

1Q 2017 Business Results & Outlook

May, 2017



Disclaimer

The business results for the first quarter of 2017 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.

Table of Contents

1Q 2017 Business Results **1**

Divisional Results & Outlook **3**

Appendix **6**

- Divisional Sales & Operating Profit
- Borrowing & Cash Flow
- CAPEX & R&D Expenses
- Ethylene/PE Supply & Demand
- Quarterly Price Trends
- Monthly Price Trends

(Unit: KRW bn)

Classification	'16.1Q	'16.4Q	'17.1Q	YoY	QoQ
Sales	4,874	5,512	6,487	33.1%	17.7%
Operating Profit	458	462	797	74.1%	72.6%
(%)	(9.4)	(8.4)	(12.3)		
EBITDA	780	805	1,151	47.7%	43.0%
(%)	(16.0)	(14.6)	(17.8)		
Pre-tax Income	423	358	698	65.0%	95.0%
(%)	(8.7)	(6.5)	(10.8)		
Net Income	338	270	548	62.1%	103.0%
(%)	(6.9)	(4.9)	(8.4)		

* Business performances of Farm Hannong and Life Sciences have been included since '16.2Q and '17.1Q, respectively.

Financial Position

(Unit: KRW bn)

Classification	'16 (End)	'17.1Q (End)	Change
Asset	20,487	22,171	8.2%
Cash and equivalents	2,207	1,909	-13.5%
Liabilities	6,436	7,265	12.9%
Borrowings	2,891	3,147	8.9%
Shareholder's Equity	14,051	14,906	6.1%
Liabilities/Equity	45.8	48.7	*2.9%p

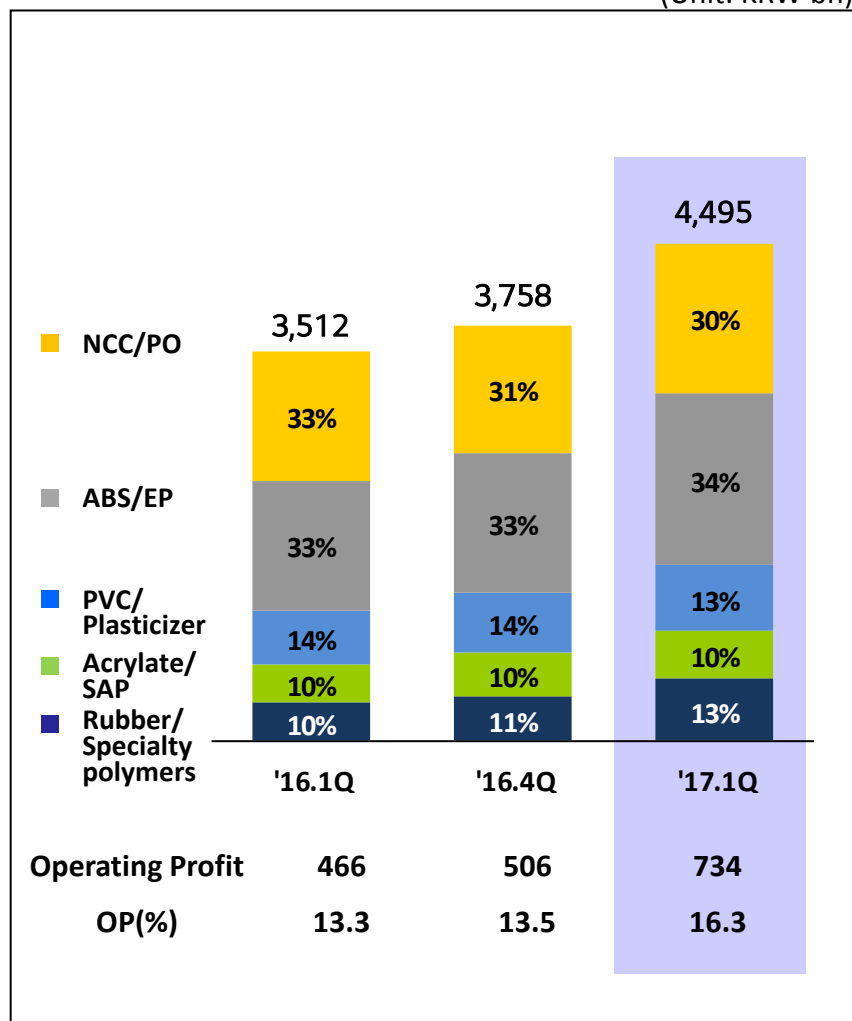
* Liabilities/Equity ratio excluding Life Sciences is 44.9%
Incremental Liabilities/Equity ratio of 3.8%p is the impact from Life Sciences merger

Financial Ratios

Classification	'16 (End)	'17.1Q (End)	Change
Borrowings / Equity (%)	20.6	21.1	0.5%p
Net borrowings/ Equity (%)	4.9	8.3	3.4%p
Interest Coverage Ratio (x)	25.9	29.4	3.5
ROE (%)	9.4	15.1	5.7%p
ROA (%)	6.6	10.3	3.7%p

Business results

(Unit: KRW bn)



Analysis

Analysis

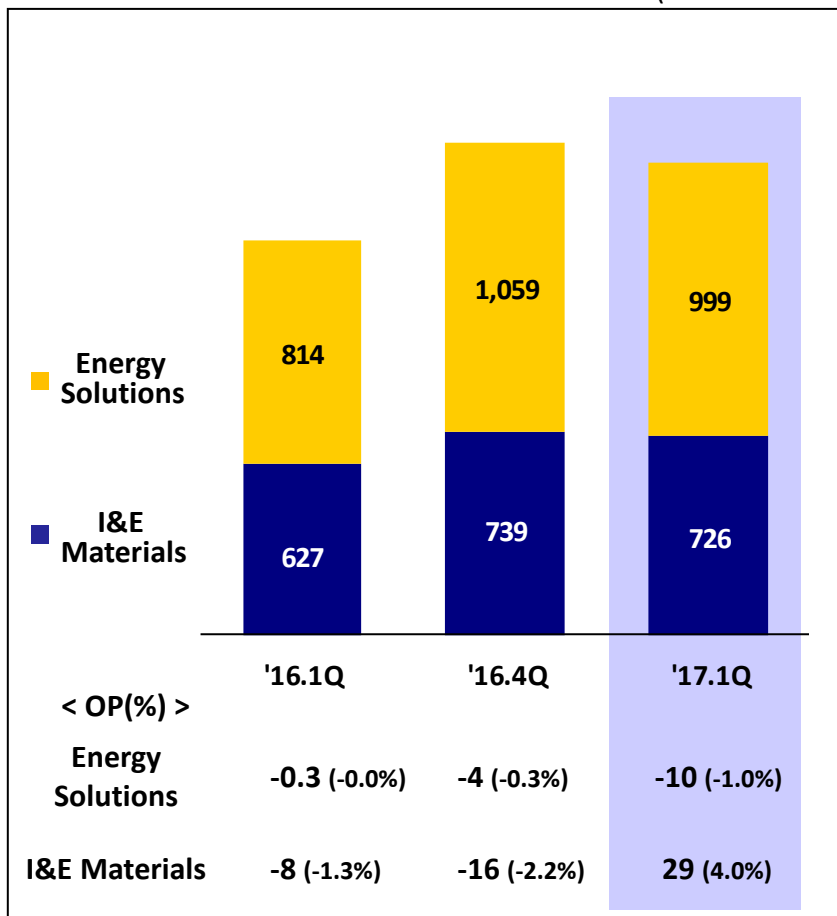
- Quarterly earnings recorded historical high on the back of restocking demand due to rise in oil prices, improved product spreads led by tight supply/demand as well as solid performance in China
- NCC/PO : Profitability improved significantly by tight supply and demand of upstream products
- ABS/EP : Solid results were generated based on increase in pre-stocking demand due to rise in feedstock prices (SM, BD and others) and favorable business condition in China
- PVC/Plasticizer : Similar profitability level maintained quarter on quarter as the PVC price stayed at the elevated level after the rise in coal price in China
- Acrylate/SAP : Profitability improved thanks to the ASP increase pushed by strong feedstock prices
- Rubber/Specialty Polymers : Profitability of synthetic rubber declined on the back of short-term feedstock (BD) price spike (One quarter of lagging for the cost reflection in the ASP)

Outlook

- A trend of solid earnings will continue by sales increase of premium product while product spreads are expected to squeeze on the back of temporary wait-and-see stance of purchase due to the expectation of weak oil prices in 2Q

Business results

(Unit: KRW bn)



Analysis

Analysis

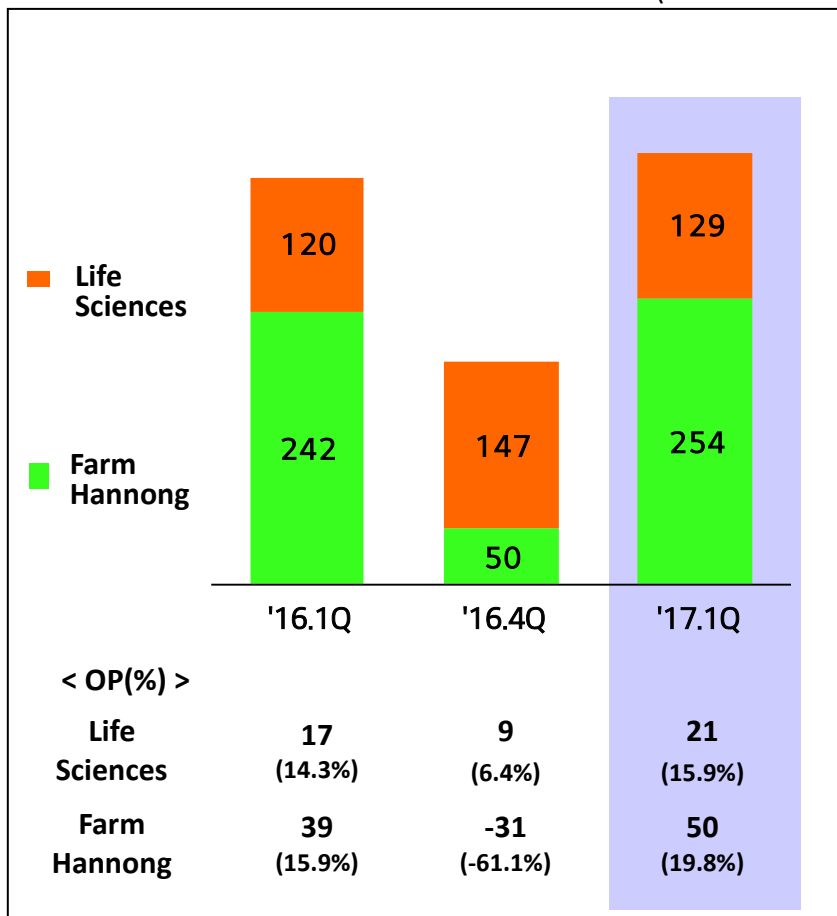
- Energy Solutions** : Despite continuing growth in automotive battery, overall sales and profitability declined QoQ due to weak season in small size/ ESS batteries
- I&E Materials** : Business turned to the profit based on recovery in front industry, advanced product mix , improved productivity and the cost cutting activities

Outlook

- Energy Solutions** : Growth will continue on the back of sales growth in automotive/ESS batteries, increase in sales toward key customers in small battery as well as acceleration in market shift to new application
- I&E Materials** : Improvement of productivity/profitability will continue by increasing proportion of production in China and products for large size TV. In addition, new businesses including RO filter will establish the base of future growth

Business results

(Unit: KRW bn)



Analysis

Analysis

- **Life Sciences** : Profitability improved significantly thanks to sales growth of major products(Yvoire, Zemiglo and others) and delay in execution of expenses due to the re-checking for R&D strategies
- **Farm Hannong** : Earnings improved by peak season, reduction of one-off costs and product mix improvement

Outlook

- **Life Sciences** : Sales growth of major products including 'Yvoire' and 'Zemiglo' will continue and profitability will stay at decent previous year level despite the likelihood of changes in profitability depending on the results of review on mid-to-long term strategies and resource input plan
- **Farm Hannong** : Despite the seasonality of strong 1H and weak 2H in the year, profitability improvement is expected through sales growth in fertilizer, concentration on seeding market and new product launch in crop protection

(Unit: KRW bn)

Classification	2016					2017				
	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total
Sales	4,874	5,219	5,054	5,512	20,659	6,487				6,487
Operating Profit	458	612	460	462	1,992	797				797
(%)	9.4%	11.7%	9.1%	8.4%	9.6%	12.3%				12.3%
EBITDA	778	949	796	804	3,327	1,151				1,151
(%)	16.0%	18.2%	15.8%	14.6%	16.0%	17.8%				17.8%
Basic Materials & Chemicals	3,512	3,653	3,525	3,758	14,447	4,495				4,495
NCC / PO	1,156	1,221	1,131	1,161	4,669	1,362				1,362
ABS	877	920	866	948	3,611	1,216				1,216
EP	298	299	304	308	1,210	332				332
PVC / Plasticizer	489	508	496	542	2,035	588				588
Acrylate / SAP	345	331	357	391	1,424	435				435
Rubber / Specialty Polymer	347	374	370	408	1,499	563				563
Operating Profit	466	649	517	506	2,139	734				734
(%)	13.3%	17.8%	14.7%	13.5%	14.8%	16.3%				16.3%
Energy Solutions	814	809	879	1,059	3,562	999				999
Operating Profit	0	-31	-14	-4	-49	-10				-10
(%)	0.0%	-3.9%	-1.6%	-0.3%	-1.4%	-1.0%				-1.0%
I&E Materials	627	650	641	739	2,656	726				726
Operating Profit	-8	-15	-16	-16	-55	29				29
(%)	-1.3%	-2.2%	-2.5%	-2.2%	-2.1%	4.0%				4.0%
Life Sciences	120	131	135	147	532	129				129
Operating Profit	17	11	10	9	47	21				21
(%)	14.3%	8.1%	7.5%	6.4%	8.9%	15.9%				15.9%
Farm Hannong	242	189	87	50	568	254				254
Operating Profit	39	-2	-20	-31	-15	50				50
(%)	15.9%	-1.2%	-23.3%	-61.1%	-2.6%	19.8%				19.8%
(Excluding One-off expenses)	49	20	-14	-25	29	50				50

* Business performances of Farm Hannong and Life Sciences have been included since 2Q16 and 1Q17, respectively.

Borrowings

(Unit : KRW bn)

Classification	'16 (End)	'17.1Q (End)
Total (Overseas Subsidiaries)	2,891 (1,892) 100%	3,147 (1,859) 100%
KRW Currency	521 18%	568 18%
C P	270	449
Others	252	119
Foreign Currency	2,369 82%	2,579 82%
Loan	1,921	1,908
Negotiation Borrowings	449	670
Short-term (Overseas Subsidiaries)	2,213 (1,284) 77%	2,175 (1,298) 69%
Long-term (Overseas Subsidiaries)	678 (607) 23%	972 (560) 31%

* The % is calculated to total borrowings.

Cash Flow

(Unit: KRW bn)

Classification	'16 (Acc.)	'17.1Q (Acc.)
Beginning Cash	2,694	2,207
Operating/Investing	524	0
Operating profit	1,992	797
Depreciation	1,335	355
Working Capital	-52	-462
Investing Activities	-1,993	-223
Others	-758	-466
Financing	-1,007	-271
Borrowings (Financed & reimbursed)	-606	-267
Dividends paid	-347	-
Ending Cash	2,207	1,909

CAPEX

(Unit: KRW bn)

Classification		'15 (Acc.)	'16 (Acc.)	'17.1Q (Acc.)
Basic Materials & Chemicals	New / Expansion	328	103	38
	Maintenance	385	289	50
	Total	713	392	89
Energy Solutions	New / Expansion	265	365	63
	Maintenance	189	197	38
	Total	454	563	101
I & E Materials	New / Expansion	219	291	17
	Maintenance	141	95	18
	Total	360	386	36
Life Sciences	New / Expansion	60	124	16
	Maintenance	19	38	9
	Total	79	162	25
Common	New / Expansion	133	555	24
	Maintenance	63	82	16
	Total	196	637	39
Total	New / Expansion	945	1,314	159
	Maintenance	778	663	131
	Total	1,723	1,977	290

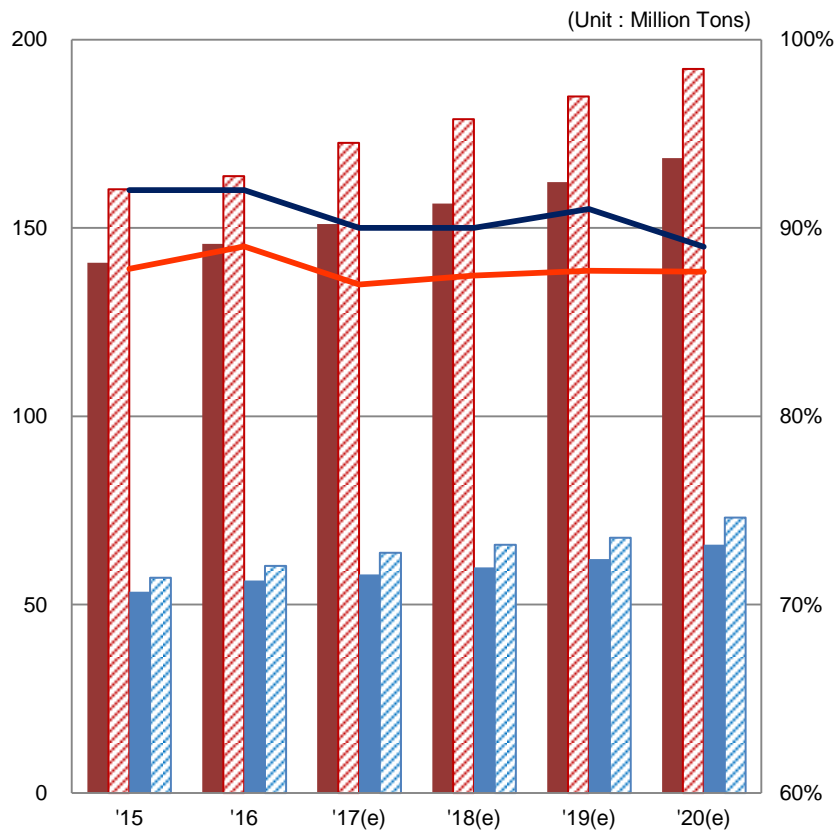
R&D expenses

(Unit: KRW bn)

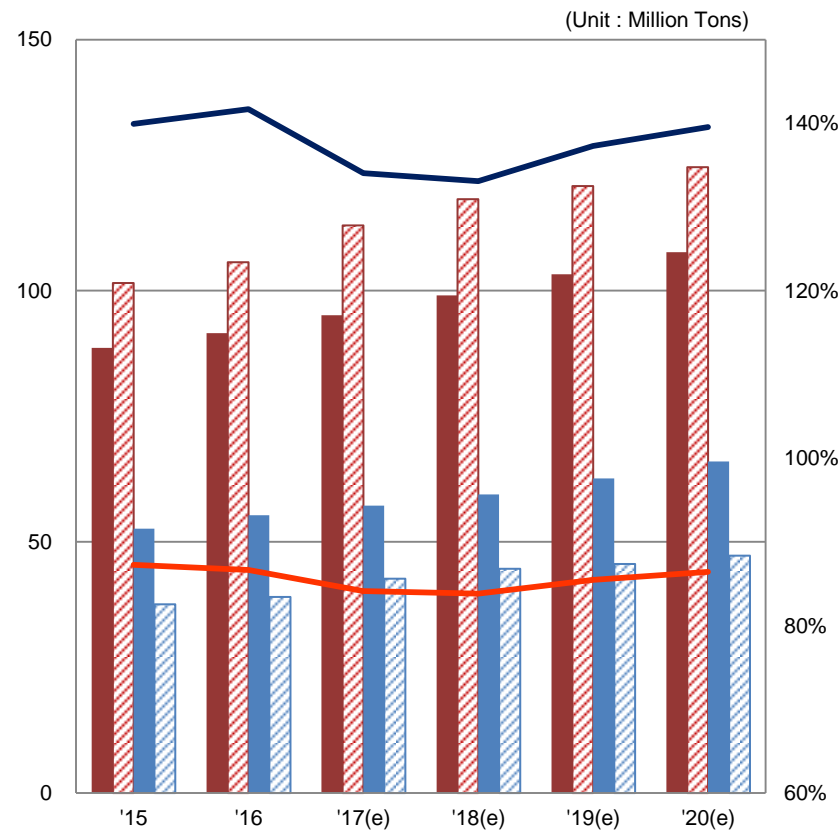
Classification	'15 (Acc.)	'16 (Acc.)	'17.1Q (Acc.)
Basic Materials & Chemicals (% of sales)	132 (0.9%)	150 (1.0%)	40 (0.9%)
Energy Solutions (% of sales)	244 (7.7%)	276 (7.7%)	78 (7.8%)
I & E Materials (% of sales)	146 (5.3%)	161 (6.1%)	44 (6.1%)
Life Sciences (% of sales)	79 (17.5%)	91 (17.1%)	20 (15.6%)
Common	72	80	35
Total (% of sales)	594 (2.9%)	667 (3.2%)	218 (3.4%)

- ① All R&D costs are expensed in the respective period
- ② As of 1Q 2017, more than 50% of Energy solutions R&D expenses were used for EV battery accumulatively
- ③ Business performances of Life Sciences have been included since 1Q 2017

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



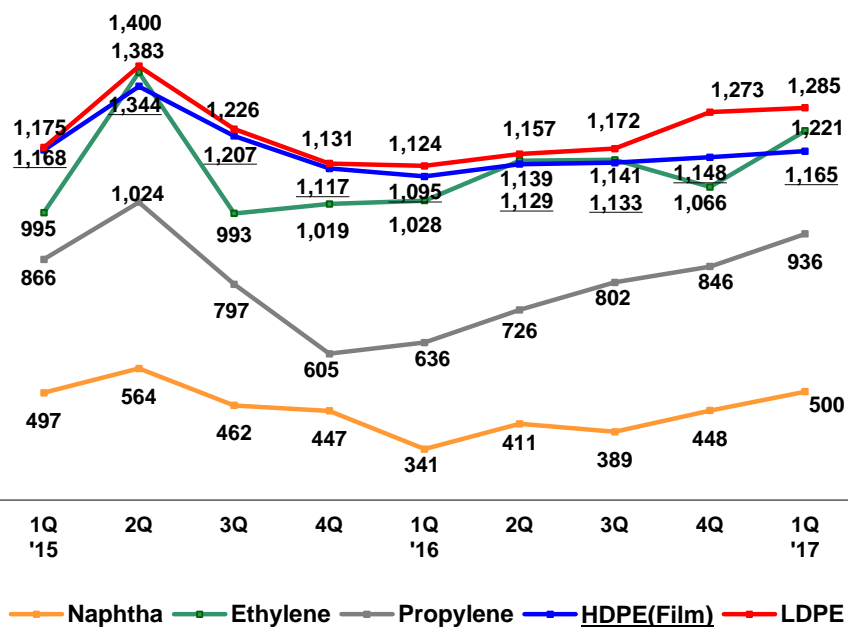
Ethylene



Polyethylene

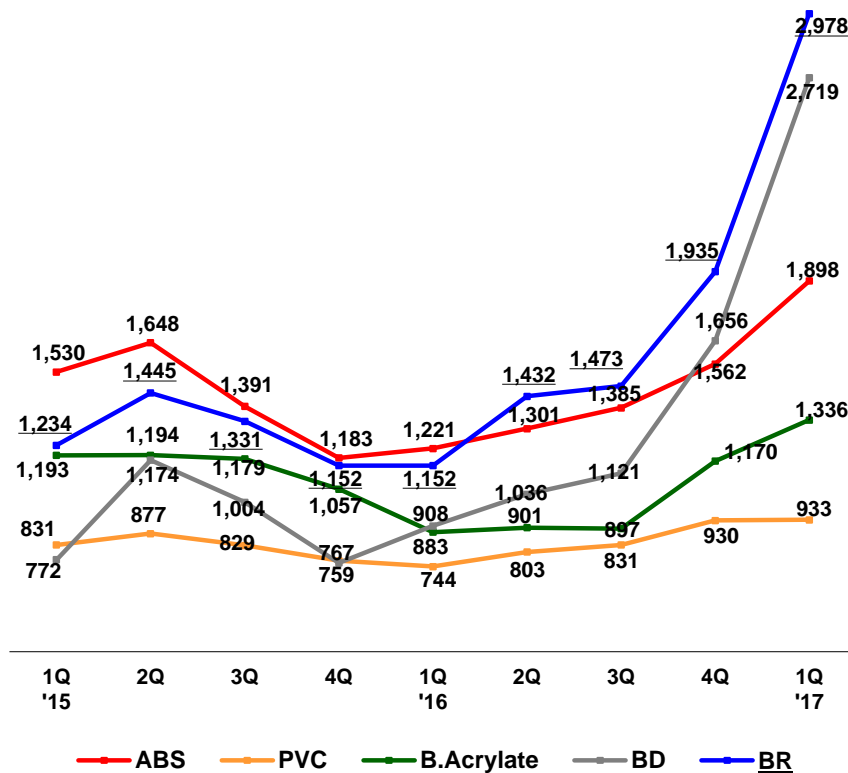
(Source : IHS)

(Unit:USD/MT)



NCC/PO

(Unit:USD/MT)



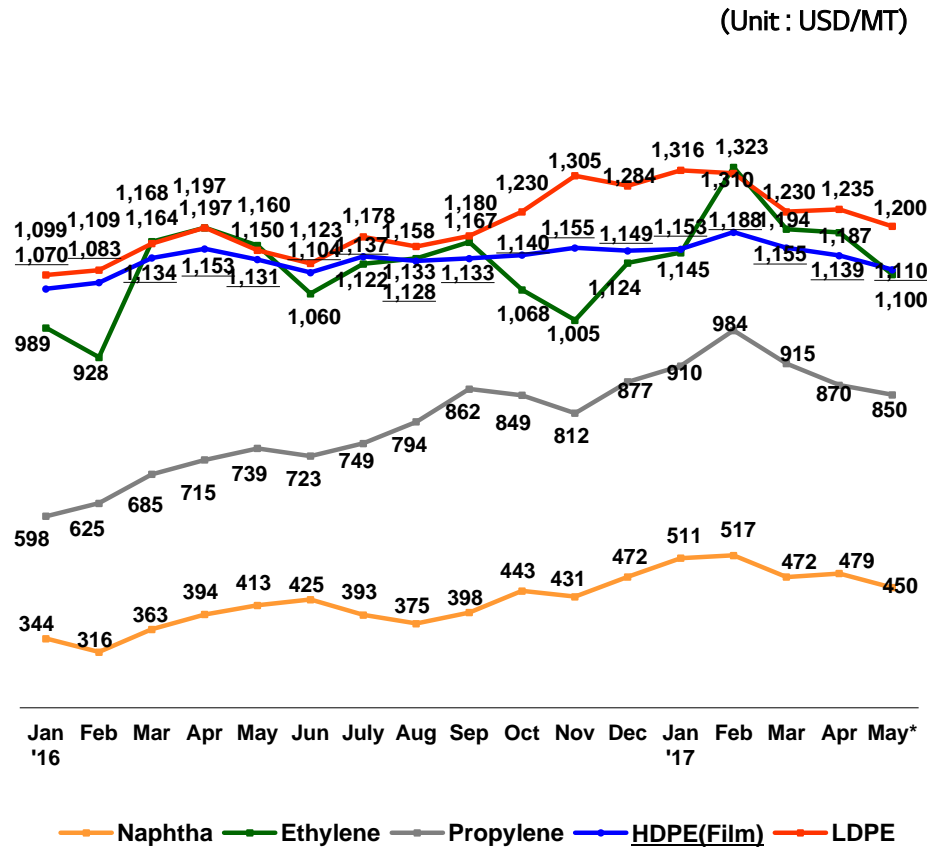
ABS/EP

PVC/
Plasticizer

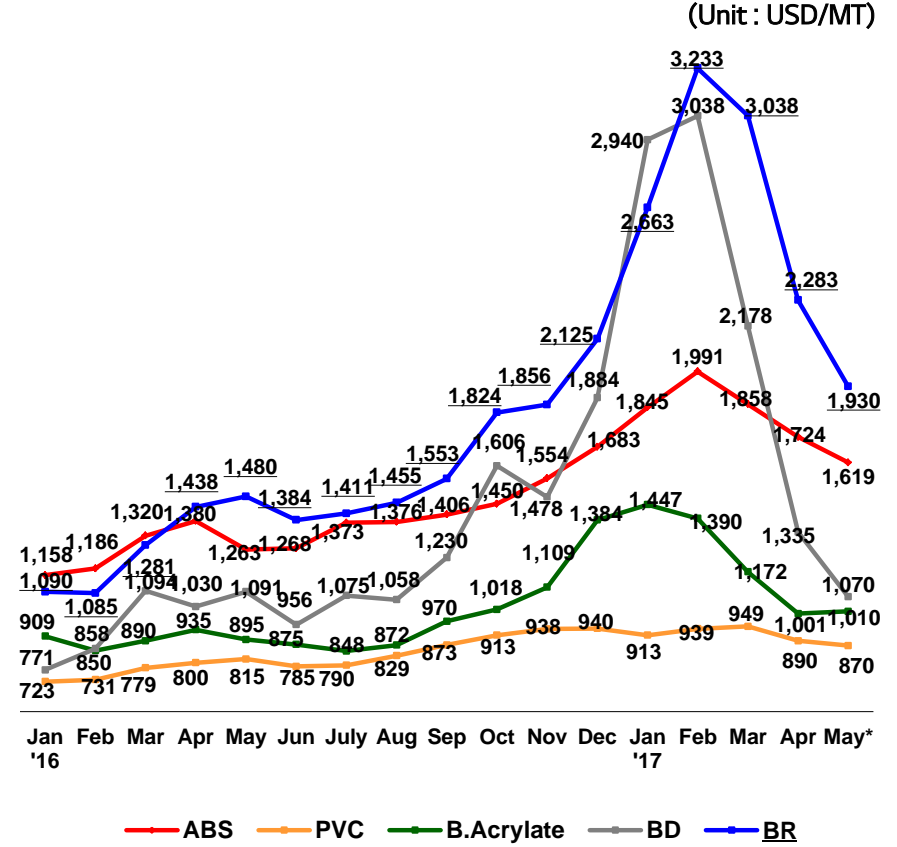
Acrylate/
SAP

Rubber/
Specialty Polymers

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



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 prices on may 22 , 2017