

# 3Q 2018 Business Results & Outlook

October 26, 2018



# Disclaimer

**The business results 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. Please note it may differ from actual results, due to uncertainties including changes in the future business environment and recalibration of strategy.**

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# 3Q 2018 Business Results

## Income Statements

(Unit: KRW bn)

Classification	3Q '17	2Q '18	3Q '18	YoY	QoQ
<b>Sales</b>	6,397	7,052	7,235	13.1%	2.6%
<b>Operating Profit</b>	790	703	602	-23.7%	-14.3%
<b>(%)</b>	(12.3)	(10.0)	(8.3)		
<b>EBITDA</b>	1,137	1,065	975	-14.2%	-8.5%
<b>(%)</b>	(17.8)	(15.1)	(13.5)		
<b>Pre-tax Income</b>	702	644	485	-30.9%	-24.7%
<b>(%)</b>	(11.0)	(9.1)	(6.7)		
<b>Net Income</b>	546	493	347	-36.5%	-29.8%
<b>(%)</b>	(8.5)	(7.0)	(4.8)		

## Balance Sheet

(Unit: KRW bn)

	'17 (End)	1Q'18 (End)	2Q'18 (End)	3Q'18 (End)	Change
<b>Asset</b>	<b>25,041</b>	<b>26,416</b>	<b>27,399</b>	<b>28,419</b>	<b>3.7%</b>
Cash and equivalents	2,779	3,132	2,830	3,333	17.8%
<b>Liabilities</b>	<b>8,703</b>	<b>9,905</b>	<b>10,391</b>	<b>11,162</b>	<b>7.4%</b>
Debt	3,045	4,236	5,114	5,300	3.6%
<b>Shareholder's Equity</b>	<b>16,339</b>	<b>16,510</b>	<b>17,009</b>	<b>17,257</b>	<b>1.5%</b>
<b>Liabilities/Equity</b>	<b>53.3</b>	<b>60.0</b>	<b>61.1</b>	<b>64.7</b>	<b>3.6%p</b>

## Financial Ratios

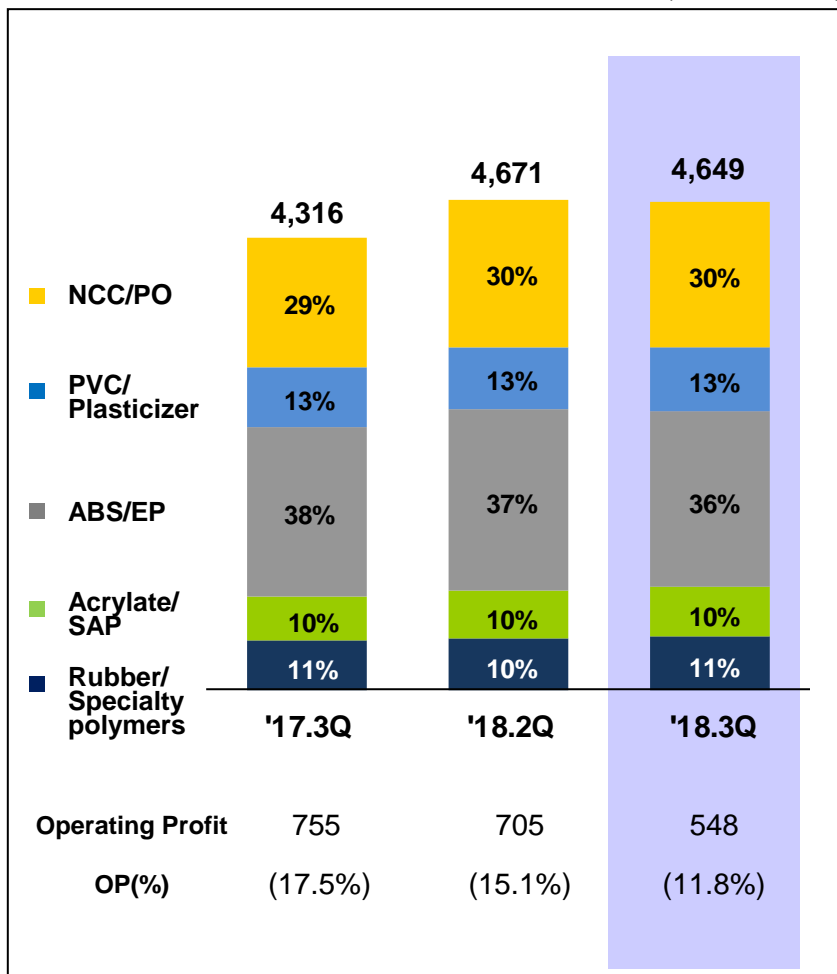
(Unit: %)

	'17 (End)	1Q'18 (End)	2Q'18 (End)	3Q'18 (End)	Change
<b>Debt / Equity</b>	<b>18.6</b>	<b>25.7</b>	<b>30.1</b>	<b>30.7</b>	<b>0.6%p</b>
<b>Net Debt/Equity</b>	<b>1.6</b>	<b>6.7</b>	<b>13.4</b>	<b>11.4</b>	<b>-2.0%p</b>
<b>Interest Coverage Ratio (x)</b>	<b>29.3</b>	<b>25.4</b>	<b>24.5</b>	<b>21.5</b>	<b>-3.0</b>
<b>ROE</b>	<b>13.3</b>	<b>13.5</b>	<b>12.5</b>	<b>11.1</b>	<b>-1.4%p</b>
<b>ROA</b>	<b>8.9</b>	<b>8.6</b>	<b>8.0</b>	<b>6.9</b>	<b>-1.1%p</b>

※ ROE: Annualized net profit / Avg of beginning & ending shareholders' equity  
 ROA: Annualized net profit / Avg of beginning & ending assets

## Performance Breakdown

(Unit: KRW bn)



## Analysis & Outlook

### Analysis

- Spread decreased due to increasing of feedstock prices and weaker demand because of trade war
- Increased sales and improved profitability in Acrylate/SAP by improving customer structure

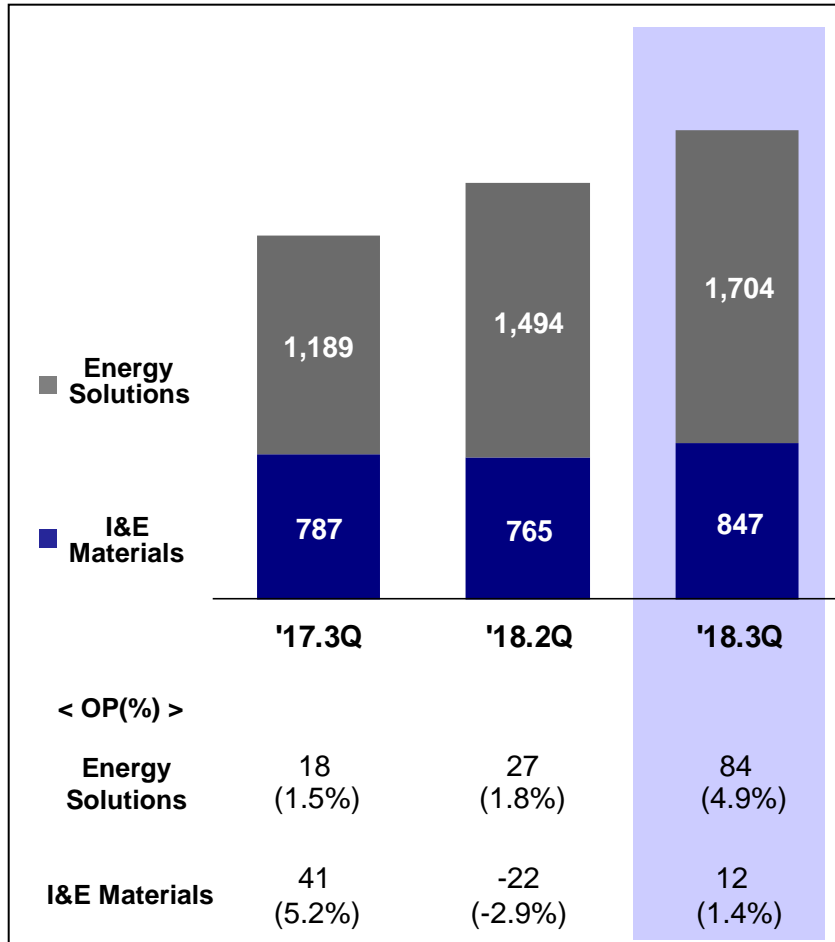
### Outlook

- Although external uncertainties and unbalanced supply/demand situation in long-term upstream industry are expected, inventory level of major products is expected to be low and supply/demand situation in most downstream industry to be improved in longer term view
- Short-term profit is expected to slow down due to regular maintenance(T/A) of NCC, but profitability will be improved through differentiated competitiveness

## Performance Breakdown

## Analysis & Outlook

(Unit: KRW bn)



### Analysis

- Energy Solutions** Sales was posted historic-high and profitability was improved from an increase in EV sales and IT & New Application Battery
- I&E Materials** Turnaround was made by increasing in sales volume caused by seasonality

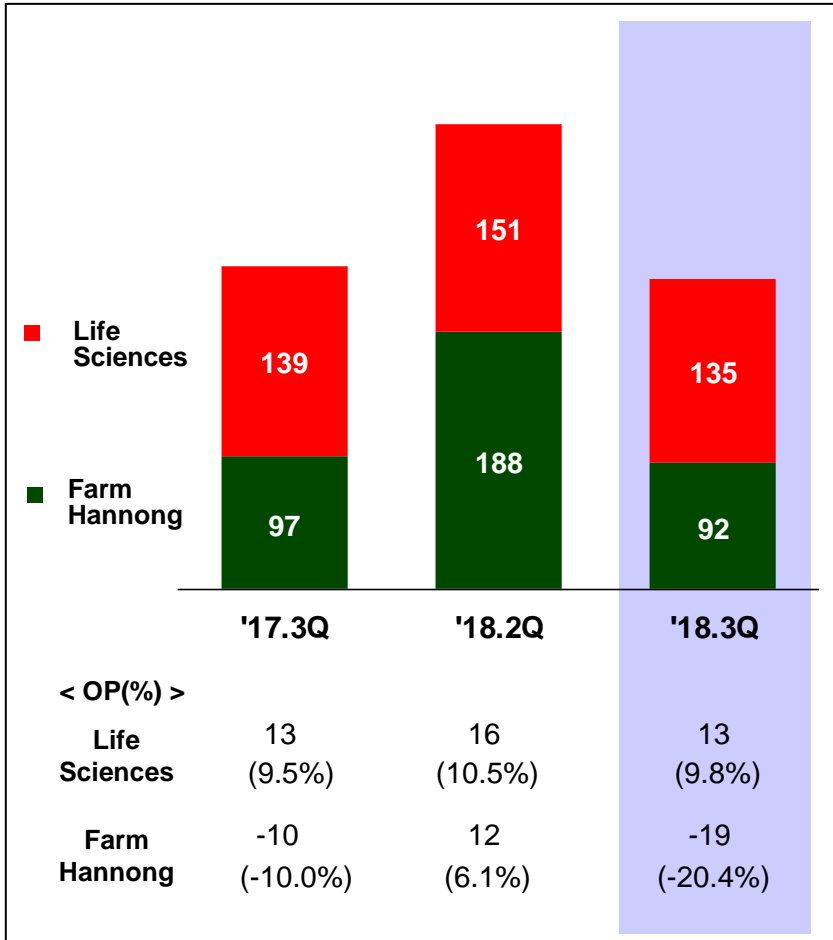
### Outlook

- Energy Solutions** Revenue growth and profitability expect to grow continually due to huge growth of automotive and ESS battery demand
- I&E Materials** Despite concerns about slowing demand in display market and declined price, revenue expects to increase due to strength of cost competitiveness and growth of premium product sales

## Performance Breakdown

## Analysis & Outlook

(Unit: KRW bn)



### Analysis

- **Life Sciences** Sales was slightly decreased due to seasonality
- **Farm Hannong** Profitability was declined YoY caused by rising of feedstock prices

### Outlook

- **Life Sciences** Sales of key products such as Zemiglo and YVOIRE is expected to grow while new drug R&D and marketing expense are expected to increase as well
- **Farm Hannong** Export of main products and sales of new product (Terrad'or) are expected to expand



(Unit: KRW bn)

LG CHEM	2016					2017					2018		
	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q
<b>Sales</b>	4,874	5,219	5,054	5,512	20,659	6,487	6,382	6,397	6,432	25,698	6,554	7,052	7,235
<b>Operating Profits</b>	458	612	460	462	1,992	797	727	790	615	2,928	651	703	602
(%)	9.4%	11.7%	9.1%	8.4%	9.6%	12.3%	11.4%	12.3%	9.6%	11.4%	9.9%	10.0%	8.3%
<b>EBITDA</b>	780	946	796	805	3,327	1,151	1,074	1,137	972	4,335	1,006	1,065	975
(%)	16.0%	18.1%	15.8%	14.6%	16.0%	17.8%	16.8%	17.8%	15.1%	16.9%	15.3%	15.1%	13.5%
<b>Basic Materials &amp; Chemicals</b>	3,512	3,653	3,525	3,758	14,447	4,495	4,319	4,316	4,297	17,427	4,359	4,671	4,649
NCC / PO	1,156	1,221	1,131	1,161	4,669	1,362	1,291	1,246	1,323	5,222	1,326	1,401	1,386
PVC / Plasticizer	489	508	495	542	2,035	587	572	560	568	2,288	605	596	611
ABS	877	920	866	947	3,611	1,216	1,185	1,261	1,214	4,876	1,233	1,356	1,304
EP	298	299	304	308	1,210	332	307	357	347	1,343	347	372	374
Acrylate / SAP	345	331	357	391	1,424	435	427	424	420	1,706	427	468	477
Rubber / Specialty Polymer	347	374	370	408	1,499	563	537	467	424	1,991	420	478	497
<b>Operating Profit</b>	466	649	517	506	2,139	734	686	755	634	2,808	637	704	548
(%)	13.3%	17.8%	14.7%	13.5%	14.8%	16.3%	15.9%	17.5%	14.7%	16.1%	14.6%	15.1%	11.8%
<b>Energy Solutions</b>	814	809	879	1,059	3,562	999	1,120	1,189	1,253	4,561	1,244	1,494	1,704
<b>Operating Profit</b>	0	-31	-14	-4	-49	-10	7	18	14	29	2	27	84
(%)	0.0%	-3.9%	-1.6%	-0.3%	-1.4%	-1.0%	0.7%	1.5%	1.1%	0.6%	0.2%	1.8%	4.9%
<b>I&amp;E Materials</b>	627	650	641	739	2,656	725	747	786	801	3,059	759	765	847
<b>Operating Profit</b>	-8	-15	-16	-16	-55	29	23	41	18	111	-10	-22	12
(%)	-1.3%	-2.2%	-2.5%	-2.2%	-2.1%	4.0%	3.1%	5.2%	2.2%	3.6%	-1.3%	-2.9%	1.4%
<b>Life Sciences</b>	120	131	135	147	532	129	135	139	148	552	131	151	135
<b>Operating Profit</b>	17	11	10	9	47	21	19	13	1	54	7	16	13
(%)	14.3%	8.1%	7.5%	6.4%	8.9%	15.9%	14.0%	9.5%	0.6%	9.7%	5.3%	10.5%	9.8%
<b>Farm Hannong</b>	242	189	87	50	568	254	186	97	67	604	237	188	92
<b>Operating Profit</b>	39	-2	-20	-31	-15	50	14	-10	-19	36	45	12	-19
(%)	15.9%	-1.2%	-23.3%	-61.1%	-2.6%	19.8%	7.3%	-10.1%	-27.9%	5.9%	19.2%	6.1%	-20.4%

## Debt

(Unit : KRW bn)

Classification	'17 (End)	1Q'18 (End)	2Q'18 (End)	3Q'18 (End)
<b>Total</b>	3,045	4,236	5,114	5,300
<b>KRW denominated</b>	1,327 44%	2,375 56%	2,340 46%	2,346 44%
<b>Other currency denominated</b>	1,718 56%	1,861 44%	2,774 54%	2,954 56%
<b>Short-term</b>	1,451 48%	1,593 38%	1,903 37%	2,037 38%
<b>Long-term</b>	1,594 52%	2,643 62%	3,211 63%	3,262 62%
<b>Cash</b>	2,779	3,132	2,830	3,333
<b>Net Debt</b>	266	1,105	2,284	1,967

## Cashflow

(Unit: KRW bn)

Classification	2017	1Q'18	2Q'18	3Q'18
<b>Beginning Cash</b>	2,207	2,779	3,132	2,830
<b>Operations/Investment Activities</b>	1,337	-831	-662	289
<b>Operating profit</b>	2,929	651	703	602
<b>Depreciation</b>	1,406	355	362	373
<b>Working Capital</b>	-845	-707	-446	128
<b>Investing Activities</b>	-1,844	-867	-744	-905
<b>Others</b>	-309	-262	-537	91
<b>Financial Activities</b>	-737	1,170	369	238
<b>Debt (Financed &amp; reimbursed)</b>	-351	1,170	829	270
<b>Dividends paid</b>	-386	-	-460	-32
<b>Ending Cash</b>	2,779	3,132	2,830	3,333

## CAPEX

(Unit: KRW bn)

Classification		'16	'17	1Q '18	2Q '18	3Q '18
Basic Materials & Chemicals	New / Expansion	103	324	116	229	182
	Maintenance	289	345	49	104	114
	<b>Total</b>	<b>392</b>	<b>669</b>	<b>164</b>	<b>333</b>	<b>296</b>
Energy Solutions	New / Expansion	365	691	150	275	502
	Maintenance	197	259	30	72	68
	<b>Total</b>	<b>563</b>	<b>950</b>	<b>180</b>	<b>347</b>	<b>569</b>
I & E Materials	New / Expansion	291	120	46	30	51
	Maintenance	95	101	28	37	32
	<b>Total</b>	<b>386</b>	<b>221</b>	<b>75</b>	<b>67</b>	<b>83</b>
Life Sciences	New / Expansion	124	81	24	18	9
	Maintenance	38	25	2	6	8
	<b>Total</b>	<b>162</b>	<b>106</b>	<b>26</b>	<b>24</b>	<b>17</b>
Common (including Farm Hannong)	New / Expansion	555	395	21	43	28
	Maintenance	82	200	36	45	39
	<b>Total</b>	<b>637</b>	<b>595</b>	<b>56</b>	<b>88</b>	<b>67</b>
<b>Total</b>	New / Expansion	1,314	1,612	357	595	771
	Maintenance	663	928	145	263	259
	<b>Total</b>	<b>1,977</b>	<b>2,540</b>	<b>501</b>	<b>859</b>	<b>1,030</b>

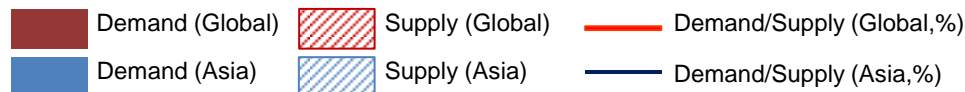
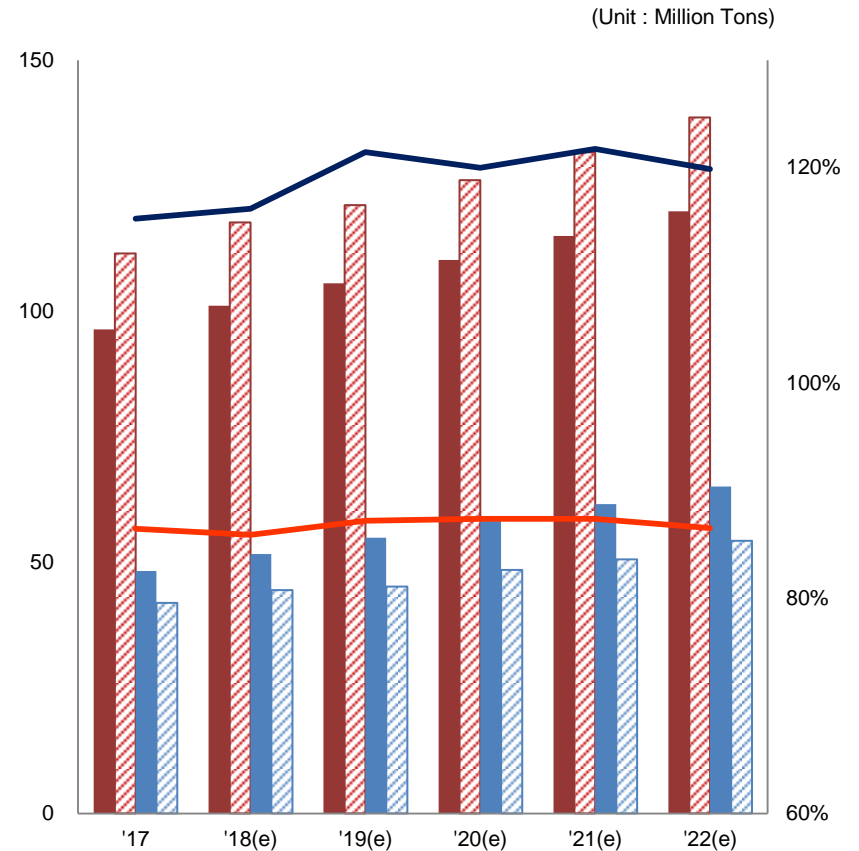
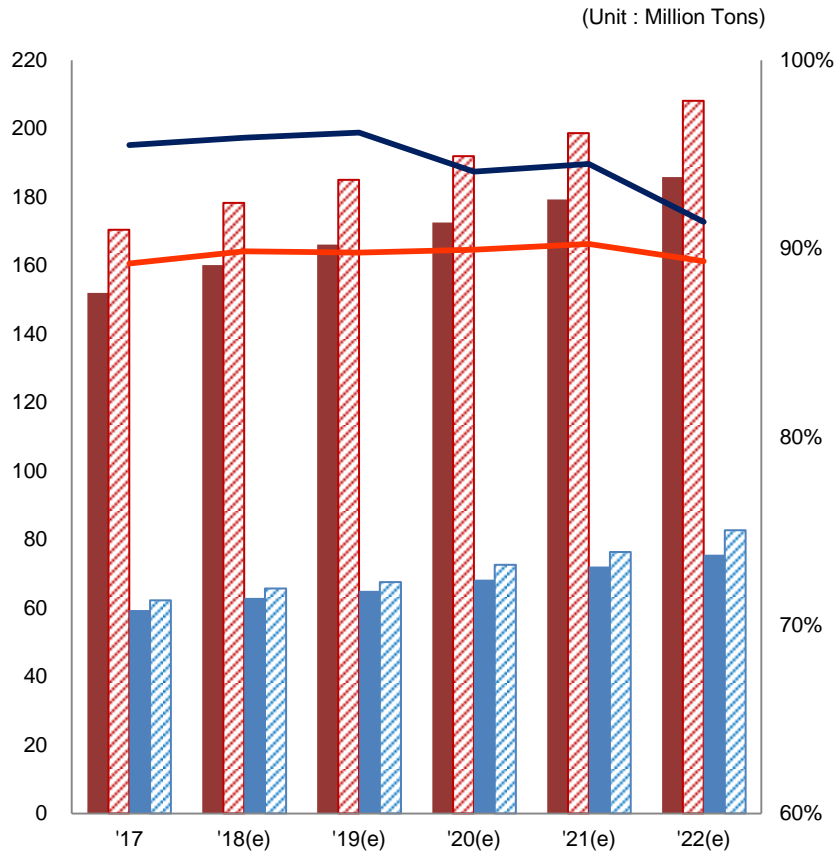
## R&D expenses

(Unit: KRW bn)

Classification	2016	2017	1Q '18	2Q '18	3Q '18
Basic Materials & Chemicals (% of sales)	150 (1.0%)	164 (0.9%)	40 (0.9%)	43 (0.9%)	47 (1.0%)
Energy Solutions (% of sales)	276 (7.7%)	299 (6.6%)	70 (5.6%)	78 (5.2%)	85 (5.0%)
I & E Materials (% of sales)	161 (6.1%)	181 (5.9%)	48 (6.3%)	52 (6.7%)	50 (5.9%)
Life Sciences (% of sales)	91 (17.6%)	96 (17.5%)	28 (21.4%)	32 (21.1%)	30 (22.3%)
Common (including Farm Hannong)	104	152	45	59	58
<b>Total</b> (% of sales)	686 (3.3%)	893 (3.5%)	231 (3.5%)	264 (3.7%)	270 (3.5%)

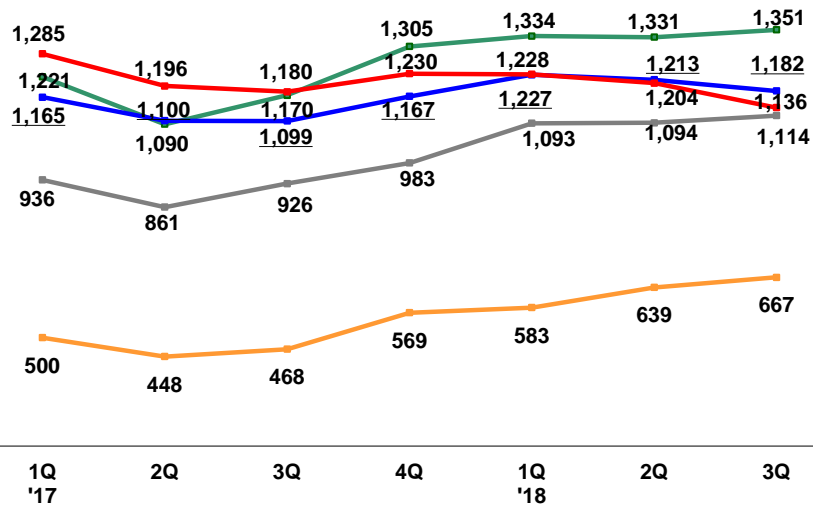
## Ethylene

## Polyethylene



(Source : IHS)

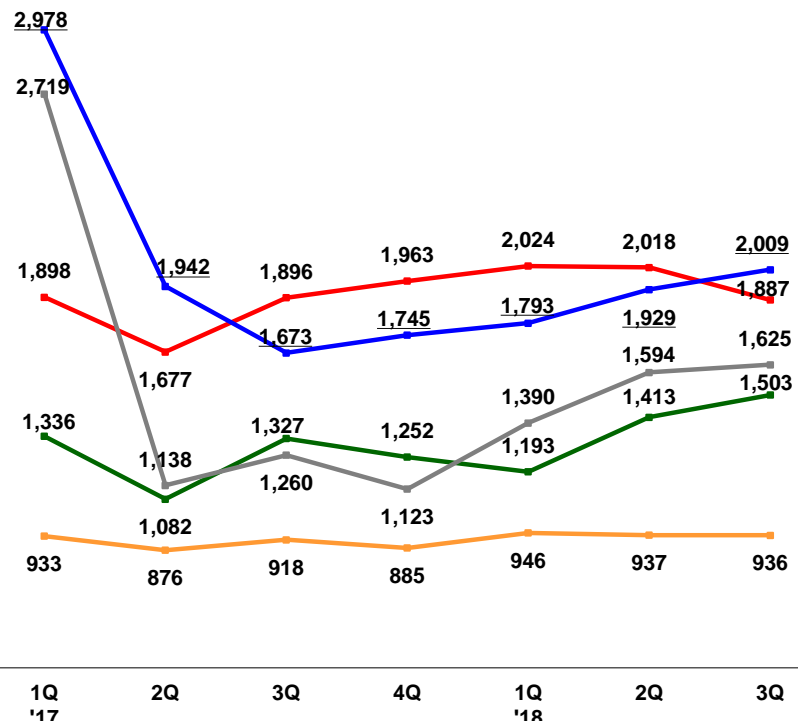
(Unit : USD/MT)



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

**NCC/PO**

(Unit : USD/MT)



— ABS — PVC — B.Acrylate — BD — BR

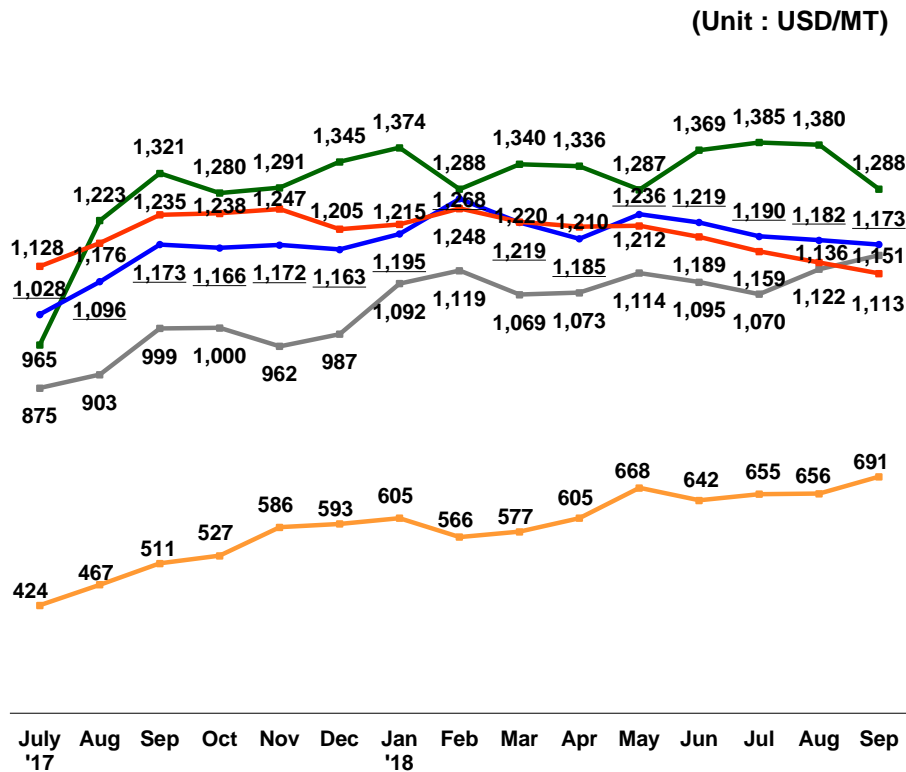
**ABS/EP**

**PVC/Plasticizer**

**Acrylate/SAP**

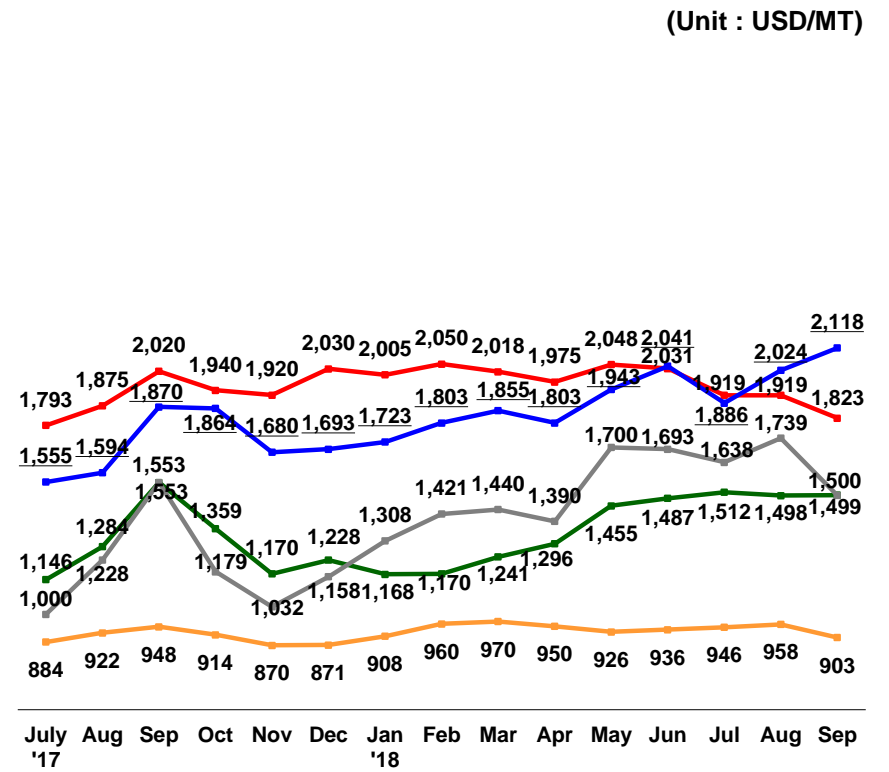
**Rubber/Specialty Polymers**

• Prices are the average 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/Specialty Polymers**

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