SK Energy Daily

Analyst. 손지우, 3773-8827 / jwshon@sk.com
R.A. 박한샘, 3773-8477 / sam4.park@sk.com

1. News Summary (3 page)

2019년 8월 19일

News		Conclusion
WTI comment	美 금리 하락 진정 0.7% 상승	
Headline	[주간가격] 에틸렌, WoW $35/mt 상승해 CFR SEA $855/mt로 마감	향후 증설로 예정된 물량은 가격 하방압력으로 작용할 전망
News 1.	[주간가격] MEG, WoW $18/mt 상승해 CFR China $540/mt로 마감	환율 변동 여파가 점차 해소 시, 펀더멘털리 가격 반등 가능
News 2.	[주간가격] BD, 플랫한 모습보이며 FOB Korea $1,115/mt로 마감	수요 약세 지연으로, 당분간 급격한 가격 상승은 제한될 전망
News 3.	[주간가격] SBR, 플랫한 모습보이며 CFR SEA $1,290/mt로 마감	다운스트림 약세가 지연됨에 따라 당분간 가격하락 지속될 전망
News 4.	[주간가격] PX, WoW $0.17/mt 상승해 FOB Korea $770.67/mt로 마감	단기적으로, 다운스트림 수요 강세로 타이트한 수급 지속될 전망

2. Prices Summary (4~7 page)

Daily	Unit	Price	1D	1W	1M	3M	12M
Refinery			%	%	%	%	%
WTI	$/bbl	54.9	0.7	0.7	(4.8)	(12.6)	(16.2)
Dubai	$/bbl	58.6	0.5	3.2	(9.2)	(18.8)	(15.7)
Gasoline	$/bbl	70.4	(0.4)	2.3	(7.9)	(12.8)	(16.4)
Diesel	$/bbl	73.9	(1.3)	2.7	(6.9)	(13.7)	(13.5)
Complex margin	$/bbl	6.4	(0.4)	(0.4)	(1.9)	1.2	(2.8)
1M lagging	$/bbl	0.5	0.6	(0.6)	(12.2)	(6.8)	(5.4)
Petrochemical			%	%	%	%	%
Naphtha	$/t	466	1.9	3.2	(11.6)	(19.7)	(26.9)
Butadiene	$/t	1,115	0.0	0.0	4.2	16.1	(35.2)
HDPE	$/t	960	0.0	(1.0)	(5.9)	(8.6)	(26.2)
MEG	$/t	540	1.7	3.4	2.7	1.7	(40.0)
PX	$/t	771	(0.8)	0.0	(6.4)	(9.5)	(33.9)
SM	$/t	976	(0.1)	1.2	(3.7)	(3.6)	(30.7)
Commodity			%	%	%	%	%
Natural Gas	$/mmbtu	2.20	(1.4)	3.8	(1.3)	(17.8)	(18.9)
Natural rubber	$/t	1,300	0.8	0.0	(7.8)	(12.8)	(1.5)
Cotton	C/lbs	60.1	0.7	1.7	(3.5)	(9.0)	(26.5)

*참고: 정제마진의 변동률은 %가 아닌 $/bbl임

Weekly	Update	Unit	Price	1W	1M	3M	12M
Utility				%	%	%	%
SMP	08/16	원/kwh	87	1.2	0.1	0.1	(0.1)
Petrochemical				%	%	%	%
Ethylene	08/12	$/t	853	4.3	17.6	(3.7)	(33.1)
Propylene	08/12	$/t	870	(1.7)	0.0	11.2	(16.1)
Benzene	08/12	$/t	648	(2.6)	(5.8)	5.3	(26.2)
Toluene	08/12	$/t	683	(1.8)	(1.1)	(4.5)	(17.8)
Xylene	08/12	$/t	705	(0.7)	1.4	(5.4)	(16.1)
PP	08/12	$/t	1,053	(0.5)	(1.4)	(9.5)	(14.6)
PVC	08/12	$/t	860	0.0	(2.3)	3.6	(9.0)
ABS	08/12	$/t	1,400	(2.1)	(5.4)	(10.8)	(28.6)
SBR	08/12	$/t	1,290	(0.8)	(5.8)	(6.2)	(29.5)
SM	08/12	$/t	1,000	(3.4)	(5.7)	(7.4)	(32.2)
BPA	08/12	$/t	1,483	4.2	6.8	(3.1)	(18.3)
Caustic	08/12	$/t	290	(6.8)	(10.5)	(15.2)	(21.4)
Solar				%	%	%	%
Polysilicon	08/14	$/kg	7.88	(0.5)	(2.5)	(5.5)	(30.7)
Module	08/14	$/W	0.21	(0.5)	(1.9)	(3.3)	(18.6)

3. Global Peers Summary (8~9 page)

	Unit	Price	1D	1W	1M	3M	12M
E&P			%	%	%	%	%
ExxonMobil	USD	68.3	1.6	(3.6)	(10.0)	(10.6)	(12.4)
Shell	EUR	2,273	(0.1)	(4.2)	(12.3)	(9.9)	(8.2)
Petrochina	CNY	6.10	0.0	(1.1)	(7.9)	(15.9)	(23.2)
Gazprom	RUB	224.7	(1.1)	(2.3)	(5.6)	10.9	59.5
Petrobras	BRL	23.9	(1.3)	(9.0)	(14.1)	(5.4)	26.2
Refinery							
Phillips66	USD	98.8	1.4	(1.6)	(2.5)	11.9	(14.0)
Valero	USD	78.1	1.8	(0.9)	(7.2)	(8.6)	(29.8)
JX	JPY	430.3	1.7	(5.5)	(18.3)	(20.8)	(42.6)
Neste Oil	EUR	29.9	(0.1)	(3.1)	(2.8)	(2.9)	(59.4)

	Unit	Price	1D	1W	1M	3M	12M
Petrochemical			%	%	%	%	%
BASF	EUR	56.9	1.3	(2.4)	(7.7)	(11.6)	(26.5)
DowDuPont	USD	66.1	1.5	(4.2)	(8.6)	1.4	(1.4)
SABIC	SAR	104.0	0.0	0.0	(9.1)	(8.1)	(15.4)
Formosa Pla.	TWD	91.1	0.9	(4.3)	(12.4)	(16.0)	(16.0)
Shin-Etsu	JPY	10,490	(1.5)	(2.0)	8.6	9.8	(1.7)
Renewable							
Wacker	EUR	64.0	0.4	(5.1)	(4.1)	(12.6)	(47.7)
First Solar	USD	61.69	4.1	(2.9)	(4.3)	1.7	21.3
GCL-Poly	HKD	0.31	(1.6)	(18.7)	(31.5)	(41.3)	(39.0)
Tesla Motors	USD	219.9	2.0	(6.4)	(12.9)	(3.7)	(34.4)

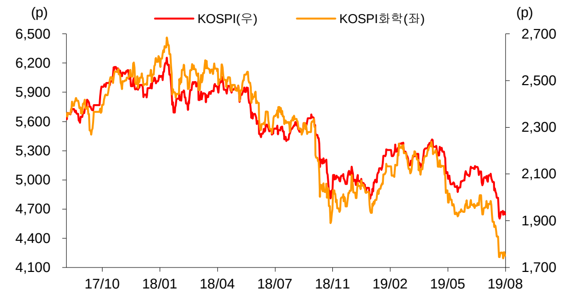
4. Coverage Summary

	08/16	1D	1W	1M	3M	6M	12M	투자의견	TP	%	P/E	P/B
KOSPI	1,927	(0.6)	(0.5)	(7.0)	(6.3)	(13.4)	(14.7)				* 추정치는 12M fwd 기준임(2020E)	
KOSPI화학	4,221	(0.8)	(0.8)	(10.7)	(12.0)	(18.1)	(24.8)				* 모든 coverage 업체의 실적은 연결기준임	
LG화학	320,000	(1.1)	0.9	(9.3)	(4.2)	(15.8)	(14.2)	매수	400,000	25.0	12.84	1.47
롯데케미칼	221,500	(2.2)	0.2	(12.3)	(15.9)	(26.7)	(34.9)	매수	310,000	40.0	8.20	0.62
한화케미칼	16,600	(4.0)	(3.5)	(22.4)	(21.7)	(24.0)	(19.2)	매수	25,000	50.6	6.88	0.42
금호석유화학	71,700	(2.2)	(0.1)	(19.3)	(22.2)	(17.1)	(31.1)	매수	130,000	81.3	7.16	0.79
KCC	215,000	(1.1)	(4.2)	(16.7)	(23.8)	(33.1)	(37.3)	매수	350,000	62.8	26.33	0.38
OCI	65,000	(4.3)	(5.1)	(29.3)	(25.5)	(32.5)	(38.1)	매수	120,000	84.6	5.64	0.44
SKC	42,700	4.4	(0.4)	(0.4)	33.4	3.9	(6.3)	매수	45,000	5.4	13.50	1.01
SK이노베이션	158,000	0.0	(0.9)	(8.1)	(6.0)	(13.9)	(20.6)	매수	190,000	20.3	13.94	0.88
S-Oil	88,300	(0.2)	(0.3)	(3.2)	4.5	(15.9)	(27.3)	매수	100,000	13.3	13.02	1.37
GS	46,250	(1.7)	(3.3)	(11.7)	(8.1)	(14.2)	(14.4)	매수	60,000	29.7	6.13	0.51
SK가스	71,500	(1.9)	(4.2)	(9.1)	(12.6)	(11.2)	(17.7)	매수	100,000	39.9	10.24	0.44
포스코인터내셔널	17,350	(0.6)	(0.9)	(5.2)	2.1	(9.9)	(3.1)	매수	23,000	32.6	10.08	0.68
LG상사	16,300	0.0	(0.9)	(12.4)	(9.2)	(5.2)	(29.7)	매수	23,000	41.1	8.14	0.45
한국전력	24,700	(1.6)	(2.0)	(2.9)	(2.9)	(26.9)	(18.6)	매수	32,000	29.6	7.52	0.20
한국가스공사	37,150	(3.8)	(6.5)	(14.8)	(10.0)	(32.1)	(32.3)	매수	55,000	48.0	7.04	0.45

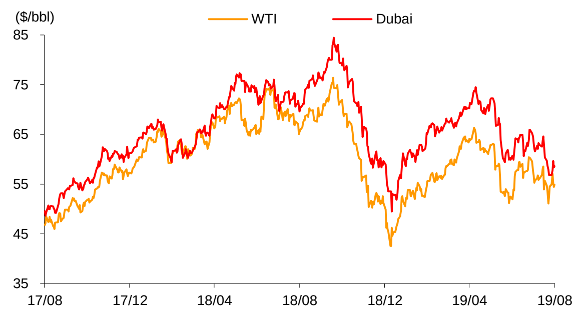
Analyst, 손지우, 3773-8827 / jwshon@sk.com
R.A. 박한샘, 3773-8477 / sam4.park@sk.com

Key Chart

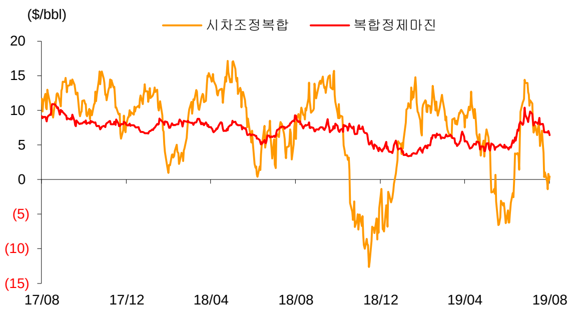
KOSPI/KOSPI화학



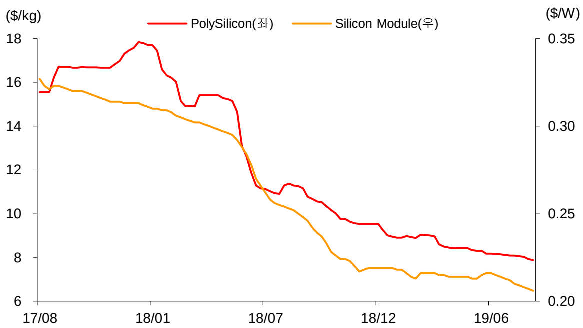
WTI/Dubai



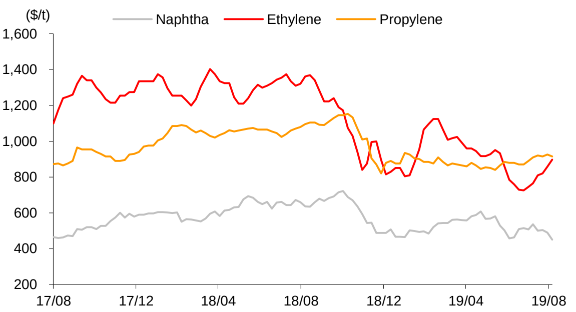
Complex & 1M lagging margin



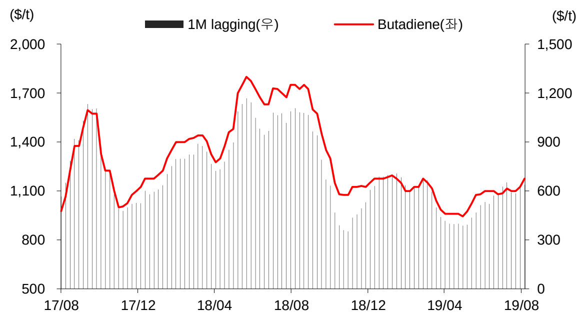
Polysilicon & Module prices



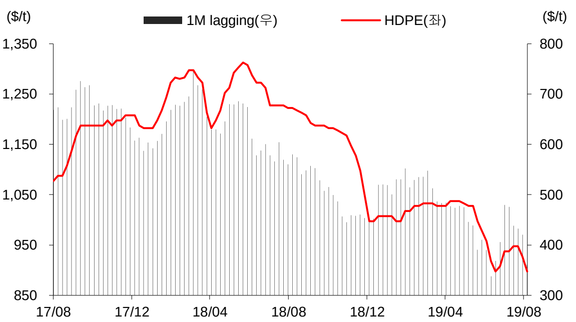
Naphtha/Ethylene/Propylene prices



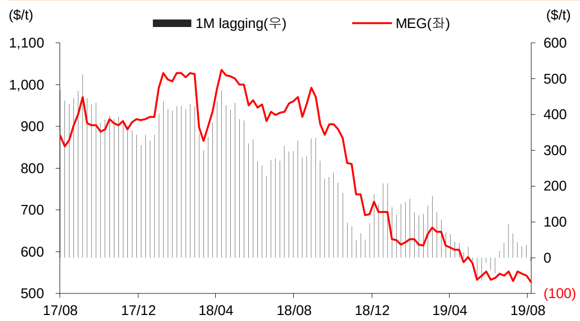
Butadiene price & 1M lagging naphtha spread



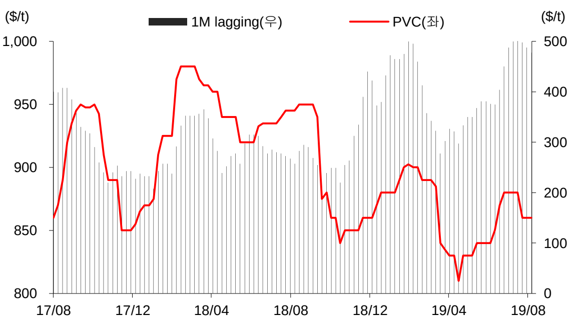
HDPE price & 1M lagging naphtha spread



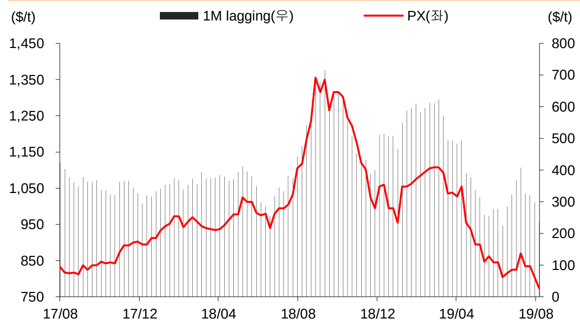
MEG price & 1M lagging naphtha spread



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

SK Energy Daily

Analyst. 손지우, 3773-8827 / jwshon@sk.com
R.A. 박한샘, 3773-8477 / sam4.park@sk.com

News Comment

Headline	(출처: Platts)
제목	[주간가격] 에틸렌, WoW $35/mt 상승해 CFR SEA $855/mt로 마감
결론	향후 증설로 예정된 물량은 가격 하방압력으로 작용할 전망
세부	
	1) 싱가포르 8월 9-12일 휴일동안 주 초 에틸렌 가격은 견조했음
	2) 급등한 가격으로 판매 물량이 늘어나며 센트먼트가 악화됨
	3) MEG와 LLPDE를 중심으로 다운스트림 가동률을 줄이는 중
	4) 중국, 한국의 신규 증설로 추가 에틸렌 공급 물량이 나타남
	5) 향후 증설로 예정된 물량은 가격 하방압력으로 작용할 전망

WTI Comment	(출처: 연합인포맥스)
제목	美 금리 하락 진정 0.7% 상승
상승 요인	미-중 무역협상에 대한 낙관론과 미 국채금리 하락세의 진정
하락 요인	채굴 장비 수 증가로 미국 산유량 증가 우려

Issue 1	(출처: Platts)
제목	[주간가격] MEG, WoW $18/mt 상승해 CFR China $540/mt로 마감
결론	환율 변동 여파가 점차 해소 시, 펀더멘털리 가격 반등 가능
세부	
	1) MEG 공급 축소에 대한 기대로 지난 주 MEG 가격은 견조했음
	2) 중국, 평균의 절반 수준인 100,000톤 수입 MEG가 이번 주 도착할 예정
	3) 중국동부 MEG 재고는 9,000톤 하락한 107만톤 수준을 기록
	4) 다운스트림 PE 가동률은 87%로 상승, MEG 가동률은 평균 약 68%
	5) 환율 변동 여파가 점차 해소 시, 펀더멘털리 가격 반등 가능

Issue 2	(출처: Platts)
제목	[주간가격] BD, 플랫한 모습보이며 FOB Korea $1,115/mt로 마감
결론	수요 약세 지연으로, 당분간 급격한 가격 상승은 제한될 전망
세부	
	1) 다운스트림 SBR 역마진 지속으로, 수요는 여전히 약세
	2) Platts에 따르면, 9월과 10월 모두 신규 BD 판매 소식은 없었음
	3) 시장 참여자들은 태국 PTT의 두번째 9월물 카고 판매를 주목하는 중
	4) 한국, 공휴일로 거래는 적었고, 높은 LPG 크래킹으로 카고는 희박했음
	5) 수요 약세 지연으로, 당분간 급격한 가격 상승은 제한될 전망

Issue 3	(출처: Platts)
제목	[주간가격] SBR, 플랫한 모습보이며 CFR SEA $1,290/mt로 마감
결론	다운스트림 약세가 지연됨에 따라 당분간 가격하락 지속될 전망
세부	
	1) 자동차시장 약세와 역마진으로 SBR 가격은 약세를 시현
	2) 중국 자동차 생산 협회에 따르면, 중국 자동차판매는 YoY 3.9% 하락
	3) 셀러들은 9월물 카고 판매가를 $1,285-$1,325/톤 CFR SEA에 유지
	4) 천연고무 SGX SICOM TSR20 9월 한달 선행 가격은 약세 시현
	5) 다운스트림 약세가 지연됨에 따라 당분간 가격하락 지속될 전망

Issue 4	(출처: Platts)
제목	[주간가격] PX, WoW $0.17/mt 상승해 FOB Korea $770.67/mt로 마감
결론	단기적으로, 다운스트림 수요 강세로 타이트한 수급 지속될 전망
세부	
	1) 9월물 시장은 중국 PX바이어들을 중심으로한 1H 수요로 타이트했음
	2) 다만, 9월 2H 카고 구매에 대해서는 신중한 모습을 보임
	3) 지난 몇 주간 원유가격 변동성이 컸으며, Refinery 원유수요가 줄였음
	4) PTA 생산업체는 양호한 PTA 스프레드로 생산치를 최대로 높이는 중
	5) 단기적으로, 다운스트림 수요 강세로 타이트한 수급 지속될 전망

Issue 5	(출처: Platts)
제목	[주간가격] PTA, WoW $3/mt 하락해 CFR China $685/mt로 마감
결론	아시아 주요국 공급제한과 중국 수요 회복으로 반등 가능하다는 판단
세부	
	1) 아시아 PTA 가격은 전주대비 하락했으나, 중국 domestic 카고는 상승
	2) 다운스트림 수요와 미-중 무역전쟁 긴장 완화의 영향이 컸음
	3) 중국 PE 업체들은 판매-생산 비율을 124%까지 올리며 재고를 소진
	4) 한국 PTA생산업체는 재고수준이 낮고, 대만 업체는 TA를 앞둠
	5) 아시아 주요국 공급제한과 중국 수요 회복으로 반등 가능하다는 판단

Issue 6	(출처: PVinsights)
제목	[주간가격] 경기 침체에 대한 우려로 태양광제품 가격하락
결론	공급과잉에 대한 이슈 해소전까지 태양광제품 가격 하락 지속 전망
세부	
	1) Mono-폴리실리콘 가격하락으로 폴리실리콘 가격은 약세를 시현
	2) 폴리실리콘, 중국 재고 상승과 생산량 상승으로 장기 공급과잉 양상
	3) Mono-wafer, 수요강세와 신증설에 따른 공급 증가로 가격 유지됨
	4) Mono-PERC, 중국 수요에 대한 우려와 생산량 감축 기대 감소로 하락
	5) 공급과잉에 대한 이슈 해소전까지 태양광제품 가격 하락 지속 전망

Analyst, 손지우, 3773-8827 / jwshon@sk.com
R.A. 박한샘, 3773-8477 / sam4.park@sk.com

Commodity Price Data

Daily Price		08/16	1D	1W	1M	3M	6M	12M	YTD	2017avg.	2018avg.	2019acc.
F/X	**USD/EUR**	0.902	0.900	0.893	0.892	0.895	0.885	0.879	0.872	0.887	0.848	0.887
	Change, %		0.2	1.0	1.1	0.7	1.8	2.6	3.4	1.7	6.4	1.6
	USD/JPY	106.4	106.1	105.7	108.2	109.9	110.5	110.9	109.7	112.1	110.4	109.5
	Change, %		0.2	0.7	(1.7)	(3.2)	(3.7)	(4.1)	(3.1)	(5.1)	(3.7)	(2.8)
	USD/KRW	1,211.4	1,214.9	1,210.1	1,177.6	1,191.1	1,128.7	1,130.0	1,113.9	1,130.9	1,100.3	1,155.8
	Change, %		(0.3)	0.1	2.9	1.7	7.3	7.2	8.8	7.1	10.1	4.8
Agriculture	**Corn**	371.0	360.8	410.3	435.3	379.0	374.8	365.3	375.0	359.4	368.2	388.7
	Change, %		2.8	(9.6)	(14.8)	(2.1)	(1.0)	1.6	(1.1)	3.2	0.8	(4.5)
	Soybean	867.3	858.0	873.8	887.8	839.8	907.5	885.5	882.5	975.9	931.9	883.5
	Change, %		1.1	(0.7)	(2.3)	3.3	(4.4)	(2.1)	(1.7)	(11.1)	(6.9)	(1.8)
	Wheat	470.8	469.0	499.5	507.5	467.0	504.3	542.3	503.3	436.0	495.4	486.9
	Change, %		0.4	(5.8)	(7.2)	0.8	(6.6)	(13.2)	(6.5)	8.0	(5.0)	(3.3)
	Rice	11.2	11.3	11.4	11.8	10.9	10.0	10.5	10.1	11.1	11.5	10.9
	Change, %		(1.1)	(1.5)	(5.0)	2.7	12.1	7.1	10.9	1.3	(2.9)	2.4
	Oats	280.3	274.8	274.8	275.8	294.3	275.8	253.8	275.3	252.3	256.2	283.4
	Change, %		2.0	2.0	1.6	(4.8)	1.6	10.4	1.8	11.1	9.4	(1.1)
MYR/mt	**Palm Oil**	2,143.0	2,172.0	2,141.0	1,918.0	2,061.0	2,200.0	2,191.0	2,004.0	2,787.3	2,250.9	2,038.2
	Change, %		(1.3)	0.1	11.7	4.0	(2.6)	(2.2)	6.9	(23.1)	(4.8)	5.1
	Cocoa	2,111.0	2,134.0	2,195.0	2,454.0	2,372.0	2,307.0	2,104.0	2,416.0	2,005.2	2,308.4	2,341.2
	Change, %		(1.1)	(3.8)	(14.0)	(11.0)	(8.5)	0.3	(12.6)	5.3	(8.6)	(9.8)
	Cotton	60.1	59.7	59.1	62.3	66.8	70.2	82.1	72.2	73.5	82.1	69.7
	Change, %		0.7	1.7	(3.6)	(10.1)	(14.4)	(26.8)	(16.8)	(18.3)	(26.8)	(13.8)
	Sugar	11.6	11.6	11.9	12.0	11.8	13.1	10.3	12.0	15.8	12.3	12.4
	Change, %		0.1	(1.9)	(2.9)	(1.2)	(11.4)	13.0	(3.2)	(26.4)	(5.0)	(5.8)
	Coffee	92.9	94.6	97.3	104.1	90.0	98.0	101.7	101.9	133.0	112.7	98.0
	Change, %		(1.8)	(4.6)	(10.8)	3.2	(5.2)	(8.7)	(8.8)	(30.2)	(17.6)	(5.2)
Energy	**WTI**	54.9	54.5	54.5	57.6	62.9	55.6	65.5	45.4	51.0	64.8	57.2
	Change, %		0.7	0.7	(4.8)	(12.7)	(1.3)	(16.2)	20.8	7.7	(15.3)	(4.0)
	Brent	58.6	58.2	58.5	64.4	72.6	66.3	71.4	53.8	54.9	71.6	65.3
	Change, %		0.7	0.2	(8.9)	(19.3)	(11.5)	(17.9)	9.0	6.9	(18.1)	(10.3)
	Natural Gas	2.2	2.2	2.1	2.3	2.6	2.6	2.9	2.9	3.0	3.1	2.6
	Change, %		(1.4)	3.8	(4.6)	(16.6)	(16.2)	(24.3)	(25.2)	(27.2)	(28.3)	(15.2)
	Ethanol	1.3	1.3	1.4	1.5	1.3	1.3	1.4	1.3	1.5	1.4	1.4
	Change, %		2.8	(9.6)	(14.3)	(2.9)	(2.0)	(4.7)	3.1	(13.0)	(5.1)	(5.9)
	RBOB Gasoline	165.7	163.6	167.4	189.2	206.2	157.3	198.7	132.4	162.9	191.7	177.7
	Change, %		1.2	(1.0)	(12.4)	(19.6)	5.3	(16.6)	25.2	1.7	(13.6)	(6.7)
	Coal	66.3	66.4	67.9	73.3	84.2	94.9	118.1	102.1	88.2	107.1	84.8
	Change, %		(0.1)	(2.3)	(9.5)	(21.2)	(30.1)	(43.9)	(35.0)	(24.8)	(38.1)	(21.8)
Metal	**Gold**	1,513.4	1,523.3	1,492.3	1,406.3	1,286.7	1,321.6	1,174.2	1,277.1	1,258.6	1,269.3	1,336.2
	Change, %		(0.7)	1.4	7.6	17.6	14.5	28.9	18.5	20.2	19.2	13.3
	Silver	17.1	17.3	17.0	15.6	14.6	15.8	14.7	15.5	17.1	15.7	15.4
	Change, %		(0.9)	0.9	10.0	17.6	8.4	16.8	10.5	0.2	8.9	10.9
	Copper	5,744.0	5,751.0	5,755.0	6,012.0	6,100.0	6,188.0	5,938.0	5,965.0	6,199.4	6,543.8	6,112.7
	Change, %		(0.1)	(0.2)	(4.5)	(5.8)	(7.2)	(3.3)	(3.7)	(7.3)	(12.2)	(6.0)
	Nickel	1,138.6	1,131.9	1,114.3	965.0	856.7	881.0	932.4	740.9	680.2	897.6	900.9
	Change, %		0.6	2.2	18.0	32.9	29.2	22.1	53.7	67.4	26.8	26.4
	Zinc	2,261.0	2,264.0	2,234.0	2,482.0	2,637.0	2,653.0	2,392.0	2,467.0	2,888.5	2,893.0	2,604.4
	Change, %		(0.1)	1.2	(8.9)	(14.3)	(14.8)	(5.5)	(8.4)	(21.7)	(21.8)	(13.2)
	Lead	2,038.5	2,068.5	2,076.8	1,983.0	1,830.0	2,066.5	2,032.0	2,016.0	2,315.7	2,244.6	1,971.6
	Change, %		(1.5)	(1.8)	2.8	11.4	(1.4)	0.3	1.1	(12.0)	(9.2)	3.4
	Aluminum	14,215.0	14,195.0	13,905.0	13,860.0	14,330.0	13,335.0	14,330.0	13,550.0	14,556.6	14,252.6	13,793.9
	Change, %		0.1	2.2	2.6	(0.8)	6.6	(0.8)	4.9	(2.3)	(0.3)	3.1
	Cobalt	32,130.0	32,124.5	28,019.0	27,583.0	34,500.0	31,000.0	63,847.0	55,000.0	55,906.9	72,883.1	32,365.4
	Change, %		0.0	14.7	16.5	(6.9)	3.6	(49.7)	(41.6)	(42.5)	(55.9)	(0.7)
	HR Coil	585.0	586.0	603.0	538.0	641.0	678.0	904.0	721.0	620.1	828.8	642.4
	Change, %		(0.2)	(3.0)	8.7	(8.7)	(13.7)	(35.3)	(18.9)	(5.7)	(29.4)	(8.9)
	Scrap	294.0	294.0	293.0	288.0	316.0	366.0	380.0	379.0	344.7	390.2	328.9
	Change, %		0.0	0.3	2.1	(7.0)	(19.7)	(22.6)	(22.4)	(14.7)	(24.7)	(10.6)

자료: Bloomberg

참고) NYMEX, ICE, LME 중 대표지수를 사용

SK Energy Daily

Analyst. 손지우, 3773-8827 / jwshon@sk.com
R.A. 박한샘, 3773-8477 / sam4.park@sk.com

Refining Price Data

Daily Price		08/16	1D	1W	1M	3M	6M	12M	YTD	2017avg.	2018avg.	2019acc.
Crude Oil	**WTI**	54.9	54.5	54.5	57.6	62.8	55.6	65.5	46.5	50.9	64.7	57.3
	Change, %		*0.7*	*0.7*	*(4.8)*	*(12.6)*	*(1.3)*	*(16.2)*	*17.9*	*7.8*	*(15.2)*	*(4.2)*
	Dubai	58.6	58.3	56.8	64.6	72.2	65.1	69.6	51.9	53.1	69.3	64.7
	Change, %		*0.5*	*3.2*	*(9.2)*	*(18.8)*	*(10.0)*	*(15.7)*	*13.1*	*10.5*	*(15.4)*	*(9.4)*
Crude Oil	**Gasoline(휘발유)**	70.4	70.6	68.8	76.4	80.7	66.2	84.2	54.9	68.0	79.8	71.5
Product	*Change, %*		*(0.4)*	*2.3*	*(7.9)*	*(12.8)*	*6.4*	*(16.4)*	*28.1*	*3.5*	*(11.8)*	*(1.6)*
	Kerosene(등유)	74.1	74.4	71.8	79.3	85.4	78.6	85.0	64.5	65.2	84.7	77.9
	Change, %		*(0.4)*	*3.2*	*(6.6)*	*(13.3)*	*(5.7)*	*(12.9)*	*14.7*	*13.5*	*(12.5)*	*(4.9)*
	Diesel(경유)	73.9	74.8	71.9	79.4	85.5	78.4	85.4	61.6	65.6	84.0	77.8
	Change, %		*(1.3)*	*2.7*	*(6.9)*	*(13.7)*	*(5.8)*	*(13.5)*	*19.9*	*12.6*	*(12.1)*	*(5.1)*
	Bunker-C	50.1	48.4	50.0	65.4	66.8	64.1	67.0	50.3	49.7	65.1	62.9
	Change, %		*3.6*	*0.2*	*(23.3)*	*(25.0)*	*(21.8)*	*(25.2)*	*(0.4)*	*0.9*	*(23.1)*	*(20.4)*
	Naphtha	49.8	50.0	48.4	56.5	62.6	56.4	69.4	46.9	53.7	67.0	56.6
	Change, %		*(0.5)*	*2.8*	*(11.9)*	*(20.5)*	*(11.8)*	*(28.3)*	*6.2*	*(7.4)*	*(25.7)*	*(12.0)*
Dubai	**Gasoline(휘발유)**	11.7	12.3	12.0	11.9	8.5	1.0	14.6	3.1	14.9	10.5	6.8
Spread	*Change*		*(0.6)*	*(0.3)*	*(0.1)*	*3.2*	*10.7*	*(2.8)*	*8.7*	*(3.2)*	*1.2*	*5.0*
	Kerosene(등유)	15.4	16.1	14.9	14.7	13.2	13.4	15.4	12.7	12.1	15.3	13.2
	Change		*(0.6)*	*0.5*	*0.7*	*2.2*	*2.0*	*(0.0)*	*2.7*	*3.3*	*0.1*	*2.3*
	Diesel(경유)	15.2	16.5	15.1	14.8	13.3	13.3	15.8	9.8	12.5	14.6	13.1
	Change		*(1.3)*	*0.1*	*0.4*	*1.9*	*2.0*	*(0.6)*	*5.5*	*2.7*	*0.6*	*2.1*
	Bunker-C	(8.5)	(10.0)	(6.8)	0.8	(5.4)	(1.1)	(2.6)	(1.5)	(3.4)	(4.2)	(1.8)
	Change		*1.4*	*(1.7)*	*(9.3)*	*(3.1)*	*(7.5)*	*(6.0)*	*(7.0)*	*(5.1)*	*(4.3)*	*(6.7)*
	Naphtha	(8.9)	(8.3)	(8.4)	(8.1)	(9.6)	(8.7)	(0.2)	(5.0)	0.6	(2.3)	(8.2)
	Change		*(0.6)*	*(0.4)*	*(0.8)*	*0.7*	*(0.2)*	*(8.7)*	*(3.9)*	*(9.5)*	*(6.5)*	*(0.7)*
Refining	**Simple(단순)**	0.8	0.6	1.6	4.8	0.8	2.1	4.2	1.7	3.2	2.5	2.4
Margin	*Change*		*0.2*	*(0.8)*	*(4.0)*	*0.0*	*(1.4)*	*(3.4)*	*(1.0)*	*(2.4)*	*(1.8)*	*(1.6)*
	Complex(복합)	6.4	6.8	6.8	8.3	5.2	4.3	9.2	3.8	8.0	7.2	5.6
	Change		*(0.4)*	*(0.4)*	*(1.9)*	*1.2*	*2.1*	*(2.8)*	*2.6*	*(1.6)*	*(0.8)*	*0.8*
	Complex(lagging)	0.5	(0.1)	1.0	12.6	7.2	10.8	5.9	(2.6)	8.9	6.8	5.8
	Change		*0.6*	*(0.6)*	*(12.2)*	*(6.8)*	*(10.4)*	*(5.4)*	*3.1*	*(8.5)*	*(6.4)*	*(5.3)*

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

Utility SMP Data

Daily Price		08/15	1D	1W	1M	3M	6M	12M	YTD	2017avg.	2018avg.	2019acc.
Electricity	**SMP**	86.9	85.9	85.5	79.2	81.0	108.6	93.5	99.0	81.5	94.5	94.2
	Change, %		*1.2*	*0.0*	*0.1*	*0.1*	*(0.2)*	*(0.1)*	*(0.1)*	*0.1*	*(0.1)*	*(0.1)*

자료 : EPSIS, SK증권

Analyst, 손지우, 3773-8827 / jwshon@sk.com
R.A. 박한샘, 3773-8477 / sam4.park@sk.com

Petrochemical Price Data

Daily Price			08/16	08/15	08/14	08/13	08/12	08/09	08/08	08/07	08/06	08/05
Spot Price	**Naphtha**	CFR Japan	465.6	457.1	478.6	457.4	451.0	451.0	451.0	463.9	472.6	490.4
	Ethylene	CFR SE Asia	855.0	860.0	860.0	840.0	820.0	820.0	820.0	820.0	820.0	820.0
	Propylene	FOB Korea	915.0	915.0	915.0	915.0	915.0	915.0	915.0	925.0	925.0	925.0
	Butadiene	FOB Korea	1,115.0	1,115.0	1,115.0	1,115.0	1,115.0	1,115.0	1,115.0	1,105.0	1,105.0	1,105.0
	HDPE	CFR FE Asia	960.0	960.0	960.0	970.0	970.0	970.0	970.0	975.0	975.0	975.0
	LDPE	CFR FE Asia	970.0	970.0	970.0	985.0	985.0	985.0	985.0	985.0	985.0	985.0
	LLDPE	CFR FE Asia	875.0	875.0	875.0	885.0	885.0	885.0	885.0	885.0	885.0	885.0
	MEG	CFR China	540.0	531.0	530.0	528.0	522.0	522.0	522.0	520.0	515.0	512.0
	PP	CFR FE Asia	1,010.0	1,010.0	1,010.0	1,010.0	1,010.0	1,010.0	1,010.0	1,010.0	1,010.0	1,035.0
	PX	CFR China	770.7	777.0	784.7	774.7	770.5	770.5	770.5	771.0	775.3	778.0
	PTA	CFR China	685.0	685.0	685.0	685.0	688.0	688.0	688.0	688.0	688.0	690.0
	Benzene	FOB Korea	652.0	642.3	644.3	626.3	627.3	627.3	627.3	635.3	638.3	647.3
	Toluene	FOB Korea	651.0	646.0	636.0	634.0	639.0	639.0	639.0	649.0	650.0	651.0
	Xylene	FOB Korea	697.0	699.0	693.0	683.0	676.0	676.0	676.0	675.0	678.0	684.0
	SM	FOB Korea	976.0	977.0	971.0	967.0	964.0	964.0	964.0	975.0	981.0	989.0

Weekly Price			Last Week	1W	1M	3M	6M	12M	YTD	2017avg.	2018avg.	2019acc.
Spot Price	**Naphtha**	CFR Japan	450.5	490.5	537.0	567.5	485.0	635.5	489.9	493.5	614.2	522.8
	Change, %			*(8.2)*	*(16.1)*	*(20.6)*	*(7.1)*	*(29.1)*	*(8.0)*	*(8.7)*	*(26.7)*	*(13.8)*
	Ethylene	CFR SE Asia	852.5	817.5	725.0	885.0	1,025.0	1,275.0	808.1	1,090.9	1,145.9	858.5
	Change, %			*4.3*	*17.6*	*(3.7)*	*(16.8)*	*(33.1)*	*5.5*	*(21.9)*	*(25.6)*	*(0.7)*
	Propylene	CFR SE Asia	870.0	885.0	870.0	782.5	837.5	1,037.5	873.1	823.6	987.0	884.1
	Change, %			*(1.7)*	*0.0*	*11.2*	*3.9*	*(16.1)*	*(0.4)*	*5.6*	*(11.9)*	*(1.6)*
	Butadiene	CFR SE Asia	1,175.0	1,125.0	1,030.0	925.0	1,050.0	1,700.0	1,126.3	1,481.1	1,391.5	1,044.1
	Change, %			*4.4*	*14.1*	*27.0*	*11.9*	*(30.9)*	*4.3*	*(20.7)*	*(15.6)*	*12.5*
	Benzene	CFR SE Asia	647.5	665.0	687.5	615.0	600.0	877.5	548.8	838.8	827.8	615.5
	Change, %			*(2.6)*	*(5.8)*	*5.3*	*7.9*	*(26.2)*	*18.0*	*(22.8)*	*(21.8)*	*5.2*
	Toluene	CFR SE Asia	682.5	695.0	690.0	715.0	625.0	830.0	601.3	689.5	773.5	667.6
	Change, %			*(1.8)*	*(1.1)*	*(4.5)*	*9.2*	*(17.8)*	*13.5*	*(1.0)*	*(11.8)*	*2.2*
	Xylene	CFR SE Asia	705.0	710.0	695.0	745.0	685.0	840.0	678.8	668.8	802.5	699.8
	Change, %			*(0.7)*	*1.4*	*(5.4)*	*2.9*	*(16.1)*	*3.9*	*5.4*	*(12.2)*	*0.7*
Spread	**Ethylene**	-Naphtha	402.0	327.0	188.0	317.5	540.0	639.5	318.3	597.4	531.7	335.6
	Change, %			*22.9*	*113.8*	*26.6*	*(25.6)*	*(37.1)*	*26.3*	*(32.7)*	*(24.4)*	*19.8*
	Propylene	-Naphtha	419.5	394.5	333.0	215.0	352.5	402.0	383.3	330.1	372.8	361.2
	Change, %			*6.3*	*26.0*	*95.1*	*19.0*	*4.4*	*9.5*	*27.1*	*12.5*	*16.1*
	Butadiene	-Naphtha	724.5	634.5	493.0	357.5	565.0	1,064.5	636.4	987.6	777.3	521.2
	Change, %			*14.2*	*47.0*	*102.7*	*28.2*	*(31.9)*	*13.8*	*(26.6)*	*(6.8)*	*39.0*
	Benzene	-Naphtha	197.0	174.5	150.5	47.5	115.0	242.0	58.9	345.3	213.6	92.6
	Change, %			*12.9*	*30.9*	*314.7*	*71.3*	*(18.6)*	*234.6*	*(43.0)*	*(7.8)*	*112.7*
	Toluene	-Naphtha	232.0	204.5	153.0	147.5	140.0	194.5	111.4	196.0	159.3	144.7
	Change, %			*13.4*	*51.6*	*57.3*	*65.7*	*19.3*	*108.3*	*18.4*	*45.7*	*60.3*
	Xylene	-Naphtha	254.5	219.5	158.0	177.5	200.0	204.5	188.9	175.3	188.3	176.9
	Change, %			*15.9*	*61.1*	*43.4*	*27.3*	*24.4*	*34.7*	*45.2*	*35.1*	*43.8*

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

Analyst 손지우, 3773-8827 / jwshon@sk.com
R.A. 박한샘, 3773-8477 / sam4.park@sk.com

Weekly Price			Last Week	1W	1M	3M	6M	12M	YTD	2017avg.	2018avg.	2019acc.
Spot Price	**HDPE**	CFR SE Asia	897.5	927.5	937.5	1,027.5	1,017.5	1,222.5	1,002.5	1,142.5	1,211.4	992.0
	Change, %			*(3.2)*	*(4.3)*	*(12.7)*	*(11.8)*	*(26.6)*	*(10.5)*	*(21.4)*	*(25.9)*	*(9.5)*
	MEG	CFR SE Asia	527.5	542.5	530.0	572.5	630.0	970.0	624.4	850.6	918.4	590.6
	Change, %			*(2.8)*	*(0.5)*	*(7.9)*	*(16.3)*	*(45.6)*	*(15.5)*	*(38.0)*	*(42.6)*	*(10.7)*
	PVC	CFR SE Asia	860.0	860.0	880.0	830.0	900.0	945.0	887.5	899.9	920.1	863.7
	Change, %			*0.0*	*(2.3)*	*3.6*	*(4.4)*	*(9.0)*	*(3.1)*	*(4.4)*	*(6.5)*	*(0.4)*
	PP	CFR SE Asia	1,052.5	1,057.5	1,067.5	1,162.5	1,097.5	1,232.5	1,076.3	1,099.6	1,236.5	1,099.0
	Change, %			*(0.5)*	*(1.4)*	*(9.5)*	*(4.1)*	*(14.6)*	*(2.2)*	*(4.3)*	*(14.9)*	*(4.2)*
	2-EH	CFR Korea	940.0	930.0	950.0	1,040.0	1,035.0	1,120.0	1,040.0	970.0	1,117.0	1,017.9
	Change, %			*1.1*	*(1.1)*	*(9.6)*	*(9.2)*	*(16.1)*	*(9.6)*	*(3.1)*	*(15.8)*	*(7.7)*
	ABS	CFR SE Asia	1,400.0	1,430.0	1,480.0	1,570.0	1,520.0	1,960.0	1,495.0	1,844.7	1,902.0	1,504.7
	Change, %			*(2.1)*	*(5.4)*	*(10.8)*	*(7.9)*	*(28.6)*	*(6.4)*	*(24.1)*	*(26.4)*	*(7.0)*
	SBR	CFR SE Asia	1,290.0	1,300.0	1,370.0	1,375.0	1,450.0	1,830.0	1,481.3	1,980.5	1,701.4	1,397.4
	Change, %			*(0.8)*	*(5.8)*	*(6.2)*	*(11.0)*	*(29.5)*	*(12.9)*	*(34.9)*	*(24.2)*	*(7.7)*
	SM	CFR SE Asia	1,000.0	1,035.0	1,060.0	1,080.0	1,067.5	1,475.0	997.5	1,253.8	1,343.7	1,049.2
	Change, %			*(3.4)*	*(5.7)*	*(7.4)*	*(6.3)*	*(32.2)*	*0.3*	*(20.2)*	*(25.6)*	*(4.7)*
	Caustic	FOB NEA	290.0	311.0	324.0	342.0	299.0	369.0	288.0	491.2	483.2	332.0
	Change, %			*(6.8)*	*(10.5)*	*(15.2)*	*(3.0)*	*(21.4)*	*0.7*	*(41.0)*	*(40.0)*	*(12.6)*
	PX	CFR SE Asia	775.0	805.0	870.0	895.0	1,085.0	1,117.5	1,031.9	844.4	1,056.0	952.0
	Change, %			*(3.7)*	*(10.9)*	*(13.4)*	*(28.6)*	*(30.6)*	*(24.9)*	*(8.2)*	*(26.6)*	*(18.6)*
	PO	CFR China	1,482.5	1,422.5	1,387.5	1,530.0	1,517.5	1,815.0	1,571.9	1,601.2	1,829.5	1,486.5
	Change, %			*4.2*	*6.8*	*(3.1)*	*(2.3)*	*(18.3)*	*(5.7)*	*(7.4)*	*(19.0)*	*(0.3)*
	Caprolactam	CFR SE Asia	1,460.0	1,460.0	1,460.0	1,705.0	1,620.0	2,155.0	1,663.8	1,936.4	2,092.4	1,614.4
	Change, %			*0.0*	*0.0*	*(14.4)*	*(9.9)*	*(32.3)*	*(12.2)*	*(24.6)*	*(30.2)*	*(9.6)*
	PTA	CFR SE Asia	695.0	707.5	770.0	840.0	855.0	920.0	817.5	667.8	869.4	808.2
	Change, %			*(1.8)*	*(9.7)*	*(17.3)*	*(18.7)*	*(24.5)*	*(15.0)*	*4.1*	*(20.1)*	*(14.0)*
Spread	**HDPE**		447.0	437.0	400.5	460.0	532.5	587.0	512.6	649.0	597.2	469.2
	Change, %			*2.3*	*11.6*	*(2.8)*	*(16.1)*	*(23.9)*	*(12.8)*	*(31.1)*	*(25.1)*	*(4.7)*
	MEG		77.0	52.0	(7.0)	5.0	145.0	334.5	134.5	357.1	304.2	67.8
	Change, %			*48.1*	*(1,200.0)*	*1,440.0*	*(46.9)*	*(77.0)*	*(42.8)*	*(78.4)*	*(74.7)*	*13.6*
	PVC		409.5	369.5	343.0	262.5	415.0	309.5	397.6	406.4	305.9	340.9
	Change, %			*10.8*	*19.4*	*56.0*	*(1.3)*	*32.3*	*3.0*	*0.8*	*33.9*	*20.1*
	PP		602.0	567.0	530.5	595.0	612.5	597.0	586.4	606.1	622.3	576.2
	Change, %			*6.2*	*13.5*	*1.2*	*(1.7)*	*0.8*	*2.7*	*(0.7)*	*(3.3)*	*4.5*
	2-EH		489.5	439.5	413.0	472.5	550.0	484.5	550.1	476.5	502.8	495.0
	Change, %			*11.4*	*18.5*	*3.6*	*(11.0)*	*1.0*	*(11.0)*	*2.7*	*(2.7)*	*(1.1)*
	ABS		949.5	939.5	943.0	1,002.5	1,035.0	1,324.5	1,005.1	1,351.2	1,287.8	981.8
	Change, %			*1.1*	*0.7*	*(5.3)*	*(8.3)*	*(28.3)*	*(5.5)*	*(29.7)*	*(26.3)*	*(3.3)*
	SBR	BD spread	115.0	175.0	340.0	450.0	400.0	130.0	355.0	499.4	310.0	353.3
	Change, %			*(34.3)*	*(66.2)*	*(74.4)*	*(71.3)*	*(11.5)*	*(67.6)*	*(77.0)*	*(62.9)*	*(67.5)*
	SM		549.5	544.5	523.0	512.5	582.5	839.5	507.6	760.3	729.5	526.4
	Change, %			*0.9*	*5.1*	*7.2*	*(5.7)*	*(34.5)*	*8.2*	*(27.7)*	*(24.7)*	*4.4*
	Caustic											
	Change, %											
	PX		324.5	314.5	333.0	327.5	600.0	482.0	542.0	351.0	441.8	429.2
	Change, %			*3.2*	*(2.6)*	*(0.9)*	*(45.9)*	*(32.7)*	*(40.1)*	*(7.5)*	*(26.6)*	*(24.4)*
	PO	propylene sprea	612.5	537.5	517.5	747.5	680.0	777.5	698.8	777.6	842.5	602.4
	Change, %			*14.0*	*18.4*	*(18.1)*	*(9.9)*	*(21.2)*	*(12.3)*	*(21.2)*	*(27.3)*	*1.7*
	Caprolactam	benzene spreac	812.5	795.0	772.5	1,090.0	1,020.0	1,277.5	1,115.0	1,097.6	1,264.6	998.9
	Change, %			*2.2*	*5.2*	*(25.5)*	*(20.3)*	*(36.4)*	*(27.1)*	*(26.0)*	*(35.8)*	*(18.7)*
	PTA	px spread	152.5	144.0	161.0	213.5	95.5	137.8	95.2	76.7	130.2	141.8
	Change, %			*5.9*	*(5.3)*	*(28.6)*	*59.7*	*10.7*	*60.2*	*98.8*	*17.1*	*7.6*

자료 : Cischem, Platts, SK증권

참고 : Spread는 Naphtha spread로 일괄적용

SK Energy Daily

Analyst. 손지우, 3773-8827 / jwshon@sk.com
R.A. 박한샘, 3773-8477 / sam4.park@sk.com

Global peers

	Currency	08/16	1D	1W	1M	3M	6M	12M	YTD	MKT CAP (mil USD)	PER 19E	PER 20E	PBR 19E	PBR 20E	EV/EBITDA 19E	EV/EBITDA 20E
Petrochemical																
DuPont	USD	66.1	1.5	(4.2)	(8.6)	1.4	(14.3)	(1.4)	(13.1)	49,291	18.0	15.5	1.2	1.1	11.5	10.7
Corteva	USD	1,278.0	6.4	(4.4)	8.5	-	-	-	-	22,644	25.5	19.5	0.9	0.9	11.9	9.8
Eastman	USD	65.5	1.9	(2.8)	(16.6)	(9.2)	(20.8)	(32.7)	(10.4)	8,972	8.5	7.6	1.5	1.4	7.3	6.9
BASF	EUR	56.9	1.3	(2.4)	(7.7)	(11.6)	(14.0)	(26.5)	(5.7)	58,004	14.5	12.3	1.3	1.3	8.7	7.6
Akzo Nobel	EUR	80.8	0.8	(1.7)	(3.4)	4.8	5.4	1.7	20.5	19,152	26.1	19.5	2.6	2.5	13.3	11.6
Arkema	EUR	74.4	1.4	(4.3)	(11.9)	(8.5)	(11.2)	(29.0)	(0.8)	6,321	8.9	8.4	1.1	1.0	5.4	5.1
Lanxess	EUR	50.5	1.7	(6.1)	(9.8)	2.3	3.6	(25.4)	25.6	4,897	12.5	11.5	1.6	1.4	6.2	5.9
Sumitomo Chemical	JPY	461	0.4	(0.6)	(5.7)	(8.5)	(15.6)	(24.7)	(13.5)	7,181	7.6	7.2	0.7	0.7	5.4	5.2
Mitsubishi Chemical	JPY	720	0.3	(0.9)	(3.9)	(1.4)	(10.8)	(24.5)	(13.5)	10,203	6.6	6.2	0.7	0.7	6.6	6.3
Shin-Etsu Chemical	JPY	10,490	(1.5)	(2.0)	8.6	9.8	11.5	(1.7)	22.9	42,205	14.0	13.1	1.6	1.5	6.2	5.8
Asahi Kasei	JPY	948	1.0	1.5	(16.3)	(17.9)	(14.8)	(38.8)	(16.1)	12,516	8.9	8.6	0.9	0.8	5.3	5.1
JSR	JPY	1,663	(1.4)	(3.1)	0.2	8.6	(10.0)	(21.1)	0.5	3,538	12.1	10.3	0.9	0.8	6.3	5.5
Nitto Denko	JPY	4,794	(0.9)	(2.9)	(6.8)	(4.9)	(18.2)	(42.4)	(13.5)	7,161	13.4	12.8	1.0	1.0	4.1	4.0
SABIC	SAR	104.0	0.0	0.0	(9.1)	(8.1)	(16.1)	(15.4)	(10.5)	83,171	20.3	18.3	1.8	1.7	8.7	8.3
Yansab	SAR	56.3	0.0	0.0	(5.5)	(13.1)	(19.6)	(22.2)	(10.6)	8,442	18.2	16.8	1.9	1.9	10.2	10.3
Formosa Plastics	TWD	91.1	0.9	(4.3)	(12.4)	(16.0)	(10.2)	(16.0)	(9.8)	18,543	12.7	11.5	1.5	1.5	16.6	15.3
Formosa Fiber	TWD	86.2	1.1	(2.7)	(12.0)	(18.7)	(17.1)	(27.3)	(17.9)	16,155	12.4	12.5	1.4	1.3	10.8	11.1
Nan Ya Plastics	TWD	67.2	1.8	(1.3)	(6.3)	(12.3)	(9.8)	(18.1)	(11.0)	17,041	14.8	14.0	1.4	1.4	15.5	15.1
Sinopec Shanghai	CNY	4.39	(0.2)	(0.2)	(14.8)	(12.7)	(15.9)	(15.7)	(12.0)	5,607	11.9	12.1	1.6	1.5	5.5	5.6
Sinopec Yizheng(Fibe	CNY	2.17	(0.5)	0.9	(11.1)	(17.2)	14.2	13.6	18.6	4,726	40.2	27.8	5.5	4.5	10.3	9.2
Reliance	INR	1,278	(0.8)	10.0	(1.2)	1.0	2.7	6.4	14.0	113,713	16.8	13.8	1.8	1.7	11.0	9.0
Industries Qatar	QAR	9.9	0.0	(4.6)	(12.2)	(9.1)	(21.9)	(91.7)	(25.8)	16,396	20.8	18.2	2.3	2.2	119.1	102.7
PTT Chemical	THB	52.5	0.5	(0.9)	(16.7)	(18.0)	(23.6)	(35.0)	(26.3)	7,658	9.6	8.2	0.8	0.7	6.7	6.0
Petronas	MYR	7.2	(0.7)	(3.2)	(13.2)	(19.1)	(16.0)	(22.6)	(23.0)	13,697	15.3	13.6	1.8	1.7	8.3	7.4
LG화학	KRW	320,000	(1.1)	0.9	(9.3)	(4.6)	(15.8)	(12.9)	(7.8)	18,710	24.0	14.4	1.4	1.3	8.6	6.3
롯데케미칼	KRW	221,500	(2.2)	0.2	(11.9)	(15.8)	(25.3)	(34.9)	(20.0)	6,288	6.6	5.5	0.6	0.5	4.4	3.8
한화케미칼	KRW	16,600	(4.0)	(3.5)	(22.8)	(21.9)	(21.7)	(16.4)	(17.8)	2,220	7.5	5.5	0.4	0.4	8.3	7.2
금호석유	KRW	71,700	(2.2)	(0.1)	(19.1)	(21.6)	(16.2)	(31.7)	(17.9)	1,809	5.7	5.6	0.9	0.8	4.2	4.2
SKC	KRW	42,700	4.4	(0.4)	(0.6)	31.8	3.5	(5.2)	19.3	1,327	15.5	10.6	1.0	0.9	9.8	8.3
국도화학	KRW	44,200	(2.3)	(3.2)	(6.5)	(6.8)	(10.3)	(23.8)	(3.2)	213	-	-	-	-	-	-
효성	KRW	82,700	(0.8)	(1.4)	13.9	4.3	19.3	98.1	65.4	1,443	10.3	10.8	0.7	0.7	11.3	12.5
Average			**0.2**	**(1.5)**	**(8.4)**	**(7.1)**	**(10.3)**	**(17.9)**	**(3.8)**							
Refinery																
Valero	USD	78.1	1.8	(0.9)	(7.2)	(8.6)	(7.4)	(29.8)	4.2	32,373	14.5	7.9	1.5	1.4	7.5	5.3
Conoco Phillips	USD	51.5	1.1	(4.7)	(13.9)	(17.7)	(26.7)	(25.8)	(17.4)	57,139	12.2	12.2	1.8	1.7	4.4	4.5
Formosa Petrochemic	TWD	98.8	3.8	(1.7)	(8.1)	(11.0)	(11.8)	(18.0)	(9.4)	30,094	19.2	15.7	2.7	2.6	12.1	10.2
Marathon Petroleum	USD	46.2	1.8	(4.5)	(17.0)	(12.6)	(29.1)	(39.7)	(21.7)	30,428	10.2	5.9	0.9	0.8	7.3	5.5
Devon Energy	USD	22.5	4.3	(6.3)	(15.9)	(28.0)	(20.7)	(44.6)	0.0	9,111	15.6	11.4	1.3	1.2	3.8	3.7
Hollyfrontier	USD	44.4	1.1	(8.7)	(7.3)	(0.8)	(23.4)	(34.5)	(13.2)	7,299	9.0	8.4	1.2	1.1	5.6	5.5
Phillips 66	USD	98.8	1.4	(1.6)	(2.5)	11.9	3.0	(14.0)	14.7	44,329	12.4	9.4	1.7	1.5	8.0	6.8
Murphy Oil	USD	19.0	2.4	(6.8)	(16.2)	(31.9)	(35.1)	(36.6)	(18.9)	3,078	18.2	12.4	0.6	0.6	4.9	4.1
JX Holdings	JPY	430.3	1.7	(5.5)	(18.3)	(20.8)	(21.1)	(42.6)	(25.4)	13,483	4.7	4.8	0.5	0.5	5.2	5.2
Idemitsu	JPY	2,611.0	(2.0)	(4.1)	(17.8)	(18.2)	(32.4)	(48.5)	(27.7)	7,417	5.4	4.9	0.6	0.5	6.0	5.5
Nesteoil	EUR	29.9	(0.1)	(3.1)	(2.8)	(2.9)	2.5	(59.4)	33.0	25,479	18.0	16.0	4.4	3.9	11.6	10.6
Ashland	USD	72.8	2.4	(2.6)	(7.1)	(1.5)	(7.5)	(13.9)	2.6	4,405	26.3	20.6	1.4	1.3	12.9	11.9
Fuchs Petrolub	EUR	31.0	1.4	(3.6)	(13.6)	(14.8)	(24.7)	(36.4)	(13.7)	4,726	19.3	17.7	2.7	2.6	11.1	10.3
SK이노베이션	KRW	158,000	0.0	(0.9)	(7.9)	(6.0)	(13.2)	(20.6)	(12.0)	12,100	12.8	8.3	0.8	0.7	7.3	5.8
S-Oil	KRW	88,300	(0.2)	(0.3)	(2.5)	5.4	(16.3)	(27.9)	(9.6)	8,234	20.4	8.6	1.5	1.3	11.5	7.3
GS	KRW	46,250	(1.7)	(3.3)	(12.6)	(6.8)	(14.0)	(14.0)	(10.4)	3,559	5.6	5.0	0.5	0.5	6.0	5.5
Average			**1.2**	**(3.7)**	**(10.7)**	**(10.3)**	**(17.4)**	**(31.7)**	**(7.8)**							

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

SK Energy Daily

Analyst. 손지우, 3773-8827 / jwshon@sk.com
R.A. 박한샘, 3773-8477 / sam4.park@sk.com

Global peers

	Currency	08/16	1D	1W	1M	3M	6M	12M	YTD	MKT CAP (mil USD)	PER 19E	PER 20E	PBR 19E	PBR 20E	EV/EBITDA 19E	EV/EBITDA 20E
E&P/Shale																
Exxon Mobil	USD	68	1.6	(3.6)	(10.0)	(10.6)	(12.1)	(12.4)	0.2	288,985	21.0	14.3	1.5	1.6	8.2	6.5
BP	GBP	490	0.1	(2.5)	(9.8)	(10.8)	(9.8)	(10.6)	(1.2)	121,448	11.3	8.6	1.2	1.1	4.7	4.3
Shell	EUR	2,273	(0.1)	(4.2)	(12.3)	(9.9)	(6.2)	(8.2)	(1.5)	221,617	11.2	9.2	1.1	1.1	5.3	4.8
Chevron	USD	116	(1.0)	(5.4)	(7.2)	(4.1)	(3.0)	(1.6)	6.5	219,856	16.3	13.7	1.4	1.4	6.2	5.7
Total	EUR	43	(0.2)	(0.6)	(13.5)	(11.0)	(13.0)	(17.4)	(6.4)	127,907	9.6	8.3	1.0	1.0	4.6	4.3
Sinopec	CNY	5	0.0	(0.2)	(6.2)	(8.6)	(13.6)	(22.2)	(1.6)	82,462	9.6	9.1	0.8	0.8	4.4	4.2
Petrochina	CNY	6	0.0	(1.1)	(7.9)	(15.9)	(17.8)	(23.2)	(15.1)	150,467	18.6	16.6	0.9	0.9	5.0	4.9
CNOOC	CNY	10	(0.9)	(1.8)	(5.8)	0.3	7.9	(8.8)	11.7	64,785	8.3	8.0	1.0	1.0	3.4	3.2
Gazprom	RUB	225	(1.1)	(2.3)	(5.6)	10.9	41.3	59.5	46.4	79,998	3.4	3.6	0.4	0.3	3.7	3.6
Rosneft	RUB	405	0.1	0.0	(3.7)	(1.8)	0.3	(4.2)	(6.4)	64,508	6.3	5.0	0.9	0.8	3.9	3.7
Anadarko	USD	73	0.0	0.0	(0.4)	0.1	60.9	16.8	66.0	36,564	42.7	43.5	-	-	7.5	7.0
Petrobras	BRL	24	(1.3)	(9.0)	(14.1)	(5.4)	(10.9)	26.2	5.4	82,681	9.2	7.5	1.0	0.9	5.1	4.6
Lukoil	USD	5,000	(0.5)	(5.4)	(3.7)	(3.8)	(7.9)	13.7	0.1	56,393	5.7	5.4	0.8	0.7	3.4	3.3
Kinder	USD	20	1.3	(1.2)	(3.7)	(1.4)	7.1	13.0	30.9	45,570	20.4	18.8	1.3	1.4	10.8	10.4
Equinor ASA	NOK	147	0.1	(1.6)	(12.1)	(19.9)	(26.4)	(30.1)	(19.8)	54,679	9.8	8.2	1.2	1.1	2.7	2.3
BHP	AUD	36	(0.6)	(3.0)	(12.1)	(3.6)	(0.8)	10.1	10.2	117,369	10.7	12.6	2.4	2.3	5.0	5.7
PTT E&P	THB	126	2.0	1.2	(7.7)	(2.3)	2.4	(7.0)	10.6	16,118	11.4	11.2	1.2	1.2	3.4	3.3
Petronas gas	MYR	16	0.0	(0.5)	(6.5)	(3.8)	(11.7)	(12.9)	(16.7)	7,581	17.0	17.5	2.4	2.3	9.0	9.1
Chesapeake	USD	1	7.8	(3.5)	(21.5)	(45.1)	(46.9)	(67.3)	(33.8)	2,272	-	-	0.7	0.8	5.3	4.9
Noble Energy	USD	22	1.4	(2.9)	1.9	(12.2)	(5.0)	(26.4)	14.7	10,287	-	37.5	1.1	1.1	7.4	5.3
Average			**0.4**	**(2.4)**	**(8.1)**	**(8.0)**	**(3.3)**	**(5.7)**	**5.0**							
PV																
WACKER	EUR	64.0	0.4	(5.1)	(4.1)	(12.6)	(30.0)	(47.7)	(19.1)	3,701	20.3	14.7	1.0	1.0	5.3	5.0
GCL-Poly	HKD	0.3	(1.6)	(18.7)	(31.5)	(41.3)	(53.1)	(39.0)	(35.8)	772	-	7.8	0.2	0.2	8.2	7.3
SunPower	USD	12.9	3.8	(10.0)	13.0	53.7	117.6	95.2	159.2	1,836	-	390.3	-	-	25.1	14.4
Canadian Solar	USD	23.4	1.3	7.0	13.4	26.9	13.9	78.4	63.1	1,390	7.8	7.3	1.0	0.8	7.0	5.5
LONGI Green Energy	CNY	24.4	(2.4)	(1.1)	5.6	(2.4)	27.8	125.3	73.0	12,555	21.0	16.5	3.8	3.2	14.2	10.8
First Solar	USD	61.7	4.1	(2.9)	(4.3)	1.7	25.4	21.3	45.3	6,502	25.4	16.9	1.1	1.1	9.8	7.1
OCI	KRW	65,000	(4.3)	(5.1)	(30.9)	(26.2)	(32.5)	(37.5)	(39.3)	1,284	-	12.3	0.5	0.4	9.0	5.0
Average			**0.2**	**(5.1)**	**(5.5)**	**(0.0)**	**9.9**	**28.0**	**35.2**							
Gas Company																
Towngas China	HKD	5.4	0.0	(4.8)	(12.6)	(5.8)	(12.5)	(23.8)	(4.8)	1,973	10.1	9.4	0.9	0.8	10.3	9.1
Kulun	HKD	6.4	0.6	(2.4)	(11.4)	(14.7)	(26.7)	(5.7)	(22.4)	7,110	7.6	6.8	1.0	0.9	4.6	4.3
Beijing Enterprise	HKD	36.8	2.9	(1.9)	(8.1)	(6.7)	(18.2)	5.9	(11.3)	5,922	5.7	5.1	0.6	0.5	10.8	10.5
ENN Energy	HKD	83.6	1.5	1.6	6.4	21.4	9.9	17.1	20.3	11,981	17.1	14.8	3.3	2.9	10.5	9.1
China Resources Gas	HKD	39.2	1.7	(3.5)	2.1	9.5	21.0	17.2	26.3	11,102	16.9	15.4	3.1	2.7	9.4	8.5
China Gas Holdings	HKD	31.6	1.9	0.6	0.5	33.9	26.9	21.8	13.3	21,027	17.0	14.1	3.8	3.2	13.9	11.6
Shenzen Gas	HKD	14.0	1.9	(0.4)	(10.5)	(10.1)	(5.6)	2.9	(3.0)	3,842	8.8	7.8	1.0	0.9	8.0	7.7
Shaan Xi	CNY	7.1	(0.1)	(0.3)	(9.2)	(12.9)	(6.5)	(2.1)	(4.2)	1,118	18.2	15.4	1.3	1.2	-	-
Suntien	HKD	1.9	1.6	1.1	(12.0)	(11.2)	(11.6)	(8.7)	(5.9)	900	4.3	3.9	0.6	0.5	6.7	6.0
China Oil & Gas	HKD	0.3	5.1	(3.1)	(12.7)	(28.1)	(41.0)	(50.0)	(41.0)	231	-	-	-	-	-	-
Average			**1.7**	**(1.3)**	**(6.8)**	**(2.5)**	**(6.4)**	**(2.5)**	**(3.3)**							
EV																
LG화학	KRW	320,000	(1.1)	0.9	(9.3)	(4.6)	(15.8)	(12.9)	(7.8)	18,710	24.0	14.4	1.4	1.3	8.6	6.3
삼성SDI	KRW	252,500	(1.2)	2.0	4.8	16.9	7.0	16.6	15.3	14,381	22.8	15.7	1.4	1.3	12.3	9.6
Panasonic	JPY	805.0	0.5	(3.6)	(12.7)	(9.5)	(21.5)	(40.9)	(18.7)	18,580	9.6	9.0	0.9	0.9	5.0	4.8
GS Yuasa	JPY	1834.0	(1.5)	(3.4)	(11.6)	(3.6)	(17.0)	(26.8)	(18.4)	1,427	11.6	10.7	0.8	0.8	5.4	5.2
NEC	JPY	4600.0	2.7	(3.0)	4.3	20.1	23.0	54.9	40.9	11,274	16.6	13.9	1.3	1.2	7.4	7.1
CATL	CNY	73.2	(1.3)	1.8	0.5	(1.5)	(11.2)	6.1	(0.8)	22,814	36.1	30.0	4.3	3.8	16.8	13.5
GuoXuan	CNY	11.9	(0.3)	3.2	(7.7)	(15.2)	(22.5)	(9.4)	2.5	1,912	16.4	14.7	1.5	1.3	11.8	10.2
Wanxiang	CNY	5.3	0.0	1.7	(12.0)	(19.5)	(7.7)	(14.3)	3.1	2,064	20.3	18.9	-	-	-	-
BYD Auto	CNY	51.1	1.9	0.2	(6.8)	(0.8)	(1.2)	20.8	0.1	18,083	39.1	32.7	2.4	2.3	10.9	9.6
Tesla Motors	USD	219.9	2.0	(6.4)	(12.9)	(3.7)	(28.6)	(34.4)	(33.9)	39,397	-	57.7	5.9	5.2	23.8	15.5
Geely	CNY	10.8	0.6	(2.2)	(8.6)	(19.3)	(22.6)	(28.7)	(21.4)	12,597	9.1	7.6	1.7	1.4	5.2	4.6
NIO	CNY	3.0	4.6	(5.8)	(10.6)	(36.7)	(60.2)	-	(53.7)	3,105	-	-	26.1	-	-	-
Average			**0.6**	**(1.2)**	**(6.9)**	**(6.5)**	**(14.8)**	**(6.3)**	**(7.7)**							

* Bloomberg 기준 / valuation multiple 또한 Bloomberg consensus 기준임