INVESTOR RELATIONS

2018 2Q

beyond the best KUMHO PETROCHEMICAL Investor Relations 2018

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2Q, 2018 Overview

Sales & Operating Income

- Sales increased by 7.6% since the last quarter and by 16.4% over the previous year to KRW 1,441.8bn.
- Operating income decreased by 7.4% since the last quarter and soared by 248.1% over the previous year to KRW 153.5bn.

(Unit: KRW bn)

Sales		(Unit: KRW bn)
1,441.8	1,339,9	1,239.1
2Q,'18	1Q,'18	2Q,'17

perating Inco	ome	(UNIL: KHWY DN)-
153.5	165.8	
		44.1
2Q,'18	1Q',18	2Q,'17

(Linit: KDW hn)

	00 240	10.710	00 247	Rate of (Change
	2Q,'18	1Q,'18	2Q,'17	QoQ	YoY
S a l e s	1,441.8	1,339.9	1,239.1	7.6%	16.4%
[Synthetic Rubbers]	516.6	474.5	499.5	8.9%	3.4%
[Synthetic Resins]	324.1	299.6	293.8	8.2%	10.3%
[Others]	601.1	565.8	445.8	6.2%	34.8%
Phenol Derivatives	452.9	416.2	295.5	8.8%	53.3%
Specialty Chemicals	34.8	33.9	35.5	2.7%	-2.0%
Energy	42.4	57.0	37.4	-25.6%	13.4%
Others	71.0	58.7	77.4	21.0%	-8.3%
Operating Income	153.5	165.8	44.1	-7.4%	248.1%
[%]	10.6%	12.4%	3.6%	-1.8%p	7.0%p
Income before Income Taxes	181.1	194.2	52.8	-6.7%	243.0%
Net Income	175.3	132.1	36.7	32.7%	377.7%
Equity Income/Losses on Investments	41.2	41.8	21.4	-1.4%	92.5%

[✓] Net Income is based on Controlling Interests.

2Q, 2018 Overview

Financial Structure

- Total Assets Turnover Ratio increased as a result of favorable performances in major businesses.
- Stable financial structure maintained in accordance with a decrease in debt and continuous liquidity management.

(Unit: KRW bn)

Debt to Equity Ratio (%)





	Unit	2Q.'18	1Q,'18	2Q,'17	Rate of	Change
	Offic	Z. 10	10, 10	La, II	QoQ	YoY
Assets	KRW bn	4,703.7	4,712.5	4,617.8	-0.2%	1.9%
Liabilities	KRW bn	2,519.0	2,639.0	2,743.3	-4.5%	-8.2%
Shareholders' Equity		2,184.7	2,073.5	1,874.5	5.4%	16.5%
Controlling Interests	KRW bn	2,180.6	1,947.6	1,764.0	12.0%	23.6%
Non- controlling Interests	DII	4.1	125.9	110.5	-96.7%	-96.3%
Debt to Equity Ratio	%	115	127	146	-12%p	-31%p
Borrowings		1,619.7	1,846.5	2,133.3	-12.3%	-24.1%
Won- denominated	KRW	1,258.7	1,363.9	1,623.5	-7.7%	-22.5%
Foreign currency- denominated	bn	361.0	482.6	509.8	-25.2%	-29.2%
Total Assets Turnover Ratio		1.22	1.15	1.06	6.2%	15.9%

10.66

10.77

2.61

-1.0%

308.5%

Total Assets Turnover Ratio





Interest

Coverage Ratio

Interest Coverage

Business Review

Synthetic Rubbers

35.8% of Total sales

Synthetic Rubbers

Synthetic Resins

Others



- ❖ Sales increased by 8.9% over the previous quarter to KRW 516.6bn.
- Profitability improved through growth in selling price as a result of strong BD price.

· An upward trend in the BD (Butadiene) price

 Gradual uptrend of BD price resulted from a decline in supply due to regular maintenances, trouble and an increased demand caused by favorable ABS market.

➤ BD Price changes by region

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	Jan.'18	Feb.'18	Mar.'18	Apr.'18	May.'18	Jun.'18
Asia	1,298	1,411	1,426	1,380	1,670	1,710
N. America	898	1,127	1,356	1,450	1,631	1,658
Europe	964	1,126	1,190	1,213	1,462	1,513

* Source: ICIS/PLATTS 2018

· Increased profitability of synthetic rubber

- Growth in sales revenue from the increase in selling price due to risen raw material(BD) price.
- Increased sales volume of NB LATEX, SBS through improved productivity with strong demand.

(Unit: USD/ton)

(Unit: USD/ton)

	Jan.'18	Feb.'18	Mar.'18	Apr.'18	May.'18	Jun.'18
SBR	1,541	1,638	1,655	1,559	1,683	1,733
BR	1,738	1,806	1,855	1,806	1,944	2,030

* Source: ICIS 2018

Business Review

Synthetic Resins

22.5% of Total sales

Synthetic Rubbers

Synthetic Resins

Others

- ❖ Sales increased by 8.2% over the previous quarter to KRW 324.1bn.
- Diminished profitability due to increased volatility in demand and intensified price competition.

Strong price of raw material (SM)

 Strong SM price resulted from regular maintenances and favorable downstream demand with low inventory within the region.

> SM Price changes

(Unit: USD/ton)

	Jan.'18	Feb.'18	Mar.'18	Apr.'18	May.'18	Jun.'18
SM	1,391	1,431	1,345	1,367	1,429	1,454

* Source: ICIS 2018

· Diminished profitability of synthetic resins

 Increased volatility in demand due to fluctuation of raw material and diminished profitability result from intensified price competition.

(Unit: USD/ton)

	Jan.'18	Feb.'18	Mar.'18	Apr.'18	May.'18	Jun.'18
PS	1,460	1,563	1,551	1,505	1,539	1,572
ABS	2,014	2,055	2,023	1,980	2,048	2,044

* Source: PLATTS 2018



Business Review

Others

41.7% Of Total sales

> Synthetic Rubbers

Synthetic Resins

Others



- Phenol derivatives: Growth in sales revenue and favorable profitability resulted from strong selling price in the bullish market.
- Energy: Decline in sales and profitability resulted from a drop in the electricity price and maintenance.

· Phenol derivatives

- Strong benzene (raw material) price due to tight supply during the quarter;
 but slight downturn caused by downward oil price and high inventory at the end of the quarter.
- Growth in both sales revenue and profitability resulted from strong selling price in the bullish market.

➢ BZ Price changes

(Unit: USD/ton)

	Jan.'18	Feb.'18	Mar.'18	Apr.'18	May.'18	Jun.'18
BZ	910	905	860	838	860	831

* Source: PLATTS 2018

Energy

 Depreciation in sales and profitability caused by a drop in the electricity price (SMP) and maintenance.

> SMP Price changes

(Unit: KRW/KW)

	Jan.'18	Feb.'18	Mar.'18	Apr.'18	May.'18	Jun.'18
SMP	92	90	101	90	87	89

* Source: Korea Power Exchange



3Q, 2018 Outlook



- Supply is expected to be tight due to trouble and regular maintenances in the short term.
- The price is likely to be volatile depending on downstream demand for peak season of manufacturing industry at the end of the quarter.

Synthetic Rubbers

- · The price is predicted to be weak due to delay in demand recovery for tire makers
- Synthetic Rubber producers will reduce operating rates due to low profitability and a wait-and-see attitude in the market will be continued.

SM

- In spite of decreased SM inventory within the region, the balance is expected to be steady as a result of restarting SM plants operations after regular main maintenances.
- Price may fluctuate depending on the price of raw material(Benzene/Ethylene) and the utilization rate of downstream producers(ABS/PS).

Synthetic Resins

- The downstream(ABS/PS) demand is expected to be weak due to traditional weak season in a general economic recession.
- The producers may increase the selling price in accordance with widely recognized perception about current lowest price at the end of the quarter.

Income Statement

(Unit: KRW bn)

						Rate of change			
	2Q,'18	1Q,'18	2Q,'17	Qc	Q	YoY			
	23, 10	10, 10	20, 17	Amount	Rate of change	Amount	Rate of change		
Sales	1,441.8	1,339.9	1,239.1	101.9	7.6%	202.7	16.4%		
Operating Income	153.5	165.8	44.1	-12.3	-7.4%	109.4	248.1%		
(Operating Margin)	10.6%	12.4%	3.6%	-1.7%p		7.1%p	_		
Net Interest Expense	23.8	13.5	22.2	10.3	76.3%	1.6	7.2%		
Equity Income/Losses on Investments	41.2	41.8	21.4	-0.6	-1.4%	19.8	92.5%		
Income before Income Taxes	181.1	194.2	52.8	-13.1	-6.7%	128.3	243.0%		
(Ordinary Income Margin)	12.6%	14.5%	4.3%	-1.9%p	_	8.3%p	_		
Net Income	175.3	132.1	36.7	43.2	32.7%	138.6	377.7%		
(Net Income Margin)	12.2%	9.9%	3.0%	2.3%p		9.2%p	_		

[✓] Net Income is based on Controlling Interests.

Balance Sheet

(Unit: KRW bn)

	2Q,'18	10.10	20 '17	Rate of	change
	ZQ, 10	1Q,'18	2Q,'17	QoQ	YoY
Current Assets	1,483.9	1,495.8	1,307.6	-11.9	176.3
- Cash and Cash Equivalents	163.6	259.4	241.3	-95.8	-77.7
Non-current Assets	3,219.8	3,216.7	3,310.2	3.1	-90.4
Total Assets	4,703.7	4,712.5	4,617.8	-8.8	85.9
Current Liabilities	1,993.8	1,967.5	1,975.1	26.3	18.7
Non-current Liabilities	525.2	671.5	768.2	-146.3	-243.0
■ Interest bearing Liabilities	1,619.7	1,846.5	2,133.3	-226.8	-513.6
- Short-term Debts	1,238.7	1,319.6	1,498.7	-80.9	-260.0
- Long-term Debts	381.0	526.9	634.6	-145.9	-253.6
■ Non-interest bearing Liabilities	899.3	792.5	610.0	106.8	289.3
Total Liabilities	2,519.0	2,639.0	2,743.3	-120.0	-224.3
Common & Preferred Stock	167.5	167.5	167.5	_	_
Total Shareholders' Equity	2,184.7	2,073.5	1,874.5	111.2	310.2
Net Debt to Asset Ratio	31.0%	33.7%	41.0%	-2.7%	-10.0%
Long-term Debts to Total Debts Ratio	23.5%	28.5%	29.7%	-5.0%	-6.2%
Current Ratio	74.4%	76.0%	66.2%	-1.6%	8.2%
Debt to Equity Ratio	115.3%	127.3%	146.3%	-12.0%	-31.0%

Production Capacity (KKPC)

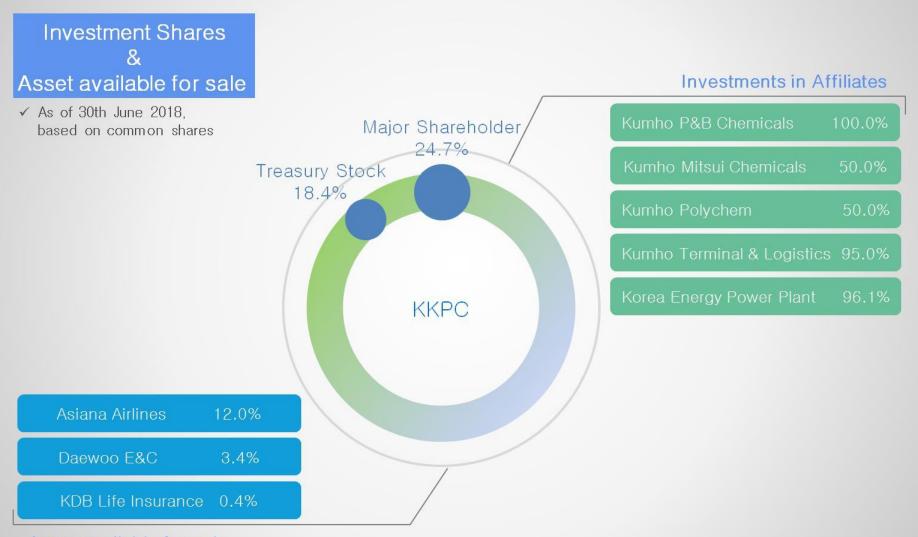
	Product		Capa.		Unit	Note
Synthetic Rubbers	SBR		384,00	00		
	BR	HBR	290,00	00		
		LBR	45,00	00		
	S-SBR		63,00	00	MT/Y	
	NdBR		60,00	00		
	NBR		87,00	00		
	HSR		10,00	00		
	NB Latex		400,00	00		
	SB Latex		82,80	00		
	SBS		75,00	00		
	Total		1,496,80	00		
Synthetic Resins	PS		230,00	00	MT/Y	
	ABS		250,00	00		
	SAN/Pwd.		161,00	00		Completion of Expansion: 16,000MT/Y, 1H, 18
	EPS		80,00	00		
	PPG		141,00	00		
	Total		862,00	00		
Specialty Chemicals	Antioxidants		83,50	00	MT/Y	
Energy	Steam		1,7	10	T/H	
	Electricity		30	00	MWH	
BD	Ulsan		90,00	00	MT/Y	
	Yeosu		147,00	00		
	Total		237,00	00		

Production Capacity (Affiliates)

	Product	Capa.	Unit	Note
Kumho P&B Chemicals	Phenol	680,000		
	Acetone	420,000		
	MIBK	60,000		
	Cumene	900,000	MT/Y	
	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		Completion of Expansion: 100,000MT/Y, 2H, 17 60,000MT/Y, 2H 19
	Aniline	20,000	MT/Y	
	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		

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Asset available for sale

Q&A