

October 25, 2019

SolutionPartner

# 3Q 2019 Business Results & Outlook





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**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.**

# 3Q 2019 Business Results

## Income Statements

(Unit:KRW bn)

	2018		2019			YoY	QoQ
	3Q	4Q	1Q	2Q	3Q		
<b>Sales</b>	7,235	7,343	6,639	7,177	<b>7,347</b>	+1.6%	+2.4%
<b>OP (%)</b>	602 8.3%	290 3.9%	275 4.1%	268 3.7%	<b>380 5.2%</b>	<b>-36.9%</b>	<b>+42.2%</b>
<b>EBITDA (%)</b>	975 13.5%	684 9.3%	682 10.3%	725 10.1%	<b>862 11.7%</b>	<b>-11.7%</b>	<b>+18.8%</b>
<b>Pre-tax Income (%)</b>	485 6.7%	158 2.1%	280 4.2%	193 2.7%	<b>244 3.3%</b>	<b>-49.7%</b>	<b>+26.4%</b>
<b>Net Income (%)</b>	347 4.8%	127 1.7%	212 3.2%	84 1.2%	<b>137 1.9%</b>	<b>-60.4%</b>	<b>+63.5%</b>

# 3Q 2019 Business Results

## Financial Position

### Balance Sheet

(Unit:KRW tn)

	2018	2Q 2019	3Q 2019	QoQ
<b>Assets</b>	28.94	32.44	<b>33.53</b>	<b>+3.4%</b>
<b>Cash and Equivalents</b>	2.56	2.67	<b>2.09</b>	<b>-21.8%</b>
<b>Liabilities</b>	11.62	15.16	<b>16.04</b>	<b>+5.8%</b>
<b>Debts</b>	5.32	8.48	<b>8.95</b>	<b>+5.6%</b>
<b>Shareholder's Equity</b>	17.32	17.28	<b>17.49</b>	<b>+1.2%</b>

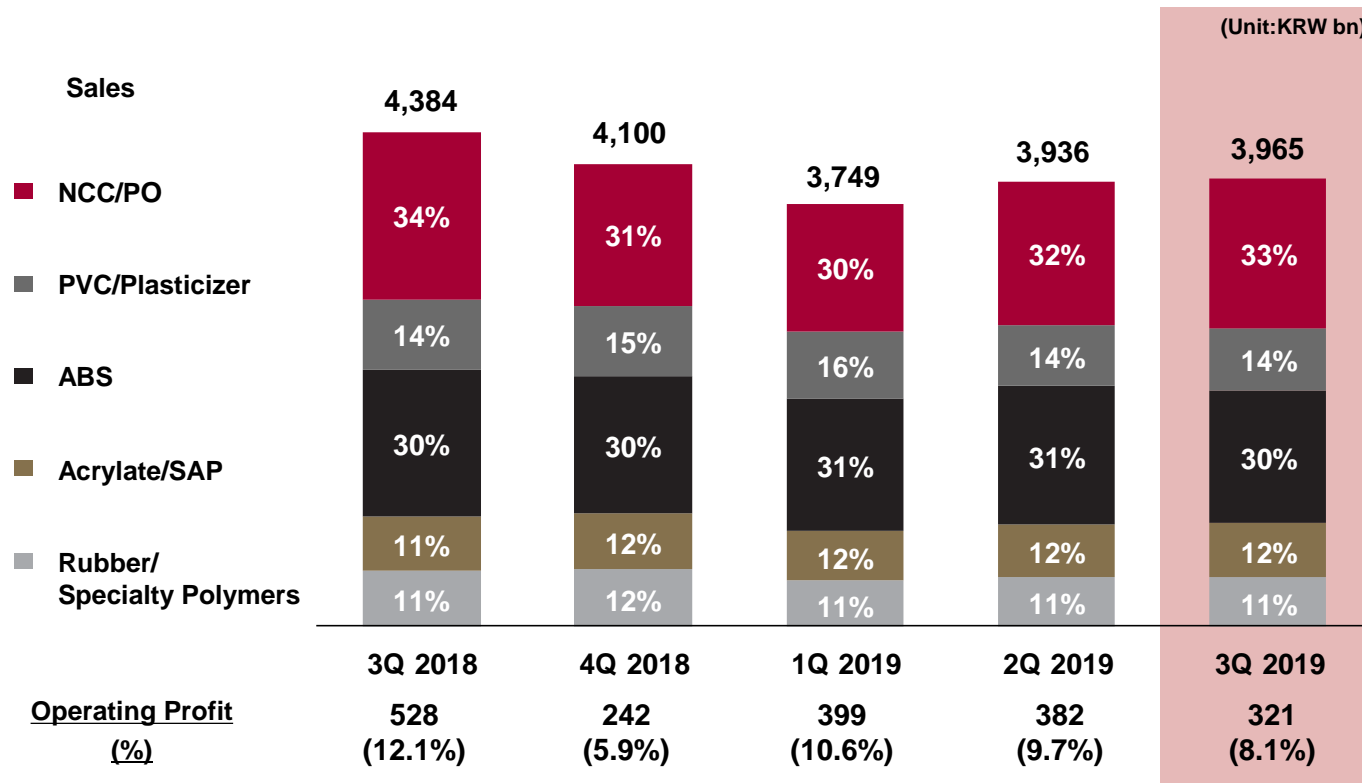
### Financial Ratios

	2018	2Q 2019	3Q 2019	QoQ
<b>Liabilities / Equity</b>	67.1%	87.7%	<b>91.7%</b>	<b>+4.0%p</b>
<b>Debts / Equity</b>	30.7%	49.1%	<b>51.2%</b>	<b>+2.1%p</b>
<b>Net Debts / Equity</b>	16.0%	33.6%	<b>39.3%</b>	<b>+5.7%p</b>
<b>ROE</b>	9.0%	1.9%	<b>3.2%</b>	<b>+1.3%p</b>
<b>ROA</b>	5.6%	1.1%	<b>1.7%</b>	<b>+0.6%p</b>

- ※ ROE: Net Income / Avg of beginning & ending shareholders' equity
- ※ ROA: Net Income / Avg of beginning & ending assets
- ※ Net Income calculation for each Quarters : Quarterly Net Income X 4

# Results & Outlook by Business

## Petrochemicals



### [Analysis]

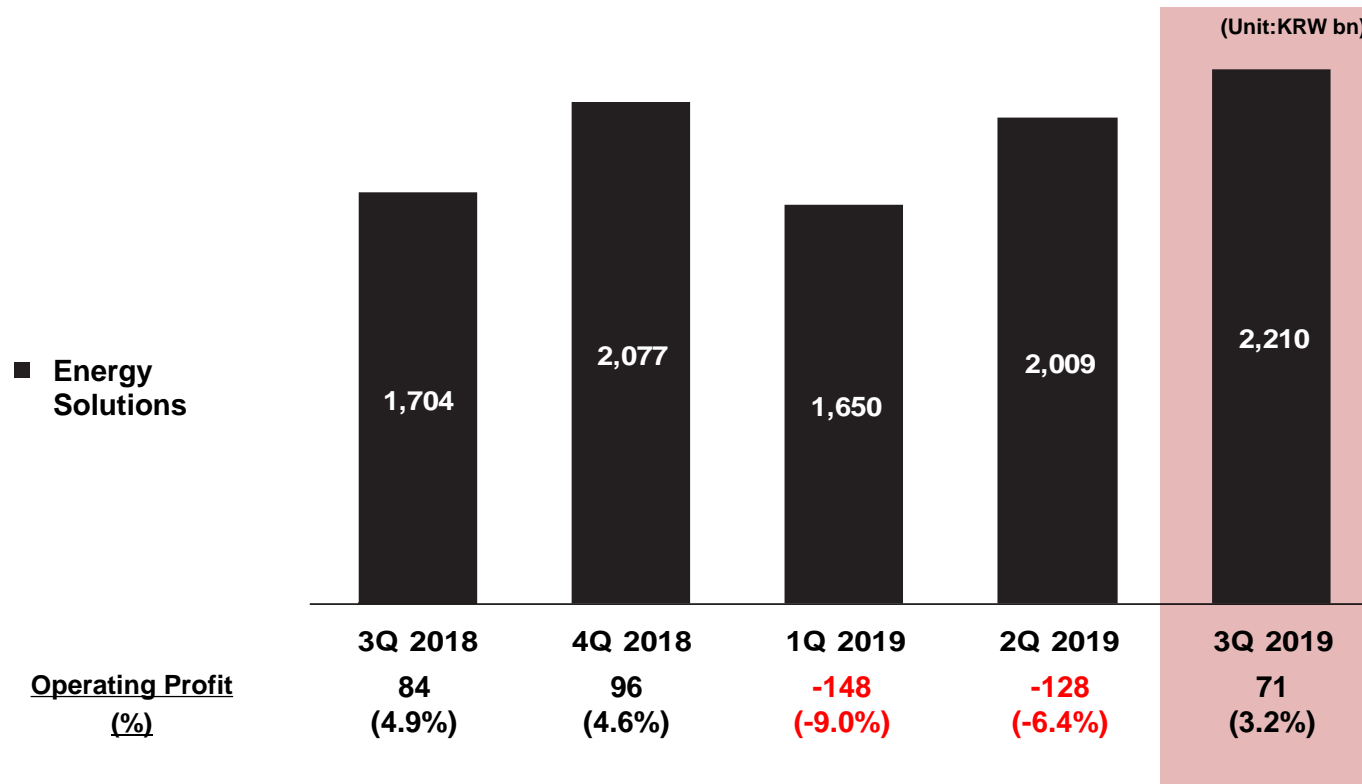
- Decreased profitability due to lower spreads of main products which caused by sluggish demand

### [Outlook]

- Spreads for main products are expected to maintain but rigidity of further decline
- Increased profitability is expected due to expansion of sales in premium products

# Results & Outlook by Business

Energy Solutions



## [Analysis]

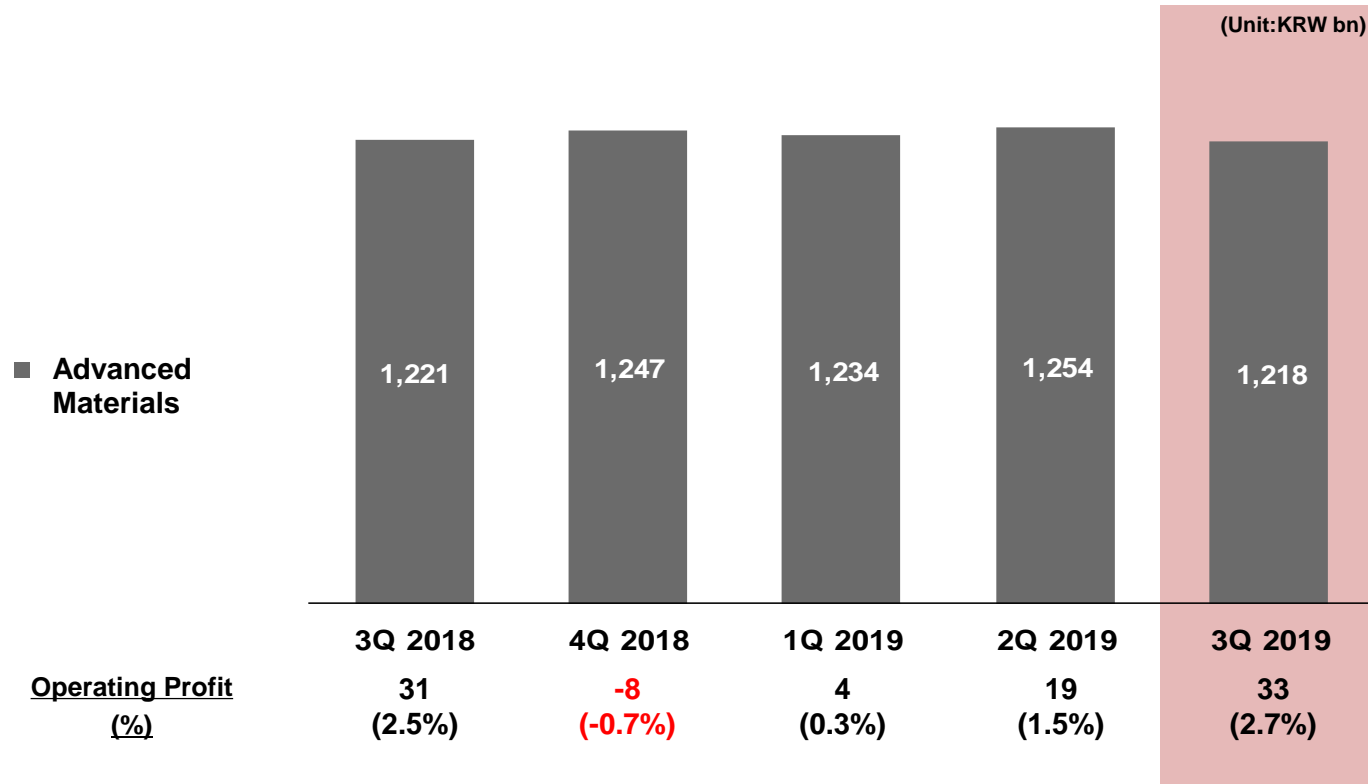
- Improved sales and profitability due to increased shipment of IT battery and EV battery

## [Outlook]

- Sales in EV battery are expected to enhance but shipment of IT battery may decrease

# Results & Outlook by Business

## Advanced Materials



### [Analysis]

- Increased profitability due to seasonality of front industry and increased sales in OLED

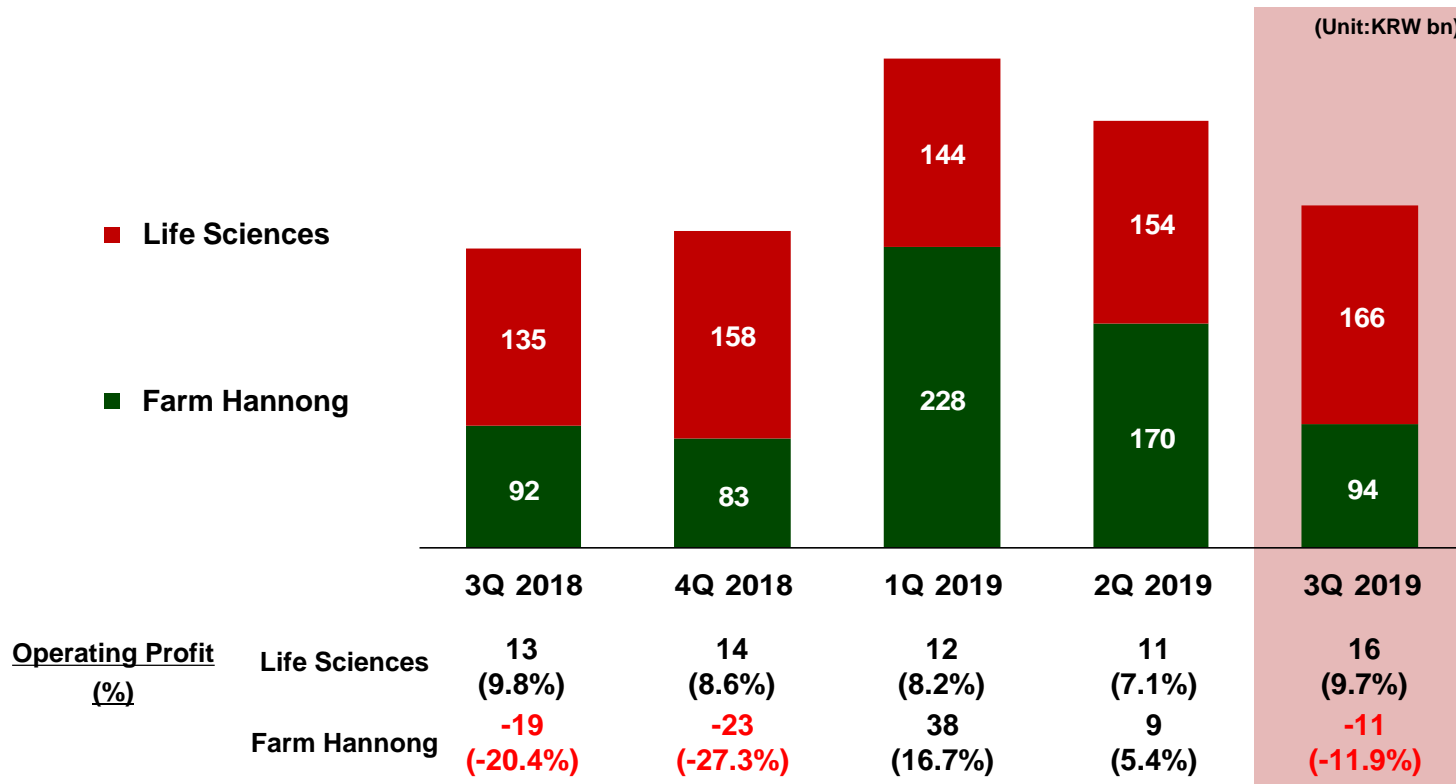
### [Outlook]

- Sales are expected to grow because of increased shipment of Automotive materials and Cathode



# Results & Outlook by Business

Life Sciences / Farm Hannong



## [Analysis]

- Life Sciences: Increased sales and profitability due to expansion of sales in main products
- Farm Hannong: Increased YoY sales due to enhancement of exports and cost cutting

## [Outlook]

- Life Sciences: R&D expenses are going to increase because of developing of new drugs
- Farm Hannong: Increased YoY profitability is expected due to expansion of sales in premium products

# Appendix

## Sales & Operating Profits by Business

(Unit:KRW bn)

LG CHEM	2017					2018					2019			
	1Q	2Q	3Q	4Q		1Q	2Q	3Q	4Q		1Q	2Q	3Q	
<b>Sales</b>	6,487	6,382	6,397	6,432	25,698	6,554	7,052	7,235	7,343	28,183	6,639	7,177	7,347	21,164
<b>Operating Profits</b>	797	727	790	615	2,929	651	703	602	290	2,246	275	268	380	923
(%)	12.3%	11.4%	12.3%	9.6%	11.4%	9.9%	10.0%	8.3%	3.9%	8.0%	4.1%	3.7%	5.2%	4.4%
<b>EBITDA</b>	1,151	1,074	1,137	972	4,335	1,006	1,065	975	684	3,730	682	725	862	2,269
(%)	17.7%	16.8%	17.8%	15.1%	16.9%	15.3%	15.1%	13.5%	9.3%	13.2%	10.3%	10.1%	11.7%	10.7%
<b>Petrochemicals</b>	4,240	4,072	4,031	4,036	16,378	4,100	4,402	4,384	4,100	16,987	3,749	3,936	3,965	11,650
NCC/PO	1,438	1,351	1,318	1,409	5,516	1,415	1,504	1,495	1,267	5,681	1,136	1,270	1,327	3,732
PVC/Plasticizer	588	572	560	568	2,288	605	596	611	622	2,434	596	538	546	1,680
ABS	1,216	1,185	1,261	1,214	4,876	1,233	1,357	1,304	1,209	5,102	1,170	1,228	1,182	3,580
Acrylate/SAP	435	427	425	420	1,706	427	468	477	495	1,868	447	461	479	1,388
Rubber/ Specialty Polymer	563	537	467	424	1,991	420	478	497	508	1,903	400	440	431	1,271
<b>Operating Profits</b>	700	666	721	596	2,683	598	663	528	242	2,031	399	382	321	1,102
(%)	16.5%	16.4%	17.9%	14.8%	16.4%	14.6%	15.1%	12.1%	5.9%	12.0%	10.6%	9.7%	8.1%	9.5%
<b>Energy Solutions</b>	999	1,120	1,189	1,253	4,561	1,245	1,494	1,704	2,077	6,520	1,650	2,009	2,210	5,870
<b>Operating Profits</b>	-10	8	18	14	29	2	27	84	96	209	-148	-128	71	-205
(%)	-1.0%	0.7%	1.5%	1.1%	0.6%	0.2%	1.8%	4.9%	4.6%	3.2%	-9.0%	-6.4%	3.2%	-3.5%
<b>Advanced Materials</b>	1,057	1,053	1,144	1,148	4,402	1,107	1,137	1,221	1,247	4,710	1,234	1,254	1,218	3,705
<b>Operating Profits</b>	63	43	75	56	237	29	20	31	-8	71	4	19	33	55
(%)	6.0%	4.1%	6.6%	4.8%	5.4%	2.6%	1.7%	2.5%	-0.7%	1.5%	0.3%	1.5%	2.7%	1.5%
<b>Life Sciences</b>	129	135	139	148	552	131	151	135	158	575	144	154	166	463
<b>Operating Profits</b>	21	19	13	1	54	7	16	13	14	50	12	11	16	39
(%)	15.9%	14.0%	9.5%	0.6%	9.7%	5.3%	10.5%	9.8%	8.6%	8.6%	8.2%	7.1%	9.7%	8.4%
<b>Farm Hannong</b>	254	186	97	68	604	237	188	92	83	600	228	170	94	491
<b>Operating Profits</b>	50	14	-10	-19	36	45	12	-19	-23	15	38	9	-11	36
(%)	19.8%	7.3%	-10.0%	-28.0%	5.9%	19.2%	6.1%	-20.4%	-27.3%	2.6%	16.7%	5.4%	-11.9%	7.3%

※ Applied retroactive effects of past performance based on the reorganization

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# Appendix

## CAPEX / R&D Expenses

### CAPEX

(Unit:KRW tn)

	2017	2018	2019			
			1Q	2Q	3Q	
Petrochemicals	0.6	1.4	0.4	0.4	0.4	1.2
Energy Solutions	1.0	1.9	0.6	0.7	1.2	2.5
Advanced Materials	0.2	0.5	0.1	0.2	0.2	0.5
Life Sciences	0.1	0.1	0.01	0.02	0.02	0.05
Common (including Farm Hannong)	0.6	0.7	0.1	0.1	0.2	0.4
<b>Total</b>	<b>2.5</b>	<b>4.6</b>	<b>1.3</b>	<b>1.4</b>	<b>2.0</b>	<b>4.7</b>

### R&D Expenses

(Unit:KRW bn)

	2017	2018	2019			
			1Q	2Q	3Q	
Petrochemicals	132	144	38	39	36	113
Energy Solutions	299	320	98	98	91	287
Advanced Materials	213	235	44	53	45	143
Life Sciences	96	124	32	36	38	106
Common (including Farm Hannong)	152	238	51	65	58	174
<b>Total</b>	<b>893</b>	<b>1,062</b>	<b>262</b>	<b>292</b>	<b>268</b>	<b>823</b>

# Appendix

## Income Statements

(Unit:KRW bn)

	2017					2018					2019			
	1Q	2Q	3Q	4Q		1Q	2Q	3Q	4Q		1Q	2Q	3Q	
<b>Sales</b>	6,487	6,382	6,397	6,432	<b>25,698</b>	6,554	7,052	7,235	7,343	<b>28,183</b>	6,639	7,177	7,347	<b>21,164</b>
Cost of Sales	5,073	5,011	4,940	5,110	<b>20,135</b>	5,212	5,580	5,868	6,177	<b>22,837</b>	5,469	6,029	6,095	<b>17,593</b>
Gross Profit(%)	1,414	1,371	1,457	1,322	<b>5,564</b>	1,342	1,472	1,367	1,166	<b>5,346</b>	1,170	1,148	1,253	<b>3,571</b>
	21.8%	21.5%	22.8%	20.6%	<b>21.6%</b>	20.5%	20.9%	18.9%	15.9%	<b>19.0%</b>	17.6%	16.0%	17.1%	<b>16.9%</b>
SG&A Expenses	617	644	667	707	<b>2,635</b>	691	768	765	876	<b>3,100</b>	895	881	873	<b>2,648</b>
<b>Operating Profit(%)</b>	797	727	790	615	<b>2,929</b>	651	703	602	290	<b>2,246</b>	275	268	380	<b>923</b>
	12.3%	11.4%	12.3%	9.6%	<b>11.4%</b>	9.9%	10.0%	8.3%	3.9%	<b>8.0%</b>	4.1%	3.7%	5.2%	<b>4.4%</b>
Other non-operating income(expenses)	-99	3	-87	-181	<b>-365</b>	2	-59	-117	-132	<b>-306</b>	4	-75	-137	<b>-207</b>
Income before tax	698	730	702	434	<b>2,564</b>	653	644	485	158	<b>1,940</b>	280	193	244	<b>717</b>
<b>Net Income</b>	548	590	546	338	<b>2,022</b>	553	493	347	127	<b>1,519</b>	212	84	137	<b>433</b>
EPS(Unit:KRW)	6,936	7,531	6,799	4,101	<b>25,367</b>	6,934	6,234	4,481	1,568	<b>19,217</b>	2,537	887	1,677	<b>5,102</b>

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# Appendix

## Financial Position

(Unit:KRW bn)

	2017				2018				2019		
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q
<b>Assets</b>	<b>22,171</b>	<b>22,671</b>	<b>23,708</b>	<b>25,041</b>	<b>26,416</b>	<b>27,399</b>	<b>28,419</b>	<b>28,944</b>	<b>31,212</b>	<b>32,436</b>	<b>33,531</b>
Cash and Equivalents	1,909	2,107	2,400	2,779	3,132	2,830	3,333	2,557	3,122	2,667	2,085
A/R	3,961	4,184	4,523	4,449	4,709	5,146	4,949	4,381	4,616	4,738	4,575
Inventory	3,250	3,086	3,187	3,353	3,784	3,950	4,404	4,290	4,503	4,771	4,977
Tangible / Intangible Assets	11,773	11,954	12,130	13,035	13,366	13,936	14,074	15,845	16,938	17,993	19,471
<b>Liabilities</b>	<b>7,265</b>	<b>7,137</b>	<b>7,586</b>	<b>8,703</b>	<b>9,905</b>	<b>10,391</b>	<b>11,162</b>	<b>11,622</b>	<b>14,013</b>	<b>15,157</b>	<b>16,040</b>
A/P	1,808	1,609	1,756	2,015	1,999	2,156	2,541	2,166	2,434	2,549	2,467
Short-term debts	2,175	1,454	1,361	1,451	1,593	1,903	2,037	1,613	1,630	1,432	1,744
Long-term debts	972	1,869	1,915	1,594	2,643	3,211	3,262	3,708	5,275	7,049	7,211
<b>Shareholders' Equity</b>	<b>14,906</b>	<b>15,535</b>	<b>16,122</b>	<b>16,339</b>	<b>16,510</b>	<b>17,009</b>	<b>17,257</b>	<b>17,322</b>	<b>17,199</b>	<b>17,279</b>	<b>17,491</b>
<b>Liabilities/Equity(%)</b>	<b>48.7%</b>	<b>45.9%</b>	<b>47.1%</b>	<b>53.3%</b>	<b>60.0%</b>	<b>61.1%</b>	<b>64.7%</b>	<b>67.1%</b>	<b>81.5%</b>	<b>87.7%</b>	<b>91.7%</b>
<b>Net debt/Equity(%)</b>	<b>8.3%</b>	<b>7.8%</b>	<b>5.4%</b>	<b>1.6%</b>	<b>6.7%</b>	<b>13.4%</b>	<b>11.4%</b>	<b>16.0%</b>	<b>22.0%</b>	<b>33.6%</b>	<b>39.3%</b>
<b>BPS (Unit:KRW)</b>	<b>188,859</b>	<b>196,894</b>	<b>203,952</b>	<b>206,544</b>	<b>208,363</b>	<b>214,535</b>	<b>217,500</b>	<b>218,227</b>	<b>216,308</b>	<b>217,445</b>	<b>219,413</b>

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# Appendix

## Cash Flows

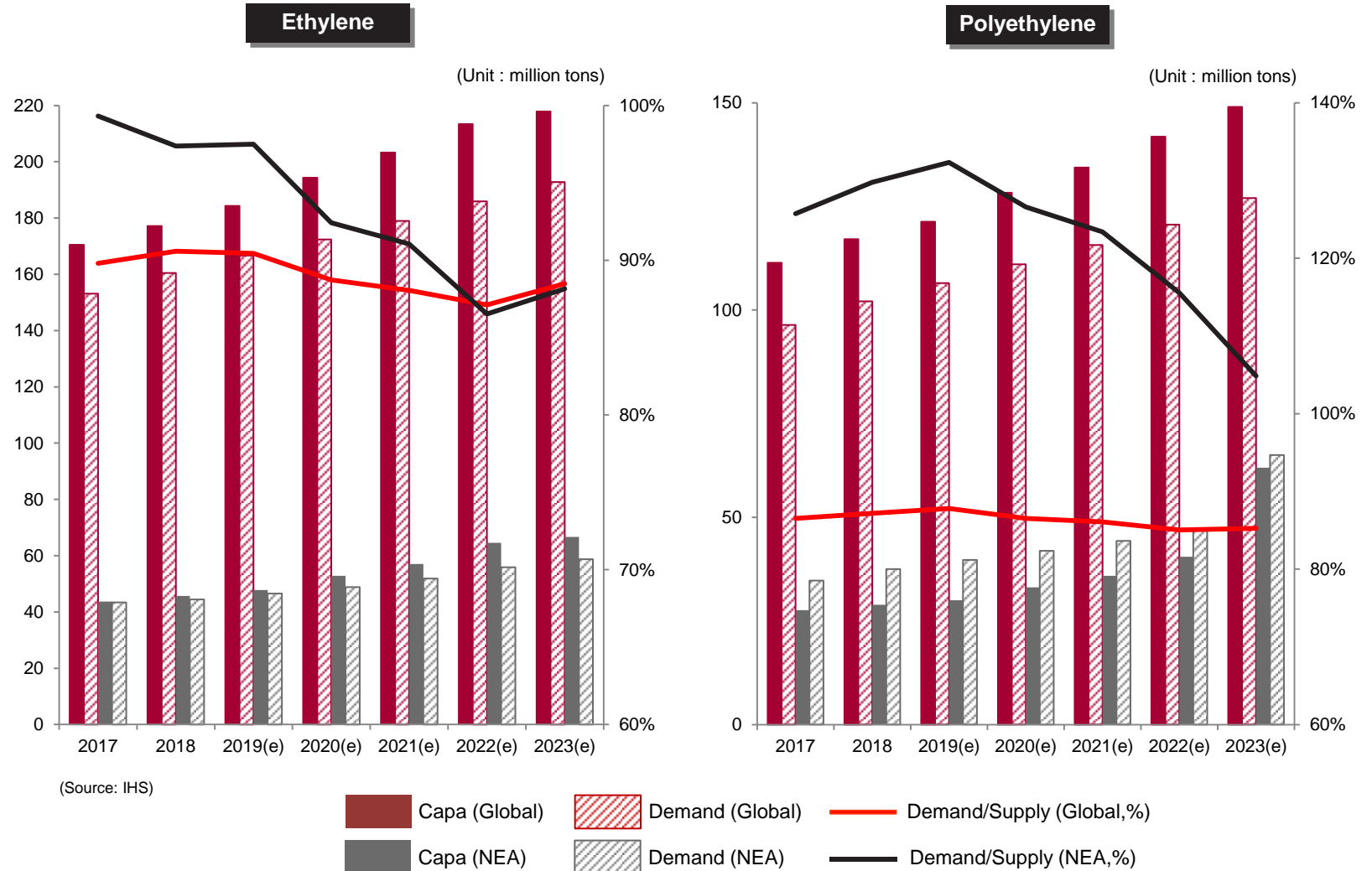
(Unit:KRW bn)

	2017					2018					2019			
	1Q	2Q	3Q	4Q		1Q	2Q	3Q	4Q		1Q	2Q	3Q	
<b>Beginning Cash Balance</b>	2,207	1,909	2,107	2,400	<b>2,207</b>	2,779	3,132	2,830	3,333	<b>2,779</b>	2,557	3,122	2,666	<b>2,557</b>
<b>Operating / Investing Activities</b>	0	442	350	546	<b>1,337</b>	-831	-662	289	-798	<b>-2,001</b>	-903	-1,490	-960	<b>-3,352</b>
Operating Profits	797	727	790	615	<b>2,929</b>	651	703	602	290	<b>2,246</b>	275	268	380	<b>923</b>
Depreciation	355	347	347	357	<b>1,406</b>	355	362	373	394	<b>1,484</b>	407	458	481	<b>1,346</b>
Working Capital	-462	-258	-294	168	<b>-845</b>	-707	-446	128	326	<b>-699</b>	-181	-275	-124	<b>-580</b>
Investing Activities	-223	-514	-571	-315	<b>-1,623</b>	-867	-744	-905	-1,610	<b>-4,126</b>	-1,547	-1,729	-1,362	<b>-4,638</b>
Others	-466	139	77	-279	<b>-529</b>	-262	-537	91	-198	<b>-907</b>	143	-210	-336	<b>-403</b>
<b>Financing Activities</b>	-271	-262	-72	-132	<b>-737</b>	1,170	369	238	17	<b>1,794</b>	1,450	1,003	375	<b>2,828</b>
Debts	-474	177	-47	-232	<b>-575</b>	1,191	878	186	-3	<b>2,252</b>	1,498	1,661	474	<b>3,633</b>
Dividends	-	-386	-	-	<b>-386</b>	-	-460	-32	-2	<b>-494</b>	-	-484	-0	<b>-484</b>
<b>Ending Cash Balance</b>	1,909	2,107	2,400	2,779	<b>2,779</b>	3,132	2,830	3,333	2,557	<b>2,557</b>	3,122	2,666	2,085	<b>2,085</b>

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# Appendix

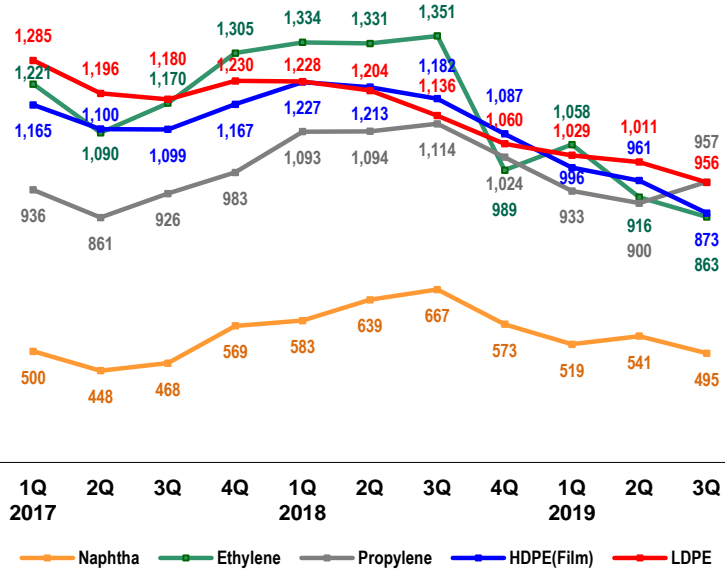
## Ethylene / PE Demand Supply



# Appendix

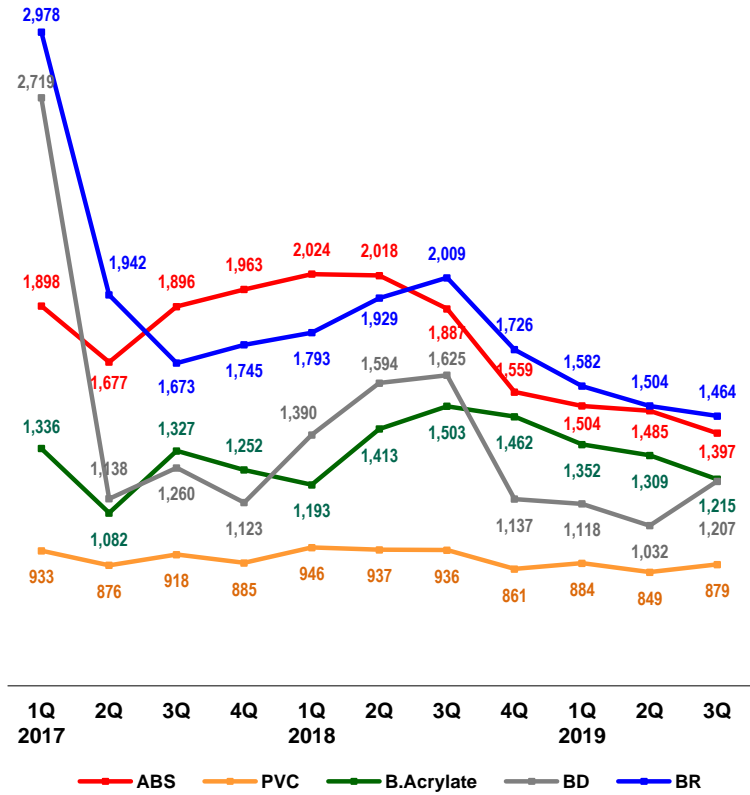
## Quarterly Price Trends

(Unit : USD/MT)



NCC/PO

(Unit : USD/MT)



ABS

PVC/  
Plasticizer

Acrylate/SAP

Rubber/Specialty  
Polymers

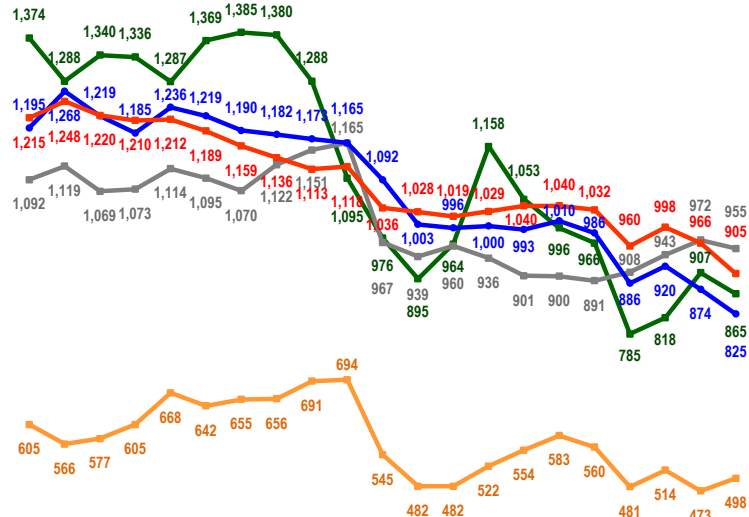
• The prices are average price of CFR FE Asia for general grade in each product group.



# Appendix

## Monthly Price Trends

(Unit : USD/MT)

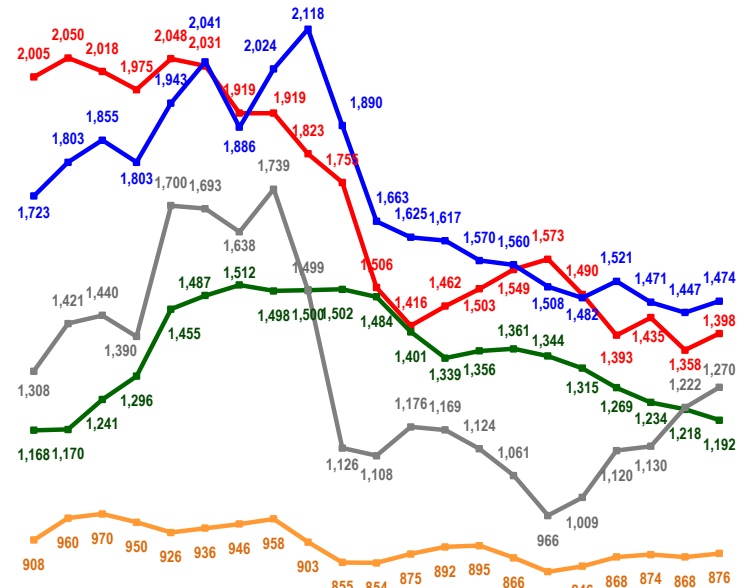


Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep  
2018 2019

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

NCC/PO

(Unit : USD/MT)



Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep  
2018 2019

— ABS — PVC — B.Acrylate — BD — BR

ABS

PVC/  
Plasticizer

Acrylate/SAP

Rubber/Specialty  
Polymers

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

# Thank you



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