

# INVESTOR RELATIONS

2018 3Q



*beyond*  
the best

KUMHO PETROCHEMICAL

Investor Relations 2018

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# 3Q, 2018 Overview

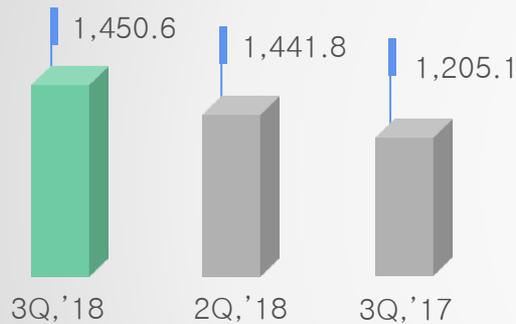
## Sales & Operating Income

- ❖ Sales increased by 0.6% since the last quarter and by 20.4% over the previous year to KRW 1,450.6bn.
- ❖ Operating income decreased by 1.6% since the last quarter and soared by 161.7% over the previous year to KRW 151.0bn.

(Unit: KRW bn)

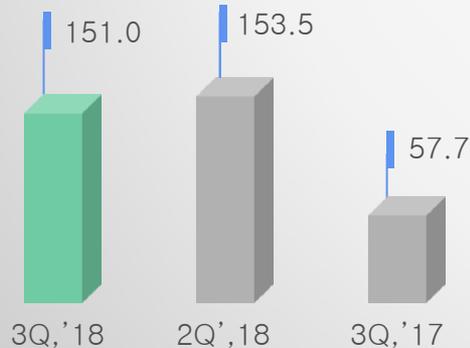
### Sales

(Unit: KRW bn)



### Operating Income

(Unit: KRW bn)



	3Q, '18	2Q, '18	3Q, '17	Rate of Change	
				QoQ	YoY
S a l e s	1,450.6	1,441.8	1,205.1	0.6%	20.4%
[Synthetic Rubbers]	539.5	516.6	463.5	4.4%	16.4%
[Synthetic Resins]	320.7	324.1	308.9	-1.0%	3.8%
[ O t h e r s ]	590.4	601.1	432.7	-1.8%	36.4%
P h e n o l Derivatives	453.6	452.9	287.3	0.2%	57.9%
S p e c i a l t y Chemicals	35.6	34.8	35.8	2.3%	-0.6%
E n e r g y	44.1	42.4	38.0	4.0%	16.1%
O t h e r s	57.1	71.0	71.6	-19.6%	-20.3%
Operating Income	151.0	153.5	57.7	-1.6%	161.7%
[ % ]	10.4%	10.6%	4.8%	-0.2%p	5.6%p
Income before Income Taxes	162.4	181.1	78.1	-10.3%	107.9%
Net Income	122.4	175.3	56.5	-30.2%	116.6%
E q u i t y Income/Losses on Investments	25.7	41.2	37.7	-37.6%	-31.8%

✓ Net Income is based on Controlling Interests.

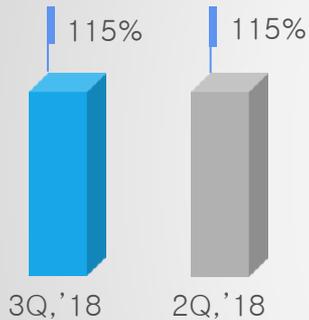
# 3Q, 2018 Overview

## Financial Structure

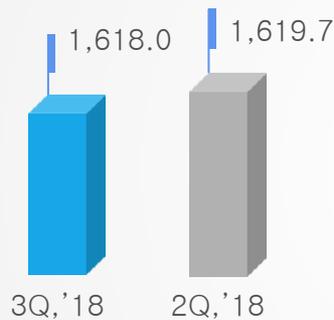
- ❖ Interest Coverage Ratio increased as a result of favorable performances in major businesses.
- ❖ Financial structure maintained its stability through the continuous management of liquidity such as the improved current ratio.

(Unit: KRW bn)

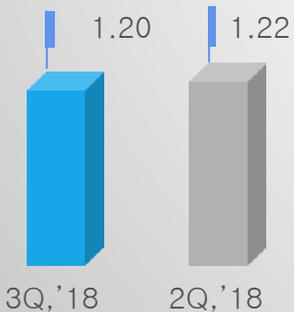
### Debt to Equity Ratio (%)



### Borrowings (KRW bn)



### Total Assets Turnover Ratio



### Interest Coverage Ratio



	Unit	3Q, '18	2Q, '18	3Q, '17	Rate of Change	
					QoQ	YoY
Assets	KRW bn	4,952.9	4,703.7	4,735.4	5.3%	4.6%
Liabilities	KRW bn	2,650.8	2,519.0	2,838.3	5.2%	-6.6%
Shareholders' Equity		2,302.1	2,184.7	1,897.1	5.4%	21.3%
Controlling Interests	KRW bn	2,297.9	2,180.6	1,786.3	5.4%	28.6%
Non-controlling Interests		4.2	4.1	110.8	2.4%	-96.2%
Debt to Equity Ratio	%	115	115	150	0%p	-35%p
Borrowings		1,618.0	1,619.7	2,005.6	-0.1%	-19.3%
Won-denominated	KRW bn	1,267.4	1,258.7	1,544.7	0.7%	-18.0%
Foreign currency-denominated		350.6	361.0	460.9	-2.9%	-23.9%
Total Assets Turnover Ratio		1.20	1.22	1.03	-1.9%	16.6%
Interest Coverage Ratio		10.86	10.66	3.58	1.9%	203.1%

# Business Review

## Synthetic Rubbers

37.2%

of Total sales

Synthetic Rubbers

Synthetic Resins

Others



- ❖ Sales increased by 4.4% over the previous quarter to KRW 539.5bn.
- ❖ Profitability declined due to sluggish improvement in spread, despite the manufacturing cost rise resulting from purchasing BD price increase.

### • A wide fluctuation in the BD price

- In the short time, there was a sharp increase in the BD price due to troubles and regular maintenance in the region but a downtrend caused by weak demand for downstream at the end of the quarter.

#### ➤ BD Price changes by region

(Unit: USD/ton)

	Apr.'18	May.'18	Jun.'18	Jul.'18	Aug.'18	Sep.'18
Asia	1,380	1,670	1,710	1,623	1,721	1,499
N. America	1,450	1,631	1,658	1,582	1,628	1,638
Europe	1,213	1,462	1,513	1,484	1,536	1,456

※ Source: ICIS/PLATTS 2018

### • Decreased profitability of synthetic rubber

- Purchasing BD price increased due to similar period between buying time for proper inventory production and the maintenance of NCC.
- Profitability declined due to sluggish improvement in product prices, despite the manufacturing cost rise.

(Unit: USD/ton)

	Apr.'18	May.'18	Jun.'18	Jul.'18	Aug.'18	Sep.'18
SBR	1,559	1,683	1,733	1,631	1,670	1,659
BR	1,806	1,944	2,030	1,875	2,060	2,100

※ Source: ICIS 2018

# Business Review

## Synthetic Resins

22.1%

of Total sales

Synthetic Rubbers

Synthetic Resins

Others

- ❖ Sales decreased by 1.0% over the previous quarter to KRW 320.7bn.
- ❖ A drop in profitability because of weakened product prices resulting from domestic economic recession and the concerns of US-China trade war.

### • Weak price of raw material (SM)

- Increase in SM price resulted from the troubles(Taiwan/Europe) in the short term; but downturn caused by seasonal low and stagnation of downstream demand at the end of the quarter.

#### ➤ SM Price changes

(Unit: USD/ton)

	Apr.'18	May.'18	Jun.'18	Jul.'18	Aug.'18	Sep.'18
SM	1,367	1,429	1,454	1,409	1,465	1,421

※ Source: ICIS 2018

### • Decreased profitability of synthetic resins

- Profitability were dropped because of weak demand and the prolonged downward trend in the product price caused by domestic economic recession and the concerns of US-China trade war.

(Unit: USD/ton)

	Apr.'18	May.'18	Jun.'18	Jul.'18	Aug.'18	Sep.'18
PS	1,505	1,539	1,572	1,491	1,511	1,499
ABS	1,980	2,048	2,044	1,866	1,932	1,838

※ Source: PLATTS 2018

# Business Review

Others

40.7%

Of Total sales

Synthetic Rubbers

Synthetic Resins

Others

- ❖ Sales decreased by 1.8% over the previous quarter to KRW 590.4bn.
- ❖ Phenol derivatives: Profitability improved due to tight supply by troubles with Chinese Phenol producer.
- ❖ Energy: Profitability improved due to an increase in electricity selling price(SMP).

## • Phenol derivatives

- Benzene prices were higher due to an increase in oil and SM price but there was a slight downturn at the end of the quarter due to an oversupply in the region.
- An Increase in sales price and profitability resulted from the tight supply by troubles with the Chinese Phenol producer.

### ➤ BZ Price changes

(Unit: USD/ton)

	Apr.'18	May.'18	Jun.'18	Jul.'18	Aug.'18	Sep.'18
BZ	838	860	831	833	879	852

※ Source: PLATTS 2018

## • Energy

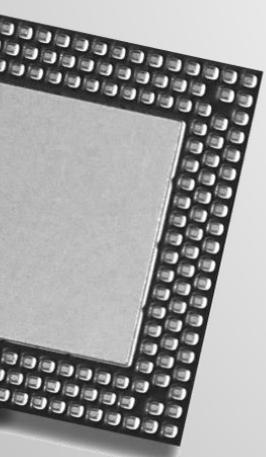
- Sales and profitability increased due to an increase in electricity selling price(SMP).

### ➤ SMP Price changes

(Unit: KRW/KW)

	Apr.'18	May.'18	Jun.'18	Jul.'18	Aug.'18	Sep.'18
SMP	90	87	89	86	90	91

※ Source: Korea Power Exchange



## 4Q, 2018 Outlook

BD

- In spite of regular maintenance in the region, stable supply and price depreciation is expected due to the slowing real demand.
- The price is likely to be volatile depending on downstream demand but limited uptrend potential is predicted.

Synthetic  
Rubbers

- Minimization of inventory of tire makers and wait-and see attitude will be continued due to a weak main raw material price BD.
- For Non-tire makers, the price is predicted to be weak due to slow demand during the low season.

SM

- Stable supply is predicted due to deep-sea cargo and high stock level of SM makers.
- Price is expected to be weak resulting from the stagnation of downstream demand.

Synthetic  
Resins

- The demand is expected to be weak due to market uncertainty resulting from US-China trade war and slow demand from China.
- The price is predicted to be weak due to slow demand and weak raw material(SM, BD) price.

# Appendices

## Income Statement

(Unit: KRW bn)

	3Q, '18	2Q, '18	3Q, '17	Rate of change			
				QoQ		YoY	
				Amount	Rate of change	Amount	Rate of change
Sales	1,450.6	1,441.8	1,205.1	8.8	0.6%	245.5	20.4%
Operating Income	151.0	153.5	57.7	-2.5	-1.6%	93.3	161.7%
<i>(Operating Margin)</i>	<i>10.4%</i>	<i>10.6%</i>	<i>4.8%</i>	<i>-0.2%p</i>	<i>-</i>	<i>5.6%p</i>	<i>-</i>
Net Interest Expense	12.4	23.8	15.9	-11.4	-47.9%	-3.5	-22.0%
Equity Income/Losses on Investments	25.7	41.2	37.7	-15.5	-37.6%	-12.0	-31.8%
Income before Income Taxes	162.4	181.1	78.1	-18.7	-10.3%	84.3	107.9%
<i>(Ordinary Income Margin)</i>	<i>11.2%</i>	<i>12.6%</i>	<i>6.5%</i>	<i>-1.4%p</i>	<i>-</i>	<i>4.7%p</i>	<i>-</i>
Net Income	122.4	175.3	56.5	-52.9	-30.2%	65.9	116.6%
<i>(Net Income Margin)</i>	<i>8.4%</i>	<i>12.2%</i>	<i>4.7%</i>	<i>-3.7%p</i>	<i>-</i>	<i>3.7%p</i>	<i>-</i>

✓ Net Income is based on Controlling Interests.

## Appendices

### Balance Sheet

(Unit: KRW bn)

	3Q, '18	2Q, '18	3Q, '17	Rate of change	
				QoQ	YoY
Current Assets	1,696.7	1,483.9	1,452.3	212.8	244.0
– Cash and Cash Equivalents	274.0	163.6	366.8	110.4	–92.8
Non-current Assets	3,256.2	3,219.8	3,283.1	36.4	–26.9
<b>Total Assets</b>	<b>4,952.9</b>	<b>4,703.7</b>	<b>4,735.4</b>	<b>249.2</b>	<b>217.5</b>
Current Liabilities	2,095.1	1,993.8	2,065.3	101.3	29.8
Non-current Liabilities	555.7	525.2	773.0	30.5	–217.3
■ Interest bearing Liabilities	1,618.0	1,619.7	2,005.6	–1.7	–387.6
– Short-term Debts	1,225.9	1,238.7	1,373.5	–12.8	–147.6
– Long-term Debts	392.1	381.0	632.1	11.1	–240.0
■ Non-interest bearing Liabilities	1,032.8	899.3	832.7	133.5	200.1
<b>Total Liabilities</b>	<b>2,650.8</b>	<b>2,519.0</b>	<b>2,838.3</b>	<b>131.8</b>	<b>–187.5</b>
Common & Preferred Stock	167.5	167.5	167.5	–	–
<b>Total Shareholders' Equity</b>	<b>2,302.1</b>	<b>2,184.7</b>	<b>1,897.1</b>	<b>117.4</b>	<b>405.0</b>
Net Debt to Asset Ratio	27.1%	31.0%	34.6%	–3.8%	–7.5%
Long-term Debts to Total Debts Ratio	24.2%	23.5%	31.5%	0.7%	–7.3%
Current Ratio	81.0%	74.4%	70.3%	6.6%	10.7%
Debt to Equity Ratio	115.1%	115.3%	149.6%	–0.2%	–34.5%

## Appendices

### Production Capacity (KKPC)

	Product	Capa.	Unit	Note	
Synthetic Rubbers	SBR	384,000	MT/Y		
	BR	HBR		290,000	
		LBR		45,000	
	S-SBR	63,000			
	NdBR	60,000			
	NBR	87,000			
	HSR	10,000			
	NB Latex	400,000			
	SB Latex	82,800			
	SBS	80,000			
	<b>Total</b>	<b>1,501,800</b>			
Synthetic Resins	PS	233,000	MT/Y	Completion of Expansion: 16,000MT/Y, 1H,'18	
	ABS	250,000			
	SAN/Pwd.	161,000			
	EPS	80,000			
	PPG	141,000			
	<b>Total</b>	<b>865,000</b>			
Specialty Chemicals	Antioxidants	83,500	MT/Y		
Energy	Steam	1,710	T/H		
	Electricity	300	MWH		
BD	Ulsan	90,000	MT/Y		
	Yeosu	147,000			
	<b>Total</b>	<b>237,000</b>			

## Appendices

### Production Capacity (Affiliates)

	Product	Capa.	Unit	Note
Kumho P&B Chemicals	Phenol	680,000	MT/Y	
	Acetone	420,000		
	MIBK	60,000		
	Cumene	900,000		
	BPA	450,000		
	Epoxy Resin	152,000		Completion of Expansion: 17,000MT/Y, 1Q,'18
	Total	2,662,000		
Kumho Mitsui Chemicals	MDI	350,000	MT/Y	Completion of Expansion: 100,000MT/Y, 2H,'17 60,000MT/Y, 2H '19
	Aniline	20,000		
	Total	370,000		
Kumho Polychem	EP(D)M	220,000	MT/Y	
	TPV/KEPA	12,000		Completion of Expansion: TPV 5,000MT/Y, 4Q,'17
	Total	232,000		

# Appendices

## Sales Breakdown & Export Share by Region

Domestic  
17%



Export  
83%

50%

18%

13%

9%

9%

1%

S.E.Asia

China

S.W.Asia

America

Europe

Others

45%

14%

11%

11%

10%

9%

China

Europe

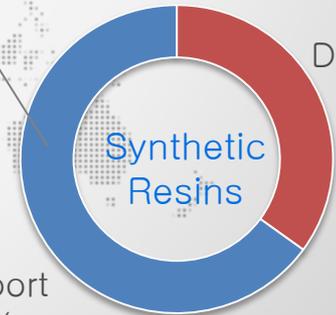
S.W.Asia

America

Africa

S.E.Asia

Domestic  
32%

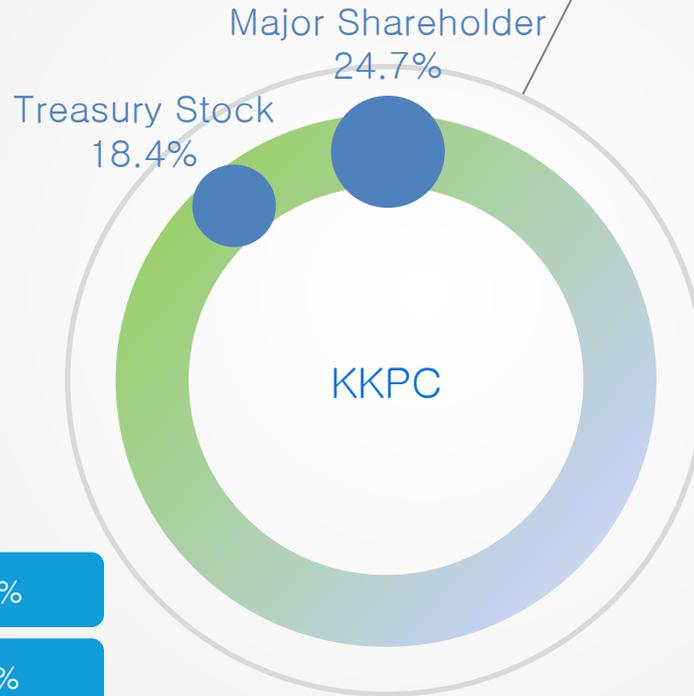


Export  
68%

# Appendices

## Investment Shares & Asset available for sale

✓ As of 30th Sep 2018, based on common shares



## Investments in Affiliates

Kumho P&B Chemicals	100.0%
Kumho Mitsui Chemicals	50.0%
Kumho Polychem	50.0%
Kumho Terminal & Logistics	95.0%
Korea Energy Power Plant	96.1%

Asiana Airlines	12.0%
Daewoo E&C	3.4%
KDB Life Insurance	0.4%

Asset available for sale

**Q & A**