

Nissan Chemical Corporation

2Q FY2020 Financial Results Briefing

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1H FY2020 Actual Highlight

1. vs. 1H FY2019 Actual

- ♦ OP flat (1H FY2020 Actual ¥18.0 billion vs. 1H FY2019 Actual ¥18.0 billion)
 - -Chemicals OP down due to sales decrease in melamine, TEPIC and environmental related products
 - -Performance Materials OP up due to substantial sales increase in Display Materials and Semis Materials, and fixed cost down
 - -Agro OP down due to Fluralaner sales decrease (above the Outlook as of May 2020) despite ALTAIR sales increase, and fixed cost up
 - -Pharma OP down due to LIVALO sales decrease, while Custom Chemicals sales increase
- ◆Net Income down ¥0.6 billion (1H FY2020 Actual ¥13.9 billion vs. 1H FY2019 Actual ¥14.5 billion)

2. vs. 1H FY2020 Outlook as of May 2020

- ♦ OP above target ¥1.9 billion (1H FY2020 Actual ¥18.0 billion vs. 1H FY2020 Outlook ¥16.1 billion)
 - -Chemicals OP significantly below target due to sales below target mainly in melamine, TEPIC and environmental related products
 - -Performance Materials OP above target due to sales above target in Semis Materials, and fixed cost below expectations
 - -Agro OP above target due to fixed cost below target, while sales below target (Fluralaner sales above target, other agrochemical products sales below target overall)
 - -Pharma OP slightly below target
- ◆Net Income above target ¥1.4 billion (1H FY2020 Actual ¥13.9 billion vs. 1H FY2020 Outlook ¥12.5 billion)

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Miyazaki: This is Miyazaki. Thank you in advance.

This is page two of the material explaining the highlights of the first half. First, as compared to the same period of the previous fiscal year, operating income remained unchanged from JPY18 billion for the same period of the previous fiscal year. Net income was JPY14.5 billion for the same period of the previous fiscal year, and JPY13.9 billion for the current fiscal year, a decrease of JPY600 million. Second, compared with the forecast, the forecast for operating income was JPY16.1 billion, so the result was JPY1.9 billion above the target. Net income exceeded the forecast by JPY1.4 billion because the forecast was JPY12.5 billion.

2H FY2020 Outlook Highlight

1. vs. 2H FY2019 Actual

- ◆OP up ¥1.7 billion (2H FY2020 Outlook ¥22.3 billion vs. 2H FY2019 Actual ¥20.6 billion)
 - -Chemicals OP up due to sales increase in high purity sulfuric acid, Nitric acid products,
 - TEPIC for general applications and environmental related products
 - -Performance Materials OP up due to substantial sales increase in Semis Materials
 - -Agro OP up due to sales increase in ALTAIR, GRACIA and Fluralaner
 - -Pharma OP up due to Custom Chemicals sales increase
- ◆Net Income up ¥1.2 billion (2H FY2020 Outlook ¥17.5 billion vs. 2H FY2019 Actual ¥16.3 billion)

2. vs. 2H FY2020 Outlook as of May 2020

- OP below target ¥0.9 billion (2H FY2020 Outlook as of Nov. ¥22.3 billion vs. 2H FY2020 Outlook as of May ¥23.2 billion)
 - -Chemicals OP below target due to sales below target mainly in melamine and Nitric acid products
 - -Performance Materials OP above target due to substantial sales increase in Semis Materials
 - -Agro OP below target due to sales below target mainly in GRACIA and Fluralaner
 - -Pharma OP above target due to LIVALO sales above target
- ◆ Net Income below target ¥0.8 billion (2H FY2020 Outlook as of Nov. ¥17.5 billion vs. 2H FY2020 Outlook as of May ¥18.3 billion)

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See page three. This is our forecast for the second half. First of all, as compared to the same period of the previous fiscal year, operating income is expected to increase by JPY1.7 billion to JPY22.3 billion from JPY20.6 billion of the same period of the previous fiscal year. Net income is expected to be JPY17.5 billion, an increase of JPY1.2 billion from JPY16.3 billion of the same period of the previous fiscal year. Compared to the previous forecast in May, operating income is expected to decrease by JPY900 million. Net income of the May forecast was JPY18.3 billion, and it is expected to be JPY17.5 billion, which is JPY800 million lower than the forecast.

Full Year FY2020 Outlook Highlight

- 1. vs. Full Year FY2019 Actual
- ♦ OP up ¥1.7 billion (FY2020 Outlook as of Nov. ¥40.3 billion vs. FY2019 Actual ¥38.6 billion)
 - -Chemicals OP down due to sales decrease in melamine and TEPIC
 - -Performance Materials OP up due to sales increase in Display Materials and Semis Materials, and fixed cost down
 - -Agro OP down due to fixed cost up, while sales increase in ALTAIR and GRACIA
 - -Pharma OP down due to LIVALO sales decrease, while Custom Chemicals sales increase
- ◆Net Income up ¥0.6 billion (FY2020 Outlook as of Nov. ¥31.4 billion vs. FY2019 Actual ¥30.8 billion)
- 2. vs. Full Year FY2020 Outlook as of May 2020
- ◆OP above target ¥1.0 billion (FY2020 Outlook as of Nov. ¥40.3 billion vs. FY2020 Outlook as of May ¥39.3 billion)
 - -Chemicals OP below target due to sales below target mainly in melamine, Nitric acid products and TEPIC
 - -Performance Materials OP above target due to sales above target in Semis Materials, and fixed cost below expectations
 - -Agro OP above target due to fixed cost below target, while sales below target
 - -Pharma OP above target due to LIVALO sales above target
- Net Income above target ¥0.6 billion (FY2020 Outlook as of Nov. ¥31.4 billion vs. FY2020 Outlook as of May ¥30.8 billion)
- 3. Shareholders Return
 - Annual dividend up ¥8/share (FY2020 Outlook as of Nov. ¥98 = 1H 46 + 2H 52 vs. FY2019 Actual ¥90 = 1H 42 + 2H 48), up ¥2/share vs. FY2020 Outlook as of May ¥96 = 1H 46 + 2H 50
 - ◆Dividend payout ratio 45.1% vs. FY2019 Actual 42.8%
 - ◆Completed a ¥7.0 billion share repurchase program in July 2020
 - ◆ Total payout ratio expected to be 67.2% taking into account of ¥98/share dividend and ¥7.0 billion share repurchase program (Mid-term Plan FY2020 target: 75%)

See page four. This is full year forecast, the sum of the first half and the second half. First, compared to the same period of the previous fiscal year, operating income for the current fiscal year is expected to increase by JPY1.7 billion to JPY40.3 billion from the previous fiscal year of JPY38.6 billion. Net income is expected to

This is a comparison with the previous forecast of May. The revised operating income forecast is increased by JPY1 billion and the revised net income forecast by JPY600 million.

be JPY31.4 billion, an increase of JPY600 million from JPY30.8 billion in the same period of the previous fiscal

Third, about shareholders return. The annual dividend will be JPY98 with an interim dividend of JPY46 and a year-end dividend of JPY52, an increase of JPY8 from the previous year of JPY90. In addition, since the forecast of May was JPY96, this is increased by JPY2.

Based on this budget, dividend payout ratio is 45.1%. We completed the JPY7 billion share repurchase program in July. The target for the total payout ratio is 75% as promised, but if we take into account only the JPY7 billion repurchase program, it will be 67.2%.

1H FY2020 PL

(¥billion)

		1H FY2019			1H FY2020		3	Change		Change (%)	Ou	H FY202 tlook as May 2020	of
	1Q	2Q	1H	1Q	2Q	1H	1Q	2Q	1H	1H	1Q	2Q	1H
Sales	48.7	47.8	96.5	49.3	45.2	94.5	+0.6	-2.6	-2.0	-2%	49.8	46.8	96.6
Operating Profit	9.3	8.7	18.0	9.8	8.2	18.0	+0.5	-0.5	0.0	0%	8.5	7.6	16.1
Non-Operating Income/Expenses	0.7	-0.1	0.6	0.6	-0.4	0.2	-0.1	-0.3	-0.4	-	0.6	0.0	0.6
Ordinary Income	10.0	8.6	18.6	10.4	7.8	18.2	+0.4	-0.8	-0.4	-3%	9.1	7.6	16.7
Extraordinary Income/Loss	0.9	0.0	0.9	0.0	1.1	1.1	-0.9	+1.1	+0.2	-	0.0	0.0	0.0
Net Income (1)	7.8	6.7	14.5	7.6	6.3	13.9	-0.2	-0.4	-0.6	-4%	6.8	5.7	12.5
EBITDA (2)	11.6	11.1	22.7	12.1	10.7	22.8	+0.5	-0.4	+0.1	0%			20.5
EPS (¥/share)	53.13	45.62	98.75	52.38	43.58	95.96	-0.75	-2.04	-2.79	-3%	-	12	86.64
Dividend (¥/share)	-	-	42	-	-	46	-		+4		-	g g	46
Total amount of Dividend	-	34	6.2	-	-	6.6	-	-	+0.4	ľ	-	-	6.6
OP Margin	19.2%	18.2%	18.7%	19.9%	18.1%	19.0%	+0.7%	-0.1%	+0.3%		17.1%	16.2%	16.7%
ROE	-	300	100		-	-		-	1-		-		-
FX Rate (¥/\$)	110	107	109	108	106	107			×	•	-		108
Crude Oil (JCC) (\$/bbl) (3)	72	66	69	31	41	36					65	65	65

- (1) Net income = Profit Attributable to Owners of Parent
- (2) EBITDA = Operating Profit + Depreciation
- (3) Based on Trade Statistics of Japan Ministry of Finance

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See page five. The table shows the results for the first half of the current fiscal year. In the first half of the current fiscal year, we recorded sales of JPY94.5 billion, operating income of JPY18 billion, and net income of JPY13.9 billion.

1H FY2020 Review

```
< vs. 1H FY2019>
                   (Sales) ◆ Down ¥ 2.0
                                               billion (-2%)
                                                               (+) Performance Materials, Trading
                                                               (-) Chemicals, Agrochemicals, Pharmaceuticals
                                              billion (0%)
                                                               (+) Performance Materials, Trading
                      (OP) Flat
                                      ¥ 0.0
                                                               (-) Chemicals, Agrochemicals, Pharmaceuticals
        (Ordinary Income) Down
                                      ¥ 0.4
                                               billion (-3%)
(Extraordinary Income/Loss) ♦ Up
                                      ¥ 0.2
                                               billion
                             1H FY2020 Up ¥1.1 billion
                                                       (Gain on sales of investment securities ¥1.1 billion,
                                                        sales amount ¥1.6 billion, sold 11 listed companies shares,
                                                        sold 100% of our shareholdings of 7 listed companies)
                             1H FY2019 Up ¥0.9 billion
             (Net Income) ◆ Down ¥ 0.6
                                              billion (-4%)
                     (EPS) ◆ Down ¥ 2.79
                                                       (-3\%)
< Shareholders Return>
                (Dividend) ◆1H ¥46/share (up ¥4 vs. 1H FY2019) (In line with FY2020 Outlook as of May 2020)
      (Share Repurchase) $\Display \tau 7.0 billion, 1.33 million shares completed in July 2020
                               (Cancelled 1.0 million shares in August 2020)
< vs. 1H FY2020 Outlook as of May 2020>
                   (Sales) ◆ Down ¥ 2.1
                                               billion
                                                               (+) Performance Materials, Pharmaceuticals, Trading
                                                               (-) Chemicals, Agrochemicals
                                      ¥ 1.9
                                               billion
                                                               (+) Performance Materials, Agrochemicals, Trading
                                                               (-) Chemicals, Pharmaceuticals
       (Ordinary Income) <- Up
                                      ¥ 1.5
                                               billion
(Extraordinary Income/Loss) ◆Up
                                      ¥ 1.1
                                               billion
                             1H FY2020 Up ¥1.1 billion
                                                       (Gain on sales of investment securities ¥1.1 billion,
                                                        sales amount ¥1.6 billion, sold 11 listed companies shares.
                                                        sold 100% of our shareholdings of 7 listed companies)
                                              billion
             (Net Income) < Up
                                      ¥ 1.4
                     (EPS) ♦Up
                                      ¥ 9.32
```

Page six shows the status of each segment. In operating income, Performance Materials and Trading increased YoY, but Chemicals, Agrochemicals, and Pharmaceuticals decreased. Regarding extraordinary income and losses, there was a gain on sales of investment securities of JPY1.1 billion in the first half of the current fiscal year. We sold shares of 11 listed companies. We sold 100% of our shareholdings of seven listed companies out of these 11.

Concerning shareholders return listed below, the interim dividend was JPY46, an increase of JPY4 from the previous year.

Then, below, it is a comparison with the forecast of May. Concerning operating income by segment, Performance Materials, Agrochemicals, and Trading increased and Chemicals and Pharmaceuticals decreased.

FY2020 Outlook (Including 3Q and 4Q Outlook)

(¥billion)

			FY2	019 Ac	tual							Outloo					20 Out		
				- I- A-	NAME:					as	of No	v. 202	0			as o	f May	2020	
	1Q	2Q	1H	3Q	4Q	2H	Total	1Q Actual	2Q Actual	1H Actual	3Q	4Q	2H	Total	1Q	2Q	1H	2H	Total
Sales	48.7	47.8	96.5	41.5	68.8	110.3	206.8	49.3	45.2	94.5	44.7	70.3	115.0	Record 209.5	49.8	46.8	96.6	117.9	214.5
Operating Profit	9.3	8.7	18.0	3.4	17.2	20.6	38.6	9.8	8.2	18.0	4.2	18.1	22.3	Record 40.3	8.5	7.6	16.1	23.2	39.3
Non-Operating Income/Expenses	0.7	-0.1	0.6	0.5	0.3	0.8	1.4	0.6	-0.4	0.2	0.5	0.1	0.6	0.8	0.6	0.0	0.6	0.5	1.1
Ordinary Income	10.0	8.6	18.6	3.9	17.5	21.4	40.0	10.4	7.8	18.2	4.7	18.2	22.9	Record 41.1	9.1	7.6	16.7	23.7	40.4
Extraordinary Income/Loss (1)	0.9	0.0	0.9	0.0	0.1	0.1	1.0	0.0	1.1	1.1	0.0	0.5	0.5	1.6	0.0	0.0	0.0	0.5	0.5
Net Income (2)	7.8	6.7	14.5	3.0	13.3	16.3	30.8	7.6	6.3	13.9	3.7	13.8	17.5	Record 31.4	6.8	5.7	12.5	18.3	30.8
EBITDA (3)	11.6	11.1	22.7	6.3	20.2	26.5	49.2	12.1	10.7	22.8	-	5	27.9	50.7		15	20.5	28.5	49.0
EPS (¥/share)	53.13	45.62	98.75	20.76	90.58	111.34	210.09	52.38	43.58	95.96	5		121.60	217.56	-	- 5	86.64	127.59	214.23
Dividend (¥/share)	-		42		-	48	90	-	-	46	l l	- 5	52	98		- 6	46	50	96
Dividend payout ratio (%)	-	-	900		. 2	32	42.8	- 5	. 12		9	- 5		45.1	-	2003			44.8
Total amount of Dividend	1000	.00	6.2		0	6.9	13.1	2		6.6	9	1	7.5	14.1	- 2	100	6.6	7.2	13.8
OP Margin	19.2%	18.2%	18.7%	8.2%	25.0%	18.7%	18.7%	19.9%	18.1%	19.0%	9.4%	25.7%	19.4%	19.2%	17.1%	16.2%	16.7%	19.7%	18.3%
ROE		- 5	- 15	2		2	16.9%	2	82 82	-	2	- 0	· 2	16.6%		2	2	2	16.4%
FX Rate (¥/\$)	110	107	109	109	109	109	109	108	106	107	105	105	105			8	108	108	108
Crude Oil (JCC) (\$/bbl) (4)	72	66	69	66	68	67	68	31	41	36		-	44		65	65	65	65	65

- (1) FY2020 Outlook as of Nov. 2020: Gain on sales of investment securities Total ¥1.6 billion
- (2) Net income = Profit Attributable to Owners of Parent
- (3) EBITDA = Operating Profit + Depreciation
- (4) Based on Trade Statistics of Japan Ministry of Finance

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See page seven for full year forecasts. As usual, forecasts for third quarter and fourth quarter are also disclosed in the second half. The exchange rate is assumed to be JPY105 in the second half as shown on the second last row. Regarding foreign exchange risk, in the second half of the year it will be around USD104 million, and this will be the amount by which exports exceed imports on a net basis.

2H FY2020 Outlook

```
<vs. 2H FY2019>
                             ¥ 4.7
                                     billion (+4%) (+) Performance Materials, Agrochemicals,
             (Sales) Up
                                                         Pharmaceuticals, Trading
                                                    (-) Chemicals
                                                    (+) Chemicals, Performance Materials, Agrochemicals,
                             ¥ 1.7
                                     billion (+8%)
               (OP) ♦Up
                                                         Pharmaceuticals
                                                    (-) Trading
   (Ordinary Income) \Dp
                             ¥ 1.5
                                     billion (+7%)
       (Net Income) ♦ Up
                             ¥ 1.2
                                     billion (+8%)
              (EPS) ♦Up
                             ¥ 10.26
                                            (+9%)
                                     billion (+23%)
            3Q (OP) . Up
                             ¥ 0.8
                                     billion (+5%)
            4Q (OP) . Up
                             ¥ 0.9
< vs. 2H FY2020 Outlook as of May 2020>
             (Sales) Down ¥2.9
                                     billion
                                                    (+) Pharmaceuticals, Trading
                                                    (-) Chemicals, Performance Materials, Agrochemicals
                                                    (+) Performance Materials, Pharmaceuticals
               (OP) ◆ Down ¥ 0.9
                                     billion
                                                    (-) Chemicals, Agrochemicals, Trading
   (Ordinary Income) ◆ Down ¥ 0.8
                                     billion
       (Net Income) ◆ Down ¥ 0.8
                                     billion
              (EPS) ◆ Down ¥ 5.99
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Our forecast for the second half is on page eight. Operating income is expected to increase YoY, excluding trading.

Compared to the operating income forecast of May, Performance Materials and Pharmaceuticals are expected to increase, and Chemicals, Agrochemicals and Trading are to decrease.

Full Year FY2020 Outlook

```
<vs. FY2019>
                   (Sales) Up
                                     ¥ 2.7
                                              billion (+1%)
                                                                (+) Performance Materials, Agrochemicals, Trading
                                                                     Chemicals, Pharmaceuticals
                     (OP) OUp
                                     ¥ 1.7
                                              billion (+4%)
                                                                (+)
                                                                     Performance Materials
                                                                (±)
                                                                     Trading
                                                                (-) Chemicals, Agrochemicals, Pharmaceuticals
       (Ordinary Income) Up
                                     ¥ 1.1
                                              billion
                                                       (+3\%)
             (Net Income) > Up
                                     ¥ 0.6
                                              billion
                                                       (+2%)
                    (EPS) ♦Up
                                     ¥ 7.47
                                                       (+4%)
              OP and Ordinary Income expected to renew the highest results of a full year in 7 consecutive years.
              Net Income expected to renew the highest results of a full year in 8 consecutive years.
<vs. FY2020 Outlook as of May 2020>
                   (Sales) Down ¥ 5.0
                                              billion
                                                                (+) Pharmaceuticals, Trading
                                                                     Chemicals, Performance Materials, Agrochemicals
                     (OP) ♦Up
                                     ¥ 1.0
                                              billion
                                                                     Performance Materials, Agrochemicals,
                                                                      Pharmaceuticals, Trading
                                                                (-) Chemicals
                                              billion
       (Ordinary Income) Up
                                     ¥ 0.7
                                     ¥ 1.1
 (Extraordinary Income/Loss) ◆Up
                                              billion
                            1H FY2020 Up ¥1.1 billion
                                                       (Gain on sales of investment securities ¥1.1 billion.
                                                        sales amount ¥1.6 billion, sold 11 listed companies shares.
                                                        sold 100% of our shareholdings of 7 listed companies)
             (Net Income) . Up
                                     ¥ 0.6
                                              billion
                    (EPS) ♦Up
                                     ¥ 3.33
< Shareholders Return>
               (Dividend) • 1H ¥46/share, 2H ¥52/share (Dividend Payout Ratio: 45.1%)
                              (1H up ¥4, 2H up ¥4 vs. FY2019) (2H up ¥2 vs. FY2020 Outlook as of May 2020)
      (Share Repurchase) ♦¥7.0 billion, 1.33 million shares completed in July 2020
                              (Cancelled 1.0 million shares in August 2020)
  (Total Payout Ratio Target) ♦ 75% (67.2% based on ¥98/share dividend and ¥7.0 billion share repurchase)
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This is followed by full year forecasts on page nine. As highlighted in red, operating income and ordinary income is expected to reach record high for the seventh consecutive year. Net income is expected to hit a record high for the eighth consecutive year.

In terms of shareholders return, as I mentioned earlier, the annual dividend is JPY98. We completed the JPY7 billion share repurchase program and cancelled one million shares.

1H FY2020 Actual, FY2020 Outlook Non-Operating Income/Expenses, Extraordinary Income/Loss

(¥billion)

	1	FY2019 Actual		10000000	020 Outl of Nov. 2	70.000		Change		25,0,000	020 Outl of May 2	7517037
	1H	2H	Total	1H Actual	2H	Total	1H Actual	2H	Total	1H	2H	Total
Non-Operating Income	1.36	1.25	2.61	0.95	1.47	2.42	-0.41	+0.22	-0.19	1.05	1.47	2.52
Interest income, dividend income	0.37	0.45	0.82	0.35	0.42	0.77	-0.02	-0.03	-0.05	0.35	0.45	0.80
Equity in earnings of affiliates	0.40	0.55	0.95	0.26	0.80	1.06	-0.14	+0.25	+0.11	0.43	0.68	1.11
Foreign exchange gains	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Others	0.59	0.25	0.84	0.34	0.25	0.59	-0.25	0.00	-0.25	0.27	0.34	0.61
Non-Operating Expenses	0.74	0.52	1.26	0.76	0.85	1.61	+0.02	+0.33	+0.35	0.48	0.90	1.38
Interest expense	0.07	0.05	0.12	0.05	0.04	0.09	-0.02	-0.01	-0.03	0.07	0.05	0.12
Loss on disposal of non-current assets	0.20	0.24	0.44	0.29	0.64	0.93	+0.09	+0.40	+0.49	0.32	0.67	0.99
Foreign exchange losses	0.22	0.02	0.24	0.26	0.00	0.26	+0.04	-0.02	+0.02	0.00	0.00	0.00
Others	0.25	0.21	0.46	0.16	0.17	0.33	-0.09	-0.04	-0.13	0.09	0.18	0.27
		72,70,90	100000000	25,040,055	A0010000			100000000000000000000000000000000000000				
Extraordinary Income (1)	1.69	0.14	1.83	1.09	0.51	1.60	-0.60	+0.37	-0.23	0.00	0.50	0.50
Extraordinary Loss	0.83	0.00	0.83	0.00	0.00	0.00	-0.83	0.00	-0.83	0.00	0.00	0.00

⁽¹⁾ Gain on sales of investment securities

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Please refer to the table of non-operating income and expenses and extraordinary income and loss on page 10 later.

1H FY2020 Actual, FY2020 Outlook

1H FY2020 Actual, FY	2020 (Jutioo	L				(¥billion
Cash Flows	1H FY2019 Actual	1H FY2020 Actual		FY2019 Actual	FY2020 Outlook as of Nov. 2020		FY2020 Outlook as of May 2020
CF from operating activities	31.9	33.6		35.5	35.0	ſ	39.1
Income before income taxes & non-controlling interests	19.5	19.3		41.0	42.7	ſ	40.9
Loss (gain) on sales of securities	-1.7	-1.1		-1.8	-1.6		-0.5
Depreciation and amortization (1)	4.7	4.8		10.5	10.4	Ī	10.9
Income taxes paid	-4.3	-6.6	lſ	-8.4	-11.4		-11.2
Working capital, others	13.7	17.2	П	-5.8	-5.1	ſ	-1.0
CF from investing activities	-2.4	-2.5	li	-15.6	-9.4		-11.9
Purchase of PPE	-4.2	-4.0		-8.9	-9.9	ſ	-11.1
Purchase and sales of investment securities	2.9	1.5		2.5	2.1	ſ	0.6
Others (2)	-1.1	0.0		-9.2	-1.6		-1.4
CF from financing activities	-33.4	-32.8		-25.2	-25.1		-25.1
Payout to shareholders (dividend)	-6.2	-7.0		-12.4	-23.1		-23.1
Payout to shareholders (share repurchase)	-6.0	-7.0		-10.0	-23.1	1	-23.1
Borrowings	-20.3	-18.8		-1.9	-2.0	ſ	-2.0
Others (3)	-0.9	0.0		-0.9	0.0	Ī	0.0
Effect of exchange rate change on cash & cash equivalents	-0.4	0.0	l	-0.3	0.0		0.0
Change in cash & cash equivalents	-4.3	-1.7	lÌ	-5.6	0.5	Ī	2.1
Cash & cash equivalents at the end of period	31.9	28.9		30.6	31.1	Ī	32.7

- (1) Including amortization of goodwill
- (2) FY2019 Actual: Payments for acquisition of QUINTEC -6.3, Others -2.9
- (3) FY2019 Actual: Share repurchase related to Introduction

of a performance-linked stock compensation plan -0.8(in August 2019), Others -0.1

Then, page 11 is about cash flows. In the first half of FY2020, we had ample cash flows, the same as in the same period of the previous fiscal year. This year's full year forecast is on the second column from the right. Free cash flow is JPY25.6 billion, which was JPY19.9 billion last year, so we have more leeway in cash flows. The balance of cash and deposits at the end of period shown on the bottom is currently expected to be JPY31.1 billion.

Balance Sheets

Balance S	sneet	S		8 3			(A)		(¥billion)
	2019/9	2020/3 (A)	2020/9 (B)	Change (B) - (A)		2019/9	2020/3 (A)	2020/9 (B)	Change (B) - (A)
Current assets	133.6	154.2	132.1	-22.1	Liabilities	43.5	64.0	41.2	-22.8
Cash	31.9	30.6	28.9	-1.7	Accounts payable	15.8	16.9	14.0	-2.9
Accounts receivable	51.8	72.5	49.1	-23.4	Borrowings	6.2	24.6	5.8	-18.8
Inventories	44.5	43.9	49.2	+5.3	Others	21.5	22.5	21.4	-1.1
Others	5.4	7.2	4.9	-2.3	Net assets	180.0	185.5	188.0	+2.5
Fixed assets	89.9	95.3	97.1	+1.8	Shareholders' equity	171.0	177.1	177.0	-0.1
Total PPE	52.2	51.6	51.2	-0.4	Valuation difference on available- for-sale securities	8.1	7.8	10.2	+2.4
Intangible assets	1.4	7.4	7.2	-0.2	Foreign currency translation adjustment	-0.9	-0.9	-0.8	+0.1
Investment securities*	30.4	30.9	33.9	+3.0	Non-controlling interests	1.6	1.6	1.6	0.0
Others	5.9	5.4	4.8	-0.6	Remeasurements of defined benefit plans	0.2	-0.1	0.0	+0.1
Total assets	223.5	249.5	229.2	-20.3	Total liabilities & Net assets	223.5	249.5	229.2	-20.3
*Investment securities	7.1 V-	9 9			• Equity Ratio	79.8%	73.7%	81.3%	
Listed shares	20.8	20.7	23.7	+3.0	• D/E Ratio (1)	-15.0%	697100 . NO		
Unlisted shares	2.4	2.6	2.6	0.0	· Change in sharehol	ders' equi		800	
Subsidiaries/Associates shares	7.2	7.6	7.6	0.0	= Net Income 13.9	- Dividend	and other	s 14.0	
Total	30.4	30.9	33.9	+3.0	(1)D/E Ratio = (Borrowii	ngs - Cash) /	Shareholde	rs' equity	12

Please refer to the balance sheet on page 12. First of all, about listed shares as shown in the margin, it increased from JPY20.7 billion in March to JPY23.7 billion in September of 2020. As I mentioned earlier, we made efforts to reduce cross-shareholdings, but the evaluation difference increased due to the rise in the level of stock prices. As a result, here is an increase of JPY3 billion.

FY2020 Sales Outlook by Segment (1)(2)(3)

(¥billion)

			FY20	19 Act	ual	X6			· ·		20 Out f Nov. :				(Change	•			20 Out f May 2		
	1Q	2Q	1H	3Q	4Q	2H	Total	1Q Actual	2Q Actual	1H Actual	3Q	4Q	2H	Total	1H Actual	2H	Total	1Q	2Q	1H	2H	Total
Chem	8.4	8.4	16.8	8.7	8.8	17.5	34.3	7.4	7.3	14.7	8.1	8.9	17.0	31.7	-2.1	-0.5	-2.6	8.5	8.5	17.0	18.6	35.6
Fine	2.6	2.6	5.2	2.6	2.7	5.3	10.5	2.7	2.7	5.4	2.9	3.5	6.4	11.8	+0.2	+1.1	+1.3	3.2	3.2	6.4	6.7	13.1
Basic	5.8	5.8	11.6	6.1	6.1	12.2	23.8	4.7	4.6	9.3	5.2	5.4	10.6	19.9	-2.3	-1.6	-3.9	5.3	5.3	10.6	11.9	22.5
P.M	15.1	16.3	31.4	17.0	17.1	34.1	65.5	17.1	17.5	34.6	17.5	17.7	35.2	69.8	+3.2	+1.1	+4.3	16.9	17.2	34.1	36.0	70.1
Agro	14.7	13.2	27.9	5.5	30.6	36.1	64.0	14.6	11.1	25.7	8.2	30.7	38.9	64.6	-2.2	+2.8	+0.6	15.2	10.8	26.0	39.5	65.5
Pharma	1.9	1.5	3.4	1.6	2.0	3.6	7.0	1.5	1.5	3.0	1.6	2.2	3.8	6.8	-0.4	+0.2	-0.2	1.2	1.6	2.8	3.6	6.4
D.D	1.4	0.7	2.1	0.9	1.0	1.9	4.1	0.7	0.8	1.5	0.6	0.9	1.5	3.0	-0.6	-0.4	-1.1	0.7	0.8	1.5	1.3	2.8
c.c	0.5	0.8	1.3	0.6	1.0	1.6	2.9	0.8	0.7	1.5	1.0	1.3	2.3	3.8	+0.2	+0.7	+0.9	0.5	0.8	1.3	2.2	3.6
Trading	17.5	15.8	33.3	17.5	17.1	34.6	67.9	18.2	15.5	33.7	17.9	17.5	35.4	69.1	+0.4	+0.8	+1.2	17.1	15.9	33.0	35.2	68.2
Others	4.9	4.9	9.8	5.1	7.5	12.6	22.4	4.8	4.6	9.4	6.4	7.6	14.0	23.4	-0.4	+1.4	+1.0	5.5	5.1	10.6	14.4	25.0
Adjust	-13.8	-12.3	-26.1	-13.9	-14.3	-28.2	-54.3	-14.3	-12.3	-26.6	-15.0	-14.3	-29.3	-55.9	-0.5	-1.1	-1.6	-14.6	-12.3	-26.9	-29.4	-56.3
Total	48.7	47.8	96.5	41.5	68.8	110.3	206.8	49.3	45.2	94.5	44.7	70.3	115.0	209.5	-2.0	+4.7	+2.7	49.8	46.8	96.6	117.9	214.5

- (1) Including inter-segment sales/transfers
- (2) In the Pharmaceuticals segment, figures are rounded to the nearest 100 million yen. Accordingly, some discrepancies may occur among totals.
- (3) In FY2020, FINEOXOCOL (FO, cosmetic raw materials) was transferred from Basic Chemicals to Fine Chemicals

13

FY2020 OP Outlook by Segment (1)(2)

(¥billion)

		St 50	FY20	19 Act	ual				6.	1400000	20 Out f N ov. 2	70 TON		80	(Change	•		30000000000000000000000000000000000000	20 Out f May 2	355055000	
y,	1Q	2Q	1H	3Q	4Q	2H	Total	1Q Actual	2Q Actual	1H Actual	3Q	4Q	2H	Total	1H Actual	2H	Total	1Q	2Q	1H	2H	Total
Chem	0.9	-0.6	0.3	0.5	0.5	1.0	1.3	0.7	-0.8	-0.1	0.7	0.6	1.3	1.2	-0.4	+0.3	-0.1	1.2	0.0	1.2	1.5	2.7
Performance Materials	4.0	4.4	8.4	4.7	3.9	8.6	17.0	5.3	5.4	10.7	4.9	5.0	9.9	20.6	+2.3	+1.3	+3.6	4.2	4.5	8.7	9.4	18.1
Agro	4.5	4.9	9.4	-1.8	11.7	9.9	19.3	4.0	3.8	7.8	-0.7	11.6	10.9	18.7	-1.6	+1.0	-0.6	3.6	3.1	6.7	11.7	18.4
Pharma	0.4	0.1	0.5	0.1	0.3	0.4	0.9	-0.1	0.1	0.0	0.1	0.5	0.6	0.6	-0.5	+0.2	-0.3	-0.1	0.2	0.1	0.3	0.4
D.D	0.2	-0.2	0.0	-0.2	0.0	-0.2	-0.1	-0.2	-0.1	-0.4	-0.4	-0.1	-0.5	-0.9	-0.4	-0.3	-0.7	-0.3	-0.1	-0.3	-0.6	-1.0
c.c	0.2	0.3	0.5	0.2	0.4	0.6	1.1	0.2	0.2	0.4	0.4	0.6	1.0	1.4	-0.1	+0.5	+0.4	0.1	0.3	0.4	1.0	1.4
Trading	0.5	0.5	1.0	0.6	0.5	1.1	2.1	0.7	0.5	1.2	0.5	0.4	0.9	2.1	+0.2	-0.2	0.0	0.5	0.5	1.0	1.0	2.0
Others	0.1	0.0	0.1	0.1	0.5	0.6	0.7	0.0	0.0	0.0	0.1	0.5	0.6	0.6	-0.1	0.0	-0.1	0.0	0.1	0.1	0.6	0.7
Adjustment	-1.1	-0.6	-1.7	-0.8	-0.2	-1.0	-2.7	-0.8	-0.8	-1.6	-1.4	-0.5	-1.9	-3.5	+0.1	-0.9	-0.8	-0.9	-0.8	-1.7	-1.3	-3.0
Total	9.3	8.7	18.0	3.4	17.2	20.6	38.6	9.8	8.2	18.0	4.2	18.1	22.3	40.3	0.0	+1.7	+1.7	8.5	7.6	16.1	23.2	39.3

- (1) OP is calculated by new method
 - 1. Applied from FY2020 (no change for sales segmentation)
 - 2. FY2019 restated based on new methods
 - 3. Consolidation items
 - (such as unrealized gain on inventories)
 - (Old method) Included in each segment
 - (New method) Excluded from each segment and included in "Adjustment"
- (2) In the Pharmaceuticals segment, figures are rounded to the nearest 100 million yen. Accordingly, some discrepancies may occur among totals.

This is followed by sales and operating income by segment. Sales are listed on page 13, followed by operating income on page 14.

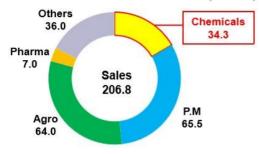
FY2020 Sales Outlook of Future Growth Engines (1)Including R&D costs deduction due to the sample shipments (Announced in May 2020) FY2020 Sales Below ¥0.3 billion ¥0.3 to ¥0.6 billion Above ¥0.6 billion Total Outlook Level (1) New TEPIC (Liquid type) Venus® Oilclean Chem ¥0.0 billion (Fine Chemicals) (Fine Chemicals) Flexible hard coating Light control film CMOS image sensor EUV under layer materials (Display) materials (Display materials (Semis) (Semis) Oilfield materials Hole injection laver Repellant bank layer materials (Display) materials (Display) (Inorganic) Alignment materials Alignment materials for LC retarder (Display) for TV (Display) **Performance** ¥3.1 billion **Materials** 3D packaging process Monomersol materials (Semis) (3D-printing) (Inorganic) Organosol (Insulation CTE) (Inorganic) New high refractive materials (IM laver film) (Inorganic) ROUNDUP AL II / III TRANSFORM™/ EXCEED™/ **NEXTER** CLARE (Licensed-in) (In-house) (In-house) VIRESCO™ (Licensed-in) (In-house) ¥9.1 billion Agro QUINTEC GRACIA (In-house) (Acquisition) New GE API product Eldecalcitol New GE API product Pharma, (Custom Chemicals) (Custom Chemicals) (Custom Chemicals) ¥1.2 billion **Others** Cell culture medium Total ¥13.4 billion

Then, page 15 and after, we provided the table of future growth engines which was presented in May for reference. Figures have not been changed from May. This continues from page 15 to page 21.

Chemicals - (A) Recent Financial Performance

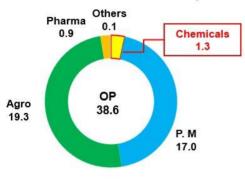
1. FY2019 Sales Distribution (¥billion)

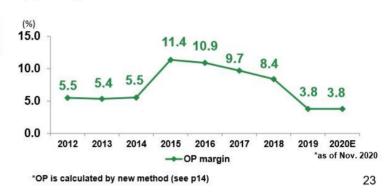
3. Recent Financial Performance (¥billion)





2. FY2019 OP Distribution (New method*) (¥billion)

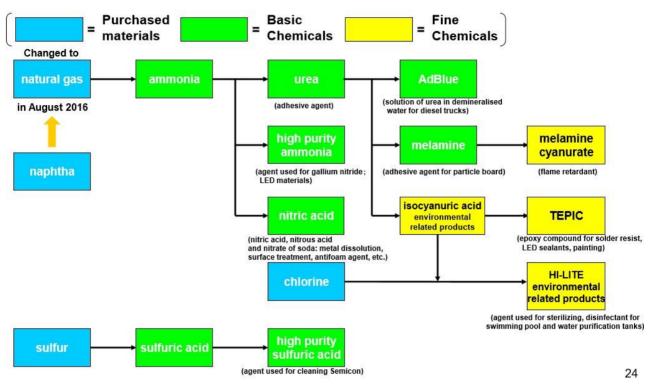




Then, we will report on the status of each segment. This is for Chemicals. On page 23, this is common to all segments, but on the first page, we have included FY2019 sales, operating income distribution, and recent financial performance.

Chemicals - (B) Flow Chart of Selected Basic and Fine Chemicals Products

- ♦ Core products of Basic Chemicals : Ammonia related products and sulfuric acid related products
- ♦ FY2019 ammonia domestic production capacity share 11%, high percentage of self-consumption of ammonia



Page 24 shows the flow of main products.

Chemicals – (C) Sales YOY Change

				,	Sales Y	OY Ch	ange(1)		
	Main Products	FY20	019 Ac	tual		20 Ou May 2		1,000,000	20 Ou Nov	
		1H	2H	Total	1H	2H	Total	1H Actual	2H	Total
TEPIC	◆ Epoxy compound for: (A) electronic materials (solder resist, LED materials), (B) general applications such as powder coating agent for paint ◆ World largest producer	+5%	+3%	+4%	+5%	+7%	+6%	-10%	+1%	-4%
Environmental related products	HI-LITE: made from chlorinated isocyanuric acid, used for sterilizing, disinfectant for swimming pool as well as water purification tank	+2%	-6%	-2%	+1%	+20%	+9%	-9%	+22%	+4%
Two products account	Total Fine Chemicals for 83% of total consolidated subsegment sales (FY2019)	+3%	-1%	+1%	+20%	+28%	+24%	+3%	+21%	+12%
Melamine	Mainly used as adhesive agent for particle board, medium density fiberboard, plywood	0%	-22%	-12%	-34%	-26%	-30%	-55%	-49%	-52%
Urea including AdBlue	Urea: mainly used for urea formaldehyde resin, adhesive agent AdBlue: solution of urea in demineralised water for diesel trucks to reduce Nox	+7%	+5%	+6%	+7%	+6%	+6%	-5%	-1%	-3%
High purity sulfuric acid	♦ Used to clean semiconductors ♦ Largest in domestic market	-2%	+12%	+5%	+19%	+15%	+17%	+14%	+19%	+17%
Nitric acid products	Nitric acid, nitrous acid and nitrate of soda: Metal dissolution, surface treatment, antifoam agent	-4%	-10%	-7%	+14%	+19%	+17%	-2%	+7%	+3%
Four products account	Total Basic Chemicals t for 53% of total consolidated subsegment sales (FY2019)	-2%	-8%	-6%	-8%	-4%	-6%	-20%	-13%	-16%

(1) In FY2020, FINEOXOCOL (cosmetic raw materials, FY2019 sales about ¥1.5 billion) was transferred from Basic Chemicals to Fine Chemicals

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Page 25 shows the sales trends of the Chemicals Segment. As shown in the note in the margin, FINEOXOCOL, which sales are approximately JPY1.4 billion or JPY1.5 billion was in FY2020 transferred from Basic Chemicals to Fine Chemicals. This makes reading some figures of Basic and Fine Chemicals a little complicated.

Chemicals - (D-1) Profit Overview (¥billion) FY2020 Outlook FY2020 Outlook (B) Change FY2019 Actual (A) as of May 2020 as of Nov. 2020 (B)-(A) 1Q 20 1H 10 20 1H 30 40 2H Total 10 20 1H 2H Total 30 40 2H Total 2H Total Sales 8.4 16.8 8.8 17.5 34.3 8.5 8.5 17.0 18.6 35.6 8.1 8.9 17.0 31.7 -0.5 8.4 8.7 -2.6 5.2 2.7 5.3 10.5 3.2 6.4 6.7 13.1 5.4 3.5 11.8 +1.1 Fine 2.6 2.6 2.6 3.2 2.7 2.7 2.9 6.4 +0.2 +1.3 5.3 5.3 11.9 4.6 9.3 -3.9 Basic 5.8 5.8 11.6 6.1 6.1 12.2 23.8 10.6 22.5 4.7 5.2 5.4 10.6 19.9 -1.6 OP 0.9 -0.6 0.3 0.5 0.5 1.0 1.3 1.2 0.0 1.2 1.5 2.7 0.7 -0.8 -0.1 0.7 0.6 1.3 1.2 -0.4 +0.3 -0.1 *In FY2020, FINEOXOCOL (FO, cosmetic raw materials) was transferred from Basic Chemicals to Fine Chemicals 1Q FY2020 Review 2Q FY2020 Review <vs. 1Q FY2019> <vs. 2Q FY2019> Sales down: TEPIC for general applications (export),
TEPIC for electronic materials (sluggish demand for cars), Sales down: TEPIC for general applications (export), TEPIC for electronic materials (sluggish demand for cars), environmental related products (export up, sluggish demand for domestic pools) environmental related products (sluggish demand for pools) Inventory adjustment cost up Inventory adjustment cost down ♦ Sales up (including ¥0.3 billion FO* transferred from BC), OP down Sales up (including ¥0.3 billion FO* transferred from BC), OP up (Basic) Sales up: high purity sulfuric acid (for semis) Sales up: high purity sulfuric acid (for semis) Sales down: domestic melamine (sluggish demand for housing), export melamine (due to reduction of low margin deals, sluggish demand) Sales down: domestic melamine (sluggish demand for housing), nitric acid products (for capacitors), urea including AdBlue (sluggish demand for trucks) export melamine(due to reduction of low margin deals) ♦ Inventory adjustment cost up
♦ Sales down (including ¥0.3 billion FO* transferred to FC), OP down urea including AdBlue, nitric acid products Sales down (including ¥0.3 billion FO* transferred to FC), OP down (Total)

<vs. 1Q FY2020 Outlook as of May 2020>

(Fine)

Sales below target: TEPIC for general applications,

Sales down ¥1.0 billion, OP down ¥0.2 billion

TEPIC for electronic materials, environmental related products

 Sales below target, OP below target Basic)

 Sales below target: melamine (both domestic and export), urea including AdBlue, high purity sulfuric acid, nitric acid products

♦ Sales below target, OP below target (Total)

Sales down ¥1.1 billion, OP down ¥0.5 billion

 Sales below target: TEPIC for electronic materials (sluggish demand for cars), environmental related products (export up, sluggish demand for domestic pools)

Inventory adjustment cost above expectations

Sales below target, OP below target

 Sales below target: urea including AdBlue (sluggish demand for trucks), melamine (sluggish demand for domestic, export in line with target), high purity sulfuric acid, nitric acid products (decline in demand)

♦ Inventory adjustment cost above expectations

Sales below target, OP below target

◆ Sales down ¥1.2 billion, OP down ¥0.8 billion

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Profit overview of Chemicals Segment comes next. There is a table on the top of page 27. We don't have much time, so for each segment, I will explain the results for the first half of FY2020 and the forecast for the second half of FY2020.

Chemicals - (D-2) Profit Overview

1H FY2020 Review <vs. 1H FY2019>

(Fine) Sales down: TEPIC for general applications (export), TEPIC for electronic materials (sluggish demand for cars), environmental related products (export up, sluggish demand for domestic pools) Sales up (including ¥0.6 billion FO* transferred from BC), OP down Sales up: high purity sulfuric acid (for semis) Sales down: domestic melamine (sluggish demand for housing), export melamine (due to reduction of low margin deals, sluggish demand) nitric acid products (for capacitors), urea including AdBlue (sluggish demand for trucks) Sales down (including ¥0.6 billion FO* transferred to FC), OP down Sales down ¥2.1 billion, OP down ¥0.4 billion <vs. 1H FY2020 Outlook as of May 2020> (Fine) Sales below target: TEPIC for general applications (export), TEPIC for electronic materials (sluggish demand for cars), environmental related products (export up.

sluggish demand for domestic pools)

melamine (sluggish demand for domestic and export),

nitric acid products (decline in demand, failure to increase prices)

Sales below target: urea including AdBlue,

Inventory adjustment cost above expectations

Sales down ¥2.3 billion, OP down ¥1.3 billion

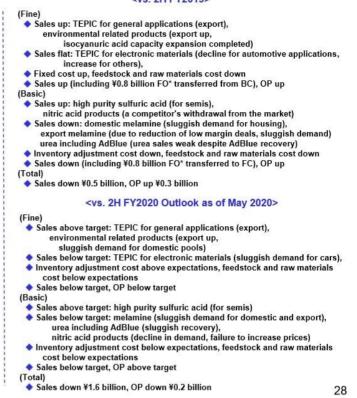
Sales below target, OP below target

Sales below target, OP below target

high purity sulfuric acid,

(Basic)

2H FY2020 Outlook <vs. 2H FY2019>



Please refer to page 28 for the first half of Chemicals. About Fine Chemicals, compared with the first half of FY2019, sales of TEPIC for general applications declined due to the impact of COVID-19, and sales of TEPIC for electronic materials for automotive applications were also sluggish due to the slump in the automobile industry.

Concerning the environmental related products, although exports increased, domestic sales declined in pools and spas, resulting in a decrease on a net basis. However, for the impact of the transfer of FINEOXOCOL as mentioned earlier, sales increased, and operating income decreased.

Next, Basic Chemicals. Only sales of high purity sulfuric acid increased, and sales of other major products declined. In particular, domestic sales of melamine declined due to a decrease in the number of domestic housing construction. Originally, our policy for export melamine was to reduce volume with an emphasis on spreads. As for nitric acid products, sales of capacitors and other products are sluggish. In addition, sales of AdBlue for trucks have been sluggish, resulting in a substantial decline in sales here and a decline in operating income.

Overall, segment sales were down JPY2.1 billion and operating income was down JPY400 million.

Compared to the forecast of May, as I just mentioned, sales of Fine Chemicals were down, and as a result, profits were also down. Basic Chemicals had the same negative factors as YOY and additional negative factors for inventory fluctuations, resulting in sales and profits below the forecast. As a result, sales were down JPY2.3 billion and operating income was down JPY1.3 billion, a significant underachievement.

Next is the forecast for the second half on the right. Compared to 2H FY2019, as for Fine Chemicals, sales of TEPIC for general applications are expected to increase in anticipation of a recovery from the impact of COVID-19. We expect a sales of environmental related products increase because export increases and domestic

increases with capacity expansion for isocyanuric acid. TEPIC for electrical materials are on a flat trend. On the other hand, there are negative and positive factors, such as an increase in fixed costs and a decrease in raw material and fuel costs. Accordingly, we expect sales and operating income increases.

Concerning Basic Chemicals, we are seeing an increase in sales of high-purity sulfuric acid and also nitric acid products, partly due to the withdrawal of competing manufacturers. On the other hand, about sales decrease, the situation is expected to remain very unchanged from the first half of FY2020. Decrease in sales of melamine, AdBlue, et cetera. This will result in sales decrease and operating income increase, which was partly attributable to lower raw material and fuel prices, as well as positive inventory fluctuations.

As the segment, total sales are expected to be down JPY500 million and operating income to be up JPY300 million.

Compared with the forecasts of May for the second half, in Fine Chemicals, sales are expected to rise in TEPIC for general applications and environmental related products. Sales of TEPIC for electronic materials are expected to be below the target. In addition, there are negative factors for inventory fluctuations, but there are also positive factors for raw materials and fuels. Sales are expected to be below target and profits are also expected to be below target.

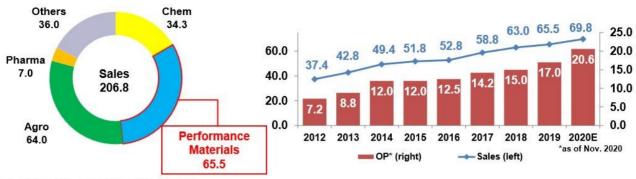
In Basic Chemicals, only high-purity sulfuric acid sales are expected to increase, while sales of other products are expected to be below target. However, despite lower sales thanks to positive factors in inventory fluctuations and cheaper raw materials and fuels, we forecast higher profits.

In total, sales are expected to be down JPY1.6 billion and operating income is expected to be down JPY200 million.

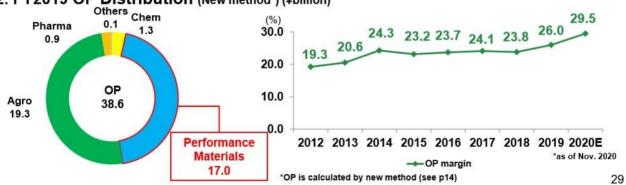
Performance Materials - (A) Recent Financial Performance

1. FY2019 Sales Distribution (¥billion)

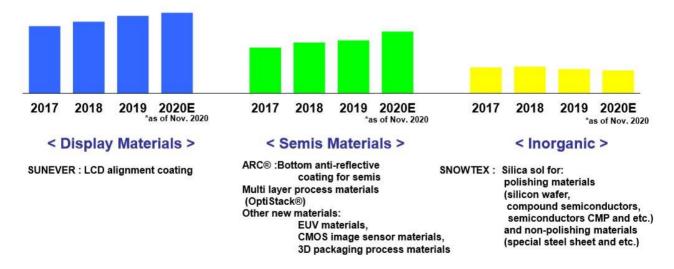
3. Recent Financial Performance (¥billion)



2. FY2019 OP Distribution (New method*) (¥billion)



Performance Materials – (B) FY2017-2020E Sales Distribution



Organo/Monomer Sol: Hard coating materials, electronic information

materials, resin additive

Oilfield materials: For enhancing oil recovery

Next is Performance Materials. Its performance trends are shown on page 29 and changes in sales distribution of Display Materials, Semis Materials, and Inorganic are shown on page 30.

Performance Materials - (C) Sales YOY Change

	arroc materials	10	, 00	AICO	week and the second	YOY CI	ridi	ige	9	
	Main Products	FY2	019 Ac1	tual	FY20	20 Out	look		020 Outl	
		1H	2H	Total	1H	2H	Total	1H Actual	2H	Total
s	UNEVER	+3%	+14%	+9%	+7%	+1%	+4%	+7%	0%	+3%
Т	otal Display Materials	+3%	+14%	+8%	+7%	+3%	+5%	+7%	+1%	+4%
T	KrF (ARC®)	-5%	+12%	+3%	+1%	-4%	-2%	+14%	-3%	+5%
	ArF (ARC®)	-3%	+5%	+1%	+6%	+5%	+6%	+16%	+10%	+13%
т	otal ARC®	-3%	+9%	+3%	+5%	+2%	+3%	+16%	+6%	+11%
0	ther Semis Materials (1)	-8%	+25%	+8%	+45%	+28%	+35%	+51%	+17%	+31%
Т	otal Semis Materials	-4%	+13%	+4%	+15%	+9%	+12%	+25%	+9%	+16%
s	NOWTEX	-2%	-2%	-2%	+6%	+7%	+7%	+2%	0%	+1%
0	rgano/Monomer Sol	-11%	-14%	-13%	-5%	+2%	-1%	-15%	-3%	-9%
0	ilfield Materials	-64%	-29%	-52%	+29%	+70%	+50%	-91%	-15%	-52%
TI	otal Inorganic Materials nree products account for 82% of total consolidated ubsegment sales (FY2019)	-11%	-8%	-9%	+1%	+7%	+4%	-8%	-2%	-5%

(1) Multi layer process materials (OptiStack®), EUV materials, CMOS image sensor materials, 3D packaging process materials etc.

Semiconductor capex plan to capture long-term future business:

Analyzing and evaluation R&D equipment (¥1.1 billion) Main capex : (approval basis) FY2014

Product development facilities(¥2.8 billion), Analyzing and evaluation R&D equipment (¥0.8 billion), FY2015 Production capacity expansion (¥0.8 billion), NCK* (¥0.7 billion), Material Research Lab. (¥0.5 billion)

FY2016 NCK* production capacity expansion (¥2.6 billion). Analyzing and evaluation R&D equipment (¥1.0 billion), Material Research Lab. (¥0.4 billion)

FY2017 Material Research Lab. (¥0.4 billion)

Production capacity expansion (¥0.2 billion), Production test facilities (¥0.2 billion) Production test facilities (¥0.1 billion) FY2018 FY2019

FY2020 Material Research Lab. new annex (¥2.0 billion), Analyzing and evaluation R&D equipment (¥0.4 billion),

Production test facilities (¥0.2 billion)
*NCK:Conso

bsidiary in South Korea. R&D, production and sales of display and semis materials. 31

Please see page 31. This shows sales growth rate of major products. First of all, about SUNEVER, the results for the first half are 7% up, which is exactly the same as the initial forecast for FY2020. Looking at a slight slowdown in the second half of FY2020, we see 3% up for full year, slightly below the target of 4% forecasted in May.

For Semis Materials in the middle, the initial forecast for the first half of FY2020 was up 15%, but the result of the first half was 25%, which was well above the forecast. We expected to be 16% up for full year.

On the other hand, for Inorganic Materials at the bottom, at the beginning of FY2020, we had projected a 1% up in the first half, but this was down 8% due to a general downturn.

Performance Materials - (D) SUNEVER

<SUNEVER Sales Distribution by Mode>



<SUNEVER Sales YOY Change by Mode>

	10	FY2019 Actua	Ĺ		Y2020 Outloo as of May 2020		100	Y2020 Outloo as of Nov. 202		YOY Change	
	1H	2Н	Total	1H	2H	Total	1H Actual	2Н	Total	+20~+29% +10~+19%	111
TN	***	77	777	77	77	77	KKK	KKK	777	+0~+9%	1
VA	777	77	77	×	A	7	¥	XX	¥	-0~-9% -10~-19%	77
IPS	7	オオ	7	A	A	A	ア ス	A	7	-20~-29%	111
Total	+3%	+14%	+9%	+7%	+1%	+4%	+7%	0%	+3%	-30%~-39%	7777

^{*}TN: Twisted Nematic, VA: Vertical Alignment, IPS: In-Plane Switching

Page 32 shows SUNEVER sales distribution by mode. IPS mode including rubbing and photo are still driving forces.

Performance Materials - (E-1) Profit Overview

(¥billion)

			FY201	9 Actu	al (A)					20 Out f May 2				0	FY2020 as o	Outlo	200				hange (B)-(A)	
	1Q	2Q	1H	3Q	4Q	2H	Total	1Q	2Q	1H	2H	Total	1Q Actual	2Q Actual	1H Actual	3Q	4Q	2H	Total	1H Actual	2H	Total
Sales	15.1	16.3	31.4	17.0	17.1	34.1	65.5	16.9	17.2	34.1	36.0	70.1	17.1	17.5	34.6	17.5	17.7	35.2	69.8	+3.2	+1.1	+4.3
OP	4.0	4.4	8.4	4.7	3.9	8.6	17.0	4.2	4.5	8.7	9.4	18.1	5.3	5.4	10.7	4.9	5.0	9.9	20.6	+2.3	+1.3	+3.6

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

1Q FY2020 Review

- DP sales up, OP up <VS. 1Q FY2019>
 Photo IP\$ up (smartphone and non-smartphone up),
- rubbing IPS up (non-smartphone up), VA up , TN down
 Semis Materials sales up, OP up
 ARC® up, other semis materials up (multi layer materials up, other new materials up)
- Steadily growing logic market, recovery of memory market Fixed cost down ¥0.4 billion

 Inorganic Materials sales down, OP down
- SNOWTEX up (non-polishing flat, polishing up),
 Organo/Monomer Sol down, Oilfield materials down (sluggish shale oil market)

 ◆ Fixed cost down ¥0.4 billion in total
- Sales up ¥2.0 billion, OP up ¥1.3 billior

<vs. 1Q FY2020 Outlook as of May 2020>

- DP sales above target, OP above target Photo IPS below target (smartphone below target), rubbing IPS above target (non-smartphone above target), VA below target, TN below target,
- Fixed cost below expectations (¥0.3 billion)
 Semis Materials sales above target, OP above target
 ARC® above target, other semis materials below target (multi layer materials and other new materials below target) Steadily growing logic semis market overall
- Fixed cost below expectations (¥0.5 billion)
 Inorganic Materials sales below target, OP above target
 SNOWTEX above target (non-polishing for cars below target, polishing above target), Organo/Monomer Sol below target, Oilfield materials below target (sluggish shale oil market)
- Fixed cost below expectations (¥0.2 billion)

 Fixed cost below expectations (¥1.0 billion) in total

 Sales up ¥0.2 billion, OP up ¥1.1 billion

2Q FY2020 Review

<vs. 2Q FY2019> DP sales up, OP up Presies up, บา up Photo IPS up (non-smartphone up), rubbing IPS down (shifted to photo IPS), VA down, TN down, Fixed cost up ¥0.1 billion

- Semis Materials sales up, OP up

 ARC® up, other semis materials up (multi layer materials and other new materials up) Steadily growing semis market overall Fixed cost down ¥0.2 billion
- Inorganic Materials sales down, OP up
 - SNOWTEX down (non-polishing down, polishing up),
 Organo/Monomer Sol down, Oilfield materials down (sluggish shale oil market)
- Fixed cost down ¥0.2 billion

 Fixed cost down ¥0.3 billion in total

 Sales up ¥1.2 billion, OP up ¥1.0 billion

<vs. 2Q FY2020 Outlook as of May 2020>

- DP sales below target, OP above target Photo IPS above target (non-smartphone above target),
- rubbing IPS above target (smartphone above target),
 VA below target, TN below target, Fixed cost below expectations (¥0.2 billion)
 Semis Materials sales above target, OP above target ARC® above target, other semis materials above target (multi layer materials and other new materials above target)
- Steadily growing semis market overall, Fixed cost below expectations (¥0.2 billion)

 Inorganic Materials sales below target, OP below target SNOWTEX below target (non-polishing for cars below target, polishing in line with target), Organo/Monomer Sol below target, Oilfield materials below target (sluggish shale oil market)
- Fixed cost below expectations (¥0.2 billion)
 Fixed cost below expectations (¥0.6 billion) in total
 Sales up ¥0.3 billion, OP up ¥0.9 billion

33

Next, page 33 shows the profit overview of Performance Materials Segment.

Performance Materials – (E-2) Profit Overview

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

1H FY2020 Review <vs. 1H FY2019>

- Photo IPS up (non-smartphone up), rubbing IPS down (shifted to photo IPS, non-smartphone un).
- VA down (customer production decrease), TN down, Fixed cost up ¥0.2 billion
- Semis Materials sales up. OP up
 - ARC® up, other semis materials up (multi layer materials and other new materials up) Steadily growing semis market overall
- Fixed cost down ¥0.6 billion Inorganic Materials sales down, OP up
 - SNOWTEX up (non-polishing down, polishing up) Organo/Monomer Sol down, Oilfield materials down (sluggish shale oil market) Fixed cost down ¥0.3 billion
- Fixed cost down ¥0.7 billion in total
- Sales up ¥3.2 billion, OP up ¥2.3 billion

<vs. 1H FY2020 Outlook as of May 2020>

- DP sales in line with target, OP above target
 Photo IPS below target (smartphone below target, non-smartphone above target), rubbing IPS above target (smartphone and non-smartphone above target). VA below target, TN below target,
- Fixed cost below expectations (¥0.5 billion)
- Semis Materials sales above target, OP above target ARC® above target, other semis materials above target (multi layer materials above target, other new materials below target) teadily growing semis market overall
- Fixed cost below expectations (¥0.7 billion)
- Inorganic Materials sales below target, OP above target SNOWTEX below target (non-polishing for cars below target, polishing above target), Organo/Monomer Sol below target.
 - Oilfield materials below target (sluggish shale oil market) Fixed cost below expectations (¥0.3 billion)
- Fixed cost below expectations (¥1.6 billion) in total Sales up ¥0.5 billion, OP up ¥2.0 billion

2H FY2020 Outlook <vs. 2H FY2019>

- DP sales up. OP down
- Photo IPS up (non-smartphone up), rubbing IPS down (shift to photo IPS), VA down (customer production decrease), TN down, Fixed cost up ¥0.1 billion
- Semis Materials sales up, OP up
- ARC® up, other semis materials up (multi laver materials up, other new materials down)
- Steadily growing semis market overall Fixed cost down ¥0.3 billion

 Inorganic Materials sales down, OP up
- SNOWTEX flat (non-polishing down, polishing up),
 Organo/Monomer Sol down, Oilfield materials down (sluggish shale oil market)
- Fixed cost down ¥0.2 billion in total
- Sales up ¥1.1 billion, OP up ¥1.3 billion

<vs. 2H FY2020 Outlook as of May 2020>

- DP sales below target, OP above target Photo IPS above target (non-smartphone above target), rubbing IPS below target (customer production decrease). VA below target (customer production decrease), TN below target, Fixed cost below expectations (¥0.2 billion)
- Semis Materials sales in line with target. OP above target ARC® above target, other semis materials below target (multi layer materials and other new materials below target)
- Inventory adjustment cost below expectations (¥0.2 billio
 Inorganic Materials sales below target, OP below target SNOWTEX below target (non-polishing for cars below target, polishing below target), Organo/Monomer Sol below target
- Oilfield materials below target (sluggish shale oil market)
 Fixed cost below expectations (¥0.2 billion) in total
- Sales down ¥0.8 billion. OP up ¥0.5 billion

34

Move on to page 34. I will explain YoY comparison for the first half.

First of all, Display Materials sales and profits increased. Photo IPS sales were extremely strong and grew significantly for non-smartphones. For rubbing IPS, sales for non-smartphones, tablets, et cetera, were favorable, but net sales declined due to a large shift to Photo. Although we have succeeded in expanding sales of VA, sales have declined due to a significant decrease in production by a customer. Like in the past, TN was down due to switching to other modes. Fixed costs for Display Materials increased by JPY200 million.

Next, Semis Materials increased in sales and profits. Sales of ARC, other multi-layer materials and new materials increased, reflecting the strong performance of the overall market. In addition, its fixed costs decreased by JPY600 million.

Inorganic Materials sales decreased but profits increased. Although sales of SNOWTEX for general applications declined due to the impact of COVID-19, sales of semiconductor-related polishing materials increased. Organo/Monomer Sol sales were down. Oilfield materials sales were down due to the sluggish shale-oil market. On the other hand, the decrease in fixed costs was also large, at JPY300 million, and as I mentioned earlier, sales decreased but profits increased.

Overall segment, with a decrease in fixed costs of JPY700 million, the sales increased by JPY3.2 billion and the operating income increased by JPY2.3 billion.

Compared to the forecast of May, firstly concerning Display Materials, sales were in line with the forecast, but operating income was above forecast. The major factor behind this is the reduced fixed costs of JPY500 million.

About Semis Materials, both sales and profits were well above target. In addition to strong sales, fixed costs fell below the target by JPY700 million.

Sales of Inorganic Materials was below target, but operating income increased thanks to a JPY300 million lower fixed costs.

As a result, compared to the May forecast, sales were up JPY500 million and operating income was up JPY2 billion.

Next is the outlook for the second half on the right.

For Display Materials, we expect YoY sales increase and profit decrease. Photo IPS continues to perform well, mainly for non-smartphones. On the other hand, the shift from rubbing IPS to Photo IPS continues. As I mentioned earlier, VA sales decrease because of the production suspension and decrease in our customer which are occurring ahead of schedule. Fixed costs are also JPY100 million plus due to the completion of the new facility.

Semis Materials will remain unchanged from the first half, and a further decrease in fixed costs of JPY300 million will be added. Therefore, both sales and profits are expected to increase.

We expect Inorganic Materials sales decrease but profits increase. SNOWTEX sales remain flat, sales of Organo/Monomer Sol sales may decrease, and Oilfield materials sales also may decrease. Looking at the details, we expect profits to increase as a result of lower sales of low-profit products in general and an increase sales highly profitable products.

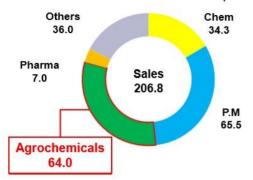
For the segment as a whole, sales will increase by JPY1.1 billion and operating income by JPY1.3 billion.

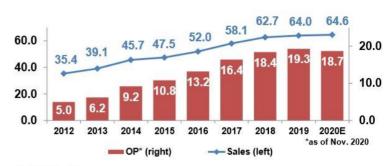
Compared to the forecast of May as shown on the bottom of page 34, Display Materials and Semis Materials are expected to generate higher profits and Inorganic Materials are expected to be below target. Compared to the first half of FY2020, the gap in fixed costs becomes smaller with JPY200 million, but sales are down JPY800 million, and profit is up JPY500 million.

Agrochemicals - (A) Recent Financial Performance

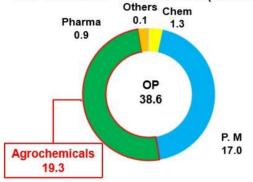
1. FY2019 Sales Distribution (¥billion)

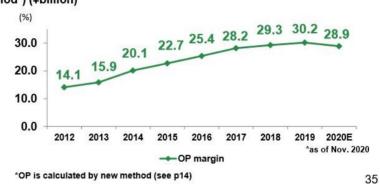
3. Recent Financial Performance (¥billion)





2. FY2019 OP Distribution(New method*) (¥billion)

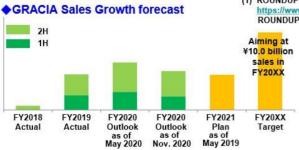




Agrochemicals - (B) Sales YOY Change (Before Discount)

♦ No.1 in the domestic agrochemicals sales ranking (Oct.2017- Sep.2018)

					Consolidated Sales	YOY Chan	ge		
Main Products		F	Y2019 Actua	al	FY2020 Outlook (as of May 2020)	FY2	020 Outlook(as	of Nov. 202	:0)
(in order of FY2019 sales amount)		1H	2H	Total	Total	1H Actual	vs. Plan as of May 2020(undisclosed)	2H	Total
Fluralaner	Animal health products	-10%	-8%	-9%	-9%	-20%	above	+3%	-11%
ROUNDUP (1)	Herbicide	+7%	+5%	+6%	0%	-1%	below	+1%	0%
ALTAIR	Herbicide	+7%	+3%	+4%	+13%	+21%	below	+15%	+16%
TARGA	Herbicide	-21%	-16%	-19%	-4%	-11%	above	+23%	+4%
GRACIA	Insecticide	over+2900%	over+450%	over+700%	+33%	-6%	below	+21%	+10%
PERMIT	Herbicide	-30%	+28%	+8%	-5%	-26%	below	+1%	-5%
LEMAY	Fungicide	-37%	-4%	-16%	+8%	+26%	above	+5%	+11%
QUINTEC	Fungicide	125 135	-		+36%	-	above	+4%	+25%
Total segment	-	-1%	+6%	+3%	+2%	-7%	below	+7%	+1%



- (1) ROUNDUP: See presentation materials for the ROUNDUP business briefing (January 22, 2020) https://www.nissanchem.co.jp/eng/news_release/release/ene2020_01_24.pdf
 ROUNDUP AL for general household accounting for 19% of FY2019 ROUNDUP sales
 - ◆ QUINTEC (QUINOXYFEN)
 - Acquired the QUINOXYFEN product line of fungicides including QUINTEC brand from Corteva in November 2019 and started to sell in December 2019
 - Protectant fungicide highly effective in controlling powdery mildew in fruits (especially grapes) and vegetables, mainly sold in USA

Next is Agrochemicals. Page 35 shows the recent financial performance, followed by page 36 for sales YoY changes in major products.

The results of the first half are shown by product with "above" or "below" remark, and the revised YoY full year outlook is listed on the right-hand side.

Fluralaner was expected to be down 9% at the beginning of the year, but now down 11%. ROUNDUP remains unchanged from the initial forecast. ALTAIR initially was expected up 13% at the beginning of the year, but now up 16%. We expected GRACIA to be up 33% at the beginning of the year. However, since April, there has been an extremely low number of pests observed, and flowers are not sold well due to the impact of COVID-19. As a result, the growth ratio here was modified to up 10%. QUINTEC shown in the last, we expected up 36%, but modified today up 25%.

The situation of GRACIA is shown on the bottom left. As you can see, the revised figures in November is slightly lower than the announced forecasted figures in May.

Agrochemicals - (C) Main Products

lotes
Monsanto, continuing to grow
w
rpe herbicide market, launched III in FY2017, growing sharply
d in Japan in FY2012
July as scheduled
EU in April 2014, apan in July 2015
insferred to NCC
r poultry red mites by MSD
serious pests, having less negative in Korea in FY2018 yen)
orteva in November 2019 tive in controlling powdery mildew
k sales 5.0 billion yen)

2023	NC-241(PYRAPROPOYNE)	Fungicide	In-house	General fungicide (expected peak sales 5.0 billion yen)
2024	NC-653(DIMESULFAZET)	Herbicide	IIn_nollse	Effective against resistant weeds, having excellent safety to rice, (expected peak sales 3.0 billion yen)
2027	NC-656	Herbicide		Our first foliar application rice herbicide with excellent efficacy against resistant grass weeds (expected peak sales 10.0 billion yen)

^{*}MSD: MSD Animal Health, the global animal health business unit of Merck

Expected peak sales of new products (GRACIA, QUINTEC, NC-241, 653, 656) 30.0 billion yen

The trend of our main products is shown on page 37

^{**}BRAVECTO, EXZOLT: the product names developed by MSD, containing the active substance Fluralaner

Export sales* account for 39% of FY2019 consolidated segment sales (Asia:21%, Europe/Africa:65%, North/Central/South America:14%)
*Including Fluralaner

Agrochemicals – (D-1) Fluralaner

Fluralaner

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

- Invented by NCC and supplied to MSD* as the active pharmaceutical ingredient of BRAVECTO and EXZOLT
- Currently, BRAVECTO series and EXZOLT are available in 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

♦BRAVECTO

- Developed and launched by MSD
- Veterinary medical products providing 12 weeks 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 Europe, June 2014 USA, July 2015 Japan, July 2019 China July 2020 monthly chews for puppies approved 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, EU, August 2020 Japan(approved)

◆BRAVECTO Plus

 A broad-spectrum combination spot-on solution for cats to treat internal and external parasite infestations July 2018 Europe, December 2019 USA, August 2020 Japan(approved)

♦EXZOLT

 A poultry medicine against red mite launched by MSD (administered via drinking water)
 September 2017 Europe, June 2018 Korea, and Middle East etc.



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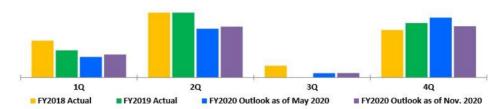
Next, see page 38 for special remarks on Fluralaner. About the third black bullet point in BRAVECTO, chewable tablet for dogs, sales of its monthly chews were approved in July 2020 in the US. In addition, sales of spot-on solution for dogs and cats were approved in August in Japan. For BRAVECTO Plus listed below, we also received approval in August for the sale in Japan.

Agrochemicals - (D-2) Fluralaner

♦NCC's Revenues

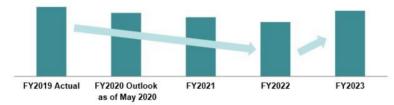
Sales of Fluralaner to MSD as API* of BRAVECTO and EXOLT products +
Running royalties received from MSD semi-annually (February, August) API*: Active Pharmaceutical Ingredient

◆FY2018-FY2020 Fluralaner Quarterly Sales (including royalties)



◆FY2019-FY2023 Fluralaner Pro-forma Sales (including royalties) Image (Announced in May 2020)

- BRAVECTO and EXOLT sales expected to grow steadily
- NCC's Fluralaner sales expected to decrease until FY2022 due to continuing inventory adjustment and recover in FY2023



◆BRAVECTO and EXOLT R&D

Several pipeline products being developed by MSD (including new type of BRAVECTO for pets and spot-on solution for livestock)

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Concerning the Fluralaner situation, as we have seen, the sales decrease more than expected at the beginning of the year. This is because of requests from Merck. Some shipments will be delayed from the fourth quarter to the next fiscal year. As I explained in May, we expect the sales recovery in FY2023 to the level of FY2019. This has not changed at all, and we expect to recover from the bottom of FY2022 years to FY2023.

Agrochemicals - (E) Joint Venture Company in India

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 (assumptions as of 2022)

Business Manufacturing active ingredients of agrochemicals (GRACIA, LEIMAY, QUINTEC, etc.) and

exporting them to NCC

Number of Operators 150-200
Plant Operating 2Q FY2022
Shareholders NCC 70%,

Bharat Rasayan LTD (BRL) 30%

Board of Directors NCC 5, BRL 2, Independent 1, Total 8

<funding (*billion)="" plan=""></funding>			
Plant	4.3	Capital (INR 1.5 billion)	2.3
Working capital and others	2.4	Borrowings provided by NCC	3.3
The second secon		Borrowings provided by local banks	1.1
Total required funds	6.7	Total funding plan	6.7

<Expected Net Contribution to NCC's Consolidated PL>

				rouna numbe	er, ¥billion)
FY	2021	2022	2023	2024	2025
OP	-0.3	0.5	1.2	2.0	3.2

Bharat Rasayan Ltd (BRL)

Foundation 1989

Listing National Stock Exchange of India(NSE), Bombay Stock Exchange (BSE)
Major Shareholders Founders families including Sat Narain Gupta, Chairman 74.8%
2019 PL Sales INR 12,151 million, Net Income after Taxes INR 1,576 million

(one of major Indian agrochemical companies) 2 plants: (A) Dahej, Gujarat (B) Rohtak, Haryana

Plant Location 2 plants: (A) Dahej, Gujarat (B) Rohtak, Haryana
Relationship with BRL manufactures active ingredients and intermediates of NCC's products. Bharat Insecticides Ltd (BIL),

NCC a related company of Bharat group, distributes certain NCC's products(TARGA, PULSOR, PERMIT) in India

Merits to NCC 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

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See page 40 for joint venture companies in India. Currently planning their construction proceeds smoothly.

Agrochemicals - (F-1) Profit Overview

(¥billion)

			FY201	9 Actu	ıal (A)			2	FY2020 Outlook as of May 2020				FY2020 Outlook (B) as of Nov. 2020							Change (B)-(A)		
	1Q	2Q	1H	3Q	4Q	2H	Total	1Q	2Q	1H	2H	Total	1Q Actual	2Q Actual	1H Actual	3Q	4Q	2H	Total	1H Actual	2H	Total
Sales	14.7	13.2	27.9	5.5	30.6	36.1	64.0	15.2	10.8	26.0	39.5	65.5	14.6	11.1	25.7	8.2	30.7	38.9	64.6	-2.2	+2.8	+0.6
OP	4.5	4.9	9.4	-1.8	11.7	9.9	19.3	3.6	3.1	6.7	11.7	18.4	4.0	3.8	7.8	-0.7	11.6	10.9	18.7	-1.6	+1.0	-0.6

1Q FY2020 Review <vs. 1Q FY2019>

: TARGA(export: shipment shifted from 2H, for mixtures in several markets overseas),

ALTAIR(domestic, export), QUINTEC(export),
LEIMAY(domestic, export), GRACIA(export)

Sales down: Fluralaner (BRAVECTO inventory adjustment),

GRACIA(domestic: less pest at low temperature) PERMIT(export: recoil of increased in FY2019),

ROUNDUP(ML down, AL up)

- Fixed cost up ¥0.3 billion
- Inventory adjustment cost down ¥0.2 billion
- Sales down ¥0.1 billion, OP down ¥0.5 billion

<vs. 1Q FY2020 Outlook as of May 2020>

Sales above target :

Sales up

TARGA(export: shipment shifted from 2H, for mixtures in several markets overseas). Fluralaner(shifted from 2Q), LEIMAY(export)

Sales below target :

GRACIA(domestic: less pest at low temperature, export), ROUNDUP(ML below target, AL above target) ALTAIR(domestic), QUINTEC(export), PERMIT(domestic)

- ◆ Fixed cost below expectations (¥0.5 billion)
- ◆ Inventory adjustment cost below expectations (¥0.3 billion)
- Sales down ¥0.6 billion, OP up ¥0.4 billion

2Q FY2020 Review <vs. 2Q FY2019>

- Sales up : QUINTEC(export), ROUNDUP(ML flat, AL up) LEIMAY(domestic, export), PERMIT(export),
- ALTAIR(domestic, export) Sales down : Fluralaner (BRAVECTO inventory adjustment),
 - TARGA(export), GRACIA(export)
- Fixed cost up ¥0.3 billion
- Sales down ¥2.1 billion, OP down ¥1.1 billion

<vs. 2Q FY2020 Outlook as of May 2020>

 Sales above target:
 Fluralaner(royalties above target), ROUNDUP(ML and AL above target), QUINTEC(export), ALTAIR(domestic, export)

Sales below target :

TARGA(export), GRACIA(domestic: less pest at low temperature), LEIMAY(export), PERMIT(export)

- Fixed cost below expectations (¥0.5 billion)
- Inventory adjustment cost above expectations (¥0.3 billion)
- Sales up ¥0.3 billion, OP up ¥0.7 billion

41

Profit overview for Agrochemicals is shown on page 41.

Agrochemicals - (F-2) Profit Overview

1H FY2020 Review 2H FY2020 Outlook <vs. 1H FY2019> <vs. 2H FY2019> : ALTAIR(domestic, export), QUINTEC(export), Sales up : ALTAIR(domestic, export), GRACIA(export) Sales up LEIMAY(domestic, export), GRACIA(export) TARGA(export), Fluralaner (royalties up), Sales down : Fluralaner(BRAVECTO inventory adjustment), LEIMAY(domestic, export), ROUNDUP(ML and AL up) GRACIA(domestic: less pest at low temperature), QUINTEC(export), PERMIT(export) TARGA(export), PERMIT(export), Fixed cost down ¥0.2 billion ROUNDUP(ML down, AL up) Inventory adjustment cost up ¥0.5 billion Fixed cost up ¥0.6 billion Sales up ¥2.8 billion, OP up ¥1.0 billion Inventory adjustment cost down ¥0.1 billion Sales down ¥2.2 billion, OP down ¥1.6 billion <vs. 2H FY2020 Outlook as of May 2020> <vs. 1H FY2020 Outlook as of May 2020> Sales above target : Sales above target : Fluralaner(royalties above target), ALTAIR(domestic), TARGA(export), ROUNDUP(ML and AL above target). TARGA(export: for mixtures in several markets overseas), LEIMAY(domestic), QUINTEC(export) LEIMAY(domestic, export), PERMIT(export) Sales below target Sales below target : GRACIA(domestic: less pest at low temperature, Fluralaner(shipment shift to FY2021, royalties above target), export: shifted to 2H). GRACIA(domestic), QUINTEC(export), ROUNDUP(ML below target, AL above target) Inventory adjustment cost above expectations (¥0.2 billion) ALTAIR(domestic), PERMIT(domestic) Sales down ¥0.6 billion, OP down ¥0.8 billion Fixed cost below expectations (¥1.0 billion) Sales down ¥0.3 billion, OP up ¥1.1 billion

Next, I will explain the situation of the first half listed on page 42.

In the first half of FY2020, ALTAIR, which performance was dramatically improved in the second-generation product was sold well and increased sales. The addition of new products to the ALTAIR lineup also contributed to the increase in sales. Export of QUINTEC increased. LEIMAY and export of GRACIA also increased.

On the other hand, the sales decrease of Fluralaner was not as bad as expected at the beginning of the year, but sales declined significantly due to the inventory adjustments at BRAVECTO. As mentioned earlier, GRACIA's domestic sales were also decreasing due to the fact that there are fewer pests. Sales of TARGA declined due to the impact of generics. ROUNDUP was slightly down, ML sales declined slightly, although AL sales for households rose, but the ROUNDUP total sales declined slightly.

Fixed cost increased by JPY600 million. Of this amount, about JPY300 million was due to the amortization of QUINTEC's goodwill.

As a result, sales were down JPY2.2 billion and operating income was down JPY1.6 billion.

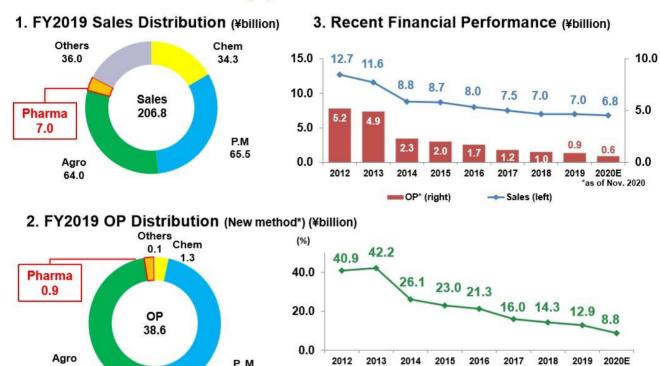
However, when comparing these with the forecasts, sales of Fluralaner, especially its royalties were above target. Then TARGA, LEIMAY, are QUINTEC were above target. Those below target were, as I mentioned earlier, GRACIA, ROUNDUP and ALTAIR, plus fixed costs of JPY1 billion below expectation, which resulted in JPY300 million down in sales and JPY1.1 billion up in operating income.

Please see the outlook for the second half on the right-hand side. First, the increase in sales is attributable to the successful introduction of new products for ALTAIR, as I mentioned earlier. In addition, GRACIA's exports, TARGA's exports, and Fluralaner mainly from royalties also saw an increase in sales, as well as LEIMAY, ROUNDUP, QUINTEC and PERMIT, so many items are expected to increase sales.

With the addition of a decrease in fixed costs, although inventory adjustment cost has a negative impact of JPY500 million, we expect sales to be up JPY2.8 billion and operating income to be up JPY1 billion.

Comparison with the forecast of May is shown below. Those which sales are above target are ALTAIR, TARGA, ROUNDUP, LEIMAY and PERMIT. Those which sales are expected below target are Fluralaner for delayed shipments, while royalties are expected to rise and GRACIA. Sales are expected to be down JPY600 million and operating income is expected to be down JPY800 million.

Pharmaceuticals - (A) Recent Financial Performance



*OP is calculated by new method (see p14)

Next is Pharmaceuticals. Page 43 shows the recent financial performance.

19.3

P. M

17.0

*as of Nov. 2020

43

→ OP margin

Pharmaceuticals - (B) Business Model (New Drug) and LIVALO

Unique ethical pharma business model without sales force



API*: Active Pharmaceutical Ingredient

◆ LIVALO API (Anti-Cholesterol Drug)

	FY2013 Actual	FY2014 Actual	FY2015 Actual	FY2016 Actual	FY2017 Actual	FY2018 Actual	FY2019 Actual	FY2020 Outlook as of May 2020	FY2020 Outlook as of Nov. 2020
Domestic End Market Sales (NHI drug price basis, ¥billion)	52.6	34.5	29.7	23.9	21.0	16.7	14.3	-	2
Our Domestic and Export API Sales (¥billion)	10.2	6.9	5.8	5.2	4.8	4.3	4.0	2.7	2.9
Our Domestic and Export API Sales YOY Change	-2%	-32%	-15%	-11%	-7%	-11%	-7%	-31%	-27%
(Domestic API Sales YOY Change)	(-2%)	(-46%)	(-27%)	(-42%)	(-73%)	(-53%)	(+105%)	(+25%)	(-1%)
(Export API Sales YOY Change)	(-1%)	(+21%)	(+5%)	(+26%)	(+29%)	(-6%)	(-14%)	(-39%)	(-31%)

⁻ August 2013, domestic compound patent expired

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Page 44 shows LIVALO's domestic end and API sales status and the growth rate for both domestic and export sales.

⁻ August 2020, market exclusivity expired in EU

⁻ Currently, available in 26 countries

Pharmaceuticals - (C) Pipeline

Product	Mechanism of action	Expected indications	Development partners
NTC-801	- Acetylcholine-activated K ⁺ channel current (IKACh) inhibition	• Arrhythmia (Atrial fibrillation)	Terminated the license agreement with Teijin and BMS in September 2015 Under consideration regarding seeking new partners Adopted as AMED* program in September 2018 Starting an investigator initiated clinical trial conducted by Osaka University

^{*}Japan Agency for Medical Research and Development

<Policy for drug discovery research>

To create innovative medicines by using the strategic chemical library, the precise organic synthesis technology, proprietary oligonucleotides therapeutics discovery platform

- In-house research
 - Focusing on cardiovascular disease and neurological disease as core therapeutic areas
 - Using state-of-the art-ion channel evaluation platform as key technology
- ◆ Collaborative research
 - Conducting small molecule and oligonucleotides drug discovery programs with several pharmaceutical companies and bio-venture companies

45

Next, page 45 shows the status of the pipeline, and this has not changed.

Pharmaceuticals - (D) Custom Chemicals

- Custom manufacturing and process researching services for new drug pharmaceutical ingredients and intermediates from pre-clinical to commercial production stages
- In addition, focusing on obtaining new contracts mainly for high activity and high-valued added GE API products 2016- Maxacalcitol (Secondary hyperparathyroidism and Psoriasis) 2017- Eldecalcitol (Osteoporosis)

Custom Chemicals Sales Growth

(¥billion)

	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	NAME OF TAXABLE PARTY.	FY2020E as of Nov. 2020
Sales	1.2	1.8	2.3	2.4	2.5	2.6	2.9	3.6	3.8

Sales YOY Change										
FY2	FY2019 Actual			20 Out of May 2		FY2020 Outlook as of Nov. 2020				
1H	2H	Total	1H	2H	Total	1H Actual	2H	Total		
0%	+23%	+11%	0%	+42%	+23%	+12%	+46%	+30%		

46

Page 46 shows the situation of Custom Chemicals. As you can see with these figures, the business has grown steadily.

Pharmaceuticals - (E) New Strategies (Announced in May 2020)

- 1. Drug Discovery (D.D)
- (1) New drug discovery strategy
 - A. In-house research (Previously) License out only at clinical testing stage
 - (New) Focus on themes initiated by NCC and selected by potential licensees and license out before clinical testing stage
 - B. Collaborative research
 - Provide our unique drug discovery technologies
 - (such as oligonucleotides drug discovery platform) to partners and aim to receive fees
 - ◆Advantages of our oligonucleotides drug discovery technologies
 - --- unique modified nucleic acids
- (2) Ceilings on R&D resources
 - A. Reduce 10 drug discovery staffs in two years
 - B. Fix R&D expenses at ¥2.5 billion
- (3) Focus on 10 out of 18 existing new drug discovery projects
- 2. Custom Chemicals (C.C)
 - (1) Expand high margin C.C business to support D.D business currently relying solely on LIVALO
 - (2) Following Maxacalcitol and Eldecalcitol, develop another high value added GE API products and launch peptides CMO business
- 3. FY2019-FY2023 Pro-forma PL Image (Announced in May 2020)

		FY2019	FY2020	FY2021	FY2023
		Actual	Outlook*	Pro-forma	Pro-forma
	D.D(1)	4.06	2.79	2.4	2.2
Sales	C.C	2.90	3.56	5.1	6.0
	Total Segment	6.96	6.35	7.5	8.2
	D.D(1)	-0.12	-0.95	-1.2	-1.3
OP	C.C	1.05	1.38	2.3	2.8
	Total Segment	0.93	0.43	1.1	1.5

*as of May 2020

(¥billion, OP: new method)

(1) Excluding possible upfront and milestone revenues in FY2021, 2023 (p55 including ¥0.5 billion in FY2023)

47

Page 47 shows our future business strategies for Pharmaceuticals, and data shown here is the same in the materials provided in May.

Pharmaceuticals – (F) Equity participation in PeptiStar Inc. (PS)

Our Investment Amount: ¥0.9 billion, (8.2% of the number of shares outstanding after the

third-party allotment)

♦ Outline of PS: The world's first Contract Manufacturing Organization (CMO)

for the research and commercial manufacture of constrained

peptide therapeutics.

Established by PeptiDream, Shionogi and Sekisui Chemical

in September 2017

Funding of PS: (approximate amount) ¥11.0 billion Equity provided by about 20 companies by way of

third-party allotment

¥9.0 billion Grant program of Cyclic Innovation for Clinical

Empowerment (CiCLE) by the Japan Agency for Medical Research and Development (AMED)

Total ¥20.0 billion

♦ Business Status of PS: Completion of R&D center in April 2019, manufacturing fab in July 2019

Our Role and Objective: Develop solution-phase synthesis suitable for mass production of

constrained peptides

Impact on our Business: Improve our novel synthetic method (solution-phase synthesis) of

constrained peptides, reduce manufacturing cost substantially

and expand our CMO business.

48

Page 48 explains our investment in PeptiStar Inc. This situation has not changed, either.

Pharmaceuticals - (G-1) Profit Overview

(D.D)

(C.C)

(Total)

LIVALO sales above target

(domestic sales above target, export above target)

Sales up ¥0.08 billion, OP up ¥0.04 billion

Sales up ¥0.23 billion, OP up ¥0.03 billion

Sales up ¥0.31 billion, OP up ¥0.07 billion

Sales above target (shifted from 2Q)

FI	Idi	IIIc	100	tui	.ICc	115		(6-	1)	PIC	HIL	UV	erv	rie	N						(¥b	illion)
		į	FY201	9 Actu	al (A)			FY2020 Outlook as of May 2020				FY2020 Outlook (B) as of Nov. 2020				Change (B)-(A)						
	1Q	2Q	1H	3Q	4Q	2H	Total	1Q	2Q	1H	2H	Total	1Q Actual	2Q Actual	1H Actual	3Q	4Q	2H	Total	1H Actual	2H	Total
Sales	1.87	1.56	3.43	1.53	2.00	3.53	6.96	1.19	1.63	2.82	3.53	6.35	1.50	1.53	3.03	1.55	2.21	3.76	6.79	-0.40	+0.23	-0.17
D.D	1.36	0.74	2.10	0.93	1.03	1.96	4.06	0.66	0.83	1.49	1.30	2.79	0.74	0.79	1.53	0.56	0.91	1.47	3.00	-0.57	-0.49	-1.06
C.C	0.51	0.82	1.33	0.60	0.97	1.57	2.90	0.53	0.80	1.33	2.23	3.56	0.76	0.74	1.50	0.99	1.30	2.29	3.79	+0.17	+0.72	+0.89
ОР	0.39	0.14	0.53	0.02	0.38	0.40	0.93	-0.14	0.19	0.05	0.38	0.43	-0.07	0.10	0.03	0.06	0.47	0.53	0.56	-0.50	+0.13	-0.37
D.D	0.23	-0.18	0.05	-0.17	0.00	-0.17	-0.12	-0.26	-0.07	-0.33	-0.62	-0.95	-0.22	-0.14	-0.36	-0.35	-0.14	-0.49	-0.85	-0.41	-0.32	-0.73
C.C	0.16	0.32	0.48	0.19	0.38	0.57	1.05	0.12	0.26	0.38	1.00	1.38	0.15	0.24	0.39	0.41	0.61	1.02	1.41	-0.09	+0.45	+0.36
	1Q FY2020 Review <vs. 1q="" fy2019=""></vs.>										-				7		0 Rev FY201					
(D.D)		(domes		es dov		port do		billion		(D.D) ♦ LIVALO sales up (domestic sales up, export down) ♦ Fixed cost down ¥0.1 billion											
(C.C)				shifted				04 1-111			1 ,,	٠.۵١			s up ¥				¥0.04	billion	r	
(Total)	 ◆ Sales up ¥0.25 billion, OP down ¥0.01 billion (Total) ◆ Sales down ¥0.37 billion, OP down ¥0.46 billion 									otal)	 Inventory adjustment cost up ¥0.1 billion Sales down ¥0.08 billion, OP down ¥0.08 billion 											
	<v< td=""><td>s. 1Q</td><td>FY202</td><td>20 Ou</td><td>llook a</td><td>as of I</td><td>May 2</td><td>020></td><td></td><td></td><td>1</td><td></td><td></td><td><vs. 2<="" td=""><td>Q FY2</td><td>020 C</td><td>utloo</td><td>k as c</td><td>of May</td><td>2020</td><td>></td><td></td></vs.></td></v<>	s. 1Q	FY202	20 Ou	llook a	as of I	May 2	020>			1			<vs. 2<="" td=""><td>Q FY2</td><td>020 C</td><td>utloo</td><td>k as c</td><td>of May</td><td>2020</td><td>></td><td></td></vs.>	Q FY2	020 C	utloo	k as c	of May	2020	>	

Next, see page 49 for Pharmaceuticals. Basically, the situation is not much different from that in May. Looking at this table, operating income for FY2019 totaled JPY0.93 billion with a negative profit of JPY0.12 billion in Drug Discovery and a positive profit of JPY1.05 billion in Custom Chemicals. In May, the forecast was JPY0.43 billion, consisting of a negative profit of JPY0.95 billion for Drug Discovery and a positive profit of JPY1.38 billion for Custom Chemicals.

(D.D)

(C.C)

(Total)

LIVALO sales below target

Sales below target (shifted to 1Q)

(domestic sales below target, export below target)

Sales down ¥0.04 billion, OP down ¥0.07 billion

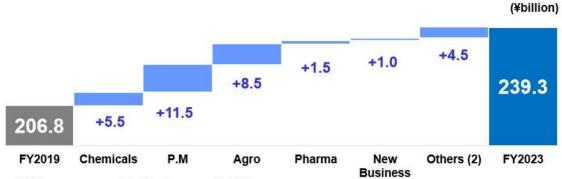
Sales down ¥0.06 billion, OP down ¥0.02 billion

Sales down ¥0.10 billion, OP down ¥0.09 billion

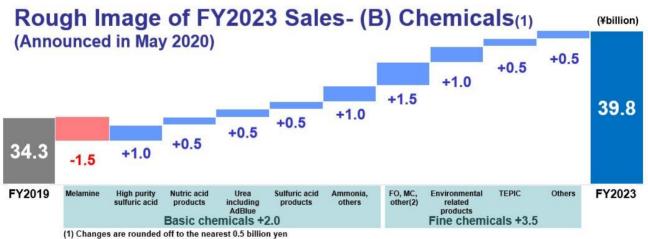
Currently, we are forecasting improvements of around JPY0.1 billion as shown in the fourth column from the right side and total operating income of JPY0.56 billion, minus JPY0.85 billion for Drug Discovery and plus JPY1.41 billion for Custom Chemicals.

Rough Image of FY2023 Sales- (A) Overall(1)

(Announced in May 2020)



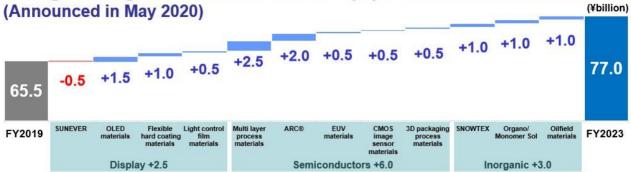
- (1) Changes are rounded off to the nearest 0.5 billion yen.
- (2) Trading, Others, Adjustment
- Fluralaner sales expected to decrease until FY2022 due to continuing inventory adjustment and recover in FY2023
- Based on this assumption, we have created a medium-term sales growth image for each segment
- Total company-wide sales expected to increase from 206.8 billion yen in FY2019 to 239.3 billion yen (+16%) in FY2023



(2) FO: FINEOXOCOL (cosmetic raw materials, acrylate adhesives), MC: Melamine Cyanurate (flame retardants, lubricants), other products/reinforced fiber materials) (products name are undisclosed)

(Basic chemi		, дет станования в при	(Fine chemicals		04		
Products	Changes (billion yen, every 0.5)	Main reasons for changes	Products	Changes (billion yen, every 0.5)	Main reasons for changes		
Melamine	-1.5	(export) Drastic volume reduction with emphasis on spreads, continued stagnant market conditions (domestic) Flat at FY2020 levels			(FO) Expand overseas with existing cosmetic ingredients and development of newapplications (MC) Expanded applications of lubricants for newpowder molding		
High purity sulfuric acid	1 +10	Expanding sales according to the equipment and production plans of semiconductor customers	FO, MC, Other	+1.5	(increased density). (Other) Development of newapplications (Total sales of the three products in FY2019: about 2.7 billion yen).		
Nitric acid products	405	W ithdrawal of a domestic competitor from the market (April 2020)					
Urea including AdBlue	+0.5	Demand for AdBlue's light- and medium-dutytrucks and construction equipment increases	Environmental related products	+1.0	Increase in isocyanuric acid capacity (to be completed by Dec. 2020) Sales expansion to major customers (with contracts)		
Sulfuric acid products	+0.5	Expanding demand for electronic components and battery applications.	TEPIC	+0.5	(General) Mostlymaintained at FY2019 level (Electronic Materials) Expand the customer base for solder resist inks and expand the use of LED sealants		
Ammonia, others	+1.0		Others	+0.5			

Rough Image of FY2023 Sales- (C) Performance Materials(1)



(1) Changes are rounded off to the nearest 0.5 billion yen.

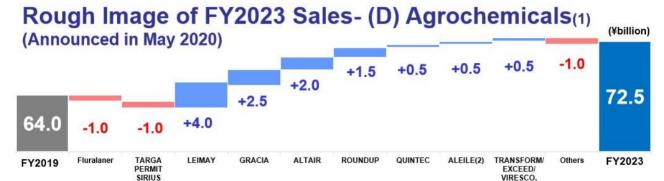
(Display)			(Semiconductors)			
products	Changes (billion yen, every 0.5)	Main reasons for changes	products	Changes (billion yen, every 0.5)		
	R -0.5	(TN) -0.5 (VA) +1.0 market share expansion	Multi layer process materials	+2.5	1	
SUNEVER		(VA) +1.0 market share expansion (rubbing IPS) -1.0 market share expansion, shift to photo IPS	ARC®	+2.0	5G	
		(Photo IPS) +0.0 Decrease in smartphone use, expansion of non-smartphone use	EUV materials	+0.5	De 50	
OLED materials		(Vapor +0.5 Alignment materials for LC retarder, De-bonding layer deposition)	EUV materiais		(E	
materials	200 1000	(Printing) +1.0 Repellent bank layer, Hole injection layer	CMOS image	+0.5	En	
Flexible HC	+1.0	Hard coating materials for flexible OLED smartphone	sensor materials	10.5	ler	
Light control film	+0.5	Development of construction materials, in-vehicle and bullet train applications	3D packaging process materials	+0.5	Ac	

	products	Changes (billion yen, every 0.5)	Main reasons for changes				
	Multi layer process materials	+2.5	Demand increases with the development of				
Ī	ARC®	+2.0	5G and IoT				
	EUV materials	+0.5	Demand increases with the development of 5G and IoT (Entered EUV Si-HM market in FY2019 finally)				
İ	CMOS image sensor materials	+0.5	Entered the market for high value-added lens materials.				
Ī	3D packaging process materials	+0.5	Acquisition of newcustomers, development of newmaterials				

NEXTER(3)

31000	2000	52 St. St.	
(Inorganic)	7		
SNOWTEX	+1.0	(non-polishing) Increase in materials for automobiles (polishing) Increase in silicon wafers and CMP	
Organo/ Monomer Sol	+1.0	Increase in hard coating materials for foldable smartphone film and 3D printing materials	
Oilfield material	+1.0	Expanded to repair existing wells with lowoil price impact	

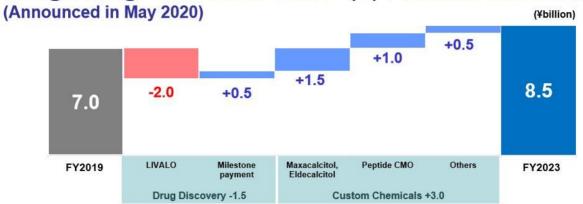
53



- (1) Changes are rounded off to the nearest 0.5 billion yen.
- (2) ALEILE: Foliar application herbicide for paddy rice including ALTAIR
 (3) TRANSFORM™/ EXCEED™/ VIRESCO™: Insecticide for fruits, vegetables, and paddy rice (licensed in from DOW)
 NEXTER: Fungicide for fruits and vegetables (licensed in from Syngenta)

Products	Changes (billion yen, every 0.5)	Main reasons for changes
Fluralaner	-1.0	Decrease until FY2022 due to continuing inventoryadjustment and recover in FY2023 (see p39)
TARGA, PERMIT, SIRIUS	-1.0	(TARGA) Shrink rapeseed cropping market in Europe, (PERMIT) Decrease in Europe, (SIRIUS) Decline in the alternative progression to ALTAIR.
LEIMAY	+4.0	Develop two mixtures for European market with two major agrochemical manufacturers
GRACIA	+2.5	(Domestic) Launch the newformulation in Japan (Export) Increase in sales countries (India, Indonesia, Vietnam, Argentina)
ALTAIR	+2.0	Switch to the newgeneration products and expand sales in China and Southeast Asia.
ROUNDUP	+1.5	Focus on large-sized standardized products in ROUNDUP ML, and strengthen AL via drugstores and supermarkets as well as home centers
QUINTEC	+0.5	Increase in sales volume
ALEILE	+0.5	Newfoliar application herbicide for paddyrice including ALTAIR Capable of in-water and highlyresistant to rain
TRANSFORM/ EXCEED/ VIRESCO, NEXTER		Focused lisenced-in products
Others	-1.0	

Rough Image of FY2023 Sales- (E) Pharmaceuticals(1)



(1) Changes are rounded off to the nearest 0.5 billion yen.

(Drug	Discovery)
(Diag	Discovery

Products	Changes (billion yen, every 0.5)	Main reasons for changes
LIVALO	-2.0	(Domestic) Volume down due to increase in generics (Export) Generic entryin Europe and the U.S. and volume down in Korea
Milestone payment		Pipeline drug is expected to be licensed in the focused area

(Custom Chemicals)

200	Custom Chemicais)			
	Maxacalcitol, Eldecalcitol	+1.5	(Maxacalcitol) Started accepting orders from newcustomer (Eldecalcitol) Expected to increase in volume at 1H 2020 launch	
	Peptide CMO	+1.0	Expect to be commissioned by PeptiStar and other companies	
	Others	+0.5	Existing contracted products	

Rough Image of FY2023 Sales- (F) New Business (Announced in May 2020)

Field	Products	Changes (every 0.5 billion yen)		
Life Sciences	Cell culture medium Biointerface control materials (inhibition of cell and protein adhesion) Cosmetic materials (promotion of skin penetration of active ingredients, moisturizing effect, etc.)			
Environment & Energy	Secondary battery materials (undercoat materials to promote low resistance) Hole transport layer materials for organic solar cells (energy conversion of sunlight)	Total ¥1.0 billion		
Information & Communication	Optical interconnect materials			

Page 51 to page 56 introduces the rough image of FY2023 sales, which data is the same and was announced in May and copied.

Capex/Depreciation/R&D by Segment

(¥billion)

		Capex (1)					Depreciation (2)						R&D expenses					
	2016	2017	2018	2019		2020E Nov. 2020	2016	2017	2018	2019	HIS GOVERNOR	2020E Nov. 2020	2016	2017	2018	2019		2020E Nov. 2020
Chem	2.0	2.6	2.0	3.1	6.8	5.0	1.6	1.7	1.8	1.8	2.2	2.3	0.5	0.6	0.6	0.4	0.4	0.3
P.M	8.4	7.2	3.3	3.3	4.9	3.9	4.8	5.9	6.0	5.1	5.0	4.6	7.9	8.1	8.2	7.7	8.4	7.3
Agro	2.4	2.6	3.3	7.9	0.7	0.8	1.3	1.4	1.7	2.2	2.3	2.5	3.8	4.3	4.5	4.6	5.0	4.3
Pharma	0.9	0.7	0.5	0.6	0.4	0.4	0.7	0.7	0.6	0.6	0.6	0.5	2.2	2.5	2.5	2.5	2.3	2.3
Trading	0.0	0.0	0.1	0.1	0.2	0.2	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	0.6	0.6	0.7	0.7	0.8	0.8	0.4	0.7	0.7	0.7	0.5	0.4	1.7	1.7	2.0	2.0	2.1	2.6
Total	14.3	13.7	9.9	15.7	13.8	11.1	8.9	10.5	10.9	10.5	10.7	10.4	16.1	17.2	17.8	17.2	18.2	16.8
									R&I	Dexn	enses	/Sales	8.9%	8.9%	8.7%	8.3%	8.5%	8.0%

(1) Capex Actual - Acceptance basis Outlook - Production commencement basis

(2) 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)

R&D Personnel (Sept. 2019) -A	450
Total Professionals (Sept. 2019) –B	1,165
A/B	39%

%Parent company only %Round number

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Then, page 57 shows the status of Capex, depreciation, and R&D expenses. As you can see, R&D expenses were estimated to be JPY18.2 billion at the beginning of the year in May, but currently we expect JPY16.8 billion at the end of period.

Mid-Term Plan Vista2021 Stage II (FY2019-2021) announced in May 2019 - (A)

I. PL	Actual	New Mid-Term Plan announced in May 2019	Mid-Term Plan announced in May 2016
	FY2018	FY2021	FY2021
Sales	204.9	235.0	250.0
Operating Profit	37.1	43.0	40.0
Ordinary Income	39.1	44.0	40.8
Net Income	29.4	33.0	31.0
EPS (¥/share)	197.67	230.00	0)
Dividend (¥/share)	82		¥.
FX Rate (¥/\$)	111	110	115
Naphtha (¥/kl)	49,700	43,000	51,100
(Financial Targets)	Actual	New Mid-Term Plan announced in May 2019	Mid-Term Plan announced in May 2016
	FY2018	FY2020, FY2021	FY2021
OP Margin	18.1%	Above 18%	Above 15%
ROE	16.6%	Above 16%	Above 14%
Dividend Payout Ratio	41.5%	45%	40%
Total Payout Ratio	72.0%	75%	70%

2. Segment (1)		Sales		Operating Profit					
oogo(.,	Actual	New Mid-Term Plan announced in May 2019	Mid-Term Plan announced in May 2016	Actual	New Mid-Term Plan announced in May 2019	Mid-Term Plan announced in May 2016			
	FY2018	FY2021	FY2021	FY2018	FY2021	FY2021			
Chemicals	35.7	43.1	40.5	3.0	5.1	4.5			
Performance Materials	63.0	75.1	82.9	15.0	17.3	18.4			
Agrochemicals	62.7	70.1	67.0	18.4	21.1	16.7			
Pharmaceuticals	7.0	7.5	8.3	1.0	0.7	2.4			
Trading, Others, Adjustment	36.5	39.2	51.3	-0.3	-1.2	-2.0			
Total	204.9	235.0	250.0	37.1	43.0	40.0			

⁽¹⁾ Including inter-segment sales/transfers

Mid-Term Plan Vista2021 Stage II (FY2019-2021) announced in May 2019 - (B)

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1. Cash Flows			
1. Casii i lows	Actual	New Mld-Term Plan	(¥billion)
	Total FY2016-2018	Total FY2019-2021 (round number)	
CF from operating activities	102.1	115.0	
CF from investing activities	-39.2	-45.0	
CF from financing activities	-62.0	-75.0	
(Total payout to shareholders (dividend & share repurchase))	-55.6	-70.0	
(Repayment of borrowings)	-6.4	-5.0	
	FY2018	FY2021	
Cash at end of fiscal year	36.2	30.0	

2. Capex, Depreciation, R&D expenses, Researchers

		Total FY2016-2018 FY2019-2021 FY2016-2018 FY2019-2021 FY2016-2018 FY2019-2021 FY2016-2018 FY2019-2021 FY2016-2018 FY2019-2019-2019-2019-2019-2019-2019-2019-) (person)		
	Ca	pex	Depre	ciation	R&D ex	cpenses	Researchers			
	Actual	100000000000000000000000000000000000000	Actual	1000000	Actual	New Mld-Term Plan	Actual	New Mld-Term Plan		
		LESSON BORROS CONTROL DE LA CO			CARLES AND CONTRACTOR	Total FY2019-2021	FY2018	FY2021		
Chemicals	6.6	14.7	5.2	9.4	1.6	1.4	10	10		
Performance Materials	18.9	17.8	16.7	17.0	24.3	26.7	200	210		
Agrochemicals	8.3	8.2	4.4	5.5	12.6	14.8	95	95		
Pharmaceuticals	2.1	1.7	2.1	1.8	7.2	7.1	85	90		
Trading, Others, Adjustment	2.0	2.3	1.9	3.1	5.4	8.0	80	75		
Total	37.9	44.7	30.3	36.8	51.1	58.0	470	480		

Figures on pages 59 and 60 are based on the current medium-term management plan.

ESG

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 members of the Board of Directors, etc.
- One Outside Director added
 As a result, the Board of Directors consisting of 9 Directors include 3 Outside Directors

August 2019

NCC was selected as one of the 50 candidates among all listed companies of the Corporate Value Improvement Award hosted by the Tokyo Stock Exchange for the second consecutive year.

September 2019

NCC was selected as an inclusion in the Dow Jones Sustainability Asia Pacific Index for the second consecutive year

December 2019

Published "Integrated Reports 2019" https://www.nissanchem.co.jp/eng/ir_info/archive/ar/ar2019.pdf

February 2020

NCC was listed for the first time on Water Security "A List" as a company with excellent sustainable water resource management by CDP

June 2020

NCC was selected as an inclusion in the S&P/JPX Carbon Efficient Index for the second consecutive year NCC was selected as a constituent of FTSE4Good Index Series and FTSE Blossom Japan Index

August 2020

NCC announced its support for recommendations of Task Force on Climate-related Financial Disclosures (TCFD)

October 2020

NCC won the 2020 Awards for Excellence in Corporate Disclosure in the chemicals and fiber sector, selected by Securities Analysts Association of Japan (SAAJ)

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Page 61 shows our effort on ESG.

In August 2020, we announced our support for recommendations of TCFD. And see the last item, we finally, for the first time, won the Awards for Excellence in Corporate Disclosure in the chemicals and fiber sector. Thank you very much for your support.

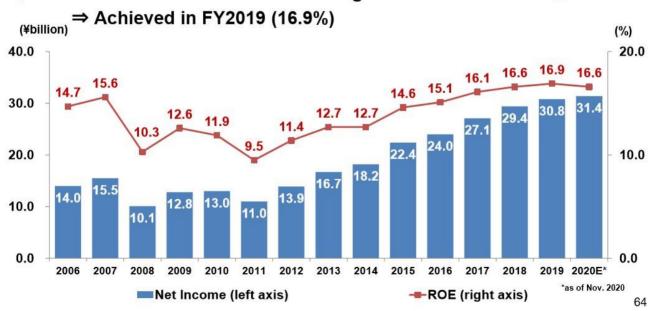
Our Characteristics - (A) Recording Stable OP Margin

 NCC has recorded more than 10% OP margin in 17 consecutive years (FY2003-2019)



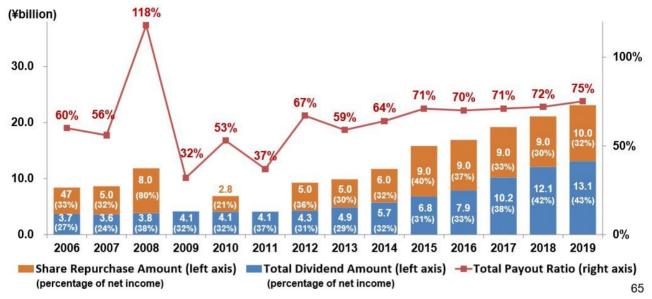
Our Characteristics - (B) High ROE

- The most important financial indicator for a long time
- ♦ Mid-Term Plan FY2016-2018 Target : Maintain above 14%
 ⇒ Achieved in FY2016, 2017 and 2018
- New Mid-Term Plan FY2019-2021 Target : Maintain above 16%



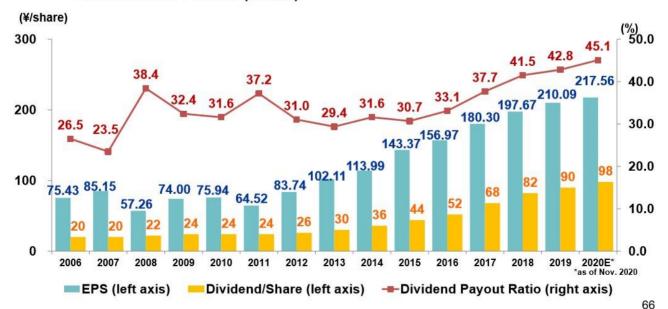
Our Characteristics - (C) Shareholders Return Policy - Total Payout Ratio

- Maintaining an aggressive shareholders return policy
- ◆ Mid-Term Plan FY2016-2018 Target : Maintain 70% total payout ratio
 ⇒ Achieved in FY2016, 2017 and 2018
- New Mid-Term Plan FY2019-2021 Target: 72.5% in FY2019, 75% in FY2020-2021
 ⇒ Achieved in FY2019 (75.1%)



Our Characteristics - (D) Shareholders Return Policy - Dividend

- Mid-Term Plan FY2016-2018 Target : Gradually increased to 41.5% in FY2018 ⇒ Achieved in FY2018 (41.5%)
- New Mid-Term Plan FY2019-2021 Target: 42.5% in FY2019, 45% in FY2020-2021
 ⇒ Achieved in FY2019 (42.8%)



Our Characteristics - (E) Shareholders Return Policy - Share Repurchase

- ◆ Started share repurchase in 2006 only to enhance ROE
- Repurchased ¥82.5 billion, 40.9 million shares (21.8% of shares issued) in total from FY2006 to FY2019
- Cancelled all repurchased shares

Shareholders Return FY2006 - 2019

(1) excluding share acquisitions for performance-based compensation (166,200 shares) (2) including share acquisitions for performance-based compensation (166,200 shares)

Fiscal year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Shares purchased (1) (thousand shares)	3,500	3,399	7,355	0	2,167	0	6,372	3,263	2,764	3,333	2,621	2,292	1,682	2,138	40,886
Purchase costs (1) (¥billion)	4.7	5.0	8.0	0.0	2.8	0.0	5.0	5.0	6.0	9.0	9.0	9.0	9.0	10.0	82.5
Shares cancelled (thousand shares)	3,000	3,635	7,000	0	3,000	0	6,000	4,000	3,000	2,000	2,000	3,000	2,000	3,000	41,635
Shares issued at FY end (million shares)	185	181	174	174	171	171	165	161	158	156	154	151	149	146	
Treasury shares at FY end (2) (thousand shares)	1,367	1,233	1,660	1,709	885	886	1,258	522	287	1,621	2,242	1,535	1,218	523	

Share repurchase program

	2017				2018			2019		2020
Fiscal Year	1H	2H	Tatal	1H	2H	Tatal	1H	2H	Tatal	From May 18, 2020 to July 28, 2020
Shares purchased (thousand shares) (1)	1,304	988	2,292	976	706	1,682	1,270	868	2,138	1,334
Purchase costs (¥billion) (1)	5.0	4.0	9.0	5.0	4.0	9.0	6.0	4.0	10.0	7.0
Shares cancelled (thousand shares)	3,000	0	3,000	2,000	0	2,000	2,000	1,000	3,000	1.000 (Aug 31, 2020)

Cash Management Policy

Aiming to control cash balance around the level of

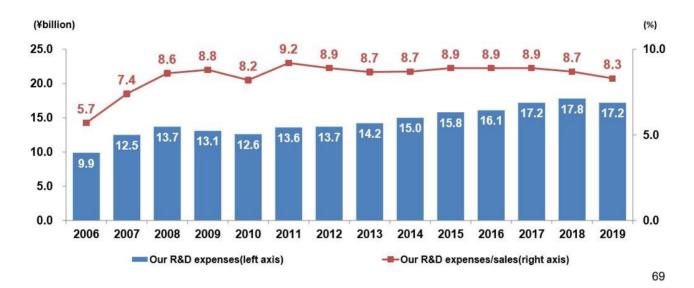
- = Minimum required level
- + 1/3 of annual scheduled long-term borrowings repayment
- + 1/3 of short-term borrowings outstanding + Contingent risk reserves

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From page 63 and after, we have listed our characteristics. Page 63 is for operating income margin, page 64 is for ROE, page 65 is for shareholders return and total return ratio, page 66 is for dividend payout ratio, and page 67 is for share repurchase.

Our Characteristics- (F-1) R&D Oriented Chemical Company

- ♦ FY2019 R&D expenses/sales: 8.3%
- Maintaining above 8% R&D expenses/sales in recent years
- About 40% of profession staff assigned to R&D centers

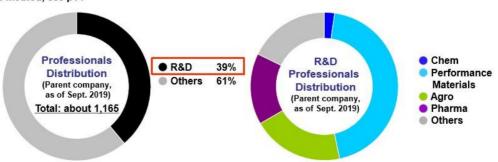


Our Characteristics- (F-2) R&D Oriented Chemical Company

R&D by segment

my organient													
		F	Y2019 Actua	il									
Segment	Sales (¥billion)	OP* (¥billion)	OP margin	R&D expenses (¥billion)	% of Sales								
Chemicals	34.3	1.3	3.8%	0.4	1.2%								
Performance Materials	65.5	17.0	26.0%	7.7	11.8%								
Agrochemicals	64.0	19.3	30.2%	4.6	7.2%								
Pharmaceuticals	7.0	0.9	12.9%	2.5	35.7%								
Others	-	-	-	2.0									
Total (including others and adjustment)	206.8	38.6	18.7%	17.2	8.3%								

*New method, see p14



Pages 69 and 70 are explaining our focus on R&D.

Thank you for your patience. My explanation now comes to an end.

Question & Answer

<Questioner 1>

Q: First, for Performance Materials. I am concerned about SUNEVER. Please tell us about performance by major mode from the first quarter to the second quarter. In addition, I would like to ask you to provide your view for the second half of FY2020.

A: IPS are performing well both in the first and second quarters. This mode including rubbing IPS still goes strong. On the other hand, with regard to VA, although there is no change in our market shares itself, it is partly affected by a decline in production at a customer.

In the second half of FY2020, we expect IPS in total to maintain this strong performance. Between rubbing IPS and Photo IPS, we forecast that the shift to Photo IPS will accelerate through the second half of FY2020.

On the other hand, we are seeing a decline in VA due to the fact that the customer production decrease like the first half will have a larger impact in the second half.

Q: About SUNEVER total, First quarter sales growth is up 14% and the first half growth is up 7%, so if only the second quarter is taken, the growth is almost unchanged. I think the growth in the second quarter slowed down.

A: Overall, the balance of inventory adjustments at the customers creates a slight gap between the first and the second quarters, but we think that the operation itself is going strong. For the second quarter, about IPS, both rubbing and Photo performed above target compared to the forecasts of May. So, this is within our expectations.

Q: I see. Regarding Photo IPS, the strongest performers are for non-smartphones, especially tablets, laptops, monitors, and so on, right?

A: That's correct. In particular, with regard to tablets as well as notebook PCs, the shift to Photo from rubbing is accelerated, and I think that this is another factor for this good performance.

Q: Yes, I understand. Second, I would like to sort out the fixed costs once. At the beginning of the term, I think you were talking that fixed costs of JPY900 million would increase in this year compared with last year. Looking at this time, in terms of Performance Materials, it will be decreased by JPY900 million in FY2020, in comparison, it will be down about JPY1.8 billion, which can be regarded as a factor behind the increase in profits from the initial forecast?

A: Yes, you can.

Q: I would like to ask you how you can break down the difference of JPY1.8 billion among Display Materials, Semis Materials, and Inorganic. Could you tell us about the content of the difference? Why the forecast was turned to positive?

A: The breakdown of JPY1.8 billion is JPY700 million for Display, JPY 700million for Semis, JPY300 million for Inorganic, and JPY100 million for others. The background to this is basically travel expenses and transportation expenses. This is largely due to the fact that we are unable to move due to the impact of COVID-19 and to the fact that our research and development expenses are getting smaller.

Q: Do you mean that the impact of COVID-19 is a little positive around here?

A: I think that is correct.

Q: You didn't make extra effort to save expenses, especially by cutting fixed costs?

A: We haven't forced our staff members to reduce expenses.

Q: OK. Do you intend on further reduction?

A: There is no particular plan for further reduction. In the current situation, the situation remains that we are not able to actually visit local markets, and we are doing so while devising sales and R&D methods in this situation. So far, I do not think that there are any major disadvantages to this situation.

<Questioner 2>

Q: My first question is about Agrochemicals. Looking at YoY ratio of increase or decrease on page 42, or the movement of profit compared to the plan, particularly at Fluralaner I think that the royalties are up, but the plan was revised downward in this period due to the delayed shipment. The fact that royalties are rising suggests that end-use demand is stronger than expected, but what is the situation in which shipments are being pushed back?

Considering customers and downstream side, as the procurement of raw materials is decreasing while product sales are increasing, do you think inventory adjustments are proceeding at a faster pace than originally expected? Or, unlike electronic materials, I think this kind of thing is unlikely to happen, but for example, the original unit has been changed at the downstream side because of production innovation? First, let me confirm this point.

In addition, regarding fixed costs of Agrochemicals. In the first half of the fiscal year, it was decreased by JPY1 billion compared to the plan, while in the second half, we particularly did not see any changes compared to the plan. However, if the number of business trips has decreased in the first half of the fiscal year, as in the case of Performance Materials, it is possible to assume a certain decline in expenses in the second half of the fiscal year. How about that?

A: Fluralaner is still strong for end users and the royalties will increase. There is no particular technical innovation in that production, as you just mentioned. I think this is the result that Merck would like to make some more inventory adjustments.

Then, about fixed costs. Some research and development expenses were delayed from the first half to the second half. There are some rooms to decrease or to increase. I'm looking at the figures for the second half, which is almost unchanged from the budget for the beginning of the year on a net basis.

Q: I heard that the impact of COVID-19 is increasing the demand for pets as the backdrop of the strong performance with end users. Did you agree to that?

Originally, you will continue inventory adjustments until FY2022. If Merck is accelerating the pace at which it will reduce inventories a little more, could this outlook be a little more accelerated depending on the situation?

A: I have some information in it, but it is still fragmentary information, so I am uncertain and cannot give you the details. However, on the figures, as we mentioned earlier, the royalties are improving, so I guess we are

progressing, but I don't know if it is temporary movement or not. We have not yet obtained accurate information on trend of end users.

Q: How about, whether or not it will be earlier or not regarding the outlook for the time when inventory adjustments will end, I think it is still early at this stage.

A: As originally predicted. It does not change.

Q: My second question is about Semis Materials of Performance Materials Segment. This figure has been much higher than the initial forecast, and how can you divide it into Logic and Memory? Please tell us a little more about in which region it performs particularly good and the background to the upward movement of this Semis Material.

A: Overall, both Logic and Memory in Semis Materials are performing well. Quick recovery of DRAM contributed to exceed our expectations and contributed significantly. As for the region, The Peninsula is the main. I expected it would take a little longer at the beginning of the year.

Q: I understand. At the same time, how is the state of sales expansion of EUV under layer in line with the initial forecast?

A: Slightly upward movement.

<Questioner 3>

Q: Movements in profit of Performance Materials, Display Materials were flat to second quarter from the first quarter, and Semis Materials were increasing. Under such circumstances, operating income increased by only JPY100 million, is this due to an increase of fixed costs? Please tell us about the direction of this profit, including the movement of fixed costs to the second half from the first half?

A: Fixed costs have increased by about JPY400 million from the first quarter to the second quarter. On the other hand, inventory adjustment cost had a positive impact of about JPY300 million. By division, QoQ trends in operating income were down JPY100 million for Display, up JPY200 million for Semis, and zero for Inorganic, which were up JPY100 million.

Then, the movement from the first half to the second half. We are currently forecasting operating income JPY800 million down, but we are assuming that fixed costs will increase by JPY1.9 billion from the first half to the second half. Then, in sub-segments, HoH operating profit is down JPY100 million for Display, down JPY600 million for Semis, down JPY100 million for Inorganic Materials, in total expected down JPY800 million.

Q: I feel that when sales increase by JPY600 million to the second half from the first half and fixed costs increase by JPY1.9 billion, there is a little drop in profit. This means you will increase inventory?

A: There will be a difference in the composition of sales, so first of all, the marginal profit will increase by almost JPY600 million. Increase to the same level as sales. Then, fixed costs will increase by JPY1.9 billion, but for the inventory, the figure will be plus JPY500 million.

Q: My second question is about the current inventory level, which seems to be a bit too high. There are some segments in which the inventory factor is written, Chemicals and Agrochemicals. Can you tell us whether this will probably push up slightly in the first half of the fiscal year, reducing inventory in the second half and lowering profits, or what the movement of inventory is on this side?

A: As for the movement of inventory, it is quite different for each segment, so I can't say anything. I don't feel that there is too much inventory.

<Questioner 4>

Q: My first question is joint ventures for Agrochemicals in India. This briefing material says that the joint venture partner sells TARGA, PULSOR, and PERMIT in India. Are these three products already approved for sale in India?

A: Sales approval has already been approved. However, although it would be misleading, basically we are not thinking of selling the products made by these joint ventures in India. In the first few years, the idea now is that we will take the products in Japan and sell them.

Q: I see. They are your manufacturing base. Don't you think India is the market to promote these products?

A: That's not something we will think about for a few years. This is a second manufacturing base, because the domestic production and supply capacity are somewhat bottlenecked, or sales are expected to increase.

Q: I understand. The second is about Photo IPS. You said that the shift from rubbing to Photo is accelerating on tablets. Either in the sense that the brands that have originally adopted Photo IPS are increasing their market shares or in the sense that the number of models that have been adopted is increasing in the first place?

A: There is an increasing number of models.

Q: The number of models is increasing means that the number of models which used rubbing before and now switched to Photo IPS is increasing?

A: Yes, yes. That's it.

Q: Together with that, I think the growth of Photo IPS for notebooks and cars was probably higher, but is it doubling?

A: Not double, but we believe the ratio has risen more than expected.

Q: Do you think it is sustainable? Notebook PCs are selling well for telework, which may not last long. Or, for automobiles, perhaps it could be longer, but how about sustainability?

A: We estimate that there will be continuity for a certain period of time.

Q: I understand.

A: I would like to give an additional explanation. The usage of notebook PCs and tablets has changed steadily, when we use them to watch television, watch movies, and play games, we still want high-definition ones. I think there is a big change in demand.

Q: I see, that's what you mean. If that's the case, the bottom line is that it lasts quite a long time, doesn't it?

A: Yes.

[END]