

beyond the best KUMHO PETROCHEMICAL

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3Q, 2016 Overview

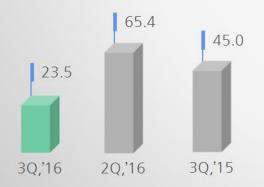
Sales **Operating Income**

- Sales revenue decreased by 1.7% over the previous quarter and increased by 3.2% over the previous year to KRW 994.4bn.
- Operating income decreased by 64.1% since the last quarter and declined by 47.8% over the previous year to KRW 23.5bn.

(Unit: KRW hn)

Sales			(Unit: KRW bn)
	994.4	1,011.5	963.7
3	8Q,'16	2Q,'16	3Q,'15

O	perating	Income	(Unit: KRW bn)



		(OTIL: KRVV DII)			
	3Q,'16	20.16	3Q,'15	Rate of	change
	3Q, 10	2Q,'16	3Q, 13	QoQ	YoY
S a l e s	994.4	1,011.5	963.7	-1.7%	3.2%
[Synthetic Rubbers]	379.3	387.7	388.6	-2.2%	-2.4%
[Synthetic Resins]	247.8	271.6	256.9	-8.8%	-3.5%
[Others]	367.3	352.2	318.2	4.3%	15.4%
Phenol Derivatives	240.9	223.4	195.4	7.8%	23.3%
Specialty Chemical s	30.7	28.5	32.4	7.7%	-5.2%
Energy	32.2	38.1	30.6	-15.5%	5.2%
Others	63.5	62.2	59.8	2.1%	6.2%
Operating Income	23.5	65.4	45.0	-64.1%	-47.8%
[%]	2.4%	6.5%	4.7%	 0	-
Income before Income Taxes	22.9	66.0	35.7	-65.3%	-35.9%
Net Income	17.8	45.0	26.7	-60.4%	-33.3%
Gain/Loss on Valuation of Equity Method Investments	5.7	8.1	10.0	-29.6%	-43.0%
✓ Net Income is based	on Contro	ling Interes	ts.		

3Q, 2016 Overview

Financial Structure

- The maintenance of a stable financial structure through a decreased debt-to-equity ratio by paying back loans with continuous liquidity control.
- The drop in interest coverage ratio caused by reduced operating profit from sluggish performance in the main businesses.

(Unit: KRW bn)





	Unit	3Q,'16	2Q,'16	3Q,'15	Rate of change		
					QoQ	YoY	
Assets	KRW bn	4,394.4	4,476.2	4,368.0	-1.8%	0.6%	
Liabilities	KRW bn	2,644.0	2,754.9	2,683.6	-4.0%	-1.5%	
Shareholders' Equity		1,750.4	1,721.3	1,684.4	1.7%	3.9%	
Controlling Interests	KRW	1,637.3	1,607.5	1,598.5	1.9%	2.4%	
Non- controlling Interests	bn	113.1	113.8	85.9	-0.6%	31.7%	
Debt toEquity Ratio	%	151	160	159	-2	-	
Borrowings		1,985.5	2,072.8	2,043.6	-4.2%	-2.8%	
Won- denominated	KRW bn	1,564.0	1,642.4	1,447.3	-4.8%	8.1%	
Foreign currency- denominated	DII	421.5	430.4	596.3	-2.1%	-29.3%	
Total Assets Turnover Ratio		0.90	0.92	0.86	-2.2%	4.7%	
Interest Coverage Ratio		1.40	4.25	3.57	-67.1%	-60.8%	

Total Assets Turnover Ratio





Interest Coverage

Business Review

Synthetic Rubbers

38.1% of Total sales

Synthetic Rubbers

Synthetic Resins

Others



- Sales decreased by 2.2% over the previous quarter to KRW 379.3bn.
- The drop in profitability caused by spread reduction from the wait-and-see attitude along with the expectation of lower product prices, in spite of strong BD prices.

Strong price of main feedstock, BD

- A surge in price caused by continuous tight supply conditions, due to decreased inflow of deep-sea cargoes and a sharp increase in technical issues within the region.
- Urgent demands caused supply and demand to become tighter, due to technical issues of BD makers and the low BD inventory level of the downstream companies.

> BD Price changes by region

(Unit: USD/ton)

	Apr.'16	May.'16	Jun.'16	Jul.'16	Aug.'16	Sep.'16
Asia	1,059	1,091	956	1,079	1,068	1,236
N. America	750	805	899	851	890	992
Europe	663	697	703	763	750	810

* Source: ICIS/PLATTS 2016

· Diminished profitability of synthetic rubber

- Reduced sales caused by increased synthetic rubber inventory within the region during the first half of the year and the expectation of a drop in prices of related products.
- A drop in spread and profitability because of a wait-and-see attitude from deepened uncertainty over price directions, in spite of the strong BD prices (raw materials).

(Unit: USD/ton)

	Apr.'16	May.'16	Jun.'16	Jul.'16	Aug.'16	Sep.'16
SBR	1,353	1,366	1,298	1,304	1,291	1,348
BR	1,445	1,476	1,370	1,420	1,450	1,570

* Source: ICIS 2016



Business Review

Synthetic Resins

24.9% of Total sales

Synthetic Rubbers

Synthetic Resins

Others

- Sales declined by 8.8% over the previous quarter to KRW 247.8bn.
- A drop in profitability because of weakened product prices from a weak steady trend of SM prices and decreased demand.

· Weak steady trend of feedstock price, SM

A weak steady trend of prices due to a fall in the downstream demand, even though
the tight supply and demand is caused by scheduled shut-downs and increased demand
through the temporary inventory built up as a result of the G20 in the early quarter.

> SM Price changes

(Unit: USD/ton, CFR China)

	Apr.'16	May.'16	Jun.'16	Jul.'16	Aug.'16	Sep.'16
SM	1,098	1,021	1,004	1,052	1,042	1,026

* Source: ICIS 2016

Slackening in profitability of synthetic resin

- A reduction in sales and profitability caused by the weak trend of the SM prices, which led few downstream companies to cut-down their inventory.
- Decreased demand due to the vacation season and the strike in the domestic automobile industry.

(Unit: USD/ton)

	Apr.'16	May.'16	Jun.'16	Jul.'16	Aug.'16	Sep.'16
PS	1,264	1,194	1,158	1,200	1,165	1,156
ABS	1,361	1,274	1,278	1,373	1,374	1,401

Source: PLATTS 2016

Business Review

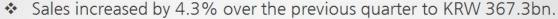
Others

37.0% Of Total sales

Synthetic Rubbers

Synthetic Resins

Others



- Phenol derivatives: A reduction in profitability due to the falling exchange rate along with the difficulty of increasing selling price in relative portion to the rise in raw materials price (C3).
- Energy: In spite of decreased sales volume due to regular maintenances from the source of demand, the profit level was sustained through the increase in the selling price of electricity.

Phenol derivatives

- In spite of an arbitrage opportunity to the outer region, the price of benzene remained moderate from the small oil price movements and weakened SM market conditions.
- Reduced profitability as a result of the extension of newly supplied, falling exchange rate and the difficulty of increasing selling price relatively to the rise in raw material price (C3).

➤ BZ Price changes

(Unit: USD/ton, FOB Korea)

	Apr.'16	May.'16	Jun.'16	Jul.'16	Aug.'16	Sep.'16
BZ	639	637	609	633	645	639

^{*} Source: PLATTS 2016

Expansion of Phenol, Acetone and Cumene: Phenol 300KTA, Acetone 185KTA and Cumene 470KTA(in 2016,2Q)

Energy

- In spite of decreased sales volume by reason of the reduced operating rates at the source of demand from scheduled shut-down, the profit level was sustained due to an upturn in selling price of electricity.
- Expansion of Yeosu Energy II: Steam 800T/H, Electricity 145MWH(in 2016,1Q)



4Q, 2016 Outlook

BD

- While it is anticipated that tight supply and demand conditions takes place due to a large number of technical issues at the BD makers, the balance is forecasted to be gradually stabilized through the change to naphtha cracking and the expected inflow of deep-sea cargoes.
- After a robust price-level at the start of this quarter caused by rush in demands through low BD inventory level, the price is expected to be fluctuated depending on resolution of problems and utilization rates within the region.

In spite of the tight balance between supply and demand in feedstock as well as favorable natural rubber prices, the increase in price is forecasted to be limited due to a wait-and-see attitude.

Synthetic Rubbers

• In spite of regular maintenance of synthetic rubber manufacturers within the region, supply is expected to be stable thanks to moderate synthetic rubber inventory.

SM

- In spite of decreased SM inventory trend within the region, the balance is expected to be calm as a result of restarting SM plant operations after the regular maintenances.
- The price is forecasted to be weak because of sluggish demand as the manufacturing sector is in the off-season.

Synthetic Resins

- In spite of strong prices of raw materials (BD/AN) in the early quarter, the increase in price is predicted to be limited due to the expectation of low SM price.
- Demand is expected to be dropped because of an increase in the inventory at the source of demand and the arrival of the off-season period.

Income Statement

(Unit: KRW bn)

					Rate of	change	
	3Q,'16	2Q,'16	3Q,'15	QoQ		YoY	
				Amount	Rate of change	Amount	Rate of change
Sales	994.4	1,011.5	963.7	-17.1	-1.7%	30.7	3.2%
Operating Income	23.5	65.4	45.0	-41.9	-64.1%	-21.5	-47.8%
(Operating Margin)	2.4%	6.5%	4.7%	-4.1%p	_	-2.3%p	<u></u>
Net Interest Expense	10.1	17.3	30.3	-7.2	-41.6%	-20.2	-66.7%
Gain/Loss on Valuation of Equity Method Investments	5.7	8.1	10.0	-2.4	-29.6%	-4.3	-43.0%
Income before Income Taxes	22.9	66.0	35.7	-43.1	-65.3%	-12.8	-35.9%
(Ordinary Income Margin)	2.3%	6.5%	3.7%	-4.2%p	-	-1.4%p	=
Net Income	17.8	45.0	26.7	-27.2	-60.4%	-8.9	-33.3%
(Net Income Margin)	1.8%	4.4%	2.8%	-2.6%p	_	-1.0%p	-

[✓] Net Income is based on Controlling Interests.

Balance Sheet

(Unit: KRW bn)

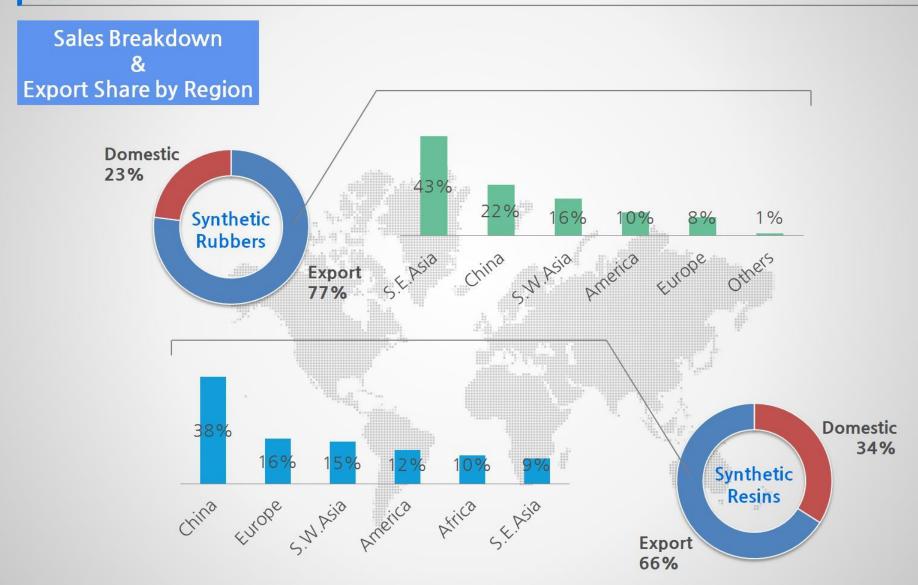
	20.46	20.16	20 115	Rate of	change
	3Q,'16	2Q,'16	3Q,'15	QoQ	YoY
Current Assets	1,009.3	1,092.3	1,131.4	-83.0	-122.1
- Cash and Cash Equivalents	54.8	103.0	79.9	-48.2	-25.1
Non-current Assets	3,385.1	3,383.9	3,236.6	1.2	148.5
Total Assets	4,394.4	4,476.2	4,368.0	-81.8	26.4
Current Liabilities	1,768.0	1,755.8	1,592.7	12.2	175.3
Non-current Liabilities	876.0	999.1	1,090.9	-123.1	-214.9
■ Interest bearing Liabilities	1,985.5	2,072.8	2,043.6	-87.3	-58.1
- Short-term Debts	1,244.2	1,210.5	1,074.6	33.7	169.6
- Long-term Debts	741.3	862.3	969.0	-121.0	-227.7
■ Non-interest bearing Liabilities	658.5	682.1	640.0	-23.6	18.5
Total Liabilities	2,644.0	2,754.9	2,683.6	-110.9	-39.6
Common & Preferred Stock	167.5	167.5	167.5		-
Total Shareholders' Equity	1,750.4	1,721.3	1,684.4	29.1	66.0
Net Debt Ratio	43.9%	44.0%	45.0%	-0.1%p	-1.1%p
Long-term Debts to Total Debts Ratio	37.3%	41.6%	47.4%	-4.3%p	-10.1%p
Current Ratio	57.1%	62.2%	71.0%	-5.1%p	-13.9%p
Debt to Equity Ratio	151.1%	160.0%	159.3%	-8.9%p	-8.2%p

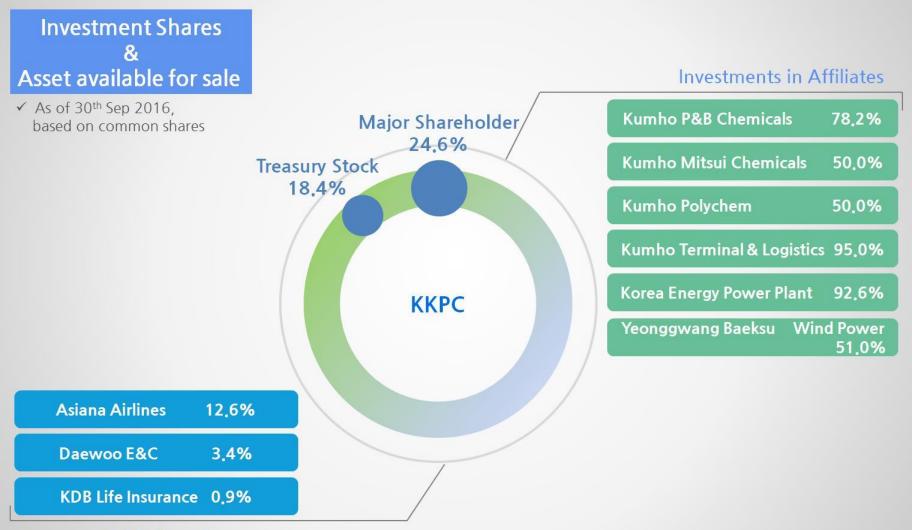
Production Capacity (KKPC)

	Pro	duct	Capa.	Unit	Note
	S	BR	481,000		
	BR	HBR	290,000		
	DK	LBR	45,000		
	S-	SBR	63,000		
	N	dBR	60,000		
Synthetic	N	IBR	80,000	MT/Y	
Rubbers	F	ISR	10,000		
	NB	Latex	200,000		Completion of Expansion: 200,000MT/Y(Multi-purpose),2H,'16
	SB	Latex	80,000		
	S	SBS	75,000		
	To	otal	1,384,000		
		PS	230,000		
	A	ABS	250,000		
Synthetic	SAN	/POW	145,000	MT/Y	
Resins	E	PS	80,000	IVII/ I	
	Р	PG	139,000		
	To	otal	844,000		
Specialty Chemicals	Antio	xidants	83,000	MT/Y	
	St	eam	1,710	T/H	Completion of Expansion:
Energy	Elec	ctricity	300	MWH	Steam 800T/H, Electricity 145MWH in 1Q,'16
	U	lsan	90,000		
BD	Ye	eosu	147,000	MT/Y	
	To	otal	237,000		

Production Capacity (Affiliates)

	Product	Capa.	Unit	Note
Kumho P&B Chemicals	Phenol	680,000	MT/Y	Completion of Expansion: 300,000MT/Y, 2Q,'16
	Acetone	420,000		Completion of Expansion: 185,000MT/Y, 2Q,'16
	MIBK	60,000		
	Cumene	900,000		Completion of Expansion: 470,000MT/Y, 2Q,'16
	BPA	450,000		
	Epoxy Resin	135,000		
	Total	2,645,000		
Kumho Mitsui Chemicals	MDI	250,000	MT/Y	Completion of Expansion: 100,000MT/Y, 2H,'17
	Aniline	2,000		
	Total	252,000		
Kumho Polychem	EP(D)M	220,000	MT/Y	
	TPV/KEPA	7,000		Completion of Expansion: TPV 5,000MT/Y, 3Q,'17
	Total	227,000		





Asset available for sale

Q&A