

# 1Q 2018 Business Results & Outlook

June, 2018



# Disclaimer

**The business results for the first quarter of 2018 currently under audit review are presented here for investors' convenience. Hence, please be advised that some of their contents may be altered in the course of audit.**

**The business results are subject to the K-IFRS(Korea International Financial Reporting Standards).**

**Forecasts and projections contained in this material are based on current business environments and management's strategies, and they may differ from the actual results upon changes and unaccounted variables.**

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(Unit: KRW bn)

Classification	1Q '17	4Q '17	1Q '18	YoY	QoQ
<b>Sales</b>	6,487	6,432	6,554	1.0%	1.9%
<b>Operating Profit</b>	797	615	651	-18.3%	5.8%
<b>(%)</b>	(12.3)	(9.6)	(9.9)		
<b>EBITDA</b>	1,151	972	1,006	-12.6%	3.5%
<b>(%)</b>	(17.8)	(15.1)	(15.3)		
<b>Pre-tax Income</b>	698	434	653	-6.5%	50.6%
<b>(%)</b>	(10.8)	(6.7)	(10.0)		
<b>Net Income</b>	548	338	553	0.8%	63.5%
<b>(%)</b>	(8.4)	(5.3)	(8.4)		

### Financial Position

(Unit: KRW bn)

Classification	'17 (End)	1Q'18 (End)	Change
<b>Asset</b>	<b>25,041</b>	<b>26,416</b>	5.5%
Cash and equivalents	2,779	3,132	12.7%
<b>Liabilities</b>	<b>8,703</b>	<b>9,905</b>	13.8%
Borrowings	3,045	4,236	39.1%
<b>Shareholder's Equity</b>	<b>16,339</b>	<b>16,510</b>	1.1%
<b>Liabilities/Equity</b>	<b>53.3</b>	<b>60.0</b>	6.7%p

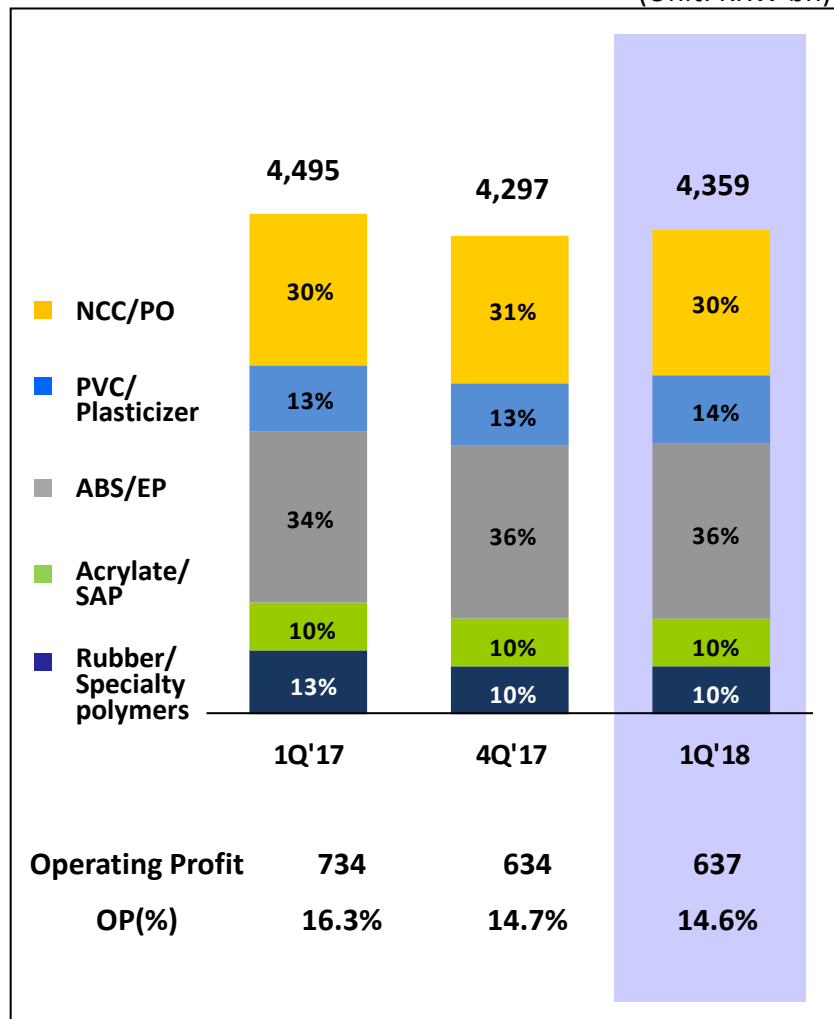
### Financial Ratios

Classification	'17 (End)	1Q'18 (End)	Change
<b>Borrowings / Equity (%)</b>	18.6	25.7	7.1%p
<b>Net borrowings/ Equity (%)</b>	1.6	6.7	5.1%p
<b>Interest Coverage Ratio (x)</b>	29.3	25.4	-3.9
<b>ROE (%)</b>	13.3	13.5	0.2%p
<b>ROA (%)</b>	8.9	8.6	-0.3%p

※ ROE: Annualized net profit / Avg. begin & end shareholders equity  
 ROA: Annualized net profit / Avg. begin & end asset

## Divisional Results

(Unit: KRW bn)



## Analysis & Outlook

### Analysis

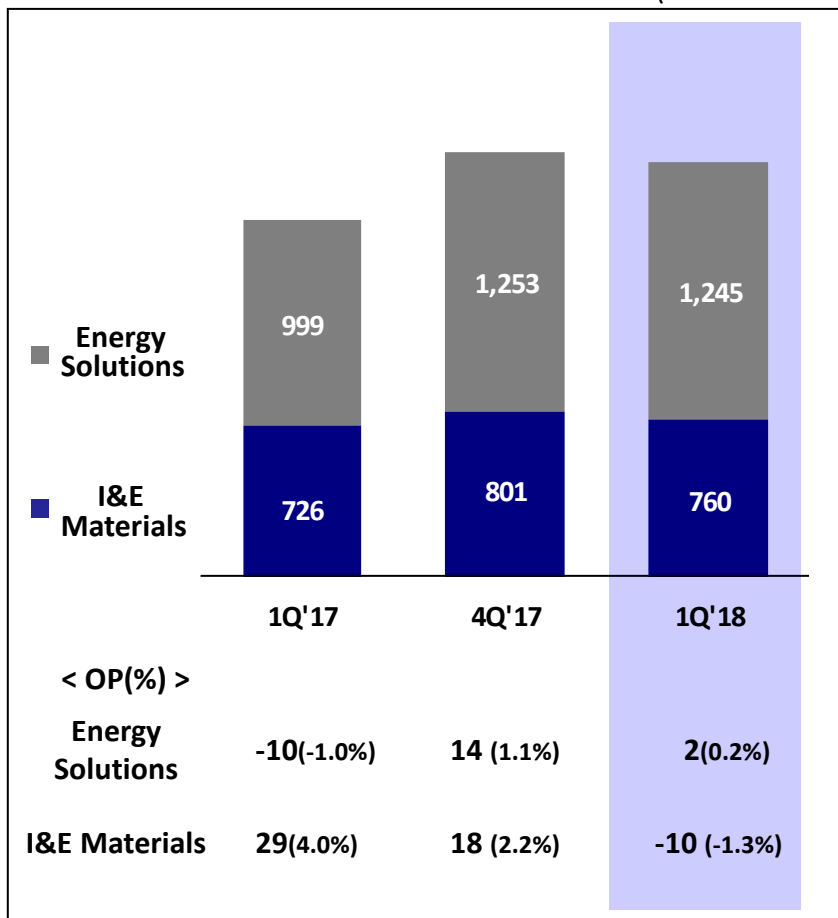
- Despite improvement in some products' spread, profitability was maintained QoQ due to strong KRW and increase in feedstock cost
  - NCC/PO : Limited spread improvement due to burden of feedstock cost caused by oil price rise
  - PVC/Plasticizer : Improved profit thanks to widened spread on the back of demand recovery
  - ABS/EP : Continued solid earnings thanks to robust sales driven by demand for home appliances in China
  - Acrylate/SAP : Improved profitability thanks to increase in sales of premium product
  - Rubber/Specialty Polymers : Increased profit thanks rise of contract price of synthetic rubber

### Outlook

- Despite the uncertainty such as F/X and oil price, business performance is expected to improve thanks to seasonality and increase of premium product sales

## Divisional Results

(Unit: KRW bn)



## Analysis & Outlook

### Analysis

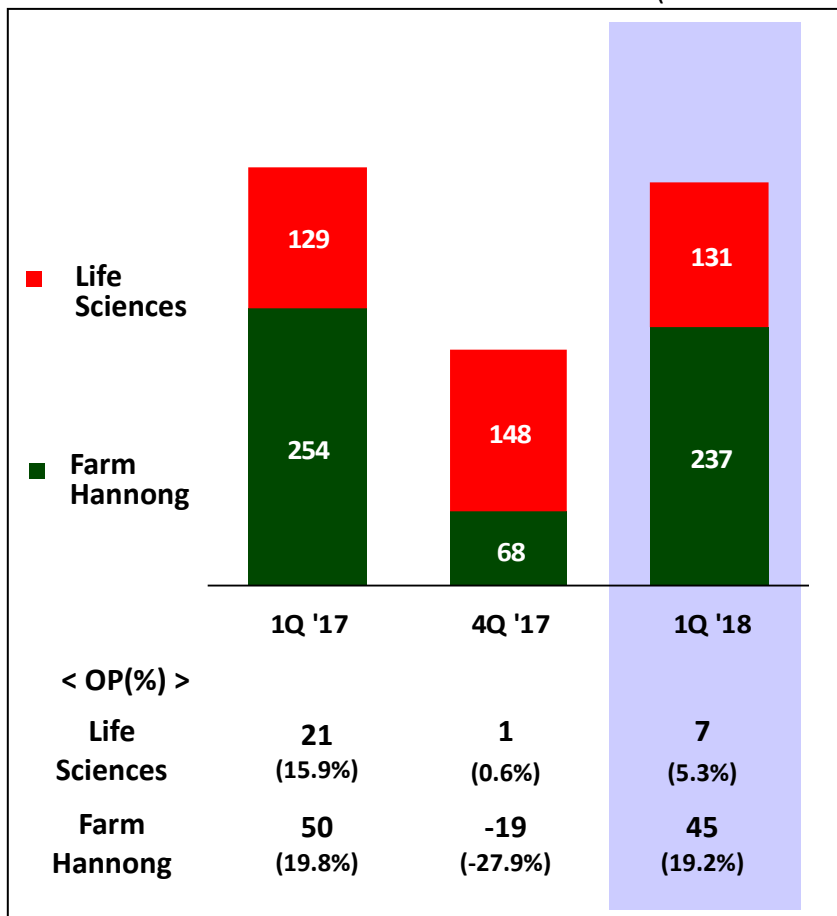
- **Energy Solutions** : Despite decrease of ESS / small size battery shipment due to seasonality, EV battery sales increased with strong market demand for EV
- **I&E Materials** : ASP cut / declined shipment due to weak market situation of front industry and strong KRW caused sales decrease and operating loss

### Outlook

- **Energy Solutions** : Continuous sales growth and profitability improvement are expected on the back of increase in demand for overall business of EV / ESS / small size battery
- **I&E Materials** : Although weak display market situation will likely to impact, profitability is expected to improve thanks to shipment increase due to seasonality as well as cost saving effect

## Divisional Results

(Unit: KRW bn)



## Analysis & Outlook

### Analysis

- **Life Sciences** : Profit improved thanks to the milestone income through new drug approval in overseas despite decrease in vaccine sales
- **Farm Hannong** : Sales and OP surged QoQ thanks to seasonality while slightly decreased YoY due to selective participation in the tenders as well as increased R&D investment

### Outlook

- **Life Sciences** : Increase in sales driven by growth of major products and new drug's (Eucept) launch is expected while increase in R&D investment for developing new molecule drug and marketing expense are planned
- **Farm Hannong** : YoY growth through sales expansion of premium products and launch of new crop protection product (Terrado'r) is estimated



(Unit: KRW bn)

Classification	2016					2017					2018
	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q
Sales	4,874	5,219	5,054	5,512	20,659	6,487	6,382	6,397	6,432	25,698	6,554
Operating Profit	458	612	460	462	1,992	797	727	790	615	2,929	651
(%)	9.4%	11.7%	9.1%	8.4%	9.6%	12.3%	11.4%	12.3%	9.6%	11.4%	9.9%
EBITDA	780	946	796	805	3,327	1,151	1,074	1,137	972	4,335	1,006
(%)	16.0%	18.1%	15.8%	14.6%	16.0%	17.8%	16.8%	17.8%	15.1%	16.9%	15.3%
<b>Basic Materials &amp; Chemicals</b>	<b>3,512</b>	<b>3,653</b>	<b>3,525</b>	<b>3,758</b>	<b>14,447</b>	<b>4,495</b>	<b>4,319</b>	<b>4,316</b>	<b>4,297</b>	<b>17,427</b>	<b>4,359</b>
NCC / PO	1,156	1,221	1,131	1,161	4,669	1,362	1,291	1,246	1,323	5,222	1,326
PVC / Plasticizer	489	508	496	542	2,035	588	572	560	568	2,288	605
ABS	877	920	866	948	3,611	1,216	1,185	1,261	1,214	4,876	1,233
EP	298	299	304	308	1,210	332	307	357	347	1,343	347
Acrylate / SAP	345	331	357	391	1,424	435	427	425	420	1,706	427
Rubber / Specialty Polymer	347	374	370	408	1,499	563	537	467	424	1,991	420
Operating Profit	466	649	517	506	2,139	734	686	755	634	2,808	637
(%)	13.3%	17.8%	14.7%	13.5%	14.8%	16.3%	15.9%	17.5%	14.7%	16.1%	14.6%
<b>Energy Solutions</b>	<b>814</b>	<b>809</b>	<b>879</b>	<b>1,059</b>	<b>3,562</b>	<b>999</b>	<b>1,120</b>	<b>1,189</b>	<b>1,253</b>	<b>4,561</b>	<b>1,245</b>
Operating Profit	0	-31	-14	-4	-49	-10	8	18	14	29	2
(%)	0.0%	-3.9%	-1.6%	-0.3%	-1.4%	-1.0%	0.7%	1.5%	1.1%	0.6%	0.2%
<b>I&amp;E Materials</b>	<b>627</b>	<b>650</b>	<b>641</b>	<b>739</b>	<b>2,656</b>	<b>726</b>	<b>747</b>	<b>787</b>	<b>801</b>	<b>3,062</b>	<b>760</b>
Operating Profit	-8	-15	-16	-16	-55	29	23	41	18	112	-10
(%)	-1.3%	-2.2%	-2.5%	-2.2%	-2.1%	4.0%	3.1%	5.2%	2.2%	3.6%	-1.3%
<b>Life Sciences</b>	<b>120</b>	<b>131</b>	<b>135</b>	<b>147</b>	<b>532</b>	<b>129</b>	<b>135</b>	<b>139</b>	<b>148</b>	<b>552</b>	<b>131</b>
Operating Profit	17	11	10	9	47	21	19	13	1	54	7
(%)	14.3%	8.1%	7.5%	6.4%	8.9%	15.9%	14.0%	9.5%	0.6%	9.7%	5.3%
<b>Farm Hannong</b>	<b>242</b>	<b>189</b>	<b>87</b>	<b>50</b>	<b>568</b>	<b>254</b>	<b>186</b>	<b>97</b>	<b>68</b>	<b>604</b>	<b>237</b>
Operating Profit	39	-2	-20	-31	-15	50	14	-10	-19	36	45
(%)	15.9%	-1.2%	-23.3%	-61.1%	-2.6%	19.8%	7.3%	-10.1%	-27.9%	5.9%	19.2%

## Borrowings

(Unit : KRW bn)

Classification	'16 (End)	'17 (End)	1Q'18 (End)
<b>Total</b> (Overseas Subsidiaries)	<b>2,891</b> (1,892)	<b>3,045</b> (1,686)	<b>4,236</b> (1,854)
<b>KRW Currency</b>	<b>521</b> 18%	<b>1,327</b> 44%	<b>2,375</b> 56%
<b>C P</b>	270	1,217	2,264
<b>Others</b>	252	110	111
<b>Foreign Currency</b>	<b>2,369</b> 82%	<b>1,718</b> 56%	<b>1,861</b> 44%
<b>Short-term</b> (Overseas Subsidiaries)	<b>2,213</b> (1,284) 77%	<b>1,451</b> (1,167) 48%	<b>1,593</b> (1,323) 38%
<b>Long-term</b> (Overseas Subsidiaries)	<b>678</b> (607) 23%	<b>1,594</b> (519) 52%	<b>2,643</b> (531) 62%
<b>Cash</b>	2,207	2,779	3,132
<b>Net borrowings</b>	683	266	1,105

※ Numbers in brackets are amounts for overseas subsidiaries and the % is calculated to total borrowings.

## Cash Flow

(Unit: KRW bn)

Classification	'17 (Acc.)	4Q'17 (Acc.)	1Q'18 (End)
<b>Beginning Cash</b>	<b>2,207</b>	<b>2,400</b>	<b>2,779</b>
<b>Operating/Investing</b>	<b>1,337</b>	<b>546</b>	<b>-831</b>
<b>Operating profit</b>	2,929	615	651
<b>Depreciation</b>	1,406	357	355
<b>Working Capital</b>	-845	168	-707
<b>Investing Activities</b>	-1,844	-536	-867
<b>Others</b>	-309	-59	-262
<b>Financing</b>	<b>-737</b>	<b>-132</b>	<b>1,170</b>
<b>Borrowings</b> (Financed & reimbursed)	-351	-132	1,170
<b>Dividends paid</b>	-386	-	-
<b>Ending Cash</b>	<b>2,779</b>	<b>2,779</b>	<b>3,132</b>

### CAPEX

(Unit: KRW bn)

Classification		'16 (Acc.)	'17 (Acc.)	4Q '17	1Q '18
Basic Materials & Chemicals	New / Expansion	103	324	192	116
	Maintenance	289	345	143	49
	<b>Total</b>	<b>392</b>	<b>669</b>	<b>335</b>	<b>164</b>
Energy Solutions	New / Expansion	365	691	301	150
	Maintenance	197	259	109	30
	<b>Total</b>	<b>563</b>	<b>950</b>	<b>410</b>	<b>181</b>
I & E Materials	New / Expansion	291	120	42	46
	Maintenance	95	101	37	28
	<b>Total</b>	<b>386</b>	<b>221</b>	<b>79</b>	<b>75</b>
Life Sciences	New / Expansion	124	81	34	24
	Maintenance	38	25	9	2
	<b>Total</b>	<b>162</b>	<b>106</b>	<b>43</b>	<b>26</b>
Common (including Farm Hannong)	New / Expansion	555	395	194	23
	Maintenance	82	200	115	32
	<b>Total</b>	<b>637</b>	<b>595</b>	<b>309</b>	<b>55</b>
<b>Total</b>	New / Expansion	1,314	1,612	764	359
	Maintenance	663	928	413	141
	<b>Total</b>	<b>1,977</b>	<b>2,540</b>	<b>1,177</b>	<b>500</b>

### R&D expenses

(Unit: KRW bn)

Classification	'16 (Acc.)	'17 (Acc.)	4Q '17	1Q '18
<b>Basic Materials &amp; Chemicals</b> (% of sales)	150 (1.0%)	164 (0.9%)	41 (0.9%)	40 (0.9%)
<b>Energy Solutions</b> (% of sales)	276 (7.7%)	299 (6.2%)	75 (6.0%)	70 (5.6%)
<b>I &amp; E Materials</b> (% of sales)	161 (6.1%)	181 (5.9%)	47 (5.9%)	48 (6.3%)
<b>Life Sciences</b> (% of sales)	91 (17.1%)	96 (17.4%)	28 (19.1%)	28 (21.3%)
<b>Common</b> (including Farm Hannong)	91	152	43	47
<b>Total</b> (% of sales)	678 (3.3%)	892 (3.5%)	235 (3.6%)	233 (3.6%)

\* As of 1Q'18, more than 50% of Energy solutions' R&D expenses were used for EV battery accumulatively

## Business Plan

(Unit: KRW tn)

Classification	'17	'18 Plan	Change
Sales	25.7	26.9	+4.7%
Basic Materials & Chemicals	17.4	16.8	-3.6%
Energy Solutions	4.6	6.1	+34.2%
I&E Materials	3.1	3.4	+9.4%
Life Sciences	0.6	0.6	+8.8%
Farm Hannong	0.6	0.7	+14.3%
Operating Profits	2.9	N/A	N/A

## CAPEX Plan

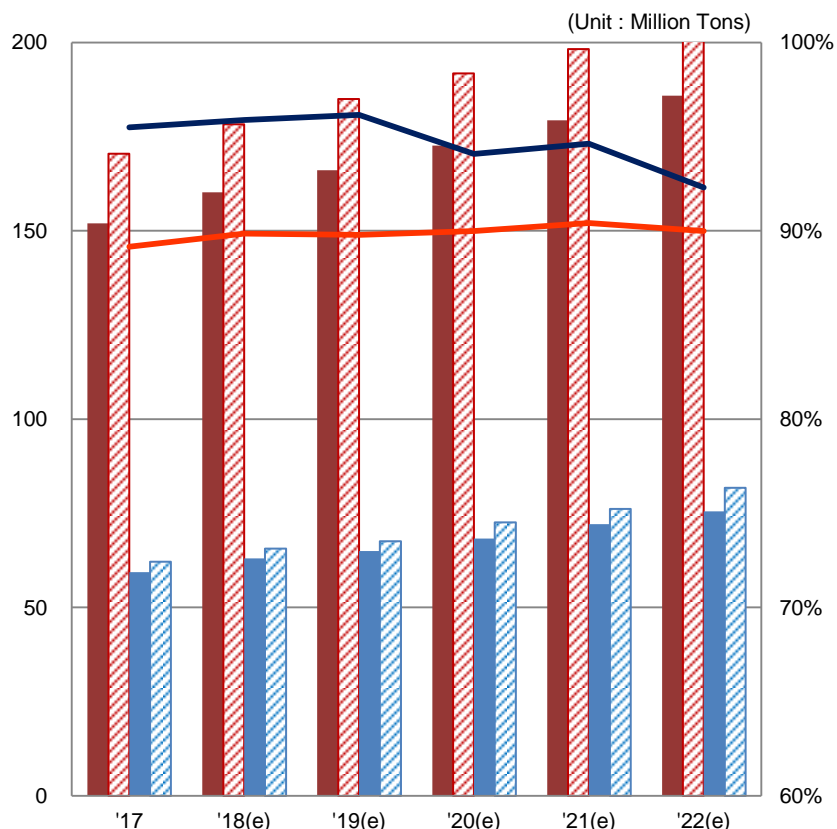
(Unit: KRW tn)

Classification	'17	'18 Plan	Change
LG Chem	2.5	3.8	+52%
New/Expansion	1.2	2.2	+85%
Maintenance	0.9	1.2	+30%
R&D	0.4	0.4	+2%

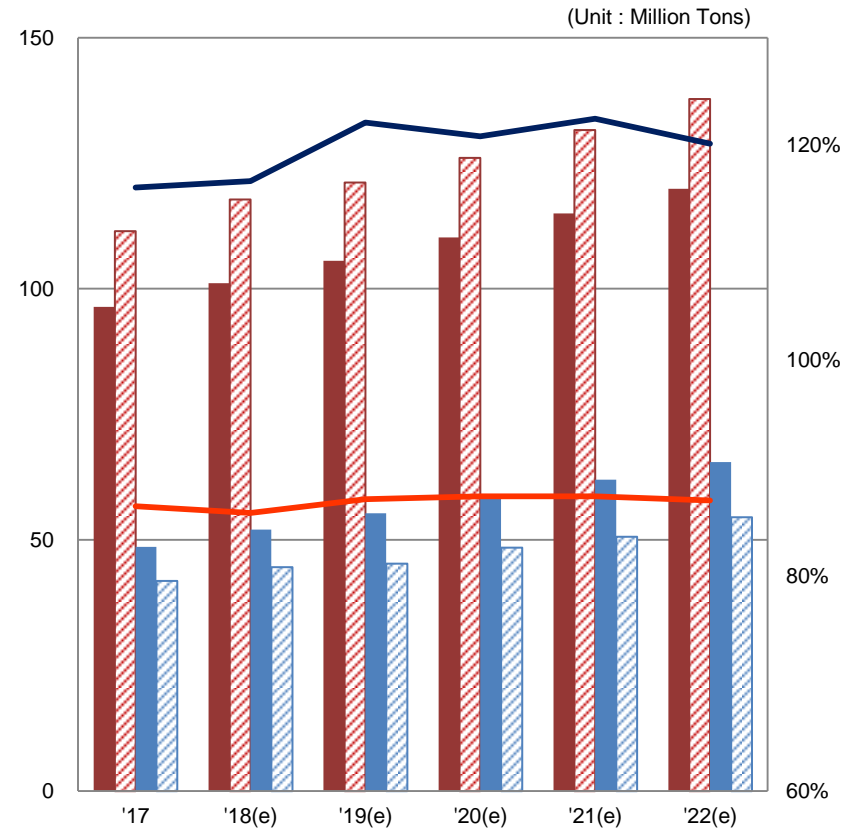
	'17	'18
Basic Materials & Chemicals	0.7	1.3
Energy Solution	1.0	1.5
Others	0.4	0.7

- Expansion of Investment in specialty items and their feedstock
- Preparation for mass production of awarded projects and laying the groundwork for core competency
- Investment in mobile and ESS batteries

## Ethylene



## Polyethylene

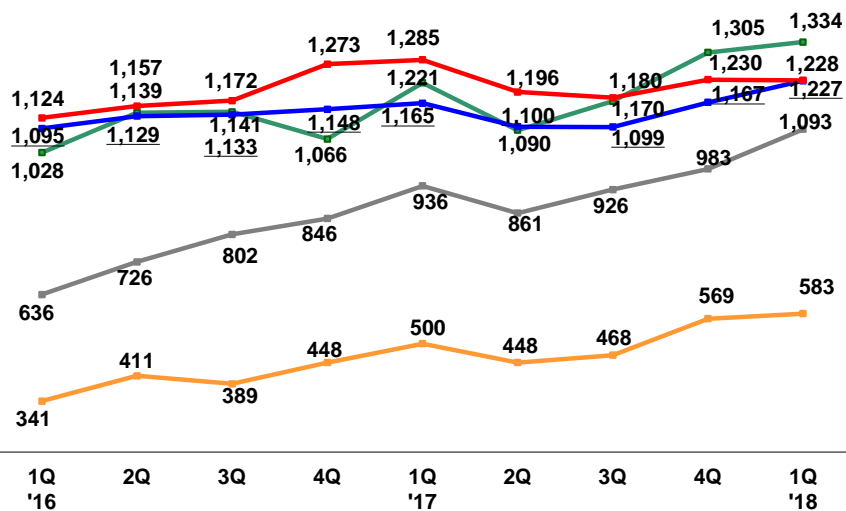


■ Demand (Global)   
 ■ Supply (Global)   
 — Demand/Supply (Global, %)

■ Demand (Asia)   
 ■ Supply (Asia)   
 — Demand/Supply (Asia, %)

(Source : IHS)

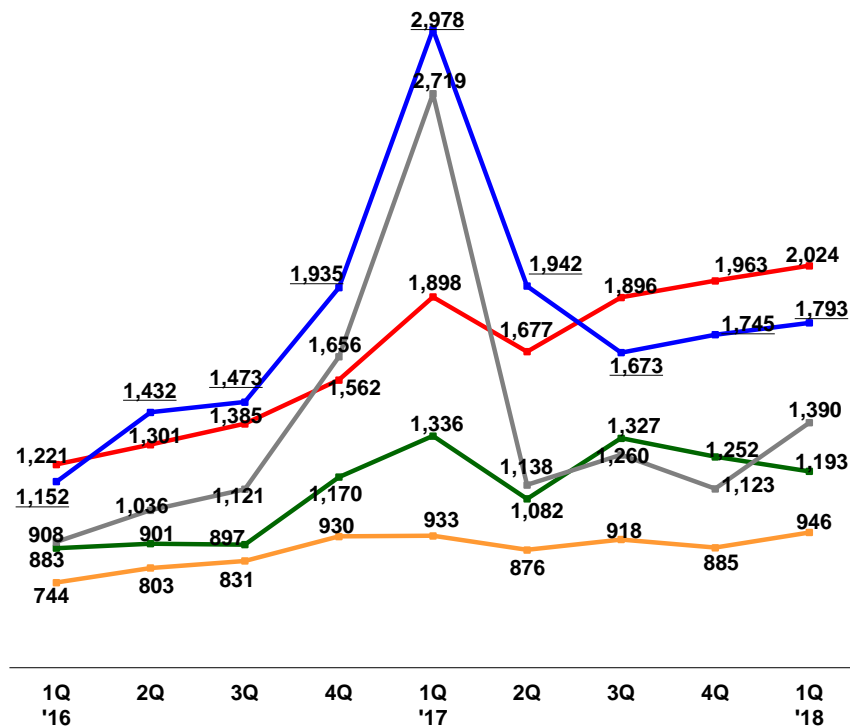
(Unit : USD/MT)



— Naphtha — Ethylene — Propylene — HDPE(Film) — LDPE

**NCC/PO**

(Unit : USD/MT)



— ABS — PVC — B.Acrylate — BD — BR

**ABS/EP**

**PVC/  
Plasticizer**

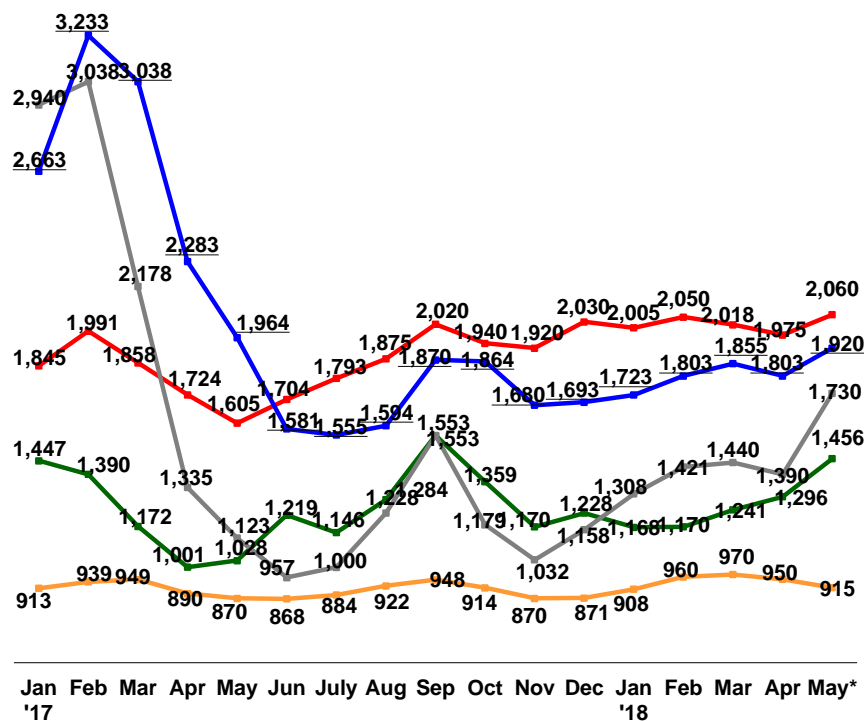
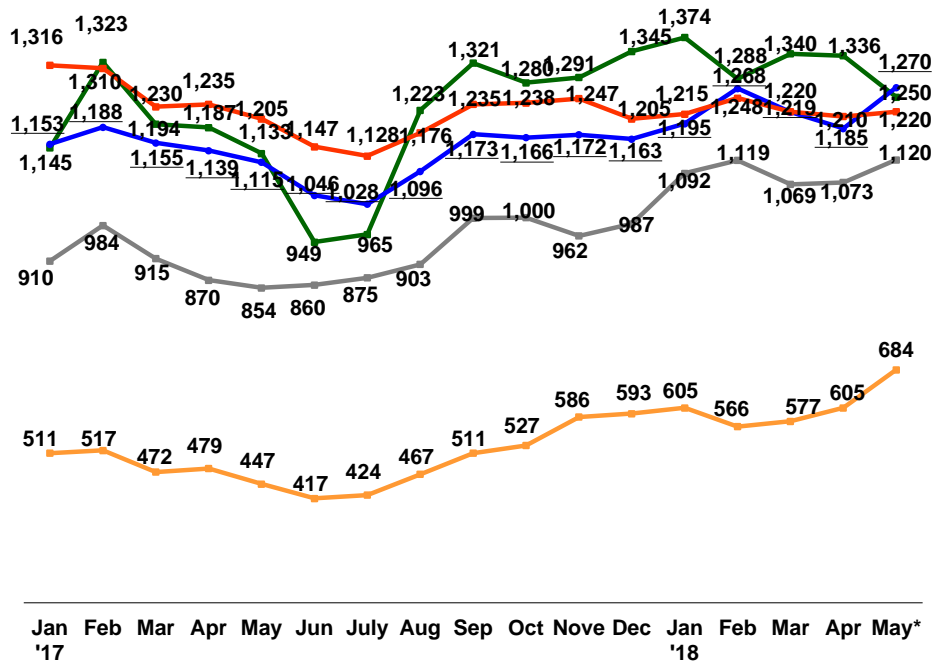
**Acrylate/  
SAP**

**Rubber/  
Specialty Polymers**

• The prices are average price of CFR FE Asia for general grade in each product group.

(Unit : USD/MT)

(Unit : USD/MT)



— Naphtha — Ethylene — Propylene — HDPE(Film) — LDPE

— ABS — PVC — B.Acrylate — BD — BR

NCC/PO

ABS/EP

PVC/  
Plasticizer

Acrylate/  
SAP

Rubber/  
Specialty Polymers

• The prices are average price of CFR FE Asia for general grade in each product group.  
\* shows the average prices on 3rd week of May, 2018