## September 2013

# Presentation for Investors 

 2013 Mizuho Investment ConferenceSponsored by Mizuho Securities in Tokyo on September 12, 2013

## Nissan Chemical Industries (NCI)

- R\&D oriented chemical company
-*FY2012 R\&D expenses/sales: NCI
8.9\%
(1 $1^{\text {st }}$ among 31 chemical companies) 31 companies average 4.2\%
*FY2012 = 1 Apr 2012-31 Mar 2013
-41\% of profession staff assigned to R\&D centers
- Core business
- Electronic Materials, Organic/Inorganic Materials, Agrochemicals, Pharmaceuticals
-Diversified product portfolio, products holding strong market positions
- Priority on OP margin and ROE
- OP margin (FY2012) 12.7\%
-ROE (FY2012) $11.4 \%$ ( $1^{\text {st }}$ among 31 chemical companies)
Recording stable profits despite cyclical nature of chemical sector
- Only two companies recorded more than 10\% OP margin in ten consecutive years (FY2003-2012) among 31 companies
-FY2007-2012 Average ROE 11.9\%


## Long-term Financial Performance Trend



## Long Term Financial Performance Trend

( $¥$ billion)

|  | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sales | 155.9 | 161.4 | 169.1 | 174.4 | 169.2 | 160.2 | 149.0 | 154.2 | 148.6 | 153.8 |
| Operating Profit | 15.7 | 17.3 | 21.7 | 20.8 | 24.8 | 17.4 | 19.2 | 19.8 | 15.5 | 19.5 |
| Ordinary Income | 14.6 | 17.4 | 21.3 | 21.2 | 24.4 | 16.9 | 19.2 | 19.4 | 15.9 | 20.5 |
| Net Income | 8.7 | 11.3 | 13.7 | 14.0 | 15.5 | 10.1 | 12.8 | 13.0 | 11.0 | 13.9 |
| EBITDA | 26.1 | 26.9 | 31.6 | 30.5 | 34.5 | 27.6 | 30.1 | 30.2 | 25.9 | 29.0 |
| OP Margin | 10.0\% | 10.7\% | 12.8\% | 12.0\% | 14.6\% | 10.9\% | 12.8\% | 12.9\% | 10.4\% | 12.7\% |
| ROE(\%) | 13.4\% | 15.2\% | 16.1\% | 14.7\% | 15.6\% | 10.3\% | 12.6\% | 11.9\% | 9.5\% | 11.4\% |
| EPS(\#) | 46.21 | 59.77 | 72.73 | 75.43 | 85.15 | 57.26 | 74.00 | 75.94 | 64.52 | 83.74 |
| Dividend(¥/share) | 11 | 11 | 15 | 20 | 20 | 22 | 24 | 24 | 24 | 26 |
| Purchase of treasury shares | - | - | - | 4.7 | 5.0 | 8.0 | - | 2.8 | - | 5.0 |
| Net Assets | 69.2 | 78.5 | 92.0 | 98.1 | 100.1 | 95.7 | 106.5 | 112.4 | 119.6 | 126.7 |
| Cash | 5.9 | 4.3 | 8.5 | 11.0 | 7.6 | 9.7 | 14.8 | 21.1 | 27.9 | 31.9 |
| Liabilities with interest | 57.4 | 44.6 | 41.5 | 32.4 | 34.4 | 45.5 | 42.1 | 39.9 | 38.9 | 38.1 |
| D/E ratio (1) | 78.0\% | 53.7\% | 38.5\% | 23.2\% | 27.2\% | 37.1\% | 26.0\% | 16.9\% | 9.3\% | 5.0\% |
| Equity ratio | 40.1\% | 46.4\% | 50.2\% | 55.3\% | 58.0\% | 55.5\% | 58.7\% | 60.7\% | 62.4\% | 63.0\% |
| Capex | 6.6 | 6.6 | 9.2 | 12.1 | 10.9 | 13.9 | 10.1 | 9.6 | 8.3 | 8.1 |
| Depreciation | 10.4 | 9.6 | 9.9 | 9.7 | 9.7 | 10.2 | 11.0 | 10.4 | 10.5 | 9.5 |
| R\&D Expenses | 8.7 | 8.6 | 9.2 | 9.9 | 12.5 | 13.7 | 13.1 | 12.6 | 13.6 | 13.7 |
| R\&D Expenses/Sales(\%) | 5.6\% | 5.3\% | 5.4\% | 5.7\% | 7.4\% | 8.6\% | 8.8\% | 8.2\% | 9.2\% | 8.9\% |
| Number of employees (parent company) | 1,505 | 1,502 | 1,502 | 1,558 | 1,614 | 1,657 | 1,710 | 1,750 | 1,730 | 1,726 |

(1) D/E ratio = (Borrowings - Cash ) / Shareholders' equity (\%)

## New Segmentation (From 2Q 2011)

-Reflecting organizational changes implemented in June 2011
-Major organizational change
Creation of Performance Materials Division to consolidate Electronic Materials Division and Inorganic Materials Division aiming to strengthen performance materials business which is identified as our major growth engine

- Major changes in segmentation

Creation of Performance Materials
Change in Chemicals
$\rightarrow$ Electronic Materials + Inorganic Materials
$\rightarrow$ Inorganic Materials shifted to Performance Materials Creation of Fine Chemicals subsegment, abolishment of Organic Materials subsegment Environmental Chemicals (HI-LITE) shifted from basic Chemicals to Fine Chemicals

| Former Segmentation |  |  |
| :---: | :---: | :---: |
| Segment | Main Products |  |
| Chem | Organic Materials | TEPIC <br> Melamine cyanurate Custom Chemicals |
|  | Inorganic Materials | SNOWTEX Organo sillica sol Alumina sol SUNCOLLOID CELNAX |
|  | Basic Chemicals | Melamine Urea, AdBlue HI-LITE Ammonia, Sulfuric acid, Nitric acid High purity chemicals |
| Electronic Materials | SUNEVER, BARC NHC <br> Multi layer process materials Micro lens |  |
| Agro Chem | Agro | Herbicides Insecticides Fungicide |
| 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 <br> Chemicals | TEPIC <br> Melamine cyanurate <br> HI-LITE <br> Custom Chemicals |
|  | Basic <br> Chemicals | Melamine <br> Urea, AdBlue <br> Ammonia, Sulfuric acid, Nitric acid <br> High purity chemicals |
| Performance <br> Materials | SUNEVER, BARC, NHC, <br> Multi layer process materials <br> Micro lens <br> SNOWTEX, Organo sillica sol <br> Alumina sol, SUNCOLLOID <br> CELNAX |  |
| Agro Chem | Agro |  |
| Pharma | Herbicides <br> Insecticides <br> Fungicide |  |
| Trading | Nissei Corporation |  |

## Diversified Product Portfolio

Consisting of products holding strong position in market


NCI's Position

Largest (World)

Largest (Japan)
Among top 3 (Japan)

Major (Asia)
Largest (Asia)
Largest (Japan)

Largest (Japan)
No. 3 (Japan)

No. 3 (Japan)

## FY2012 Global Sales Distribution



## Sales and Operating Profit by New Segmentation

( $¥$ billion)

|  |  | FY2010 | FY2011 | FY2012 | FY2013E |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chemicals | 38.1 24.7\% | 36.9 24.8\% | 36.6 23.8\% | 37.6 24.1\% |
|  | Performance M. | 38.0 24.6\% | $34.0 \quad 22.9 \%$ | 37.4 24.3\% | 39.9 25.6\% |
|  | Agro | 34.4 22.3\% | $33.8 \quad 22.7 \%$ | $35.4 \quad 23.0 \%$ | 36.2 23.2\% |
|  | Pharma | 9.6 6.2\% | $10.0 \quad 6.7 \%$ | 10.6 6.9\% | 10.1 6.5\% |
|  | Trading | 44.1 28.6\% | 44.8 30.1\% | 46.6 30.3\% | 48.7 31.2\% |
|  | Others | 27.0 17.5\% | 20.0 13.5\% | 21.2 13.8\% | 21.3 13.7\% |
|  | Adjustment | -37.0-24.0\% | -30.9-20.8\% | -34.0-22.1\% | -37.8-24.2\% |
|  | Total | 154.2 100\% | 148.6 100\% | 153.8 100\% | 156.0 100\% |


|  |  | FY2011 |  | FY2012 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 <br> 0 | Chemicals | 0.8 | 2.2\% | 0.7 | 1.9\% |
|  | Performance M. | 6.2 | 18.2\% | 6.5 | 17.4\% |
|  | Agro | 2.8 | 8.3\% | 3.0 | 8.5\% |
|  | Pharma | 2.5 | 25.0\% | 2.3 | 21.7\% |
|  | Trading | 0.0 | 0.0\% | 0.0 | 0.0\% |
|  | Others | 1.3 | 6.5\% | 1.2 | 5.7\% |
|  | - |  |  |  |  |
|  | Total | 13.6 | 9.2\% | 13.7 | 8.9\% |


| $\begin{aligned} & \text { 우 } \\ & \text { 으 } \end{aligned}$ | Chemicals | 2.4 12.1\% | 1.6 | 10.3\% | 1.9 | 9.7\% | 2.6 | 12.7\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Performance M. | 7.9 39.9\% | 4.8 | 31.0\% | 7.2 | 36.9\% | 7.2 | 35.3\% |
|  | Agro | 4.8 24.2\% | 4.4 | 28.4\% | 5.0 | 25.6\% | 5.2 | 25.5\% |
|  | Pharma | 4.4 22.2\% | 4.6 | 29.7\% | 5.2 | 26.7\% | 4.9 | 24.0\% |
|  | Trading | 1.4 7.1\% | 1.3 | 8.4\% | 1.4 | 7.2\% | 1.4 | 6.9\% |
|  | Others | 1.0 5.1\% | 0.3 | 1.9\% | 0.7 | 3.6\% | 0.4 | 2.0\% |
|  | Adjustment | -2.1-10.6\% | -1.5 | -9.7\% | -1.9 | -9.7\% | -1.3 | -6.4\% |
|  | Total | 19.8 100\% | 15.5 | 100\% | 19.5 | 100\% | 20.4 | 100\% |


| 0000000000000 | Chemicals | 31.6 | 16.6\% | 30.3 | 15.2\% |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Performance M. | 31.5 | 16.6\% | 34.3 | 17.2\% |
|  | Agro | 44.6 | 23.5\% | 46.7 | 23.4\% |
|  | Pharma | 12.4 | 6.5\% | 11.3 | 5.7\% |
|  | Trading | 16.5 | 8.7\% | 17.3 | 8.7\% |
|  | Others | 9.5 | 5.0\% | 9.2 | 4.6\% |
|  | Common Assets | 44.0 | 23.1\% | 50.1 | 25.2\% |
|  | Total | 190.1 | 100\% | 199.2 | 100\% |


|  | Chemicals | 6.3\% | 4.3\% | 5.2\% | 6.9\% |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Performance M. | 20.8\% | 14.1\% | 19.3\% | 18.0\% |
|  | Agro | 14.0\% | 13.0\% | 14.1\% | 14.4\% |
|  | Pharma | 45.8\% | 46.0\% | 49.1\% | 48.5\% |
|  | Trading | 3.2\% | 2.9\% | 3.0\% | 2.9\% |
|  | Others | 3.7\% | 1.5\% | 3.3\% | 1.9\% |
|  | Total | 12.9\% | 10.4\% | 12.7\% | 13.1\% |


|  | Chemicals | 5.0\% | 6.3\% |
| :---: | :---: | :---: | :---: |
|  | Performance M. | 15.2\% | 20.9\% |
|  | Agro | 9.9\% | 10.8\% |
|  | Pharma | 37.1\% | 46.4\% |
|  | Trading | 7.9\% | 7.8\% |
|  | Others | 3.2\% | 7.5\% |
|  | Total | 8.1\% | 9.8\% |


| -1 | FY2011 |  |  | FY2012 |  |  | Change |  |  | FY2012 <br> Outlook as of October 2012 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1H | 2H | Total | 1H | 2H | Total | 1H | 2H | Total | 1H | 2H E | Total |
| Sales | 69.8 | 78.8 | 148.6 | 71.1 | 82.7 | 153.8 | 1.3 | 3.9 | 5.2 | 71.1 | 83.9 | 155.0 |
| Operating Profit | 6.6 | 8.9 | 15.5 | 8.6 | 10.9 | 19.5 | 2.0 | 2.0 | 4.0 | 8.6 | 10.0 | 18.6 |
| Non-Operating Income/Expenses | -0.1 | 0.5 | 0.4 | -0.2 | 1.2 | 1.0 | -0.1 | 0.7 | 0.6 | -0.2 | 0.2 | 0.0 |
| Ordinary Income | 6.5 | 9.4 | 15.9 | 8.4 | 12.1 | 20.5 | 1.9 | 2.7 | 4.6 | 8.4 | 10.2 | 18.6 |
| Extraordinary Profit/Loss | - | 0.7 | 0.7 | - | - | - | - | -0.7 | -0.7 | - | - | - |
| Net Income | 4.4 | 6.6 | 11.0 | 5.6 | 8.3 | 13.9 | 1.2 | 1.7 | 2.9 | 5.6 | 7.0 | 12.6 |
| EBITDA (2) | 11.5 | 14.4 | 25.9 | 13.0 | 16.0 | 29.0 | 1.5 | 1.6 | 3.1 | 13.0 | 15.1 | 28.1 |
| EPS ( $~$ ) | 25.88 | 38.64 | 64.52 | 33.63 | 50.11 | 83.74 | 7.75 | 11.47 | 19.22 | 33.63 | 43.32 | 76.95 |
| Dividend ( $¥ /$ share) | ¥12 | ¥12 | ¥24 | ¥12 | ¥14 | ¥26 | ¥0 | ¥2 | ¥2 | ¥12 | ¥12 | $¥ 24$ |
| Total amount of Dividend | 2.1 | 2.0 | 4.1 | 2.0 | 2.3 | 4.3 | -0.1 | 0.3 | 0.2 | 2.0 | 2.0 | 4.0 |
| OP Margin(\%) | 9.4\% | 11.3\% | 10.4\% | 12.1\% | 13.3\% | 12.7\% | 2.7\% | 2.0\% | 2.3\% | 12.1\% | 11.9\% | 12.0\% |
| ROE(\%) |  |  | 9.5\% |  |  | 11.4\% |  |  | 1.9\% |  |  |  |
| FX Rate ( $~ / ~ / \$$ ) | 80 | 82 |  | 79 | 87 |  |  |  |  | 79 | 79 |  |
| Naphtha( $\ddagger / \mathrm{KL}$ ) (3) | 57,000 | 52,800 |  | 54,800 | 59,800 |  |  |  |  | 55,500 | 49,000 |  |


| Comprehensive Income |  |  | 11.5 |  |  | 16.1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

(1) FY2012 = April 1, 2012 - March 31, 2013
(2) EBITDA = Operating Profit + Depreciation
(3) Based on Trade Statistics of Japan Ministry of Finance

## 2H FY2012 Review

```
<vs. 2H FY2011>
    (Sales) Up ¥3.9 billion (+5.0 %) (+) All Segments
    (OP) Up ¥2.0 billion (+23.1%) (+) All Segments
    (Ordinary Income) <Up ¥2.7 billion (+29.4 %)
    (Net Income) Up ¥1.7 billion (+25.5%)
```

<vs. 2H FY2012 Outlook as of October 2012>
(Sales) Down $¥ 1.2$ billion (+) Agrochemicals, Pharmaceuticals
(- ) Chemicals, Performance Materials, Trading
(OP) Up $¥ 0.9$ billion (+) Performance Materials, Agrochemicals, Pharmaceuticals (- ) Chemicals, Trading
(Ordinary Income) Up $¥ 1.9$ billion
(Net Income) Up $¥ 1.3$ billion
<Dividend> $\quad ¥ 14 /$ share (up $¥ 2$ vs. Outlook as of October 2012 and 2H FY2011)

## FY2012 Review

<vs. FY2011>
(Sales) Uup $¥ 5.2$ billion (+3.5\%) (+) Performance Materials, Agrochemicals, Pharmaceuticals, Trading
(- ) Chemicals
(OP) Up $¥ 4.0$ billion (+26.3\%) (+) All Segments
(OP Margin) $\quad 12.7 \%$ More than 10\% OP Margin in ten consecutive years since FY2003
(Non-Operating Income and Expenses)
(Ordinary Income)
(Net Income) $\quad$ Up $¥ 2.9$ billion (+26.5\%)
(ROE) 11.4\% (FY2011 9.5\%)
<Dividend and Purchase of Treasury Shares>
(Dividend) $\quad ¥ 26 /$ share Dividend payout ratio 31.0\%
(Purchase of
Treasury Shares) $\quad ¥ 5.0$ billion Between May and August 2012

## FY2012

## Non-Operating Income/Expenses, Extraordinary Profit/Loss, <br> Comprehensive Income <br> (¥billion)

|  | FY2011 | FY2012 | Change |
| :--- | ---: | ---: | ---: |
| Non-Operating Income | 2.28 | 2.60 | 0.32 |
| Interest income | 0.03 | 0.02 | -0.01 |
| Dividend income | 0.56 | 0.58 | 0.02 |
| Others | 1.69 | 2.00 | 0.31 |
| Non-Operating Expenses | 1.89 | 1.66 | -0.23 |
| Interest expense | 0.45 | 0.34 | -0.11 |
| Loss on disposal of fixed assets | 0.24 | 0.36 | 0.12 |
| Others | 1.20 | 0.96 | -0.24 |
| Extraordinary Profit (1) | 0.65 | 0.00 | -0.65 |
| Extraordinary Loss | 0.00 | 0.00 | 0.00 |
| Com prehens ive Income | 11.48 | 16.13 | 4.65 |
| Net income | 10.98 | 13.88 | 2.90 |
| Minority interests | 0.08 | 0.14 | 0.06 |
| Unrealized gains or losses on investment securities | 0.58 | 1.52 | 0.94 |
| Foreign currencytranslation adjustments | -0.16 | 0.59 | 0.75 |

(1) FY2011: Gain on sales of business 0.65

FY2012 Cash Flows
(¥billion)

|  | FY2011 |  |  | FY2012 |  |  | Change |  |  | FY2012 <br> Outlook as of October 2012 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1H | 2H | Total | 1H | 2H | Total | 1H | 2H | Total | 1H | 2H E | Total |
| CF from operating activities | 20.4 | 0.9 | 21.3 | 21.9 | 0.9 | 22.8 | 1.5 | 0.0 | 1.5 | 21.9 | 0.8 | 22.7 |
| Profit before income tax | 6.5 | 10.0 | 16.5 | 8.4 | 12.1 | 20.5 | 1.9 | 2.1 | 4.0 | 8.4 | 10.2 | 18.6 |
| Depreciation \& Amortization | 4.9 | 5.6 | 10.5 | 4.4 | 5.1 | 9.5 | -0.5 | -0.5 | -1.0 | 4.4 | 5.1 | 9.5 |
| Tax | -3.1 | -2.9 | -6.0 | -1.9 | -2.5 | -4.4 | 1.2 | 0.4 | 1.6 | -1.9 | -2.6 | -4.5 |
| Working capital, others | 12.1 | -11.8 | 0.3 | 11.0 | -13.8 | -2.8 | -1.1 | -2.0 | -3.1 | 11.0 | -11.9 | -0.9 |
| CF from investing activities | -6.3 | -3.0 | -9.3 | -4.8 | -4.5 | -9.3 | 1.5 | -1.5 | 0.0 | -4.8 | -6.2 | -11.0 |
| Purchase of investments in securities | -0.9 | 0.1 | -0.8 | -0.1 | 0.0 | -0.1 | 0.8 | -0.1 | 0.7 | -0.1 | 0.0 | -0.1 |
| Purchase of PPE | -4.9 | -3.8 | -8.7 | -3.9 | -4.1 | -8.0 | 1.0 | -0.3 | 0.7 | -3.9 | -6.5 | -10.4 |
| Others | -0.5 | 0.7 | 0.2 | -0.8 | -0.4 | -1.2 | -0.3 | -1.1 | -1.4 | -0.8 | 0.3 | -0.5 |
| CF from financing activities | -9.6 | 4.5 | -5.1 | -22.6 | 12.8 | -9.8 | -13.0 | 8.3 | -4.7 | -22.6 | 12.5 | -10.1 |
| Dividends paid | -2.0 | -2.1 | -4.1 | -2.0 | -2.0 | -4.0 | 0.0 | 0.1 | 0.1 | -2.0 | -2.0 | -4.0 |
| Borrowings | -7.5 | 6.5 | -1.0 | -15.5 | 14.7 | -0.8 | -8.0 | 8.2 | 0.2 | -15.5 | 14.5 | -1.0 |
| Purchase of treasury shares | 0.0 | 0.0 | 0.0 | -5.0 | 0.0 | -5.0 | -5.0 | 0.0 | -5.0 | -5.0 | 0.0 | -5.0 |
| Others | -0.1 | 0.1 | 0.0 | -0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 |
| Effect of FX rate changes on cash \& cash equivalents | -0.4 | 0.3 | -0.1 | -0.1 | 0.4 | 0.3 | 0.3 | 0.1 | 0.4 | -0.1 | 0.0 | -0.1 |
| Change in cash \& cash equivalents | 4.1 | 2.7 | 6.8 | -5.6 | 9.6 | 4.0 | -9.7 | 6.9 | -2.8 | -5.6 | 7.1 | 1.5 |
| Cash \& cash equivalents at end of period | 25.2 | 27.9 |  | 22.3 | 31.9 |  | -2.9 | 4.0 |  | 22.3 | 29.4 |  |

## FY2012 Balance Sheets

|  | $2012 / 3$ | $2013 / 3$ | Change |
| :--- | ---: | ---: | ---: |
| Current assets | 118.4 | 125.9 | 7.5 |
| Cash | 27.9 | 31.9 | 4.0 |
| Accounts receivable | 55.5 | 56.7 | 1.2 |
| Inventories | 29.4 | 30.6 | 1.2 |
| Others | 5.6 | 6.7 | 1.1 |
| Fixed assets | 71.7 | 73.3 | 1.6 |
| Total PPE | 44.7 | 44.0 | -0.7 |
| Intangible assets | 2.8 | 2.0 | -0.8 |
| Investment securities | 22.3 | 24.9 | 2.6 |
| Others | 1.9 | 2.4 | 0.5 |
| Total assets | 190.1 | 199.2 | 9.1 |


|  | 2012/3 | 2013/3 | Change |
| :---: | :---: | :---: | :---: |
| Liabilities | 70.5 | 72.5 | 2.0 |
| Accounts payable | 17.3 | 17.4 | 0.1 |
| Borrowings | 38.9 | 38.1 | -0.8 |
| Others | 14.3 | 17.0 | 2.7 |
| Net assets | 119.6 | 126.7 | 7.1 |
| Shareholders' equity | 118.0 | 122.9 | 4.9 |
| Unrealized gains or losses on inv estment securities | 2.0 | 3.5 | 1.5 |
| Foreign currencytranslation adjustments | -1.4 | -0.8 | 0.6 |
| Minority interests | 1.0 | 1.1 | 0.1 |
| Total liabilities \& Net assets | 190.1 | 199.2 | 9.1 |
| (D/E Ratio)(1) | 9.3\% | 5.0\% |  |
| (Equity Ratio) | 62.4\% | 63.0\% |  |

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

FY2013 Outlook (¥billion) as of May 2013

| FY2012 |  |  | FY2013 E |  |  | Change |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1H | 2H | Total | 1H | 2H | Total | 1H | 2H | Total |
| 71.1 | 82.7 | 153.8 | 72.0 | 84.0 | 156.0 | 0.9 | 1.3 | 2.2 |
| 8.6 | 10.9 | 19.5 | 8.7 | 11.7 | 20.4 | 0.1 | 0.8 | 0.9 |
| -0.2 | 1.2 | 1.0 | 0.1 | 0.5 | 0.6 | 0.3 | -0.7 | -0.4 |
| 8.4 | 12.1 | 20.5 | 8.8 | 12.2 | 21.0 | 0.4 | 0.1 | 0.5 |
| - | - | - | - | - | - | - | - | - |
| 5.6 | 8.3 | 13.9 | 6.3 | 8.6 | 14.9 | 0.7 | 0.3 | 1.0 |
| 13.0 | 16.0 | 29.0 | 12.9 | 16.3 | 29.2 | -0.1 | 0.3 | 0.2 |
| 33.63 | 50.11 | 83.74 | 38.48 | 52.52 | 91.00 | 4.85 | 2.41 | 7.26 |
| ¥12 | ¥14 | ¥26 | ¥12 | ¥14 | ¥26 | ¥0 | ¥0 | ¥0 |
| 2.0 | 2.3 | 4.3 | 2.0 | 2.3 | 4.3 | 0.0 | 0.0 | 0.0 |
| 12.1\% | 13.3\% | 12.7\% | 12.1\% | 13.9\% | 13.1\% | 0.0\% | 0.6\% | 0.4\% |
|  |  | 11.4\% |  |  | 11.4\% |  |  | 0.0\% |
| 79 | 87 |  | 85 | 85 |  |  |  |  |
| 54,800 | 59,800 |  | 61,000 | 61,000 |  |  |  |  |

Comprehensive income
(1) EBITDA = Operating Profit +Depreciation
(2) Based on Trade Statistics of Japan Ministry of Finance

## FY2013 Outlook as of May 2013

<vs. FY2012>
(Sales) $\leqslant$ Up $¥ 2.2$ billion (+1.4\%) (+) Chemicals, Performance Materials, Agrochemicals, Trading
(-) Pharmaceuticals
(OP) Up $¥ 0.9$ billion (+4.4\%) (+) Chemicals, Agrochemicals
$( \pm)$ Performance Materials, Trading
(- ) Pharmaceuticals
(Non-Operating
Income and Expenses)
(Ordinary Income)
$\checkmark$ Up $¥ 0.5$ billion (+2.5\%)
(Net Income) $\leqslant$ Up $¥ 1.0$ billion (+7.4\%)
<Dividend> $\quad ¥ \mathbf{1 2 / s h a r e}$ for $\mathbf{1 H}, \mathbf{¥ 1 4 / s h a r e}$ for $\mathbf{2 H}$ (same as FY2012)

## FY2013 Cash Flows Outlook as of May 2013

(¥billion)

| 2013 | FY2012 | FY2013 E |
| :--- | ---: | ---: |
| CF from operating activities | 22.8 | 20.0 |
| Profit before income tax | 20.5 | 21.0 |
| Depreciation \& Amortization | 9.5 | 8.8 |
| Tax | -4.4 | -6.7 |
| Working capital, others | -2.8 | -3.1 |
| CF from investing activities | -9.3 | -11.6 |
| Purchase of PPE | -8.0 | -9.5 |
| Others | -1.3 | -2.1 |
| CF from financing activities | -9.8 | -6.3 |
| Dividends paid | -4.0 | -4.3 |
| Borrowings | -0.8 | -2.0 |
| Purchase of treasury shares | -5.0 | 0.0 |
| Others | 0.0 | 0.0 |
| Effect of FX rate changes on cash \& cash equivalents | 0.3 | 0.0 |
| Change in cash \& cash equivalents | 4.0 | 2.1 |
| Cash \& cash equivalents at end of period | 31.9 | 34.0 |

(Blank)

## FY2012 Sales by Segment

( $¥$ billion)

|  | FY2011 |  |  | FY2012 |  |  | Change |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1H | 2H | Total | 1H | 2H | Total | 1H | 2H | Total |
| Chem | 18.6 | 18.3 | 36.9 | 17.9 | 18.7 | 36.6 | -0.7 | 0.4 | -0.3 |
| Fine <br> Chemicals | 5.9 | 5.0 | 10.9 | 5.6 | 5.6 | 11.2 | -0.3 | 0.6 | 0.3 |
| Basic Chemicals | 12.7 | 13.3 | 26.0 | 12.3 | 13.1 | 25.4 | -0.4 | -0.2 | -0.6 |
| Performance Materials | 17.0 | 17.0 | 34.0 | 18.8 | 18.6 | 37.4 | 1.8 | 1.6 | 3.4 |
| Agro | 12.5 | 21.3 | 33.8 | 13.4 | 22.0 | 35.4 | 0.9 | 0.7 | 1.6 |
| Pharma | 5.2 | 4.8 | 10.0 | 5.3 | 5.3 | 10.6 | 0.1 | 0.5 | 0.6 |
| Trading | 22.5 | 22.3 | 44.8 | 22.7 | 23.9 | 46.6 | 0.2 | 1.6 | 1.8 |
| Others | 9.3 | 10.7 | 20.0 | 10.2 | 11.0 | 21.2 | 0.9 | 0.3 | 1.2 |
| Adjustment | -15.3 | -15.6 | -30.9 | -17.2 | -16.8 | -34.0 | -1.9 | -1.2 | -3.1 |
| Total | 69.8 | 78.8 | 148.6 | 71.1 | 82.7 | 153.8 | 1.3 | 3.9 | 5.2 |


| FY2012 Outlook <br> as of October 2012 |  |  |
| ---: | ---: | ---: |
| 1 H | 2 H E | Total |
| 17.9 | 19.6 | 37.5 |
| 5.6 | 6.2 | 11.8 |
| 12.3 | 13.4 | 25.7 |
| 18.8 | 18.9 | 37.7 |
| 13.4 | 21.7 | 35.1 |
| 5.3 | 4.3 | 9.6 |
| 22.7 | 25.3 | 48.0 |
| 10.2 | 11.5 | 21.7 |
| -17.2 | -17.4 | -34.6 |
| 71.1 | 83.9 | 155.0 |

## FY2012 OP by Segment

( $¥$ billion)

|  | FY2011 |  |  | FY2012 |  |  | Change |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 H | 2H | Total | 1 H | 2 H | Total | 1H | 2 H | Total |
| Chem | 0.8 | 0.8 | 1.6 | 0.8 | 1.1 | 1.9 | 0.0 | 0.3 | 0.3 |
| Performance <br> Materials | 2.6 | 2.2 | 4.8 | 4.1 | 3.1 | 7.2 | 1.5 | 0.9 | 2.4 |
| Agro | 0.8 | 3.6 | 4.4 | 1.3 | 3.7 | 5.0 | 0.5 | 0.1 | 0.6 |
| Pharma | 2.6 | 2.0 | 4.6 | 2.6 | 2.6 | 5.2 | 0.0 | 0.6 | 0.6 |
| Trading | 0.7 | 0.6 | 1.3 | 0.7 | 0.7 | 1.4 | 0.0 | 0.1 | 0.1 |
| Others | 0.0 | 0.3 | 0.3 | 0.1 | 0.6 | 0.7 | 0.1 | 0.3 | 0.4 |
| Adjustment | -0.9 | -0.6 | -1.5 | -1.0 | -0.9 | -1.9 | -0.1 | -0.3 | -0.4 |
| Total | 6.6 | 8.9 | 15.5 | 8.6 | 10.9 | 19.5 | 2.0 | 2.0 | 4.0 |


| FY2012 Outlook <br> as of October 2012 |  |  |
| :---: | ---: | ---: |
| 1 H | 2 H E | Total |
| 0.8 | 1.7 | 2.5 |
| 4.1 | 2.6 | 6.7 |
| 1.3 | 3.5 | 4.8 |
| 2.6 | 1.7 | 4.3 |
| 0.7 | 0.8 | 1.5 |
| 0.1 | 0.4 | 0.5 |
| -1.0 | -0.7 | -1.7 |
| 8.6 | 10.0 | 18.6 |

## FY2013 Sales Outlook by Segment as of May 2013

( $¥$ billion)

|  | FY2012 |  |  | FY2013 E |  |  | Change |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1H | 2H | Total | 1H | 2H | Total | 1H | 2H | Total |
| Chem | 17.9 | 18.7 | 36.6 | 17.9 | 19.7 | 37.6 | 0.0 | 1.0 | 1.0 |
| Fine Chemicals | 5.6 | 5.6 | 11.2 | 5.8 | 6.2 | 12.0 | 0.2 | 0.6 | 0.8 |
| Basic Chemicals | 12.3 | 13.1 | 25.4 | 12.1 | 13.5 | 25.6 | -0.2 | 0.4 | 0.2 |
| Performance Materials | 18.8 | 18.6 | 37.4 | 19.6 | 20.3 | 39.9 | 0.8 | 1.7 | 2.5 |
| Agro | 13.4 | 22.0 | 35.4 | 13.4 | 22.8 | 36.2 | 0.0 | 0.8 | 0.8 |
| Pharma | 5.3 | 5.3 | 10.6 | 5.6 | 4.5 | 10.1 | 0.3 | -0.8 | -0.5 |
| Trading | 22.7 | 23.9 | 46.6 | 23.7 | 25.0 | 48.7 | 1.0 | 1.1 | 2.1 |
| Others | 10.2 | 11.0 | 21.2 | 9.8 | 11.5 | 21.3 | -0.4 | 0.5 | 0.1 |
| Adj ustment | -17.2 | -16.8 | -34.0 | -18.0 | -19.8 | -37.8 | -0.8 | -3.0 | -3.8 |
| Total | 71.1 | 82.7 | 153.8 | 72.0 | 84.0 | 156.0 | 0.9 | 1.3 | 2.2 |

## FY2013 OP Outlook by Segment as of May 2013

( $¥$ billion)

|  | FY2012 |  |  | FY2013 E |  |  | Change |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1 H | 2 H | Total | 1H | 2H | Total | 1H | 2H | Total |
| Chem | 0.8 | 1.1 | 1.9 | 0.9 | 1.7 | 2.6 | 0.1 | 0.6 | 0.7 |
| Performance <br> Materials | 4.1 | 3.1 | 7.2 | 3.5 | 3.7 | 7.2 | -0.6 | 0.6 | 0.0 |
| Agro | 1.3 | 3.7 | 5.0 | 1.4 | 3.8 | 5.2 | 0.1 | 0.1 | 0.2 |
| Pharma | 2.6 | 2.6 | 5.2 | 2.9 | 2.0 | 4.9 | 0.3 | -0.6 | -0.3 |
| Trading | 0.7 | 0.7 | 1.4 | 0.6 | 0.8 | 1.4 | -0.1 | 0.1 | 0.0 |
| Others | 0.1 | 0.6 | 0.7 | 0.0 | 0.4 | 0.4 | -0.1 | -0.2 | -0.3 |
| Adjustment | -1.0 | -0.9 | -1.9 | -0.6 | -0.7 | -1.3 | 0.4 | 0.2 | 0.6 |
| Total | 8.6 | 10.9 | 19.5 | 8.7 | 11.7 | 20.4 | 0.1 | 0.8 | 0.9 |

## 1Q FY2013 Financial Performance

|  |  | (¥billion) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { 1Q } \\ \text { FY2012 } \end{gathered}$ | $\begin{gathered} \text { 1Q } \\ \text { FY2013 } \end{gathered}$ | Change |  |
| Sales | Chem | 9.1 | 9.5 | 0.4 |  |
|  | Fine Chemicals | 2.9 | 2.9 | 0.0 |  |
|  | Basic Chemicals | 6.2 | 6.6 | 0.4 |  |
|  | Performance Materials | 9.5 | 10.3 | 0.8 |  |
|  | Agro | 8.3 | 9.9 | 1.6 |  |
|  | Pharma | 3.5 | 2.9 | -0.6 |  |
|  | Trading | 11.9 | 12.7 | 0.8 |  |
|  | Others | 3.9 | 4.6 | 0.7 |  |
|  | Adjustment | -7.8 | -9.7 | -1.9 |  |
|  | Total | 38.4 | 40.2 | 1.8 | +4.7\% |
| OP | Chem | 0.8 | 0.8 | 0.0 |  |
|  | Performance Materials | 2.1 | 2.1 | 0.0 |  |
|  | Agro | 1.6 | 2.3 | 0.7 |  |
|  | Pharma | 1.9 | 1.6 | -0.3 |  |
|  | Trading | 0.4 | 0.4 | 0.0 |  |
|  | Others | -0.1 | 0.1 | 0.2 |  |
|  | Adjustment | -0.4 | -0.6 | -0.2 |  |
|  | Total | 6.3 | 6.7 | 0.4 | +6.1\% |
| Non-Operating Income/Expenses | Equity in earnings of affiliates | 0.1 | 0.3 | 0.2 |  |
|  | Others (net) | 0.1 | 0.6 | 0.5 |  |
|  | Total | 0.2 | 0.9 | 0.7 |  |
| Ordinary Income |  | 6.5 | 7.6 | 1.1 |  |
| Net Income |  | 4.3 | 5.2 | 0.9 | +21.4\% |
| EBITDA (1) |  | 8.4 | 8.7 | 0.3 |  |
| EPS ( $\ddagger$ ) |  | 25.14 | 31.58 |  |  |
| OP Margin |  | 16.5\% | 16.7\% |  |  |
| Naphtha (¥/KL) (2) |  | 60,600 | 65,500 |  |  |

(1) EBITDA = Operating Profit + Depreciation
(2) Based on Trade Statistics of Japan Ministry of Finance

## 1Q FY2013 Review

<vs. 1Q FY2012>
(Sales) Up $¥ 1.8$ billion (+4.7\%) (+) Chemicals, Performance Materials, Agrochemicals, Trading
(-) Pharmaceuticals
$(\mathrm{OP})$ Up $¥ 0.4$ billion (+6.1\%) (+) Agrochemicals
$( \pm)$ Chemicals, Performance Materials, Trading
(- ) Pharmaceuticals
(Non-Operating
Income and Expenses)
(Ordinary Income)
(Net Income) $\bullet$ Up $¥ 0.9$ billion (+21.4\%)
<Dividend> $\quad ¥ \mathbf{1 2 / s h a r e}$ for $\mathbf{1 H}, \mathbf{¥ 1 4 / s h a r e}$ for $\mathbf{2 H}$ (same as FY2012)

1Q FY2013 Balance Sheets

|  | $2012 / 6$ | $2013 / 3$ | $2013 / 6$ |
| :--- | ---: | ---: | ---: |
| Current assets | 113.3 | 125.9 | 117.1 |
| Cash | 20.3 | 31.9 | 24.8 |
| Accounts receivable | 54.8 | 56.7 | 56.3 |
| Inventories | 30.3 | 30.6 | 31.1 |
| Others | 7.9 | 6.7 | 4.9 |
| Fixed assets | 72.0 | 73.3 | 77.8 |
| Total PPE | 44.9 | 44.0 | 43.8 |
| Intangible assets | 2.5 | 2.0 | 1.8 |
| Investment securities | 21.8 | 24.9 | 30.6 |
| Others | 2.8 | 2.4 | 1.6 |
| Total assets | 185.3 | 199.2 | 194.9 |


|  | (¥billion) |  |  |
| :---: | :---: | :---: | :---: |
|  | 2012/6 | 2013/3 | 2013/6 |
| Liabilities | 65.7 | 72.5 | 63.8 |
| Accounts payable | 16.4 | 17.4 | 16.5 |
| Borrowings | 35.5 | 38.1 | 33.0 |
| Others | 13.8 | 17.0 | 14.3 |
| Net assets | 119.6 | 126.7 | 131.1 |
| Shareholders' equity | 118.5 | 122.9 | 125.7 |
| Unrealized gains or losses on inv estment securities | 1.6 | 3.5 | 4.9 |
| Foreign currencytranslation adjustments | -1.4 | -0.8 | -0.7 |
| Minority interests | 0.9 | 1.1 | 1.2 |
| Total liabilities \& Net assets | 185.3 | 199.2 | 194.9 |
| (D/E Ratio)(1) | 12.9\% | 5.0\% | 6.5\% |
| (Equity Ratio) | 64.0\% | 63.0\% | 66.7\% |

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## 1H FY2013 Outlook revised on July 30, 2013

(¥billion)

|  | FY2012 | FY2013E |  | Change |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1H | 1H | 1H | 1H | 1H |
|  |  | $\begin{gathered} \hline \text { as of May } \\ 2013 \end{gathered}$ | $\begin{array}{\|c} \hline \text { as of July } \\ 2013 \end{array}$ | $\begin{gathered} \hline \text { as of May } \\ 2013 \end{gathered}$ | $\begin{gathered} \hline \text { as of July } \\ 2013 \end{gathered}$ |
| Sales | 71.1 | 72.0 | 75.0 | 0.9 | 3.9 |
| Operating Profit | 8.6 | 8.7 | 9.5 | 0.1 | 0.9 |
| Non-Operating Income/Expenses | -0.2 | 0.1 | 0.3 | 0.3 | 0.5 |
| Ordinary Income | 8.4 | 8.8 | 9.8 | 0.4 | 1.4 |
| Extraordinary Profit/Loss | - | - | - | - | - |
| Net Income | 5.6 | 6.3 | 7.0 | 0.7 | 1.4 |
| EPS ( $¥$ ) | 33.63 | 38.48 | 42.75 | 4.85 | 9.12 |
| Dividend ( $¥ /$ share) | $¥ 12$ | ¥12 | $¥ 12$ | $\not \geq 0$ | $¥ 0$ |
| Total amount of Dividend | 2.0 | 2.0 | 2.0 | 0.0 | 0.0 |
| OP Margin(\%) | 12.1\% | 12.1\% | 12.7\% | 0.0\% | 0.6\% |

## 1H FY2013 Outlook revised on July 30, 2013

- In 1Q, sales of main products overall have exceeded the previous forecast announced on May 14, 2013
- In 2Q, sales are expected to remain steady.
- FY2013 full year Outlook unchanged due to uncertain business environments in 2 H


## 1H FY2013 Sales Outlook by Segment revised on July 30, 2013

|  | 1H FY2012 |  |  | 1H FY2013 E <br> Revised on July 30, 2013 |  |  | Change |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1Q | 2Q | 1H | $\begin{gathered} \text { 1Q } \\ \text { Actual } \end{gathered}$ | 2Q E | 1HE | $\begin{gathered} \hline \text { 1Q } \\ \text { Actual } \end{gathered}$ | 2Q E | 1HE |
| Chem | 9.1 | 8.8 | 17.9 | 9.5 | 9.3 | 18.8 | 0.4 | 0.5 | 0.9 |
| Fine Chemicals | 2.9 | 2.7 | 5.6 | 2.9 | - | - | 0.0 | - |  |
| $\begin{array}{\|l\|} \hline \text { Basic } \\ \text { Chemicals } \\ \hline \end{array}$ | 6.2 | 6.1 | 12.3 | 6.6 | - | - | 0.4 | - |  |
| Performance Materials | 9.5 | 9.3 | 18.8 | 10.3 | 10.1 | 20.4 | 0.8 | 0.8 | 1.6 |
| Agro | 8.3 | 5.1 | 13.4 | 9.9 | 4.6 | 14.5 | 1.6 | -0.5 | 1.1 |
| Pharma | 3.5 | 1.8 | 5.3 | 2.9 | 2.8 | 5.7 | -0.6 | 1.0 | 0.4 |
| Trading | 11.9 | 10.8 | 22.7 | 12.7 | 11.0 | 23.7 | 0.8 | 0.2 | 1.0 |
| Others | 3.9 | 6.3 | 10.2 | 4.6 | 5.2 | 9.8 | 0.7 | -1.1 | -0.4 |
| Adjustment | -7.8 | -9.4 | -17.2 | -9.7 | -8.2 | -17.9 | -1.9 | 1.2 | -0.7 |
| Total | 38.4 | 32.7 | 71.1 | 40.2 | 34.8 | 75.0 | 1.8 | 2.1 | 3.9 |


| ( $¥$ billion) |
| :---: |
| $\begin{array}{\|c\|} \hline \text { 1H FY2013 E } \\ \text { as of } \\ \text { May } 2013 \\ \hline \end{array}$ |
| 1HE |
| 17.9 |
| 5.8 |
| 12.1 |
| 19.6 |
| 13.4 |
| 5.6 |
| 23.7 |
| 9.8 |
| -18.0 |
| 72.0 |

## 1H FY2013 OP Outlook by Segment revised on July 30, 2013

|  | 1H FY2012 |  |  | 1H FY2013 E <br> Revised on July 30, 2013 |  |  | Change |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1Q | 2Q | 1H | $\begin{gathered} \text { 1Q } \\ \text { Actual } \end{gathered}$ | 2Q E | 1HE | $\begin{gathered} \hline \text { 1Q } \\ \text { Actual } \end{gathered}$ | 2Q E | 1HE |
| Chem | 0.8 | 0.0 | 0.8 | 0.8 | 0.2 | 1.0 | 0.0 | 0.2 | 0.2 |
| Performance Materials | 2.1 | 2.0 | 4.1 | 2.1 | 1.7 | 3.8 | 0.0 | -0.3 | -0.3 |
| Agro | 1.6 | -0.3 | 1.3 | 2.3 | -0.6 | 1.7 | 0.7 | -0.3 | 0.4 |
| Pharma | 1.9 | 0.7 | 2.6 | 1.6 | 1.4 | 3.0 | -0.3 | 0.7 | 0.4 |
| Trading | 0.4 | 0.3 | 0.7 | 0.4 | 0.2 | 0.6 | 0.0 | -0.1 | -0.1 |
| Others | -0.1 | 0.2 | 0.1 | 0.1 | -0.1 | 0.0 | 0.2 | -0.3 | -0.1 |
| Adjustment | -0.4 | -0.6 | -1.0 | -0.6 | 0.0 | -0.6 | -0.2 | 0.6 | 0.4 |
| Total | 6.3 | 2.3 | 8.6 | 6.7 | 2.8 | 9.5 | 0.4 | 0.5 | 0.9 |

( $¥$ billion)

| $1 \mathrm{H} \mathrm{FY2013} \mathrm{E}$ <br> as of <br> May 2013 |
| ---: |
| 1 H E |
| 0.9 |
| 3.5 |
| 1.4 |
| 2.9 |
| 0.6 |
| 0 |
| -0.6 |
| 8.7 |

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

$\checkmark$ Core products of Basic Chemicals : Ammonia related products and sulfuric acid related products

- FY2012 ammonia domestic market share 9\%, high percentage of self-consumption of ammonia

$==\begin{aligned} & \text { Basic } \\ & \text { Chemicals }\end{aligned}$

(agent used for sterilizing, disinfectant for

(Blank)


## Chemicals - (B) Fine Chemicals Subsegment

## FY2012 Review

 <vs. FY2011>TEPIC 1H : Sales for general applications down due to strong yen, sales for electronic materials slightly up
2H:Sales for both general applications and electronic materials down

- Environmental related products

1H:Weak domestic demand and decrease in export due to strong yen
2H: Domestic sales down, export up

- Custom Chemicals

Increase in work on awarded contracts
FY2013 Outlook as of May 2013
<vs. FY2012> TEPIC : Sales for both general applications and electronic materials up due to weak yen
Environmental related products : Domestic sales up, export flat

- Custom Chemicals: Sales down due to volume decrease in certain products

| Product | Characteristics and Trend | Sales YOY Change |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | FY2011 <br> Total | FY2012 Outlook as of October 2012 |  |  | FY2012 |  |  | FY2013 E as of May 2013 |  |  |
|  |  |  | 1H | 2H E | Total | 1H | 2H | Total | 1H E | 2H E | Total |
| Total Subsegment |  | -3\% | -5\% | +24\% | +8\% | -5\% | +12\% | +3\% | +3\% | +11\% | +7\% |
| TEPIC | Epoxy compound for : <br> (A) electronic materials (solder resist, LED sealant), <br> (B) general applications such as powder coating agent for paint (automobiles, electric appliances) <br> World largest producer | -12\% | -5\% | +16\% | +5\% | -5\% | -5\% | -5\% | +8\% | +18\% | +13\% |
| Environmental related products | HI-LITE : made from chlorinated isocyanuric acid, used for sterilizing, disinfectant for swimming pool as well as water purification tank | -12\% | -16\% | +16\% | -3\% | -16\% | +10\% | -5\% | +11\% | +2\% | +7\% |
| Custom Chemicals | Custom manufacturing and process researching services for pharmaceutical ingredients and intermediaries from pre-clinical to commercial production stages <br> New plant completed in July 2010 ( $¥ 2.0$ billion capex) | +33\% | +3\% | +48\% | +23\% | +3\% | +46\% | +22\% | -25\% | +12\% | -5\% |

Three products account for $78 \%$ of total consolidated subsegment sales (FY2012)

## Chemicals - (C) Basic Chemicals Subsegment

## FY2012 Review

<vs. FY2011>
Melamine 1H : Domestic sales slightly up, export declined due to strong yen and weak Asian market
2 H : Domestic demand up, export up due to weak yen and recovery of Asian market
Urea including AdBlue
Sales increase continuing
High purity sulfuric acid
Sales up in 1H, down in 2H
FY2013 Outlook as of May 2013
<vs. FY2012> Melamine : Domestic sales up, export up due to weak yen and recovery in Asian market
( weaker Asian market expected in 2 H )

- Urea including AdBlue

Sales increase continuing
$\checkmark$ High purity sulfuric acid
Increase in demand expected in $\mathbf{2 H}$

| Product | Characteristics and Trend | FY2011 | FY2012 Outlook as of October 2012 |  |  | FY2012 |  |  | $\begin{gathered} \text { FY2013 E } \\ \text { as of May } 2013 \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | 1H | 2H E | Total | 1H | 2H | Total | 1H E | 2H E | Total |
| Total Subsegment |  | -3\% | -3\% | +1\% | -1\% | -3\% | -1\% | -2\% | -1\% | +3\% | +1\% |
| Melamine | Mainly used as adhesive agent for particle board, medium density fiberboard, plyw ood | -26\% | -25\% | -14\% | -20\% | -25\% | +28\% | +0\% | +24\% | -10\% | +4\% |
| Urea including AdBlue | Urea: mainly used for urea formaldehyde resin, adhesive agent <br> - AdBlue: solution of urea in demineralised water for diesel trucks to reduce Nox | +22\% | +35\% | +26\% | +30\% | +35\% | +20\% | +27\% | +15\% | +17\% | +16\% |
| High purity sulfuric acid | Used to clean semiconductors <br> Largest in domestic market <br> - Capacity expansion (+15\%) completed in May 2011 | +1\% | +10\% | +13\% | +12\% | +10\% | -3\% | +3\% | -2\% | +13\% | +5\% |

Three products account for $34 \%$ of total consolidated subsegment sales(FY2012)

## Chemicals - (D) Profit Overview

|  | FY2011 |  |  | $\begin{aligned} & 2 \mathrm{HE} \\ & \text { as of } \end{aligned}$ | FY2012 |  |  | $\begin{gathered} \text { FY2013 E } \\ \text { as of May } 2013 \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1H | 2H | Total | 2HE | 1H | 2H | Total | 1HE | 2HE | Total |
| Sales | 18.6 | 18.3 | 36.9 | 19.6 | 17.9 | 18.7 | 36.6 | 17.9 | 19.7 | 37.6 |
| Fine Chemicals | 5.9 | 5.0 | 10.9 | 6.2 | 5.6 | 5.6 | 11.2 | 5.8 | 6.2 | 12.0 |
| Basic Chemicals | 12.7 | 13.3 | 26.0 | 13.4 | 12.3 | 13.1 | 25.4 | 12.1 | 13.5 | 25.6 |


| OP | 0.8 | 0.8 | 1.6 | 1.7 | 0.8 | 1.1 | 1.9 | 0.9 | 1.7 | 2.6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: |

## 2H FY2012 Review

<vs. 2H FY2011>

## (Fine Chemicals)

Sales of environmental related products and Custom Chemicals up, sales of TEPIC down

- Fixed cost down, sales up, OP up
(Basic Chemicals)
Sales of melamine, urea, AdBlue up, sales of high purity sulfuric acid down
- Fixed cost down, naphtha cost up, sales down, OP up (Total Segment)

Sales up $¥ 0.4$ billion, OP up $¥ 0.3$ billion
(Fine Chemicals)

## FY2012 Review <br> <vs. FY2011>

- Sales of Custom Chemicals and other minor products up, sales of environmental related products and TEPIC down
$\rightarrow$ Fixed cost down, Sales up, OP up
(Basic Chemicals)
Sales of urea, AdBlue, high purity sulfuric acid up, sales of melamine flat
- Fixed cost down, Sales up, OP slightly up
(Total Segment)
Sales down $¥ 0.3$ billion, OP up $¥ 0.3$ billion


## 2H FY2012 Review

<vs. 2H FY2012 Outlook as of October 2012>
(Fine Chemicals)

- Sales of TEPIC and environmental related products below expectations
- Sales down, OP down
(Basic Chemicals)
- Sales of melamine above expectations, sales of other products below expectations
- Naphtha cost up, sales down, OP down
(Total Segment)
- Sales down $¥ 0.9$ billion, OP down $¥ 0.6$ billion


## FY2013 Outlook as of May 2013

<vs. FY2012>

## (Fine Chemicals)

- Sales of environmental related products, TEPIC, other minor products up, sales of Custom Chemicals down
- Fixed cost of Custom Chemicals down, sales up, OP up


## (Basic Chemicals)

- Sales of melamine, urea, AdBlue, high purity sulfuric acid up

Low margin transactions cut, higher naphtha cost, Sales up, OP up (Total Segment)
-Sales up $¥ 1$.0billion, OP up $¥ 0.7$ billion

## Chemicals - (E) 1H FY2013 Profit Overview

|  | ( $¥$ billion) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1H FY2012 |  |  | 1H FY2013 E <br> revised on July 30, 2013 |  |  | $\left.\begin{array}{\|c}\text { 1H FY2013 E } \\ \text { as of } \\ \text { May 2013 }\end{array}\right]$ |
|  | 1Q | 2Q | 1H | $\begin{gathered} \hline \text { 1Q } \\ \text { Actual } \end{gathered}$ | 2Q E | 1HE |  |
| Sales | 9.1 | 8.8 | 17.9 | 9.5 | 9.3 | 18.8 | 17.9 |
| Fine Chemicals | 2.9 | 2.7 | 5.6 | 2.9 | - |  | 5.8 |
| Basic Chemicals | 6.2 | 6.1 | 12.3 | 6.6 | - |  | 12.1 |


| OP | 0.8 | 0.0 | 0.8 | 0.8 | 0.2 | 1.0 | 0.9 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

## 1Q FY2013 Review

(Fine Chemicals)

- Sales of TEPIC, environmental related products up, <vs. 1Q FY2012> sales of Custom Chemicals down due to changes in delivery schedules
- Sales flat, OP flat
(Basic Chemicals)
Sales of melamine, urea, AdBlue up, high purity sulfuric acid down
- Naphtha cost up
- Sales up, OP flat
(Total Segment)
Sales up $¥ 0.4$ billion, OP flat


## 1H FY2013 Outlook

<vs. 1H FY2013 Outlook as of May 2013>
(Fine Chemicals)
Sales of TEPIC, environmental related products up

- Sales up, OP up
(Basic Chemicals)
- Melamine sales above expectations
- Higher naphtha cost
- Sales up, OP flat
(Total Segment)
- Sales up $¥ 0.9$ billion, OP up $¥ 0.1$ billion
(Fine Chemicals)
- Sales of TEPIC, environmental related products, other minor products up,


## Custom Chemicals down

- Fixed costs of Custom Chemicals down
- Sales up, OP up
(Basic Chemicals)
Sales of melamine, urea, AdBlue, high purity sulfuric acid up
- Low margin transactions cut, higher naphtha cost
- Sales up, OP down
(Total Segment)
$\checkmark$ Sales up $¥ 0.9$ billion, OP up $¥ 0.2$ billion


## Performance Materials - (A) Topics

- Advanced Materials Research Lab. (*tentative name)
- Focusing on developing new applications
- To be completed in July 2014 ( $¥ 3.4$ billion capex)
- Integration of R\&D functions for new products and applications of Performance Materials
$\checkmark$ FY2012 capex program of NCK (Korean subsidiary) (approval basis)
<Display Materials>
Expansion of SUNEVER production facilities, warehouses, R\&D center
<Semiconductors Materials>
Expansion of BARC and multi layer process materials production facilities, warehouses
- 100\% Acquisition of Thin Materials AG (TMAT)
<Acquisition Date> June 28, 2013
<Location> Munich, Germany (in the premises of Fraunhofer-Gesellschaft, FhG)
<Representative> Dr. Franz Richter
<Purpose of Acquisition>
To adopt TMAT's advanced processing and material development technologies for 3D packaging for semiconductors
(Blank)


## Performance Materials - (B) SUNEVER

- Polyimide resin to align liquid crystal molecules in a certain direction
$\checkmark$ Key component to control reaction speed of image, non erasable residual dots



## Performance Materials - (C) Display Materials

```
2H FY2012 Review
<vs. 2H FY2011>
    \ Total Display Materials sales up 32%, SUNEVER sales up 36%
    Substantial sales increase in IPS/FFS as well as VA, TN sales down
    * 3D TV materials sales down due to customers' production cut
<vs. 2H FY2012 Outlook VA, IPS/FFS, 3D sales above expectations
as of October 2012> < TN sales below expectations
FY2013 Outlook as of May }201
<vs. FY2012>
T Total Display Materials sales down 1%, SUNEVER sales down 4%
* IPS/FFS sales up, VA and TN sales down
 3D TV materials sales up
```


(1) NHC(protective coating for touch panels), 3D TV materials, etc

## Performance Materials - (D) BARC (bottom anti-reflective coating for semiconductor)

Bottom anti-reflective coating for semiconductor lithography for eliminating reflections Demand for ArF increasing as lithography shifts to fine processing technology
$\square$ With BARC
(1) Exposure


## Performance Materials - (E) Semiconductors Materials

## 2H FY2012 Review <br> <vs. 2H FY2011>

Total Semiconductors Materials sales up 8\%, BARC sales down 4\%(KrF up, ArF down)

- Other semiconductors materials (including multi layer process materials) sales up 171\%
<vs. 2H FY2012 Outlook Sales of KrF and other semiconductors materials
as of October 2012>
(including multi layer process materials) above expectations, ArF below expectations
FY2013 Outlook as of May 2013
<vs. FY2012>
Total Semiconductors Materials sales up 6\%, BARC sales up 3\%
- KrF sales flat, ArF sales up 4\%
$\checkmark$ Other semiconductors materials (including multi layer process materials) sales up 24\%

|  | Sales YOY Change |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY2011 <br> Total | FY2012 Outlook as of October 2012 |  |  | FY2012 |  |  | FY2013 E as of May 2013 |  |  |
|  |  | 1H | 2H E | Total | 1H | 2H | Total | 1H E | 2H E | Total |
| BARC | -12\% | +1\% | -2\% | -1\% | +1\% | -4\% | -1\% | -2\% | +7\% | +3\% |
| KrF | -18\% | -2\% | -4\% | -3\% | -2\% | +4\% | +1\% | +0\% | +1\% | +0\% |
| ArF | -3\% | +2\% | -3\% | +0\% | +2\% | -9\% | -3\% | -1\% | +12\% | +5\% |
| Other Semiconductors Materials (1) | +15\% | +139\% | +155\% | +148\% | +139\% | +171\% | +156\% | +37\% | +14\% | +24\% |
| Total Semiconductors Materials | -11\% | +9\% | +9\% | +9\% | +9\% | +8\% | +9\% | +3\% | +8\% | +6\% |

(1) Multi layer process materials, microlens, etc

Performance Materials - (F) Inorganic Materials
High performance

| inorganic colloidal materials |
| :---: |
| SNOWTEX <br> colloidal silica <br> (water dispersed <br> silica sol) |
| Alumina sol <br> Organo sol <br> water dispersed <br> alumina hydrate sol |
| SUNCOLLOID <br> methanol dispersed <br> tin oxide sol |
| CelnaxCilica sol |

Dominant share in domestic market (SNOWTEX)

## NCI's Advantages

- Wide variety of grades to accommodate diversified customer's needs
... particle diameter, surface treatment, concentration, PH , etc.

[^0]... long-term product stability, large-sized sol, etc.
< Application Examples >

| -Polishing |
| :--- |
| silicon wafer, |
| aluminum/glass |
| hard discs |

FY2012 Sales Distribution

| $38 \%$ | $62 \%$ |
| :---: | :---: |

## Performance Materials - (G) SNOWTEX, Organo sol

## FY2012 Review

<vs. FY2011>
$\checkmark$ SNOWTEX 1H : Sales down due to sluggish demand for both polishing and non-polishing materials
2H : Polishing materials sales up, non-polishing materials sales down
$\checkmark$ Organo sol : Sales down due to sluggish demand

## FY2013 Outlook as of May 2013

<vs. FY2012>

- SNOWTEX
: Recovery of demand expected for both applications
Organo sol : Sluggish demand expected to continue, focusing on developing new applications

| Product | Characteristics | Sales YOY Change (1) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | FY2011 <br> Total | FY2012 Outlook as of October 2012 |  |  | FY2012 |  |  | $\begin{gathered} \text { FY2013 E } \\ \text { as of May } 2013 \end{gathered}$ |  |  |
|  |  |  | 1H | 2H E | Total | 1H | 2H | Total | 1H E | 2H E | Total |
| SNOWTEX | - Mainly Used for : <br> (A) polishing materials (silicon wafer, aluminum and glass hard disk), <br> (B) non-polishing materials ( NOx reduction catalyst, automobile catalyst, chrome-free electrical steel sheet) <br> - Largest domestic producer <br> - New second plant in Toyama completed in March 2011 (capacity +20\%) | -16\% | -8\% | +31\% | +9\% | -8\% | +1\% | -4\% | +8\% | +28\% | +17\% |
| Organo <br> sol | -Used for : hard coating materials, electronic information materials World largest producer | +2\% | -12\% | +10\% | -2\% | -12\% | -24\% | -18\% | -13\% | +6\% | -5\% |

(1) Non-consolidated basis

## Performance Materials - (H) Profit Overview

|  |  |  |  |  |  |  |  |  |  | bilion) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY2011 |  |  | $\begin{array}{\|c\|} \hline 2 \mathrm{H} \mathrm{E} \\ \text { as of } \\ \text { Oct.2012 } \end{array} \mathrm{\mid}$ | FY2012 |  |  | $\begin{gathered} \text { FY2013 E } \\ \text { as of May } 2013 \end{gathered}$ |  |  |
|  | 1H | 2H | Total |  | 1H | 2H | Total | 1HE | 2HE | Total |
| Sales | 17.0 | 17.0 | 34.0 | 18.9 | 18.8 | 18.6 | 37.4 | 19.6 | 20.3 | 39.9 |
| OP | 2.6 | 2.2 | 4.8 | 2.6 | 4.1 | 3.1 | 7.2 | 3.5 | 3.7 | 7.2 |

## 2H FY2012 Review

<vs. 2H FY2011>

- Sales of SUNEVER up (VA, IPS/FFS)
- Sales of Semiconductors Materials up (BARC down, other materials including multi layer process materials up substantially)
- Sales of Inorganic Materials down (SNOWTEX up, organo sol down)
- Sales up $¥ 1.6$ billion, OP up $¥ 0.9$ billion


## FY2012 Review <br> <vs. FY2011>

- Sales of VA, and IPS/FFS up, sales of TN and 3D TV materials down
- Sales of Semiconductors Materials up (BARC down slightly, other materials including multi layer process materials up substantially)
- Sales of Inorganic Materials down (SNOWTEX, organo sol)
- Fixed cost down
$\checkmark$ Sales up $¥ 3.4$ billion, OP up $¥ 2.4$ billion


## 2H FY2012 Review

## <vs. 2H FY2012 Outlook as of October 2012>

- Sales of VA, and IPS/FFS above expectations
- Sales of Semiconductors Materials above expectations except ArF
-Sales of Inorganic Materials below expectations
-Sales down $¥ 0.3$ billion, OP up $¥ 0.5$ billion


## FY2013 Outlook as of May 2013 <vs. FY2012>

Sales of SUNEVER down ( IPSIFFS up, TN and VA down), 3D up
$\checkmark$ Sales of Semiconductors Materials up (ArF and other materials including multi layer process materials up substantially, KrF flat)
$\checkmark$ Sales of Inorganic Materials up
(SNOWTEX and other products including high refractive sol up, organo sol down)

- Sales up $¥ 2.5$ billion, OP flat


## Performance Materials - (I) 1H FY2013 Profit Overview

( $¥$ billion)

|  | 1H FY2012 |  |  | 1H FY2013 E <br> revised on July 30, 2013 |  |  | 1H FY2013 E as of |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1Q | 2Q | 1H | 1Q Actual | 2Q E | 1HE | 1HE |
| Sales | 9.5 | 9.3 | 18.8 | 10.3 | 10.1 | 20.4 | 19.6 |
| OP | 2.1 | 2.0 | 4.1 | 2.1 | 1.7 | 3.8 | 3.5 |

## 1Q FY2013 Review <br> <vs. 1Q FY2012>

- Sales of SUNEVER up (VA and IPSIFFS up, TN down)
- Total Semiconductors Materials sales up
(BARC down, other materials including multi layer process materials up substantially)
- Inorganic Materials sales down
- Sales up $¥ 0.8$ billion, OP flat


## 1H FY2013 Outlook

revised on July 30,2013
<vs. 1H FY2013 Outlook as of May 2013>

- Sales of SUNEVER (TN, VA and IPS/FFS) above expectations
-Sales of Semiconductors Materials above expectations
- Sales of Inorganic Materials below expectations
-Sales up $¥ 0.8$ billion, OP up $¥ 0.3$ billion


## <vs. 1H FY2012>

- SUNEVER sales up (IPS/FFS up, TN and VA down)
- Total Semiconductors Materials sales up
- Inorganic Materials sales down
- Sales up $¥ 1.6$ billion, OP down $¥ 0.3$ billion


## Agrochemicals－（A）Sales Distribution（before discount）


－Main Products（in order of FY2012 sales amount）：
ROUNDUP（herbicide），SIRIUS（herbicide），PERMIT（herbicide）， PULSOR（THIFLUZAMIDE，fungicide），TARGA（herbicide）， STARMITE（miticide），LEIMAY（fungicide）， SANMITE（insecticide），ALTAIR（NC－620）（herbicide）

|  | Non－consolidated Sales YOY Change （before discount） |  |
| :---: | :---: | :---: |
|  | $\begin{aligned} & \hline \text { FY2012 } \\ & \text { IFY2011 } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { FY2013E } \\ & \text { IFY2012 } \end{aligned}$ |
| ROUNDUP |  |  |
| SIRIUS |  |  |
| PERMIT |  |  |
| $\qquad$ |  |  |
| TARGA |  |  |
| STARMITE |  |  |
| LEIMAY |  |  |
| SANMITE |  |  |
| $\begin{gathered} \text { ALTAR } \\ \text { (NC-620) } \end{gathered}$ |  |  |

YOY Change

| ＋0～＋5\％ | $\nearrow$ | －0～－5\％ | $\lambda$ |
| :---: | :---: | :---: | :---: |
| ＋5～＋10\％ | $\nearrow \nearrow$ | －5～－10\％ | い |
| ＋10～＋15\％ | フ17 | －10～－15\％ | い1） |
| ＋15\％～ | ハアイス | －15\％～ | 464t |

## Agrochemicals - (B) Overview

- Stable profit center
- Strengthening product portfolio by:

| (launch) | (products) licensed-in products |
| :---: | :---: |
| (FY2008) | LEIMAY (fungicide, in-house) |
|  | STARMITE (miticide, in-house) |
| (FY2009) | PULSOR (THIFLUZAMIDE) (fungicide, acquired from Dow) |
|  | PREVATHON (insecticide, licensed from DuPont) |
| (FY2010) | AVH (herbicide, licensed from ZEN-NOH, Bayer and Hokko) |
|  | ROUNDUP AL for general household market, growing steadily |
| (FY2011) | ALTAIR(NC-620) (paddy rice herbicide, launched in Korea, in-house) |
| (FY2012) | ALTAIR(NC-620) (paddy rice herbicide, launched in Japan, in-house) |
| (FY2013) | Bulk shipment of animal health products to licensee started in July (for pets to exterminate tick and flea, licensing product) |
| (FY2014) | Animal health products expected to be launched in USA and EU |
| (FY2014-16) | Fruits/vegetables/paddy rice insecticide (licensed-in product), |
|  | Fruits/vegetables/tea insecticide (licensed-in product), |
|  | Fruits/vegetables fungicide (licensed-in product), |
| (FY2019-) | Insecticide (in-house) (New addition) |

-Full reconstruction of Biological Research Laboratories FY2010-2015 (FY2010-12 $¥ 4.6$ billion capex) (Main completed facilities) Fully automated chemical compounds library, weather simulation room

- Acquired 3\% share of IHARABRÁS (leading agro company in Brazil) in September 2011 to strengthen R\&D and marketing capabilities in the rapidly growing market in Latin America
- Export sales account for about 20\% of FY2012 non-consolidated segment sales (including sales through Trading segment)(Asia:50\%, Europe,Africa:27\%, North/Central/South America:23\%)


## Agrochemicals - (C) Non-consolidated Segment Sales (before discount)

|  | Non-consolidated Sales YOY Change (before discount) |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | FY2012 Outlook <br> as of October 2012 |  | FY2012 |  | FY2013 E |  |  |
|  | 1 H | 2H E | Total | 1 H |  | Total |  |
|  | $+12 \%$ | $+3 \%$ | $+6 \%$ | $+12 \%$ | $+5 \%$ | $+7 \%$ | $-2 \%$ |
| Except ROUNDUP | $+4 \%$ | $+1 \%$ | $+2 \%$ | $+4 \%$ | $+1 \%$ | $+2 \%$ | $+7 \%$ |
| Total Segment | $+6 \%$ | $+2 \%$ | $+3 \%$ | $+6 \%$ | $+2 \%$ | $+3 \%$ | $+5 \%$ |


|  | Distribution of NCI <br> Non-consolidated Sales |  |
| :--- | ---: | ---: |
|  | FY2011 | FY2012 |
| Fungicide + Insecticide | $2 \%$ | $3 \%$ |
| Insecticide | $18 \%$ | $18 \%$ |
| Fungicide | $13 \%$ | $13 \%$ |
| Herbicide | $65 \%$ | $64 \%$ |
| Plant growth regulator | $2 \%$ | $2 \%$ |
| Others | $1 \%$ | $1 \%$ |


| Distribution of <br> Japanese Market |
| ---: |
| Oct 2011-Sept 2012 |
| $10.9 \%$ |
| $30.4 \%$ |
| $22.2 \%$ |
| $33.5 \%$ |
| $1.9 \%$ |
| $1.2 \%$ |

(Blank)

## Agrochemicals - (D) Profit Overview

( $¥$ billion)

|  | FY2011 |  |  | 2HE as of Oct. 2012 | FY2012 |  |  | FY2013 E as of May 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1H | 2H | Total | 2HE | 1H | 2H | Total | 1HE | 2HE | Total |
| Sales | 12.5 | 21.3 | 33.8 | 21.7 | 13.4 | 22.0 | 35.4 | 13.4 | 22.8 | 36.2 |
| OP | 0.8 | 3.6 | 4.4 | 3.5 | 1.3 | 3.7 | 5.0 | 1.4 | 3.8 | 5.2 |

## 2H FY2012 Review <br> <vs. 2H FY2011>

- Sales of ROUNDUP, STARMITE, ALTAIR up, export up, sales of SIRIUS, PULSOR down
- Milestones on animal health products received
$\checkmark$ Fixed cost up (depreciation cost of
new Biological Research Lab. up, R\&D expenses up)
$\checkmark$ Sales up $¥ 0.7$ billion, OP up $¥ 0.1$ billion


## FY2012 Review <br> <vs. FY2011>

$\checkmark$ Sales of ROUNDUP, PULSOR, STARMITE, ALTAIR up, sales of SIRIUS and TARGA down

- Milestones on animal health products received
- Fixed cost up
(depreciation cost of new Biological Research Lab. and ALTAIR facilities up, R\&D expenses up)
-Sales up $¥ 1.6$ billion, OP up $¥ 0.6$ billion


## 2H FY2012 Review

<vs. 2H FY2012 Outlook as of October 2012>
$\checkmark$ Sales of ROUNDUP, SIRIUS, STARMITE, SANMITE above expectations
$\checkmark$ Sales of TARGA and LEIMAY below expectations
$\checkmark$ R\&D expenses above expectations due to accelerated R\&D activities
Sales up $¥ 0.3$ billion, OP up $¥ 0.2$ billion

## FY2013 Outlook as of May 2013 <br> <vs. FY2012>

- Sales of TARGA, STARMITE, LEIMAY, ALTAIR up, sales of ROUNDUP and SIRIUS down
- Bulk shipment of animal health products to the licensee expected to start
$\checkmark$ Fixed cost up (depreciation cost of new Biological Research Lab. up, R\&D expenses up due to accelerated pipeline development)
Sales up $¥ 0.8$ billion, OP up $¥ 0.2$ billion


## Agrochemicals - (E) 1H FY2013 Profit Overview

( $¥$ billion)

|  | 1H FY2012 |  |  | 1H FY2013 E <br> revised on July 30, 2013 |  |  | 1H FY2013 E as of |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1Q | 2Q | 1H | $\begin{gathered} 1 Q \\ \text { Actual } \end{gathered}$ | 2Q E | 1HE | 1HE |
| Sales | 8.3 | 5.1 | 13.4 | 9.9 | 4.6 | 14.5 | 13.4 |
| OP | 1.6 | -0.3 | 1.3 | 2.3 | -0.6 | 1.7 | 1.4 |

## 1Q FY2013 Review <br> <vs. 1Q FY2012>

Sales of ROUNDUP, TARGA, STARMITE, LEIMAY, ALTAIR up, partly due to advanced orders and weak yen
$\checkmark$ Sales up $¥ 1.6$ billion, OP up $¥ 0.7$ billion

## 1H FY2013 Outlook <br> revised on July 30,2013

<vs. 1H FY2013 Outlook as of May 2013>
$\checkmark$ Sales of ROUNDUP, TARGA, STARMITE, LEIMAY, ALTAIR above expectations

- Strong export
- R\&D expenses above expectations due to accelerated R\&D activities
Sales up $¥ 1$.1billion, OP up $¥ 0.3$ billion
<vs. 1H FY2012>
$\checkmark$ Sales of ROUNDUP, TARGA, STARMITE, LEIMAY, ALTAIR up
- Strong export
- Bulk shipment of the animal health products started in July
- Sales up $¥ 1.1$ billion, OP up $¥ 0.4$ billion


## Pharmaceuticals - (A) NCI Business Model

- Steadily expanding segment in mid-term perspective
- Unique ethical pharma business model without sales force
<Before Launch> <After Launch >


Bulk Sales Revenues, Sales Milestone Royalty


## Pharmaceuticals - (B) LIVALO (anti-cholesterol drug)

-Domestic market share up steadily (about20\% in FY2012)
-FY2012 NHI drug price cut 8\%, but sales volume up substantially
-New plant completed in March 2011, commercial production started in May 2012
\& Full reconstruction of Biological Research Laboratories (FY2010-2015)

FY2012
Market share
Crestor 34\%
Lipitor 27\%
Livalo 20\%
Mevalotin 12\%

January - February 2013, crystalline form patents approved

- August 2013, domestic compound patent expired



## Pharmaceuticals - (C) LIVALO World Wide Strategy \& Pipeline

## LIVALO World Wide Strategy

| Country/Region | Developing Status | Launch (schedule) | Business Partner |
| :---: | :---: | :---: | :---: |
| Japan | Launched | Sep 2003 | Kow a, Daiichi-Sankyo (1) |
| Korea | Launched | Jul 2005 | JWP Pharm ace utical |
| Thailand | Launched | Jan 2008 | Biopharm-Chemical |
| China | Launched | Jul 2009 | Kow a Shanghai |
| USA | Launched | Jun 2010 | Kow a(KPA) (2) |
| Lebanon | Launched | Mar 2011 | Algorithm |
| Spain | Launched | May 2011 | Recordati, Esteve |
| Portugal | Launched | Jun 2011 | Recordati, Delta |
| Mexico | Launched | Feb 2012 | Ei Lilly |
| Indonesia | Launched | May 2012 | Indonesia Tanabe |
| Taiw an | Launched | Jun 2012 | Taiw an Tanabe |
| Switzerland | Launched | Jan 2013 | Ei Lilly |
| Ukraine | Approved | Jun 2013 | Recordati |
| Brazil | Approved | Jul 2013 | Ei Lilly |
| France | Approved | 2013 | Recordati |
| Italy | Approved | 2013 | Recordati |

Other approved countries: Australia, Cyprus, Greece, Ireland, Turkey, Venezuela etc.
(1) From July 2013, Kowa will be the sole partner (2) As of June 30, 2013, Eli Lilly ended its co-promotion of LIVALO

Pipeline

| Product | Market |  | Developing Status | Licensee | Expected Market Size ( $¥$ billion) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NT-702 | Japan | Intermittent claudication | Phase II | Taisho | 20-30 |
|  |  | Asthma |  |  | 20 |
| NTC-801 <br> (Antiarrhythmic agent) | Japan |  | Discontinuation of clinical development No further plans for development at this time (under discussion among three companies) | Teijin | 1 million patients (2015) |
|  | World wide (except Japan) |  |  | BMS | 8.4 million patients (2015) |
| NIP-022 (Platelet generating stimulator agent) |  |  | Phase I | Ono | 0.35 million patients (2015 in Japan) |

(Blank)

## Pharmaceuticals - (D) Profit Overview

( $¥$ billion)

|  | FY2011 |  |  | 2HE as of Oct. 2012 | FY2012 |  |  | FY2013 E as of May 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1H | 2H | Total | 2HE | 1H | 2H | Total | 1HE | 2HE | Total |
| Sales | 5.2 | 4.8 | 10.0 | 4.3 | 5.3 | 5.3 | 10.6 | 5.6 | 4.5 | 10.1 |
| OP | 2.6 | 2.0 | 4.6 | 1.7 | 2.6 | 2.6 | 5.2 | 2.9 | 2.0 | 4.9 |

## 2H FY2012 Review

<vs. 2H FY2011>

- LIVALO

NHI drug price cut 8\%
Domestic and export sales volume up
Variable cost down by new plant

- Absence of milestones
- Sales up $¥ 0.5$ billion (LIVALO+0.7, others-0.2), OP up $¥ 0.6$ billion


## FY2012 Review

<vs. FY2011>

- LIVALO

NHI drug price cut 8\%
Domestic and export sales volume up Variable cost down by new plant

- Absence of milestones
- Sales up $¥ 0.6$ billion (LIVALO+1.5, milestones-0.4, others-0.5), OP up $¥ 0.6$ billion


## 2H FY2012 Review

## <vs. 2H FY2012 Outlook as of October 2012>

- Domestic and export sales of LIVALO above expectations
- Sales up $¥ 1.0$ billion (LIVALO+0.9, others+0.1), OP up $¥ 0.9$ billion


## FY2013 Outlook as of May 2013 <br> <vs. FY2012>

- LIVALO crystalline form patent approved in Japan
(January - February 2013)
- LIVALO domestic compound patent expires (August 2013)
- LIVALO export flat (USA and EU sales up, Korea sales down due to price cut)
- Absence of milestones
- Sales down $¥ 0.5$ billion (LIVALO-0.4, others-0.1), OP down $¥ 0.3$ billion


## Pharmaceuticals - (E) 1H FY2013 Profit Overview

( $¥$ billion)

|  | 1H FY2012 |  |  | 1H FY2013 E <br> revised on July 30, 2013 |  |  | 1H FY2013 E as of |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1Q | 2Q | 1H | $\begin{gathered} 1 Q \\ \text { Actual } \end{gathered}$ | 2Q E | 1HE | 1HE |
| Sales | 3.5 | 1.8 | 5.3 | 2.9 | 2.8 | 5.7 | 5.6 |
| OP | 1.9 | 0.7 | 2.6 | 1.6 | 1.4 | 3.0 | 2.9 |

## 1Q FY2013 Review <br> <vs. 1Q FY2012>

- Domestic LIVALO sales down as expected In FY2012, introduction of new production method of LIVALO advanced from 2Q to 1Q, which boosted 1Q domestic sales to an extraordinary high level
$\checkmark$ For 1Q FY2013, domestic LIVALO end market share estimated to be $\mathbf{2 0 . 8 \%}$ (vs.20.0\% for FY2012)
- Absence of milestones as expected

Sales down $¥ 0.6$ billion, OP down $¥ 0.3$ billion

## 1H FY2013 Outlook <br> revised on July 30,2013

<vs. 1H FY2013 Outlook as of May 2013>

- Domestic and export sales of LIVALO slightly above expectations
-Sales up $¥ 0.1$ billion, OP up $¥ 0.1$ billion
- Domestic and export sales of LIVALO continuing to grow
- Sales up $¥ 0.4$ billion, OP up $¥ 0.4$ billion


## Trading - (A) Profit Overview

( ¥billion)

|  | FY2011 |  |  | $\begin{gathered} \hline 2 \mathrm{HEE} \\ \text { as of } \\ \text { Oct. } 2012 \end{gathered}$ | FY2012 |  |  | FY2013 E as of May 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1H | 2H | Total | 2HE | 1H | 2H | Total | 1HE | 2HE | Total |
| Sales | 22.5 | 22.3 | 44.8 | 25.3 | 22.7 | 23.9 | 46.6 | 23.7 | 25.0 | 48.7 |
| OP | 0.7 | 0.6 | 1.3 | 0.8 | 0.7 | 0.7 | 1.4 | 0.6 | 0.8 | 1.4 |

## 2H FY2012 Review <br> <vs. 2H FY2011>

-Sales up due to volume increase in electronic materials
$\checkmark$ Sales up $¥ 1.6$ billion, OP up $¥ 0.1$ billion

## FY2012 Review <br> <vs. FY2011>

Sales and OP up with increase in trading volume
$\checkmark$ Sales up $¥ 1.8$ billion, OP up $¥ 0.1$ billion

2H FY2012 Review
<vs. 2H FY2012 Outlook as of October 2012>

- Trading volume below expectations
- Sales down $¥ 1.4$ billion, OP down $¥ 0.1$ billion

FY2013 Outlook as of May 2013
<vs. FY2012>

Trading volume up, operating costs up

- Sales $¥ 2.1$ billion, OP flat


## Trading - (B) 1H FY2013 Profit Overview

|  | ( $¥$ billion) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1H FY2012 |  |  | 1H FY2013 E <br> revised on July 30, 2013 |  |  | 1H FY2013 E as of May 2013 |
|  | 1Q | 2Q | 1H | $\begin{gathered} \hline 1 Q \\ \text { Actual } \end{gathered}$ | 2Q E | 1HE | 1HE |
| Sales | 11.9 | 10.8 | 22.7 | 12.7 | 11.0 | 23.7 | 23.7 |
| OP | 0.4 | 0.3 | 0.7 | 0.4 | 0.2 | 0.6 | 0.6 |

## 1Q FY2013 Review

<vs. 1Q FY2012>

- Sales up due to volume increase
- Sales up $¥ 0.8$ billion, OP flat

1H FY2013 Outlook
revised on July 30,2013
<vs. 1H FY2013 Outlook as of May 2013>
<vs. 1H FY2012>
$\checkmark$ trading volume in line with expectations
$\checkmark$ Sales flat, OP flat

- Trading volume up, operating costs up
- Sales up $¥ 1.0$ billion, OP down $¥ 0.1$ billion


## Capex/Depreciation/R\&D by Segment

(¥billion)

|  | Capex(1) |  |  |  |  | Depreciation(2) |  |  |  |  | R\&D expenses |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2009 | 2010 | 2011 | 2012 | 2013E | 2009 | 2010 | 2011 | 2012 | 2013E | 2009 | 2010 | 2011 | 2012 | 2013E | \% of Sales |
| Chem |  | 1.9 | 1.6 | 1.0 | 1.4 |  | 3.4 | 2.5 | 2.0 | 1.9 |  | 0.8 | 0.8 | 0.7 | 0.7 | 1.9\% |
| Performance M. | - | 3.7 | 2.2 | 3.1 | 3.3 | - | 4.1 | 4.3 | 3.7 | 3.4 |  | 5.6 | 6.2 | 6.5 | 6.5 | 16.4\% |
| Agro |  | 0.4 | 2.1 | 2.5 | 1.3 | - | 1.9 | 1.8 | 1.9 | 2.2 |  | 2.6 | 2.8 | 3.0 | 3.5 | 9.6\% |
| Pharma |  | 2.4 | 1.7 | 0.7 | 0.5 | - | 0.3 | 1.0 | 1.1 | 0.9 | - | 2.4 | 2.5 | 2.3 | 2.4 | 23.3\% |
| Trading | - | 0.2 | 0.1 | 0.0 | 0.1 | - | 0.1 | 0.1 | 0.1 | 0.1 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0\% |
| Others |  | 1.0 | 0.6 | 0.8 | 0.6 |  | 0.6 | 0.8 | 0.7 | 0.3 |  | 1.2 | 1.3 | 1.2 | 1.2 |  |
| Total | 10.1 | 9.6 | 8.3 | 8.1 | 7.2 | 11.0 | 10.4 | 10.5 | 9.5 | 8.8 | 13.1 | 12.6 | 13.6 | 13.7 | 14.3 |  |
| Capex |  |  |  |  |  |  | ex | ense | Sale | es (\%) | 8.8\% | 8.2\% | 9.2\% | 8.9\% | 9.2\% |  |

Actual - Acceptance basis
Outlook - Production commencement basis

## (2) Depreciation Method

SUNEVER, BARC- 4 year declining balance method (50.0\% of initial capex amount in the $1^{\text {st }} y e a r$ ) Other products - 8 year declining balance method (25.0\% of initial capex amount in the $1^{\text {st }}$ year)

## FY2012 and 2013 Main Capex Items (Approval basis)

(¥billion)

| FY2012 |  | FY2013 E |  |
| :--- | ---: | :--- | :---: |
| High purity ammonia | 0.3 | SNOWTEX | 0.5 |
| SUNEVER(NCK) | 1.4 | Chemical Research Lab. <br> (Instruments) | 0.8 |
| BARC(NCK) | 1.2 | Electronic Materials Lab. <br> (Instruments) | 0.8 |
| Advanced Materials <br> Research Lab. (Building) | 3.4 | Biological Research Lab. | 0.3 |
| Electronic Materials Lab. <br> (Instruments) | 0.8 |  |  |
| Biological Research Lab. | 0.9 |  |  |

NCK=Korean sublidiary

## Financial Strategy - (A) Purchase of Treasury Shares

- Started purchase of treasury shares in 2006 to enhance ROE
- Purchased $¥ 25.5$ billion, 22.8 million shares ( $\mathbf{1 2 . 2 \%}$ of shares issued) in total
- Cancelled all purchased shares


## Record of purchase of treasury shares FY2006-12

|  | FY2006 | FY2007 | FY2008 | FY2009 | FY2010 | FY2011 | FY2012 | $\begin{gathered} \hline \text { FY2006- } \\ \text { FY2012 } \\ \text { Total } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shares purchased (thousand shares) | 3,500 | 3,399 | 7,355 | 0 | 2,167 | 0 | 6,372 | 22,793 |
| Purchase costs ( $¥$ billion) | 4.7 | 5.0 | 8.0 | 0 | 2.8 | 0 | 5.0 | 25.5 |
| Shares cancelled (thousand shares) | 3,000 | 3,635 | 7,000 | 0 | 3,000 | 0 | 6,000 | 22,635 |
| Shares issued at FY end (thousand shares) | 184,635 | 181,000 | 174,000 | 174,000 | 171,000 | 171,000 | 165,000 |  |
| Treasury share at FY end (thousand shares) | 1,367 | 1,233 | 1,660 | 1,709 | 885 | 886 | 1,258 |  |
| Dividend ( $¥$ billion) | 3.7 | 3.6 | 3.8 | 4.2 | 4.1 | 4.1 | 4.3 |  |
| Dividend ( $¥$ I Share) | 20 | 20 | 22 | 24 | 24 | 24 | 26 |  |
| Total payout ratio <br> (dividend + purchase of treasury shares) | 61 | 56 | 117 | 32 | 53 | 37 | 67 |  |

## Financial Strategy - (B) 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 (added for FY2011)
(non-consolidated basis) <br> \title{
Mid-term Business Plan Vista 2015 Stage II (FY2013-2015) <br> \title{
Mid-term Business Plan Vista 2015 Stage II (FY2013-2015) (A) Financial Targets
} (A) Financial Targets
}

|  | ( $¥$ billion) |  |
| :--- | ---: | ---: |
| 1. PL | FY2012 | FY2015 |
| Sales | 153.8 | 180.0 |
| Operating Profit | 19.5 | 26.0 |
| Ordinary Income | 20.5 | 26.5 |
| Net Income | 13.9 | 18.5 |
| EPS( $¥$ ) | 84.00 | 113.00 |


| 2. Segment |  |  |  | (\#billion) |
| :---: | :---: | :---: | :---: | :---: |
|  | Sales |  | Operating Profit |  |
|  | FY2012 | FY2015 | FY2012 | FY2015 |
| Chemicals and others (1) | 70.4 | 77.5 | 2.1 | 3.6 |
| Performance Materials | 37.4 | 53.8 | 7.2 | 11.3 |
| Agro | 35.4 | 40.8 | 5.0 | 7.6 |
| Pharma | 10.6 | 7.9 | 5.2 | 3.5 |
| Total | 153.8 | 180.0 | 19.5 | 26.0 |

(1) "Chemicals and others" including Chemicals segment, Trading segment, Others segment and Adjustment

# Mid-term Business Plan Vista 2015 Stage II (FY2013-2015) 

 (B) Financial IndicatorsHighest importance on ROE as well as OP margin
ROE : FY2015 Target 13.4\%
OP margin : FY2015 Target 14.4\%

- Dividend payout ratio above 30\%
- In addition, continue to purchase treasury shares timely
- Maintain R\&D expenses/sales above 9\% <br> \title{
Mid-term Business Plan Vista 2015 Stage II (FY2013-2015) <br> \title{
Mid-term Business Plan Vista 2015 Stage II (FY2013-2015) (C) Sources of Growth for Stage II
} (C) Sources of Growth for Stage II
}


## < Performance Materials > <br> - Display

New LCD alignment materials aiming at
(a) high resolution
(b) low power consumption
(c) low cost
(d) slim bezel design

Semiconductor


New development and applications of BARC

## < Agrochemicals >



ALTAIR
(NC-620, paddy rice herbicide)

Animal health product
< Pharmaceuticals >

LIVALO
Domestic market defended by newly approved crystalline form patents

## LIVALO Export

New pipeline products

## Mid-term Business Plan Vista 2015 Stage II (FY2013-2015) (D) Initiatives for FY2016 onwards

## < Materials >



Materials for Flexible Displays

## Hyper Branch Polymers

- Fluoro-polymeric surface modifier for touch panels
- Ultra-high refractive index coating materials
< Life Science >

NANOFIBERGEL
Cosmetics field, quasi-pharmaceutical \& medical additive

3D cell culture medium
< R\&D Center >

## Agrochemicals

- Licensed-in product
-Vegetables/fruits/paddy rice insecticide
-Vegetables/fruits/tea insecticide
-Vegetables/fruits fungicide
- In-house product
-Vegetables/general purpose insecticide
-Paddy rice herbicide
-Fungicide


## Pharmaceuticals

- Developing next drug candidates for pain, rheumatism, and diabetes
- Leveraging our libraries and synthesis capacity by promoting joint drug development with pharmaceutical manufactures

FY2011-1Q FY2013 Quarterly Sales by Segment
(¥billion)


## FY2011- 1Q FY2013 Quarterly OP by Segment

( $¥$ billion)

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

## Brief History of NCI's R\&D



## NCI's Technology Link



## Main Products by Segment (New Segmentation)

| Segment | Products | Main Applications |
| :---: | :---: | :---: |
| Chem | Fine Chemicals TEPIC Melamine cyanurate Environmetal product Custom Chemicals | epoxy compound for LED sealants, solder resist, painting <br> flame retardant <br> HI-LITE (chlorinated isocyanuric acid for sterilizing) <br> custom manufacturing and process services for pharmaceutical companies |
|  | Basic Chemicals <br> Melamine <br> AdBlue <br> Ammonia, Sulfuric acid, Nitric acid Highpurity 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 <br> SUNEVER <br> BARC <br> Multi layer process materials NHC <br> Micro lens | LCD alignment coating bottom anti-reflective coating for semiconductors multi layer process material for semiconductors(Si-HM/SOC) protective coating for touch panel microlens material for image sensor application |
|  | Inorganic Materials SNOWTEX <br> Organo sillica sol Alumina sol SUNCOLLOID CELNAX | water dispersed colloidal sillica sol for polishing sillicon wafers, electrical steel sheets, NOx reduction catalyst, electronic printing materials film coating, antistatic interference shielding, electronic printing materials automotive catalyst, electronic printing materials high refractive sol for lens antistatic sol for film |
| Agro | ```Herbicide TARGA PERMIT SIRIUS, ALTAIR(NC-620) ROUNDUP Insecticide STARMITE, SANMITE, MITOKOHNE Fungicide LEIMAY PULSOR, IKARUGA, GREATAM (THIFLUZAMIDE)``` | soybean, rapeseed, sugarbeet <br> corn, sugarcane, rice <br> paddy rice <br> non-selective herbicide for orchard, noncrop land <br> fruits,tea, vegetables <br> potato, grape, turf |
| Pharma | LIVALO | Anti-cholesterol drug |
| Trading | Nissei Corporation |  |
| Others | Transportation, Landscaping, Engineering, Fertilizer |  |

## Main Products by Segment (Former Segmentation)

| Segment | Products | Main Applications |
| :---: | :---: | :---: |
| Chem | Organic Materials TEPIC Custom Chemicals Melamine cyanurate | epoxy compound for LED sealants, solder resist, painting custom manufacturing and process services for pharmaceutical companies flame retardant |
|  | Inorganic Materials SNOWTEX <br> Organo sillica sol Alumina sol SUNCOLLOID CELNAX | water dispersed colloidal sillica sol for polishing sillicon wafers, electrical steel sheets, NOx reduction catalyst, electronic printing materials <br> film coating, antistatic interference shielding, electronic printing materials automotive catalyst, electronic printing materials high refractive sol for lens antistatic sol for film |
|  | Basic Chemicals <br> Melamine <br> AdBlue <br> Environmetal product <br> Ammonia, Sulfuric acid, Nitric acid Highpurity chemicals | adhesive agent for plywood solution of urea in demineralised water for diesel trucks to reduce NOX HI-LITE (chlorinated isocyanuric acid for sterilizing) <br> agents used for cleaning semiconductors |
| Electronic Materials | SUNEVER <br> BARC <br> NHC <br> Micro lens | LCD alignment coating bottom anti-reflective coating for semiconductors protective coating for touch panel microlens material for image sensor application |
| Agro | Herbicide <br> TARGA <br> PERMIT <br> SIRIUS, ALTAIR(NC-620) <br> ROUNDUP <br> Insecticide <br> STARMITE, SANMITE, MITOKOHNE <br> Fungicide <br> LEIMAY <br> PULSOR, IKARUGA, GREATAM (THIFLUZAMIDE) | soybean, rapeseed, sugarbeet corn, sugarcane, rice paddy rice non-selective herbicide for orchard, noncrop land <br> fruits,tea, vegetables <br> potato, grape, turf |
| Pharma | LIVALO | Anti-cholesterol drug |
| Trading | Nissei Corporation |  |
| Others | Transportation, Landscaping, Engineering, Fertilizer |  |

## 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.


Synonymous with excellence


[^0]:    - Superiority in quality

