SK Energy Daily

에너지/Commodity/정유화학. 손지우 | 3773-8827, jwshon@sk.com
R.A. 유승우 | 3773-9180, yswbest@sk.com

SK 증권

1. News Summary (3 page)

2017년 11월 17일

News		Conclusion
WTI comment	'美 재고·생산증가'에 하락…WTI 0.3%↓	
Headline	GM, 테슬라에 도전장… "지금보다 30% 저렴한 전기차 내놓겠다"	Bolt를 포함한 LG화학의 GM향 배터리 매출액은 꾸준히 상승할 전망
News 1.	올해만 '4000여명' 줄인 조선 3사, 내년말까지 2000~3000명 추가 감축	연이은 수주부진과 2017년 더딘 수주 회복세로 구조조정은 불가피함
News 2.	-	-
News 3.	-	-
News 4.	-	-

2. Prices Summary (4~7 page)

Daily	Unit	Price	1D	1W	1M	3M	12M
Refinery			%	%	%	%	%
WTI	$/bbl	55.1	(0.3)	(3.6)	7.5	17.1	21.4
Dubai	$/bbl	60.3	0.4	(2.1)	8.6	23.9	38.7
Gasoline	$/bbl	74.6	0.3	(2.9)	6.0	12.7	29.0
Diesel	$/bbl	73.0	1.4	0.5	7.0	19.3	30.8
Complex margin	$/bbl	8.0	0.4	0.5	(0.1)	(0.9)	(0.6)
1M lagging	$/bbl	12.3	0.1	(3.0)	2.9	2.5	9.5
Petrochemical			%	%	%	%	%
Naphtha	$/t	584	0.6	(1.5)	9.3	26.9	37.4
Butadiene	$/t	980	3.7	3.7	(16.9)	(10.1)	(28.2)
HDPE	$/t	1,260	0.0	0.8	5.0	13.5	10.5
MEG	$/t	880	(1.1)	(3.6)	(2.8)	4.1	24.8
PX	$/t	879	(0.1)	(0.3)	4.6	9.9	13.1
SM	$/t	1,224	(0.6)	(2.6)	2.5	6.3	9.5
Commodity			%	%	%	%	%
Natural Gas	$/mmbtu	3.05	(0.9)	(4.6)	(1.1)	(4.2)	(4.8)
Natural rubber	$/t	1,360	0.0	(4.2)	(2.2)	(10.5)	(20.0)
Cotton	C/lbs	69.2	0.6	1.3	2.8	2.6	(5.7)

*참고: 정제마진의 변동률은 %가 아닌 $/bbl임

Weekly	Update	Unit	Price	1W	1M	3M	12M
Petrochemical				%	%	%	%
Ethylene	11/13	$/t	1,180	4.4	(2.3)	4.9	30.0
Propylene	11/13	$/t	800	3.2	(1.2)	3.2	17.6
Benzene	11/13	$/t	865	5.8	10.2	12.0	27.7
Toluene	11/13	$/t	718	1.8	2.5	9.5	10.4
Xylene	11/13	$/t	673	1.5	3.1	5.9	2.7
PP	11/13	$/t	1,148	1.8	(1.7)	4.6	10.3
PVC	11/13	$/t	890	0.0	(5.6)	2.3	(4.3)
ABS	11/13	$/t	1,920	1.6	(2.5)	3.8	27.6
SBR	11/13	$/t	1,670	6.4	(4.6)	10.6	(5.9)
SM	11/13	$/t	1,263	5.6	4.8	7.9	8.4
BPA	11/13	$/t	1,778	(5.1)	5.5	12.0	21.3
Caustic	11/13	$/t	674	3.5	34.0	42.6	77.4
2-EH	11/13	$/t	980	(2.0)	(2.0)	2.1	22.5
Caprolactam	11/13	$/t	2,090	(3.7)	6.1	16.1	46.2
Solar				%	%	%	%
Polysilicon	11/15	$/kg	16.7	0.0	(0.1)	7.1	14.0
Module	11/15	$/W	0.32	(0.3)	(1.3)	(2.5)	(20.5)

3. Global Peers Summary (8~9 page)

	Unit	Price	1D	1W	1M	3M	12M
E&P			%	%	%	%	%
ExxonMobil	USD	80.6	(0.8)	(4.1)	(2.7)	4.0	(6.1)
Shell	EUR	2,331	(2.9)	(5.1)	1.8	9.6	18.0
Petrochina	CNY	8.08	(0.9)	(5.2)	0.4	2.3	8.7
Gazprom	RUB	129.2	(1.5)	(1.7)	1.6	10.7	(11.2)
Petrobras	BRL	15.8	3.0	(5.4)	(1.9)	20.4	7.3
Refinery							
Phillips66	USD	92.5	(0.1)	(2.1)	1.7	11.4	11.4
Valero	USD	82.1	0.8	1.0	6.1	24.4	29.1
JX	JPY	610.0	(0.4)	(0.9)	7.2	15.9	42.1
Neste Oil	EUR	50.2	2.9	3.4	29.5	43.0	37.6

	Unit	Price	1D	1W	1M	3M	12M
Petrochemical			%	%	%	%	%
BASF	EUR	92.8	0.7	(2.2)	4.4	13.9	14.7
DowDuPont	USD	70.7	2.5	0.6	(0.4)	10.5	32.9
SABIC	SAR	99.7	0.2	(0.0)	1.5	2.0	15.4
Formosa Pla.	TWD	92.3	(0.4)	0.2	(1.0)	0.9	8.0
Shin-Etsu	JPY	12,385	1.2	0.3	21.6	26.8	50.1
Renewable							
Wacker	EUR	138.4	1.9	2.7	15.7	35.8	72.4
First Solar	USD	60.35	(0.4)	(0.3)	27.6	23.0	83.9
GCL-Poly	HKD	1.50	2.7	8.7	20.0	64.8	50.0
Tesla Motors	USD	312.5	0.4	3.1	(10.9)	(13.9)	69.9

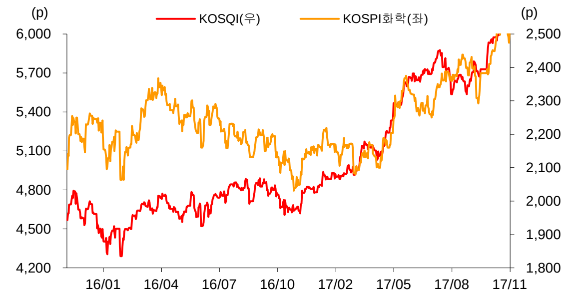
4. Coverage Summary

	11/16	1D	1W	1M	3M	6M	12M	투자의견	TP	%	P/E	P/B
KOSPI	2,535	0.7	(0.6)	2.0	7.5	10.5	28.8				* 추정치는 12M fwd 기준임	
KOSPI화학	6,017	1.4	(2.0)	3.1	5.8	10.0	19.9				* 모든 coverage 업체의 실적은 연결기준임	
LG화학	405,500	2.1	(2.1)	8.7	16.2	42.8	68.6	매수	400,000	(1.4)	12.84	2.12
롯데케미칼	356,000	2.7	(3.4)	(11.6)	(9.4)	2.3	11.8	매수	410,000	15.2	5.60	1.23
한화케미칼	30,800	4.9	(1.1)	(9.5)	(12.7)	7.3	23.9	매수	39,000	26.6	5.20	0.86
금호석유화학	70,900	0.3	(4.2)	4.4	(8.4)	(5.6)	(1.4)	매수	100,000	41.0	12.02	1.32
KCC	403,500	1.9	(1.0)	3.7	0.7	15.3	5.4	매수	450,000	11.5	22.40	0.59
OCI	123,500	1.6	0.4	23.5	33.1	41.8	48.3	매수	120,000	(2.8)	15.68	0.95
SKC	42,400	(0.9)	5.6	6.8	13.1	45.2	36.6	매수	45,000	6.1	11.72	1.16
SK이노베이션	201,000	2.6	(7.6)	(3.4)	17.9	19.6	24.8	매수	210,000	4.5	8.11	1.08
S-Oil	121,000	3.0	(5.1)	(8.0)	6.6	15.8	43.0	매수	140,000	15.7	13.09	2.28
GS	60,300	1.0	(11.1)	(8.4)	(11.3)	(4.9)	10.0	매수	80,000	32.7	5.72	0.89
SK가스	97,300	2.2	(0.4)	2.5	(11.1)	(19.6)	(6.9)	매수	130,000	33.6	7.35	0.72
포스코대우	18,800	0.5	(7.6)	(2.8)	(13.6)	(20.5)	(26.1)	매수	25,000	33.0	10.53	0.82
LG상사	27,500	(0.4)	(11.3)	(1.6)	(3.0)	(12.0)	(11.9)	매수	38,000	38.2	10.01	0.89
한국전력	37,800	(0.3)	(1.2)	(5.0)	(15.7)	(11.6)	(21.0)	매수	55,000	45.5	7.25	0.30
한국가스공사	44,950	2.3	5.3	4.9	(2.4)	(12.9)	2.7	매수	60,000	33.5	9.18	0.58

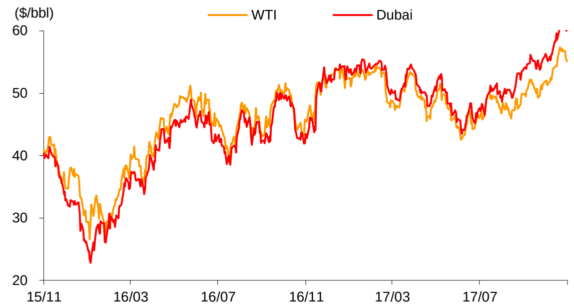
에너지/Commodity/정유화학. 손지우 I 3773-8827, jwshon@sk.com
R.A. 유승우 I 3773-9180, yswbest@sk.com

Key Chart

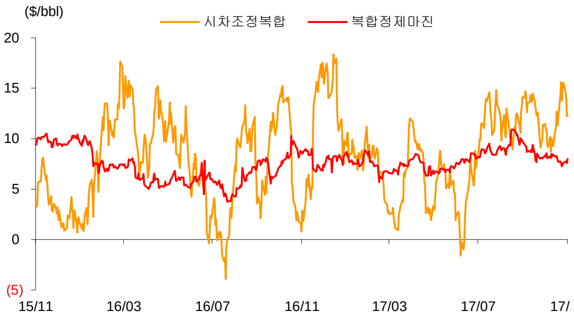
KOSPI/KOSPI화학



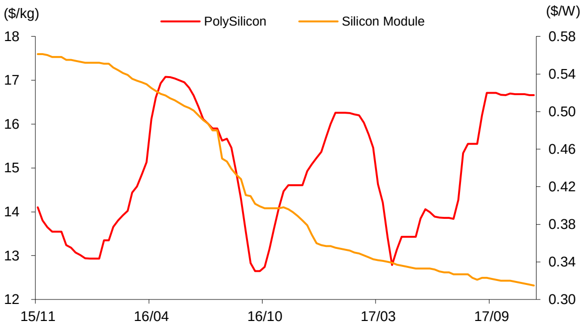
WTI/Dubai



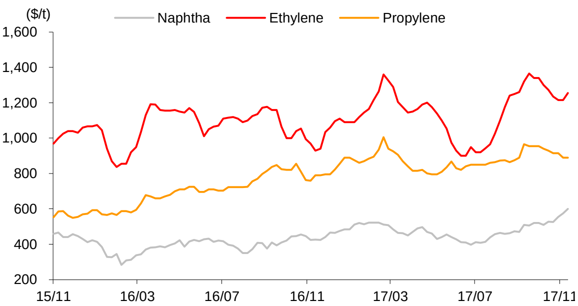
Complex & 1M lagging margin



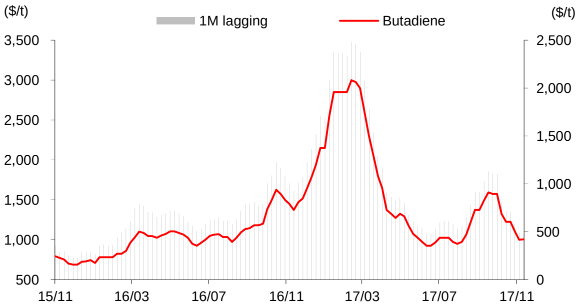
Polysilicon & Module prices



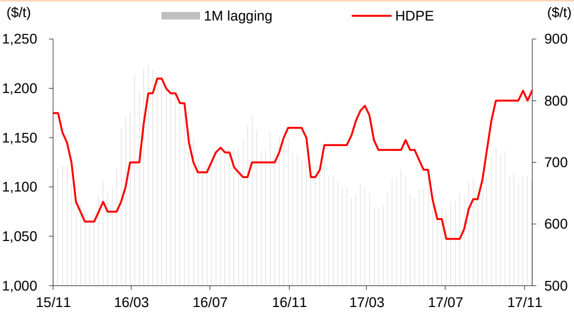
Naphtha/Ethylene/Propylene prices



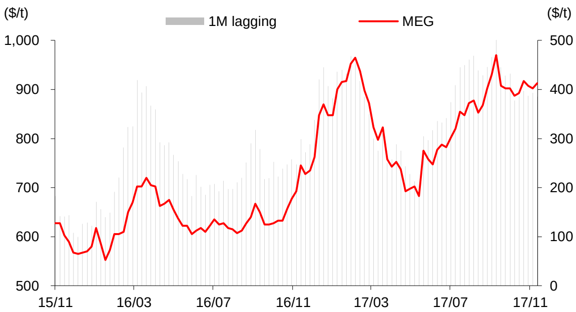
Butadiene price & 1M lagging naphtha spread



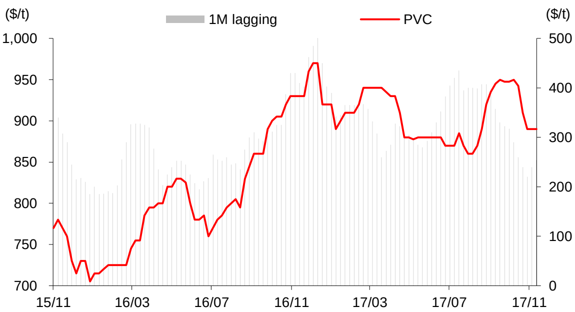
HDPE price & 1M lagging naphtha spread



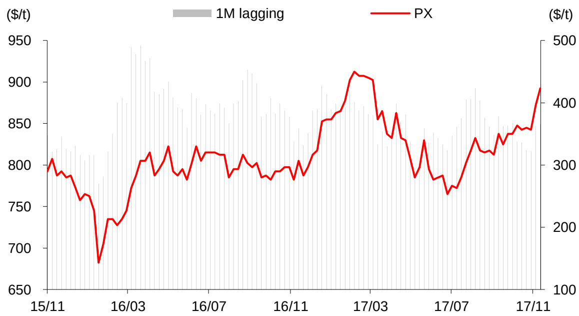
MEG price & 1M lagging naphtha spread



PVC price & 1M lagging naphtha spread



PX price & 1M lagging naphtha spread



자료: Bloomberg, Cischem, Petronet, Platts, Pvinsights, SK증권
참고: 상기 데이터는 일괄적으로 과거 2년치 적용

에너지/Commodity/정유화학. 손지우 l 3773-8827, jwshon@sk.com
R.A. 유승우 l 3773-9180, yswbest@sk.com

SK증권

News Comment

Headline	(출처: 연합뉴스)
제목	GM, 테슬라에 도전장… "지금보다 30% 저렴한 전기차 내놓겠다"
결론	Bolt를 포함한 LG화학의 GM향 배터리 매출액은 꾸준히 상승할 전망
세부	
	1) 메리 바라 GM CEO, "지금보다 30% 저렴한 전기차 내놓겠다"
	2) "2세대 EV 플랫폼을 채택한 전기차는 1회 충전으로 480㎞ 이상 달릴 것"
	3) 현재 GM Bolt는 1회 충전으로 396km를 주행하며 현재 1.7만대 판매함
	4) 배터리 기술에서도 145$/kW 수준에서 100$/kW 수준까지 낮출 계획임
	5) Bolt를 포함한 LG화학의 GM향 배터리 매출액은 꾸준히 상승할 전망

WTI Comment	(출처: 연합뉴스)
제목	'美 재고·생산증가'에 하락…WTI 0.3%↓
상승 요인	
하락 요인	미국의 주간 원유 생산이 하루 965만 배럴로 사상 최고 수준을 기록 미국의 원유재고가 2주 연속 증가

Issue 1	(출처: 아시아투데이)
제목	올해만 '4000여명' 줄인 조선 3사, 내년말까지 2000~3000명 추가 감축
결론	연이은 수주부진과 2017년 더딘 수주 회복세로 구조조정은 불가피함
세부	
	1) 구조조정이 본격화된 2015년 이후 2년 사이 1만명 이상이 조선소를 떠남
	2) 조선 3사는 내년말까지 2000~3000명을 추가로 줄여나가겠다는 방침
	3) 삼성중공업은 내년 말까지 1000 ~ 2000명의 인력을 추가 감축 계획
	4) 대우조선해양도 2018년까지 9000명대로 1000명 가량 감축할 계획
	5) 연이은 수주부진과 2017년 더딘 수주 회복세로 구조조정은 불가피함

Issue 2	
제목	
결론	
세부	
	1)
	2)
	3)
	4)
	5)

Issue 3	
제목	
결론	
세부	
	1)
	2)
	3)
	4)
	5)

Issue 4	
제목	
결론	
세부	
	1)
	2)
	3)
	4)
	5)

Issue 5	
제목	
결론	
세부	
	1)
	2)
	3)
	4)
	5)

Issue 6	
제목	
결론	
세부	
	1)
	2)
	3)
	4)
	5)

Commodity Price Data

Daily Price		Today	1D	1W	1M	3M	6M	12M	YTD	2015avg.	2016avg.	2017acc.
F/X	**USD/EUR**	0.850	0.848	0.859	0.848	0.850	0.902	0.935	0.951	0.901	0.904	0.893
	Change, %		*0.2*	*(1.1)*	*0.2*	*(0.0)*	*(5.8)*	*(9.2)*	*(10.6)*	*(5.7)*	*(6.0)*	*(4.8)*
	USD/JPY	113.1	112.9	113.5	112.2	110.2	113.1	109.1	117.0	121.1	108.8	112.1
	Change, %		*0.2*	*(0.4)*	*0.8*	*2.6*	*(0.1)*	*3.6*	*(3.3)*	*(6.6)*	*4.0*	*0.9*
	USD/KRW	1,101.4	1,112.5	1,115.5	1,127.8	1,141.7	1,116.0	1,169.4	1,205.8	1,131.2	1,160.5	1,137.3
	Change, %		*(1.0)*	*(1.3)*	*(2.3)*	*(3.5)*	*(1.3)*	*(5.8)*	*(8.7)*	*(2.6)*	*(5.1)*	*(3.2)*
Agriculture	**Corn**	336.5	338.3	341.5	350.5	352.5	367.8	338.5	352.0	376.8	358.5	361.4
	Change, %		*(0.5)*	*(1.5)*	*(4.0)*	*(4.5)*	*(8.5)*	*(0.6)*	*(4.4)*	*(10.7)*	*(6.1)*	*(6.9)*
	Soybean	972.0	976.3	975.3	991.0	921.8	976.3	985.8	996.5	945.4	987.5	975.6
	Change, %		*(0.4)*	*(0.3)*	*(1.9)*	*5.5*	*(0.4)*	*(1.4)*	*(2.5)*	*2.8*	*(1.6)*	*(0.4)*
	Wheat	421.5	420.0	429.0	436.5	419.3	424.3	397.0	408.0	508.1	436.4	439.0
	Change, %		*0.4*	*(1.7)*	*(3.4)*	*0.5*	*(0.6)*	*6.2*	*3.3*	*(17.1)*	*(3.4)*	*(4.0)*
	Rice	12.2	12.1	11.2	12.1	12.2	10.6	9.7	9.4	11.1	10.3	10.9
	Change, %		*0.7*	*8.9*	*0.4*	*(0.2)*	*14.5*	*25.5*	*30.0*	*10.0*	*17.6*	*11.4*
	Oats	262.3	269.3	273.0	259.5	260.0	229.8	233.5	228.5	250.2	196.3	253.4
	Change, %		*(2.6)*	*(3.9)*	*1.1*	*0.9*	*14.1*	*12.3*	*14.8*	*4.8*	*33.6*	*3.5*
MYR/mt	**Palm Oil**	2,706.0	2,695.0	2,747.0	2,755.0	2,622.0	2,834.0	2,871.0	3,218.0	2,190.3	2,653.8	2,832.9
	Change, %		*0.4*	*(1.5)*	*(1.8)*	*3.2*	*(4.5)*	*(5.7)*	*(15.9)*	*23.5*	*2.0*	*(4.5)*
	Cocoa	2,131.0	2,133.0	2,198.0	2,044.0	1,844.0	2,034.0	2,412.0	2,126.0	3,091.6	2,854.0	2,011.2
	Change, %		*(0.1)*	*(3.0)*	*4.3*	*15.6*	*4.8*	*(11.7)*	*0.2*	*(31.1)*	*(25.3)*	*6.0*
	Cotton	69.2	68.8	68.3	67.5	67.6	81.3	72.1	70.7	63.3	65.6	73.4
	Change, %		*0.6*	*1.3*	*2.5*	*2.5*	*(14.9)*	*(4.0)*	*(2.0)*	*9.4*	*5.5*	*(5.7)*
	Sugar	15.3	15.1	14.9	14.2	12.9	15.9	20.4	19.5	13.1	18.2	16.0
	Change, %		*1.1*	*2.6*	*7.6*	*17.9*	*(3.9)*	*(25.0)*	*(21.8)*	*16.1*	*(15.9)*	*(4.5)*
	Coffee	126.7	126.8	126.4	123.8	131.0	129.3	161.3	137.1	132.6	136.1	134.4
	Change, %		*(0.0)*	*0.2*	*2.4*	*(3.2)*	*(2.0)*	*(21.4)*	*(7.6)*	*(4.5)*	*(6.9)*	*(5.7)*
Energy	**WTI**	55.1	55.3	57.2	51.9	46.8	48.7	45.6	53.7	48.8	43.4	50.0
	Change, %		*(0.3)*	*(3.6)*	*6.3*	*17.9*	*13.3*	*21.0*	*2.6*	*12.9*	*27.1*	*10.3*
	Brent	61.4	61.9	63.9	57.8	50.3	51.7	46.6	56.8	53.7	45.1	53.6
	Change, %		*(0.8)*	*(4.0)*	*6.1*	*22.1*	*18.8*	*31.6*	*8.0*	*14.3*	*36.1*	*14.5*
	Natural Gas	3.1	3.1	3.2	2.9	2.9	3.2	2.8	3.7	2.6	2.6	3.0
	Change, %		*(0.9)*	*(4.6)*	*3.6*	*5.6*	*(5.5)*	*10.5*	*(18.0)*	*16.1*	*19.6*	*0.2*
	Ethanol	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.6	1.5	1.5	1.5
	Change, %		*(1.3)*	*(3.5)*	*(2.0)*	*(9.2)*	*(6.2)*	*(8.6)*	*(13.4)*	*(7.9)*	*(8.2)*	*(8.6)*
	RBOB Gasoline	171.4	173.9	182.0	161.7	156.4	160.4	131.9	166.5	163.6	140.0	161.4
	Change, %		*(1.4)*	*(5.8)*	*6.0*	*9.6*	*6.8*	*29.9*	*2.9*	*4.8*	*22.4*	*6.2*
	Coal	96.8	97.6	97.7	96.2	97.5	73.3	104.9	88.4	59.0	65.5	86.8
	Change, %		*(0.8)*	*(1.0)*	*0.6*	*(0.7)*	*32.1*	*(7.8)*	*9.4*	*64.1*	*47.8*	*11.5*
Metal	**Gold**	1,278.7	1,278.1	1,285.1	1,295.1	1,283.3	1,237.1	1,225.2	1,152.3	1,160.6	1,248.5	1,256.3
	Change, %		*0.0*	*(0.5)*	*(1.3)*	*(0.4)*	*3.4*	*4.4*	*11.0*	*10.2*	*2.4*	*1.8*
	Silver	17.1	17.0	17.0	17.2	17.1	16.9	17.0	15.9	15.7	17.1	17.2
	Change, %		*0.5*	*0.6*	*(0.8)*	*(0.2)*	*1.4*	*0.6*	*7.4*	*8.7*	*(0.1)*	*(0.4)*
	Copper	6,737.0	6,773.0	6,808.0	7,134.5	6,532.0	5,611.0	5,433.0	5,535.5	5,503.1	4,872.0	6,101.4
	Change, %		*(0.5)*	*(1.0)*	*(5.6)*	*3.1*	*20.1*	*24.0*	*21.7*	*22.4*	*38.3*	*10.4*
	Nickel	741.1	760.0	799.2	765.5	686.1	585.6	769.9	682.0	759.5	646.4	670.9
	Change, %		*(2.5)*	*(7.3)*	*(3.2)*	*8.0*	*26.6*	*(3.7)*	*8.7*	*(2.4)*	*14.7*	*10.5*
	Zinc	3,144.0	3,151.5	3,176.0	3,194.0	3,119.0	2,546.0	2,524.0	2,576.0	1,941.9	2,097.5	2,844.3
	Change, %		*(0.2)*	*(1.0)*	*(1.6)*	*0.8*	*23.5*	*24.6*	*22.0*	*61.9*	*49.9*	*10.5*
	Lead	2,402.5	2,433.0	2,511.8	2,527.0	2,505.5	2,076.8	2,154.3	2,003.5	1,791.2	1,868.3	2,291.1
	Change, %		*(1.3)*	*(4.3)*	*(4.9)*	*(4.1)*	*15.7*	*11.5*	*19.9*	*34.1*	*28.6*	*4.9*
	Aluminum	15,435.0	15,265.0	15,370.0	16,335.0	15,955.0	13,920.0	14,085.0	12,765.0	12,184.0	12,373.5	14,554.0
	Change, %		*1.1*	*0.4*	*(5.5)*	*(3.3)*	*10.9*	*9.6*	*20.9*	*26.7*	*24.7*	*6.1*
	Cobalt	61,000.0	61,000.0	61,250.0	60,039.0	56,788.0	55,543.8	29,250.0	32,734.0	28,444.4	25,480.1	53,942.9
	Change, %		*0.0*	*(0.4)*	*1.6*	*7.4*	*9.8*	*108.5*	*86.4*	*114.5*	*139.4*	*13.1*
	HR Coil	611.0	612.0	610.0	590.0	621.0	615.0	494.0	633.0	461.5	519.3	618.5
	Change, %		*(0.2)*	*0.2*	*3.6*	*(1.6)*	*(0.7)*	*23.7*	*(3.5)*	*32.4*	*17.7*	*(1.2)*
	Scrap	340.0	335.0	325.0	330.0	369.0	350.0	255.0	302.0	252.9	275.7	343.2
	Change, %		*1.5*	*4.6*	*3.0*	*(7.9)*	*(2.9)*	*33.3*	*12.6*	*34.4*	*23.3*	*(0.9)*

자료: Bloomberg

참고) NYMEX, ICE, LME 중 대표지수를 사용

에너지/Commodity/정유화학. 손지우 | 3773-8827, jwshon@sk.com
R.A. 유승우 | 3773-9180, yswbest@sk.com

SK증권

Refining Price Data

Daily Price		11/16	1D	1W	1M	3M	6M	12M	YTD	2015avg.	2016avg.	2017acc.
Crude Oil	**WTI**	55.1	55.3	57.2	51.3	47.1	49.4	45.4	53.7	48.8	43.4	50.0
	Change, %		*(0.3)*	*(3.6)*	*7.5*	*17.1*	*11.7*	*21.4*	*2.6*	*13.0*	*27.2*	*10.4*
	Dubai	60.3	60.0	61.6	55.5	48.7	51.0	43.5	53.8	50.8	41.3	52.0
	Change, %		*0.4*	*(2.1)*	*8.6*	*23.9*	*18.2*	*38.7*	*12.0*	*18.7*	*46.0*	*16.0*
Crude Oil Product	**Gasoline(휘발유)**	74.6	74.3	76.8	70.3	66.2	65.0	57.8	69.8	69.5	56.3	67.0
	Change, %		*0.3*	*(2.9)*	*6.0*	*12.7*	*14.8*	*29.0*	*6.7*	*7.2*	*32.5*	*11.3*
	Kerosene(등유)	73.7	73.0	74.4	67.8	61.0	61.0	55.7	66.4	64.7	52.9	63.9
	Change, %		*0.9*	*(0.9)*	*8.7*	*20.9*	*20.9*	*32.3*	*11.0*	*13.9*	*39.4*	*15.4*
	Diesel(경유)	73.0	72.0	72.6	68.2	61.2	61.3	55.8	65.5	64.8	52.1	64.3
	Change, %		*1.4*	*0.5*	*7.0*	*19.3*	*19.1*	*30.8*	*11.4*	*12.7*	*40.1*	*13.5*
	Bunker-C	56.3	55.8	57.4	51.8	45.9	48.0	42.2	52.1	45.3	35.5	48.7
	Change, %		*0.9*	*(1.9)*	*8.8*	*22.7*	*17.3*	*33.5*	*8.2*	*24.5*	*58.6*	*15.7*
	Naphtha	64.2	63.7	64.8	57.4	48.7	48.5	46.5	53.5	52.6	42.6	52.2
	Change, %		*0.9*	*(0.9)*	*12.0*	*32.0*	*32.3*	*38.0*	*20.1*	*22.1*	*50.8*	*23.0*
Dubai Spread	**Gasoline(휘발유)**	14.3	14.3	15.2	14.8	17.5	14.0	14.3	16.0	18.7	14.9	15.0
	Change		*(0.0)*	*(0.9)*	*(0.6)*	*(3.2)*	*0.3*	*(0.0)*	*(1.8)*	*(4.5)*	*(0.7)*	*(0.7)*
	Kerosene(등유)	13.4	13.0	12.8	12.3	12.4	10.0	12.3	12.6	14.0	11.6	11.9
	Change		*0.4*	*0.6*	*1.1*	*1.1*	*3.5*	*1.2*	*0.8*	*(0.5)*	*1.9*	*1.5*
	Diesel(경유)	12.7	11.9	11.0	12.7	12.5	10.3	12.4	11.7	14.0	10.8	12.4
	Change		*0.8*	*1.7*	*(0.0)*	*0.2*	*2.4*	*0.4*	*1.0*	*(1.3)*	*1.9*	*0.3*
	Bunker-C	(4.0)	(4.2)	(4.2)	(3.7)	(2.7)	(3.0)	(1.3)	(1.8)	(5.5)	(5.8)	(3.3)
	Change		*0.3*	*0.2*	*(0.2)*	*(1.2)*	*(1.0)*	*(2.7)*	*(2.2)*	*1.6*	*1.8*	*(0.7)*
	Naphtha	3.9	3.6	3.2	1.8	0.0	(2.5)	3.1	(0.4)	1.8	1.3	0.2
	Change		*0.3*	*0.8*	*2.1*	*3.9*	*6.4*	*0.9*	*4.3*	*2.1*	*2.6*	*3.7*
Refining Margin	**Simple(단순)**	3.0	2.6	2.5	3.1	3.9	2.4	4.4	3.8	3.3	1.9	3.2
	Change		*0.4*	*0.5*	*(0.1)*	*(0.9)*	*0.6*	*(1.4)*	*(0.8)*	*(0.3)*	*1.1*	*(0.2)*
	Complex(복합)	8.0	7.6	7.4	8.0	8.8	6.7	8.5	8.3	9.3	7.0	8.0
	Change		*0.4*	*0.5*	*(0.1)*	*(0.9)*	*1.3*	*(0.6)*	*(0.3)*	*(1.3)*	*1.0*	*0.0*
	Complex(lagging)	12.3	12.2	15.3	9.4	9.8	4.2	2.8	18.0	7.3	8.5	8.6
	Change		*0.1*	*(3.0)*	*2.9*	*2.5*	*8.1*	*9.5*	*(5.7)*	*5.0*	*3.8*	*3.6*

자료 : Petronet, SK증권
참고 1) Crude Oil 가격은 현물(spot) 기준으로 선물(future) 가격과 다를 수 있음
참고 2) Gasoline은 95RON, 경유는 L/P 0.5%, Bunker-C는 380cst/4.0% 기준임

SK Energy Daily

에너지/Commodity/정유화학, 손지우 | 3773-8827, jwshon@sk.com
R.A. 유승우 | 3773-9180, yswbest@sk.com
SK 증권

Petrochemical Price Data

Daily Price			11/16	11/15	11/14	11/13	11/10	11/09	11/08	11/07	11/06	11/03
Spot Price	**Naphtha**	CFR Japan	584.3	581.0	595.8	601.5	604.4	592.9	593.4	587.4	588.1	580.0
	Ethylene	CFR SE Asia	1,160.0	1,160.0	1,160.0	1,160.0	1,160.0	1,160.0	1,160.0	1,140.0	1,140.0	1,140.0
	Propylene	FOB Korea	877.0	875.0	875.0	875.0	875.0	894.0	899.0	903.0	918.0	918.0
	Butadiene	FOB Korea	980.0	945.0	945.0	945.0	945.0	945.0	945.0	945.0	945.0	945.0
	HDPE	CFR FE Asia	1,260.0	1,260.0	1,260.0	1,260.0	1,250.0	1,250.0	1,250.0	1,250.0	1,240.0	1,240.0
	LDPE	CFR FE Asia	1,250.0	1,250.0	1,250.0	1,250.0	1,250.0	1,250.0	1,250.0	1,250.0	1,240.0	1,240.0
	LLDPE	CFR FE Asia	1,190.0	1,190.0	1,190.0	1,185.0	1,190.0	1,190.0	1,190.0	1,180.0	1,170.0	1,170.0
	MEG	CFR China	880.0	890.0	902.0	910.0	910.0	913.0	913.0	915.0	910.0	900.0
	PP	CFR FE Asia	1,115.0	1,120.0	1,120.0	1,120.0	1,115.0	1,120.0	1,120.0	1,120.0	1,120.0	1,130.0
	PX	CFR China	878.5	879.0	886.5	888.3	880.0	881.0	883.0	887.0	877.0	864.3
	PTA	CFR China	700.0	700.0	700.0	685.0	685.0	685.0	685.0	685.0	665.0	660.0
	Benzene	FOB Korea	834.0	834.0	859.0	836.0	835.0	836.0	872.0	856.0	828.0	815.0
	Toluene	FOB Korea	679.0	677.0	681.0	686.0	687.0	684.0	691.0	695.0	682.0	676.0
	Xylene	FOB Korea	683.0	681.0	693.0	693.0	697.0	697.0	705.0	708.0	689.0	677.0
	SM	FOB Korea	1,223.5	1,231.0	1,255.0	1,253.0	1,252.0	1,256.0	1,263.0	1,228.0	1,189.0	1,168.0

Weekly Price			Last Week	1W	1M	3M	6M	12M	YTD	2015avg.	2016avg.	2017acc.
Spot Price	**Naphtha**	CFR Japan	600.0	574.0	527.0	459.0	414.0	427.0	484.5	493.0	399.5	480.1
	Change, %			*4.5*	*13.9*	*30.7*	*44.9*	*40.5*	*23.8*	*21.7*	*50.2*	*25.0*
	Ethylene	CFR SE Asia	1,180.0	1,130.0	1,207.5	1,125.0	892.5	907.5	990.0	1,103.7	1,040.9	1,071.9
	Change, %			*4.4*	*(2.3)*	*4.9*	*32.2*	*30.0*	*19.2*	*6.9*	*13.4*	*10.1*
	Propylene	CFR SE Asia	800.0	775.0	810.0	775.0	755.0	680.0	815.0	770.0	705.7	877.2
	Change, %			*3.2*	*(1.2)*	*3.2*	*6.0*	*17.6*	*(1.8)*	*3.9*	*13.4*	*(8.8)*
	Butadiene	CFR SE Asia	925.0	950.0	1,175.0	1,015.0	975.0	1,325.0	2,100.0	877.5	1,116.8	1,540.1
	Change, %			*(2.6)*	*(21.3)*	*(8.9)*	*(5.1)*	*(30.2)*	*(56.0)*	*5.4*	*(17.2)*	*(39.9)*
	Benzene	CFR SE Asia	865.0	817.5	785.0	772.5	732.5	677.5	822.5	690.0	646.7	831.4
	Change, %			*5.8*	*10.2*	*12.0*	*18.1*	*27.7*	*5.2*	*25.4*	*33.8*	*4.0*
	Toluene	CFR SE Asia	717.5	705.0	700.0	655.0	630.0	650.0	690.0	700.8	630.5	685.2
	Change, %			*1.8*	*2.5*	*9.5*	*13.9*	*10.4*	*4.0*	*2.4*	*13.8*	*4.7*
	Xylene	CFR SE Asia	672.5	662.5	652.5	635.0	615.0	655.0	675.0	699.3	627.7	664.1
	Change, %			*1.5*	*3.1*	*5.9*	*9.3*	*2.7*	*(0.4)*	*(3.8)*	*7.1*	*1.3*
Spread	**Ethylene**	-Naphtha	580.0	556.0	680.5	666.0	478.5	480.5	505.5	610.6	641.4	591.8
	Change, %			*4.3*	*(14.8)*	*(12.9)*	*21.2*	*20.7*	*14.7*	*(5.0)*	*(9.6)*	*(2.0)*
	Propylene	-Naphtha	200.0	201.0	283.0	316.0	341.0	253.0	330.5	277.0	306.2	397.1
	Change, %			*(0.5)*	*(29.3)*	*(36.7)*	*(41.3)*	*(20.9)*	*(39.5)*	*(27.8)*	*(34.7)*	*(49.6)*
	Butadiene	-Naphtha	325.0	376.0	648.0	556.0	561.0	898.0	1,615.5	384.5	717.3	1,060.0
	Change, %			*(13.6)*	*(49.8)*	*(41.5)*	*(42.1)*	*(63.8)*	*(79.9)*	*(15.5)*	*(54.7)*	*(69.3)*
	Benzene	-Naphtha	265.0	243.5	258.0	313.5	318.5	250.5	338.0	197.0	247.2	351.3
	Change, %			*8.8*	*2.7*	*(15.5)*	*(16.8)*	*5.8*	*(21.6)*	*34.5*	*7.2*	*(24.6)*
	Toluene	-Naphtha	117.5	131.0	173.0	196.0	216.0	223.0	205.5	207.8	231.0	205.1
	Change, %			*(10.3)*	*(32.1)*	*(40.1)*	*(45.6)*	*(47.3)*	*(42.8)*	*(43.4)*	*(49.1)*	*(42.7)*
	Xylene	-Naphtha	72.5	88.5	125.5	176.0	201.0	228.0	190.5	206.3	228.2	184.1
	Change, %			*(18.1)*	*(42.2)*	*(58.8)*	*(63.9)*	*(68.2)*	*(61.9)*	*(64.8)*	*(68.2)*	*(60.6)*

자료 : Cischem, Platts, Bloomberg, SK증권
참고 : Spread는 Polymer와 Naphtha의 가격차이임

에너지/Commodity/정유화학. 손지우 I 3773-8827, jwshon@sk.com
R.A. 유승우 I 3773-9180, yswbest@sk.com
SK 증권

Weekly Price			Last Week	1W	1M	3M	6M	12M	YTD	2015avg.	2016avg.	2017acc.
Spot Price	HDPE	CFR SE Asia	1,197.5	1,187.5	1,187.5	1,087.5	1,047.5	1,160.0	1,142.5	1,230.1	1,134.6	1,134.0
	Change, %			0.8	0.8	10.1	14.3	3.2	4.8	(2.7)	5.5	5.6
	MEG	CFR SE Asia	912.5	902.5	892.5	852.5	855.0	745.0	847.5	780.8	660.8	842.8
	Change, %			1.1	2.2	7.0	6.7	22.5	7.7	16.9	38.1	8.3
	PVC	CFR SE Asia	890.0	890.0	942.5	870.0	885.0	930.0	920.0	820.8	823.4	905.3
	Change, %			0.0	(5.6)	2.3	0.6	(4.3)	(3.3)	8.4	8.1	(1.7)
	PP	CFR SE Asia	1,147.5	1,127.5	1,167.5	1,097.5	1,047.5	1,040.0	1,032.5	1,109.8	978.4	1,090.9
	Change, %			1.8	(1.7)	4.6	9.5	10.3	11.1	3.4	17.3	5.2
	2-EH	CFR Korea	980.0	1,000.0	1,000.0	960.0	932.5	800.0	865.0	930.1	772.4	960.7
	Change, %			(2.0)	(2.0)	2.1	5.1	22.5	13.3	5.4	26.9	2.0
	ABS	CFR SE Asia	1,920.0	1,890.0	1,970.0	1,850.0	1,800.0	1,505.0	1,635.0	1,431.1	1,347.1	1,820.5
	Change, %			1.6	(2.5)	3.8	6.7	27.6	17.4	34.2	42.5	5.5
	SBR	CFR SE Asia	1,670.0	1,570.0	1,750.0	1,510.0	1,450.0	1,775.0	2,000.0	1,332.1	1,483.0	2,028.6
	Change, %			6.4	(4.6)	10.6	15.2	(5.9)	(16.5)	25.4	12.6	(17.7)
	SM	CFR SE Asia	1,262.5	1,195.0	1,205.0	1,170.0	1,202.5	1,165.0	1,205.0	1,100.7	1,064.6	1,243.2
	Change, %			5.6	4.8	7.9	5.0	8.4	4.8	14.7	18.6	1.6
	Caustic	FOB NEA	674.0	651.0	503.0	472.5	457.5	380.0	422.5	296.8	316.6	464.7
	Change, %			3.5	34.0	42.6	47.3	77.4	59.5	127.1	112.9	45.0
	PX	CFR SE Asia	892.5	872.5	842.5	817.5	785.0	805.0	855.0	842.9	790.4	836.4
	Change, %			2.3	5.9	9.2	13.7	10.9	4.4	5.9	12.9	6.7
	PO	CFR China	1,777.5	1,872.5	1,685.0	1,587.5	1,530.0	1,465.0	1,562.5	1,683.4	1,396.8	1,570.2
	Change, %			(5.1)	5.5	12.0	16.2	21.3	13.8	5.6	27.3	13.2
	Caprolactam	CFR SE Asia	2,090.0	2,170.0	1,970.0	1,800.0	1,610.0	1,430.0	1,850.0	1,581.5	1,344.9	1,916.6
	Change, %			(3.7)	6.1	16.1	29.8	46.2	13.0	32.1	55.4	9.0
	PTA	CFR SE Asia	700.0	670.0	667.5	657.5	665.0	622.5	642.5	648.0	613.7	660.6
	Change, %			4.5	4.9	6.5	5.3	12.4	8.9	8.0	14.1	6.0
Spread	HDPE		597.5	613.5	660.5	628.5	633.5	733.0	658.0	737.1	735.1	654.0
	Change, %			(2.6)	(9.5)	(4.9)	(5.7)	(18.5)	(9.2)	(18.9)	(18.7)	(8.6)
	MEG		312.5	328.5	365.5	393.5	441.0	318.0	363.0	287.8	261.3	362.8
	Change, %			(4.9)	(14.5)	(20.6)	(29.1)	(1.7)	(13.9)	8.6	19.6	(13.9)
	PVC		290.0	316.0	415.5	411.0	471.0	503.0	435.5	327.8	423.9	425.3
	Change, %			(8.2)	(30.2)	(29.4)	(38.4)	(42.3)	(33.4)	(11.5)	(31.6)	(31.8)
	PP		547.5	553.5	640.5	638.5	633.5	613.0	548.0	616.8	578.9	610.8
	Change, %			(1.1)	(14.5)	(14.3)	(13.6)	(10.7)	(0.1)	(11.2)	(5.4)	(10.4)
	2-EH		380.0	426.0	473.0	501.0	518.5	373.0	380.5	437.0	372.9	480.6
	Change, %			(10.8)	(19.7)	(24.2)	(26.7)	1.9	(0.1)	(13.1)	1.9	(20.9)
	ABS		1,320.0	1,316.0	1,443.0	1,391.0	1,386.0	1,078.0	1,150.5	938.1	947.6	1,340.5
	Change, %			0.3	(8.5)	(5.1)	(4.8)	22.4	14.7	40.7	39.3	(1.5)
	SBR	BD spread	745.0	620.0	575.0	495.0	475.0	450.0	(100.0)	454.7	366.2	488.5
	Change, %			20.2	29.6	50.5	56.8	65.6	(845.0)	63.9	103.4	52.5
	SM		662.5	621.0	678.0	711.0	788.5	738.0	720.5	607.7	665.1	763.1
	Change, %			6.7	(2.3)	(6.8)	(16.0)	(10.2)	(8.0)	9.0	(0.4)	(13.2)
	Caustic											
	Change, %											
	PX		292.5	298.5	315.5	358.5	371.0	378.0	370.5	349.9	390.9	356.3
	Change, %			(2.0)	(7.3)	(18.4)	(21.2)	(22.6)	(21.1)	(16.4)	(25.2)	(17.9)
	PO	propylene sprea	977.5	1,097.5	875.0	812.5	775.0	785.0	747.5	913.4	691.1	693.0
	Change, %			(10.9)	11.7	20.3	26.1	24.5	30.8	7.0	41.4	41.1
	Caprolactam	benzene sprea	1,225.0	1,352.5	1,185.0	1,027.5	877.5	752.5	1,027.5	891.6	698.2	1,085.2
	Change, %			(9.4)	3.4	19.2	39.6	62.8	19.2	37.4	75.5	12.9
	PTA	px spread	75.3	59.3	77.8	85.3	115.5	59.0	44.0	58.0	60.4	75.1
	Change, %			27.0	(3.2)	(11.7)	(34.8)	27.5	71.0	29.7	24.5	0.2

자료 : Cischem, Platts, SK증권

참고 : Spread는 Naphtha spread로 일괄적용

에너지/Commodity/정유화학. 손지우 | 3773-8827, jwshon@sk.com
R.A. 유승우 | 3773-9180, yswbest@sk.com
SK증권

Global peers

	Currency	11/16	1D	1W	1M	3M	6M	12M	YTD	MKT CAP	PER		PBR		EV/EBITDA	
										(mil USD)	17E	18E	17E	18E	17E	18E
Petrochemical																
DowDuPont	USD	70.7	2.5	0.6	(0.4)	10.5	13.5	32.9	23.5	165,391	20.5	17.1	1.6	1.8	11.5	10.0
Eastman	USD	90.2	0.7	0.2	2.6	5.7	13.3	21.5	19.9	12,958	12.8	11.1	2.6	2.4	9.2	8.5
BASF	EUR	92.8	0.7	(2.2)	4.4	13.9	6.2	14.7	5.1	100,385	15.2	15.1	2.5	2.3	8.1	8.0
Akzo Nobel	EUR	77.7	0.3	(1.1)	(1.4)	0.6	2.7	34.6	30.8	23,040	18.9	18.1	3.3	3.2	10.2	9.8
Arkema	EUR	104.3	0.8	(2.0)	0.9	9.3	6.7	18.3	12.2	9,312	14.7	13.5	1.9	1.8	6.7	6.4
Lanxess	EUR	65.0	0.5	(4.0)	(2.3)	2.1	(2.9)	14.1	4.3	7,006	16.8	14.8	2.2	2.0	7.3	7.9
Sumitomo Chemical	JPY	813	2.0	(4.0)	16.1	24.9	34.6	62.0	46.2	11,924	10.9	10.5	1.5	1.3	7.8	7.5
Mitsubishi Chemical	JPY	1,165	1.5	(4.0)	3.1	22.3	36.5	66.0	53.7	15,547	9.4	9.3	1.4	1.2	6.4	6.3
Shin-Etsu Chemical	JPY	12,385	1.2	0.3	21.6	26.8	24.7	50.1	36.6	47,414	24.1	21.1	2.3	2.1	10.8	9.4
Asahi Kasei	JPY	1,426	0.5	(4.8)	5.8	9.7	31.7	44.2	39.8	17,714	15.4	15.0	1.6	1.5	7.6	7.4
JSR	JPY	2,188	1.7	(3.9)	5.8	7.9	11.7	42.8	18.7	4,383	15.1	14.6	1.3	1.2	8.3	7.7
Nitto Denko	JPY	11,060	0.2	(3.3)	16.1	12.1	19.3	39.8	23.3	17,026	20.5	18.7	2.5	2.3	9.3	8.7
SABIC	SAR	99.7	0.2	(0.0)	1.5	2.0	2.4	15.4	9.0	79,750	14.8	13.9	1.8	1.7	7.5	7.2
Yansab	SAR	55.2	(2.3)	(2.2)	(2.1)	2.3	(0.5)	17.6	1.3	8,278	13.8	13.0	2.3	2.2	8.8	8.5
Formosa Plastics	TWD	92.3	(0.4)	0.2	(1.0)	0.9	3.7	8.0	3.5	19,556	13.4	14.1	1.8	1.7	19.5	19.2
Formosa Fiber	TWD	93.7	0.0	0.5	(1.2)	2.4	4.3	(2.4)	(2.7)	18,279	11.9	12.8	1.7	1.6	10.4	10.6
Nan Ya Plastics	TWD	74.6	(0.1)	(0.1)	(0.9)	1.5	5.1	14.4	4.8	19,692	14.3	14.7	1.7	1.7	15.0	15.4
Sinopec Shanghai	CNY	6.34	(1.1)	(2.6)	2.1	(3.8)	(0.8)	5.3	(1.6)	9,044	12.1	11.6	2.4	2.1	6.6	6.6
Sinopec Yizheng(Fibe	CNY	3.02	(0.3)	(1.6)	(2.9)	(5.6)	(3.2)	(24.7)	(26.3)	5,842	#N/A N/A	55.9	5.8	5.8	28.4	14.8
Reliance	INR	904	2.3	0.4	3.1	15.4	33.3	83.2	67.0	90,160	16.8	14.3	1.9	1.7	11.6	9.4
Industries Qatar	QAR	96.0	2.1	1.9	0.5	5.5	(7.3)	(5.4)	(18.3)	15,008	16.3	13.9	1.7	1.6	54.9	51.5
PTT Chemical	THB	78.0	(1.6)	(2.5)	(5.2)	7.6	5.8	28.9	23.8	10,654	10.2	10.3	1.4	1.3	5.4	5.3
Petronas	MYR	7.3	0.7	(1.4)	(0.7)	2.0	0.7	6.9	4.6	14,011	14.9	15.1	2.0	1.9	8.5	8.5
LG화학	KRW	405,500	2.1	(2.1)	9.6	17.4	42.0	70.4	55.4	26,105	15.0	14.3	2.0	1.8	6.7	6.2
롯데케미칼	KRW	356,000	2.7	(3.4)	(11.7)	(6.4)	2.2	12.1	(3.5)	11,128	5.3	5.3	1.1	0.9	3.6	3.2
한화케미칼	KRW	30,800	4.9	(1.1)	(7.8)	(12.3)	7.7	23.2	24.7	4,629	5.0	5.5	0.8	0.7	6.6	6.6
금호석유	KRW	70,900	0.3	(4.2)	4.6	(3.5)	(7.3)	(2.3)	(13.5)	1,970	12.4	11.6	1.3	1.2	9.4	8.4
SKC	KRW	42,400	(0.9)	5.6	5.5	13.4	42.3	33.3	28.5	1,451	11.1	10.0	1.0	1.0	9.6	8.3
국도화학	KRW	59,600	0.0	2.2	4.9	8.8	24.4	4.2	8.6	316	0.0	0.0	0.0	0.0	0.0	0.0
효성	KRW	7,450	3.5	(2.1)	3.6	17.5	15.5	28.0	9.6	4,275	7.9	7.8	1.2	1.0	7.2	6.4
Average			**0.8**	**(1.4)**	**2.5**	**7.0**	**12.3**	**25.2**	**16.3**							
Refinery																
Valero	USD	82.1	0.8	1.0	6.1	24.4	27.2	29.1	20.2	35,934	16.6	13.1	1.8	1.8	7.2	6.2
Conoco Phillips	USD	50.2	(0.5)	(6.2)	1.0	14.9	6.6	13.2	0.2	60,039	103.5	34.4	2.0	2.0	8.7	6.7
Formosa Petrochemic	TWD	106.0	(0.5)	1.0	0.5	2.9	(2.8)	6.5	(5.4)	33,608	14.7	18.0	3.1	3.1	9.7	11.4
Andeavor	USD	104.8	0.9	(2.1)	0.9	12.2	28.0	22.2	19.8	16,347	14.8	12.6	1.6	1.6	8.8	7.0
Marathon Petroleum	USD	62.0	0.8	0.6	11.3	21.4	18.2	42.6	23.2	30,286	16.5	14.7	2.5	2.4	8.2	7.4
Devon Energy	USD	38.2	0.7	(6.5)	6.4	24.5	0.6	(13.2)	(16.4)	20,053	21.5	17.5	2.8	2.4	9.2	8.2
Hollyfrontier	USD	43.8	2.1	3.8	21.4	57.4	61.8	57.7	33.7	7,765	19.4	16.2	1.6	1.5	8.7	7.5
Phillips 66	USD	92.5	(0.1)	(2.1)	1.7	11.4	17.7	11.4	7.0	46,853	20.3	14.7	2.1	2.1	10.4	8.5
Murphy Oil	USD	27.8	0.6	(6.9)	6.7	12.6	6.0	(7.9)	(10.9)	4,789	#N/A N/A	243.4	1.1	1.1	5.2	4.6
JX Holdings	JPY	610.0	(0.4)	(0.9)	7.2	15.9	18.7	42.1	23.3	18,521	9.2	8.6	0.9	0.8	7.6	7.1
Idemitsu	JPY	3,440.0	1.2	(0.1)	9.6	28.6	(13.1)	37.8	10.8	6,339	7.9	7.8	0.9	0.8	8.0	7.7
Nesteoil	EUR	50.2	2.9	3.4	29.5	43.0	33.3	37.6	37.4	15,138	16.1	16.0	3.0	2.7	9.3	9.8
Ashland	USD	70.8	5.3	8.7	5.7	14.9	11.8	32.5	32.3	4,415	17.6	21.5	1.4	1.3	8.0	10.0
Fuchs Petrolub	EUR	46.3	1.1	(1.0)	(8.1)	(3.8)	(6.4)	22.7	16.0	7,130	24.4	22.9	4.8	4.3	14.0	13.3
SK이노베이션	KRW	201,000	2.6	(7.6)	(2.7)	17.9	17.2	28.4	37.2	16,949	8.0	7.7	1.0	0.9	4.9	4.4
S-Oil	KRW	121,000	3.0	(5.1)	(8.0)	7.6	12.6	44.0	42.9	12,423	11.9	9.2	2.1	1.9	9.2	6.8
GS	KRW	60,300	1.0	(11.1)	(8.8)	(10.5)	(6.9)	9.6	11.5	5,109	5.8	5.5	0.7	0.7	7.1	6.8
Average			**1.3**	**(1.8)**	**4.7**	**17.4**	**13.6**	**24.5**	**16.6**							

* Bloomberg 기준 / valuation multiple 또한 Bloomberg consensus 기준임
* 국내업체의 multiple은 Dataguidepro 기준임

SK Energy Daily

에너지/Commodity/정유화학. 손지우 I 3773-8827, jwshon@sk.com
R.A. 유승우 I 3773-9180, yswbest@sk.com

SK 증권

Global peers

	Currency	11/16	1D	1W	1M	3M	6M	12M	YTD	MKT CAP (mil USD)	PER 17E	PER 18E	PBR 17E	PBR 18E	EV/EBITDA 17E	EV/EBITDA 18E
E&P/Shale																
Exxon Mobil	USD	81	(0.8)	(4.1)	(2.7)	4.0	(2.4)	(6.1)	(10.7)	341,341	22.6	20.0	1.9	1.9	9.8	8.8
BP	GBP	491	(0.8)	(4.6)	(0.1)	10.3	4.7	11.1	(3.6)	128,322	21.8	16.6	1.3	1.3	6.4	5.7
Shell	EUR	2,331	(2.9)	(5.1)	1.8	9.6	7.5	18.0	3.9	257,266	16.8	15.2	1.3	1.3	6.9	6.3
Chevron	USD	115	(1.6)	(2.3)	(4.6)	7.2	6.8	5.7	(2.7)	217,611	28.7	22.8	1.5	1.5	8.2	7.1
Total	EUR	46	(0.0)	(4.7)	0.4	7.6	(4.9)	6.8	(5.0)	137,828	13.2	12.7	1.3	1.2	6.1	5.4
Sinopec	CNY	6	(0.5)	(5.0)	1.9	0.0	0.9	18.6	9.4	103,503	13.6	12.7	1.0	0.9	4.4	4.3
Petrochina	CNY	8	(0.9)	(5.2)	0.4	2.3	5.1	8.7	1.6	211,751	50.8	31.1	1.2	1.2	6.6	6.2
CNOOC	CNY	12	0.9	(3.4)	1.3	5.6	6.2	(9.3)	(10.2)	60,601	13.1	11.3	1.0	1.0	4.1	3.9
Gazprom	RUB	129	(1.5)	(1.7)	1.6	10.7	(1.5)	(11.2)	(16.4)	51,318	4.5	4.1	0.3	0.2	3.8	3.5
Rosneft	RUB	304	0.4	(9.9)	(6.6)	0.5	(3.0)	(10.5)	(24.7)	53,968	10.0	6.7	0.8	0.7	5.5	4.6
Anadarko	USD	48	(0.3)	(7.6)	(2.0)	11.7	(8.2)	(23.3)	(31.9)	25,990	#N/A N/A	#N/A N/A	1.9	1.8	7.4	6.5
Petrobras	BRL	16	3.0	(5.4)	(1.9)	20.4	0.7	7.3	6.3	64,115	13.8	9.6	0.6	0.6	5.3	4.9
Lukoil	USD	3,304	0.2	(1.9)	9.4	16.1	14.3	7.9	(4.2)	47,240	7.1	6.5	0.7	0.7	N/A	N/A
Kinder	USD	17	(1.2)	(6.0)	(10.5)	(10.0)	(15.0)	(20.9)	(18.7)	47,497	26.1	24.1	1.0	1.1	10.8	10.4
Statoil	NOK	164	(0.2)	(3.4)	1.2	12.2	6.8	17.7	3.5	65,986	16.1	17.1	1.7	1.7	3.5	3.4
BHP	AUD	27	(0.3)	(4.8)	1.2	6.2	13.5	13.7	8.8	104,255	14.9	17.0	1.8	1.8	5.9	6.3
PTT E&P	THB	92	0.0	(1.6)	(1.1)	8.6	(4.9)	13.2	(4.4)	11,100	14.5	12.8	0.9	0.9	3.5	3.2
Petronas gas	MYR	17	1.8	(2.9)	(8.0)	(9.0)	(12.8)	(19.7)	(19.3)	8,156	19.2	18.0	2.7	2.6	10.9	10.1
Chesapeake	USD	4	0.0	(6.3)	0.8	(3.8)	(30.5)	(34.9)	(45.2)	3,498	5.5	5.5	#N/A N/A	#N/A N/A	7.5	6.5
Noble Energy	USD	26	(0.7)	(9.3)	(7.5)	8.6	(18.4)	(29.5)	(32.2)	12,554	#N/A N/A	697.3	1.3	1.3	7.8	7.1
Average		**0**	**(0.3)**	**(4.8)**	**(1.3)**	**5.9**	**(1.8)**	**(1.8)**	**(9.8)**							
PV																
WACKER	EUR	138.4	1.9	2.7	15.7	35.8	34.4	72.4	40.0	8,498	26.4	23.3	2.2	2.1	7.8	7.3
GCL-Poly	HKD	1.5	2.7	8.7	20.0	64.8	61.3	50.0	61.3	3,570	10.9	10.3	1.0	1.0	7.0	6.4
SunPower	USD	8.1	(2.5)	(5.1)	20.5	(15.0)	12.6	13.4	22.8	1,133	#N/A N/A	#N/A N/A	1.5	1.5	18.3	12.0
Canadian Solar	USD	17.6	0.5	4.2	9.8	3.4	35.6	48.6	44.1	1,018	11.6	7.4	1.0	0.9	9.5	8.9
JA Solar	USD	6.9	(1.4)	(13.6)	(10.6)	9.3	(5.2)	23.0	44.2	327	7.6	12.9	1.6	1.6	4.0	3.8
Yingli	USD	2.3	(1.3)	5.0	(0.4)	(4.5)	(4.9)	(34.6)	(10.4)	42	#N/A N/A	#N/A N/A	#N/A N/A	#N/A N/A	#N/A N/A	#N/A N/A
First Solar	USD	60.4	(0.4)	(0.3)	27.6	23.0	64.1	83.9	88.1	6,303	24.2	51.2	1.0	1.2	11.2	12.3
한화큐셀	USD	8.2	0.0	(9.6)	6.2	7.6	17.2	(8.9)	0.2	681	24.1	37.2	#N/A N/A	#N/A N/A	8.7	8.5
OCI	KRW	123,500	1.6	0.4	25.4	31.4	42.3	47.4	56.9	2,686	14.0	15.4	0.9	0.8	7.6	6.4
웅진에너지	KRW	8,260	3.8	4.3	20.2	(0.1)	46.7	67.5	74.4	189	N/A	0.9	0.8	7.6	6.4	7.9
신성솔라에너지	KRW	1,855	1.1	6.3	7.5	(14.3)	(7.7)	(20.2)	(16.1)	293	N/A	0.8	7.6	6.4	7.9	7.8
Average			**0.6**	**0.3**	**12.9**	**12.9**	**26.9**	**31.1**	**36.9**							
Gas Company																
Towngas China	HKD	6.3	(0.5)	(2.6)	11.4	20.8	38.5	58.6	55.1	2,244	14.6	13.2	1.2	1.1	13.0	11.9
Kulun	HKD	6.7	(0.6)	(7.4)	(9.9)	(9.4)	(5.0)	20.9	15.7	6,936	10.6	9.6	1.2	1.1	5.5	5.4
Beijing Enterprise	HKD	45.4	0.4	(2.5)	(0.9)	12.3	22.4	32.4	23.7	7,329	8.7	8.0	0.9	0.8	15.8	14.7
ENN Energy	HKD	57.4	(0.2)	(1.5)	(0.7)	12.4	47.0	64.9	79.9	7,957	15.2	13.4	3.0	2.5	9.3	8.3
China Resources Gas	HKD	28.5	(1.2)	(1.0)	(0.2)	(0.3)	23.1	18.3	30.7	8,116	16.3	14.5	3.1	2.7	9.6	8.7
China Gas Holdings	HKD	23.5	1.7	(5.3)	(4.5)	22.6	106.8	120.8	122.9	14,919	19.9	16.7	4.6	3.9	15.7	13.3
Shenzen Gas	HKD	14.7	(0.7)	0.0	(4.7)	5.6	11.9	26.9	30.1	3,817	12.0	11.5	1.4	1.3	9.0	8.4
Shann Xi	CNY	8.1	0.0	(2.8)	(3.7)	(5.0)	(3.0)	(20.4)	(15.5)	1,360	17.1	15.4	1.6	1.5	#N/A N/A	#N/A N/A
Suntien	HKD	2.0	5.2	(4.7)	(7.7)	14.7	31.8	91.5	103.0	966	7.6	6.6	0.7	0.7	9.9	8.5
China Oil & Gas	HKD	0.5	3.9	(1.9)	(3.6)	(1.9)	(5.4)	(11.7)	(13.1)	395	9.1	7.9	0.9	0.8	6.2	5.6
Average			**0.8**	**(3.0)**	**(2.4)**	**7.2**	**26.8**	**40.2**	**43.3**							
EV																
LG화학	KRW	405,500	2.1	(2.1)	9.6	17.4	42.0	70.4	55.4	26,105	14.1	13.7	1.9	1.7	6.7	6.5
삼성SDI	KRW	215,500	(0.9)	(2.7)	5.9	20.7	40.8	127.6	97.7	13,514	21.9	13.5	1.3	1.2	24.6	15.5
Panasonic	JPY	1678.5	0.2	(4.7)	4.3	12.4	22.3	62.3	41.1	36,480	21.9	16.6	2.3	2.1	7.1	6.2
GS Yuasa	JPY	574.0	0.9	(0.3)	(2.9)	6.9	13.0	24.5	18.1	2,103	17.4	15.8	1.4	1.3	7.8	7.2
NEC	JPY	2940.0	0.3	(3.9)	(4.1)	(1.7)	4.3	(2.3)	(5.2)	6,785	15.9	16.3	0.9	0.8	7.0	6.5
BYD Auto	CNY	64.2	0.4	(5.5)	(4.7)	33.1	32.0	15.3	29.3	25,614	36.7	26.3	3.2	2.9	15.8	12.7
Tesla Motors	USD	312.5	0.4	3.1	(10.9)	(13.9)	(1.4)	69.9	46.2	52,521	#N/A N/A	#N/A N/A	11.0	10.9	139.4	31.7
Kandi Technologies	USD	8.1	2.5	17.4	(2.4)	121.9	102.5	105.1	65.3	389	#N/A N/A	#N/A N/A	#N/A N/A	#N/A N/A	#N/A N/A	#N/A N/A
Average			**0.7**	**0.2**	**(0.6)**	**24.6**	**31.9**	**59.1**	**43.5**							

* Bloomberg 기준 / valuation multiple 또한 Bloomberg consensus 기준임