

1Q 2018 Business Results & Outlook

April 30, 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
Sales	6,487	6,432	6,554	1.0%	1.9%
Operating Profit	797	615	651	-18.3%	5.8%
(%)	(12.3)	(9.6)	(9.9)		
EBITDA	1,151	972	1,006	-12.6%	3.5%
(%)	(17.8)	(15.1)	(15.3)		
Pre-tax Income	698	434	653	-6.5%	50.6%
(%)	(10.8)	(6.7)	(10.0)		
Net Income	548	338	553	0.8%	63.5%
(%)	(8.4)	(5.3)	(8.4)		

Financial Position

(Unit: KRW bn)

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

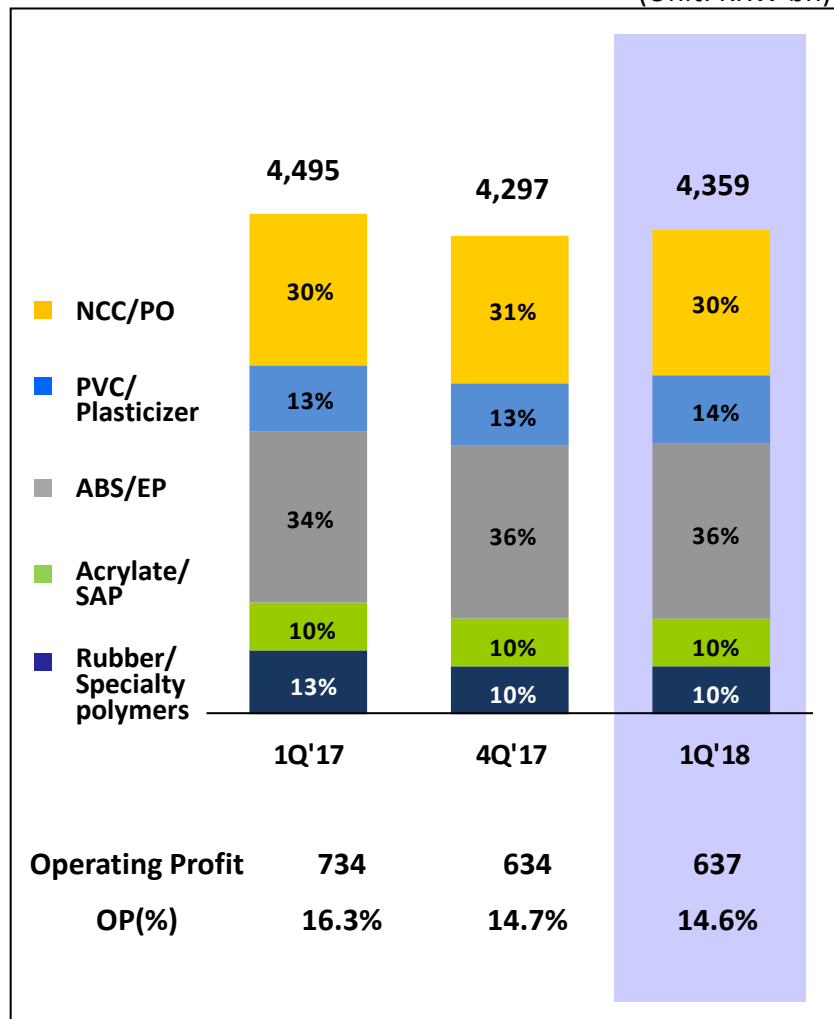
Financial Ratios

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

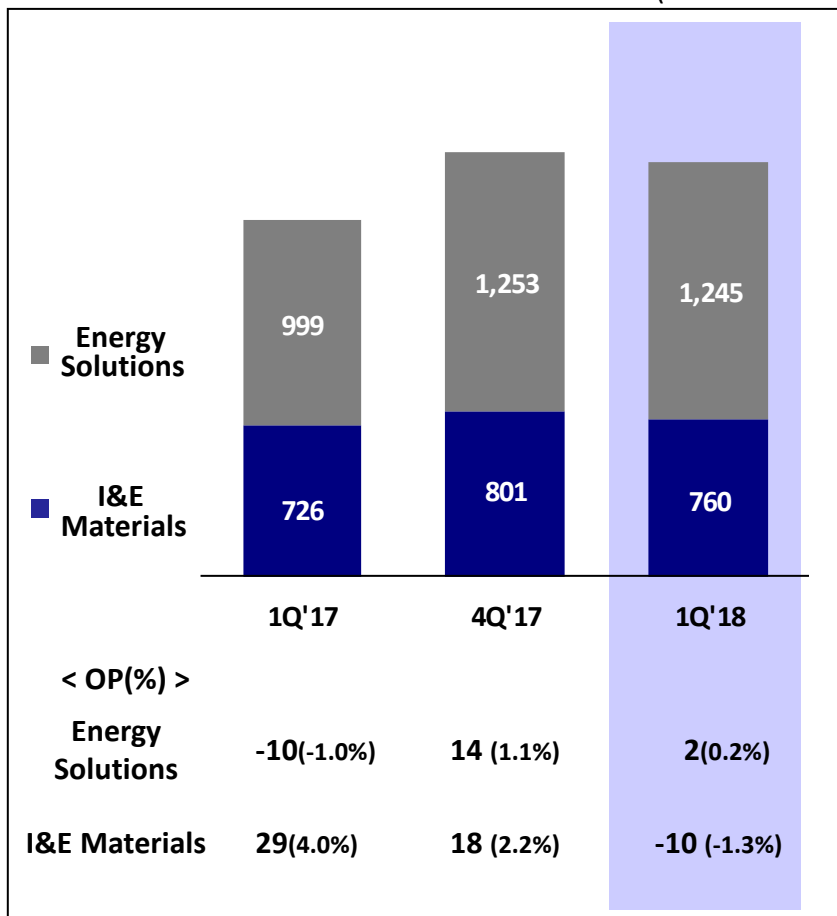
- Despite improvement in some products' spread, profitability was maintained QoQ due to strong KRW and increase in feedstock cost
 - NCC/PO : Limited spread improvement due to burden of feedstock cost caused by oil price rise
 - PVC/Plasticizer : Improved profit thanks to widened spread on the back of 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

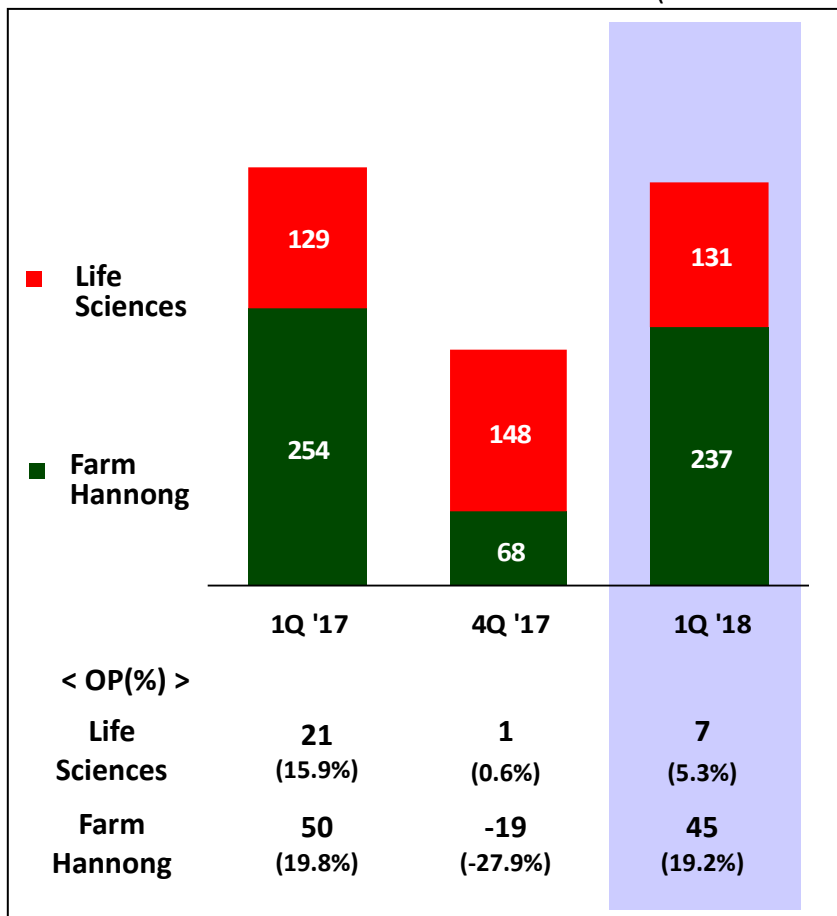
- **Energy Solutions** : Despite decrease of ESS / small size battery shipment due to seasonality, EV battery sales increased with strong market demand for EV
- **I&E Materials** : ASP cut / declined shipment due to weak market situation of front industry and strong KRW caused sales decrease and operating 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%
Basic Materials & Chemicals	3,512	3,653	3,525	3,758	14,447	4,495	4,319	4,316	4,297	17,427	4,359
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%
Energy Solutions	814	809	879	1,059	3,562	999	1,120	1,189	1,253	4,561	1,245
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%
I&E Materials	627	650	641	739	2,656	726	747	787	801	3,062	760
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%
Life Sciences	120	131	135	147	532	129	135	139	148	552	131
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%
Farm Hannong	242	189	87	50	568	254	186	97	68	604	237
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)
Total (Overseas Subsidiaries)	2,891 (1,892)	3,045 (1,686)	4,236 (1,854)
KRW Currency	521 18%	1,327 44%	2,375 56%
C P	270	1,217	2,264
Others	252	110	111
Foreign Currency	2,369 82%	1,718 56%	1,861 44%
Short-term (Overseas Subsidiaries)	2,213 (1,284) 77%	1,451 (1,167) 48%	1,593 (1,323) 38%
Long-term (Overseas Subsidiaries)	678 (607) 23%	1,594 (519) 52%	2,643 (531) 62%
Cash	2,207	2,779	3,132
Net borrowings	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)
Beginning Cash	2,207	2,400	2,779
Operating/Investing	1,337	546	-831
Operating profit	2,929	615	651
Depreciation	1,406	357	355
Working Capital	-845	168	-707
Investing Activities	-1,844	-536	-867
Others	-309	-59	-262
Financing	-737	-132	1,170
Borrowings (Financed & reimbursed)	-351	-132	1,170
Dividends paid	-386	-	-
Ending Cash	2,779	2,779	3,132

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
	Total	392	669	335	164
Energy Solutions	New / Expansion	365	691	301	150
	Maintenance	197	259	109	30
	Total	563	950	410	181
I & E Materials	New / Expansion	291	120	42	46
	Maintenance	95	101	37	28
	Total	386	221	79	75
Life Sciences	New / Expansion	124	81	34	24
	Maintenance	38	25	9	2
	Total	162	106	43	26
Common (including Farm Hannong)	New / Expansion	555	395	194	23
	Maintenance	82	200	115	32
	Total	637	595	309	55
Total	New / Expansion	1,314	1,612	764	359
	Maintenance	663	928	413	141
	Total	1,977	2,540	1,177	500

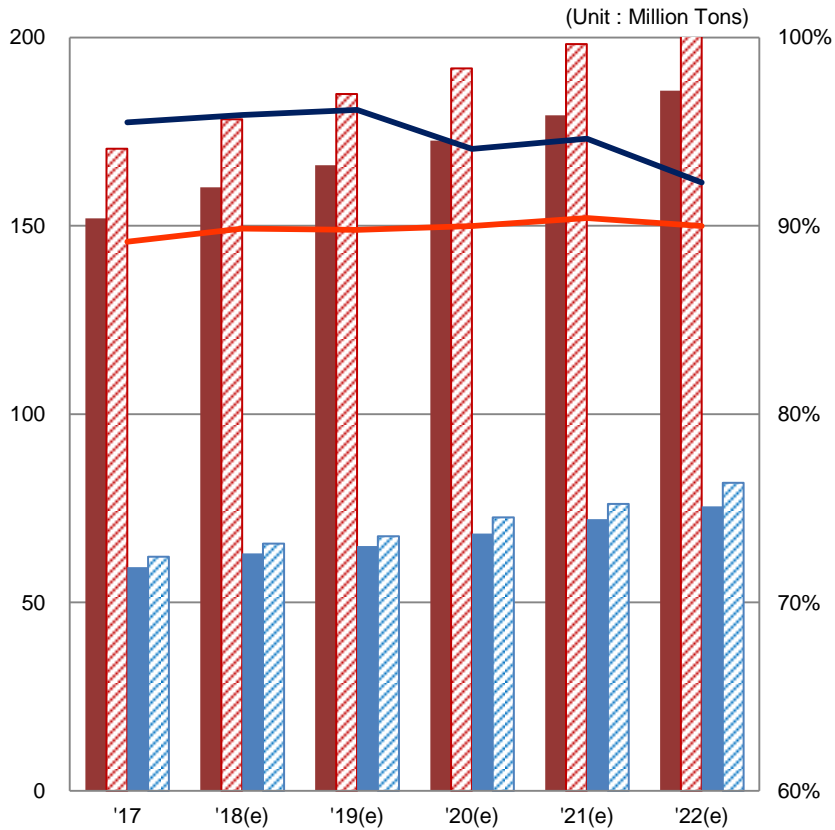
R&D expenses

(Unit: KRW bn)

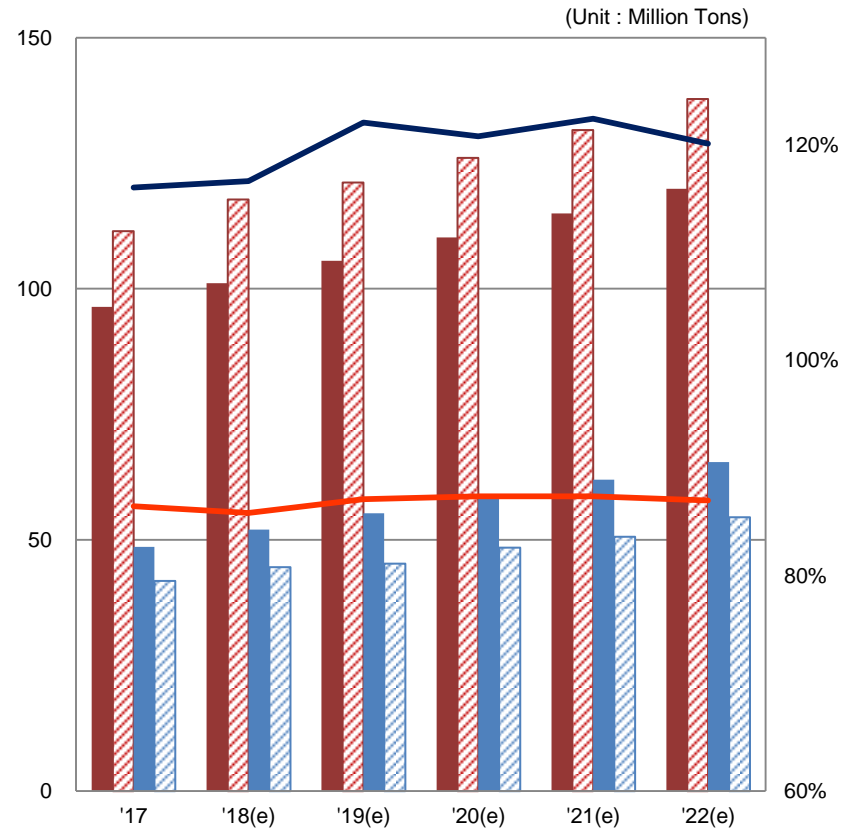
Classification	'16 (Acc.)	'17 (Acc.)	4Q '17	1Q '18
Basic Materials & Chemicals (% of sales)	150 (1.0%)	164 (0.9%)	41 (0.9%)	40 (0.9%)
Energy Solutions (% of sales)	276 (7.7%)	299 (6.2%)	75 (6.0%)	70 (5.6%)
I & E Materials (% of sales)	161 (6.1%)	181 (5.9%)	47 (5.9%)	48 (6.3%)
Life Sciences (% of sales)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

Ethylene



Polyethylene

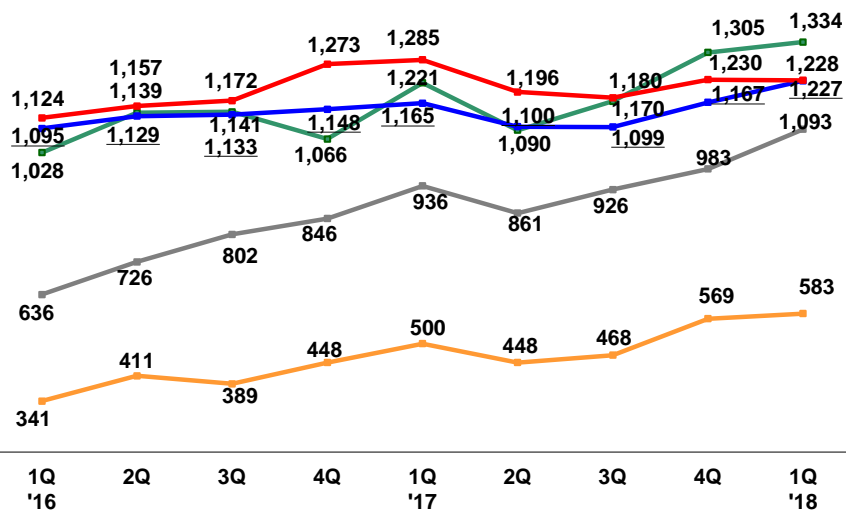


■ Demand (Global)
 ■ Supply (Global)
 — Demand/Supply (Global, %)

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

(Source : IHS)

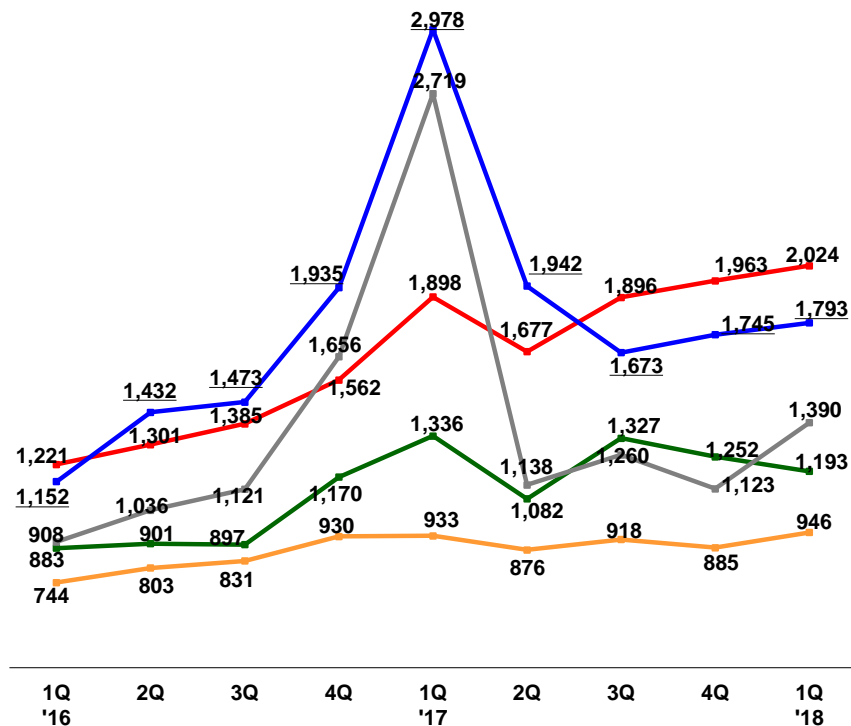
(Unit : USD/MT)



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

NCC/PO

(Unit : USD/MT)



— ABS — PVC — B.Acrylate — BD — BR

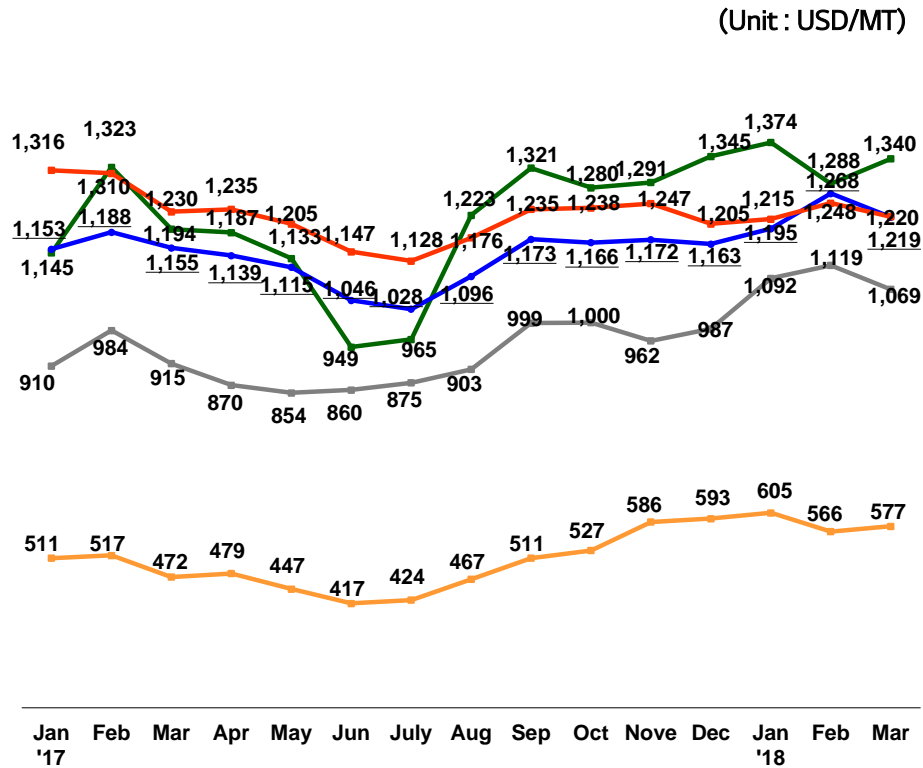
ABS/EP

**PVC/
Plasticizer**

**Acrylate/
SAP**

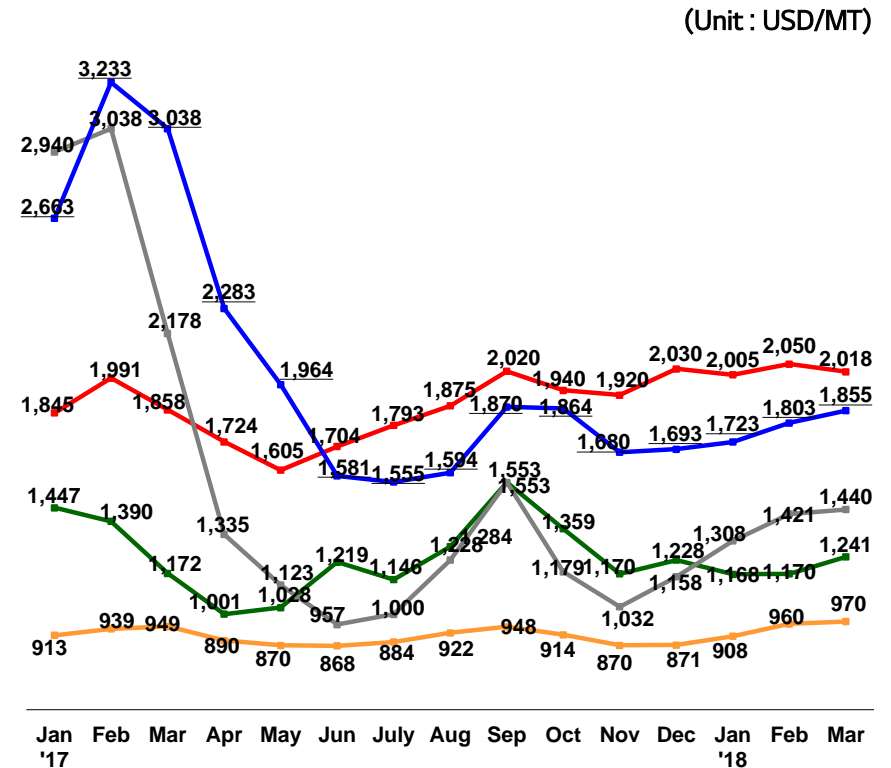
**Rubber/
Specialty Polymers**

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



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

NCC/PO



— ABS — PVC — B.Acrylate — BD — BR

ABS/EP

PVC/
Plasticizer

Acrylate/
SAP

Rubber/
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