

November 6, 2017

**Nissan Chemical,
- where unique & solution meet**

Presentation for Investors

1H FY2017 (April 1 – September 30, 2017) Financial Results

**Presented by Junichi Miyazaki,
Director and Senior Executive Vice President**

Translation of presentation materials for the investor meeting held in Tokyo on November 6, 2017

NISSAN CHEMICAL INDUSTRIES, LTD.



NISSAN CHEMICAL INDUSTRIES, LTD.

1H FY2017 PL

(¥billion)

	1H FY2016			1H FY2017			Change			Change (%)	1H FY2017 Outlook as of May 2017		
	1Q	2Q	1H	1Q	2Q	1H	1Q	2Q	1H	1H	1Q	2Q	1H
Sales	45.1	39.4	84.5	47.4	43.6	Record 91.0	+2.3	+4.2	+6.5	+8%	45.2	42.5	87.7
Operating Profit	9.5	5.2	14.7	10.0	7.3	Record 17.3	+0.5	+2.1	+2.6	+17%	8.1	6.9	15.0
Non-Operating Income/Expenses	-0.1	-0.4	-0.5	0.9	-0.4	0.5	+1.0	+0.0	+1.0	-	0.5	-0.4	0.1
Ordinary Income	9.4	4.8	14.2	10.9	6.9	Record 17.8	+1.5	+2.1	+3.6	+25%	8.6	6.5	15.1
Extraordinary Income/Loss	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	0.0	0.0	0.0
Net Income (1)	6.8	3.8	10.6	7.9	5.3	Record 13.2	+1.1	+1.5	+2.6	+24%	6.5	5.0	11.5
EBITDA (2)	11.5	7.3	18.8	12.2	9.8	22.0	+0.7	+2.5	+3.2	+17%	-	-	19.9
EPS (¥)	44.31	24.69	69.00	52.22	35.18	87.40	+7.91	+10.49	+18.40	+27%	-	-	76.36
Dividend (¥/share)	-	-	24	-	-	32	-	-	+8		-	-	28
Total amount of Dividend	-	-	3.7	-	-	4.8	-	-	+1.1		-	-	4.2
OP Margin	21.1%	13.3%	17.4%	21.2%	16.6%	19.0%	+0.1%	+3.3%	+1.6%		17.9%	16.2%	17.1%
ROE	-	-	-	-	-	-	-	-	-		-	-	-
FX Rate (¥/\$)	108	102	105	111	111	111					110	110	110
Naphtha (¥/KL) (3)	31,600	31,300	31,400	39,100	36,100	37,700					40,700	40,700	40,700
Comprehensive Income	4.9	2.5	7.4	9.5	7.2	16.7							

(1) Net income = Profit Attributable to Owners of Parent

(2) EBITDA = Operating Profit + Depreciation

(3) Based on Trade Statistics of Japan Ministry of Finance

1H FY2017 Review

<vs. 1H FY2016>

(Sales)	◆Up	¥6.5 billion (+8%)
(OP)	◆Up	¥2.6 billion (+17%)
(Ordinary Income)	◆Up	¥3.6 billion (+25%)
(Net Income)	◆Up	¥2.6 billion (+24%)
(EPS)	◆Up	¥18.40 (+27%)

(+) Chemicals, Performance Materials, Agrochemicals, Trading
(-) Pharmaceuticals
(+) Performance Materials, Agrochemicals, Trading
(-) Chemicals, Pharmaceuticals

Sales renewed the highest results in 3 consecutive years
OP renewed the highest results in 5 consecutive years
Ordinary Income and Net Income renewed the highest results

<vs. 1H FY2017 Outlook as of May 2017>

(Sales)	◆Up	¥3.3 billion
(OP)	◆Up	¥2.3 billion
(Ordinary Income)	◆Up	¥2.7 billion
(Net Income)	◆Up	¥1.7 billion
(EPS)	◆Up	¥11.04

(+) Performance Materials, Agrochemicals, Pharmaceuticals
(-) Chemicals, Trading
(+) Performance Materials, Agrochemicals, Pharmaceuticals
(-) Chemicals, Trading

<Shareholders Return>

(Dividend)	◆	1H ¥32/share, 2H ¥34/share (1H up ¥8, 2H up ¥6 vs. FY2016) (1H up ¥4, 2H up ¥2 vs. FY2017E as of May 2017)
(Share Repurchase)	◆	¥5.0 billion, 1.3 million shares completed in June 2017 (Cancelled 3 million shares in May 2017 and August 2017)

1H FY2017

Non-Operating Income/Expenses, Extraordinary Income/Loss, Comprehensive Income

(¥billion)

	1H FY2016	1H FY2017	Change
Non-Operating Income	0.89	1.26	+0.37
Interest income, dividend income	0.30	0.32	+0.02
Equity in earnings of affiliates	0.15	0.45	+0.30
Foreign exchange gains	0.00	0.16	+0.16
Others	0.44	0.33	-0.11
Non-Operating Expenses	1.41	0.69	-0.72
Interest expense	0.09	0.07	-0.02
Foreign exchange losses	0.63	0.00	-0.63
Loss on disposal of non-current assets	0.26	0.22	-0.04
Others	0.43	0.40	-0.03
Extraordinary Income	-	-	-
Extraordinary Loss	-	-	-
Comprehensive Income	7.44	16.71	+9.27
Net income	10.60	13.18	+2.58
Net income attributable to non-controlling interests	0.07	0.12	+0.05
Valuation difference on available-for-sale securities	-2.32	3.56	+5.88
Foreign currency translation adjustment	-0.87	-0.13	+0.74
Others	-0.04	-0.02	+0.02

1H FY2017 Cash Flow

(¥billion)

	1H FY2016	1H FY2017
CF from operating activities	29.4	30.0
Income before income taxes & non-controlling interests	14.2	17.8
Depreciation & amortization	4.1	4.7
Income taxes paid	-4.9	-3.7
Working capital, others	16.0	11.2
CF from investing activities	-4.5	-6.3
Purchase of PPE	-5.3	-6.4
Others	0.8	0.1
CF from financing activities	-26.6	-26.8
Cash dividends paid	-4.0	-4.3
Borrowings	-17.5	-17.5
Share repurchase	-5.0	-5.0
Others	-0.1	0.0
Effect of exchange rate change on cash & cash equivalents	-0.3	0.1
Change in cash & cash equivalents	-2.0	-3.0
Cash & cash equivalents at the end of period	33.3	32.7

Balance Sheets as of September 30, 2017

(¥billion)

	2016/9	2017/3 (A)	2017/9 (B)	Change (B) - (A)
Current assets	120.4	140.5	128.5	-12.0
Cash	33.3	35.7	32.7	-3.0
Accounts receivable	43.6	60.1	50.4	-9.7
Inventories	36.8	36.4	38.7	+2.3
Others	6.7	8.3	6.7	-1.6
Fixed assets	84.3	91.2	98.0	+6.8
Total PPE	48.6	52.0	53.7	+1.7
Intangible assets	1.5	1.6	1.7	+0.1
Investment securities	28.7	32.5	37.5	+5.0
Others	5.5	5.1	5.1	+0.0
Total assets	204.7	231.7	226.5	-5.2

	2016/9	2017/3 (A)	2017/9 (B)	Change (B) - (A)
Liabilities	49.7	68.0	55.4	-12.6
Accounts payable	13.1	14.9	16.2	+1.3
Borrowings	15.5	30.8	13.3	-17.5
Others	21.1	22.3	25.9	+3.6
Net assets	155.0	163.7	171.1	+7.4
Shareholders' equity	145.6	151.3	155.3	+4.0
Valuation difference on available-for-sale securities	8.2	10.1	13.6	+3.5
Foreign currency translation adjustment	-0.7	0.2	0.1	-0.1
Non-controlling interests	1.5	1.7	1.7	+0.0
Remeasurements of defined benefit plans	0.4	0.4	0.4	+0.0
Total liabilities & Net assets	204.7	231.7	226.5	-5.2

- Equity Ratio 75.0% 69.9% 74.8%
- D/E Ratio (1) -12.2% -3.2% -12.5%
- Change in shareholders' equity +4.0
= Net Income 13.2 - Dividend and others 9.2

(1)D/E Ratio = (Borrowings - Cash) / Shareholders' equity

FY2017 Outlook

(¥billion)

	FY2016 Actual					FY2017 Outlook as of Nov. 2017						Change					Change (%)	FY2017 Outlook as of May 2017		
	1H	(3Q)	(4Q)	2H	Total	1H Actual	(3Q)	(4Q)	2H	Total	1H Actual	(3Q)	(4Q)	2H	Total	Total	1H	2H	Total	
Sales	84.5	37.6	58.2	95.8	180.3	91.0	41.3	59.7	101.0	Record	192.0	+6.5	+3.7	+1.5	+5.2	+11.7	+6%	87.7	101.3	189.0
Operating Profit	14.7	4.0	12.7	16.7	31.4	17.3	4.4	12.8	17.2	Record	34.5	+2.6	+0.4	+0.1	+0.5	+3.1	+10%	15.0	17.5	32.5
Non-Operating Income/Expenses	-0.5	1.1	-0.3	0.8	0.3	0.5	0.6	0.5	1.1		1.6	+1.0	-0.5	+0.8	+0.3	+1.3	-	0.1	0.7	0.8
Ordinary Income	14.2	5.1	12.4	17.5	31.7	17.8	5.0	13.3	18.3	Record	36.1	+3.6	-0.1	+0.9	+0.8	+4.4	+14%	15.1	18.2	33.3
Extraordinary Income/Loss	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	-	-	-	-	-	-	0.0	0.0	0.0
Net Income (1)	10.6	3.6	9.8	13.4	24.0	13.2	3.9	9.9	13.8	Record	27.0	+2.6	+0.3	+0.1	+0.4	+3.0	+12%	11.5	13.7	25.2
EBITDA (2)	18.8	6.1	15.4	21.5	40.3	22.0	-	-	23.4		45.4	+3.2	-	-	+1.9	+5.1	+13%	19.9	23.7	43.6
EPS (¥/share) (3)	69.00	23.86	64.11	87.97	156.97	87.40	-	-	91.83		179.23	+18.40	-	-	+3.86	+22.26	+14%	76.36	91.18	167.54
Dividend (¥/share)	24	-	-	28	52	32	-	-	34		66	+8	-	-	+6	+14		28	32	60
Total amount of Dividend (3)	3.7	-	-	4.2	7.9	4.8	-	-	5.1		9.9	+1.1	-	-	+0.9	+2.0		4.2	4.8	9.0
OP Margin	17.4%	10.6%	21.9%	17.4%	17.4%	19.0%	10.7%	21.5%	17.1%		18.0%	+1.6%	0.1%	-0.4%	-0.3%	+0.6%		17.1%	17.3%	17.2%
ROE (3)	-	-	-	-	15.1%	-	-	-	-		15.9%					+0.8%		-	-	15.0%
FX Rate (¥/\$)	105	-	-	112		111	-	-	112									110	110	
Naphtha (¥/kl)	31,400	-	-	38,200		37,700	-	-	36,500									40,700	40,700	
Comprehensive Income	7.4	6.3	10.1	16.4	23.8	16.7														

(1) Net income = Profit Attributable to Owners of Parent

(2) EBITDA = Operating Profit + Depreciation

(3) FY2017 Outlook including effects of FY2017 share repurchase program ended on June, 2017

2H FY2017 Outlook

<vs. 2H FY2016>

(Sales)	◆Up	¥5.2 billion (+5%)
(OP)	◆Up	¥0.5 billion (+3%)
(Ordinary Income)	◆Up	¥0.8 billion (+4%)
(Net Income)	◆Up	¥0.4 billion (+3%)
(EPS)	◆Up	¥3.86 (+4%)

(+) Chemicals, Performance Materials, Agrochemicals, Trading
(-) Pharmaceuticals
(+) Agrochemicals, Trading
(-) Chemicals, Performance Materials, Pharmaceuticals

<vs. 2H FY2017 Outlook as of May 2017>

(Sales)	◆Down	¥0.3 billion
(OP)	◆Down	¥0.3 billion
(Ordinary Income)	◆Up	¥0.1 billion
(Net Income)	◆Up	¥0.1 billion
(EPS)	◆Up	¥0.65

(+) Agrochemicals
(±) Chemicals
(-) Performance Materials, Pharmaceuticals, Trading
(+) Chemicals, Performance Materials
(±) Trading
(-) Agrochemicals, Pharmaceuticals

<Shareholders Return>

(Dividend) ◆ 1H ¥32/share, 2H ¥34/share
(1H up ¥8, 2H up ¥6 vs. FY2016)
(1H up ¥4, 2H up ¥2 vs. FY2017E as of May 2017)

Full Year FY2017 Outlook

<vs. FY2016>	(Sales) ◆Up	¥11.7 billion (+6%)	(+) Chemicals, Performance Materials, Agrochemicals, Trading (-) Pharmaceuticals
	(OP) ◆Up	¥3.1 billion (+10%)	(+) Performance Materials, Agrochemicals, Trading (-) Chemicals, Pharmaceuticals
	(Ordinary Income) ◆Up	¥4.4 billion (+14%)	
	(Net Income) ◆Up	¥3.0 billion (+12%)	
	(EPS) ◆Up	¥22.26 (+14%)	
	(ROE) ◆15.9%	(+0.8%)	

Sales expected to renew the highest results in 3 consecutive years
OP and Ordinary Income expected to renew the highest results in 4 consecutive years
Net Income expected to renew the highest results in 5 consecutive years

<vs. FY2017 Outlook as of May 2017>

(Sales) ◆Up	¥3.0 billion	(+) Performance Materials, Agrochemicals, Pharmaceuticals (-) Chemicals, Trading
(OP) ◆Up	¥2.0 billion	(+) Chemicals, Performance Materials, Pharmaceuticals (±) Agrochemicals, Trading
(Ordinary Income) ◆Up	¥2.8 billion	
(Net Income) ◆Up	¥1.8 billion	
(EPS) ◆Up	¥11.69	
(ROE) ◆15.9%	(+0.9%)	

<Shareholders Return>

(Dividend) ◆	1H ¥32/share, 2H ¥34/share (1H up ¥8, 2H up ¥6 vs. FY2016) (1H up ¥4, 2H up ¥2 vs. FY2017E as of May 2017)
(Share Repurchase) ◆	¥5.0 billion, 1.3 million shares completed in June 2017 (Cancelled 3 million shares in May 2017 and August 2017)
(Total Shareholders Return Target) ◆	70% (55.3% based on the above Share Repurchase and Dividend)

FY2017 Outlook

Non-Operating Income/Expenses, Extraordinary Income/Loss

(¥billion)

	FY2016 Actual	FY2017 Outlook as of Nov. 2017	Change	FY2017 Outlook as of May. 2017
Non-Operating Income	2.25	2.90	+0.65	1.94
Interest income, dividend income	0.75	0.82	+0.07	0.62
Equity in earnings of affiliates	0.70	1.17	+0.47	0.76
Foreign exchange gains	0.00	0.16	+0.16	0.00
Others	0.80	0.75	-0.05	0.56
Non-Operating Expenses	1.98	1.30	-0.68	1.12
Interest expense	0.16	0.13	-0.03	0.13
Loss on disposal of non-current assets	0.60	0.59	-0.01	0.54
Loss on foreign exchange	0.31	0.00	-0.31	0.00
Others	0.91	0.58	-0.33	0.45
Extraordinary Income	0.00	0.00	-	0.00
Extraordinary Loss	0.00	0.00	-	0.00

FY2017 Cash Flow Outlook

(¥billion)

	FY2016 Actual	FY2017 Outlook as of Nov. 2017	FY2017 Outlook as of May 2017
CF from operating activities	32.5	35.9	36.6
Income before income taxes & non-controlling interests	31.7	36.1	33.3
Impairment loss	0.2	0.0	0.0
Depreciation & Amortization	8.9	10.9	11.1
Income taxes paid	-9.0	-7.2	-6.1
Working capital, others	0.7	-3.9	-1.7
CF from investing activities	-13.1	-18.3	-17.7
Purchase of PPE	-12.4	-17.3	-17.1
Purchase and sales of investment securities	2.2	0.1	0.0
Others	-2.9	-1.1	-0.6
CF from financing activities	-19.1	-16.2	-15.6
Cash dividends paid	-7.7	-9.1	-8.5
Borrowings	-2.3	-2.1	-2.1
Share repurchase	-9.0	-5.0	-5.0
Others	-0.1	0.0	0.0
Effect of exchange rate change on cash & cash equivalents	0.4	0.0	0.0
Change in cash & cash equivalents	0.4	1.4	3.3
Cash & cash equivalents at the end of period	35.7	37.1	39.0

FY2017 Sales Outlook by Segment⁽¹⁾

(¥billion)

	FY2016 Actual							FY2017 Outlook as of Nov. 2017							Change						FY2017 Outlook as of May 2017			
	1Q	2Q	1H	3Q	4Q	2H	Total	1Q	2Q	1H	3Q	4Q	2H	Total	1Q	2Q	1H	3Q	4Q	2H	Total	1H	2H	Total
Chem	8.5	8.0	16.5	9.1	9.2	18.3	34.8	8.8	7.9	16.7	9.2	9.2	18.4	35.1	+0.3	-0.1	+0.2	+0.1	-0.0	+0.1	+0.3	17.1	18.4	35.5
Fine	2.8	2.5	5.3	2.7	2.7	5.4	10.7	2.8	2.5	5.3	2.6	2.5	5.1	10.4	-0.0	-0.0	-0.0	-0.1	-0.2	-0.3	-0.3	5.3	5.1	10.4
Basic	5.7	5.5	11.2	6.4	6.5	12.9	24.1	6.0	5.4	11.4	6.6	6.7	13.3	24.7	+0.3	-0.1	+0.2	+0.2	+0.2	+0.4	+0.6	11.8	13.3	25.1
Performance	12.6	12.9	25.5	13.8	13.5	27.3	52.8	14.1	15.0	29.1	14.6	14.8	29.4	58.5	+1.5	+2.1	+3.6	+0.8	+1.3	+2.1	+5.7	27.9	29.7	57.6
Agro	14.5	9.5	24.0	4.2	23.8	28.0	52.0	14.6	11.5	26.1	7.0	25.1	32.1	58.2	+0.1	+2.0	+2.1	+2.8	+1.3	+4.1	+6.2	24.9	31.4	56.3
Pharma	2.2	1.5	3.7	2.4	1.9	4.3	8.0	2.1	1.4	3.5	2.3	1.5	3.8	7.3	-0.1	-0.1	-0.2	-0.1	-0.4	-0.5	-0.7	3.0	3.9	6.9
Trading	14.4	13.2	27.6	13.7	13.9	27.6	55.2	14.6	14.5	29.1	15.8	15.4	31.2	60.3	+0.2	+1.3	+1.5	+2.1	+1.5	+3.6	+5.1	29.5	32.0	61.5
Others	4.0	4.6	8.6	5.8	9.6	15.4	24.0	5.4	4.3	9.7	4.5	7.2	11.7	21.4	+1.4	-0.3	+1.1	-1.3	-2.4	-3.7	-2.6	9.2	12.5	21.7
Adjustment	-11.1	-10.3	-21.4	-11.4	-13.7	-25.1	-46.5	-12.2	-11.0	-23.2	-12.1	-13.5	-25.6	-48.8	-1.1	-0.7	-1.8	-0.7	+0.2	-0.5	-2.3	-23.9	-26.6	-50.5
Total	45.1	39.4	84.5	37.6	58.2	95.8	180.3	47.4	43.6	91.0	41.3	59.7	101.0	192.0	+2.3	+4.2	+6.5	+3.7	+1.5	+5.2	+11.7	87.7	101.3	189.0

(1) Including inter-segment sales/transfers

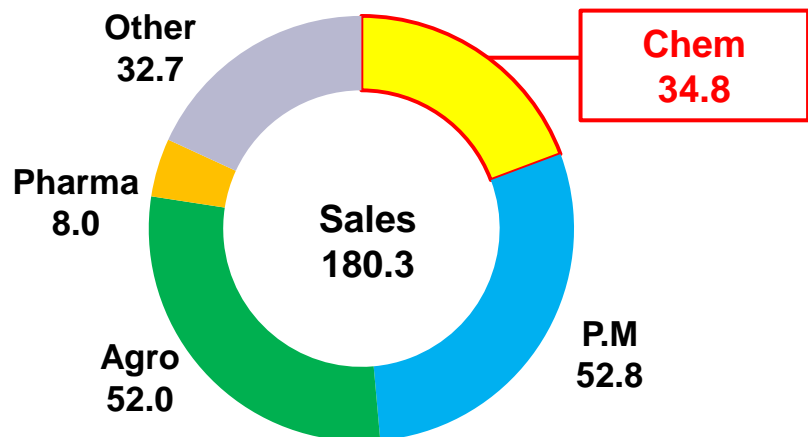
FY2017 OP Outlook by Segment

(¥billion)

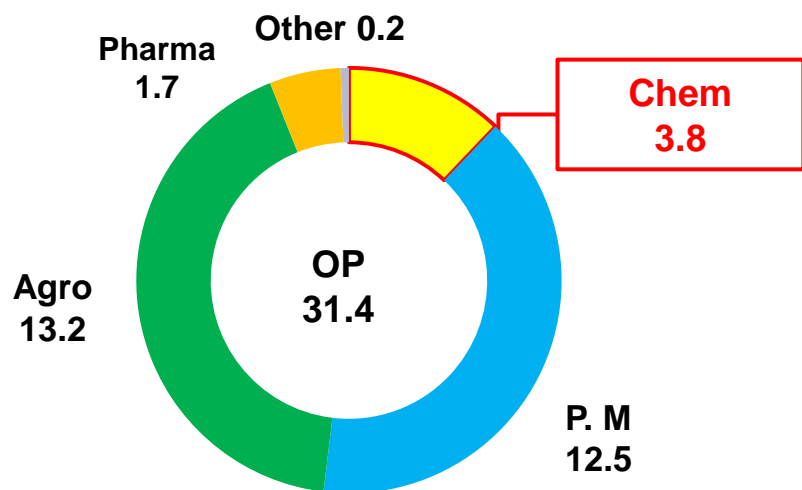
	FY2016 Actual							FY2017 Outlook as of Nov. 2017							Change							FY2017 Outlook as of May 2017		
	1Q	2Q	1H	3Q	4Q	2H	Total	1Q	2Q	1H	3Q	4Q	2H	Total	1Q	2Q	1H	3Q	4Q	2H	Total	1H	2H	Total
Chem	1.5	-0.2	1.3	1.3	1.2	2.5	3.8	1.5	-0.2	1.3	1.2	1.2	2.4	3.7	+0.0	-0.0	-0.0	-0.1	+0.0	-0.1	-0.1	1.5	2.1	3.6
Performance	3.0	3.2	6.2	3.8	2.5	6.3	12.5	3.6	4.1	7.7	3.3	2.9	6.2	13.9	+0.6	+0.9	+1.5	-0.5	+0.4	-0.1	+1.4	6.3	6.0	12.3
Agro	4.5	2.4	6.9	-2.0	8.3	6.3	13.2	4.5	3.6	8.1	-0.8	8.3	7.5	15.6	+0.0	+1.2	+1.2	+1.2	-0.0	+1.2	+2.4	7.6	8.0	15.6
Pharma	0.6	0.0	0.6	0.8	0.3	1.1	1.7	0.5	0.0	0.5	0.5	0.0	0.5	1.0	-0.1	-0.0	-0.1	-0.3	-0.3	-0.6	-0.7	0.1	0.8	0.9
Trading	0.4	0.4	0.8	0.5	0.4	0.9	1.7	0.4	0.5	0.9	0.6	0.5	1.1	2.0	-0.0	+0.1	+0.1	+0.1	+0.1	+0.2	+0.3	0.9	1.1	2.0
Others	0.0	0.0	0.0	0.2	0.8	1.0	1.0	0.1	0.1	0.2	0.0	0.5	0.5	0.7	+0.1	+0.1	+0.2	-0.2	-0.3	-0.5	-0.3	-0.1	0.6	0.5
Adjustment	-0.5	-0.6	-1.1	-0.6	-0.8	-1.4	-2.5	-0.6	-0.8	-1.4	-0.4	-0.6	-1.0	-2.4	-0.1	-0.2	-0.3	+0.2	+0.2	+0.4	+0.1	-1.3	-1.1	-2.4
Total	9.5	5.2	14.7	4.0	12.7	16.7	31.4	10.0	7.3	17.3	4.4	12.8	17.2	34.5	+0.5	+2.1	+2.6	+0.4	+0.1	+0.5	+3.1	15.0	17.5	32.5

Chemicals – (A) Recent Financial Performance

1. FY2016 Sales Distribution (¥billion)

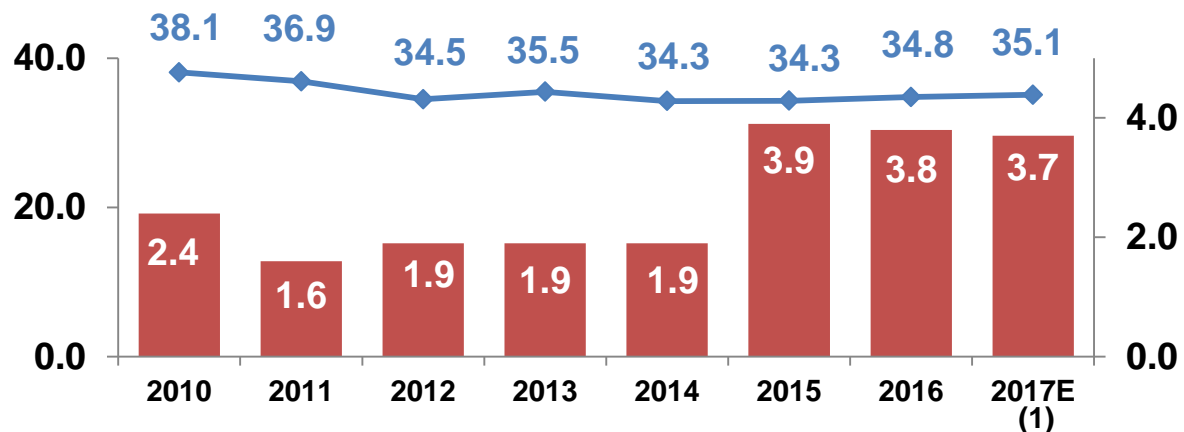


2. FY2016 OP Distribution (¥billion)



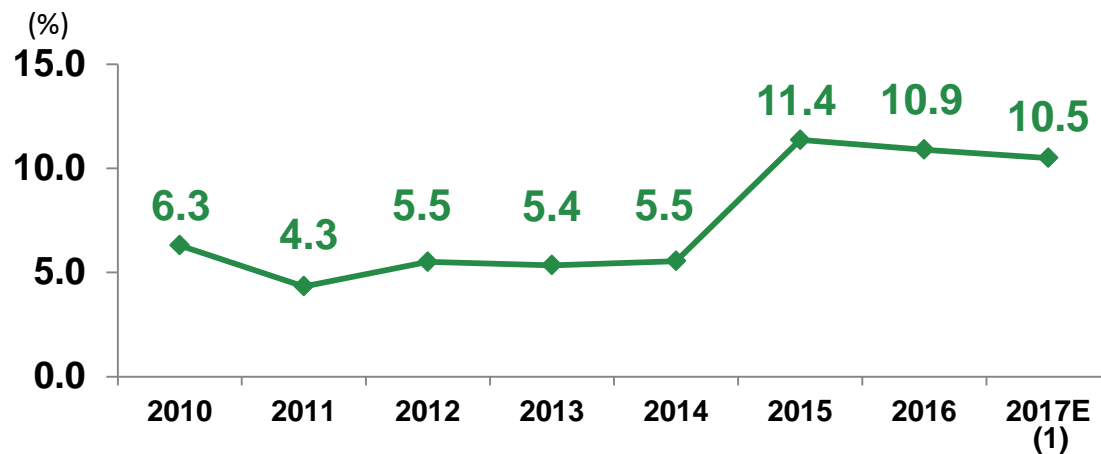
3. Recent Financial Performance (¥billion)

(1) Outlook as of Nov. 2017



OP (right)

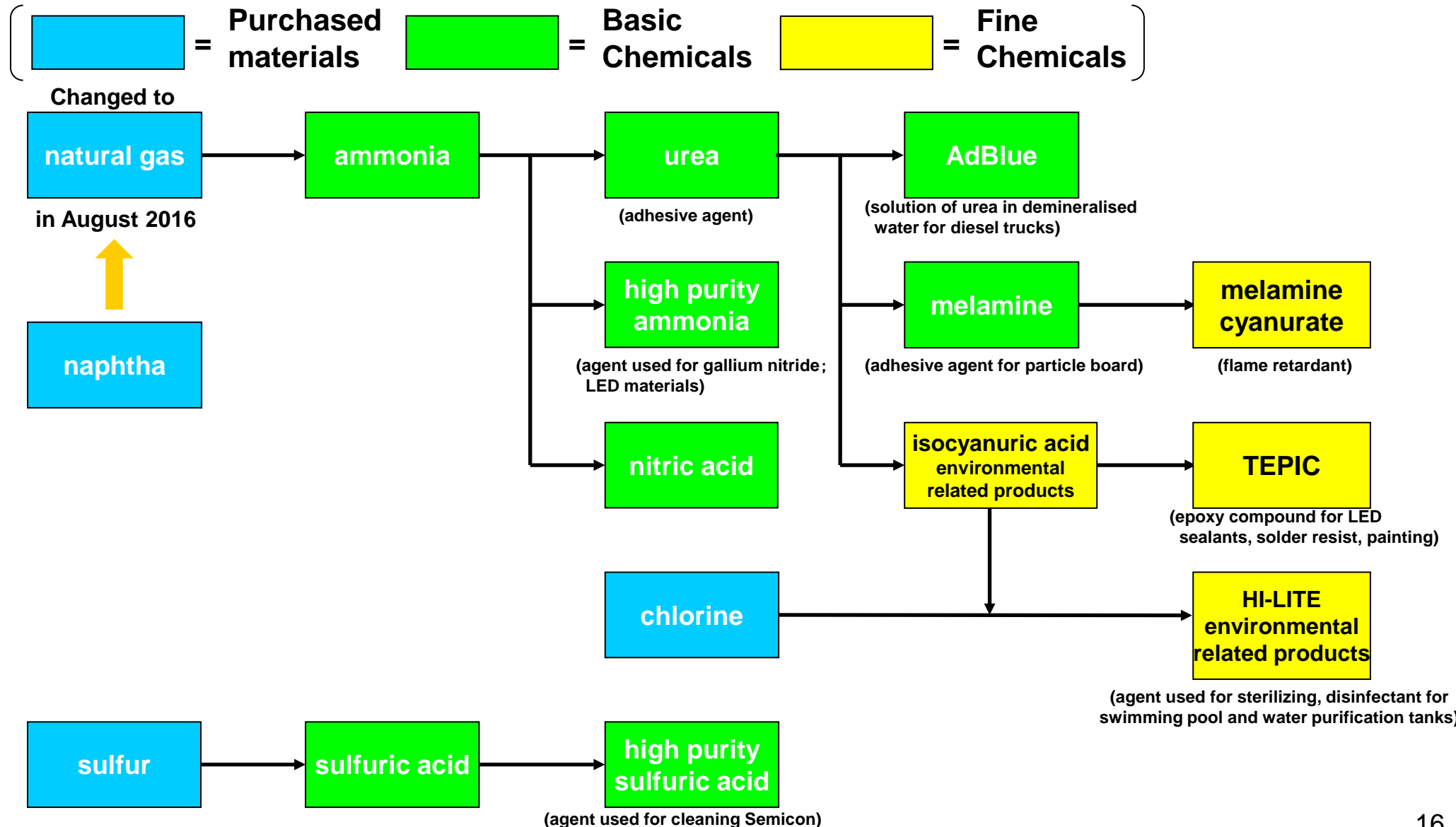
Sales (left)



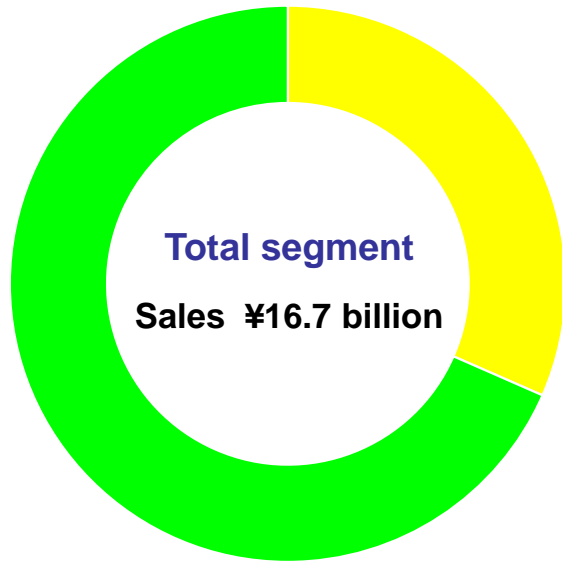
OP margin

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

- ◆ Core products of Basic Chemicals : Ammonia related products and sulfuric acid related products
- ◆ FY2016 ammonia domestic production capacity share 11%, high percentage of self-consumption of ammonia

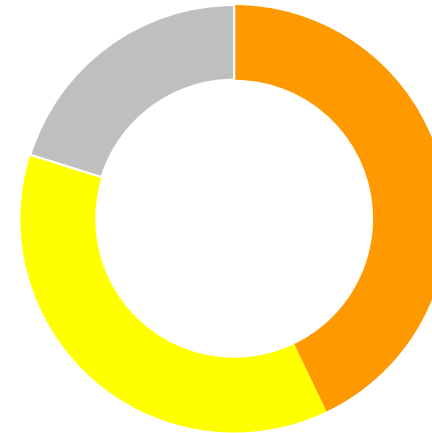


Chemicals – (C) 1H FY2017 Sales Distribution



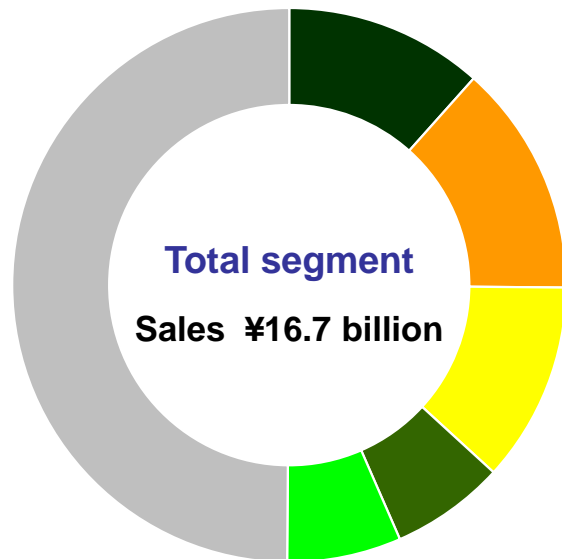
● Fine Chemicals 32%
● Basic Chemicals 68%

Fine Chemicals
Sales ¥5.3 billion



Main Products	80%
Others	20%

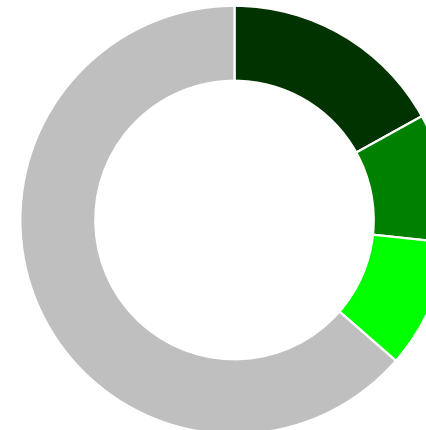
● TEPIC
● Environmental related products
● Others



Main Products	50%
Others	50%

< Main Products >
● Melamine
● TEPIC
● Environmental related products
● Urea/AdBlue
● High purity sulfuric acid
● Others

Basic Chemicals
Sales ¥11.4 billion

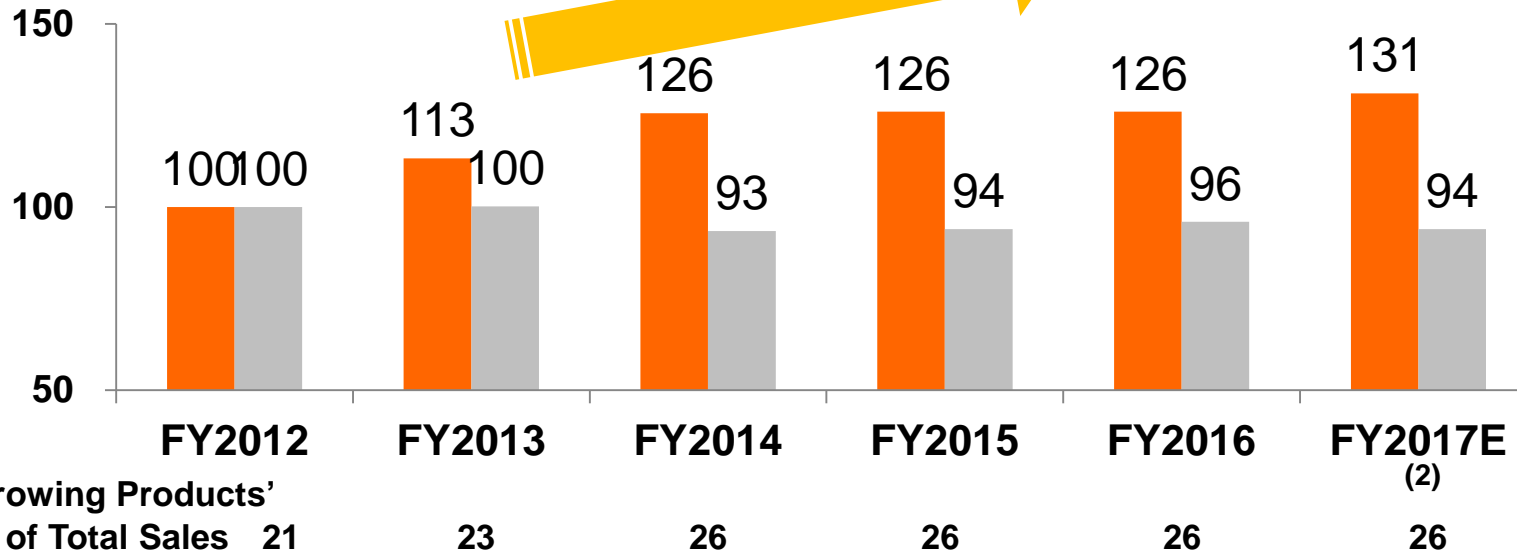


Main Products	36%
Others	64%

● Melamine
● High purity sulfuric acid
● Urea/AdBlue
● Others

Chemicals – (D) Growing Products

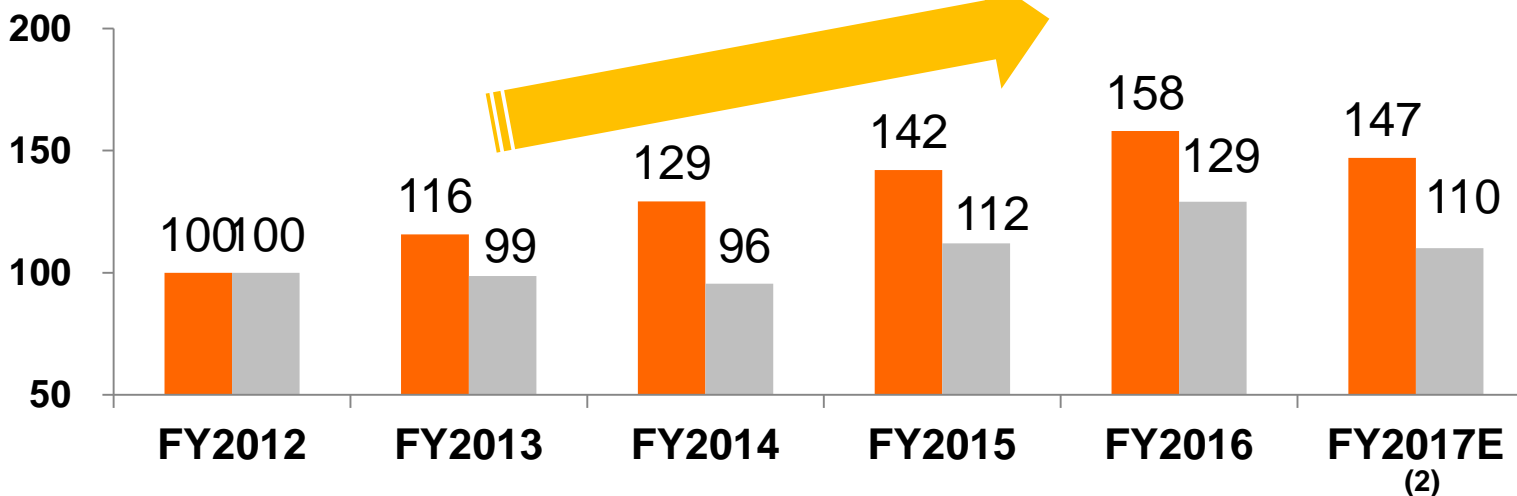
◆ Sales (FY2012=100)



■ Growing Products
 TEPIC
 FINEOXCOL
 AdBlue
 High purity ammonia
 Melamine cyanurate
 etc.

■ Matured Products
 Melamine
 Ammonia
 Urea
 Nitric acid
 etc.

◆ Marginal Profit (1) (FY2012=100)



(1) Marginal Profit : Sales – Variable Cost (2) Outlook as of Nov. 2017

Chemicals – (E-1) Production Capacity

◆ Production Capacity (FY2012 Production Capacity = 100)

		FY2012	FY2013	FY2014	FY2015	FY2016	FY2017E
Growing Products	TEPIC	100	→			120	
	AdBlue [Number of Plants(1)]	100 [2]	→		150 [4]	→ 160 [5]	
	High purity ammonia	100	→		250		
Matured Products	Ammonia	100	→			80	
	Nitric acid	100	→ 80	→			70

} Increasing
} Decreasing

(1) Including subcontractors

◆ Completed Cost Saving Investments at Toyama Ammonia Related Plants

Construction Cost: ¥0.5 billion

Cost Savings: ¥0.2-0.3billion/year

Contents: Utility and manpower savings

◆ Ammonia Feedstock Change Project

See Page E-2

Chemicals – (E-2)

Ammonia Feedstock Change Project

◆Project:

Change of feedstock for ammonia production at Toyama Plant from naphtha to natural gas

◆Purpose:

To pursue more stable profitability from ammonia and its derivative products by using natural gas

◆Construction Cost:

¥ 1.09 billion

◆Completion Period:

Completed in August 2016 as scheduled

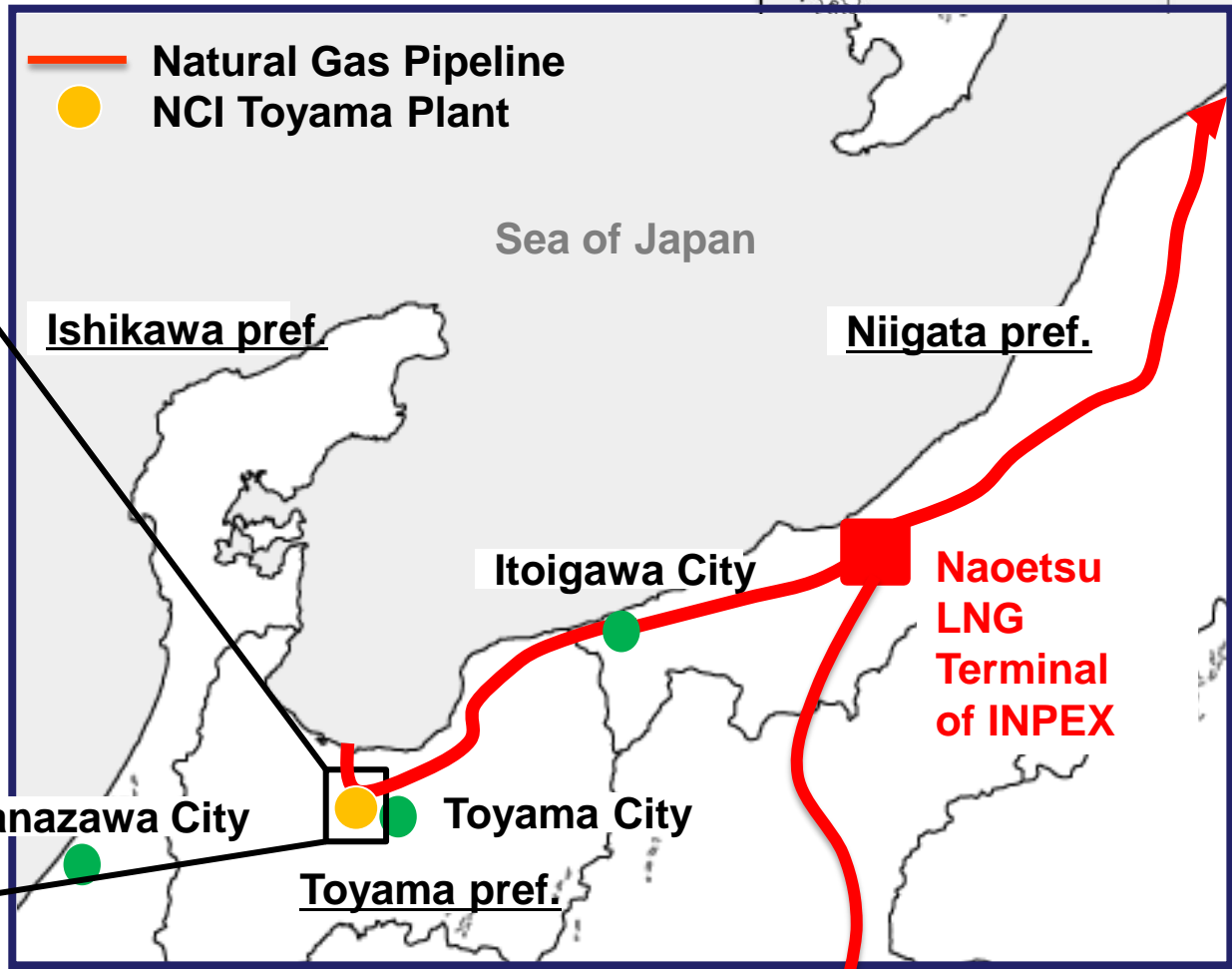
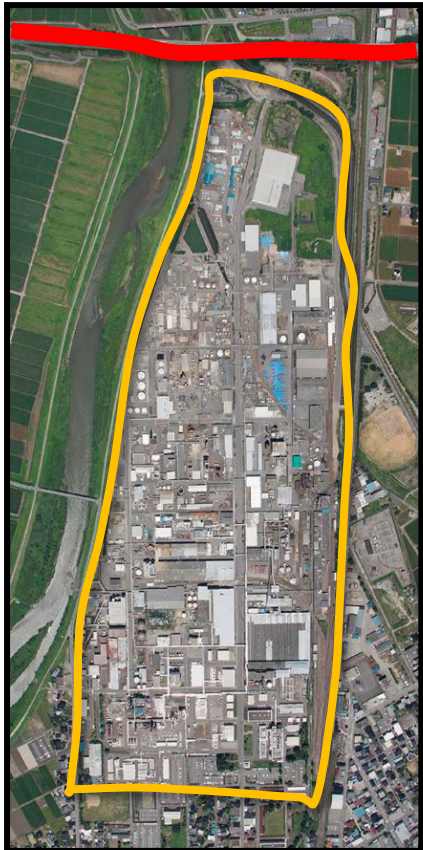
◆Extraordinary Loss:

Extraordinary loss of ¥ 704 million incurred in 3Q FY2014 (fiscal year ending in March 2015) as cost for dismantling the existing naphtha pipeline after completion of the project

Chemicals – (E-3)

Ammonia Feedstock Change Project

— Natural Gas Pipeline
— NCI Toyama Plant



Chemicals – (F) Fine Chemicals Subsegment

1H FY2017 Sales Review

<vs. 1H FY2016>

- ◆ TEPIC : Sales for general applications up, sales for electronic materials up
- ◆ Environmental related products : Domestic sales down (absence of one time large order in 1H FY2016), export sales up

<vs. 1H FY2017 Outlook as of May 2017>

- ◆ TEPIC : Both applications above target
- ◆ Environmental related products : Domestic sales below target, export sales below target

2H FY2017 Sales Outlook

<vs. 2H FY2016>

- ◆ TEPIC : Sales for general applications down, sales for electronic materials down
- ◆ Environmental related products : Domestic sales flat, export sales up

<vs. 2H FY2017 Outlook as of May 2017>

- ◆ TEPIC : Sales for general applications above target, sales for electronic materials in line with target
- ◆ Environmental related products : Domestic and export sales above target

Main Products		Sales YOY Change								
		FY2016 Actual			FY2017 Outlook as of May 2017			FY2017 Outlook as of Nov. 2017		
		1H	2H	Total	1H	2H	Total	1H Actual	2H	Total
Total Subsegment		-3%	+4%	+0%	-0%	-5%	-3%	-1%	-5%	-3%
TEPIC	◆ Epoxy compound for : (A) electronic materials (solder resist, LED sealant), (B) general applications such as powder coating agent for paint ◆ World largest producer	-9%	+19%	+5%	+19%	-10%	+2%	+24%	-5%	+8%
Environmental related products	◆ HI-LITE : made from chlorinated isocyanuric acid, used for sterilizing, disinfectant for swimming pool as well as water purification tank	+2%	+8%	+4%	-3%	+2%	-0%	-6%	+5%	-1%

Two products account for 75% of total consolidated subsegment sales (FY2016)

Chemicals – (G) Basic Chemicals Subsegment

1H FY2017 Sales Review

<vs. 1H FY2016>

- ◆ Melamine : Domestic sales down, export sales down, temporary plant shutdown(1)
- ◆ Urea/AdBlue : Urea down, AdBlue up
- ◆ High purity sulfuric acid : Up

<vs. 1H FY2017 Outlook as of May 2017>

- ◆ Melamine : Domestic sales below target, export sales below target, temporary plant shutdown
- ◆ Urea/AdBlue : Urea above target and AdBlue below target
- ◆ High purity sulfuric acid : Above target

2H FY2017 Sales Outlook

<vs. 2H FY2016>

- ◆ Melamine : Both domestic and export sales up
- ◆ Urea/AdBlue : Urea flat, AdBlue up
- ◆ High purity sulfuric acid : Up

<vs. 2H FY2017 Outlook as of May 2017>

- ◆ Melamine : Domestic sales below target, export sales below target
- ◆ Urea/AdBlue : Urea above target and AdBlue below target
- ◆ High purity sulfuric acid : Above target

Main Products		Sales YOY Change								
		FY2016 Actual			FY2017 Outlook as of May 2017			FY2017 Outlook as of Nov. 2017		
		1H	2H	Total	1H	2H	Total	1H Actual	2H	Total
Total Subsegment		-0%	+3%	+2%	+5%	+3%	+4%	+2%	+3%	+2%
Melamine	◆ Mainly used as adhesive agent for particle board, medium density fiberboard, plywood	+1%	+11%	+6%	+10%	+8%	+9%	-18%	+7%	-4%
Urea/AdBlue	◆ Urea: mainly used for urea formaldehyde resin, adhesive agent ◆ AdBlue: solution of urea in demineralised water for diesel trucks to reduce Nox	+2%	-9%	-4%	+3%	+5%	+4%	+1%	+5%	+3%
High purity sulfuric acid	◆ Used to clean semiconductors ◆ Largest in domestic market	-1%	+9%	+4%	+13%	+1%	+7%	+23%	+5%	+14%

Three products account for 39% of total consolidated subsegment sales(FY2016)

(1) From August to October 2017, melamine plant temporarily shutdown for total 37 days due to mechanical troubles and normalized on October 12, 2017 (1H estimated impact) sales down ¥0.67 billion, OP down ¥0.37 billion

Chemicals – (H) Profit Overview

(¥billion)

	FY2016 Actual (A)							FY2017 Outlook as of May 2017					FY2017 Outlook(B) as of Nov. 2017							Change (B)-(A)						
	1Q	2Q	1H	3Q	4Q	2H	Total	1Q	2Q	1H	2H	Total	1Q	2Q	1H	3Q	4Q	2H	Total	1Q	2Q	1H	3Q	4Q	2H	Total
Sales	8.5	8.0	16.5	9.1	9.2	18.3	34.8	8.4	8.7	17.1	18.4	35.5	8.8	7.9	16.7	9.2	9.2	18.4	35.1	+0.3	-0.1	+0.2	+0.1	-0.0	+0.1	+0.3
Fine	2.8	2.5	5.3	2.7	2.7	5.4	10.7	2.6	2.7	5.3	5.1	10.4	2.8	2.5	5.3	2.6	2.5	5.1	10.4	-0.0	-0.0	-0.0	-0.1	-0.2	-0.3	-0.3
Basic	5.7	5.5	11.2	6.4	6.5	12.9	24.1	5.8	6.0	11.8	13.3	25.1	6.0	5.4	11.4	6.6	6.7	13.3	24.7	+0.3	-0.1	+0.2	+0.2	+0.2	+0.4	+0.6
OP	1.5	-0.2	1.3	1.3	1.2	2.5	3.8	1.4	0.1	1.5	2.1	3.6	1.5	-0.2	1.3	1.2	1.2	2.4	3.7	+0.0	-0.0	-0.0	-0.1	+0.0	-0.1	-0.1

1H FY2017 Review

<vs. 1H FY2016>

(Fine Chemicals)

- ◆ TEPIC sales up, environmental related products sales down
- ◆ Sales flat, OP flat

(Basic Chemicals)

- ◆ Sales of melamine down
- ◆ Sales of urea including AdBlue and high purity sulfuric acid up
- ◆ Feedstock cost up, melamine trouble, inventory adjustment cost down
- ◆ Sales up, OP down

(Total Segment)

- ◆ Sales up ¥0.2billion, OP flat

<vs. 1H FY2017 Outlook as of May 2017>

(Fine Chemicals)

- ◆ TEPIC sales above target
- ◆ Environmental related products sales below target
- ◆ Fixed cost above expectations
- ◆ Sales in line with target, OP below target

(Basic Chemicals)

- ◆ Sales of melamine below target
- ◆ Sales of urea including AdBlue below target
- ◆ Sales of high purity sulfuric acid above target
- ◆ Feedstock cost below expectations, melamine trouble, fixed cost above expectations
- ◆ Sales below target, OP below target

(Total Segment)

- ◆ Sales down ¥0.4billion, OP down ¥0.2billion

2H FY2017 Outlook

<vs. 2H FY2016>

(Fine Chemicals)

- ◆ TEPIC sales down, environmental related products sales up
- ◆ Inventory adjustment cost down
- ◆ Sales down, OP flat

(Basic Chemicals)

- ◆ Sales of melamine, urea including AdBlue and high purity sulfuric acid up
- ◆ Feedstock cost up, fixed cost up
- ◆ Sales up, OP down

(Total Segment)

- ◆ Sales up ¥0.1billion, OP down ¥0.1billion

<vs. 2H FY2017 Outlook as of May 2017>

(Fine Chemicals)

- ◆ Sales of TEPIC and environmental related products above target, sales of other products below target
- ◆ Fixed cost and inventory adjustment cost above expectations
- ◆ Sales in line with target, OP below target

(Basic Chemicals)

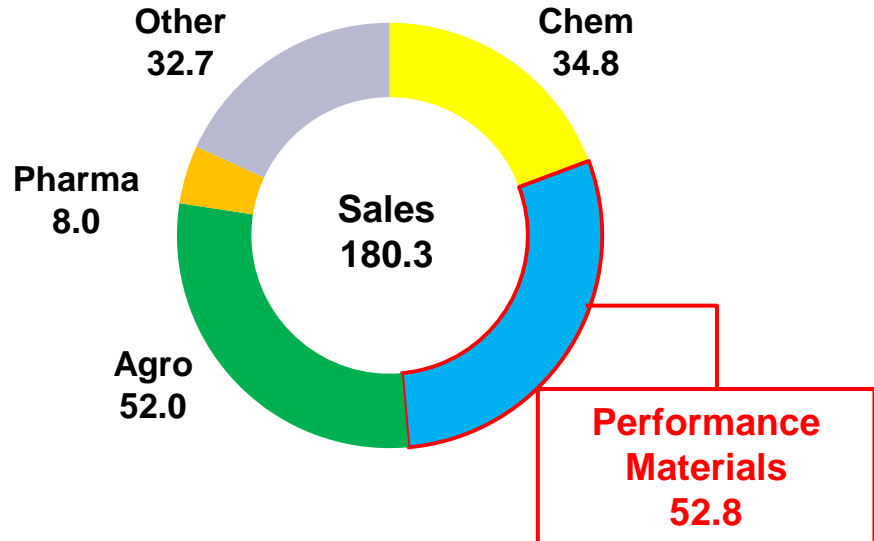
- ◆ Sales of melamine below target
- ◆ Sales of urea including AdBlue in line with target
- ◆ Sales of high purity sulfuric acid above target
- ◆ Feedstock cost and inventory adjustment cost below expectations
- ◆ Sales in line with target, OP above target

(Total Segment)

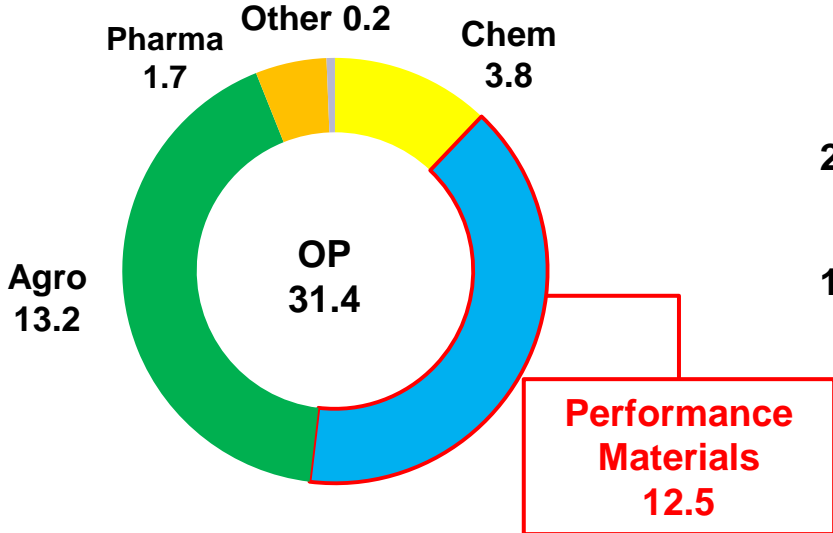
- ◆ Sales flat, OP up ¥0.3billion

Performance Materials – (A) Recent Financial Performance

1. FY2016 Sales Distribution (¥billion)

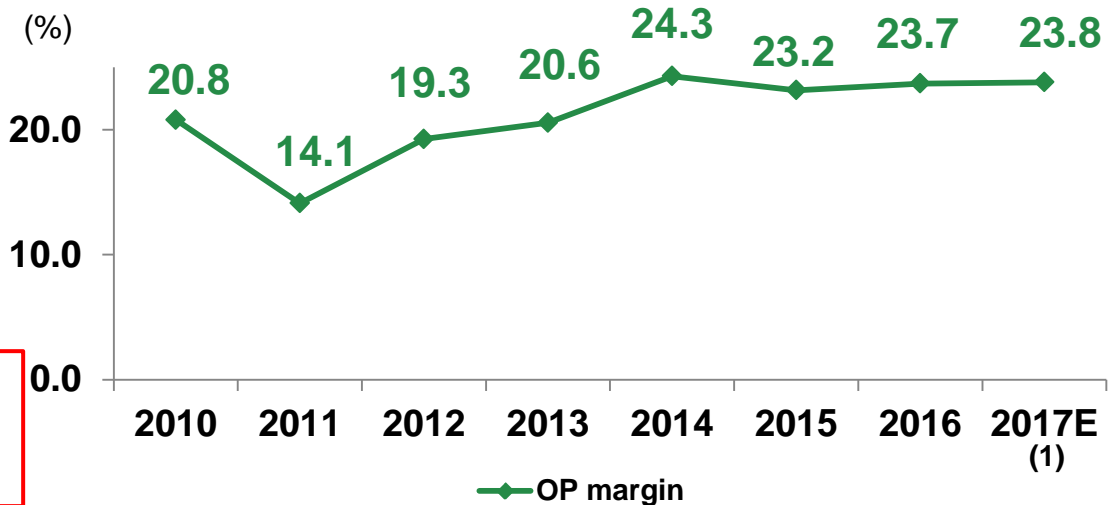
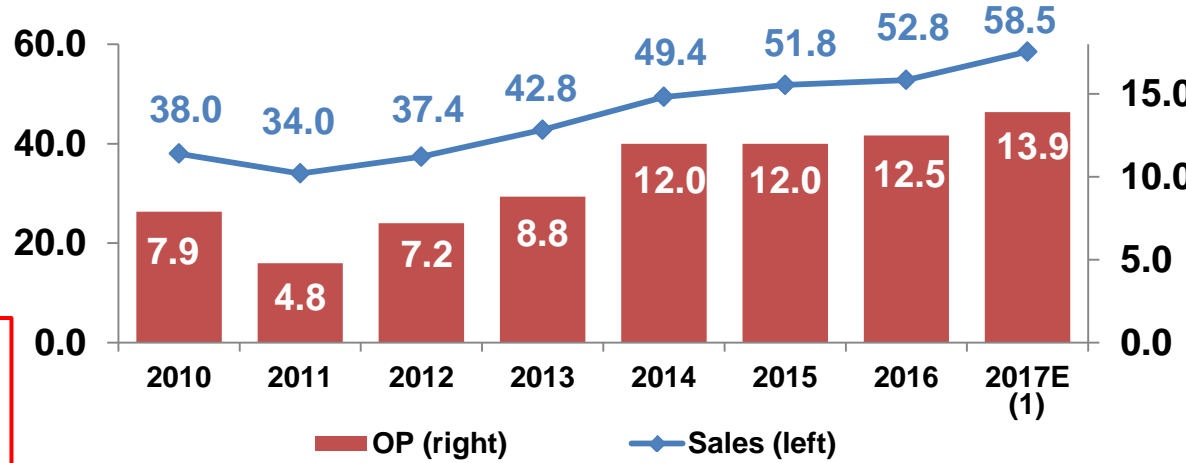


2. FY2016 OP Distribution (¥billion)



3. Recent Financial Performance (¥billion)

(1) Outlook as of Nov. 2017



Performance Materials – (B) Display Materials

1H FY2017 Sales Review

<vs. 1H FY2016>

- ◆ Total Display Materials up +11%
- ◆ IPS/FFS and VA up, TN down
- ◆ Photo-alignment IPS SUNEVER sales increasing substantially

<vs. 1H FY2017 Outlook as of May 2017>

- ◆ Total Display Materials above target
- ◆ IPS/FFS and VA above target, TN in line with target

2H FY2017 Sales Outlook

<vs. 2H FY2016>

- ◆ Total Display Materials up +9%
- ◆ IPS/FFS and VA up, TN down
- ◆ Photo-alignment IPS SUNEVER sales increasing substantially

<vs. 2H FY2017 Outlook as of May 2017>

- ◆ Total Display Materials below target
- ◆ VA above target, TN below target, IPS/FFS in line with target

Main Products	Sales YOY Change								
	FY2016 Actual			FY2017 Outlook as of May 2017			FY2017 Outlook as of Nov. 2017		
	1H	2H	Total	1H	2H	Total	1H Actual	2H	Total
Total SUNEVER	+4%	+7%	+5%	+6%	+9%	+8%	+11%	+9%	+10%
Other Display Materials (1)	-3%	+21%	+9%	+10%	+27%	+20%	+21%	+8%	+14%
Total Display Materials	+4%	+7%	+5%	+6%	+10%	+8%	+11%	+9%	+10%

(1) NHC(protective coating for touch panels), 3D TV materials, Elsource (hole injection layer materials for OLED),etc

- ◆ Purchased patents and expertise of OLED hole injection and hole transport materials from Solvay (September 2016)
- ◆ Established subsidiary in Suzhou, China for strengthening technical support, customer service and product development (July 2017)

Performance Materials – (C) Semis Materials

1H FY2017 Sales Review

<vs. 1H FY2016>

◆ Total Semis Materials sales up +20%

<vs. 1H FY2017 Outlook as of May 2017>

◆ Total Semis Materials sales above target

KrF, ArF and other semis materials up

KrF, ArF and other semis materials above target

2H FY2017 Sales Outlook

<vs. 2H FY2016>

◆ Total Semis Materials sales up +11%

<vs. 2H FY2017 Outlook as of May 2017>

◆ Total Semis Materials sales above target

KrF flat, ArF and other semis materials up

KrF, ArF and other semis materials above target

Main Products		Sales YOY Change								
		FY2016 Actual			FY2017 Outlook as of May 2017			FY2017 Outlook as of Nov. 2017		
		1H	2H	Total	1H	2H	Total	1H Actual	2H	Total
KrF	-8%	+10%	+0%	+2%	-4%	-1%	+13%	-1%	+6%	
ArF	-1%	+4%	+1%	+16%	+11%	+13%	+22%	+12%	+17%	
Bottom anti-reflective coating (ARC®) Total		-3%	+7%	+1%	+10%	+5%	+8%	+16%	+6%	+11%
Other Semis Materials (1)		-15%	+3%	-6%	+29%	+30%	+29%	+37%	+35%	+36%
Total Semis Materials		-6%	+6%	-0%	+14%	+10%	+12%	+20%	+11%	+16%

(1) Multi layer process materials (OptiStack®), microlens materials, etc

◆ Semiconductor capex plan to capture long-term future business:

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

FY2015 Product development facilities(¥2.8 billion),

Analyzing and evaluation R&D equipment (¥0.8 billion),

Production capacity expansion (¥0.8 billion), NCK (¥0.7 billion),

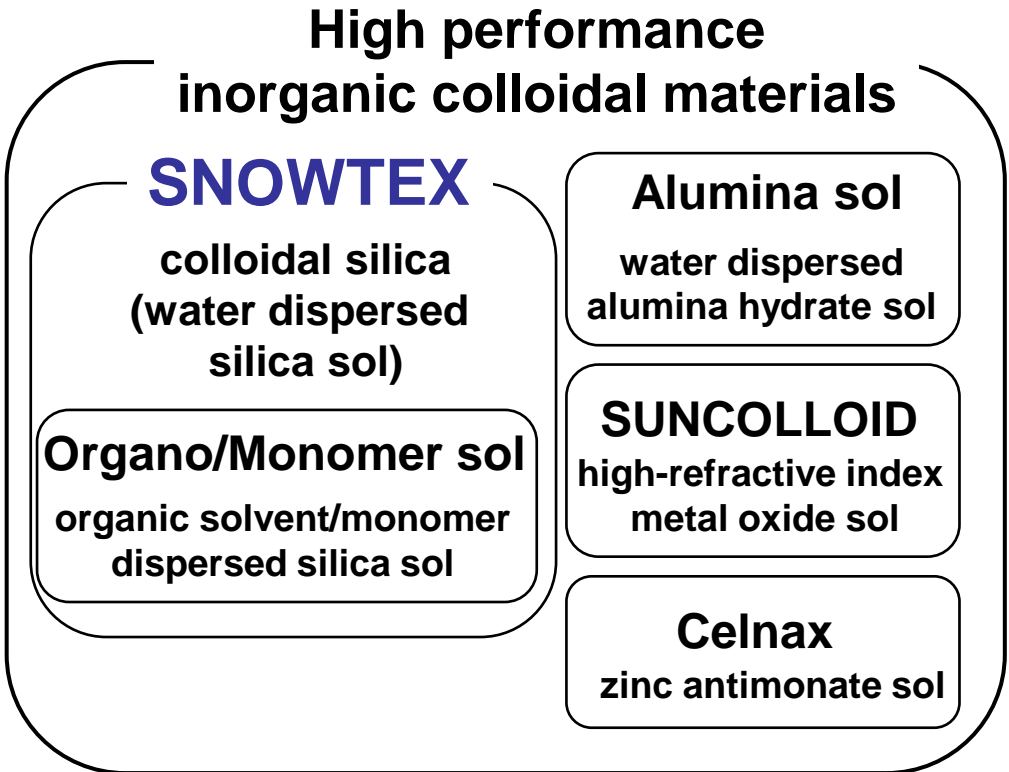
Material Research Lab. (¥0.5 billion)

FY2016 NCK production capacity expansion (¥3.2 billion),

Analyzing and evaluation R&D equipment (¥1.0 billion), Material Research Lab. (¥0.5 billion)

FY2017 Material Research Lab. (¥0.4 billion)

Performance Materials – (D-1) Inorganic Materials



< SNOWTEX Characteristics >

- High transparency
- High hydrophilicity
- High heat resistance
- Better antistatic
- High hardness
- Control refractive index
- Increase friction
- Increase bonding
- Increase viscosity

< SNOWTEX Key functions >

- Polishing**
- Coating**
- Binding**

< Application Examples >

- Polishing**
silicon wafer, aluminum/glass hard discs
- Coating for**
special steel sheet, plastic optical lenses, metals, plastic films
- Binding**
catalyst carrier, ceramics

Performance Materials – (D-2) SNOWTEX, Organo/Monomer sol

1H FY2017 Sales Review

<vs. 1H FY2016>

- ◆ SNOWTEX : Up (sales for polishing materials and non-polishing materials up)
- ◆ Organo/Monomer sol : Up

<vs. 1H FY2017 Outlook as of May 2017>

- ◆ SNOWTEX : Above target (sales for polishing materials and non-polishing materials above target)
- ◆ Organo/Monomer sol : Above target

2H FY2017 Sales Outlook

<vs. 2H FY2016>

- ◆ SNOWTEX : Down (sales for polishing materials and non-polishing materials down)
- ◆ Organo/Monomer sol : Up

<vs. 2H FY2017 Outlook as of May 2017>

- ◆ SNOWTEX : Below target (sales for polishing materials above target, sales for non-polishing materials below target)
- ◆ Organo/Monomer sol : In line with target

Main Products		Consolidated Sales YOY Change								
		FY2016 Actual (1)			FY2017 Outlook as of May 2017			FY2017 Outlook as of Nov. 2017		
		1H	2H	Total	1H	2H	Total	1H Actual	2H	Total
SNOWTEX	◆ Mainly Used for : (A) polishing materials (silicon wafer, aluminum and glass hard disk), (B) non-polishing materials (NOx reduction catalyst, automobile catalyst, special steel sheet)	-4%	+6%	+1%	+3%	-3%	+0%	+7%	-4%	+1%
Organo/ Monomer sol	◆ Used for : hard coating materials, electronic information materials, resin additive	-7%	-3%	-5%	+15%	+5%	+10%	+21%	+5%	+12%

Two products account for 82% of total consolidated subsegment sales (FY2016)

Total Inorganic Materials	-4%	+4%	-0%	+10%	+3%	+6%	+15%	+3%	+9%
----------------------------------	-----	-----	-----	------	-----	-----	------	-----	-----

Performance Materials – (E) Profit Overview

(¥billion)

	FY2016 Actual (A)							FY2017 Outlook as of May 2017					FY2017 Outlook(B) as of Nov. 2017							Change (B)-(A)						
	1Q	2Q	1H	3Q	4Q	2H	Total	1Q	2Q	1H	2H	Total	1Q	2Q	1H	3Q	4Q	2H	Total	1Q	2Q	1H	3Q	4Q	2H	Total
Sales	12.6	12.9	25.5	13.8	13.5	27.3	52.8	13.8	14.1	27.9	29.7	57.6	14.1	15.0	29.1	14.6	14.8	29.4	58.5	+1.5	+2.1	+3.6	+0.8	+1.3	+2.1	+5.7
OP	3.0	3.2	6.2	3.8	2.5	6.3	12.5	3.2	3.1	6.3	6.0	12.3	3.6	4.1	7.7	3.3	2.9	6.2	13.9	+0.6	+0.9	+1.5	-0.5	+0.4	-0.1	+1.4

1H FY2017 Review

<vs. 1H FY2016>

- ◆ SUNEVER sales up (IPS/FFS up, VA up, TN down)
- ◆ Total Semis Materials sales up
(KrF, ArF and other semis materials up)
- ◆ Inorganic Materials sales up
(SNOWTEX and Organo/Monomer sol up)
- ◆ Fixed cost up ¥1.3billion
- ◆ Sales up ¥3.6billion, OP up ¥1.5billion

<vs. 1H FY2017 Outlook as of May 2017>

- ◆ SUNEVER sales above target
(IPS/FFS above target, VA above target, TN in line with target)
- ◆ Total Semis Materials sales above target
(KrF, ArF and other semis materials above target)
- ◆ Inorganic Materials sales above target
(SNOWTEX and Organo/Monomer sol above target)
- ◆ Fixed cost down ¥0.4billion
- ◆ Sales up ¥1.2billion, OP up ¥1.4billion

2H FY2017 Outlook

<vs. 2H FY2016>

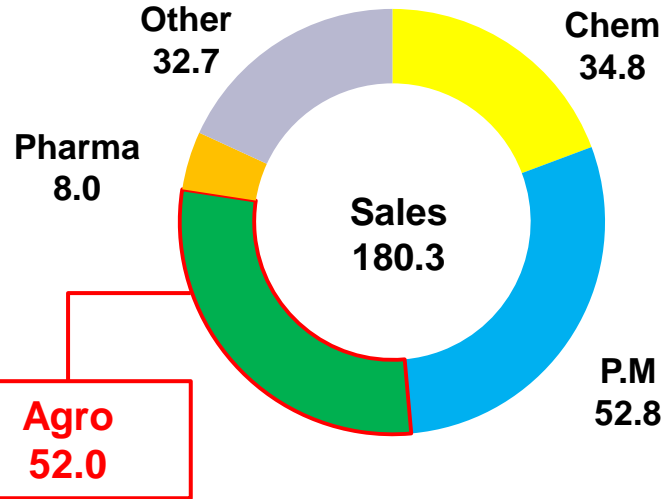
- ◆ SUNEVER sales up (IPS/FFS and VA up, TN down)
- ◆ Total Semis Materials sales up
(KrF flat, ArF and other semis materials up)
- ◆ Inorganic Materials sales up
(SNOWTEX up, Organo/Monomer sol up)
- ◆ Fixed cost up ¥2.1billion
- ◆ Sales up ¥2.1billion, OP down ¥0.1billion

<vs. 2H FY2017 Outlook as of May 2017>

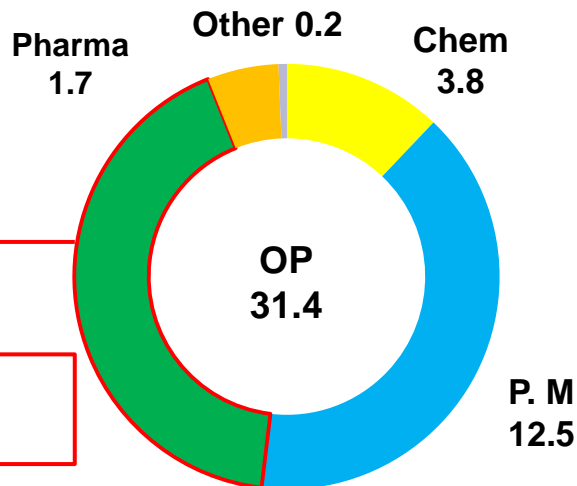
- ◆ SUNEVER sales in line with target
(IPS/FFS in line with target, VA above target, TN below target)
- ◆ Total Semis Materials sales above target
(KrF, ArF and semi materials above target)
- ◆ Inorganic Materials sales above target
(SNOWTEX below target, Organo/Monomer sol in line with target)
- ◆ Selling TEPIC via NCA (USA subsidiary) abolished
(sales down ¥0.4billion)
- ◆ Inventory adjustment cost down ¥0.3billion
- ◆ Sales down ¥0.3billion, OP up ¥0.2billion

Agrochemicals – (A) Recent Financial Performance

1. FY2016 Sales Distribution (¥billion)

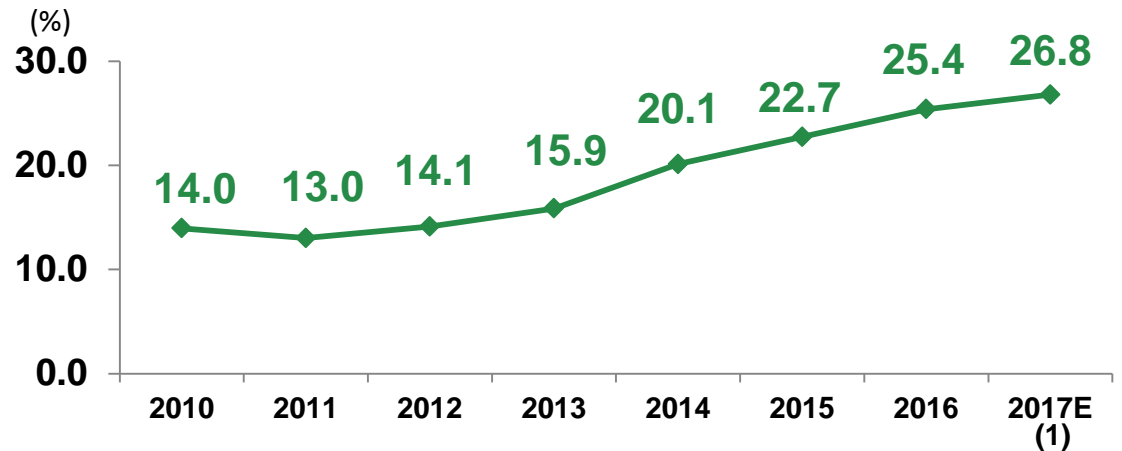
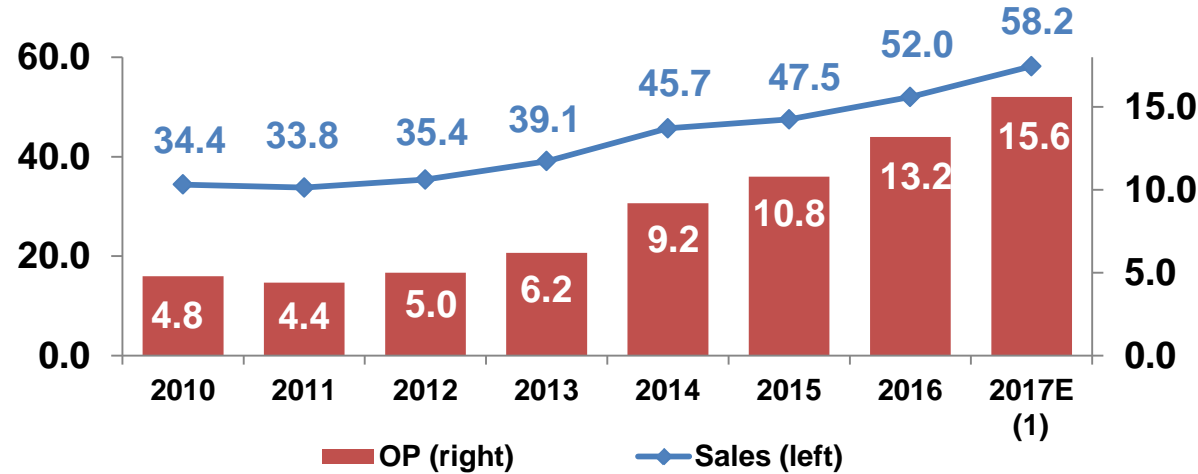


2. FY2016 OP Distribution (¥billion)



3. Recent Financial Performance (¥billion)

(1) Outlook as of Nov. 2017



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

Main Products (in order of FY2016 sales amount)		Sales YOY Change		
		FY2016 /FY2015 (1)	FY2017E /FY2016 as of May2017(2)	FY2017E /FY2016 as of Nov.2017(2)
ROUNDUP	herbicide	↗↗	↘	↗
Fluralaner	Animal health products	↗↗↗↗	↗↗↗↗	↗↗↗↗
ALTAR (NC-620)	herbicide	↗↗↗	↗	↘
TARGA	herbicide	↗	↘	↗
PERMIT	herbicide	↘↘↘	↗	↗
SIRIUS	herbicide	↘↘	↘	↘
LEIMAY/ORACLE	fungicide	↗↗	↗↗	↗↗
STARMITE	miticide	↘↘	↘	↘
PULSOR (THIFLUZAMIDE)	fungicide	↘↘↘↘	↗↗	↗
SANMITE	insecticide	↘↘	↗↗	↗↗↗↗

Domestic sales of all major products down due to a change in domestic shipment and pricing policies resulting in one-time sales shift from 2H FY2017 to 1Q FY2018 (¥1.4billion) (no change from FY2017 Outlook as of May 2017)

YOY Change

+30%~	↗↗↗↗
+20~+30%	↗↗↗
+10~+20%	↗↗
+0~+10%	↗
-0~-10%	↘
-10~-20%	↘↘
-20~-30%	↘↘↘
-30%~	↘↘↘↘

(1) Non-consolidated basis
(2) Consolidated basis

Agrochemicals – (C) Overview

- ◆ Transforming from a stable profit sector into a high growth sector driven by ALTAIR, ROUNDUP and FLURALANER
- ◆ Strengthening product portfolio by: in-house developed products, acquired products, licensed-in products

(launch)	(products)
FY2002	ROUNDUP (herbicide, acquired domestic business from Monsanto)
FY2008	LEIMAY (fungicide, in-house) STARMITE (miticide, in-house)
FY2009	PULSOR (THIFLUZAMIDE) (fungicide, acquired from Dow) PREVATHON (insecticide, licensed from DuPont)
FY2010	ROUNDUP AL for general household shower-type herbicide market, growing sharply
FY2011-12	ALTAIR (paddy rice herbicide, in-house) launched in Korea in FY2011 and in Japan in FY2012
FY2013	Fluralaner started to be supplied to MSD in July as scheduled
FY2014	BRAVECTO launched in several countries in EU in April and in the USA in June by MSD EXIREL/PYROSSO (CYAZYPYR) launched (insecticide, licensed from DuPont)
FY2015	BRAVECTO launched in Japan in July by Intervet K.K. TREFANOCIDE (herbicide, acquired by Gowan from Dow, exclusive sales right in Japan transferred to NCI)
FY2017	ISOPYRAZAM (fungicide, licensed from Syngenta) ISOCLAST (SULFOXAFLOX) (insecticide, licensed from Dow)
FY2019	GRACIA (Insecticide, in-house)
FY2022	General fungicide (in-house)

MSD: MSD Animal Health, the global animal health business unit of Merck
Intervet K.K: a Japanese subsidiary of MSD

- ◆ Expanded Fluralaner production capacity at two outsourced factories (March 2017)
- ◆ Full reconstruction of Biological Research Laboratories for Agro and Pharma segments completed (April 2017)
FY2010-2017 total capex ¥6.4 billion
- ◆ Construction of GRACIA plant started in May 2017 (to be completed in July 2018, capex ¥1.4billion)
- ◆ Acquired 3% share of IHARABRÁS (leading agro company in Brazil) in September 2011
- ◆ Established subsidiaries in China (April 2014), Brazil (Aug. 2016) and India (Aug. 2017) for sales support and product development
- ◆ Export sales account for 32% of FY2016 consolidated segment sales
(Asia:25%, Europe/Africa:64%, North/Central/South America:11%) *Including Fluralaner

Agrochemicals – (D) Fluralaner

◆ Fluralaner

Invented by NCI and supplied to MSD as the active pharmaceutical ingredient of BRAVECTO

◆ BRAVECTO

*Developed by MSD

*Veterinary medical product providing unique immediate and persistent tick and flea killing activity for dogs for 12 weeks, longer than currently available once-monthly commercialized products

*Chewable tablet for dogs launched by MSD

April 2014 Germany, Spain, Italy, France, the Netherlands, UK

June 2014 USA

July 2015 Japan

Currently, available in more than 85 countries

*Spot-On-Solution for dogs and cats launched by MSD

July 2016 EU(cats)

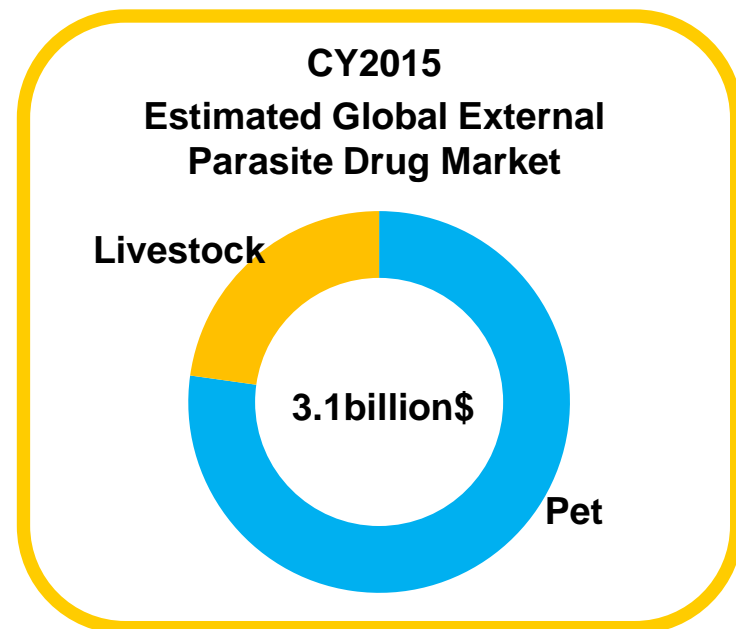
December 2016 USA(cats)

January 2017 USA, Germany, Austria(dogs)

◆ EXZOLT

*For poultry red mites launched by MSD (administered via drinking water)

September 2017 EU



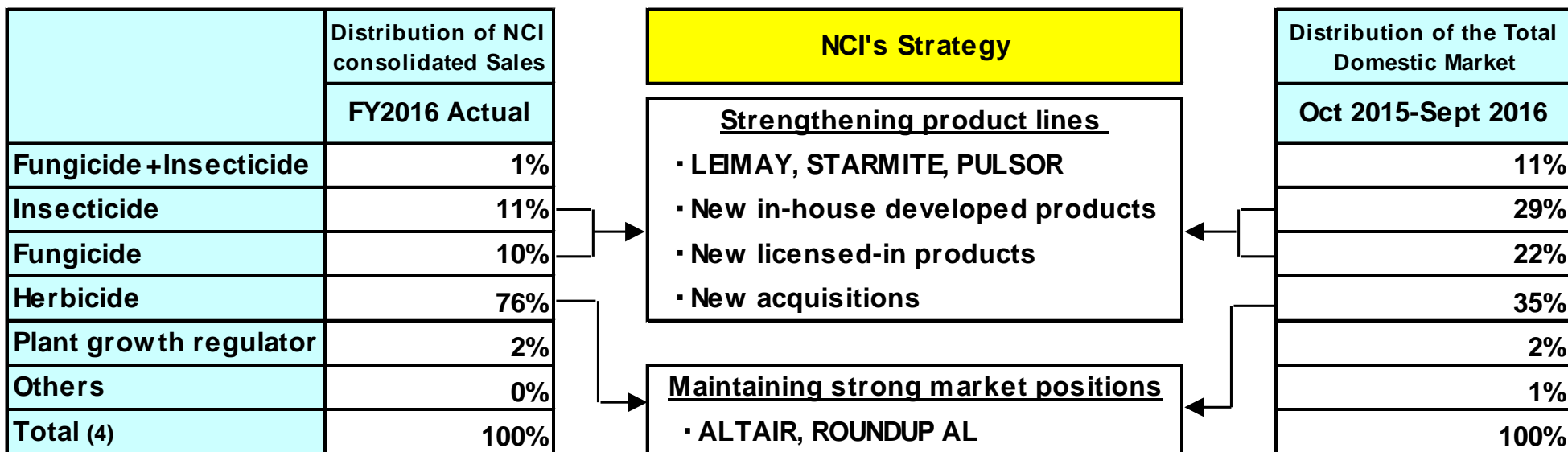
Agrochemicals – (E) Segment Sales (Before Discount)

	Sales YOY Change											
	FY2013 Actual	FY2014 Actual	FY2015 Actual	FY2016 Actual			FY2017 Outlook as of May 2017			FY2017 Outlook as of Nov. 2017		
	Total	Total	Total	1H	2H	Total	1H	2H	Total	1H Actual	2H	Total
ROUNDUP	-0%	+17%	-0%	+20%	+6%	+13%	-1%	-7%	-4%	+8%	-6%	+1%
(ROUNDUP AL(1))	(+66%)	(+59%)	(+36%)	(+26%)	(+40%)	(+30%)	(+30%)	(-4%)	(+19%)	(+23%)	(+7%)	(+18%)
Others(2)	+14%	+13%	+5%	+12%	+6%	+9%	+5%	+14%	+10%	+9%	+16%	+13%
Total Segment	+11%	+14%	+4%	+14%	+6%	+10%	+3%	+10%	+7%	+9%	+11%	+10%

(1) ROUNDUP for general household, launched in FY2010, accounting for 15% of FY2015 ROUNDUP sales

(2) Including Fluralaner

(3) FY2013-2016 Actual : Non-consolidated basis, FY2017 Outlook : Consolidated basis



(4) Excluding Fluralaner

Agrochemicals – (F) Profit Overview

(¥billion)

	FY2016 Actual (A)							FY2017 Outlook as of May 2017					FY2017 Outlook(B) as of Nov. 2017							Change (B)-(A)						
	1Q	2Q	1H	3Q	4Q	2H	Total	1Q	2Q	1H	2H	Total	1Q	2Q	1H	3Q	4Q	2H	Total	1Q	2Q	1H	3Q	4Q	2H	Total
Sales	14.5	9.5	24.0	4.2	23.8	28.0	52.0	13.5	11.4	24.9	31.4	56.3	14.6	11.5	26.1	7.0	25.1	32.1	58.2	+0.1	+2.0	+2.1	+2.8	+1.3	+4.1	+6.2
OP	4.5	2.4	6.9	-2.0	8.3	6.3	13.2	3.8	3.8	7.6	8.0	15.6	4.5	3.6	8.1	-0.8	8.3	7.5	15.6	+0.0	+1.2	+1.2	+1.2	-0.0	+1.2	+2.4

1H FY 2017 Review

<vs. 1H FY2016>

- ◆ Sales up : Fluralaner, ALTAIR, ROUNDUP(ML,AL), LEIMAY(export)
- ◆ Sales down : PERMIT(export), SIRIUS, PULSOR(export)
- ◆ Fixed costs up ¥0.4 billion
- ◆ Sales up ¥2.1 billion, OP up ¥1.2 billion

<vs. 1H FY2017 Outlook as of May 2017>

- ◆ Sales above target : Fluralaner, ALTAIR, ROUNDUP(ML), TARGA(export), SANMITE(export)
- ◆ Sales below target : PULSOR(export)
- ◆ Sales up ¥1.2 billion, OP up ¥0.5 billion

2H FY 2017 Outlook

<vs. 2H FY2016>

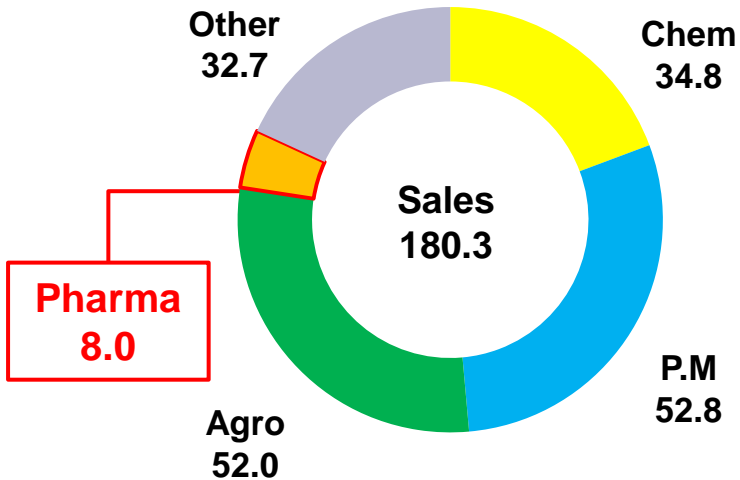
- ◆ Sales up : Fluralaner, PERMIT(export), PULSOR(export), TARGA(export), SANMITE(export), LEIMAY(export)
- ◆ Sales down: ROUNDUP(ML), ALTAIR
(due to a change in domestic marketing strategy)
- ◆ Fixed costs up ¥0.5 billion
- ◆ Change in domestic marketing strategy (p32)
- ◆ Inventory adjustment cost up ¥0.4 billion
- ◆ Sales up ¥4.1 billion, OP up ¥1.2 billion

<vs. 2H FY2017 Outlook as of May 2017>

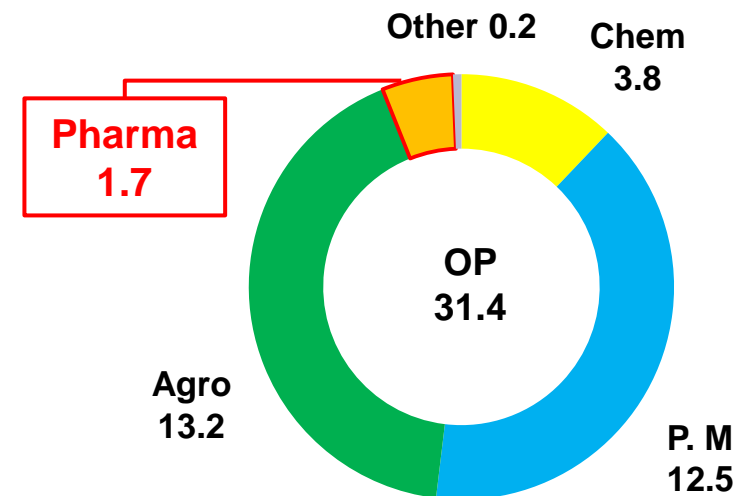
- ◆ Sales above target : TARGA, STARMITE(export), ROUNDUP(AL), LEIMAY(export)
- ◆ Sales below target : Fluralaner, ALTAIR, SIRIUS
- ◆ Fixed costs up ¥0.2 billion
- ◆ Inventory adjustment cost above expectations (¥0.6 billion)
- ◆ Sales up ¥0.7 billion, OP down ¥0.5 billion

Pharmaceuticals – (A) Recent Financial Performance

1. FY2016 Sales Distribution (¥billion)

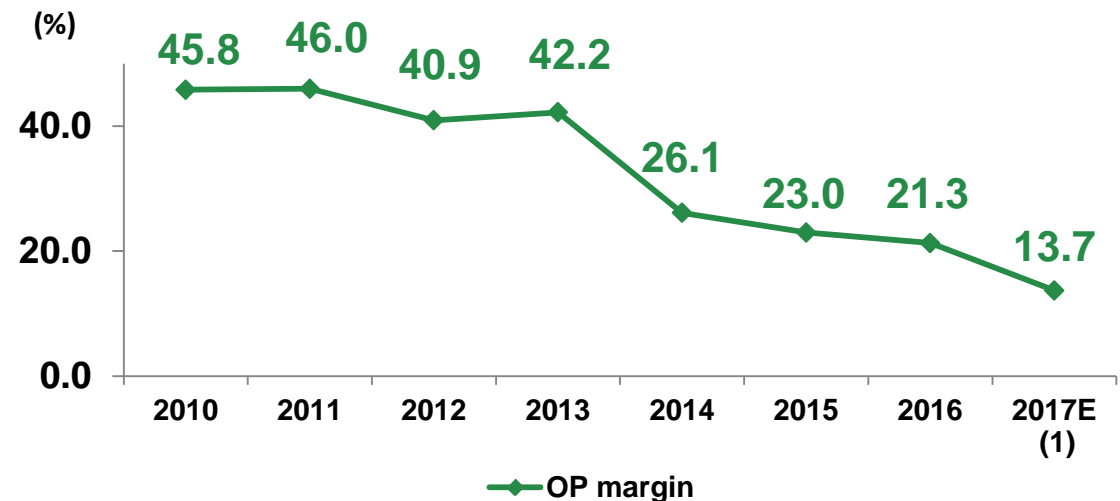
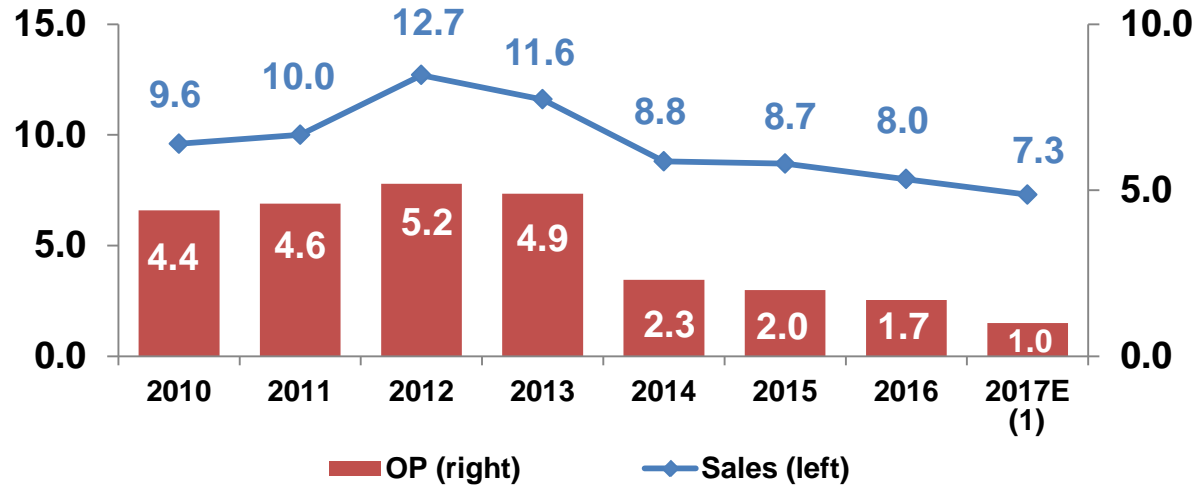


2. FY2016 OP Distribution (¥billion)



3. Recent Financial Performance (¥billion)

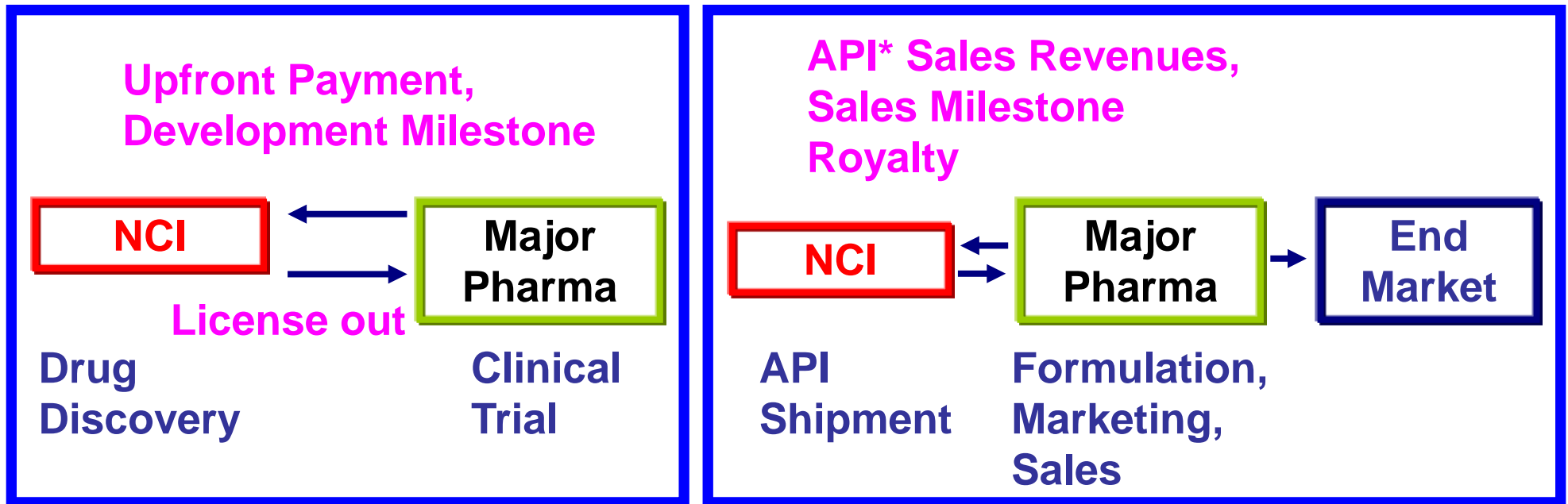
(1) Outlook as of Nov. 2017



Pharmaceuticals – (B) NCI Business Model (New Drug)

- ◆ Unique ethical pharma business model without sales force

< Before Launch > → < After Launch >



API*: Active Pharmaceutical Ingredient

Pharmaceuticals – (C) LIVALO (Anti-Cholesterol Drug)

	FY2013 Actual	FY2014 Actual	FY2015 Actual	FY2016 Actual	FY2017 Outlook as of May 2017	FY2017 Outlook as of Nov. 2017
Domestic End Market Sales (NHI drug price basis, ¥billion)	52.6	34.5	29.7	23.9	-	-
Domestic End Market Share (1)	21%	16%	15%	13%	-	-
Our Domestic and Export API Sales (¥billion)	10.2	6.9	5.8	5.2	4.3	4.6
Our Domestic and Export API Sales YOY Change (Our Domestic API Sales YOY Change)	-2% (-2%)	-32% (-46%)	-15% (-27%)	-11% (-42%)	-17% (-40%)	-12% (-70%)

(1) Excluding generic

- ◆ August 2013, domestic compound patent expired
- ◆ April 2014, filed complaints against certain companies in USA which had submitted Abbreviated New Drug Application(ANDA) with FDA
- ◆ Domestic market share 13% in FY2016
- ◆ FY2016 NHI drug price cut about -7~-9%
- ◆ Full reconstruction of Biological Research Laboratories completed (April 2017)
- ◆ Currently, available in 25 countries

FY2016 Domestic Market Share(1)	
Crestor	60%
Lipitor	15%
LIVALO	13%
Mevalotin	7%

Pharmaceuticals – (D) Pipeline

Product	Mechanism of action	Expected indications	Development partners
NIP-022	<ul style="list-style-type: none"> Thrombopoietin (TPO) receptor activation 	<ul style="list-style-type: none"> Thrombocytopenia 	<ul style="list-style-type: none"> Terminated the license agreement with Ono in April 2014 Entered into the license agreement with Yakult in October 2015 Completed a Phase I clinical trial in Japan in July 2017
NT-702	<ul style="list-style-type: none"> Phosphodiesterase (PDE)3 inhibition 	<ul style="list-style-type: none"> Intermittent claudication Asthma 	<ul style="list-style-type: none"> Terminated the license agreement with Taisho Under consideration regarding seeking new partners
NTC-801	<ul style="list-style-type: none"> Acetylcholine-activated K⁺ channel current (IKACH) inhibition 	<ul style="list-style-type: none"> Arrhythmia (Atrial fibrillation) 	<ul style="list-style-type: none"> Terminated the license agreement with Teijin and BMS in September 2015 Under consideration regarding seeking new partners

◆ Strategic research collaboration

- With Shionogi for discovering novel antifungal drug candidates(Started in January 2016)
- With Mitsubishi Tanabe Pharma to create novel drug candidates for autoimmune diseases(Started in March 2017)
- With Shionogi for discovering novel analgesic drug candidates(Started in April 2017)

◆ Novel drug discovery research

To create innovative medicines by using the strategic chemical library, the precise organic synthesis technology and the state-of-the-art evaluation technology;

- In-house research : Focusing on cardiovascular disease and neurological disease as core therapeutic areas.
- Collaborative research : Utilizing open innovation effectively (e.g. Shionogi)

Pharmaceuticals – (E) Custom Chemicals

- ◆ Custom manufacturing and process researching services for pharmaceutical ingredients and intermediates from pre-clinical to commercial production stages
- ◆ October 2013, Custom Chemicals shifted from Chemicals Segment to Pharma Segment to seek synergy of the two divisions (organic synthesis technology, R&D/manufacturing/quality control systems)
- ◆ Focusing on obtaining new contracts including high activity and high-valued added GE API products (Prostaglandin and vitamin D3, etc.)

1H FY2017 Sales Review

<vs. 1H FY2016>

- ◆ Up due to volume increase in existing products and new contracts

<vs. 1H FY2017 Outlook as of May 2017>

- ◆ Above target (existing products sales above target, new contracts above target)

2H FY2017 Sales Outlook

<vs. 2H FY2016>

- ◆ Up due to volume increase in existing products

<vs. 2H FY2017 Outlook as of May 2017>

- ◆ Below target (existing products sales below target)

Sales YOY Change								
FY2016 Actual			FY2017 Outlook as of May 2017			FY2017 Outlook as of Nov. 2017		
1H	2H	Total	1H	2H	Total	1H Actual	2H	Total
+10%	+2%	+6%	-10%	+17%	+6%	+9%	+11%	+10%

Pharmaceuticals – (F) Profit Overview

(¥billion)

	FY2016 Actual (A)							FY2017 Outlook as of May 2017					FY2017 Outlook(B) as of Nov. 2017							Change (B)-(A)						
	1Q	2Q	1H	3Q	4Q	2H	Total	1Q	2Q	1H	2H	Total	1Q	2Q	1H	3Q	4Q	2H	Total	1Q	2Q	1H	3Q	4Q	2H	Total
Sales	2.2	1.5	3.7	2.4	1.9	4.3	8.0	1.5	1.5	3.0	3.9	6.9	2.1	1.4	3.5	2.3	1.5	3.8	7.3	-0.1	-0.1	-0.2	-0.1	-0.4	-0.5	-0.7
OP	0.6	0.0	0.6	0.8	0.3	1.1	1.7	0.1	0.0	0.1	0.8	0.9	0.5	0.0	0.5	0.5	0.0	0.5	1.0	-0.1	-0.0	-0.1	-0.3	-0.3	-0.6	-0.7

1H FY 2017 Review

<vs. 1H FY2016>

- ◆ LIVALO sales down (domestic down due to GE, export up)
- ◆ Custom Chemicals sales up
- ◆ Fixed cost down ¥0.1billion
- ◆ Sales down ¥0.2billion, OP down ¥0.1billion

<vs. 1H FY2017 Outlook as of May 2017>

- ◆ LIVALO sales above target
(domestic sales below target, export above target)
- ◆ Custom Chemicals sales above target
- ◆ Sales up ¥0.5billion, OP up ¥0.4billion

2H FY 2017 Outlook

<vs. 2H FY2016>

- ◆ LIVALO sales down (domestic down due to GE, export up)
- ◆ Custom Chemicals sales up
- ◆ Absence of up-front payment (received in 2H FY2016)
- ◆ Fixed cost down ¥0.2 billion
- ◆ Inventory adjustment cost up ¥0.2 billion
- ◆ Sales down ¥0.5billion, OP down ¥0.6billion

<vs. 2H FY2017 Outlook as of May 2017>

- ◆ LIVALO sales below target
(domestic sales below target, export above target)
- ◆ Custom Chemicals sales below target
- ◆ Inventory adjustment cost above expectations (¥0.2 billion)
- ◆ Sales down ¥0.1billion, OP down ¥0.3billion

Capex/Depreciation/R&D by Segment

(¥billion)

	Capex (1)					Depreciation (2)					R&D expenses					% of Sales				
	2013	2014	2015	2016	2017E	2013	2014	2015	2016	2017E	2013	2014	2015	2016	2017E					
Chem	1.2	1.4	2.3	2.0	2.7	1.4	1.4	1.4	1.6	1.8	0.4	0.5	0.5	0.5	0.6	1.7%				
Performance M.	4.3	5.2	5.4	8.4	8.8	3.2	3.6	5.2	4.8	6.2	6.3	6.7	7.4	7.9	8.4	14.4%				
Agro	1.3	1.8	1.3	2.4	1.4	2.0	1.8	1.4	1.3	1.4	3.5	3.5	3.9	3.8	4.2	7.2%				
Pharma	0.6	0.4	0.4	0.9	0.6	1.2	0.9	0.8	0.7	0.7	2.9	2.7	2.4	2.2	2.6	35.6%				
Trading	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0					
Others	1.4	0.1	0.8	0.6	0.7	0.6	0.7	0.8	0.4	0.7	1.1	1.6	1.6	1.7	1.6					
Total	8.8	9.8	10.2	14.3	14.3	8.5	8.5	9.7	8.9	10.9	14.2	15.0	15.8	16.1	17.4					
											R&D expenses/Sales					8.7%	8.7%	8.9%	8.9%	9.0%

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

(2) Depreciation Method
 SUNEVER, ARC®, OptiStack®
 - 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. 2017) –A	440
Total Professionals (Sept. 2017) –B	1,120
A/B	39%

※Parent company only

※Round number

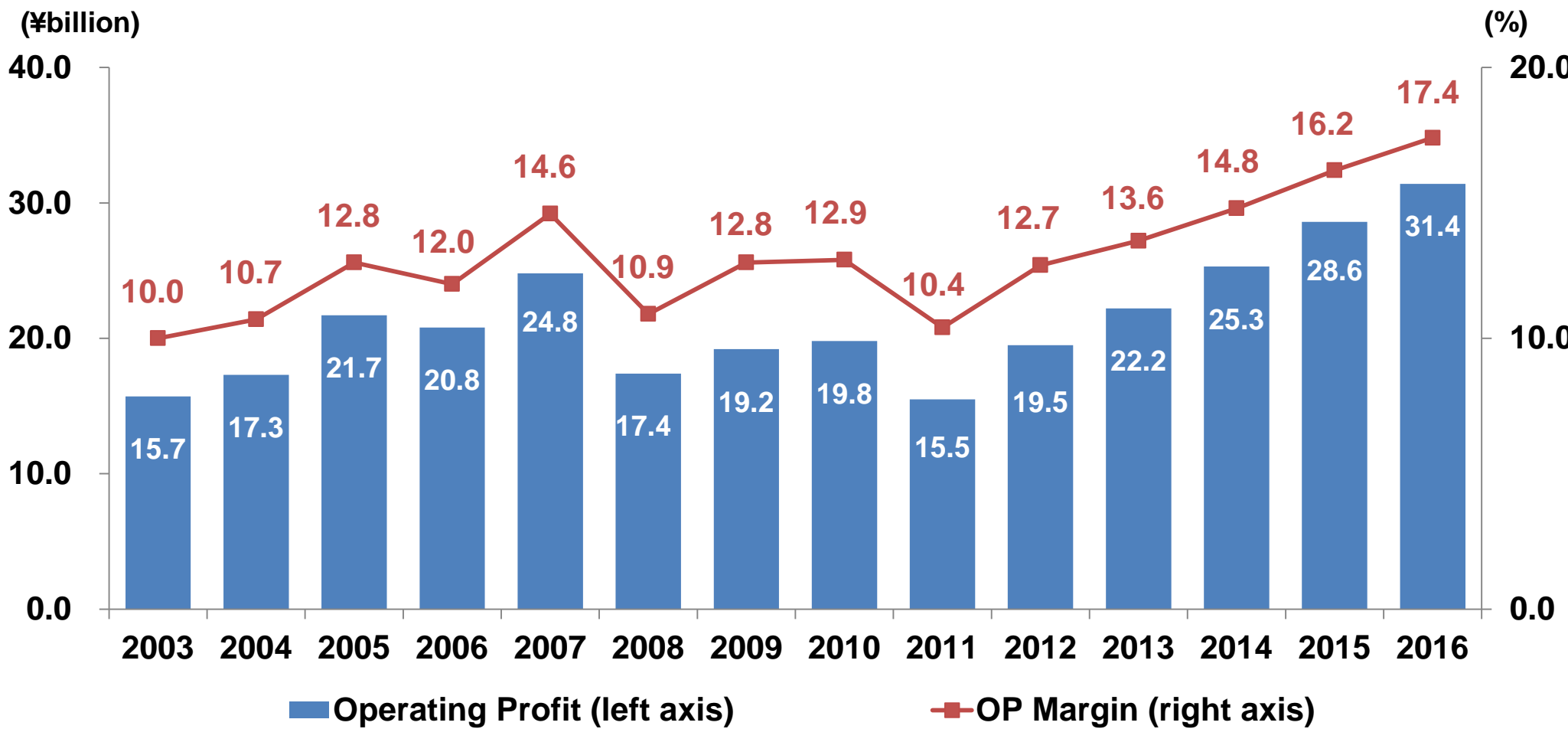
Main Capex Items (Approval Basis)

(¥billion)

FY2014 Actual		FY2015 Actual		FY2016 Actual		FY2017 Outlook	
Reconstruction of Biological Research Lab. The fifth stage (Facilities)	1.3	Semis (Product development facilities)	2.8	NCK Semis (Production capacity expansion)	3.2	Agro (Production facilities)	1.4
Semis (Analyzing and evaluation R&D equipment)	1.1	Material Research Lab. (Instruments)	1.7	Material Research Lab. (Instruments)	1.3	Material Research Lab. (Instruments)	1.1
Ammonia Feedstock Change Project	1.1	Agro (Formulation facilities)	1.2	Semis (Analyzing and evaluation R&D equipment)	1.0	Chemical Research Lab. (Instruments)	0.6
Electronic Materials Lab. (Instruments)	0.9	SUNEVER (Raw materials products)	1.0	Chemical Research Lab. (Instruments)	0.6	Display (Test facilities)	0.3
Quality improvement of Inorganic Materials products	0.7	Semis (Analyzing and evaluation R&D equipment)	0.8	SNOWTEX (Production capacity expansion)	0.5	Biological Research Lab. (Instruments)	0.3
Chemical Research Lab. (Instruments)	0.6	Semis (Production capacity expansion)	0.8	NCK SUNEVER (Production capacity expansion)	0.3	Display (production facilities)	0.3
NCK R&D Center (Instruments)	0.3	NCK Semis (Production capacity expansion)	0.7	SNOWTEX (Production capacity expansion)	0.3		
		Custom Chemicals (Production capacity expansion)	0.4	NCK R&D Center (Instruments)	0.2		
		TEPIC (Production capacity expansion)	0.3	Biological Research Lab. (Instruments)	0.2		
		Biological Research Lab. (Instruments)	0.2				
		NCK R&D Center (Instruments)	0.2				

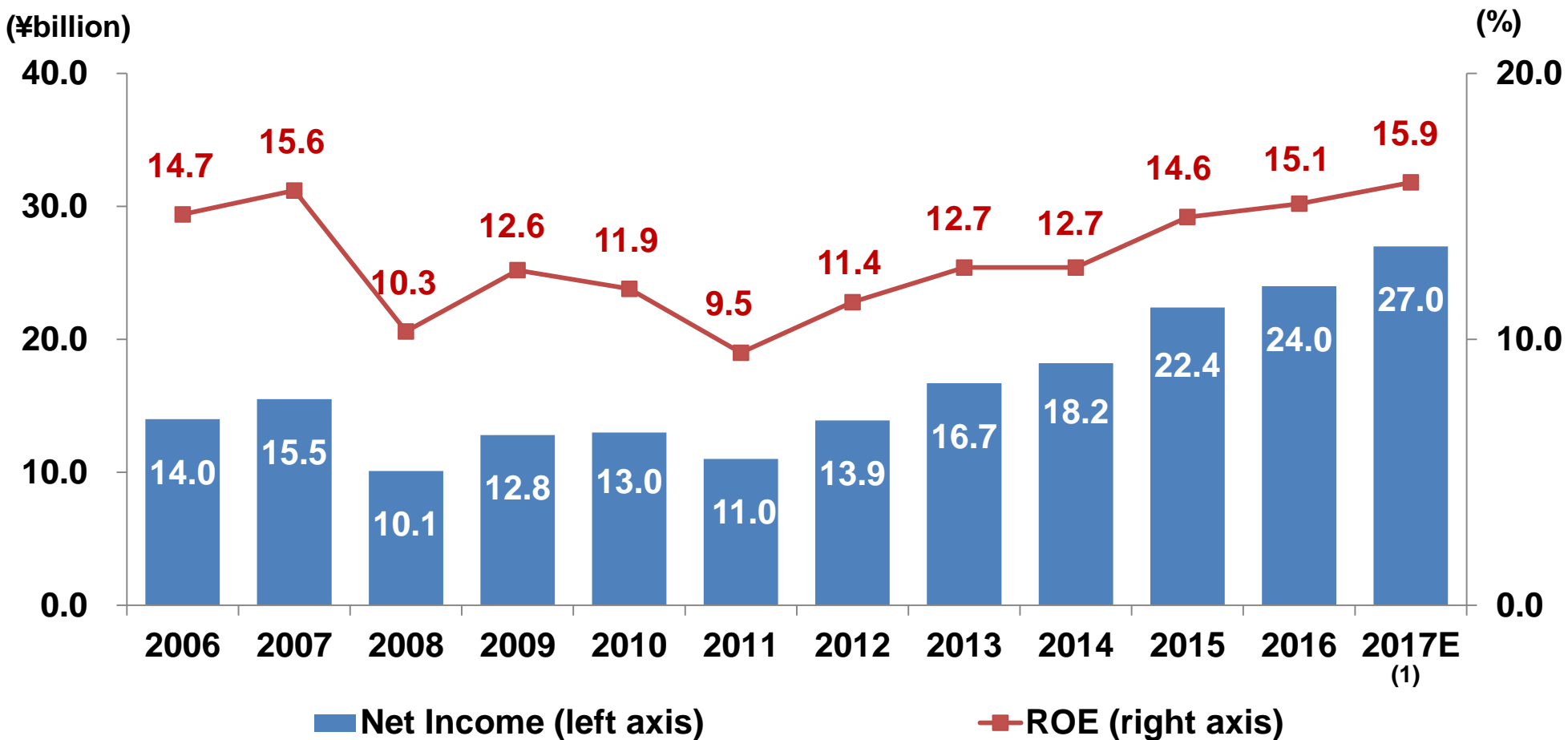
Our Characteristics - (A) Recording Stable OP Margin

◆ NCI has recorded more than 10% OP margin in 14 consecutive years (FY2003-2016)



Our Characteristics - (B) High ROE

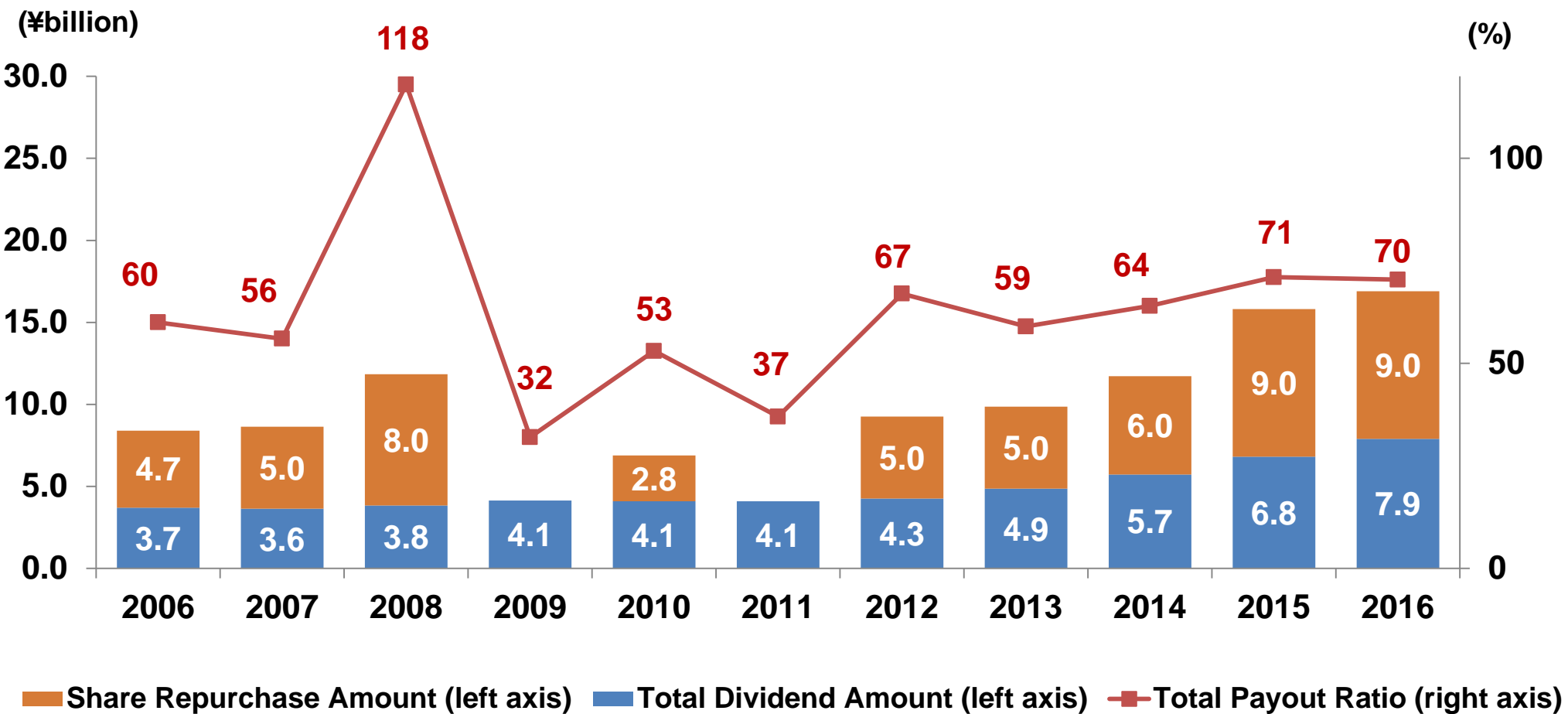
- ◆ The most important financial indicator for a long time
- ◆ Target : Maintain above 14% (15.1% in FY2016)
(Mid-Term Business Plan Vista 2021 (FY2016-2021))



(1) Outlook as of Nov. 2017

Our Characteristics - (C) Shareholders Return Policy

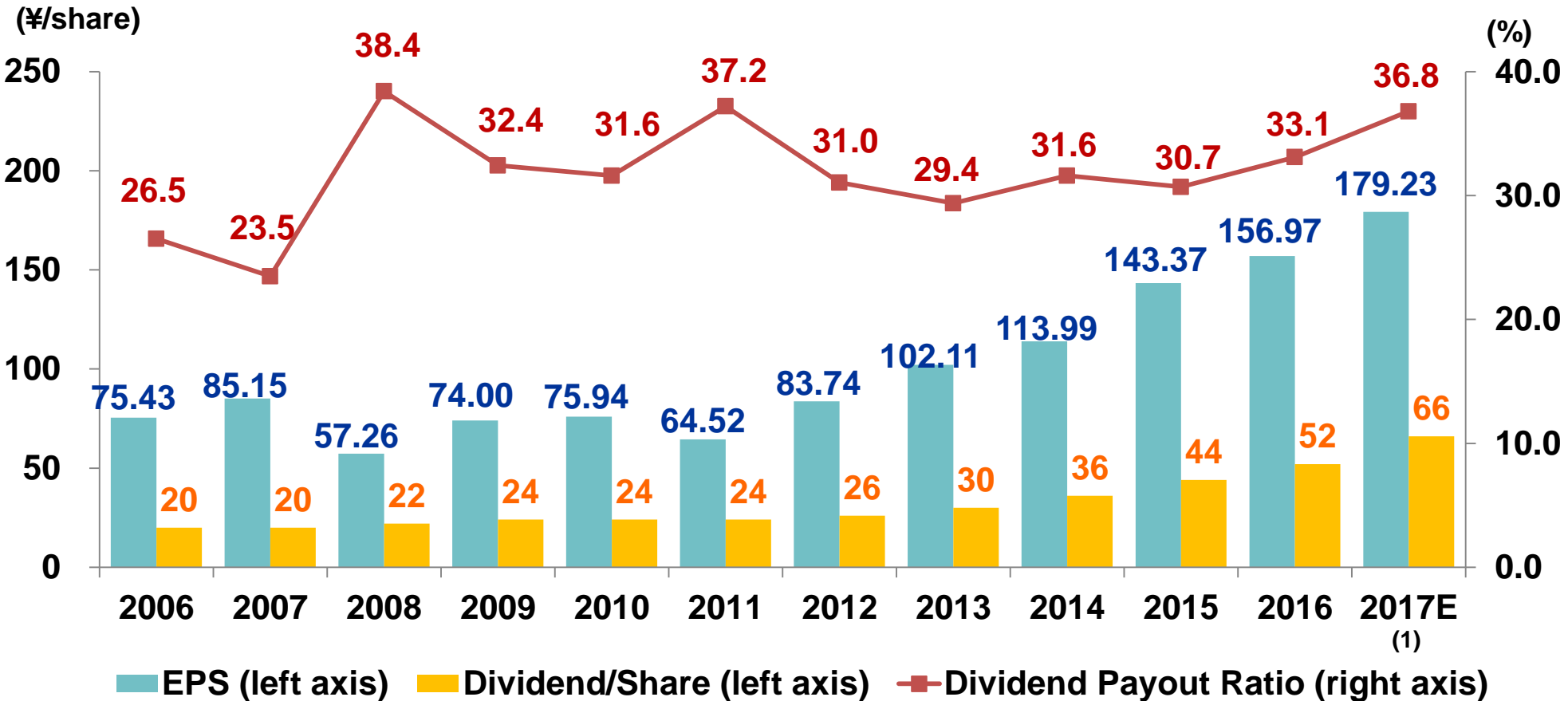
- ◆ Maintaining an aggressive shareholders return policy
- ◆ Target : Maintain 70% total payout ratio (70.4% in FY2016)
(Mid-Term Business Plan Vista 2021 (FY2016-2021))



Our Characteristics - (D) Shareholders Return Policy - Dividend

- ◆ Maintaining about 30% dividend payout ratio in recent years
- ◆ Target : Gradually increase to 40% in FY2018

(Mid-Term Business Plan Vista 2021 (FY2016-2021))



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

- ◆ Started share repurchase in 2006 only to enhance ROE
- ◆ Repurchased ¥54.5 billion, 34.8 million shares (18.5% of shares issued) in total from FY2006 to FY2016
- ◆ **Cancelled all repurchased shares**
- ◆ Target : Continue to repurchase shares to achieve the 70% total payout ratio

Shareholders Return FY2006 - 2016

Fiscal year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
Shares purchased (thousand shares)	3,500	3,399	7,355	0	2,167	0	6,372	3,263	2,764	3,333	2,621	34,774
Purchase costs (¥billion)	4.7	5.0	8.0	0.0	2.8	0.0	5.0	5.0	6.0	9.0	9.0	54.5
Shares cancelled (thousand shares)	3,000	3,635	7,000	0	3,000	0	6,000	4,000	3,000	2,000	2,000	33,635
Shares issued at FY end (million shares)	185	181	174	174	171	171	165	161	158	156	154	
Treasury shares at FY end (thousand shares)	1,367	1,233	1,660	1,709	885	886	1,258	522	287	1,621	2,242	

◆ FY2017 share repurchase program

- Total number of shares repurchased :1.3 million shares
- Total amount :¥5.0 billion
- Period of repurchase :From May 15, 2017 to June 1, 2017

◆ FY2017 cancellation of shares

- May 9, 2017 2.0 million shares
- August 31, 2017 1.0 million shares

◆ Cash Management Policy

Aiming to control cash balance around the level of

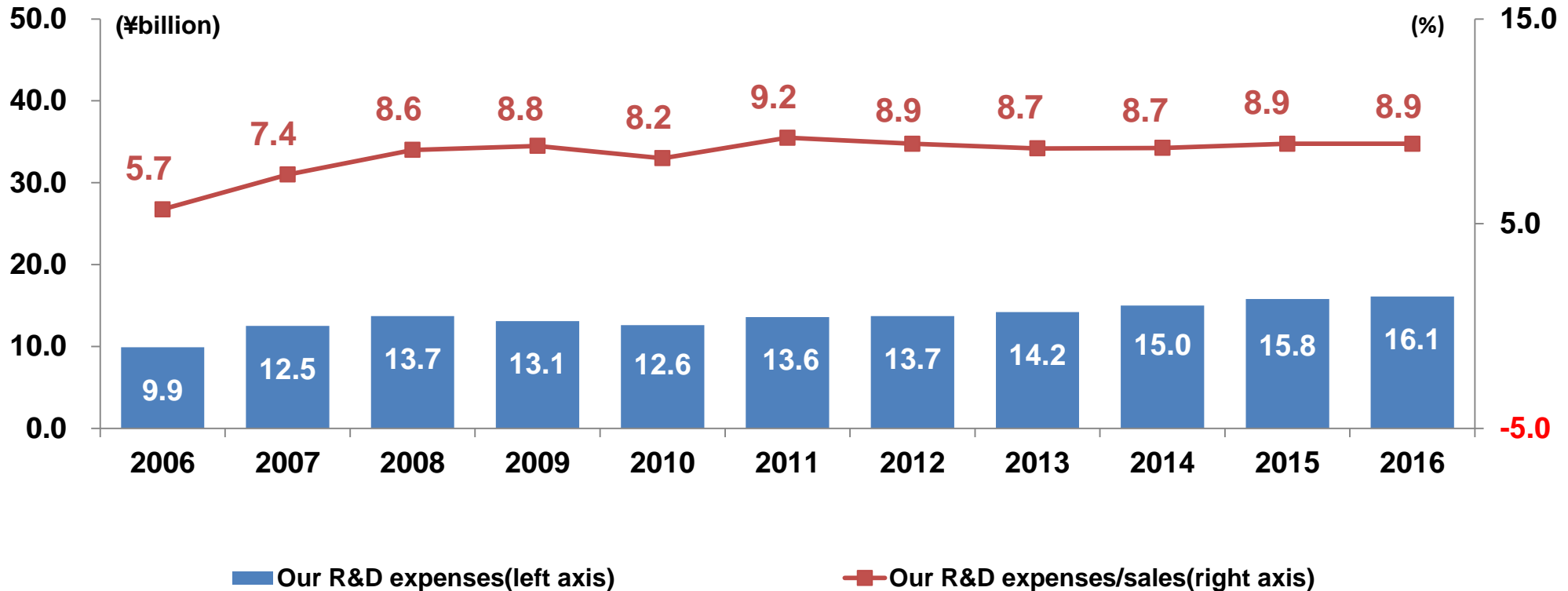
= Minimum required level

+ 1/3 of annual scheduled long-term borrowings repayment

+ 1/3 of short-term borrowings outstanding + Contingent risk reserves

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

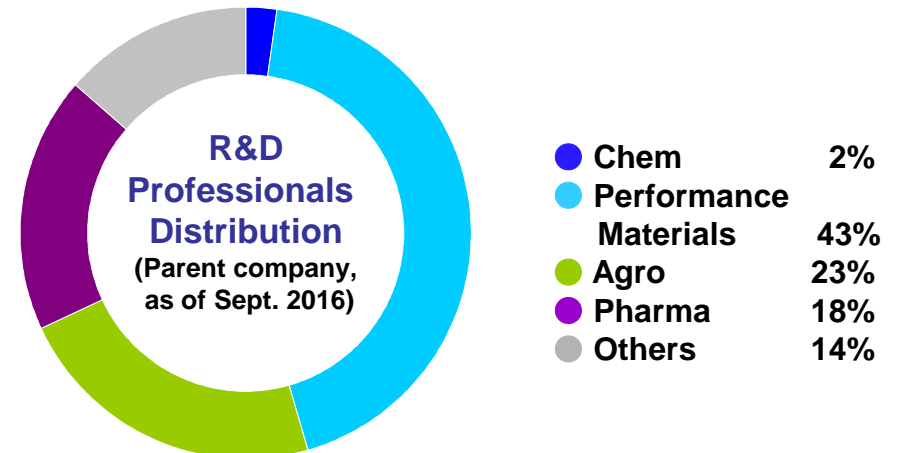
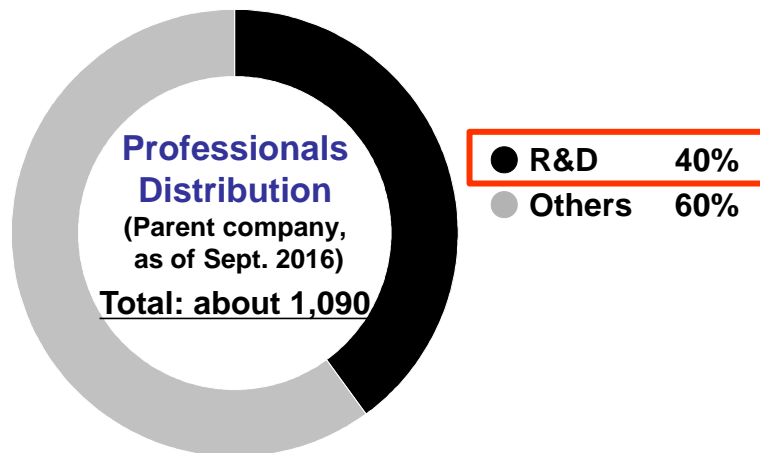
- ◆ FY2016 R&D expenses/sales: 8.9%
31 companies average : 4.4%
- ◆ Target: Maintain above 8% R&D expenses/sales
(Mid-Term Business Plan Vista 2021 (FY2016-2021))
- ◆ 40% of profession staff assigned to R&D centers



Our Characteristics- (G) R&D Oriented Chemical Company

◆ R&D by segment

Segment	Main Products	FY2016				
		Sales (¥billion)	OP (¥billion)	OP margin	R&D expenses (¥billion)	% of Sales
Chem	Ammonia related products, sulfuric acid related products, fine chemicals	34.8	3.8	10.9%	0.5	1.4%
Performance Materials	LCD alignment coating, Bottom anti-reflective coating for semicon Inorganic materials	52.8	12.5	23.7%	7.9	15.0%
Agro	Agrochemical	52.0	13.2	25.4%	3.8	7.3%
Pharma	LIVALO (anti-cholesterol drug), Custom Chemicals	8.0	1.7	21.3%	2.2	27.5%
Others		-	-	-	1.7	-
Total (including others and adjustment)		180.3	31.4	17.4%	16.1	8.9%



(Blank)

Mid-Term Business Plan Vista 2021 (FY2016-2021) announced in May 2016 -Financial Indicators (A)

(¥billion)

1. PL	Actual		Plan		
	2015	2016	2016	2018	2021
Sales	176.9	180.3	187.5	217.0	250.0
Operating Profit	28.6	31.4	29.7	35.0	40.0
Ordinary Income	29.5	31.7	30.4	35.6	40.8
Net Income	22.4	24.0	23.0	27.1	31.0
OP Margin	16.2%	17.4%	15.8%	16.1%	16.0%
ROE	14.6%	15.1%	14.3%	above 14%	above 14%
Dividend Payout Ratio	30.7%	33.1%	33.3%	40%	40%
Total Payout Ratio	70.8%	70.4%	maintain 70%	maintain 70%	maintain 70%

FX Rate (V\$)	1H 122 2H 118	1H 105 2H 112	FY2016 onward 115		
Naphtha (VKL)	1H 48,000 2H 37,700	1H 31,400 2H 38,200	35,400	FY2017 onward 51,100	

2. Segment(1)	Actual				Plan					
	Sales		OP		Sales			OP		
	2015	2016	2015	2016	2016	2018	2021	2016	2018	2021
Chem	34.3	34.8	3.9	3.8	35.4	38.0	40.5	4.9	4.0	4.5
Performance M.	51.8	52.8	12.0	12.5	55.3	68.0	82.9	11.7	15.4	18.4
Agro	47.5	52.0	10.8	13.2	52.1	58.6	67.0	11.3	12.9	16.7
Pharma	8.7	8.0	2.0	1.7	7.4	8.1	8.3	1.4	2.0	2.4
Trading,Others,Adjustment	34.6	32.7	-0.1	0.2	37.3	44.3	51.3	0.4	0.7	-2.0
Total	176.9	180.3	28.6	31.4	187.5	217.0	250.0	29.7	35.0	40.0

(1) Including inter-segment sales/transfers

Mid-Term Business Plan Vista 2021 (FY2016-2021) ⁽¹⁾ announced in May 2016 -Financial Indicators (B)

- ◆ **OP Margin : Maintain above 15% (FY2016 Actual 17.4%)**
- ◆ **ROE : Maintain above 14% (FY2016 Actual 15.1%)**
- ◆ **Dividend Payout Ratio :
Gradually increase to 40% in FY2018 (FY2016 Actual 33.1%)**
- ◆ **Total Payout Ratio :
Maintain 70% (FY2016 Actual 70.4%) New indicator**
- ◆ **R&D expenses/sales : above 8% (FY2016 Actual 8.9%)**

Mid-Term Business Plan Vista 2021 (FY2016-2021) ⁽¹⁾

Sources of Sales Growth for Stage I (FY2016-2018)(C)

(1) Announced in May 2016

Sales Growth ⁽¹⁾ (FY2018 vs FY2015)		Below ¥1.0 billion	¥1.0 to ¥3.0 billion	Above ¥3.0 billion
Performance Materials	Chem	AdBlue High purity ammonia	TEPIC	
	Display		VA	Photo-alignment IPS
	Semis	3D packaging materials (TMAT), New lithography materials	Bottom anti-reflective coating materials (ARC®) Multi layer process materials	
	Inorganic		Oilfield Materials	
	New Field	OLED materials Sensor materials Light control film materials HYPERTECH		
Agro	New Insecticide (in-house) New licensed-in product	ROUNDUP ALTAIR	Fluralaner Export	
Pharma	LIVALO(export) Custom chemicals Development of pipeline products			
New Products	Other new products			

Mid-Term Business Plan Vista 2021 (FY2016-2021) announced in May 2016 -Initiatives for 2019 Onwards(D)

Initiatives for 2019 onwards

Information & Communications

Developing materials for:
• Heat-resistant lenses
• Light control film
• Optical interconnect

Creating next-generation display

Creating next-generation semis materials

Life Sciences

Developing :
• NC-515(insecticide)
• New fungicide
• New paddy rice herbicide

Developing NIP-022 (platelet increasing agent)

Promoting research collaboration of antifungal drug

Upgrading cell culture materials to the global standardized product

Environment & Energy

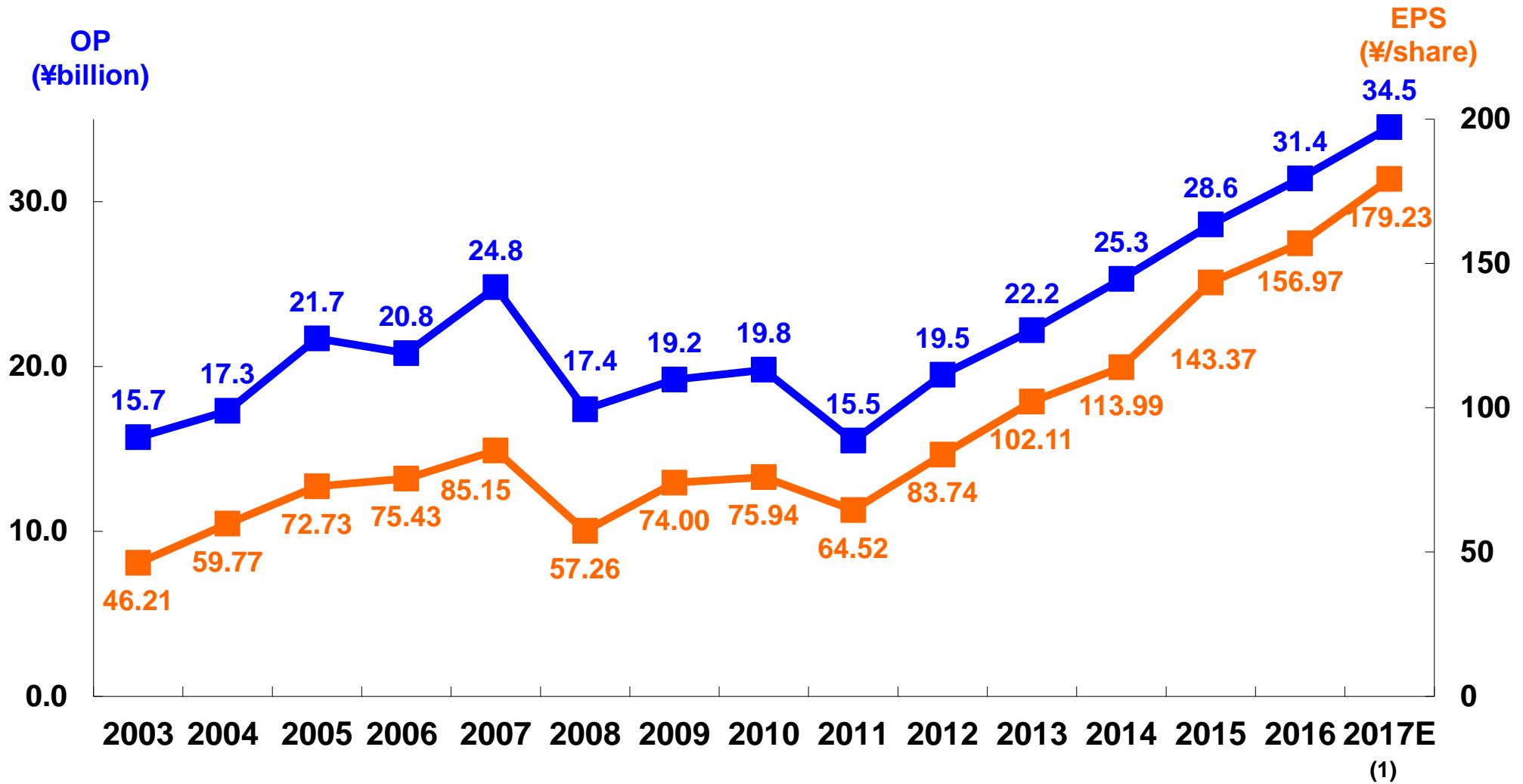
Developing materials for:
• Secondary batteries
• Fuel cells

Creating energy harvesting materials

R&D

Acquiring seeds in the biomedical materials field

Long-term Financial Performance Trend



(1) Outlook as of Nov. 2017

Long Term Financial Performance Trend

(¥billion)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017E (1)
Sales	155.9	161.4	169.1	174.4	169.2	160.2	149.0	154.2	148.6	153.8	163.7	171.2	176.9	180.3	192.0
Operating Profit	15.7	17.3	21.7	20.8	24.8	17.4	19.2	19.8	15.5	19.5	22.2	25.3	28.6	31.4	34.5
Ordinary Income	14.6	17.4	21.3	21.2	24.4	16.9	19.2	19.4	15.9	20.5	23.7	26.4	29.5	31.7	36.1
Net Income	8.7	11.3	13.7	14.0	15.5	10.1	12.8	13.0	11.0	13.9	16.7	18.2	22.4	24.0	27.0
EBITDA	26.1	26.9	31.6	30.5	34.5	27.6	30.1	30.2	25.9	29.0	30.8	33.8	38.3	40.3	45.4
OP Margin	10.0%	10.7%	12.8%	12.0%	14.6%	10.9%	12.8%	12.9%	10.4%	12.7%	13.6%	14.8%	16.2%	17.4%	18.0%
ROE	13.4%	15.2%	16.1%	14.7%	15.6%	10.3%	12.6%	11.9%	9.5%	11.4%	12.7%	12.7%	14.6%	15.1%	15.9%
EPS(¥/share)	46.21	59.77	72.73	75.43	85.15	57.26	74.00	75.94	64.52	83.74	102.11	113.99	143.37	156.97	179.23
Dividend(¥/share)	11	11	15	20	20	22	24	24	24	26	30	36	44	52	66
Dividend Payout Ratio	23.8%	18.4%	20.6%	26.5%	23.5%	38.4%	32.4%	31.6%	37.2%	31.0%	29.4%	31.6%	30.7%	33.1%	36.8%
Share Repurchase	-	-	-	4.7	5.0	8.0	-	2.8	-	5.0	5.0	6.0	9.0	9.0	5.0
Total Assets	172.6	169.4	183.2	177.3	172.7	172.3	181.4	183.4	190.1	199.2	208.0	223.9	228.2	231.7	-
Net Assets	69.2	78.5	92.0	98.1	100.1	95.7	106.5	112.4	119.6	126.7	137.8	151.3	156.9	163.7	-
Cash	5.9	4.3	8.5	11.0	7.6	9.7	14.8	21.1	27.9	31.9	30.8	31.3	35.3	35.7	-
Liabilities with Interest	57.4	44.6	41.5	32.4	34.4	45.5	42.1	39.9	38.9	38.1	36.1	35.1	33.1	30.8	-
D/E Ratio	78.0%	53.7%	38.5%	23.2%	27.2%	37.1%	26.0%	16.9%	9.3%	5.0%	4.1%	2.7%	-1.6%	-3.2%	-
Equity Ratio	40.1%	46.4%	50.2%	55.3%	58.0%	55.5%	58.7%	60.7%	62.4%	63.0%	65.7%	66.9%	68.1%	69.9%	-
Capex	6.6	6.6	9.2	12.1	10.9	13.9	10.1	9.6	8.3	8.1	8.8	9.8	10.2	14.3	14.3
Depreciation	10.4	9.6	9.9	9.7	9.7	10.2	11.0	10.4	10.5	9.5	8.5	8.5	9.7	8.9	10.9
R&D Expenses	8.7	8.6	9.2	9.9	12.5	13.7	13.1	12.6	13.6	13.7	14.2	15.0	15.8	16.1	174.0
R&D Expenses/Sales	5.6%	5.3%	5.4%	5.7%	7.4%	8.6%	8.8%	8.2%	9.2%	8.9%	8.7%	8.7%	8.9%	8.9%	9.0%

(1)Outlook as of Nov. 2017

FY2011-2Q FY2013 Quarterly Sales by Segment⁽¹⁾

(Former Segmentation)

(¥billion)

	FY2011 Actual					FY2012 Actual					FY2013 Actual	
	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q	2Q
Chem	9.4	9.2	9.0	9.3	36.9	9.1	8.8	8.9	9.8	36.6	9.5	9.1
Fine	3.0	2.9	2.4	2.6	10.9	2.9	2.7	2.4	3.2	11.2	2.9	3.1
Basic	6.4	6.3	6.6	6.7	26.0	6.2	6.1	6.5	6.6	25.4	6.6	6.0
Performance Materials	8.7	8.3	8.6	8.4	34.0	9.5	9.3	9.5	9.1	37.4	10.3	10.3
Agro	7.1	5.4	3.7	17.6	33.8	8.3	5.1	4.6	17.4	35.4	9.9	6.1
Pharma	2.9	2.3	2.4	2.4	10.0	3.5	1.8	3.1	2.2	10.6	2.9	2.8
Trading	11.6	10.9	10.8	11.5	44.8	11.9	10.8	12.5	11.4	46.6	12.7	11.8
Others	4.6	4.7	4.3	6.4	20.0	3.9	6.3	4.6	6.4	21.2	4.6	5.1
Adjustment	-7.7	-7.6	-7.3	-8.3	-30.9	-7.8	-9.4	-8.6	-8.2	-34.0	-9.7	-9.0
Total	36.6	33.2	31.5	47.3	148.6	38.4	32.7	34.6	48.1	153.8	40.2	36.2

(1) Including inter-segment sales/transfers

FY2011-2Q FY2013 Quarterly OP by Segment

(Former Segmentation)

(¥billion)

	FY2011 Actual					FY2012 Actual					FY2013 Actual	
	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q	2Q
Chem	1.0	-0.2	0.6	0.2	1.6	0.8	0.0	0.4	0.7	1.9	0.8	0.0
Performance Materials	1.7	0.9	1.1	1.1	4.8	2.1	2.0	1.6	1.5	7.2	2.1	2.3
Agro	1.2	-0.4	-1.5	5.1	4.4	1.6	-0.3	-1.1	4.8	5.0	2.3	0.1
Pharma	1.4	1.2	1.0	1.0	4.6	1.9	0.7	1.6	1.0	5.2	1.6	1.5
Trading	0.4	0.3	0.3	0.3	1.3	0.4	0.3	0.4	0.3	1.4	0.4	0.3
Others	0.0	0.0	-0.1	0.4	0.3	-0.1	0.2	0.1	0.5	0.7	0.1	0.1
Adjustment	-0.5	-0.4	-0.4	-0.2	-1.5	-0.4	-0.6	-0.5	-0.4	-1.9	-0.6	-0.4
Total	5.2	1.4	1.0	7.9	15.5	6.3	2.3	2.5	8.4	19.5	6.7	3.9
OP Margin	14.3%	4.0%	3.4%	16.6%	10.4%	16.5%	6.8%	7.5%	17.4%	12.7%	16.7%	10.6%

FY2012-2Q FY2017 Quarterly Sales by Segment (1)

(New Segmentation)

(¥billion)

	FY2013 Actual					FY2014 Actual					FY2015 Actual					FY2016 Actual					FY2017 Actual	
	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q	2Q
Chem	9.3	8.6	8.8	8.8	35.5	8.5	8.2	9.1	8.5	34.3	8.7	8.0	9.0	8.6	34.3	8.5	8.0	9.1	9.2	34.8	8.8	7.9
Fine	2.7	2.6	2.3	2.3	9.9	2.7	2.6	2.8	2.5	10.6	3.0	2.5	2.5	2.6	10.6	2.8	2.5	2.7	2.7	10.7	2.8	2.5
Basic	6.6	6.0	6.5	6.5	25.6	5.8	5.6	6.3	6.0	23.7	5.7	5.5	6.5	6.0	23.7	5.7	5.5	6.4	6.5	24.1	6.0	5.4
Perf	10.3	10.3	11.1	11.1	42.8	11.8	12.4	13.0	12.2	49.4	13.0	13.0	13.6	12.2	51.8	12.6	12.9	13.8	13.5	52.8	14.1	15.0
Agro	9.9	6.1	5.5	17.6	39.1	12.3	6.2	5.7	21.5	45.7	13.6	7.5	5.0	21.4	47.5	14.5	9.5	4.2	23.8	52.0	14.6	11.5
Pharma	3.1	3.3	3.0	2.2	11.6	2.5	2.5	2.1	1.7	8.8	2.1	1.6	3.5	1.5	8.7	2.2	1.5	2.4	1.9	8.0	2.1	1.4
Trading	12.7	11.8	12.8	13.4	50.7	14.1	13.2	14.1	13.0	54.4	14.7	12.8	14.9	13.2	55.6	14.4	13.2	13.7	13.9	55.2	14.6	14.5
Others	4.6	5.1	4.9	6.8	21.4	3.8	4.7	4.6	7.8	20.9	4.1	4.8	4.7	7.3	20.9	4.0	4.6	5.8	9.6	24.0	5.4	4.3
Adjust	-9.7	-9.0	-8.9	-9.8	-37.4	-10.5	-9.8	-10.7	-11.3	-42.3	-11.0	-9.2	-11.0	-10.7	-41.9	-11.1	-10.3	-11.4	-13.7	-46.5	-12.2	-11.0
Total	40.2	36.2	37.2	50.1	163.7	42.5	37.4	37.9	53.4	171.2	45.2	38.5	39.7	53.5	176.9	45.1	39.4	37.6	58.2	180.3	47.4	43.6

(1) Including inter-segment sales/transfers

FY2012-2Q FY2017 Quarterly OP by Segment

(New Segmentation)

(¥billion)

	FY2013 Actual					FY2014 Actual					FY2015 Actual					FY2016 Actual					FY2017 Actual	
	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q	2Q
Chem	1.0	-0.2	0.6	0.5	1.9	1.0	-0.6	0.6	0.9	1.9	1.5	-0.1	1.2	1.3	3.9	1.5	-0.2	1.3	1.2	3.8	1.5	-0.2
Perf	2.1	2.3	2.3	2.1	8.8	3.3	3.4	3.2	2.1	12.0	3.4	2.9	3.6	2.1	12.0	3.0	3.2	3.8	2.5	12.5	3.6	4.1
Agro	2.3	0.1	-0.8	4.6	6.2	4.0	0.0	-0.5	5.7	9.2	4.4	1.8	-1.3	5.9	10.8	4.5	2.4	-2.0	8.3	13.2	4.5	3.6
Pharma	1.4	1.7	1.4	0.4	4.9	0.8	0.8	0.4	0.3	2.3	0.4	0.2	1.6	-0.2	2.0	0.6	0.0	0.8	0.3	1.7	0.5	0.0
Trading	0.4	0.3	0.4	0.4	1.5	0.5	0.4	0.5	0.3	1.7	0.5	0.4	0.5	0.4	1.8	0.4	0.4	0.5	0.4	1.7	0.4	0.5
Others	0.1	0.1	0.1	0.5	0.8	-0.1	0.0	0.1	0.6	0.6	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.2	0.8	1.0	0.1	0.1
Adjust	-0.6	-0.4	-0.5	-0.4	-1.9	-0.6	-0.4	-0.7	-0.7	-2.4	-0.8	-0.3	-0.7	-0.6	-2.4	-0.5	-0.6	-0.6	-0.8	-2.5	-0.6	-0.8
Total	6.7	3.9	3.5	8.1	22.2	8.9	3.6	3.6	9.2	25.3	9.4	4.9	4.9	9.4	28.6	9.5	5.2	4.0	12.7	31.4	10.0	7.3
OPMargin	16.7%	10.6%	9.3%	16.4%	13.6%	21.0%	9.6%	9.6%	17.2%	14.8%	20.9%	12.6%	12.5%	17.6%	16.2%	21.1%	13.3%	10.6%	21.9%	17.4%	21.2%	16.6%

1H FY2017 Sales by Segment (1)

(¥billion)

	1H FY2016 Actual			1H FY2017 Outlook as of May 2017			1H FY2017 Actual		
	1Q	2Q	Total	1Q	2Q	Total	1Q	2Q	Total
Chem	8.5	8.0	16.5	8.4	8.7	17.1	8.8	7.9	16.7
Fine	2.8	2.5	5.3	2.6	2.7	5.3	2.8	2.5	5.3
Basic	5.7	5.5	11.2	5.8	6.0	11.8	6.0	5.4	11.4
Performance Materials	12.6	12.9	25.5	13.8	14.1	27.9	14.1	15.0	29.1
Agro	14.5	9.5	24.0	13.5	11.4	24.9	14.6	11.5	26.1
Pharma	2.2	1.5	3.7	1.5	1.5	3.0	2.1	1.4	3.5
Trading	14.4	13.2	27.6	15.2	14.3	29.5	14.6	14.5	29.1
Others	4.0	4.6	8.6	4.7	4.5	9.2	5.4	4.3	9.7
Adjustment	-11.1	-10.3	-21.4	-11.9	-12.0	-23.9	-12.2	-11.0	-23.2
Total	45.1	39.4	84.5	45.2	42.5	87.7	47.4	43.6	91.0

(1) Including inter-segment sales/transfers

1H FY2017 OP by Segment

(¥billion)

	1H FY2016 Actual			1H FY2017 Outlook as of May 2017			1H FY2017 Actual		
	1Q	2Q	Total	1Q	2Q	Total	1Q	2Q	Total
Chem	1.5	-0.2	1.3	1.4	0.1	1.5	1.5	-0.2	1.3
Performance Materials	3.0	3.2	6.2	3.2	3.1	6.3	3.6	4.1	7.7
Agro	4.5	2.4	6.9	3.8	3.8	7.6	4.5	3.6	8.1
Pharma	0.6	0.0	0.6	0.1	0.0	0.1	0.5	0.0	0.5
Trading	0.4	0.4	0.8	0.4	0.5	0.9	0.4	0.5	0.9
Others	0.0	0.0	0.0	-0.1	0.0	-0.1	0.1	0.1	0.2
Adjustment	-0.5	-0.6	-1.1	-0.7	-0.6	-1.3	-0.6	-0.8	-1.4
Total	9.5	5.2	14.7	8.1	6.9	15.0	10.0	7.3	17.3

Sales and Operating Profit by Segment (¥billion)

		FY2010		FY2011		FY2012		FY2013		FY2014		FY2015		FY2016		FY2017E(1)	
Sales (A)	Chem	38.1	24.7%	36.9	24.8%	34.5	22.4%	35.5	21.7%	34.3	20.0%	34.3	19.4%	34.8	19.3%	35.1	18.3%
	Perf	38.0	24.6%	34.0	22.9%	37.4	24.3%	42.8	26.1%	49.4	28.9%	51.8	29.3%	52.8	29.3%	58.5	30.5%
	Agro	34.4	22.3%	33.8	22.7%	35.4	23.0%	39.1	23.9%	45.7	26.7%	47.5	26.9%	52.0	28.8%	58.2	30.3%
	Pharma	9.6	6.2%	10.0	6.7%	12.7	8.3%	11.6	7.1%	8.8	5.1%	8.7	4.9%	8.0	4.4%	7.3	3.8%
	Trading	44.1	28.6%	44.8	30.1%	46.6	30.3%	50.7	31.0%	54.4	31.8%	55.6	31.4%	55.2	30.6%	60.3	31.4%
	Others	27.0	17.5%	20.0	13.5%	21.2	13.8%	21.4	13.1%	20.9	12.2%	20.9	11.8%	24.0	13.3%	21.4	11.1%
	Adj	-37.0	-24.0%	-30.9	-20.8%	-34.0	-22.1%	-37.4	-22.8%	-42.3	-24.7%	-41.9	-23.7%	-46.5	-25.8%	-48.8	-25.4%
Total	154.2	100%	148.6	100%	153.8	100%	163.7	100%	171.2	100%	176.9	100%	180.3	100%	192.0	100%	

FY2016

OP (B)	Chem	2.4	12.1%	1.6	10.3%	1.9	9.7%	1.9	8.6%	1.9	7.5%	3.9	13.6%	3.8	12.1%	3.7	10.7%
	Perf	7.9	39.9%	4.8	31.0%	7.2	36.9%	8.8	39.6%	12.0	47.4%	12.0	42.0%	12.5	39.8%	13.9	40.3%
	Agro	4.8	24.2%	4.4	28.4%	5.0	25.6%	6.2	27.9%	9.2	36.4%	10.8	37.8%	13.2	42.0%	15.6	45.2%
	Pharma	4.4	22.2%	4.6	29.7%	5.2	26.7%	4.9	22.1%	2.3	9.1%	2.0	7.0%	1.7	5.4%	1.0	2.9%
	Trading	1.4	7.1%	1.3	8.4%	1.4	7.2%	1.5	6.8%	1.7	6.7%	1.8	6.3%	1.7	5.4%	2.0	5.8%
	Others	1.0	5.1%	0.3	1.9%	0.7	3.6%	0.8	3.6%	0.6	2.4%	0.5	1.7%	1.0	3.2%	0.7	2.0%
	Adj	-2.1	-10.6%	-1.5	-9.7%	-1.9	-9.7%	-1.9	-8.6%	-2.4	-9.5%	-2.4	-8.4%	-2.5	-8.0%	-2.4	-7.0%
Total	19.8	100%	15.5	100%	19.5	100%	22.2	100%	25.3	100%	28.6	100%	31.4	100%	34.5	100%	

Segment Assets (D)		26.1	11.3%
		48.0	20.7%
		55.6	24.0%
		10.2	4.4%
		19.8	8.5%
		10.7	4.6%
		61.3	26.5%
Total	231.7	100%	

OP Margin (C) = (B)/(A)	Chem	6.3%	4.3%	5.5%	5.4%	5.5%	11.4%	10.9%	10.5%
	Perf	20.8%	14.1%	19.3%	20.6%	24.3%	23.2%	23.7%	23.8%
	Agro	14.0%	13.0%	14.1%	15.9%	20.1%	22.7%	25.4%	26.8%
	Pharma	45.8%	46.0%	40.9%	42.2%	26.1%	23.0%	21.3%	13.7%
	Trading	3.2%	2.9%	3.0%	3.0%	3.1%	3.2%	3.1%	3.3%
	Others	3.7%	1.5%	3.3%	3.7%	2.9%	2.4%	4.2%	3.3%
	Total	12.9%	10.4%	12.7%	13.6%	14.8%	16.2%	17.4%	18.0%

ROA (E) = (B)/(D)		14.6%
		26.0%
		23.7%
		16.7%
		8.6%
		9.3%
	Total	13.6%

FY2010-2011 : Former Segmentation, FY2012- : New Segmentation

(1)Outlook as of Nov. 2017

New Segmentation (From October 1, 2013)

Former Segmentation

Segment	Main Products	
Chem	Fine Chemicals	TEPIC Melamine cyanurate HI-LITE Custom Chemicals
	Basic Chemicals	Melamine Urea, AdBlue Ammonia, Sulfuric acid, Nitric acid High purity chemicals
Performance Materials	SUNEVER, NHC, ARC® (Bottom anti-reflective coating) OptiStack® (Multi layer process materials) Micro lens SNOWTEX, Organo silica sol Alumina sol, SUNCOLLOID CELNAX	
Agro	Agro	Herbicides Insecticides Fungicide
	Active substance of Veterinary medical product	
Pharma	LIVALO	
Trading	Nissei Corporation	
Others	Nissan Butsuryu, Nissan Green & Landscape, Nissan Engineering, Fertilizer	
Adjustment	R&D expenses of Advanced Materials & Planning Dept. included	



New Segmentation

Segment	Main Products	
Chem	Fine Chemicals	TEPIC Melamine cyanurate HI-LITE
	Basic Chemicals	Melamine Urea, AdBlue Ammonia, Sulfuric acid, Nitric acid High purity chemicals
Performance Materials	SUNEVER, NHC, ARC® (Bottom anti-reflective coating) OptiStack® (Multi layer process materials) Micro lens SNOWTEX, Organo silica sol Alumina sol, SUNCOLLOID CELNAX	
Agro	Agro	Herbicides Insecticides Fungicide
	Active substance of Veterinary medical product	
Pharma	LIVALO	Custom Chemicals
Trading	Nissei Corporation	
Others	Nissan Butsuryu, Nissan Green & Landscape, Nissan Engineering, Fertilizer	
Adjustment	R&D expenses of Advanced Materials & Planning Dept. included	

Main Products by Segment (New Segmentation)

Segment	Products	Main Applications
Chem	◆ Fine Chemicals TEPIC Melamine cyanurate Environmental product	epoxy compound for LED sealants, solder resist, painting flame retardant HI-LITE (chlorinated isocyanuric acid for sterilizing)
	◆ Basic Chemicals Melamine AdBlue Ammonia, Sulfuric acid, Nitric acid High purity chemicals	adhesive agent for plywood solution of urea in demineralised water for diesel trucks to reduce NOx agents used for cleaning semiconductors
Performance Materials	◆ Electronic Materials SUNEVER ARC® OptiStack® NHC OPTIFOCUS ELSOURCE	LCD alignment coating bottom anti-reflective coating for semiconductors multi layer process material for semiconductors (Si-HM/SOC) *ARC® and OptiStack® are registered trade mark of Brewer Science, Inc. protective coating for touch panel microlens material for image sensor application hole injection layer materials for OLED
	◆ Inorganic Materials SNOWTEX Organo silica sol Monomer sol Alumina sol SUNCOLLOID CELNAX	water dispersed colloidal silica sol for polishing silicon wafers, special steel sheets, NOx reduction catalyst, electronic printing materials film coating, antistatic interference shielding, electronic printing materials resin additive automotive catalyst, electronic printing materials high refractive sol for lens antistatic sol for film
Agro	◆ Herbicide TARGA PERMIT SIRIUS, ALTAIR ROUNDUP ◆ Insecticide STARMITE, SANMITE, MITOKOHNE ◆ Fungicide LEIMAY/ORACLE PULSOR, IKARUGA, GREATAM (THIFLUZAMIDE) ◆ Animal health products Fluralaner	soybean, rapeseed, sugarbeet corn, sugarcane, rice paddy rice non-selective herbicide for orchard, noncrop land fruits, tea, vegetables vegetables, potato, fruits potato, grape, turf active substance of BRAVECTO (veterinary medical product for dogs and cats) and EXZOLT (for poultry red mites)
Pharma	LIVALO Custom Chemicals	anti-cholesterol drug custom manufacturing and process services for pharmaceutical companies
Trading	Nissei Corporation	
Others	Transportation, Landscaping, Engineering, Fertilizer	

Change of Company Name

- 1. New company name** **Nissan Chemical Corporation**
Current company name **Nissan Chemical Industries, Ltd.**

- 2. Effective date** **July 1, 2018**

- 3. Reason for the change of company name**

The Company was founded in 1887 as Tokyo Jinzo Hiryo, Japan’s first chemical fertilizer manufacturer. Subsequently, through repeated mergers, the Company eventually changed its name to Dainippon Jinzo Hiryo, and then in 1937 to Nissan Chemical Industries, Ltd., as it is known today.

Since its founding, the Company has been pursuing innovative technologies that promote social evolution, thereby taking on new business challenges. Currently, the Company provides products and services globally by the four business domains of Information & Communication, Life Sciences, Environment & Energy and Chemicals & Affiliates.

In April 2016, based on the understanding that the critical issue for the Nissan Chemical Group to achieve sustainable growth is expansion of its business areas, the Company launched the long-term business plan “Progress2030” with a perspective toward fiscal 2030.

As described, the Company has already been transcending the framework of industry in the development of its business and will accelerate this effort toward the future. To adapt the name of the Company to its business content, the name of the Company will be changed from Nissan Chemical Industries, Ltd. to Nissan Chemical Corporation.

Forward Looking Statements

The forward looking statements in this material are based on information available at the time of preparation of the material. Although they reflect our current expectations, these statements are not guarantees of future performance, but include a number of risks and uncertainties. Actual results may largely differ from these statements due to various factors which may be beyond company control.

No information in this material is provided as an offer to buy or sell the shares of the company. We urge users of the material to make investment decision based upon own judgment.