### Solution Partner

# 4Q 2019 Business Results & Outlook





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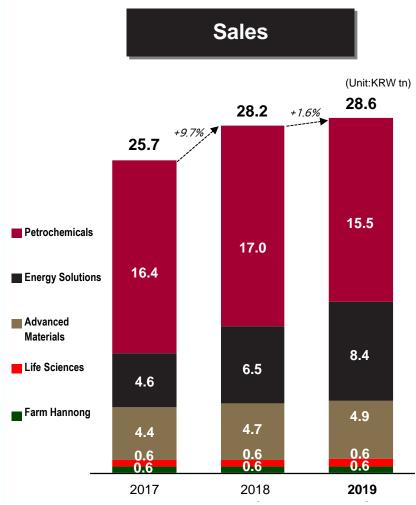
- Sales & Operating Profit by Business
- Income Statements / Financial Position / Cash Flows
- Dividend Summary
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The business results currently under audit review are presented here for investors' convenience. Hence, please be advised that some of their 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.

# **2019 Business Results**



\* Applied retroactive effects of past performance based on the reorganization

### **Operating Profit(%)**

(Unit:KRW bn)

			20	19
	2017	2018	Actual	W / O <sup>*</sup> Non-recurring Loss
LG Chem	2,929	2,246	896	1,320
LG Chem	(11.4%)	(8.0%)	(3.1%)	(4.6%)
Detrechem	2,683	2,031	1,418	1,418
Petrochem	(16.4%)	(12.0%)	(9.1%)	(9.1%)
Energy	29	209	-454	-30
Solutions	(0.6%)	(3.2%)	(-5.4%)	(-0.4%)
Advanced	237	71	64	64
Materials	(5.4%)	(1.5%)	(1.3%)	(1.3%)
Life	54	50	37	37
Sciences	(9.7%)	(8.6%)	(5.9%)	(5.9%)
Farm	36	15	21	21
Hannong	(5.9%)	(2.6%)	(3.5%)	(3.5%)

\* Assumptions excluding non-recurring losses for comparison

	2018					
	10	10	20	20	40	ຊ
	4Q	1Q	2Q	3Q	Actual	W / O* Non-recurring Loss
Sales	7,343	6,639	7,177	7,347	7,461	7,461
OP	290	275	268	380	-28	276
(%)	3.9%	4.1%	3.7%	5.2%	-0.4%	3.7%
EBITDA	684	682	725	862	485	789
(%)	9.3%	10.3%	10.1%	11.7%	6.5%	10.6%
Pre-tax Income	158	280	193	244	-156	148
(%)	2.1%	4.2%	2.7%	3.3%	-2.1%	2.0%
Net Income	127	212	84	137	-57	246
(%)	1.7%	3.2%	1.2%	1.9%	-0.8%	3.3%

(Unit:KRW bn)

\* Assumptions excluding non-recurring losses for comparison

### **Balance Sheet**

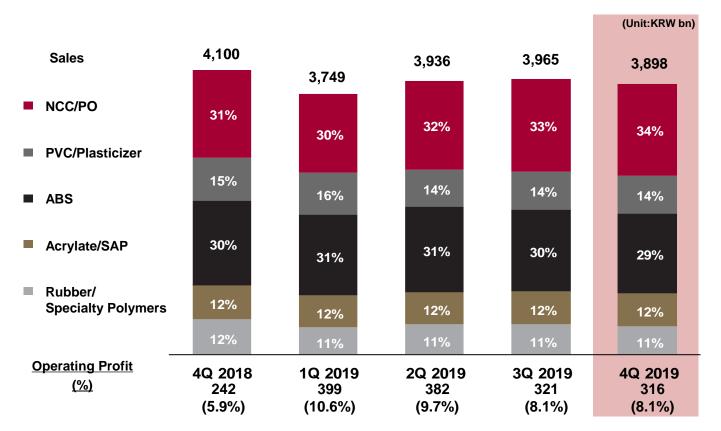
			(Unit:KRW tn)
	2017	2018	2019
Asset	25.04	28.94	34.02
Cash and Equivalents	2.78	2.56	1.92
Liabilities	8.70	11.62	16.64
Debt	3.04	5.32	8.41
Shareholder's Equity	16.34	17.32	17.38

### **Financial Ratios**

	2017	2018	2019		
Liabilities / Equity	53.3%	67.1%	95.7%		
Debts / Equity	18.6%	30.7%	48.4%		
Net Debts / Equity	1.6%	16.0%	37.4%		
ROE	13.3%	9.0%	2.2%		
ROA	8.9%	5.6%	1.2%		

ROE: Net Income / Avg of beginning & ending shareholders' equity ROA: Net Income / Avg of beginning & ending assets

### **Petrochemicals**

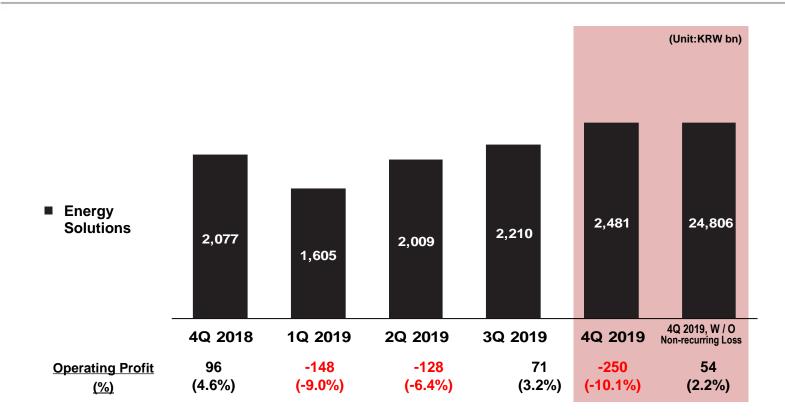


#### [Analysis]

- Decline in demand of upstream due to seasonality of 4Q and worsened market conditions
- Profitability is to be maintained
- thanks to the downstream's robust performance

#### [Outlook]

 Earnings of 1Q is expected to be impacted by the new global capacity coming operation and increased market uncertainty

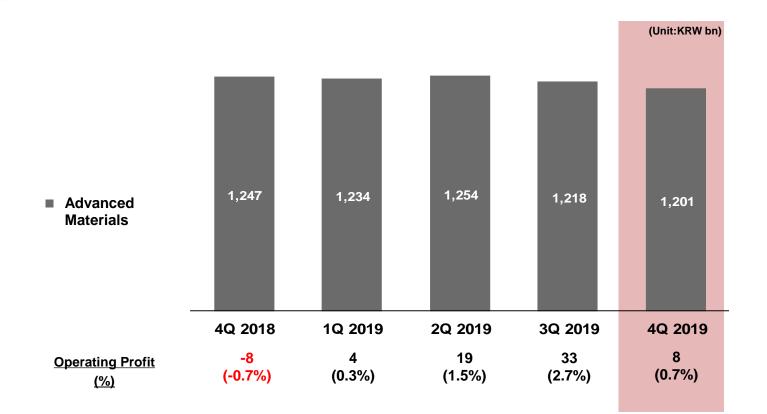


#### [Analysis]

- The revenue enhanced with the expansion of sales in EV batteries to European Market
- Profitability worsened due to the recognition of the ESS fire-related provision

#### [Outlook]

- Shipment of EV battery is expected to grow in 1Q
- Decline in the shipment of IT battery caused by seasonal off-peak

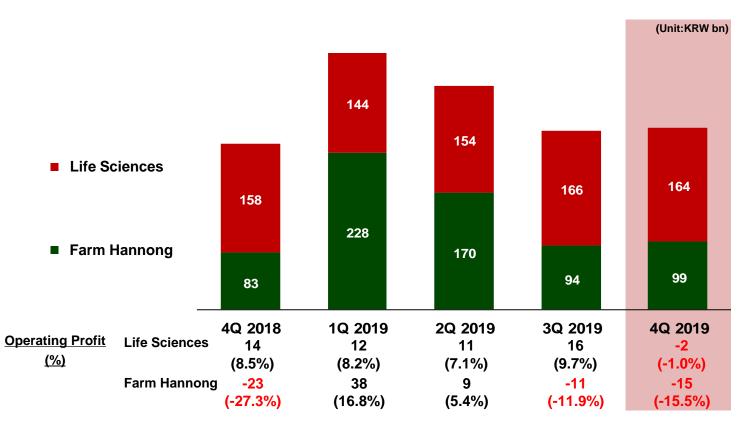


#### [Analysis]

 Sales and profitability decreased due to seasonality of display industry and the price decline

#### [Outlook]

 Decreased shipments of display-related products due to seasonality of front industry



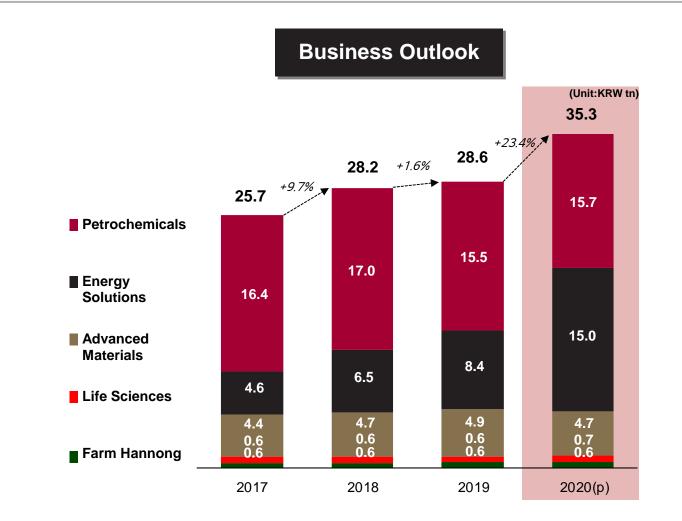
#### [Analysis]

- Life Sciences: Decreased profitability due to increase in marketing and R&D expenses
- Farm Hannong: Improved YoY profitability thanks to expansion of sales in main products and cost improvement

#### [Outlook]

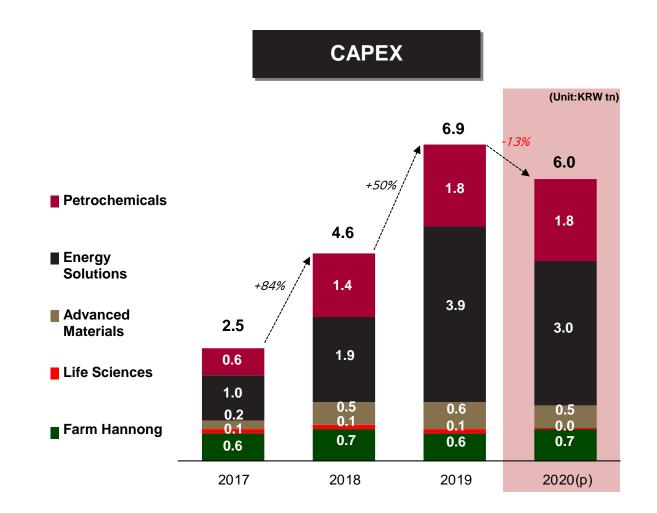
- Life Sciences: Investment in R&D is expected to be strengthened for new drug development
- Farm Hannong: Slight decrease in sales YoY is expected due to focusing on profitable products

# **2020 Business Outlook**



\* Business outlook and CAPEX are based on our business plan, and may differ from actual results, due to changes in business environment and strategies. The difference between total sales and total sales by business is intra-company transactions, sales in common business, etc.

# 2020 Business Outlook



\* Business outlook and CAPEX are based on our business plan, and may differ from actual results, due to changes in business environment and strategies.



### Sales & Operating Profits by Business

2017								2018			2019				
LG CHEM	1Q	2Q	3Q	4Q		1Q	2Q	3Q	4Q		1Q	2Q	3Q	4Q	
Sales	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	7,461	28,625
Operating Profits	797	727	790	615	2,929	651	703	602	290	2,246	275	268	380	-28	896
(%)	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%	-0.4%	3.1%
EBITDA	1,151	1,074	1,137	972	4,335	1,006	1,065	975	684	3,730	682	725	862	485	2,755
(%)	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%	6.5%	9.6%
Petrochemicals	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	3,898	15,548
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	1,316	5,048
PVC/Plasticizer	588	572	560	568	2,288	605	596	611	622	2,434	596	538	546	545	2,225
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	1,148	4,728
Acrylate/SAP	435	427	425	420	1,706	427	468	477	495	1,868	447	461	479	473	1,861
Rubber/ Specialty Polymer	563	537	467	424	1,991	420	478	497	508	1,903	400	440	431	415	1,686
<b>Operating Profits</b>	700	666	721	596	2,683	598	663	528	242	2,031	399	382	321	316	1,418
(%)	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%	8.1%	9.1%
Energy Solutions	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	2,481	8,350
<b>Operating Profits</b>	-10	8	18	14	29	2	27	84	96	209	-148	-128	71	-250	-454
(%)	-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%	-10.1%	-5.4%
Advanced Materials	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	1,201	4,906
Operating Profits	63	43	75	56	237	29	20	31	-8	71	4	19	33	8	64
(%)	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%	0.7%	1.3%
Life Sciences	129	135	139	148	552	131	151	135	158	575	144	154	166	164	628
Operating Profits	21	19	13	1	54	7	16	13	14	50	12	11	16	-2	37
(%)	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%	-1.0%	5.9%
Farm Hannong	254	186	97	68	604	237	188	92	83	600	228	170	94	99	590
Operating Profits	50	14	-10	-19	36	45	12	-19	-23	15	38	9	-11	-15	21
(%)	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%	-15.5%	3.5%

(Unit:KRW bn)

\* Applied retroactive effects of past performance based on the reorganization

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			2017				2018			2019					
	1Q	2Q	3Q	4Q		1Q	2Q	3Q	4Q		1Q	2Q	3Q	4Q	
Sales	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	7,461	28,625
Cost of Sales	5,073	5,011	4,940	5,110	20,135	5,212	5,580	5,868	6,177	22,837	5,469	6,029	6,095	6,186	23,779
Gross Profit(%)	1,414	1,371	1,457	1,322	5,564	1,342	1,472	1,367	1,166	5,346	1,170	1,148	1,253	1,275	4,846
	21.8%	21.5%	22.8%	20,6%	21.6%	20.5%	20.9%	18.9%	15.9%	19.0%	17.6%	16.0%	17.1%	17.1%	16.9%
SG&A Expenses	617	644	667	707	2,635	691	768	765	876	3,100	895	881	873	1,303	3,950
Operating Profit(%)	797	727	790	615	2,929	651	703	602	290	2,246	275	268	380	-28	896
	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%	-0.4%	3.1%
Other non-operating income(expenses)	-99	3	-87	-181	-365	2	-59	-117	-132	-306	4	-75	-137	-128	-335
Income before tax	698	730	702	434	2,564	653	644	485	158	1,940	280	193	244	-156	561
Net Income	548	590	546	338	2,022	553	493	347	127	1,519	212	84	137	-57	376
EPS(Unit:KRW)	6,936	7,531	6,799	4,101	25,367	6,934	6,234	4,481	1,568	19,217	2,537	887	1,677	-1,016	4,085

(Unit:KRW bn)

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Appendix



(Unit:KRW bn)

		20	17			20	18		2019				
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	
Assets	22,171	22,671	23,708	25,041	26,416	27,399	28,419	28,944	31,212	32,436	33,531	34,024	
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	1,921	
A/R	3,961	4,184	4,523	4,449	4,709	5,146	4,949	4,381	4,616	4,738	4,575	3,738	
Inventory	3,250	3,086	• 3,187	3,353	3,784	3,950	4,404	4,290	4,503	4,771	4,977	5,034	
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	20,804	
Liabilities	7,265	7,137	7,586	8,703	9,905	10,391	11,162	11,622	14,013	15,157	16,040	16,641	
A/P	1,808	1,609	1,756	2,015	1,999	2,156	2,541	2,166	2,434	2,549	2,467	2,380	
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	1,356	
Long-term debts	972	1,869	1,915	1,594	2,643	3,211	3,262	3,708	5,275	7,049	7,211	7,058	
Shareholders' Equity	14,906	15,535	16,122	16,339	16,510	17,009	17,257	17,322	17,199	17,279	17,491	17,384	
Liabilities/Equity(%)	48.7%	45.9%	47.1%	53.3%	60.0%	61.1%	64.7%	67.1%	81.5%	87.7%	91.7%	95.7%	
Net debt/Equity(%)	8.3%	7.8%	5.4%	1.6%	6.7%	13.4%	11.4%	16.0%	22.0%	33.6%	39.3%	37.4%	
BPS (Unit:KRW)	188,859	196,894	203,952	206,544	208,363	214,535	217,500	218,227	216,308	217,445	219,413	217,230	

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			2017					2018			2019				
	1Q	2Q	3Q	4Q		1Q	2Q	3Q	4Q		1Q	2Q	3Q	4Q	
Beginning Cash Balance	1,474	1,492	1,730	1,781	1,474	2,249	2,917	2,352	3,067	2,249	2,514	3,098	2,631	2,055	2,514
<b>Operating Activities</b>	224	955	929	1,073	3,181	37	82	1,198	808	2,125	644	246	395	1,839	3,124
Operating Profits	797	727	790	615	2,929	651	703	602	290	2,246	275	268	380	-28	896
Depreciation	355	347	347	357	1,406	355	362	373	394	1,484	407	458	481	513	1,859
Working Capital	-627	-258	-294	168	-1,011	-707	-446	128	307	-718	-181	-275	-124	693	113
Investing Activities	92	-473	-821	-438	-1,640	-553	-1,005	-697	∆1,384	-3,639	-1,527	-1,732	-1,360	-1,492	-6,111
Financing Activities	-271	-262	-72	-132	-737	1,170	369	238	17	1,794	1,450	986	386	-525	2,298
Debts	256	177	-47	-232	154	1,191	878	186	21	2,276	1,584	1,576	474	-540	3,093
Dividends	-	-386	-	-	-386	-	-460	-34	-	-494	-	-484	-	-	-484
Ending Cash Balance	1,492	1,730	1,781	2,249	2,249	2,917	2,352	3,067	2,514	2,514	3,098	2,631	2,055	1,889	1,889

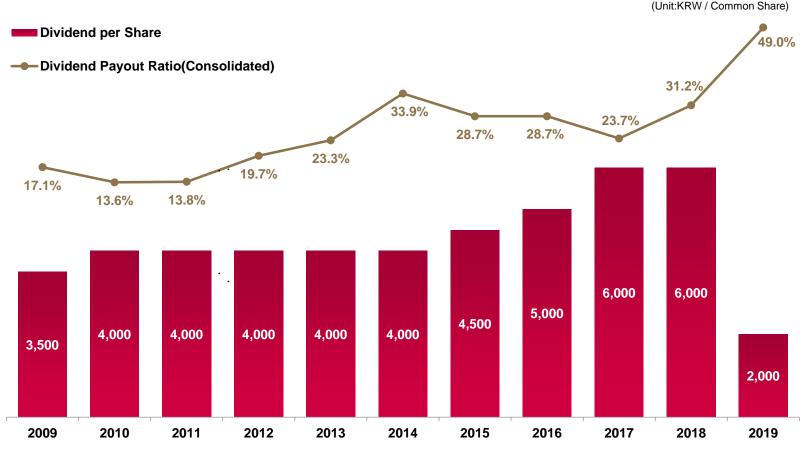
(Unit:KRW bn)

\* On an accounting (disclosure) basis

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### **Dividend Summary**



#### \* Dividend of 2019 is approved by the board of directors and will be finalized after approval of the 19th Annual General Meeting.

※ Dividend Policy

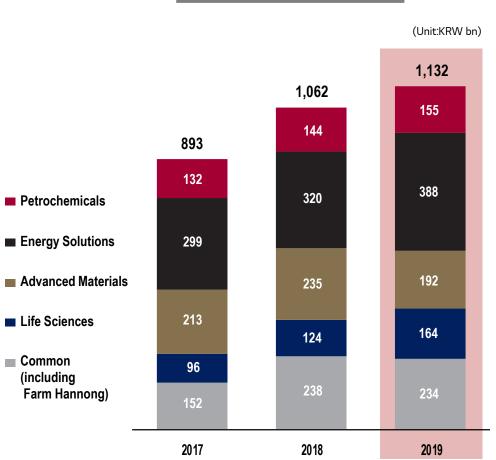
LG Chem considers all factors such as, investment amounts, cash flow, financial structure and dividend stability, etc., when the company determines dividend payout amounts for enhancing shareholders' value and expanding return of profits to its shareholders.

The dividend stability means the company tries to avoid reducing dividend per share, however, it can be flexibly applied to the direction of the company's long-term growth and continuing enhancement of shareholders' value after analyzing changes in economic condition and business strategy including CAPEX.

The company will communicate to investors about expected next year's dividend information in the conference call at least once a year.

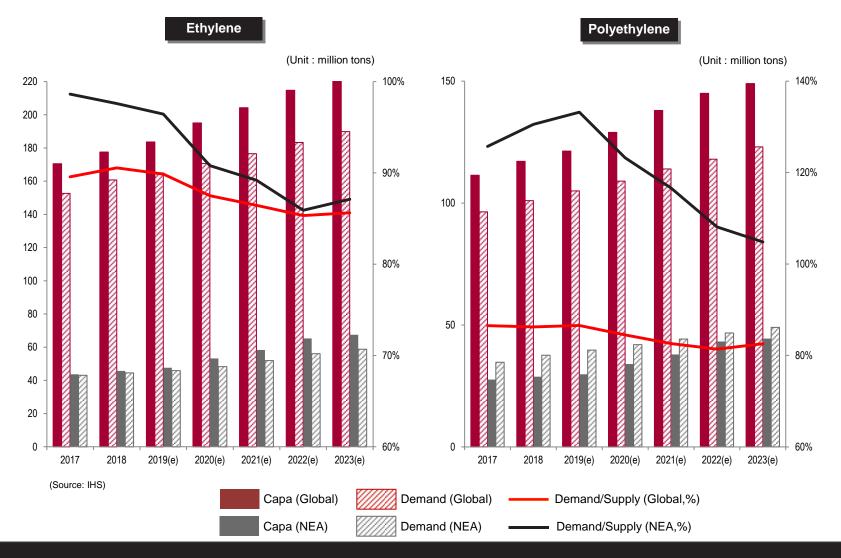


### **R&D Expenses**



R&D Expenses

# Appendix

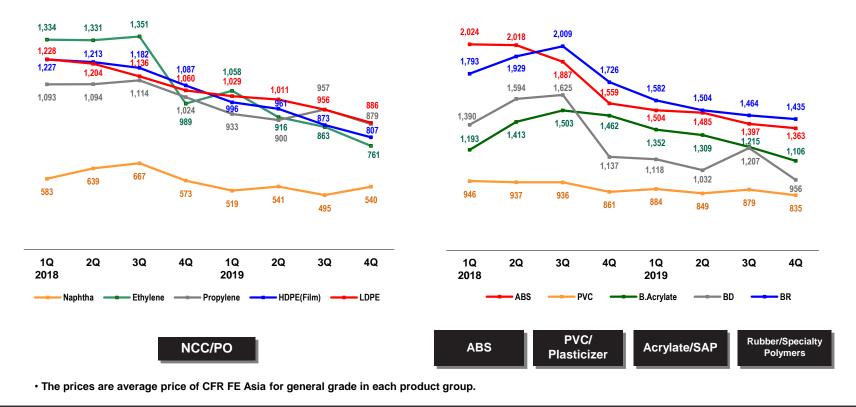




### **Quarterly Price Trends**

(Unit : USD/MT)

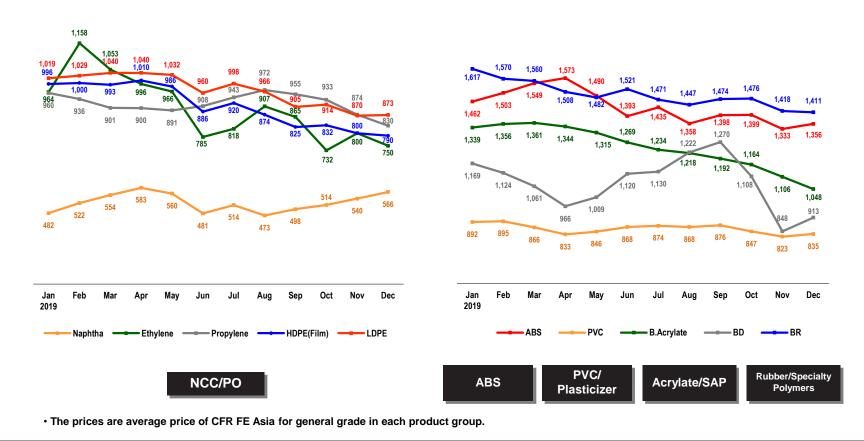
(Unit: USD/MT)

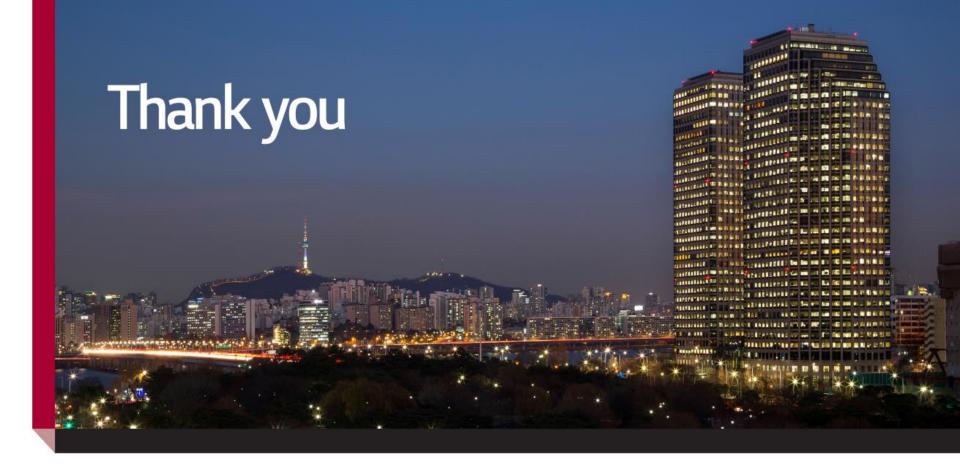




(Unit : USD/MT)

(Unit: USD/MT)







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