

4Q 2020

# Business Results & Outlook





# Contents

- 4Q 2020 Earnings Summary | 4~6
- 4Q Results & Outlook by Business | 7~11
- 2021 Business Outlook | 12
- Business Review & Strategy | 13~15
- Appendix | 16~20
  - Sales & Operating Profit by Business
  - Income Statements / Financial Position / Cash Flows
  - CAPEX & R&D Expenses

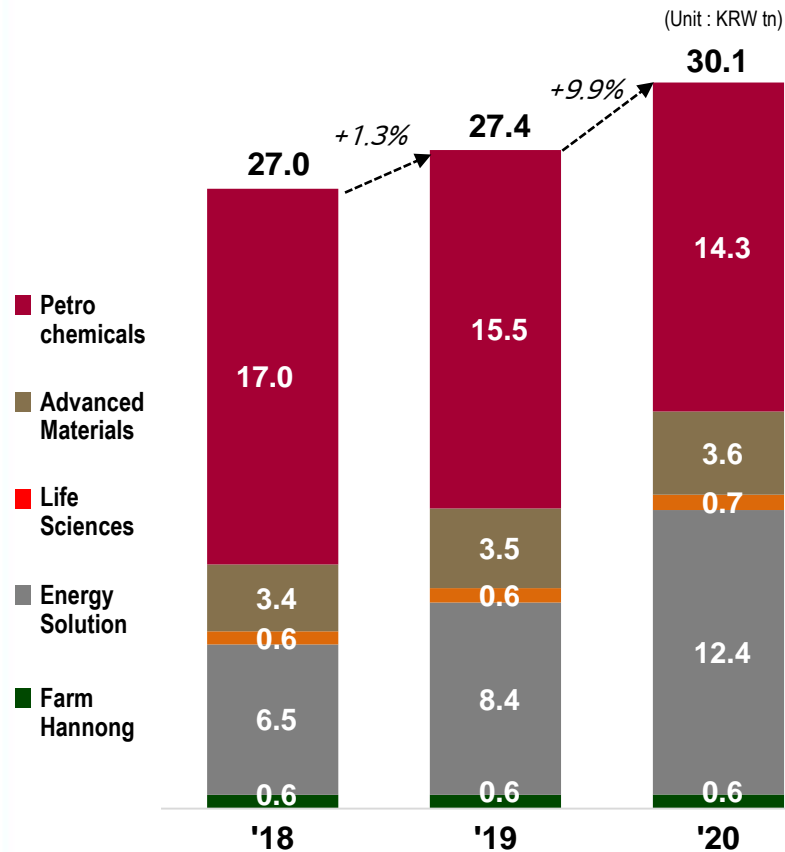
**The business results currently under audit review are presented here for investors' convenience. Hence, please be advised that some of their contents may be altered in the course of audit.**

**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.**

# 2020 Business Results

## Sales



## Operating Profit(%)

(Unit : KRW bn)

	'18	'19	'20	YoY
<b>LG Chem(%)</b>	2,289 (8.6%)	825 (3.0%)	1,798 (6.0%)	<b>+117.9%</b>
<b>Petro chemicals</b>	2,032 (12.0%)	1,417 (9.1%)	1,968 (13.8%)	<b>+38.9%</b>
<b>Advanced Materials</b>	52 (2.0%)	7 (0.2%)	163 (4.5%)	<b>+2,227.1%</b>
<b>Life Sciences</b>	50 (8.6%)	37 (5.9%)	54 (8.1%)	<b>+44.6%</b>
<b>Energy Solution</b>	209 (3.2%)	-454 (-5.4%)	-167 (-1.3%)	-
<b>Farm Hannong</b>	15 (2.6%)	21 (3.5%)	25 (4.1%)	<b>+18.2%</b>
<b>EBITDA(%)</b>	3,773 (14.1%)	2,684 (9.8%)	4,110 (13.7%)	<b>+53.1%</b>

※ The historical business results retroactively excluded the results of the discounted and held for sale business.

# 4Q 2020 Business Results

## Income Statements

(Unit : KRW bn)

	2019					2020					YoY	QoQ
	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total		
<b>Sales</b>	6,265	6,778	6,899	7,411	27,353	6,729	6,935	7,507	<b>8,905</b>	30,077	<b>+20.2%</b>	<b>+18.6%</b>
<b>OP (%)</b>	263 4.2%	247 3.6%	349 5.1%	<b>-33</b> <b>-0.5%</b>	825 3.0%	206 3.1%	572 8.2%	902 12.0%	<b>119</b> <b>1.3%</b>	1,798 6.0%	<b>Turn a profit</b>	<b>-86.9%</b>
<b>EBITDA (%)</b>	670 10.7%	702 10.4%	830 12.0%	483 6.5%	2,684 9.8%	736 10.9%	1,130 16.3%	1,490 19.9%	<b>755</b> <b>8.5%</b>	4,110 13.7%	<b>+56.4%</b>	<b>-49.4%</b>
<b>Pre-tax Income (%)</b>	261 4.2%	187 2.8%	223 3.2%	<b>-97</b> <b>-1.3%</b>	574 2.1%	158 2.3%	470 6.8%	708 9.4%	<b>-392</b> <b>-4.4%</b>	944 3.1%	-	<b>Turn a loss</b>
<b>Net Income (%)</b>	212 3.4%	84 1.2%	137 2.0%	<b>-57</b> <b>-0.8%</b>	376 1.4%	36 0.5%	419 6.0%	570 7.6%	<b>-343</b> <b>-3.9%</b>	682 2.3%	-	<b>Turn a loss</b>

※ The historical business results retroactively excluded the results of the discounted and held for sale business.

# 4Q 2020 Business Results

## Financial Position

### Balance Sheet

(Unit : KRW tn)

	4Q 2019	3Q 2020	4Q 2020
<b>Asset</b>	34.0	40.0	<b>41.4</b>
Cash and Equivalents	1.9	3.6	<b>3.9</b>
<b>Liabilities</b>	16.6	21.2	<b>22.6</b>
Debt	8.4	11.4	<b>10.2</b>
Shareholder's Equity	17.4	18.8	<b>18.8</b>

### Financial Ratios

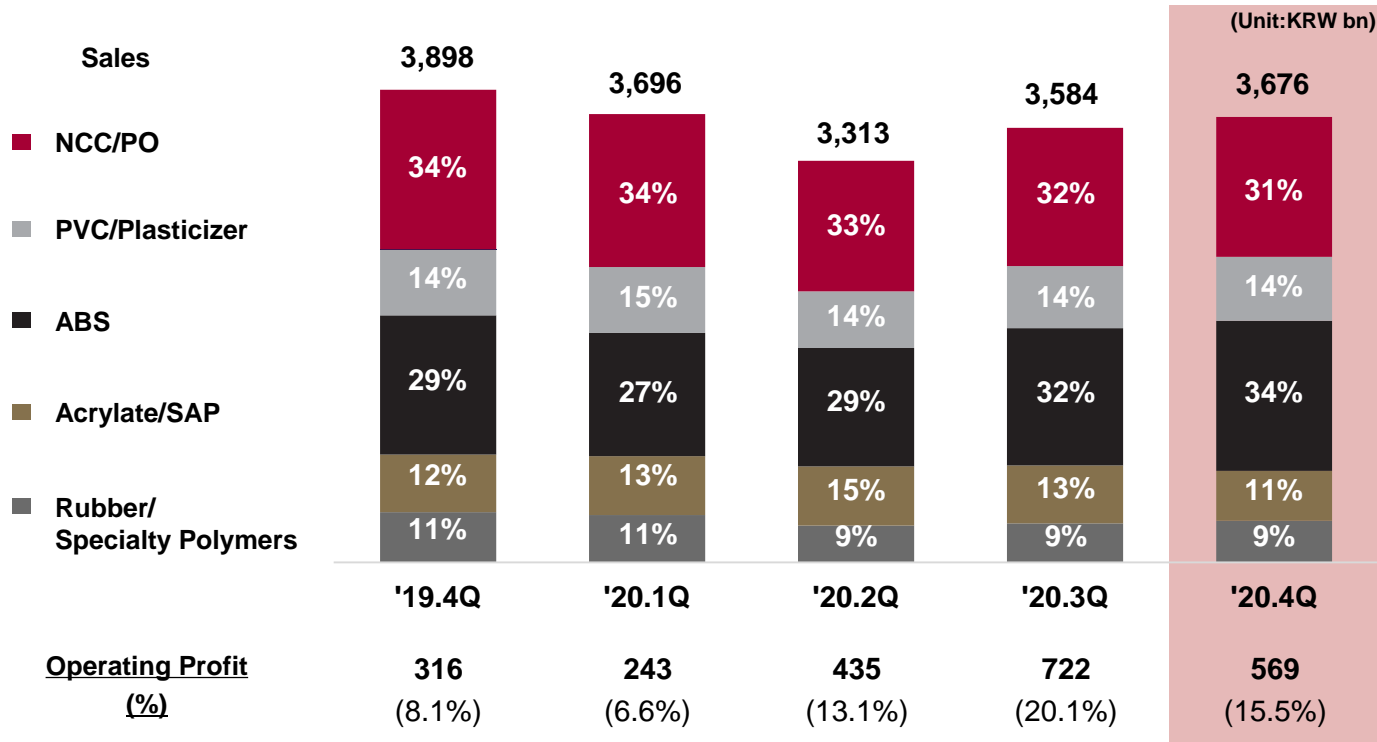
	4Q 2019	3Q 2020	4Q 2020
<b>Liabilities / Equity</b>	95.7%	112.6%	<b>120.3%</b>
<b>Debts / Equity</b>	48.4%	60.4%	<b>54.2%</b>
<b>Net Debts / Equity</b>	37.4%	41.5%	<b>33.5%</b>
<b>ROE</b>	2.2%	12.4%	<b>3.8%</b>
<b>ROA</b>	1.2%	5.8%	<b>1.8%</b>

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

ROA: Net Income / Avg of beginning & ending assets

# 4Q Results & Outlook by Business

Petrochemicals



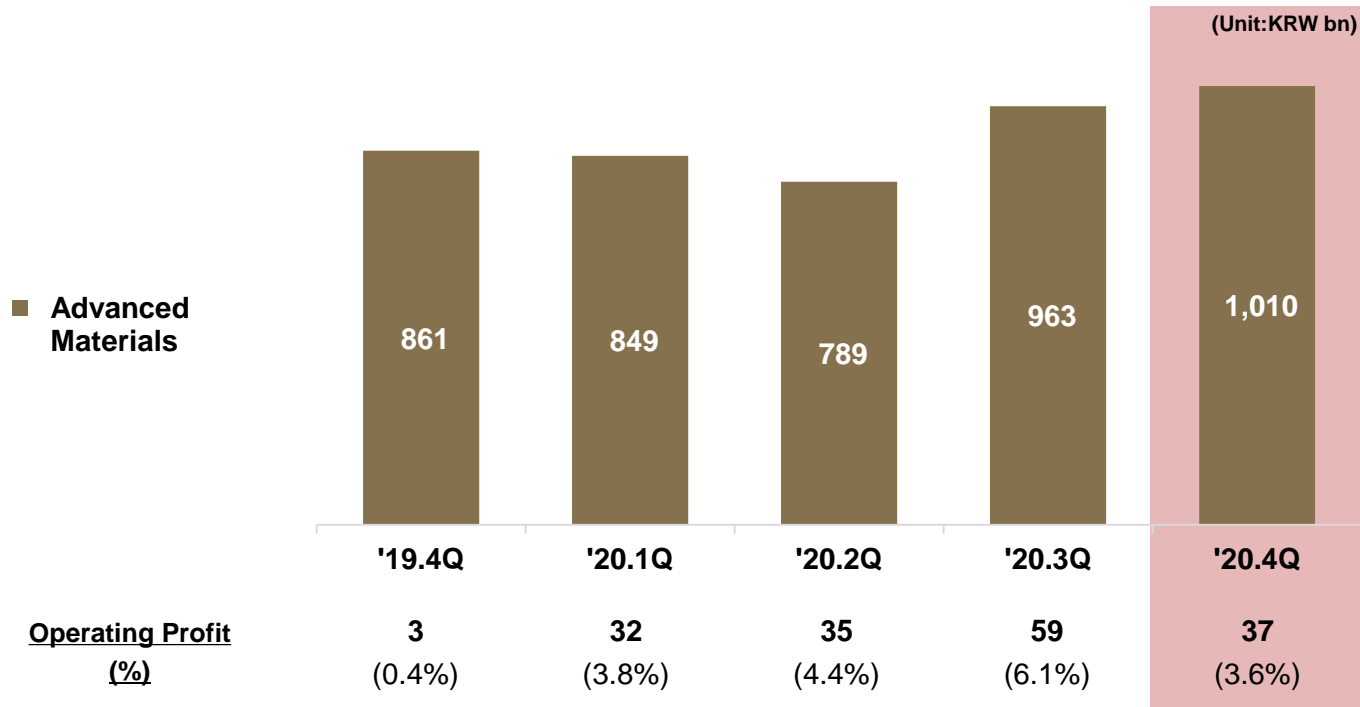
## [Analysis]

- Despite the impact from Yeosu NCC ESD and FX, robust profitability from improved spread of key products

## [Outlook]

- Although supply increases in Upstream by new capacity expansions, demand is expected to be recovered

# 4Q Results & Outlook by Business Advanced Materials



## [Analysis]

- While sales grew from increased shipments of battery materials, profitability declined due to the FX

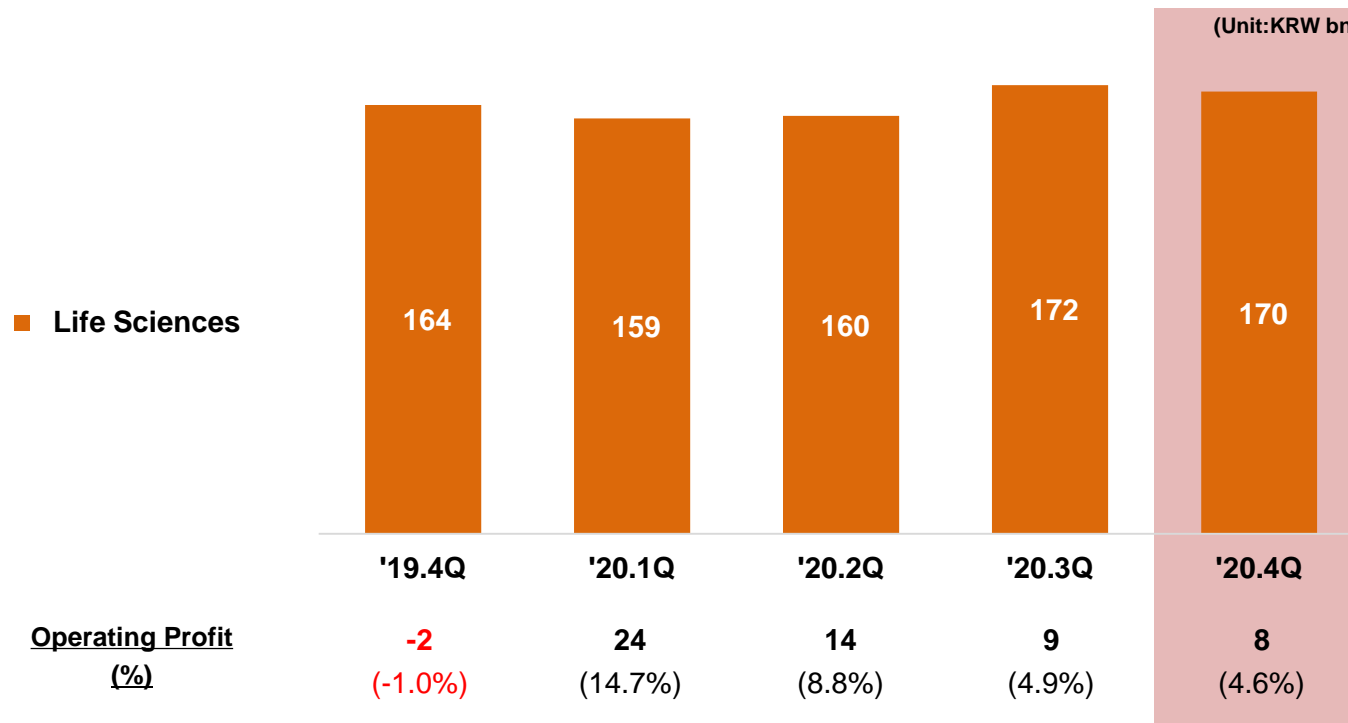
## [Outlook]

- While the negative FX impact to continue, expect sales and profitability to improve centered around battery materials



# 4Q Results & Outlook by Business

Life Sciences



## [Analysis]

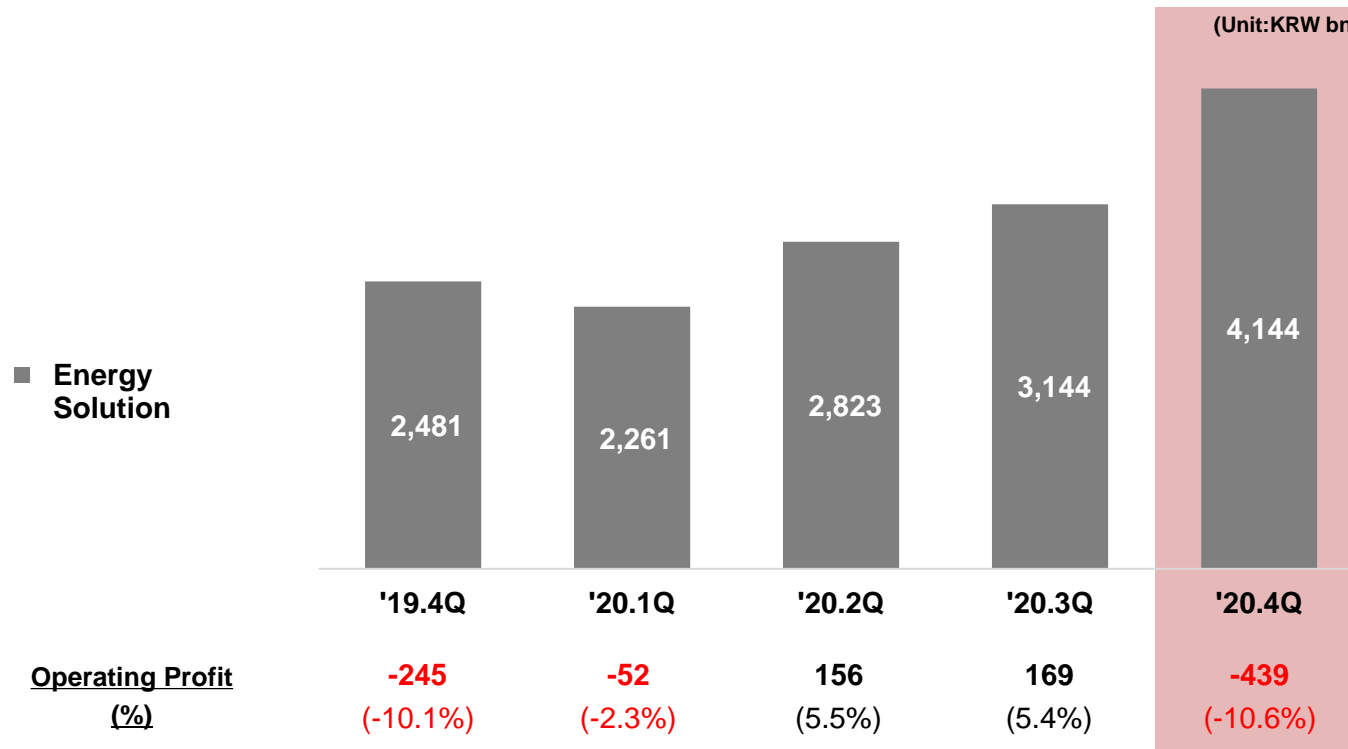
- Solid sales and profitability due to strong sales of Zemiglo and Yvoire

## [Outlook]

- Expect sales to increase due to the launch of new products including Eupolio (polio vaccine) and strengthen new drug portfolio through expanding R&D investment

# 4Q Results & Outlook by Business

Energy Solution



## [Analysis]

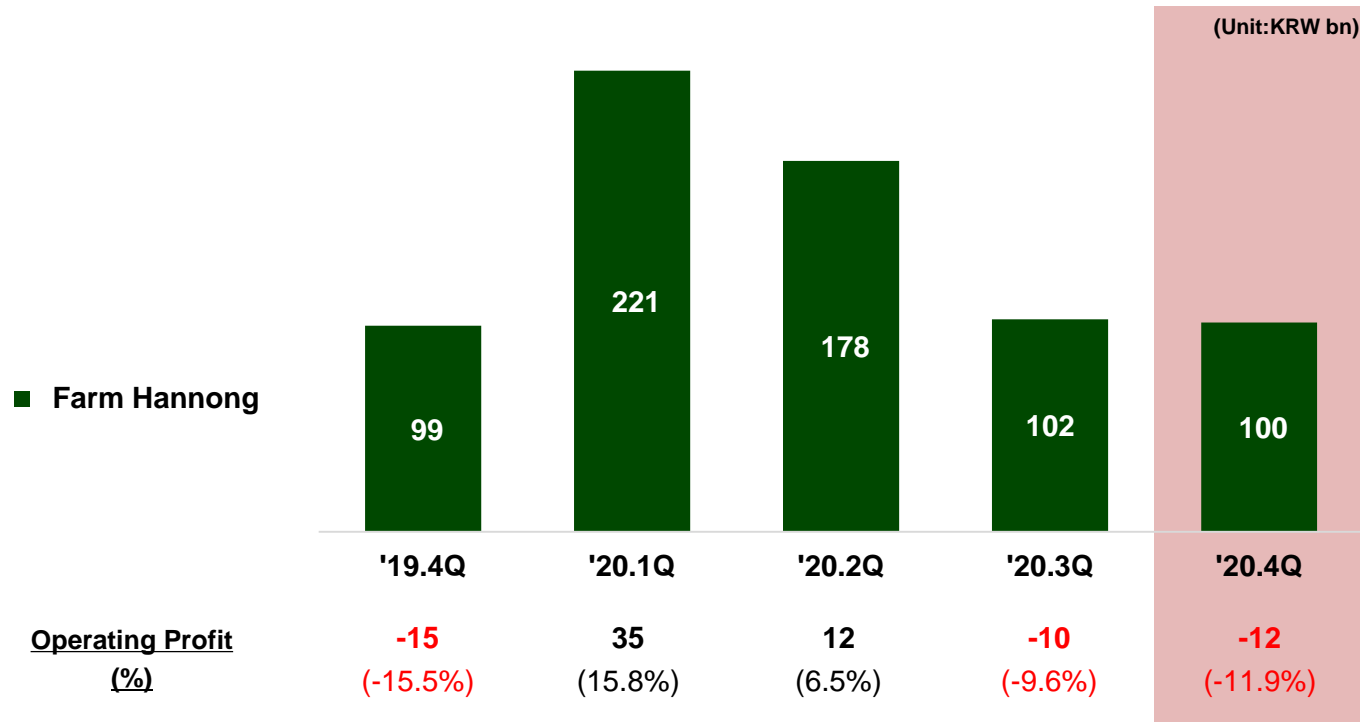
- Sales growth driven by increased shipment to major customers in Europe and America
- Despite profitability improvements from improved yield and reduction in fixed costs, profit decreased due to the negative FX impact and one-off cost

## [Outlook]

- Expect sales to grow from greater EV sales
- Profitability improving through more efficient operation and cost improvement

# 4Q Results & Outlook by Business

Farm Hannong



## [Analysis]

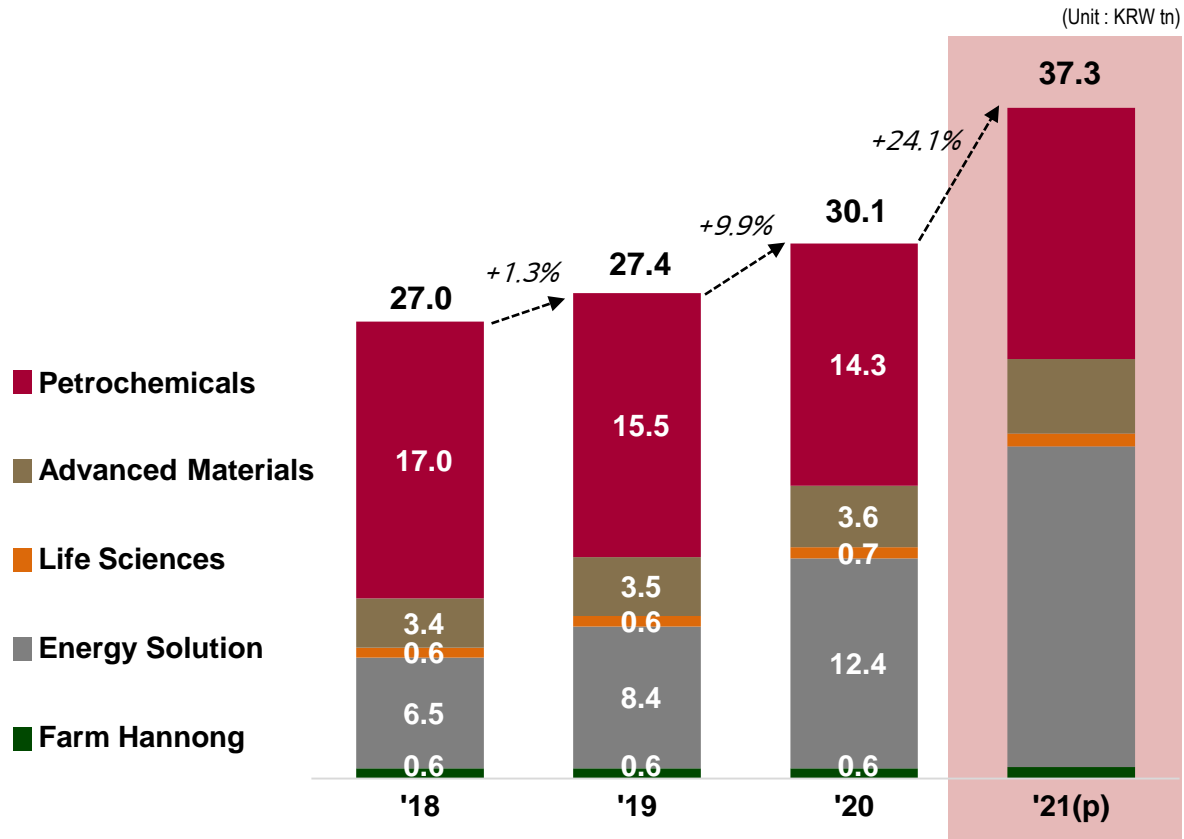
- YoY improvement in sales and profitability from greater sales of the seed business and improved cost structure for crop protection products

## [Outlook]

- Expect growth of crop protection and seed business and sales and profitability to improve from greater sales of specialty fertilizers, etc.

# 2021 Business Outlook

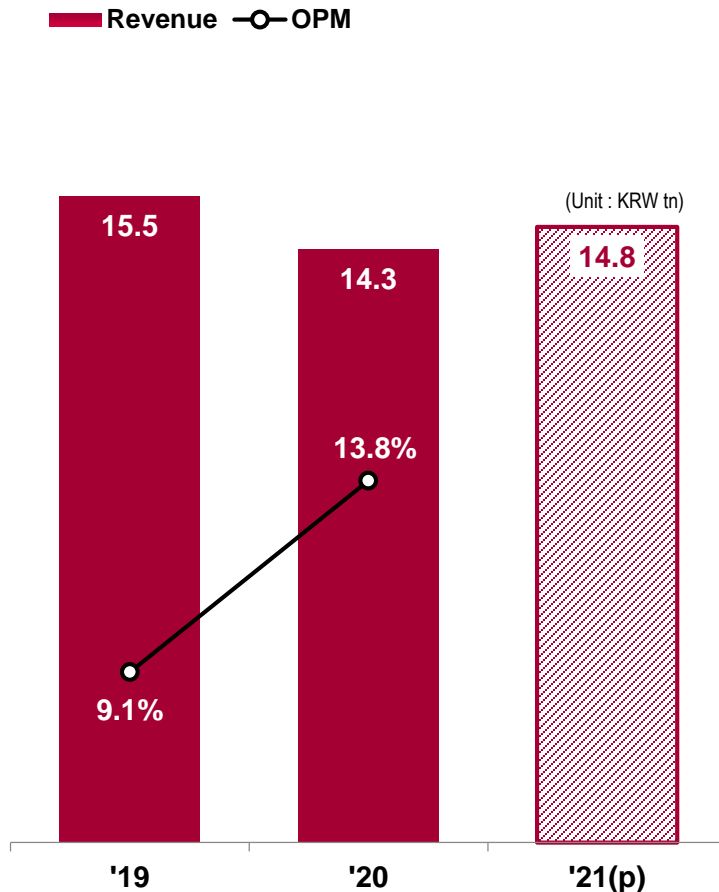
## Revenue



※ Business outlook is 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.

# Business Review & Strategy

① Petrochemicals



## ■ 2020 Review

- Due to the spread of COVID-19, downstream's demand contracted and sales declined
- Spread widened for key products such as ABS and NBL from China's economic recovery and Mega Trend-led consumption increases

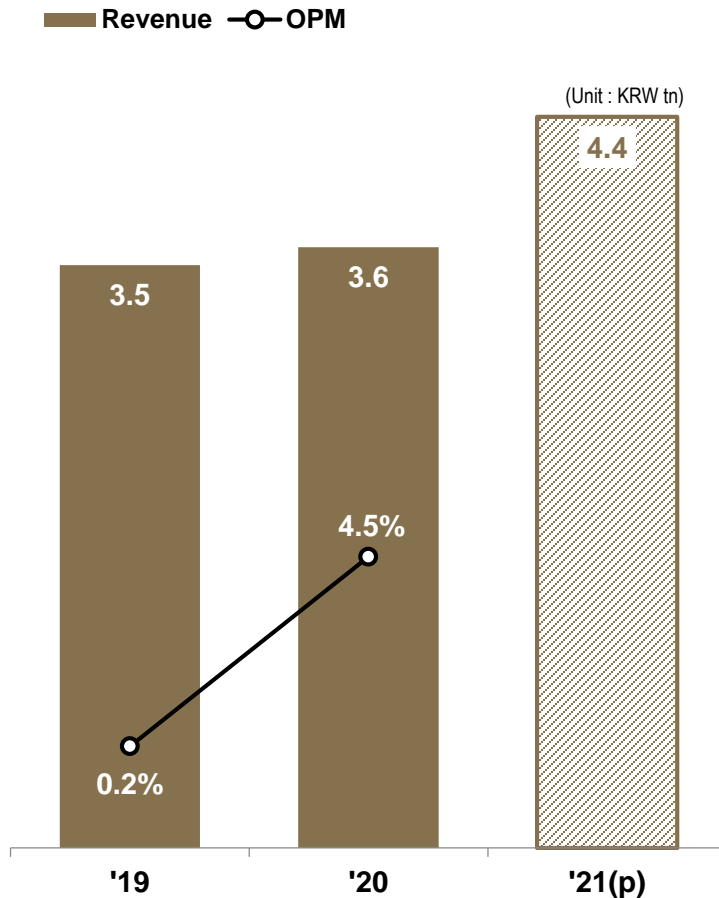
## ■ 2021 Outlook & Strategy

- Upstream: New & additional capa expansion in the region  
Downstream: demand to gradually improve from the recovery in global economic
- Increase in demand for eco-friendly products such as solar power, EV, recycle, etc.
- Strengthen product competitiveness, proactively review regional diversification strategy and strengthen new business development capability in promising areas related to sustainability, etc.

※ Business outlook is based on our business plan, and may differ from actual results, due to changes in business environment and strategies.

# Business Review & Strategy

② Advanced Materials



## ■ 2020 Review

- Despite weak demand from downstream due to COVID-19, sales and profitability improved in cathodes and OLED materials business
- Realigned business portfolio inc. disposal of LCD polarizer, Secured growth foundation by improving productivity and competitiveness of OLED materials

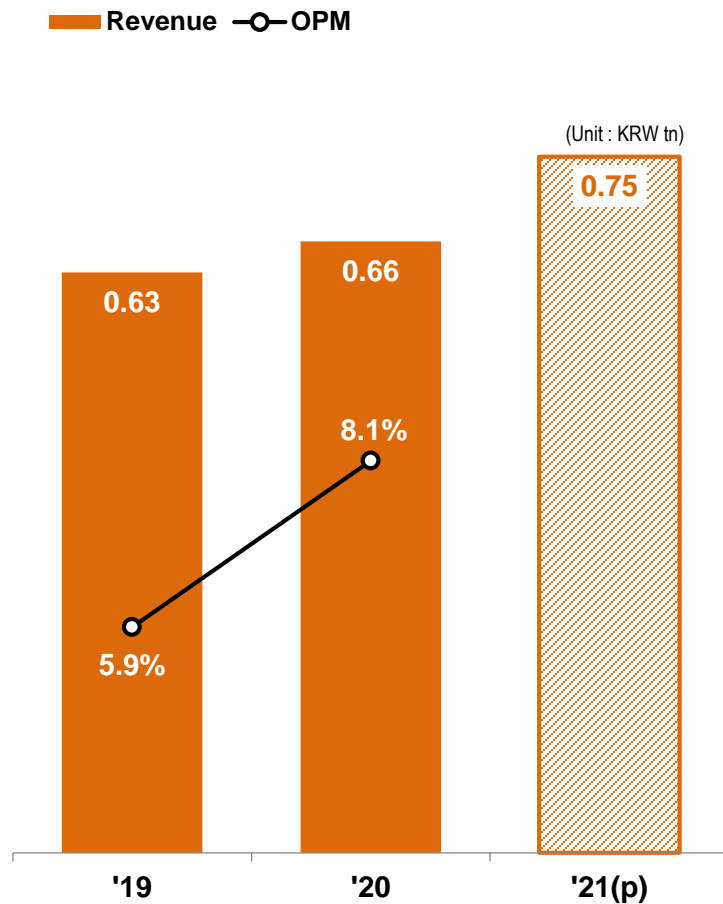
## ■ 2021 Outlook & Strategy

- Sales growth target of more than 20% from demand growth outlook of downstream market including battery / OLED / IT
- Focus on fostering High-Ni battery material and increasing capacity
- Strengthen high-value-add products such as eco-friendly materials, light materials for e-mobility

※ Business outlook is based on our business plan, and may differ from actual results, due to changes in business environment and strategies.

# Business Review & Strategy

③ Life Sciences



## 2020 Review

- Sales grew and profitability improved with the strengthening of the market status of key products such as Zemiglo (diabetes) and Eutropin (growth hormone)
- Expanded new drug development tasks and laid the foundation for global new R&D foundation by securing the pipeline through Open Innovation

## 2021 Outlook & Strategy

- Expect sales growth of more than 10% by supplying new product Eupolio (polio vaccine) and etc. to UNICEF and expanding existing business including Yvoire (filler)
- Increase R&D investment by strengthening global clinical and new drug portfolio

※ Business outlook is based on our business plan, and may differ from actual results, due to changes in business environment and strategies.

# Appendix

## Sales & Operating Profits by Business

(Unit : KRW bn)

LG Chem	2019					2020				
	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total
Sales	6,265	6,778	6,899	7,411	27,353	6,729	6,935	7,507	8,905	30,077
Operating profits	263	247	349	-33	825	206	572	902	119	1,798
(%)	4.2%	3.6%	5.1%	-0.5%	3.0%	3.1%	8.2%	12.0%	1.3%	6.0%
EBITDA	670	702	830	483	2,684	736	1,130	1,490	755	4,110
(%)	10.7%	10.4%	12.0%	6.5%	9.8%	10.9%	16.3%	19.9%	8.5%	13.7%
<b>Petrochemicals</b>	<b>3,749</b>	<b>3,936</b>	<b>3,965</b>	<b>3,898</b>	<b>15,548</b>	<b>3,696</b>	<b>3,313</b>	<b>3,584</b>	<b>3,676</b>	<b>14,269</b>
NCC/PO	1,136	1,270	1,327	1,316	5,048	1,261	1,077	1,140	1,155	4,634
PVC/Plasticizer	596	538	546	545	2,225	543	467	511	529	2,050
ABS	1,170	1,228	1,182	1,148	4,728	1,016	977	1,134	1,238	4,365
Acrylate/SAP	447	461	479	473	1,861	484	488	475	412	1,859
Rubber/ Specialty Polymer	400	440	431	415	1,686	391	304	323	342	1,360
Operating Profits	397	382	321	316	1,417	243	435	722	569	1,968
(%)	10.6%	9.7%	8.1%	8.1%	9.1%	6.6%	13.1%	20.1%	15.5%	13.8%
<b>Advanced Materials</b>	<b>888</b>	<b>895</b>	<b>811</b>	<b>861</b>	<b>3,455</b>	<b>849</b>	<b>789</b>	<b>963</b>	<b>1,010</b>	<b>3,611</b>
Operating Profits	-6	5	5	3	7	32	35	59	37	163
(%)	-0.7%	0.6%	0.6%	0.4%	0.2%	3.8%	4.4%	6.1%	3.6%	4.5%
<b>Life Sciences</b>	<b>144</b>	<b>154</b>	<b>166</b>	<b>164</b>	<b>628</b>	<b>159</b>	<b>160</b>	<b>172</b>	<b>170</b>	<b>661</b>
Operating Profits	12	11	16	-2	37	24	14	9	8	54
(%)	8.2%	7.1%	9.7%	-1.0%	5.9%	14.7%	8.8%	4.9%	4.6%	8.1%
<b>Energy Solution</b>	<b>1,650</b>	<b>2,009</b>	<b>2,210</b>	<b>2,481</b>	<b>8,350</b>	<b>2,261</b>	<b>2,823</b>	<b>3,144</b>	<b>4,144</b>	<b>12,372</b>
Operating Profits	-148	-128	71	-250	-454	-52	156	169	-439	-167
(%)	-9.0%	-6.4%	3.2%	-10.1%	-5.4%	-2.3%	5.5%	5.4%	-10.6%	-1.3%
<b>Farm Hannong</b>	<b>228</b>	<b>170</b>	<b>94</b>	<b>99</b>	<b>590</b>	<b>221</b>	<b>178</b>	<b>102</b>	<b>100</b>	<b>601</b>
Operating Profits	38	9	-11	-15	21	35	12	-10	-12	25
(%)	16.8%	5.4%	-11.9%	-15.5%	3.5%	15.8%	6.5%	-9.6%	-11.9%	4.1%

※ Applied retroactive effects of past performance based on the reorganization

※ 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.



# Appendix

## Income Statements

(Unit : KRW bn)

LG Chem	2019					2020				
	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total
<b>Sales</b>	6,265	6,778	6,899	7,411	<b>27,353</b>	6,729	6,935	7,507	8,905	<b>30,077</b>
Cost of Sales	5,130	5,674	5,701	6,163	<b>22,668</b>	5,620	5,422	5,711	7,012	<b>23,764</b>
Gross Profit(%)	1,135	1,105	1,198	1,247	<b>4,686</b>	1,109	1,513	1,796	1,893	<b>6,312</b>
	18.1%	16.3%	17.4%	16.8%	<b>17.1%</b>	16.5%	21.8%	23.9%	21.3%	<b>21.0%</b>
SG&A Expenses	872	858	849	1,281	<b>3,860</b>	904	942	894	1,775	<b>4,514</b>
<b>Operating Profit(%)</b>	263	247	349	-33	<b>825</b>	206	572	902	119	<b>1,798</b>
	4.2%	3.6%	5.1%	-0.5%	<b>3.0%</b>	3.1%	8.2%	12.0%	1.3%	<b>6.0%</b>
Other non-operating income(expenses)	-2	-60	-125	-64	<b>-251</b>	-48	-102	-194	-510	<b>-855</b>
Income before tax	261	187	223	-97	<b>574</b>	158	470	708	-392	<b>944</b>
<b>Net Income</b>	212	84	137	-57	<b>376</b>	36	419	570	-343	<b>682</b>
EPS (Unit:KRW)					<b>4,085</b>					<b>6,666</b>

※ Applied retroactive effects of past performance based on the reorganization

※ 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.

# Appendix

## Financial Position

(Unit : KRW bn)

LG Chem	2018				2019				2020			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
<b>Assets</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>	<b>34,024</b>	<b>37,121</b>	<b>38,576</b>	<b>40,019</b>	<b>41,389</b>
Cash and Equivalents	3,132	2,830	3,333	2,557	3,122	2,667	2,085	1,921	2,797	3,367	3,554	3,882
A/R	4,709	5,146	4,949	4,381	4,616	4,738	4,575	3,738	4,663	4,908	5,393	5,298
Inventory	3,784	3,950	4,404	4,290	4,503	4,771	4,977	5,034	5,335	4,753	4,928	5,350
Tangible / Intangible Assets	13,366	13,936	14,074	15,845	16,938	17,993	19,471	20,800	21,702	22,017	22,528	22,847
<b>Liabilities</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>	<b>16,641</b>	<b>19,705</b>	<b>20,734</b>	<b>21,198</b>	<b>22,599</b>
A/P	1,999	2,156	2,541	2,166	2,434	2,549	2,467	2,380	2,550	2,261	2,859	3,459
Short-term debts	1,593	1,903	2,037	1,613	1,630	1,432	1,744	1,356	2,431	2,860	2,509	1,549
Long-term debts	2,643	3,211	3,262	3,708	5,275	7,049	7,211	7,058	9,123	9,001	8,856	8,637
<b>Shareholders' Equity</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>17,384</b>	<b>17,416</b>	<b>17,842</b>	<b>18,821</b>	<b>18,790</b>
Liabilities/Equity(%)	60.0%	61.1%	64.7%	67.1%	81.5%	87.7%	91.7%	95.7%	113.1%	116.2%	112.6%	120.3%
Net debt/Equity(%)	6.7%	13.4%	11.4%	16.0%	22.0%	33.6%	39.3%	37.4%	50.3%	47.6%	41.5%	33.5%
<b>BPS (Unit:KRW)</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>	<b>217,230</b>	<b>217,238</b>	<b>221,857</b>	<b>232,070</b>	<b>230,440</b>

※ 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.

# Appendix

## Cash Flows

(Unit : KRW bn)

LG Chem	2019					2020				
	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total
<b>Beginning Cash Balance</b>	2,514	3,098	2,631	2,055	<b>2,514</b>	1,889	2,767	3,363	3,539	<b>1,889</b>
<b>Operating Activities</b>	644	246	395	1,836	<b>3,121</b>	-97	1,716	1,987	2,235	<b>5,841</b>
Operating Profits	263	247	349	-33	<b>825</b>	206	572	902	119	<b>1,798</b>
Depreciation	407	455	481	516	<b>1,859</b>	530	558	588	636	<b>2,312</b>
Working Capital	-181	-275	-124	693	<b>113</b>	-1,056	48	-62	272	<b>-797</b>
<b>Investing Activities</b>	-1,527	-1,732	-1,360	-1,493	<b>-6,111</b>	-1,328	-1,144	-1,000	-1,824	<b>-5,296</b>
<b>Financing Activities</b>	1,450	986	386	-521	<b>2,301</b>	2,283	44	-792	-596	<b>938</b>
Borrow/Repay	1,584	1,576	474	-540	<b>3,093</b>	3,139	308	-496	-1,179	<b>1,772</b>
Dividends	-	-484	-	-	<b>-484</b>	-	-154	-24	-	<b>-178</b>
<b>Ending Cash Balance</b>	3,098	2,631	2,055	1,889	<b>1,889</b>	2,767	3,363	3,539	3,274	<b>3,274</b>

※ Applied retroactive effects of past performance based on the reorganization

※ 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.

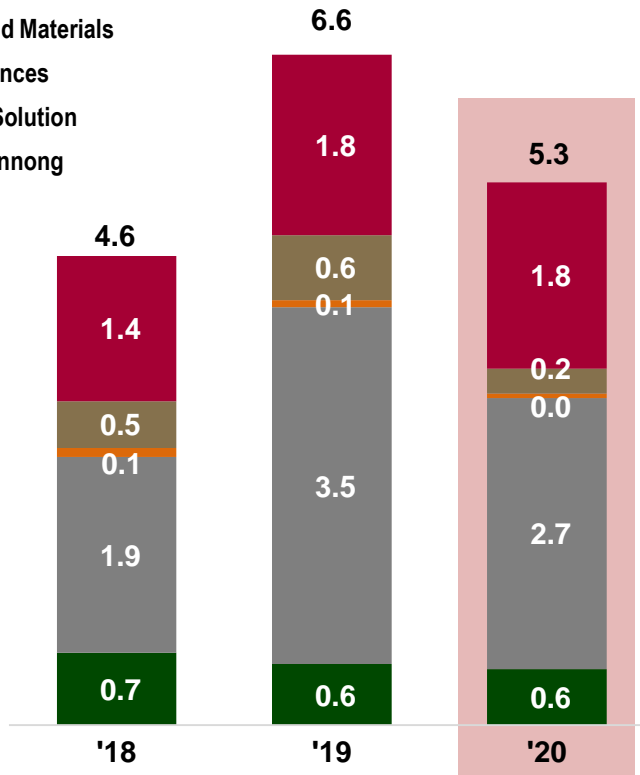
# Appendix

## CAPEX & R&D Expenses

### CAPEX

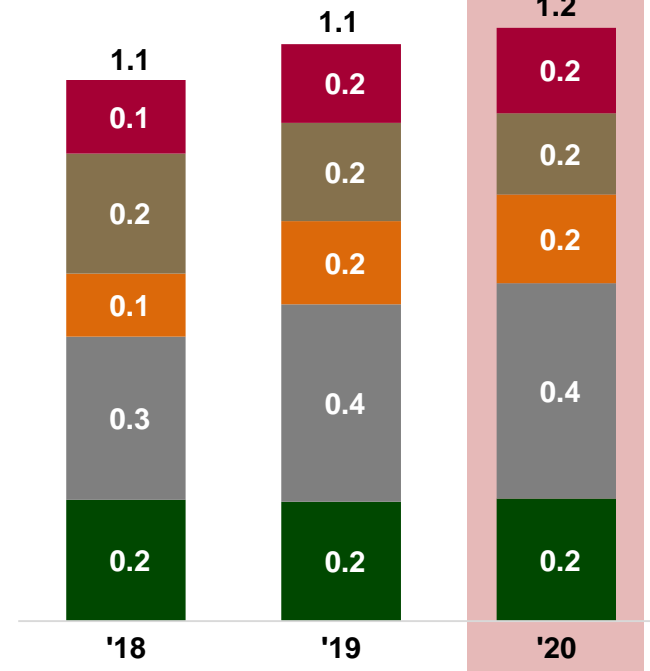
(Unit : KRW tn)

- Petrochemicals
- Advanced Materials
- Life Sciences
- Energy Solution
- Farm Hannong



### R&D Expenses

(Unit : KRW tn)



# Thank you



**LG Chem**

07336 LG Twin Towers 128, Yeoui-daero, Yeong deung po-gu, Seoul | Tel. 02-3773-1114 | [www.lgchem.com](http://www.lgchem.com)  
Copyright© 2021 LG Chem. All Rights Reserved.