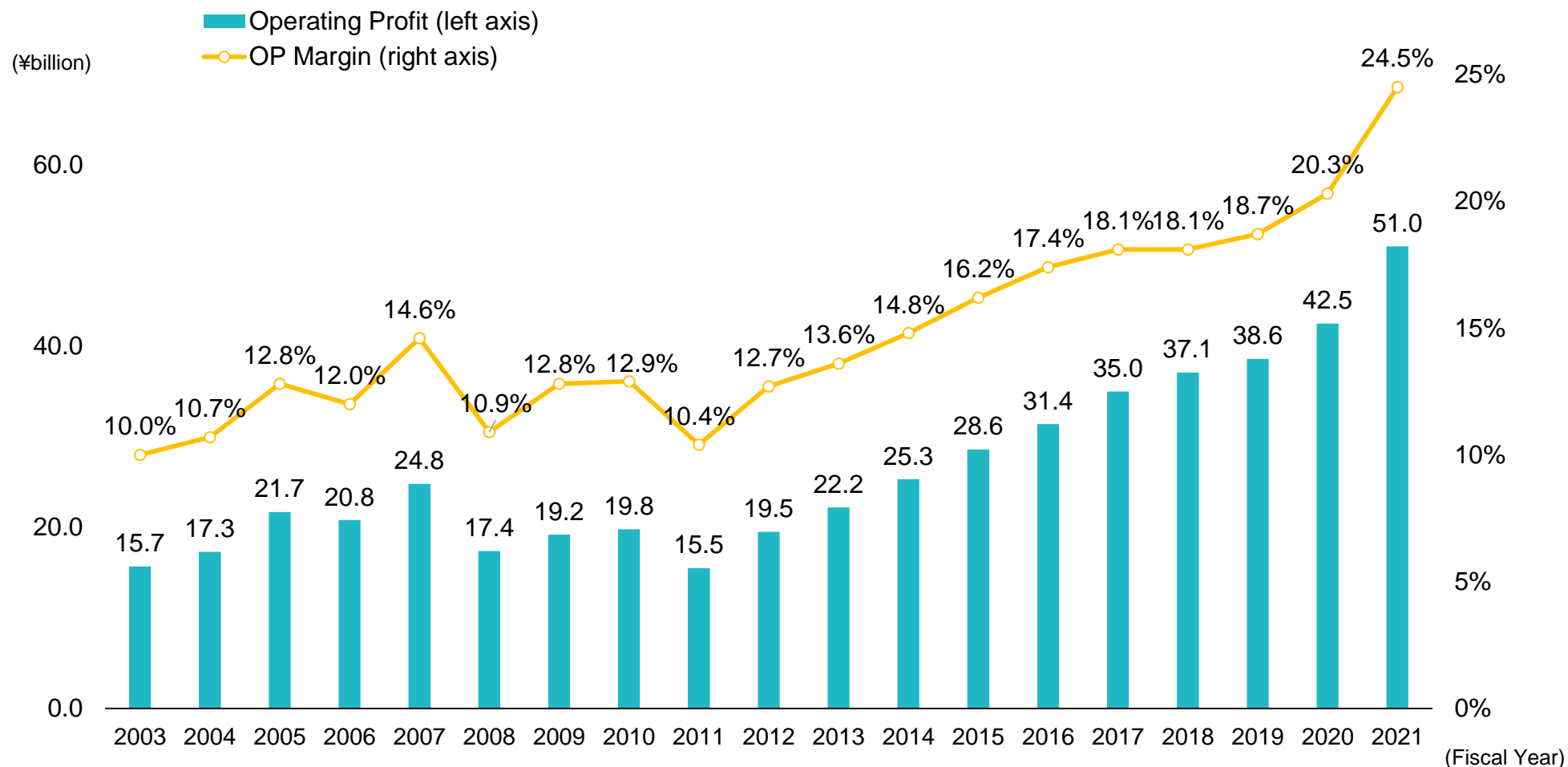
Impact of organizational change regarding Healthcare Div.

(¥billion)

	FY2024	FY2027
R&D expenses (Impact of transfer to Planning and Development Division)	1.3	1.3

OP Margin Trend

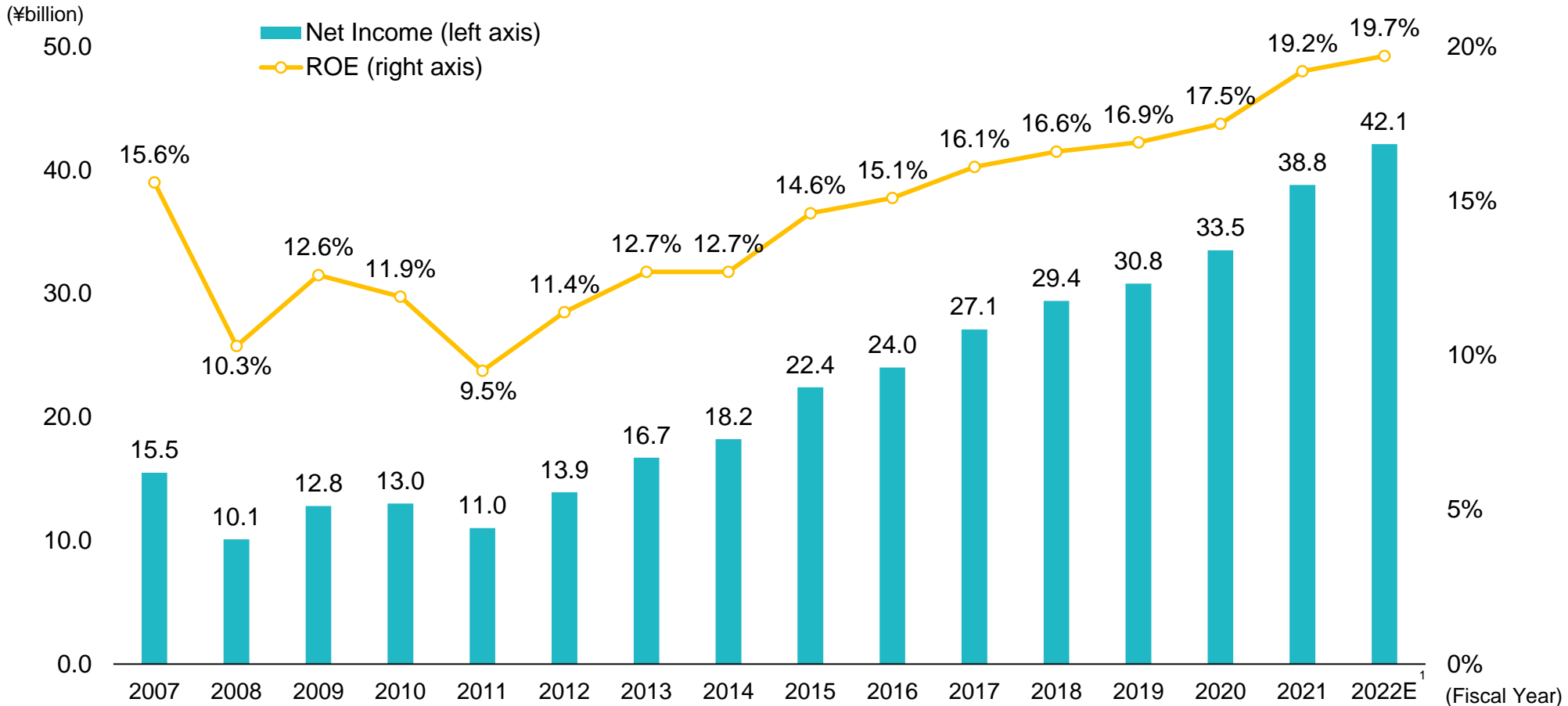
- OP margin has been above 10% for 19 consecutive years (FY2003-2021)
- FY2021 Actual : 24.5%



1. FY2021 Actual: Including effects of changes in accounting policies (see p81)

ROE Trend

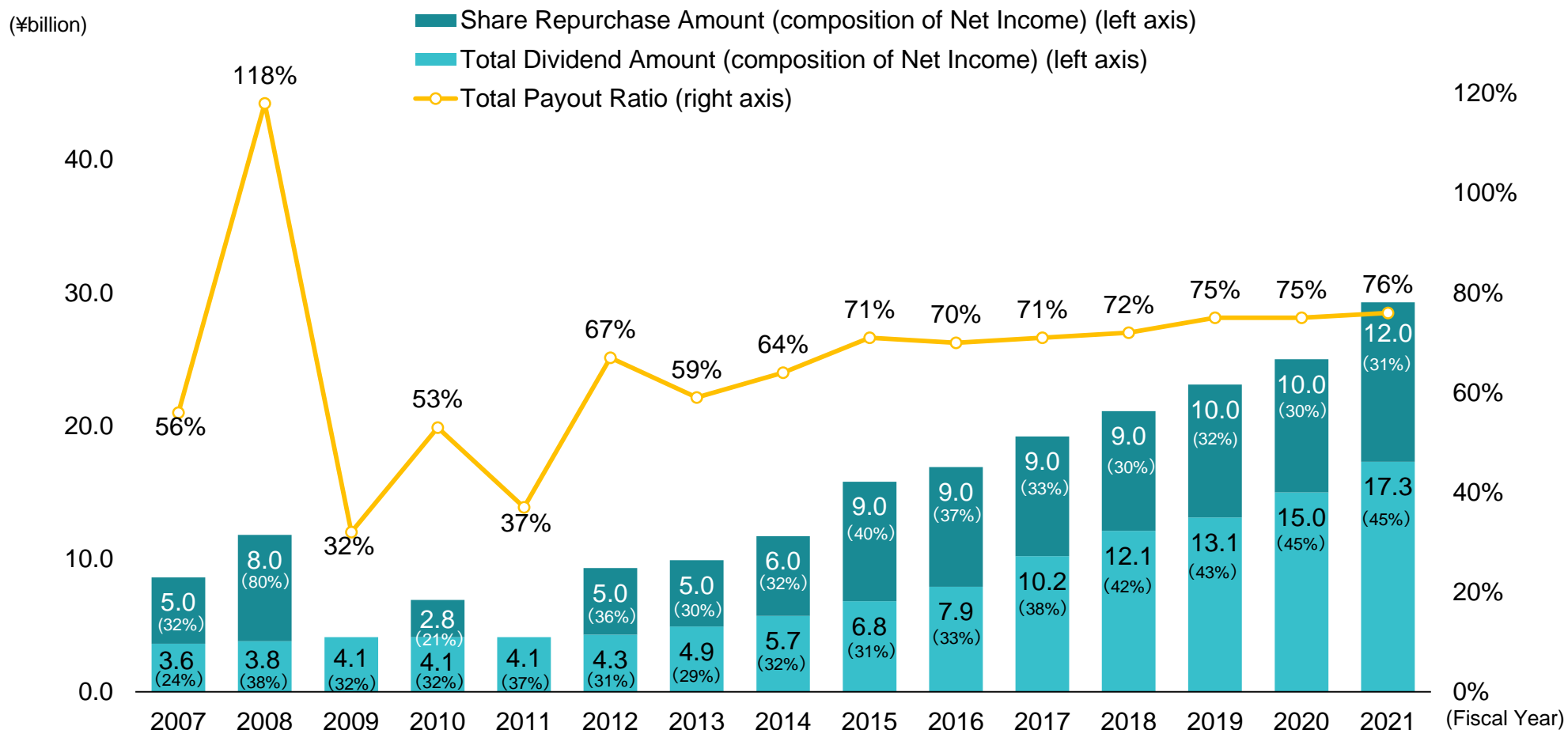
- Position ROE as the most important financial indicator for a long time
- Mid-Term Plan FY2019-2021 Target : Maintain above 16% ⇒ Achieved
- New Mid-Term Plan FY2022-2027 Target: above 18%
- FY2022 Outlook: 19.7%



1. as of Nov 2022

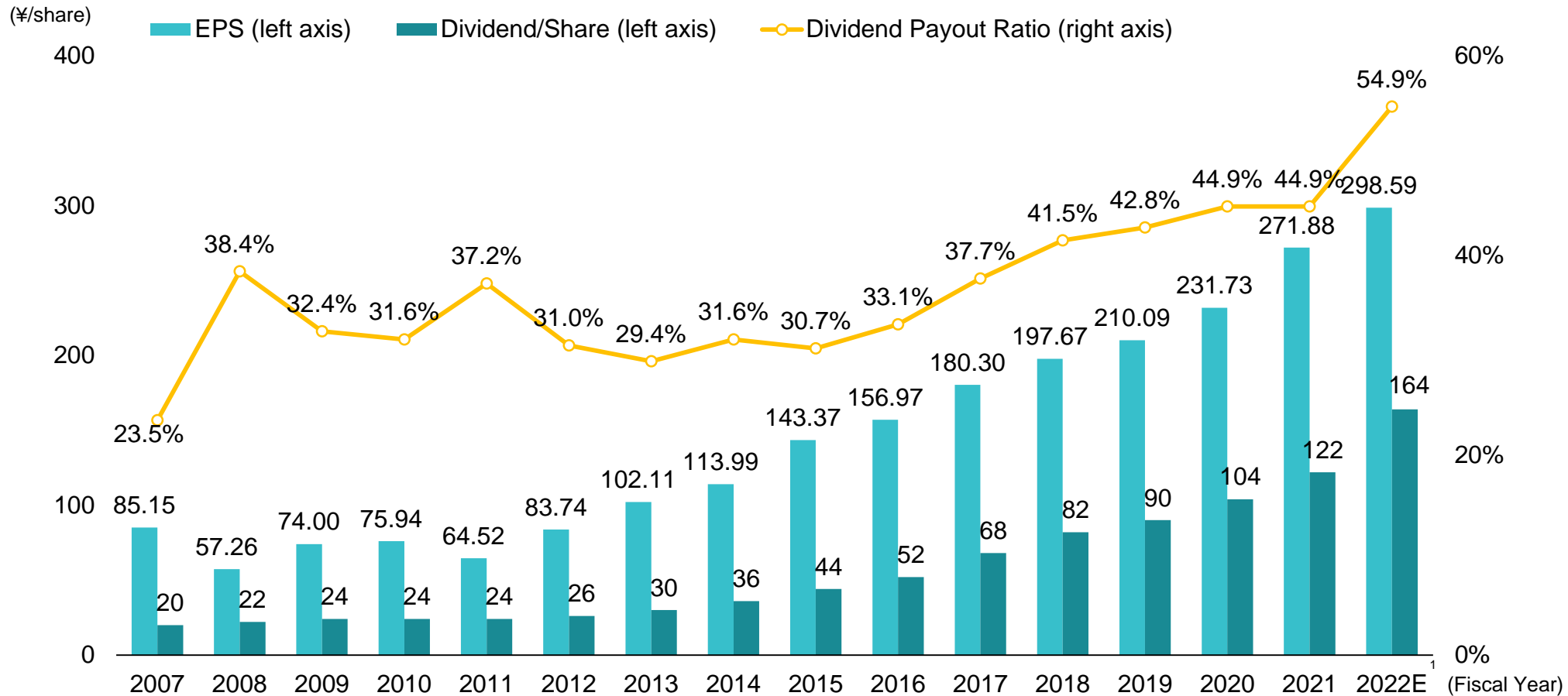
Shareholders Return Policy - Total Payout Ratio

- Maintain an aggressive shareholders return policy
- Mid-Term Plan FY2019-2021 Target : 72.5% in FY2019, 75% after FY2020 ⇒ Achieved
- FY2021 Actual: 76%
- New Mid-Term Plan FY2022-2027 Target: 75%



Shareholders Return Policy – Dividend Payout Ratio

- Gradually increased from 30.7% in FY2015 to 44.9% in FY2021
- Increase Dividend Payout Ratio Target to 55% from 45% in New Mid-Term Plan FY2022-2027
- Emphasis on direct shareholder returns
- Increased dividend/share for 10 consecutive years until FY2021



Shareholders Return Policy - Share Repurchase

- Started share repurchase in FY2006 only to enhance ROE
- Repurchased ¥104.5 billion, 44.75 million shares (23.8% of shares issued) in total from FY2006 to FY2021
- Cancelled all repurchased shares
- Continue to strengthen shareholders return through share repurchase

FY2006 - 2021 Shareholders Return (no share repurchase in FY2009 and FY2011)

Fiscal Year	2006	2007	2008	2010	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
Shares purchased (thousand shares) ¹	3,500	3,399	7,355	2,167	6,372	3,263	2,764	3,333	2,621	2,292	1,682	2,138	1,829	2,033	44,748
Purchase costs (¥billion) ¹	4.7	5.0	8.0	2.8	5.0	5.0	6.0	9.0	9.0	9.0	9.0	10.0	10.0	12.0	104.5
Shares cancelled (thousand shares)	3,000	3,635	7,000	3,000	6,000	4,000	3,000	2,000	2,000	3,000	2,000	3,000	1,000	2,000	44,635
Shares issued at FY end (million shares)	185	181	174	171	165	161	158	156	154	151	149	146	145	143	-
Treasury shares at FY end (thousand shares) ²	1,367	1,233	1,660	885	1,258	522	287	1,621	2,242	1,535	1,218	523	1,352	1,384	-
Total payout ratio (dividend + share repurchase) (%)	60	56	118	53	67	59	64	71	70	71	72	75	75	76	-

FY2018 - 2022 Share Repurchase and Cancel Program

Fiscal Year	2018			2019			2020			2021			2022
	1H	2H	Total	1H	2H	Total	1H	2H	Total	1H	2H	Total	1H
Shares purchased (thousand shares) ¹	976	706	1,682	1,270	868	2,138	1,334	495	1,829	1,262	771	2,033	683
Purchase costs (¥billion) ¹	5.0	4.0	9.0	6.0	4.0	10.0	7.0	3.0	10.0	7.0	5.0	12.0	5.0
Shares cancelled ³ (thousand shares)	2,000	0	2,000	2,000	1,000	3,000	1,000	0	1,000	2,000	0	2,000	1,700

1. Excluding share acquisitions for performance-based compensation 2. Including share acquisitions for performance-based compensation

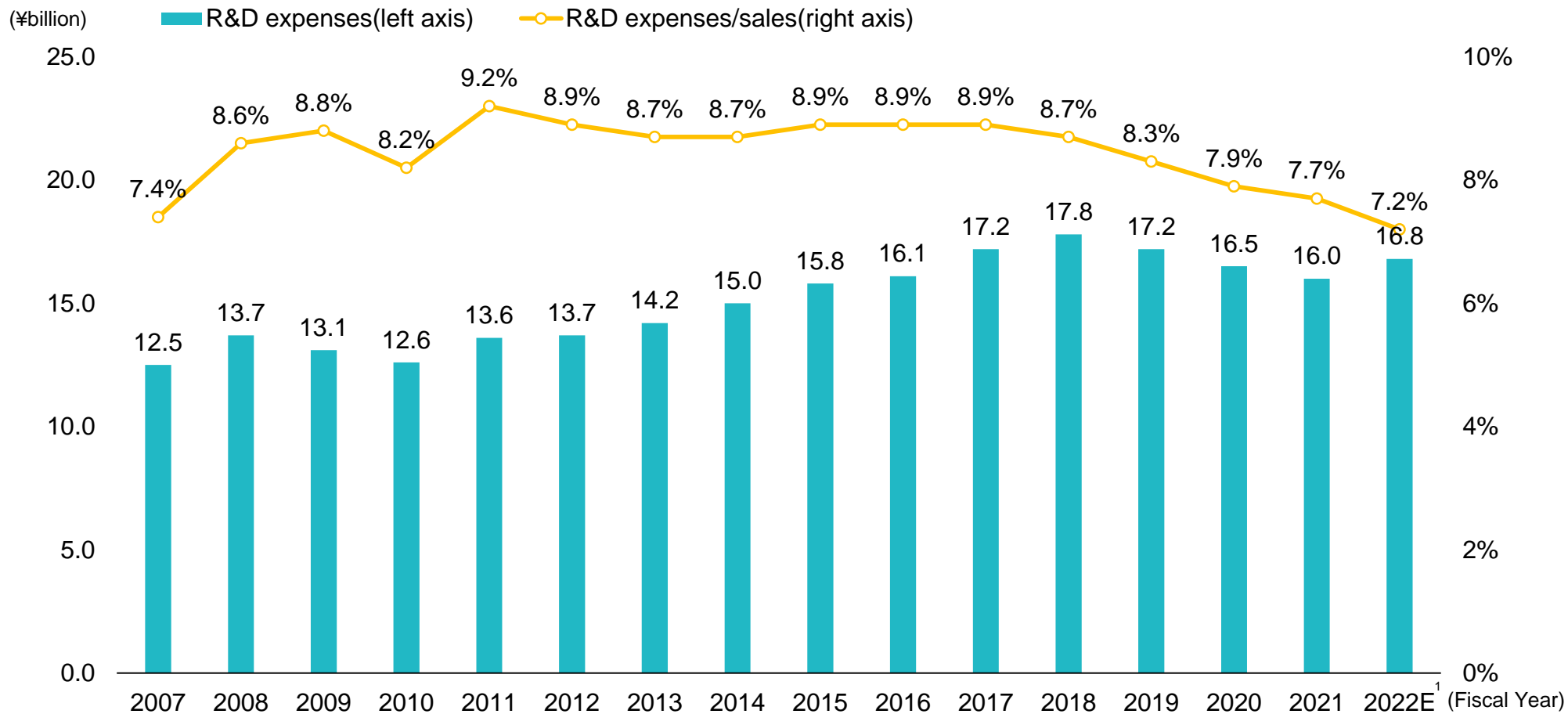
3. Date of Cancellation in 1H FY2022 is May 10 and Aug 31 2022

Cash Management Policy (Non-consolidated basis)

Level of Target Cash Balance= Minimum required level + 1/3 of annual scheduled long-term borrowings repayment
+ 1/3 of short-term borrowings outstanding + Contingent risk reserves

R&D Expenses Trend

- Value R&D as a future-creating enterprise that responds to social needs with unique, innovative technologies
- Maintain about 7-9% R&D expenses/sales in recent years



1. as of Nov 2022

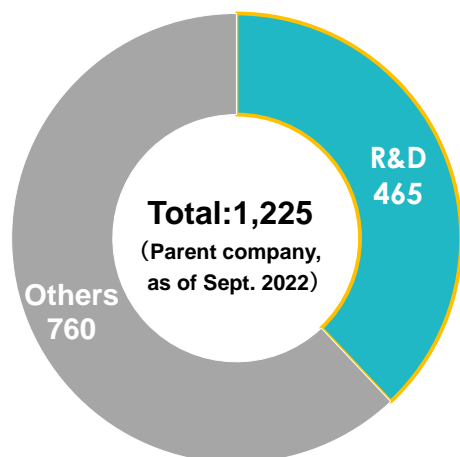
- Achieve high OP margin despite aggressive investment in R&D
- About 40% of professional staff engaged in R&D

R&D Expenses by Segment

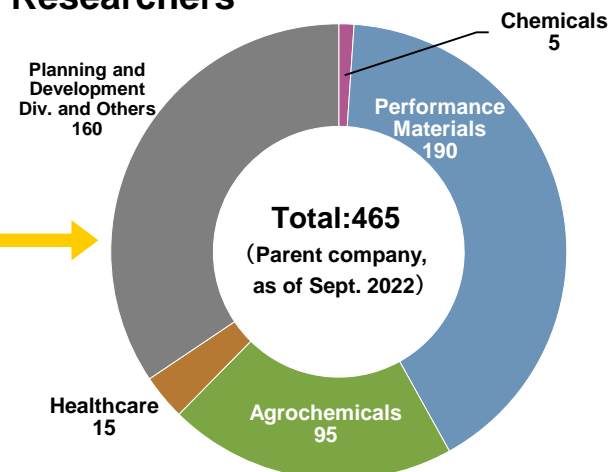
Segments	FY2022 Outlook as of Nov 2022				
	Sales (¥billion)	OP (¥billion)	OP Margin	R&D expenses (¥billion)	R&D Expenses/Sales
Chemicals	42.4	2.5	5.9%	0.3	0.7%
Performance Materials	89.2	30.3	34.0%	7.3	8.2%
Agrochemicals	79.2	21.9	27.7%	4.4	5.6%
Healthcare	6.6	2.8	42.4%	0.6	9.1%
Others ¹	-	-	-	4.2	-
Total (including Others¹)	234.2	55.5	23.7%	16.8	7.2%

1. Including Planning and Development Div.

Professional Staff Distribution



Researchers



2. The staff number indicated is round number

Long-term Financial Performance Trend

(¥billion)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022E
Sales	155.9	161.4	169.1	174.4	169.2	160.2	149.0	154.2	148.6	153.8	163.7	171.2	176.9	180.3	193.4	204.9	206.8	209.1	208.0	234.2
Operating Profit	15.7	17.3	21.7	20.8	24.8	17.4	19.2	19.8	15.5	19.5	22.2	25.3	28.6	31.4	35.0	37.1	38.6	42.5	51.0	55.5
Ordinary Income	14.6	17.4	21.3	21.2	24.4	16.9	19.2	19.4	15.9	20.5	23.7	26.4	29.5	31.7	36.2	39.1	40.0	43.9	53.7	58.3
Net Income	8.7	11.3	13.7	14.0	15.5	10.1	12.8	13.0	11.0	13.9	16.7	18.2	22.4	24.0	27.1	29.4	30.8	33.5	38.8	42.1
EBITDA	26.1	26.9	31.6	30.5	34.5	27.6	30.1	30.3	25.9	29.1	30.8	33.8	38.3	40.3	45.5	48.0	49.2	53.0	61.2	67.0
OP Margin	10.0%	10.7%	12.8%	12.0%	14.6%	10.9%	12.8%	12.9%	10.4%	12.7%	13.6%	14.8%	16.2%	17.4%	18.1%	18.1%	18.7%	20.3%	24.5%	23.7%
ROE	13.4%	15.2%	16.1%	14.7%	15.6%	10.3%	12.6%	11.9%	9.5%	11.4%	12.7%	12.7%	14.6%	15.1%	16.1%	16.6%	16.9%	17.5%	19.2%	19.7%
EPS (¥/share)	46.21	59.77	72.73	75.43	85.15	57.26	74.00	75.94	64.52	83.74	102.11	113.99	143.37	156.97	180.30	197.67	210.09	231.73	271.88	298.59
Dividend (¥/share)	11	11	15	20	20	22	24	24	24	26	30	36	44	52	68	82	90	104	122	164
Dividend Payout Ratio	23.8%	18.4%	20.6%	26.5%	23.5%	38.4%	32.4%	31.6%	37.2%	31.0%	29.4%	31.6%	30.7%	33.1%	37.7%	41.5%	42.8%	44.9%	44.9%	54.9%
Share Repurchase	-	-	-	4.7	5.0	8.0	-	2.8	-	5.0	5.0	6.0	9.0	9.0	9.0	9.0	10.0	10.0	12.0	-
Total Assets	172.6	169.4	183.2	177.3	172.7	172.3	181.4	183.4	190.1	199.2	208.0	223.9	228.2	231.7	246.0	247.0	249.5	265.5	279.7	-
Net Assets	70.4	80.0	93.6	99.3	101.2	96.8	107.7	112.4	119.6	126.7	137.8	151.3	156.9	163.7	176.4	182.1	185.5	200.6	208.0	-
Cash	5.9	4.3	8.5	11.0	7.6	9.7	14.8	21.1	27.9	31.9	30.8	31.3	35.3	35.7	37.7	36.2	30.6	32.4	34.7	-
Liabilities with Interest	57.4	44.6	41.5	32.4	34.4	45.5	42.1	39.9	38.9	38.1	36.1	35.1	33.1	30.8	28.6	26.6	24.6	22.7	22.7	-
Equity Ratio	40.1%	46.4%	50.2%	55.3%	58.0%	55.5%	58.7%	60.7%	62.4%	63.0%	65.7%	66.9%	68.1%	69.9%	71.0%	73.0%	73.7%	74.9%	73.6%	-
Capex	6.6	6.6	9.2	12.1	10.9	13.9	10.1	9.6	8.3	7.9	8.8	9.8	10.2	14.3	13.7	9.9	15.7	15.8	11.0	20.6
Depreciation	10.4	9.6	9.9	9.7	9.7	10.2	11.0	10.4	10.5	9.5	8.5	8.5	9.7	8.9	10.5	10.9	10.5	10.4	10.2	11.3
R&D Expenses	8.7	8.6	9.2	9.9	12.5	13.7	13.1	12.6	13.6	13.7	14.2	15.0	15.8	16.1	17.2	17.8	17.2	16.5	16.0	16.8
R&D Expenses/Sales	5.6%	5.3%	5.4%	5.7%	7.4%	8.6%	8.8%	8.2%	9.2%	8.9%	8.7%	8.7%	8.9%	8.9%	8.9%	8.7%	8.3%	7.9%	7.7%	7.2%

1. FY2021- : Including effects of changes in accounting policies (see p81)

2. FY2022E: as of Nov 2022

Sales and OP Trend by Segment

Sales (A)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022E	(¥billion)
Chemicals	38.1	36.9	34.5	35.5	34.3	34.3	34.8	34.9	35.7	34.3	31.9	37.6	42.4	
Performance Materials	38.0	34.0	37.4	42.8	49.4	51.8	52.8	58.8	63.0	65.5	71.6	81.7	89.2	
Agrochemicals	34.4	33.8	35.4	39.1	45.7	47.5	52.0	58.1	62.7	64.0	63.8	65.8	79.2	
Healthcare	9.6	10.0	12.7	11.6	8.8	8.7	8.0	7.5	7.0	7.0	6.7	6.6	6.6	
Trading	44.1	44.8	46.6	50.7	54.4	55.6	55.2	59.5	67.9	67.9	69.8	80.4	95.7	
Others	27.0	20.0	21.2	21.4	20.9	20.9	24.0	21.5	24.6	22.4	23.8	23.6	28.0	
Adjustment	-37.0	-30.9	-34.0	-37.4	-42.3	-41.9	-46.5	-46.9	-56.0	-54.3	-58.5	-87.7	-106.9	
Total	154.2	148.6	153.8	163.7	171.2	176.9	180.3	193.4	204.9	206.8	209.1	208.0	234.2	

OP (B)														Segment Assets (FY2021)(D)
Chemicals	2.4	1.6	1.9	1.9	1.9	3.9	3.8	3.4	3.0	1.3	1.5	3.8	2.5	32.0
Performance Materials	7.9	4.8	7.2	8.8	12.0	12.0	12.5	14.2	15.0	17.0	22.4	27.6	30.3	55.3
Agrochemicals	4.8	4.4	5.0	6.2	9.2	10.8	13.2	16.4	18.4	19.3	18.2	18.1	21.9	90.8
Healthcare	4.4	4.6	5.2	4.9	2.3	2.0	1.7	1.2	1.0	0.9	0.4	2.8	2.8	8.3
Trading	1.4	1.3	1.4	1.5	1.7	1.8	1.7	1.8	2.0	2.1	2.5	2.9	2.8	31.5
Others	1.0	0.3	0.7	0.8	0.6	0.5	1.0	0.6	0.9	0.7	0.8	0.7	1.0	12.2
Adjustment	-2.1	-1.5	-1.9	-1.9	-2.4	-2.4	-2.5	-2.6	-3.2	-2.7	-3.3	-4.9	-5.8	49.6
Total	19.8	15.5	19.5	22.2	25.3	28.6	31.4	35.0	37.1	38.6	42.5	51.0	55.5	279.7

OP Margin (B)/(A)														ROA(FY2021) (B)/(D)
Chemicals	6.3%	4.3%	5.5%	5.4%	5.5%	11.4%	10.9%	9.7%	8.4%	3.8%	4.7%	10.1%	5.9%	11.9%
Performance Materials	20.8%	14.1%	19.3%	20.6%	24.3%	23.2%	23.7%	24.1%	23.8%	26.0%	31.3%	33.8%	34.0%	49.9%
Agrochemicals	14.0%	13.0%	14.1%	15.9%	20.1%	22.7%	25.4%	28.2%	29.3%	30.2%	28.5%	27.5%	27.7%	19.9%
Healthcare	45.8%	46.0%	40.9%	42.2%	26.1%	23.0%	21.3%	16.0%	14.3%	12.9%	6.0%	42.4%	42.4%	33.7%
Trading	3.2%	2.9%	3.0%	3.0%	3.1%	3.2%	3.1%	3.0%	2.9%	3.1%	3.6%	3.6%	2.9%	9.2%
Others	3.7%	1.5%	3.3%	3.7%	2.9%	2.4%	4.2%	2.8%	3.7%	3.1%	3.4%	3.0%	3.6%	5.7%
Total	12.9%	10.4%	12.7%	13.6%	14.8%	16.2%	17.4%	18.1%	18.1%	18.7%	20.3%	24.5%	23.7%	18.2%

1. FY2010-2011 : Old Segmentation, FY2012- : New Segmentation(after organizational change in June 2011) 2. Including inter-segment sales/transfers 3. FY2019-2022E : New OP method
4. FY2021: Including Sales decrease due to changes in accounting policies (see p81)
5. Trading: Nissei Corporation, Others: Nissan Butsuruyu, Nissan Green & Landscape, Nissan Engineering, Nihon Hiryo, and others
Adjustment: Planning & Development Division and others
6. Sales and OP for Planning & Development Division in FY2021, FY2022 Outlook(as of Nov 2022) are disclosed on p69
7. Organizational change was implemented in April, 2022. FY2010-2020 Actual figures are based on old segmentation, FY2021 actual has been revised to reflect organizational change in April 2022 (see p82, p83). 8. 2022E: as of Nov 2022
A. Applied from FY2020 (no change for sales segmentation)
B. FY2019 restated based on new methods
C. Consolidation items
(such as unrealized gain on inventories)
- (Old method) Included in each segment
- (New method) Excluded from each segment and included in "Adjustment"

Quarterly Sales Trend by Segment (FY2019 - FY2022 Outlook)

(¥billion)

	FY2019 Actual					FY2020 Actual					FY2021 Actual					FY2022 Outlook as of Nov 2022					FY2022 Outlook as of Aug 2022			
	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q Actual	2Q Actual	3Q	4Q	Total	1Q Actual	2Q	2H	Total
Chemicals	8.4	8.4	8.7	8.8	34.3	7.4	7.3	8.3	8.9	31.9	8.8	8.3	10.5	10.0	37.6	10.4	9.4	11.0	11.6	42.4	10.4	9.1	19.3	38.8
Fine Chemicals	2.6	2.6	2.6	2.7	10.5	2.7	2.7	2.8	3.2	11.4	3.2	3.0	3.7	3.2	13.1	4.2	3.5	4.0	4.6	16.3	4.2	3.6	7.4	15.2
Basic Chemicals	5.8	5.8	6.1	6.1	23.8	4.7	4.6	5.5	5.7	20.5	5.6	5.3	6.8	6.8	24.5	6.2	5.9	7.0	7.0	26.1	6.2	5.5	11.9	23.6
Performance Materials	15.1	16.3	17.0	17.1	65.5	17.1	17.5	19.2	17.8	71.6	20.0	19.6	20.9	21.2	81.7	21.8	20.2	22.7	24.5	89.2	21.8	20.6	46.5	88.9
Agrochemicals	14.7	13.2	5.5	30.6	64.0	14.6	11.1	6.3	31.8	63.8	13.4	11.6	11.9	28.9	65.8	19.7	16.0	11.3	32.2	79.2	19.7	13.5	42.2	75.4
Healthcare	1.9	1.5	1.6	2.0	7.0	1.5	1.5	1.4	2.3	6.7	1.1	2.2	2.0	1.3	6.6	1.7	1.5	1.7	1.7	6.6	1.7	1.4	2.9	6.0
Healthcare	1.4	0.7	0.9	1.0	4.1	0.7	0.8	0.6	0.8	2.9	0.6	0.8	0.5	0.6	2.5	0.8	0.6	0.4	0.5	2.3	0.8	0.4	0.9	2.2
Custom Chemicals	0.5	0.8	0.6	1.0	2.9	0.8	0.7	0.8	1.5	3.8	0.4	1.5	1.4	0.8	4.1	0.8	1.0	1.3	1.1	4.2	0.8	1.0	2.0	3.8
Trading	17.5	15.8	17.5	17.1	67.9	18.2	15.5	17.8	18.3	69.8	17.8	18.6	22.2	21.8	80.4	23.7	24.0	23.8	24.2	95.7	23.7	20.0	44.0	87.7
Others	4.9	4.9	5.1	7.5	22.4	4.8	4.6	6.8	7.6	23.8	4.9	5.5	6.1	7.1	23.6	6.5	5.9	6.7	8.9	28.0	6.5	6.0	14.4	26.9
Adjustment	-13.8	-12.3	-13.9	-14.3	-54.3	-14.3	-12.3	-16.1	-15.8	-58.5	-19.5	-20.5	-24.1	-23.6	-87.7	-25.5	-25.8	-27.5	-28.1	-106.9	-25.5	-23.5	-51.4	-100.4
Total	48.7	47.8	41.5	68.8	206.8	49.3	45.2	43.7	70.9	209.1	46.5	45.3	49.5	66.7	208.0	58.3	51.2	49.7	75.0	234.2	58.3	47.1	117.9	223.3

1. Including inter-segment sales/transfers

2. In the Healthcare segment, figures are rounded to the nearest 100 million yen. Accordingly, some discrepancies may occur among totals.

3. In FY2020, FINEOXOCOL (cosmetic raw materials etc.) was transferred from Basic Chemicals to Fine Chemicals

4. Trading: Nissei Corporation, Others: Nissan Butsuryu, Nissan Green & Landscape, Nissan Engineering, Nihon Hiryo, and others,

Adjustment: Planning & Development Division, and others

5. Sales and OP for Planning & Development Division in FY2021 Actual and FY2022 Outlook as of Nov 2022 are disclosed on p69

6. Organizational change was implemented in April, 2022. FY2019-2020 Actual figures are based on old segmentation (see p82, p83)

Quarterly OP Trend by Segment (FY2019 - FY2022 Outlook)

(¥billion)

	FY2019 Actual					FY2020 Actual					FY2021 Actual					FY2022 Outlook as of Nov 2022					FY2022 Outlook as of Aug 2022			
	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q Actual	2Q Actual	3Q	4Q	Total	1Q Actual	2Q	2H	Total
Chemicals	0.9	-0.6	0.5	0.5	1.3	0.7	-0.8	0.7	0.9	1.5	1.3	-0.1	1.3	1.3	3.8	1.7	-0.6	0.9	0.5	2.5	1.7	-0.2	0.8	2.3
Performance Materials	4.0	4.4	4.7	3.9	17.0	5.3	5.4	6.3	5.4	22.4	6.9	6.2	7.6	6.9	27.6	7.9	6.0	8.1	8.3	30.3	7.9	6.3	16.0	30.2
Agrochemicals	4.5	4.9	-1.8	11.7	19.3	4.0	3.8	-1.3	11.7	18.2	4.0	2.9	3.0	8.2	18.1	6.8	5.3	1.6	8.2	21.9	6.8	3.8	10.0	20.6
Healthcare	0.4	0.1	0.1	0.3	0.9	-0.1	0.1	0.0	0.4	0.4	0.3	1.1	0.9	0.5	2.8	0.8	0.7	0.7	0.6	2.8	0.8	0.5	1.0	2.3
Healthcare	0.2	-0.2	-0.2	0.0	-0.1	-0.2	-0.1	-0.4	-0.2	-0.9	0.2	0.3	0.2	0.2	0.8	0.4	0.2	0.2	0.1	0.9	0.4	0.1	0.1	0.6
Custom Chemicals	0.2	0.3	0.2	0.4	1.1	0.2	0.2	0.3	0.6	1.3	0.1	0.8	0.8	0.3	2.0	0.4	0.5	0.5	0.6	2.0	0.4	0.4	0.9	1.6
Trading	0.5	0.5	0.6	0.5	2.1	0.7	0.5	0.7	0.6	2.5	0.7	0.6	0.9	0.7	2.9	1.0	0.9	0.5	0.4	2.8	1.0	0.6	1.1	2.7
Others	0.1	0.0	0.1	0.5	0.7	0.0	0.0	0.4	0.4	0.8	0.1	-0.1	0.2	0.5	0.7	0.1	0.0	0.3	0.6	1.0	0.1	-0.1	0.7	0.7
Adjustment	-1.1	-0.6	-0.7	-0.3	-2.7	-0.8	-0.8	-1.2	-0.5	-3.3	-1.4	-1.2	-1.3	-1.0	-4.9	-1.0	-1.4	-2.2	-1.2	-5.8	-1.0	-0.6	-2.1	-3.7
Total	9.3	8.7	3.5	17.1	38.6	9.8	8.2	5.6	18.9	42.5	11.9	9.4	12.6	17.1	51.0	17.3	10.9	9.9	17.4	55.5	17.3	10.3	27.5	55.1

1. In the Healthcare segment, figures are rounded to the nearest 100 million yen. Accordingly, some discrepancies may occur among totals.

2. Trading: Nissei Corporation, Others: Nissan Butsuryu, Nissan Green & Landscape, Nissan Engineering, Nihon Hiryo, and others
Adjustment: Planning & Development Division, and others

3. Sales and OP for Planning & Development Division in FY2021 Actual and FY2022 Outlook as of Nov 2022 are disclosed on p69

4. Organizational change was implemented in April, 2022. FY2019-2020 Actual figures are based on old segmentation, FY2021 actual has been revised to reflect organizational change in April 2022 (see p82, p83)

Changes in Accounting Policies (from FY2021)

Changed accounting policies from FY2021. No change from FY2020 Presentation Materials announced in May 2021

1. Changes in accounting policies:

Adoption of the Accounting Standard for the Revenue Recognition (ASBJ Statement No.29)

2. Timing of adoption: April 1, 2021 (from FY2021)

3. Major effects on PL, BS due to the changes:

A. Agent transactions

Mainly effected segments	Chemicals, Agrochemicals, Trading
Before adoption	Sales = gross amount from the customer, Sales expenses = amount paid to the supplier
After adoption	Sales = gross amount from the customer - amount paid to the supplier
Impact on FY2021 PL	Sales and sales expenses down ¥22.8 billion, only deducted from Sales of Adjustment segment No impact on Operating Profit

B. Royalties based on sales amount

Mainly effected segments	Agrochemicals (Fluralaner running royalties)
Before adoption (until FY2021)	Royalties revenue on MSD ³ 's sales for Jan-June: recognized in Aug, July-Dec: recognized in Feb
After adoption (from FY2021)	Royalties revenue on MSD ³ 's sales for Jan-Mar: recognized in May, Apr-June: recognized in Aug, July-Sep: recognized in Nov, Oct-Dec: recognized in Feb

3. MSD: MSD Animal Health, the global animal health business unit of Merck

C. Sales discount subject to change at the selling timing

Mainly effected segments	Agrochemicals
Before adoption	Recognized when discount is finally fixed
After adoption	Recognized corresponding to sales period based on reasonable estimation
Impact on FY2021 BS	<ul style="list-style-type: none"> The cumulative effect (¥1.5 billion)(after reflecting tax effect) of retroactively applying (C) is deducted from the beginning FY2021 retained earnings (BS item)

Sales discount amount trend after adoption vs. before adoption: 1Q up(negative impact), 2Q down, 1H up, 2H down, Total almost flat

Before adoption	FY2020	Discount on AY2020*(Oct 2019 – Sep 2020) sales
After adoption	FY2020	Discount on AY2020*(Oct 2019 – Sep 2020) sales + discount for Oct 2020 – Mar 2021 sales = ¥1.5 billion
	FY2021	Discount on Apr 2021 – Mar 2022 sales

AY2020* = Agrochemical Year (from Oct 2019 to Sep 2020)

Impact of Changes in Accounting Policies (YOY Change) (¥billion)

	FY2021 Actual						
	1Q	2Q	1H	3Q	4Q	2H	Total
Sales Impact¹	-3.5	-7.4	-10.9	-1.7	-10.3	-12.0	-22.9
OP Impact²	+1.2	-2.1	-0.9	+4.0	-3.2	+0.8	-0.1

1. Total impact of Agent transaction, Royalties based on sales amount and Sales discount subject to change at the selling timing

2. Total impact of Royalties based on sales amount and Sales discount subject to change at the selling timing

The following organizational changes were implemented on April 1, 2022, in order to achieve mid- to long-term growth while appropriately capturing changes in the business environment. (No change from 1Q FY2022 Presentation Materials announced in Aug 2022)

Organizational Change in “Pharmaceuticals Div.” and “Planning and Development Div.”

Purpose

Functional integration of Drug Discovery and Medical Materials
(R&D function in Planning and Development Div., Sales function in Healthcare Div.)

before

after

Pharmaceuticals Division

Planning and Development Dept.

R&D function for Drug Discovery

Custom Chemicals Dept.

Planning and Development Division¹

Life Science Materials Dept.

R&D function for Medical Materials

Information & Communication
Materials Development Dept.

Environment & Energy Materials
Development Dept.

Innovative Materials Planning Dept.

Healthcare Division

Healthcare Products Sales Dept.

Sales function for Pharma and
Medical Materials

Custom Chemicals Dept.

Planning and Development Division¹

Healthcare Business Development Dept.

R&D function for Drug Discovery
and Medical Materials

Information & Communication
Materials Development Dept.

Environment & Energy Materials
Development Dept.

Innovative Materials Planning Dept.

Renamed

New

Integration

1. Planning and Development Division is included in “Adjustment” segment.

Sales and OP for Planning and Development Division in FY2021 actual, FY2022, 2024, 2027 Outlook are disclosed on p69

Impact of Organizational Changes

FY2021 OP by Segment

No change from 1Q FY2022 Presentation Materials announced in Aug 2022

(¥billion)

	FY2021 Actual (Before organizational change)					FY2021 Actual (After organizational change)					Change				
	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total
Chemicals	1.3	-0.1	1.3	1.3	3.8	1.3	-0.1	1.3	1.3	3.8	0.0	0.0	0.0	0.0	0.0
Performance Materials	7.0	6.2	7.6	6.9	27.7	6.9	6.2	7.6	6.9	27.6	-0.1	0.0	0.0	0.0	-0.1
Agrochemicals	4.1	2.9	3.1	8.2	18.3	4.0	2.9	3.0	8.2	18.1	-0.1	0.0	-0.1	0.0	-0.2
Healthcare	-0.2	0.7	0.4	0.0	0.9	0.3	1.1	0.9	0.5	2.8	+0.5	+0.4	+0.5	+0.5	+1.9
Healthcare	-0.3	-0.2	-0.3	-0.3	-1.1	0.2	0.2	0.2	0.2	0.8	+0.5	+0.4	+0.5	+0.5	+1.9
Custom Chemicals	0.1	0.8	0.8	0.3	2.0	0.1	0.8	0.8	0.3	2.0	0.0	0.0	0.0	0.0	0.0
Trading	0.7	0.6	0.8	0.8	2.9	0.7	0.6	0.8	0.8	2.9	0.0	0.0	0.0	0.0	0.0
Others	0.1	-0.1	0.2	0.5	0.7	0.1	-0.1	0.2	0.5	0.7	0.0	0.0	0.0	0.0	0.0
Adjustment	-1.1	-0.8	-0.8	-0.6	-3.3	-1.4	-1.2	-1.2	-1.1	-4.9	-0.3	-0.4	-0.4	-0.5	-1.6
Total	11.9	9.4	12.6	17.1	51.0	11.9	9.4	12.6	17.1	51.0	0.0	0.0	0.0	0.0	0.0

1. Figures of Healthcare for FY2021 (Before organizational change) are for old segmentation
2. In the Healthcare segment, figures are rounded to the nearest 100 million yen. Accordingly, some discrepancies may occur among totals.
3. Trading: Nissei Corporation, Others: Nissan Butsuryu, Nissan Green & Landscape, Nissan Engineering, Nihon Hiryo, and others, Adjustment: Planning & Development Division and others
4. Sales and OP for Planning & Development Division in FY2021 actual, FY2022 Outlook as of Nov 2022 are disclosed on p69
5. No impact of organizational changes on sales

Narrowing down business areas and future focus areas

(No change from FY2021 Presentation Materials announced in May 2022)

Focus areas		Our initiatives
Healthcare (HC)	Oligonucleotide Therapeutics	<ul style="list-style-type: none"> Application of our unique oligonucleotide therapeutics technology, 80% of resources invested Steady promotion of Joint research and development with pharmaceutical companies and strategic alliance with Luxana Biotech Co. (Secured 7 nucleic acid target themes)
	Small Molecule Therapeutics	Collaboration with drug discovery ventures (narrowed down from 10 to 3 themes), introduction of AI
	Medical Materials	Biointerface control materials, cosmetic materials, etc.
Custom Chemicals (CC)		In addition to strengthening the existing business model, joint development is also oriented (peptides, etc.)

Resource allocation

(person, round number)

	FY2021 Actual	FY2022 Outlook as of May 2022	FY2024 Mid-Term Plan	FY2027 Mid-Term Plan
Researchers	75	15	20	20
HC	65	5	5	5
CC	10	10	15	15
Reference Researchers in Healthcare Business Development Dept. Planning & Development Division	35	90	85	90

(¥billion)

	FY2021 Actual	FY2022 Outlook as of May 2022	FY2024 Mid-Term Plan	FY2027 Mid-Term Plan
R&D expenses	2.13	0.74	1.03	1.12
HC	1.80	0.31	0.52	0.53
CC	0.33	0.43	0.51	0.59
Reference Impact of transfer to Planning & Development Division (B)	-	1.45	1.26	1.27

Quantitative Plan

(¥billion)

	FY2021 Actual	FY2022 Outlook as of May 2022	FY2024 Mid-Term Plan	FY2027 Mid-Term Plan
Sales	6.63	5.94	7.23	11.48
HC Existing	2.42	2.13	1.13	0.90
HC New	0.04	0.00	0.44	2.08
CC Existing	4.17	3.81	5.06	5.79
CC New	0.00	0.00	0.60	2.71
OP (A)	0.95	2.09	2.15	4.29
HC	-1.07	0.53	-0.70	-0.10
CC	2.02	1.56	2.85	4.38
Reference Substantial OP before transfer (A)-(B)	0.95	0.64	0.89	3.02

1. FY2021 Actual figures are based on old segmentation(before organizational changes)

Main Products by Segment

Segment		Products	Main Applications		
Chemicals	Fine Chemicals	TEPIC	epoxy compound for LED sealants, solder resist, painting		
		Melamine cyanurate	flame retardant		
		Environmental product	HI-LITE (chlorinated isocyanuric acid for sterilizing)		
		FINEOXOCOL	Cosmetics, Lubricants, Adhesive		
	Basic Chemicals	Melamine	adhesive agent for plywood		
		AdBlue® ¹	solution of urea in demineralised water for diesel trucks to reduce NOx		
		High purity Sulfuric acid	agents used for cleaning semiconductors		
		Ammonia, Sulfuric acid, Nitric acid, Urea			
Performance Materials	Electronic Materials	SUNEVER	LCD alignment coating		
		ARC® ²	bottom anti-reflective coating for semiconductors		
		OptiStack® ²	multi layer process material for semiconductors (Si-HM/SOC)		
		OPTIFOCUS	microlens material for image sensor application		
		ELSOURCE	hole injection layer materials for OLED		
	Inorganic Materials	SNOWTEX	water dispersed colloidal silica sol for polishing silicon wafers, special steel sheets		
		Organo silica sol	film coating, antistatic interference shielding, electronic printing materials		
		Monomer sol	resin additive		
		Alumina sol	automotive catalyst, electronic printing materials		
		SUNCOLLOID	high refractive sol for lens		
		CELNAX	antistatic sol for film		
		Oilfield materials	for enhancing oil recovery		
		Agrochemicals	Herbicide	TARGA	soybean, rapeseed, sugarbeet
				PERMIT	corn, sugarcane, rice
SIRIUS, ALTAIR	rice				
ROUNDUP	non-selective herbicide for orchard, noncrop land				
Insecticide	SANMITE, MITOKOHNE, STARMITE		fruits, citrus, tea, vegetables		
	GRACIA		vegetables, tea		
Fungicide	PULSOR, IKARUGA, GREATAM (THIFLUZAMIDE)		potato, rice, turf		
	LEIMAY/ORACLE		potato, vegetables, grape		
	QUINTEC (QUINOXYFEN)		fruits, vegetables		
	DITHANE (MANCOZEB)		fruits, vegetables		
Animal health product	Fluralaner		active substance of BRAVECTO (veterinary medical product for dogs and cats) and EXZOLT (for poultry red mites)		
Healthcare			LIVALO API	anti-cholesterol drug	
		Custom Chemicals	custom manufacturing and solution proposal business for pharmaceutical companies		

1. AdBlue® is a registered trademark of German Automobile Industry Association (Verband der Automobilindustrie).

2. ARC® and OptiStack® are registered trade mark of Brewer Science, Inc.

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