# SK Energy Daily

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SK 증권

## 1. News Summary (3 page)

2018년 7월 31일

| News | | Conclusion |
|---|---|---|
| *WTI comment* | 수급 우려에 급등세…WTI 70달러 회복 | |
| *Headline* | 테슬라, 유럽 첫 기가팩토리 설립 추진…독일·네덜란드 유력 | 추가적인 capex 지출을 감당할 수 있는 현금 조달이 이슈가 될 것임 |
| *News 1.* | 현대오일뱅크, 올레핀과 폴리올레핀 신 사업 진출 | 미국산 PE 진입으로 가격 약세 전망되는 바, 원가 관리가 중요할 것 |
| *News 2.* | - | - |
| *News 3.* | - | - |
| *News 4.* | - | - |

## 2. Prices Summary (4~7 page)

| Daily | Unit | Price | 1D | 1W | 1M | 3M | 12M |
|---|---|---|---|---|---|---|---|
| *Refinery* | | | % | % | % | % | % |
| WTI | $/bbl | 70.1 | 2.1 | 3.3 | (5.4) | 2.3 | 39.8 |
| Dubai | $/bbl | 73.4 | (0.1) | 2.6 | (3.3) | 4.8 | 45.7 |
| Gasoline | $/bbl | 85.0 | 0.3 | 2.8 | 1.3 | 1.4 | 28.2 |
| Diesel | $/bbl | 86.5 | (0.4) | 2.6 | (1.1) | 0.8 | 32.4 |
| Complex margin | $/bbl | 7.6 | (0.1) | 0.3 | 2.4 | (0.7) | (1.9) |
| 1M lagging | $/bbl | 6.6 | (1.4) | 0.5 | 1.3 | (6.4) | (8.0) |
| *Petrochemical* | | | % | % | % | % | % |
| Naphtha | $/t | 674 | 0.1 | 3.9 | 3.3 | 6.9 | 46.9 |
| Butadiene | $/t | 1,670 | 0.6 | (0.6) | 5.0 | 14.4 | 83.5 |
| HDPE | $/t | 1,310 | 0.0 | (0.8) | (3.0) | (3.0) | 19.1 |
| MEG | $/t | 951 | 2.9 | 5.3 | 6.3 | (6.3) | 9.3 |
| PX | $/t | 1,053 | 2.1 | 5.7 | 9.1 | 10.0 | 30.9 |
| SM | $/t | 1,379 | 0.9 | 1.4 | 4.7 | 3.7 | 22.2 |
| *Commodity* | | | % | % | % | % | % |
| Natural Gas | $/mmbtu | 2.80 | 0.5 | 3.8 | (1.7) | 0.3 | (0.3) |
| Natural rubber | $/t | 1,300 | (0.8) | 0.0 | (0.8) | (6.5) | (8.5) |
| Cotton | C/lbs | 90.0 | 1.0 | 2.8 | 6.4 | 6.2 | 27.6 |

*참고: 정제마진의 변동률은 %가 아닌 $/bbl임

| Weekly | Update | Unit | Price | 1W | 1M | 3M | 12M |
|---|---|---|---|---|---|---|---|
| *Petrochemical* | | | | % | % | % | % |
| Ethylene | 07/30 | $/t | 1,233 | (2.6) | (2.2) | 1.4 | 26.4 |
| Propylene | 07/30 | $/t | 995 | 0.5 | 1.5 | 0.5 | 30.5 |
| Benzene | 07/30 | $/t | 848 | 2.1 | 5.0 | 0.9 | 14.1 |
| Toluene | 07/30 | $/t | 800 | 1.3 | 1.9 | 5.3 | 26.0 |
| Xylene | 07/30 | $/t | 823 | 0.0 | 2.8 | 6.8 | 32.1 |
| PP | 07/30 | $/t | 1,233 | (0.8) | (3.9) | (0.8) | 14.9 |
| PVC | 07/30 | $/t | 945 | 0.5 | 1.1 | 0.5 | 9.9 |
| ABS | 07/30 | $/t | 1,940 | 1.0 | (3.0) | (2.5) | 6.6 |
| SBR | 07/30 | $/t | 1,760 | 0.0 | (1.1) | 3.5 | 18.1 |
| SM | 07/30 | $/t | 1,395 | 0.0 | 2.4 | 3.0 | 19.0 |
| BPA | 07/30 | $/t | 1,783 | (1.7) | 1.0 | (7.9) | 15.7 |
| Caustic | 07/30 | $/t | 361 | (14.0) | (24.0) | (39.6) | (21.9) |
| 2-EH | 07/30 | $/t | 1,095 | (0.5) | (0.5) | (3.9) | 12.9 |
| Caprolactam | 07/30 | $/t | 2,155 | 0.0 | 1.2 | (0.7) | 24.6 |
| *Solar* | | | | % | % | % | % |
| Polysilicon | 07/25 | $/kg | 10.9 | (0.8) | (3.2) | (29.1) | (23.4) |
| Module | 07/25 | $/W | 0.26 | (0.8) | (5.2) | (14.4) | (21.7) |

## 3. Global Peers Summary (8~9 page)

| | Unit | Price | 1D | 1W | 1M | 3M | 12M |
|---|---|---|---|---|---|---|---|
| *E&P* | | | % | % | % | % | % |
| ExxonMobil | USD | 81.7 | (0.2) | 0.4 | (1.2) | 5.1 | 2.7 |
| Shell | EUR | 2,598 | (0.0) | (2.2) | (1.2) | 2.6 | 22.8 |
| Petrochina | CNY | 7.59 | 0.1 | 1.7 | (1.6) | (0.8) | (6.3) |
| Gazprom | RUB | 138.9 | 0.7 | 0.4 | (1.5) | (4.8) | 18.8 |
| Petrobras | BRL | 19.9 | 0.6 | 3.3 | 15.7 | (13.4) | 51.5 |
| *Refinery* | | | | | | | |
| Phillips66 | USD | 122.2 | 2.8 | 10.6 | 8.8 | 9.7 | 46.0 |
| Valero | USD | 117.3 | 0.8 | 10.3 | 5.8 | 5.7 | 75.8 |
| JX | JPY | 816.8 | (1.5) | 2.6 | 6.1 | 14.3 | 64.5 |
| Neste Oil | EUR | 70.4 | (0.2) | 4.2 | 4.8 | 0.7 | 90.4 |

| | Unit | Price | 1D | 1W | 1M | 3M | 12M |
|---|---|---|---|---|---|---|---|
| *Petrochemical* | | | % | % | % | % | % |
| BASF | EUR | 82.1 | (0.2) | (0.5) | 0.5 | (4.8) | 3.0 |
| DowDuPont | USD | 68.1 | (0.5) | 3.6 | 3.2 | 7.6 | 3.6 |
| SABIC | SAR | 129.4 | (0.3) | 0.2 | 2.5 | 13.0 | 30.9 |
| Formosa Pla. | TWD | 111.5 | 0.9 | 2.8 | (0.9) | 6.7 | 21.9 |
| Shin-Etsu | JPY | 11,190 | (1.1) | 8.0 | 13.3 | (0.5) | 11.4 |
| *Renewable* | | | | | | | |
| Wacker | EUR | 121.8 | 0.6 | 4.9 | 8.6 | (18.6) | 20.0 |
| First Solar | USD | 51.57 | (0.2) | (2.0) | (2.1) | (27.3) | 5.5 |
| GCL-Poly | HKD | 0.70 | 0.0 | 4.5 | (5.4) | (28.6) | (17.6) |
| Tesla Motors | USD | 290.2 | (2.4) | (4.3) | (15.4) | (1.3) | (13.4) |

## 4. Coverage Summary

| | 07/30 | 1D | 1W | 1M | 3M | 6M | 12M | 투자의견 | TP | % | P/E | P/B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| KOSPI | 2,294 | (0.1) | 1.1 | (1.4) | (8.8) | (10.9) | (4.5) | | | | * 추정치는 12M fwd 기준임 | |
| KOSPI화학 | 5,673 | 0.3 | 3.5 | (2.0) | (8.3) | (10.8) | 0.6 | | | | * 모든 coverage 업체의 실적은 연결기준임 | |
| LG화학 | 377,000 | 0.7 | 13.2 | 13.0 | 4.7 | (13.4) | 16.7 | 매수 | 400,000 | 6.1 | 14.89 | 1.68 |
| 롯데케미칼 | 354,000 | 0.4 | 6.6 | 1.7 | (14.5) | (12.9) | (2.5) | 매수 | 400,000 | 13.0 | 10.99 | 1.00 |
| 한화케미칼 | 21,050 | (1.2) | 4.0 | (3.7) | (27.3) | (41.0) | (35.0) | 매수 | 30,000 | 42.5 | 9.46 | 0.51 |
| 금호석유화학 | 111,500 | 2.8 | 1.4 | (4.3) | 3.7 | 7.7 | 47.1 | 매수 | 150,000 | 34.5 | 10.40 | 1.44 |
| KCC | 327,000 | 1.9 | 2.8 | (0.3) | (16.4) | (18.6) | (24.8) | 매수 | 400,000 | 22.3 | 28.35 | 0.50 |
| OCI | 100,500 | (1.0) | 6.2 | (2.4) | (35.6) | (36.2) | 10.0 | 매수 | 140,000 | 39.3 | 7.64 | 0.73 |
| SKC | 44,050 | (0.1) | 5.9 | 2.1 | 15.6 | (0.9) | 22.4 | 매수 | 50,000 | 13.5 | 12.01 | 1.04 |
| SK이노베이션 | 204,000 | 2.8 | 3.8 | 1.0 | 3.8 | 3.0 | 16.6 | 매수 | 230,000 | 12.7 | 11.99 | 1.02 |
| S-Oil | 117,000 | 3.5 | 4.5 | 6.8 | 6.4 | 1.3 | 2.6 | 매수 | 140,000 | 19.7 | 13.35 | 1.95 |
| GS | 53,500 | 1.5 | 3.5 | (1.7) | (12.7) | (22.1) | (27.6) | 매수 | 80,000 | 49.5 | 4.96 | 0.60 |
| SK가스 | 84,500 | (0.1) | (0.9) | (10.0) | (10.0) | (17.2) | (25.9) | 매수 | 130,000 | 53.8 | 7.98 | 0.57 |
| 포스코대우 | 18,750 | 0.3 | (6.3) | (12.4) | (16.9) | (22.0) | (19.9) | 매수 | 25,000 | 33.3 | 9.83 | 0.73 |
| LG상사 | 22,900 | 0.4 | 0.9 | (5.2) | (13.4) | (25.4) | (23.0) | 매수 | 38,000 | 65.9 | 8.48 | 0.65 |
| 한국전력 | 32,900 | 1.2 | 2.0 | 2.8 | (12.1) | (8.7) | (26.8) | 매수 | 45,000 | 36.8 | 7.96 | 0.26 |
| 한국가스공사 | 57,800 | 0.9 | 0.0 | (10.0) | 5.5 | 12.5 | 14.9 | 매수 | 75,000 | 29.8 | 8.97 | 0.75 |

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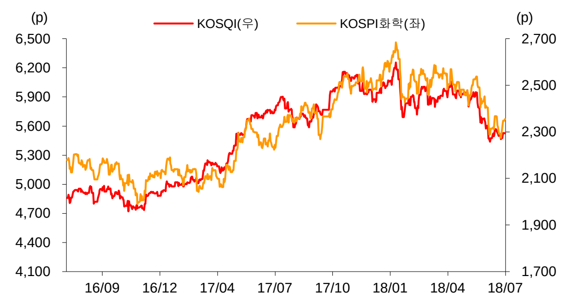
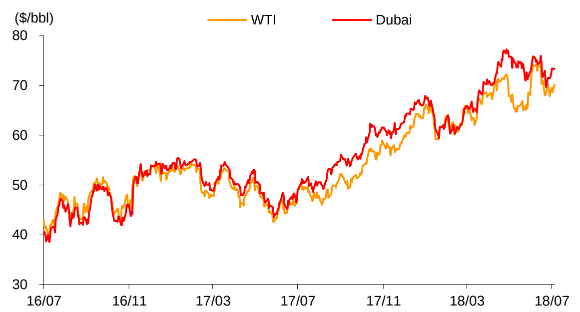
# Key Chart

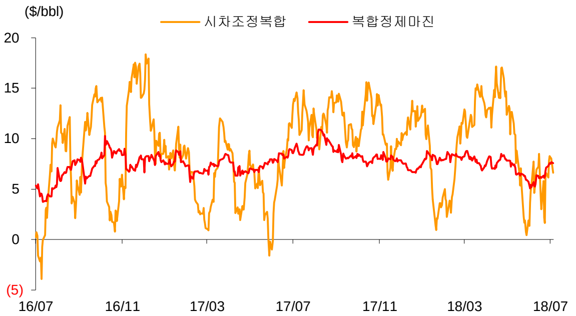
**KOSPI/KOSPI화학**



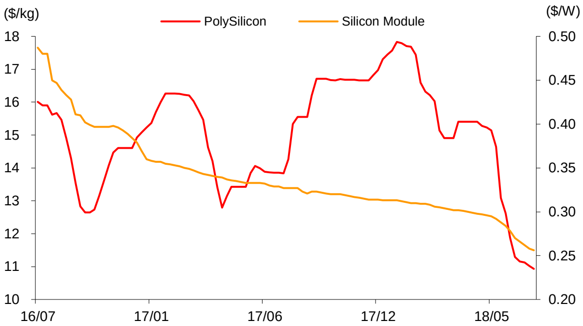

**WTI/Dubai**



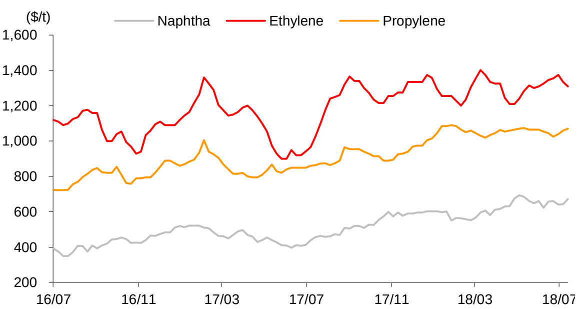

Complex & 1M lagging margin



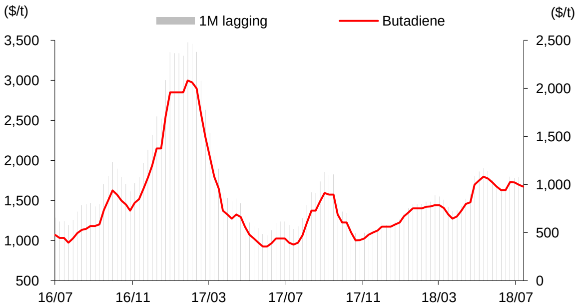

Polysilicon & Module prices



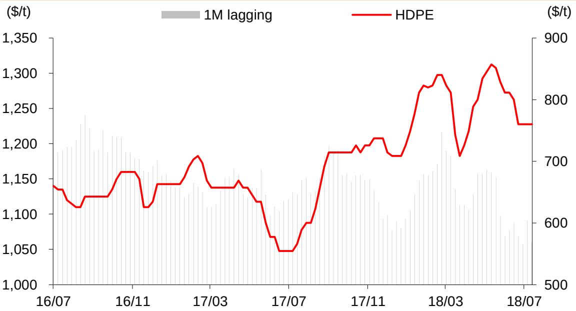

Naphtha/Ethylene/Propylene prices



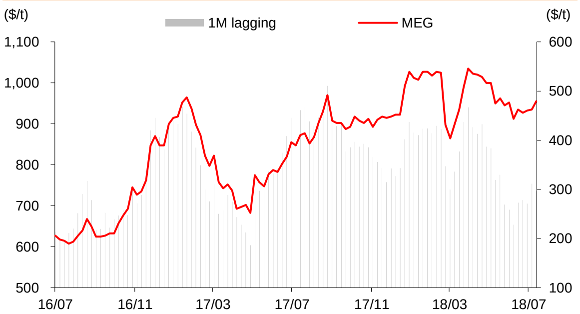

**Butadiene price & 1M lagging naphtha spread**



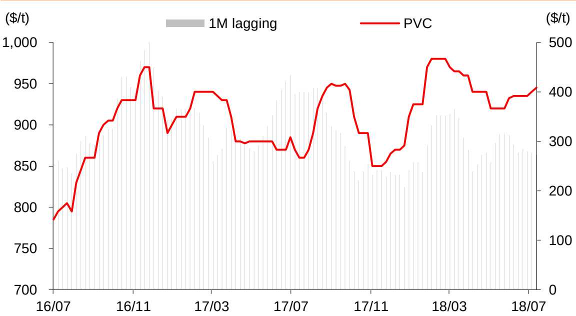

**HDPE price & 1M lagging naphtha spread**



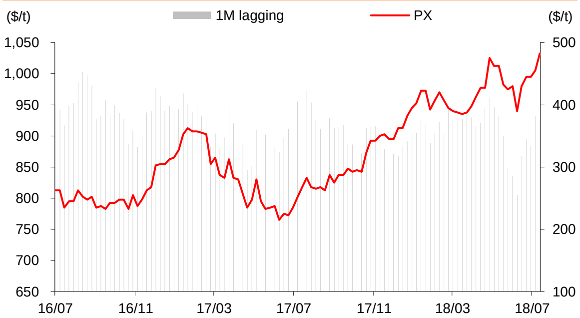

**MEG price & 1M lagging naphtha spread**




**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

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## News Comment

| Headline | (출처: 글로벌이코노믹) |
|---|---|
| **제목** | 테슬라, 유럽 첫 기가팩토리 설립 추진…독일·네덜란드 유력 |
| **결론** | 추가적인 capex 지출을 감당할 수 있는 현금 조달이 이슈가 될 것임 |
| **세부** | |
| | 1) 후보지로 독일을 염두에 두고 주정부 2곳과 기가팩토리 건설 협상중 |
| | 2) 일론 머스크, "베네룩스 3국 근처의 독일-프랑스 국경 지역이 될 것" |
| | 3) 테슬라는 이미 벨기에에서 30km 떨어진 독일 프륌시에 연구시설이 있음 |
| | 4) 네덜란드 정부와도 기가팩토리 건설 협상을 진행하는 것으로 알려짐 |
| | 5) 추가적인 capex 지출을 감당할 수 있는 현금 조달이 이슈가 될 것임 |

| WTI Comment | (출처: 연합뉴스) |
|---|---|
| 제목 | 수급 우려에 급등세…WTI 70달러 회복 |
| 상승 | 사우디아라비아의 홍해를 통한 원유수송 잠정 중단이 부각 |
| 요인 | OPEC의 7월 하루 원유생산이 전달(17만3천b)보다 적은 7만b 기록 |
| 하락 | |
| 요인 | |

| Issue 1 | (출처: 국민일보) |
|---|---|
| 제목 | 현대오일뱅크, 올레핀과 폴리올렌핀 신 사업 진출 |
| 결론 | 미국산 PE 진입으로 가격 약세 전망되는 바, 원가 관리가 중요할 것 |
| 세부 | |
| | 1) 자회사인 현대케미칼을 통해 PE 75만톤, PP 40만톤 capa 구축 예정 |
| | 2) 2021년까지 총 2.7조원을 투자하며 중질유분을 원료로 사용하는 HPC임 |
| | 3) 납사 투입 줄이고 탈황중질유, 부생가스, LPG를 투입해 원가를 낮춤 |
| | 4) 향후 탈황중질유 등 부산물 투입 비중을 80%까지 끌어올릴 계획 |
| | 5) 미국산 PE 진입으로 가격 약세 전망되는 바, 원가 관리가 중요할 것 |

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

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

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

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

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## Commodity Price Data

| Daily Price | | Today | 1D | 1W | 1M | 3M | 6M | 12M | YTD | 2016avg. | 2017avg. | 2018acc. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F/X | **USD/EUR** | 0.854 | 0.858 | 0.855 | 0.856 | 0.828 | 0.806 | 0.851 | 0.833 | 0.904 | 0.887 | 0.831 |
| | *Change, %* | | (0.4) | (0.1) | (0.2) | 3.2 | 6.0 | 0.4 | 2.6 | (5.5) | (3.6) | 2.8 |
| | **USD/JPY** | 111.0 | 111.1 | 111.4 | 110.8 | 109.3 | 108.8 | 110.7 | 112.6 | 108.8 | 112.1 | 109.1 |
| | *Change, %* | | (0.0) | (0.3) | 0.3 | 1.6 | 2.1 | 0.3 | (1.4) | 2.1 | (1.0) | 1.8 |
| | **USD/KRW** | 1,120.3 | 1,118.1 | 1,131.2 | 1,114.7 | 1,068.1 | 1,073.7 | 1,122.2 | 1,066.7 | 1,160.5 | 1,130.9 | 1,082.7 |
| | *Change, %* | | 0.2 | (1.0) | 0.5 | 4.9 | 4.3 | (0.2) | 5.0 | (3.5) | (0.9) | 3.5 |
| Agriculture | **Corn** | 367.3 | 362.0 | 357.3 | 350.3 | 392.5 | 361.5 | 374.3 | 350.8 | 358.5 | 359.4 | 371.1 |
| | *Change, %* | | 1.5 | 2.8 | 4.9 | (6.4) | 1.6 | (1.9) | 4.7 | 2.4 | 2.2 | (1.0) |
| | **Soybean** | 875.0 | 870.5 | 847.8 | 858.5 | 1,037.8 | 1,000.3 | 1,000.8 | 951.8 | 987.5 | 975.9 | 978.9 |
| | *Change, %* | | 0.5 | 3.2 | 1.9 | (15.7) | (12.5) | (12.6) | (8.1) | (11.4) | (10.3) | (10.6) |
| | **Wheat** | 546.5 | 530.5 | 513.8 | 497.5 | 512.5 | 457.3 | 481.0 | 427.0 | 436.4 | 436.0 | 480.5 |
| | *Change, %* | | 3.0 | 6.4 | 9.8 | 6.6 | 19.5 | 13.6 | 28.0 | 25.2 | 25.3 | 13.7 |
| | **Rice** | 12.0 | 12.0 | 12.0 | 11.6 | 12.8 | 12.4 | 12.4 | 11.7 | 10.3 | 11.1 | 12.2 |
| | *Change, %* | | (0.4) | (0.3) | 3.0 | (6.5) | (3.7) | (3.7) | 2.4 | 15.6 | 8.1 | (1.9) |
| | **Oats** | 232.8 | 232.0 | 231.5 | 250.5 | 225.5 | 270.0 | 290.3 | 241.0 | 196.3 | 252.3 | 245.3 |
| | *Change, %* | | 0.3 | 0.5 | (7.1) | 3.2 | (13.8) | (19.8) | (3.4) | 18.6 | (7.7) | (5.1) |
| MYR/mt | **Palm Oil** | 2,129.0 | 2,122.0 | 2,130.0 | 2,298.0 | 2,324.0 | 2,490.0 | 2,666.0 | 2,444.0 | 2,653.8 | 2,787.3 | 2,393.0 |
| | *Change, %* | | 0.3 | (0.0) | (7.4) | (8.4) | (14.5) | (20.1) | (12.9) | (19.8) | (23.6) | (11.0) |
| | **Cocoa** | 2,239.0 | 2,233.0 | 2,299.0 | 2,476.0 | 2,845.0 | 1,970.0 | 2,060.0 | 1,892.0 | 2,854.0 | 2,005.2 | 2,390.5 |
| | *Change, %* | | 0.3 | (2.6) | (9.6) | (21.3) | 13.7 | 8.7 | 18.3 | (21.5) | 11.7 | (6.3) |
| | **Cotton** | 90.0 | 89.1 | 87.5 | 85.4 | 84.7 | 77.0 | 70.2 | 78.6 | 65.6 | 73.5 | 84.1 |
| | *Change, %* | | 1.0 | 2.8 | 5.4 | 6.2 | 16.8 | 28.1 | 14.4 | 37.1 | 22.3 | 6.9 |
| | **Sugar** | 10.8 | 10.9 | 11.1 | 11.9 | 11.5 | 13.7 | 14.4 | 15.2 | 18.2 | 15.8 | 12.5 |
| | *Change, %* | | (0.6) | (2.3) | (8.8) | (6.1) | (21.1) | (24.7) | (28.6) | (40.4) | (31.6) | (13.2) |
| | **Coffee** | 111.4 | 110.5 | 111.7 | 111.5 | 120.7 | 122.3 | 137.9 | 126.2 | 136.1 | 133.0 | 117.7 |
| | *Change, %* | | 0.9 | (0.2) | (0.1) | (7.7) | (8.9) | (19.2) | (11.7) | (18.1) | (16.2) | (5.4) |
| Energy | **WTI** | 70.1 | 68.7 | 67.9 | 74.2 | 68.6 | 64.5 | 49.7 | 60.4 | 43.4 | 51.0 | 66.2 |
| | *Change, %* | | 2.1 | 3.3 | (5.4) | 2.3 | 8.7 | 41.1 | 16.1 | 61.7 | 37.6 | 5.9 |
| | **Brent** | 75.0 | 74.3 | 73.1 | 79.4 | 75.2 | 69.0 | 52.5 | 66.9 | 45.1 | 54.9 | 71.7 |
| | *Change, %* | | 0.9 | 2.6 | (5.6) | (0.3) | 8.6 | 42.7 | 12.1 | 66.3 | 36.7 | 4.5 |
| | **Natural Gas** | 2.8 | 2.8 | 2.7 | 2.9 | 2.8 | 3.2 | 2.9 | 3.0 | 2.6 | 3.0 | 2.8 |
| | *Change, %* | | (0.9) | 2.8 | (4.3) | 1.2 | (12.5) | (4.9) | (5.3) | 9.6 | (7.5) | (1.3) |
| | **Ethanol** | 1.5 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.5 | 1.3 | 1.5 | 1.5 | 1.4 |
| | *Change, %* | | 1.1 | 1.5 | 2.0 | 0.6 | 5.3 | (5.7) | 10.1 | (4.1) | (2.9) | 1.1 |
| | **RBOB Gasoline** | 216.0 | 216.2 | 209.1 | 217.9 | 212.9 | 189.5 | 167.6 | 179.9 | 140.0 | 162.9 | 200.5 |
| | *Change, %* | | (0.1) | 3.3 | (0.9) | 1.5 | 14.0 | 28.9 | 20.1 | 54.3 | 32.6 | 7.7 |
| | **Coal** | 115.6 | 119.9 | 118.7 | 114.4 | 99.4 | 107.2 | 87.2 | 100.8 | 65.5 | 88.2 | 105.4 |
| | *Change, %* | | (3.6) | (2.6) | 1.0 | 16.2 | 7.8 | 32.5 | 14.6 | 76.5 | 31.0 | 9.6 |
| Metal | **Gold** | 1,221.4 | 1,223.3 | 1,224.5 | 1,253.2 | 1,315.4 | 1,338.5 | 1,269.7 | 1,302.6 | 1,248.5 | 1,258.6 | 1,306.4 |
| | *Change, %* | | (0.2) | (0.3) | (2.5) | (7.1) | (8.7) | (3.8) | (6.2) | (2.2) | (3.0) | (6.5) |
| | **Silver** | 15.5 | 15.5 | 15.4 | 16.1 | 16.3 | 17.1 | 16.8 | 16.9 | 17.1 | 17.1 | 16.5 |
| | *Change, %* | | (0.0) | 0.7 | (3.9) | (5.2) | (9.6) | (7.6) | (8.6) | (9.4) | (9.3) | (6.2) |
| | **Copper** | 6,250.0 | 6,297.0 | 6,130.0 | 6,626.0 | 6,807.0 | 7,050.0 | 6,325.0 | 7,247.0 | 4,872.0 | 6,199.4 | 6,845.9 |
| | *Change, %* | | (0.7) | 2.0 | (5.7) | (8.2) | (11.3) | (1.2) | (13.8) | 28.3 | 0.8 | (8.7) |
| | **Nickel** | 946.9 | 941.3 | 918.4 | 1,022.5 | 923.4 | 851.5 | 656.9 | 809.1 | 646.4 | 680.2 | 919.0 |
| | *Change, %* | | 0.6 | 3.1 | (7.4) | 2.5 | 11.2 | 44.1 | 17.0 | 46.5 | 39.2 | 3.0 |
| | **Zinc** | 2,557.0 | 2,596.0 | 2,555.0 | 2,854.0 | 3,127.0 | 3,496.0 | 2,776.0 | 3,319.0 | 2,097.5 | 2,888.5 | 3,154.6 |
| | *Change, %* | | (1.5) | 0.1 | (10.4) | (18.2) | (26.9) | (7.9) | (23.0) | 21.9 | (11.5) | (18.9) |
| | **Lead** | 2,145.0 | 2,136.0 | 2,122.0 | 2,411.8 | 2,325.5 | 2,600.5 | 2,305.0 | 2,482.8 | 1,868.3 | 2,315.7 | 2,417.0 |
| | *Change, %* | | 0.4 | 1.1 | (11.1) | (7.8) | (17.5) | (6.9) | (13.6) | 14.8 | (7.4) | (11.3) |
| | **Aluminum** | 14,345.0 | 14,300.0 | 14,120.0 | 14,065.0 | 14,380.0 | 14,450.0 | 14,315.0 | 15,020.0 | 12,373.5 | 14,556.6 | 14,334.8 |
| | *Change, %* | | 0.3 | 1.6 | 2.0 | (0.2) | (0.7) | 0.2 | (4.5) | 15.9 | (1.5) | 0.1 |
| | **Cobalt** | 69,750.0 | 69,750.0 | 69,750.0 | 77,550.0 | 88,500.0 | 79,867.5 | 56,930.0 | 75,205.0 | 25,480.1 | 55,906.9 | 82,734.4 |
| | *Change, %* | | 0.0 | 0.0 | (10.1) | (21.2) | (12.7) | 22.5 | (7.3) | 173.7 | 24.8 | (15.7) |
| | **HR Coil** | 889.0 | 887.0 | 916.0 | 910.0 | 865.0 | 679.0 | 625.0 | 662.0 | 519.3 | 620.1 | 829.0 |
| | *Change, %* | | 0.2 | (2.9) | (2.3) | 2.8 | 30.9 | 42.2 | 34.3 | 71.2 | 43.4 | 7.2 |
| | **Scrap** | 393.0 | 393.0 | 394.0 | 400.0 | 380.0 | 375.0 | 354.0 | 367.0 | 275.7 | 344.7 | 389.6 |
| | *Change, %* | | 0.0 | (0.3) | (1.8) | 3.4 | 4.8 | 11.0 | 7.1 | 42.6 | 14.0 | 0.9 |

자료: Bloomberg

참고) NYMEX, ICE, LME 중 대표지수를 사용

# SK Energy Daily

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## Refining Price Data

| Daily Price | | 07/30 | 1D | 1W | 1M | 3M | 6M | 12M | YTD | 2015avg. | 2016avg. | 2017acc. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Crude Oil | **WTI** | 70.1 | 68.7 | 67.9 | 74.2 | 68.6 | 65.6 | 50.2 | 53.7 | 43.4 | 50.9 | 66.2 |
| | *Change, %* | | *2.1* | *3.3* | *(5.4)* | *2.3* | *7.0* | *39.8* | *30.5* | *61.7* | *37.8* | *5.9* |
| | **Dubai** | 73.4 | 73.4 | 71.5 | 75.9 | 70.1 | 67.6 | 50.4 | 53.8 | 41.3 | 53.1 | 68.8 |
| | *Change, %* | | *(0.1)* | *2.6* | *(3.3)* | *4.8* | *8.6* | *45.7* | *36.3* | *77.7* | *38.2* | *6.7* |
| Crude Oil Product | **Gasoline(휘발유)** | 85.0 | 84.8 | 82.7 | 84.0 | 83.9 | 81.8 | 66.4 | 69.8 | 56.3 | 68.0 | 81.3 |
| | *Change, %* | | *0.3* | *2.8* | *1.3* | *1.4* | *4.0* | *28.2* | *21.7* | *51.2* | *25.0* | *4.6* |
| | **Kerosene(등유)** | 88.3 | 88.3 | 85.9 | 88.3 | 87.2 | 83.6 | 64.3 | 66.4 | 52.9 | 65.2 | 84.2 |
| | *Change, %* | | *(0.0)* | *2.7* | *(0.0)* | *1.2* | *5.6* | *37.4* | *32.9* | *66.9* | *35.3* | *4.8* |
| | **Diesel(경유)** | 86.5 | 86.9 | 84.3 | 87.5 | 85.8 | 83.6 | 65.4 | 65.5 | 52.1 | 65.6 | 83.2 |
| | *Change, %* | | *(0.4)* | *2.6* | *(1.1)* | *0.8* | *3.5* | *32.4* | *32.1* | *66.0* | *31.9* | *4.0* |
| | **Bunker-C** | 71.6 | 71.8 | 69.7 | 72.1 | 63.8 | 60.0 | 48.1 | 52.1 | 35.5 | 49.7 | 63.1 |
| | *Change, %* | | *(0.3)* | *2.7* | *(0.7)* | *12.1* | *19.3* | *48.8* | *37.5* | *101.4* | *44.1* | *13.4* |
| | **Naphtha** | 73.8 | 73.8 | 71.2 | 72.3 | 69.5 | 65.2 | 50.3 | 53.5 | 42.6 | 53.7 | 67.9 |
| | *Change, %* | | *0.0* | *3.8* | *2.1* | *6.3* | *13.2* | *46.9* | *38.1* | *73.4* | *37.4* | *8.8* |
| Dubai Spread | **Gasoline(휘발유)** | 11.7 | 11.4 | 11.2 | 8.1 | 13.8 | 14.2 | 16.0 | 16.0 | 14.9 | 14.9 | 12.5 |
| | *Change* | | *0.3* | *0.4* | *3.6* | *(2.1)* | *(2.6)* | *(4.3)* | *(4.4)* | *(3.3)* | *(3.3)* | *(0.9)* |
| | **Kerosene(등유)** | 14.9 | 14.9 | 14.4 | 12.5 | 17.2 | 16.0 | 13.9 | 12.6 | 11.6 | 12.1 | 15.4 |
| | *Change* | | *0.0* | *0.5* | *2.4* | *(2.3)* | *(1.1)* | *1.0* | *2.3* | *3.3* | *2.8* | *(0.5)* |
| | **Diesel(경유)** | 13.1 | 13.5 | 12.8 | 11.6 | 15.8 | 16.1 | 15.0 | 11.7 | 10.8 | 12.5 | 14.4 |
| | *Change* | | *(0.3)* | *0.3* | *1.5* | *(2.6)* | *(2.9)* | *(1.8)* | *1.5* | *2.3* | *0.6* | *(1.2)* |
| | **Bunker-C** | (1.8) | (1.7) | (1.8) | (3.8) | (6.2) | (7.6) | (2.3) | (1.8) | (5.8) | (3.4) | (5.7) |
| | *Change* | | *(0.2)* | *(0.0)* | *2.0* | *4.4* | *5.8* | *0.5* | *(0.0)* | *4.0* | *1.6* | *3.9* |
| | **Naphtha** | 0.5 | 0.4 | (0.3) | (3.6) | (0.6) | (2.3) | (0.1) | (0.4) | 1.3 | 0.6 | (0.9) |
| | *Change* | | *0.1* | *0.8* | *4.0* | *1.0* | *2.8* | *0.6* | *0.8* | *(0.8)* | *(0.2)* | *1.4* |
| Refining Margin | **Simple(단순)** | 3.4 | 3.5 | 3.3 | 1.2 | 2.5 | 1.9 | 4.6 | 3.8 | 1.9 | 3.2 | 2.1 |
| | *Change* | | *(0.1)* | *0.2* | *2.2* | *0.9* | *1.5* | *(1.2)* | *(0.4)* | *1.5* | *0.3* | *1.3* |
| | **Complex(복합)** | 7.6 | 7.7 | 7.3 | 5.2 | 8.2 | 8.0 | 9.5 | 8.3 | 7.0 | 8.0 | 7.4 |
| | *Change* | | *(0.1)* | *0.3* | *2.4* | *(0.7)* | *(0.4)* | *(1.9)* | *(0.7)* | *0.6* | *(0.4)* | *0.2* |
| | **Complex(lagging)** | 6.6 | 8.0 | 6.1 | 5.3 | 13.1 | 13.0 | 14.6 | 18.0 | 8.5 | 8.9 | 9.2 |
| | *Change* | | *(1.4)* | *0.5* | *1.3* | *(6.4)* | *(6.4)* | *(8.0)* | *(11.4)* | *(1.9)* | *(2.3)* | *(2.6)* |

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

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## Petrochemical Price Data

| Daily Price | | | 07/30 | 07/27 | 07/26 | 07/25 | 07/24 | 07/23 | 07/20 | 07/19 | 07/18 | 07/17 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spot Price | **Naphtha** | CFR Japan | 673.8 | 672.8 | 669.0 | 660.4 | 653.4 | 648.4 | 647.9 | 633.4 | 626.8 | 631.5 |
| | **Ethylene** | CFR SE Asia | 1,235.0 | 1,245.0 | 1,245.0 | 1,250.0 | 1,250.0 | 1,260.0 | 1,270.0 | 1,270.0 | 1,270.0 | 1,280.0 |
| | **Propylene** | FOB Korea | 1,070.0 | 1,060.0 | 1,060.0 | 1,060.0 | 1,060.0 | 1,060.0 | 1,060.0 | 1,060.0 | 1,050.0 | 1,050.0 |
| | **Butadiene** | FOB Korea | 1,670.0 | 1,660.0 | 1,680.0 | 1,680.0 | 1,680.0 | 1,680.0 | 1,680.0 | 1,650.0 | 1,650.0 | 1,650.0 |
| | **HDPE** | CFR FE Asia | 1,310.0 | 1,310.0 | 1,310.0 | 1,310.0 | 1,310.0 | 1,320.0 | 1,320.0 | 1,320.0 | 1,320.0 | 1,340.0 |
| | **LDPE** | CFR FE Asia | 1,140.0 | 1,140.0 | 1,140.0 | 1,145.0 | 1,150.0 | 1,150.0 | 1,150.0 | 1,150.0 | 1,150.0 | 1,170.0 |
| | **LLDPE** | CFR FE Asia | 1,100.0 | 1,100.0 | 1,110.0 | 1,110.0 | 1,110.0 | 1,110.0 | 1,115.0 | 1,115.0 | 1,115.0 | 1,115.0 |
| | **MEG** | CFR China | 951.0 | 924.0 | 918.0 | 901.0 | 899.0 | 903.0 | 901.0 | 899.0 | 893.0 | 895.0 |
| | **PP** | CFR FE Asia | 1,205.0 | 1,205.0 | 1,215.0 | 1,215.0 | 1,205.0 | 1,205.0 | 1,205.0 | 1,220.0 | 1,220.0 | 1,230.0 |
| | **PX** | CFR China | 1,053.3 | 1,031.3 | 1,016.3 | 1,010.3 | 1,006.8 | 996.5 | 997.0 | 986.7 | 973.7 | 974.3 |
| | **PTA** | CFR China | 870.0 | 850.0 | 850.0 | 848.0 | 850.0 | 845.0 | 845.0 | 844.0 | 844.0 | 844.0 |
| | **Benzene** | FOB Korea | 865.7 | 857.7 | 843.7 | 838.7 | 837.0 | 838.7 | 839.0 | 828.0 | 823.0 | 825.3 |
| | **Toluene** | FOB Korea | 773.0 | 768.0 | 771.0 | 766.0 | 760.0 | 753.0 | 748.0 | 746.0 | 741.0 | 740.0 |
| | **Xylene** | FOB Korea | 869.5 | 859.5 | 853.5 | 844.0 | 842.5 | 830.0 | 842.0 | 825.0 | 813.0 | 808.0 |
| | **SM** | FOB Korea | 1,378.5 | 1,366.5 | 1,366.0 | 1,367.0 | 1,364.0 | 1,359.5 | 1,359.5 | 1,350.0 | 1,339.5 | 1,331.5 |

| Weekly Price | | | Last Week | 1W | 1M | 3M | 6M | 12M | YTD | 2016avg. | 2017avg. | 2018acc. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spot Price | **Naphtha** | CFR Japan | 672.0 | 643.0 | 658.5 | 631.0 | 607.0 | 456.5 | 484.5 | 399.5 | 493.5 | 619.2 |
| | *Change, %* | | | *4.5* | *2.1* | *6.5* | *10.7* | *47.2* | *38.7* | *68.2* | *36.2* | *8.5* |
| | **Ethylene** | CFR SE Asia | 1,232.5 | 1,265.0 | 1,260.0 | 1,215.0 | 1,265.0 | 975.0 | 990.0 | 1,040.9 | 1,090.9 | 1,238.3 |
| | *Change, %* | | | *(2.6)* | *(2.2)* | *1.4* | *(2.6)* | *26.4* | *24.5* | *18.4* | *13.0* | *(0.5)* |
| | **Propylene** | CFR SE Asia | 995.0 | 990.0 | 980.0 | 990.0 | 945.0 | 762.5 | 815.0 | 705.7 | 823.6 | 1,054.6 |
| | *Change, %* | | | *0.5* | *1.5* | *0.5* | *5.3* | *30.5* | *22.1* | *41.0* | *20.8* | *(5.6)* |
| | **Butadiene** | CFR SE Asia | 1,625.0 | 1,650.0 | 1,580.0 | 1,410.0 | 1,275.0 | 900.0 | 2,100.0 | 1,116.8 | 1,481.1 | 1,454.5 |
| | *Change, %* | | | *(1.5)* | *2.8* | *15.2* | *27.5* | *80.6* | *(22.6)* | *45.5* | *9.7* | *11.7* |
| | **Benzene** | CFR SE Asia | 847.5 | 830.0 | 807.5 | 840.0 | 832.5 | 742.5 | 822.5 | 646.7 | 838.8 | 866.1 |
| | *Change, %* | | | *2.1* | *5.0* | *0.9* | *1.8* | *14.1* | *3.0* | *31.1* | *1.0* | *(2.1)* |
| | **Toluene** | CFR SE Asia | 800.0 | 790.0 | 785.0 | 760.0 | 725.0 | 635.0 | 690.0 | 630.5 | 689.5 | 769.8 |
| | *Change, %* | | | *1.3* | *1.9* | *5.3* | *10.3* | *26.0* | *15.9* | *26.9* | *16.0* | *3.9* |
| | **Xylene** | CFR SE Asia | 822.5 | 822.5 | 800.0 | 770.0 | 762.5 | 622.5 | 675.0 | 627.7 | 668.8 | 784.8 |
| | *Change, %* | | | *0.0* | *2.8* | *6.8* | *7.9* | *32.1* | *21.9* | *31.0* | *23.0* | *4.8* |
| Spread | **Ethylene** | -Naphtha | 560.5 | 622.0 | 601.5 | 584.0 | 658.0 | 518.5 | 505.5 | 641.4 | 597.4 | 619.0 |
| | *Change, %* | | | *(9.9)* | *(6.8)* | *(4.0)* | *(14.8)* | *8.1* | *10.9* | *(12.6)* | *(6.2)* | *(9.5)* |
| | **Propylene** | -Naphtha | 323.0 | 347.0 | 321.5 | 359.0 | 338.0 | 306.0 | 330.5 | 306.2 | 330.1 | 435.4 |
| | *Change, %* | | | *(6.9)* | *0.5* | *(10.0)* | *(4.4)* | *5.6* | *(2.3)* | *5.5* | *(2.1)* | *(25.8)* |
| | **Butadiene** | -Naphtha | 953.0 | 1,007.0 | 921.5 | 779.0 | 668.0 | 443.5 | 1,615.5 | 717.3 | 987.6 | 835.3 |
| | *Change, %* | | | *(5.4)* | *3.4* | *22.3* | *42.7* | *114.9* | *(41.0)* | *32.9* | *(3.5)* | *14.1* |
| | **Benzene** | -Naphtha | 175.5 | 187.0 | 149.0 | 209.0 | 225.5 | 286.0 | 338.0 | 247.2 | 345.3 | 246.9 |
| | *Change, %* | | | *(6.1)* | *17.8* | *(16.0)* | *(22.2)* | *(38.6)* | *(48.1)* | *(29.0)* | *(49.2)* | *(28.9)* |
| | **Toluene** | -Naphtha | 128.0 | 147.0 | 126.5 | 129.0 | 118.0 | 178.5 | 205.5 | 231.0 | 196.0 | 150.6 |
| | *Change, %* | | | *(12.9)* | *1.2* | *(0.8)* | *8.5* | *(28.3)* | *(37.7)* | *(44.6)* | *(34.7)* | *(15.0)* |
| | **Xylene** | -Naphtha | 150.5 | 179.5 | 141.5 | 139.0 | 155.5 | 166.0 | 190.5 | 228.2 | 175.3 | 165.5 |
| | *Change, %* | | | *(16.2)* | *6.4* | *8.3* | *(3.2)* | *(9.3)* | *(21.0)* | *(34.1)* | *(14.2)* | *(9.1)* |

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

# SK Energy Daily

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| Weekly Price | | | Last Week | 1W | 1M | 3M | 6M | 12M | YTD | 2016avg. | 2017avg. | 2018acc. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spot Price | HDPE | CFR SE Asia | 1,227.5 | 1,227.5 | 1,262.5 | 1,252.5 | 1,212.5 | 1,057.5 | 1,142.5 | 1,134.6 | 1,142.5 | 1,255.1 |
| | Change, % | | | 0.0 | (2.8) | (2.0) | 1.2 | 16.1 | 7.4 | 8.2 | 7.4 | (2.2) |
| | MEG | CFR SE Asia | 955.0 | 935.0 | 935.0 | 1,020.0 | 935.0 | 872.5 | 847.5 | 660.8 | 850.6 | 975.1 |
| | Change, % | | | 2.1 | 2.1 | (6.4) | 2.1 | 9.5 | 12.7 | 44.5 | 12.3 | (2.1) |
| | PVC | CFR SE Asia | 945.0 | 940.0 | 935.0 | 940.0 | 965.0 | 860.0 | 920.0 | 823.4 | 899.9 | 942.3 |
| | Change, % | | | 0.5 | 1.1 | 0.5 | (2.1) | 9.9 | 2.7 | 14.8 | 5.0 | 0.3 |
| | PP | CFR SE Asia | 1,232.5 | 1,242.5 | 1,282.5 | 1,242.5 | 1,227.5 | 1,072.5 | 1,032.5 | 978.4 | 1,099.6 | 1,259.8 |
| | Change, % | | | (0.8) | (3.9) | (0.8) | 0.4 | 14.9 | 19.4 | 26.0 | 12.1 | (2.2) |
| | 2-EH | CFR Korea | 1,095.0 | 1,100.0 | 1,100.0 | 1,140.0 | 1,190.0 | 970.0 | 865.0 | 772.4 | 970.0 | 1,115.8 |
| | Change, % | | | (0.5) | (0.5) | (3.9) | (8.0) | 12.9 | 26.6 | 41.8 | 12.9 | (1.9) |
| | ABS | CFR SE Asia | 1,940.0 | 1,920.0 | 2,000.0 | 1,990.0 | 1,960.0 | 1,820.0 | 1,635.0 | 1,347.1 | 1,844.7 | 2,020.7 |
| | Change, % | | | 1.0 | (3.0) | (2.5) | (1.0) | 6.6 | 18.7 | 44.0 | 5.2 | (4.0) |
| | SBR | CFR SE Asia | 1,760.0 | 1,760.0 | 1,780.0 | 1,700.0 | 1,670.0 | 1,490.0 | 2,000.0 | 1,483.0 | 1,980.5 | 1,754.0 |
| | Change, % | | | 0.0 | (1.1) | 3.5 | 5.4 | 18.1 | (12.0) | 18.7 | (11.1) | 0.3 |
| | SM | CFR SE Asia | 1,395.0 | 1,395.0 | 1,362.5 | 1,355.0 | 1,320.0 | 1,172.5 | 1,205.0 | 1,064.6 | 1,253.8 | 1,400.2 |
| | Change, % | | | 0.0 | 2.4 | 3.0 | 5.7 | 19.0 | 15.8 | 31.0 | 11.3 | (0.4) |
| | Caustic | FOB NEA | 361.0 | 420.0 | 475.0 | 598.0 | 639.0 | 462.5 | 422.5 | 316.6 | 491.2 | 556.6 |
| | Change, % | | | (14.0) | (24.0) | (39.6) | (43.5) | (21.9) | (14.6) | 14.0 | (26.5) | (35.1) |
| | PX | CFR SE Asia | 1,032.5 | 1,005.0 | 980.0 | 977.5 | 935.0 | 817.5 | 855.0 | 790.4 | 844.4 | 969.9 |
| | Change, % | | | 2.7 | 5.4 | 5.6 | 10.4 | 26.3 | 20.8 | 30.6 | 22.3 | 6.5 |
| | PO | CFR China | 1,782.5 | 1,812.5 | 1,765.0 | 1,935.0 | 1,722.5 | 1,540.0 | 1,562.5 | 1,396.8 | 1,601.2 | 1,869.6 |
| | Change, % | | | (1.7) | 1.0 | (7.9) | 3.5 | 15.7 | 14.1 | 27.6 | 11.3 | (4.7) |
| | Caprolactam | CFR SE Asia | 2,155.0 | 2,155.0 | 2,130.0 | 2,170.0 | 2,200.0 | 1,730.0 | 1,850.0 | 1,344.9 | 1,936.4 | 2,123.3 |
| | Change, % | | | 0.0 | 1.2 | (0.7) | (2.0) | 24.6 | 16.5 | 60.2 | 11.3 | 1.5 |
| | PTA | CFR SE Asia | 862.5 | 855.0 | 860.0 | 802.5 | 772.5 | 667.5 | 642.5 | 613.7 | 667.8 | 809.6 |
| | Change, % | | | 0.9 | 0.3 | 7.5 | 11.7 | 29.2 | 34.2 | 40.5 | 29.2 | 6.5 |
| Spread | HDPE | | 555.5 | 584.5 | 604.0 | 621.5 | 605.5 | 601.0 | 658.0 | 735.1 | 649.0 | 635.9 |
| | Change, % | | | (5.0) | (8.0) | (10.6) | (8.3) | (7.6) | (15.6) | (24.4) | (14.4) | (12.6) |
| | MEG | | 283.0 | 292.0 | 276.5 | 389.0 | 328.0 | 416.0 | 363.0 | 261.3 | 357.1 | 355.9 |
| | Change, % | | | (3.1) | 2.4 | (27.2) | (13.7) | (32.0) | (22.0) | 8.3 | (20.8) | (20.5) |
| | PVC | | 273.0 | 297.0 | 276.5 | 309.0 | 358.0 | 403.5 | 435.5 | 423.9 | 406.4 | 323.0 |
| | Change, % | | | (8.1) | (1.3) | (11.7) | (23.7) | (32.3) | (37.3) | (35.6) | (32.8) | (15.5) |
| | PP | | 560.5 | 599.5 | 624.0 | 611.5 | 620.5 | 616.0 | 548.0 | 578.9 | 606.1 | 640.6 |
| | Change, % | | | (6.5) | (10.2) | (8.3) | (9.7) | (9.0) | 2.3 | (3.2) | (7.5) | (12.5) |
| | 2-EH | | 423.0 | 457.0 | 441.5 | 509.0 | 583.0 | 513.5 | 380.5 | 372.9 | 476.5 | 496.6 |
| | Change, % | | | (7.4) | (4.2) | (16.9) | (27.4) | (17.6) | 11.2 | 13.4 | (11.2) | (14.8) |
| | ABS | | 1,268.0 | 1,277.0 | 1,341.5 | 1,359.0 | 1,353.0 | 1,363.5 | 1,150.5 | 947.6 | 1,351.2 | 1,401.5 |
| | Change, % | | | (0.7) | (5.5) | (6.7) | (6.3) | (7.0) | 10.2 | 33.8 | (6.2) | (9.5) |
| | SBR | BD spread | 135.0 | 110.0 | 200.0 | 290.0 | 395.0 | 590.0 | (100.0) | 366.2 | 499.4 | 299.5 |
| | Change, % | | | 22.7 | (32.5) | (53.4) | (65.8) | (77.1) | (235.0) | (63.1) | (73.0) | (54.9) |
| | SM | | 723.0 | 752.0 | 704.0 | 724.0 | 713.0 | 716.0 | 720.5 | 665.1 | 760.3 | 781.0 |
| | Change, % | | | (3.9) | 2.7 | (0.1) | 1.4 | 1.0 | 0.3 | 8.7 | (4.9) | (7.4) |
| | Caustic | | | | | | | | | | | |
| | Change, % | | | | | | | | | | | |
| | PX | | 360.5 | 362.0 | 321.5 | 346.5 | 328.0 | 361.0 | 370.5 | 390.9 | 351.0 | 350.7 |
| | Change, % | | | (0.4) | 12.1 | 4.0 | 9.9 | (0.1) | (2.7) | (7.8) | 2.7 | 2.8 |
| | PO | propylene sprea | 787.5 | 822.5 | 785.0 | 945.0 | 777.5 | 777.5 | 747.5 | 691.1 | 777.6 | 815.0 |
| | Change, % | | | (4.3) | 0.3 | (16.7) | 1.3 | 1.3 | 5.4 | 13.9 | 1.3 | (3.4) |
| | Caprolactam | benzene spread | 1,307.5 | 1,325.0 | 1,322.5 | 1,330.0 | 1,367.5 | 987.5 | 1,027.5 | 698.2 | 1,097.6 | 1,257.3 |
| | Change, % | | | (1.3) | (1.1) | (1.7) | (4.4) | 32.4 | 27.3 | 87.3 | 19.1 | 4.0 |
| | PTA | px spread | 139.8 | 151.5 | 174.0 | 118.3 | 118.0 | 95.3 | 44.0 | 60.4 | 76.7 | 130.6 |
| | Change, % | | | (7.8) | (19.7) | 18.2 | 18.4 | 46.7 | 217.6 | 131.3 | 82.2 | 7.0 |

자료 : Cischem, Platts, SK증권

참고 : Spread는 Naphtha spread로 일괄적용

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R.A. 유승우 I 3773-9180, yswbest@sk.com

## Global peers

| | Currency | 07/30 | 1D | 1W | 1M | 3M | 6M | 12M | YTD | MKT CAP (mil USD) | PER 18E | PER 19E | PBR 18E | PBR 19E | EV/EBITDA 18E | EV/EBITDA 19E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***Petrochemical*** | | | | | | | | | | | | | | | | |
| DowDuPont | USD | 68.1 | (0.5) | 3.6 | 3.2 | 7.6 | (9.4) | 3.6 | (4.5) | 168,245 | 17.7 | 14.9 | 1.8 | 1.7 | 10.2 | 9.2 |
| Eastman | USD | 101.4 | 0.5 | 1.9 | 1.4 | (0.7) | 1.4 | 22.1 | 9.4 | 13,550 | 11.6 | 10.7 | 2.5 | 2.2 | 8.7 | 8.1 |
| BASF | EUR | 82.1 | (0.2) | (0.5) | 0.5 | (4.8) | (13.2) | 3.0 | (10.5) | 101,214 | 14.6 | 13.6 | 2.4 | 2.2 | 7.8 | 7.4 |
| Akzo Nobel | EUR | 79.2 | (0.1) | 1.2 | 8.0 | 5.7 | 5.2 | 3.9 | 8.4 | 22,073 | 17.0 | 15.8 | 3.0 | 2.8 | 9.3 | 8.8 |
| Arkema | EUR | 106.7 | 0.1 | 3.9 | 5.2 | (1.7) | 1.1 | 10.8 | 5.1 | 9,270 | 13.2 | 12.2 | 1.7 | 1.6 | 6.3 | 6.0 |
| Lanxess | EUR | 70.1 | 0.3 | 4.0 | 5.0 | 13.9 | (1.0) | 6.7 | 5.8 | 7,282 | 15.5 | 13.1 | 2.1 | 1.9 | 9.3 | 8.2 |
| Sumitomo Chemical | JPY | 644 | (0.2) | 4.7 | 2.5 | 2.4 | (21.0) | (0.9) | (20.5) | 11,911 | 10.1 | 10.5 | 1.3 | 1.2 | 7.4 | 8.0 |
| Mitsubishi Chemical | JPY | 991 | (0.4) | 3.4 | 6.8 | (4.7) | (17.1) | 6.8 | (19.9) | 16,544 | 9.2 | 8.7 | 1.3 | 1.2 | 6.3 | 6.1 |
| Shin-Etsu Chemical | JPY | 11,190 | (1.1) | 8.0 | 13.3 | (0.5) | (10.3) | 11.4 | (2.3) | 43,948 | 18.5 | 16.6 | 1.9 | 1.8 | 8.1 | 7.4 |
| Asahi Kasei | JPY | 1,485 | 0.1 | 2.1 | 5.4 | (1.5) | 2.9 | 19.2 | 2.1 | 18,109 | 14.4 | 13.6 | 1.5 | 1.4 | 7.4 | 7.0 |
| JSR | JPY | 2,055 | 0.6 | 5.7 | 9.0 | (0.5) | (22.3) | 8.0 | (7.3) | 4,455 | 14.5 | 13.4 | 1.2 | 1.1 | 7.7 | 7.2 |
| Nitto Denko | JPY | 8,073 | (0.3) | 2.4 | (3.7) | (0.9) | (18.4) | (16.7) | (19.4) | 15,450 | 15.7 | 14.6 | 2.1 | 1.9 | 7.3 | 7.0 |
| SABIC | SAR | 129.4 | (0.3) | 0.2 | 2.5 | 13.0 | 21.3 | 30.9 | 27.6 | 80,773 | 14.2 | 13.7 | 1.7 | 1.7 | 7.3 | 7.1 |
| Yansab | SAR | 74.0 | 0.0 | (0.1) | (0.7) | 6.5 | 12.9 | 35.0 | 25.4 | 8,861 | 13.7 | 13.9 | 2.2 | 1.9 | 9.0 | 8.9 |
| Formosa Plastics | TWD | 111.5 | 0.9 | 2.8 | (0.9) | 6.7 | 8.3 | 21.9 | 13.0 | 21,114 | 14.4 | 13.9 | 1.8 | 1.8 | 18.9 | 19.2 |
| Formosa Fiber | TWD | 118.5 | 0.0 | 3.9 | (2.5) | 8.2 | 8.2 | 30.2 | 15.0 | 20,511 | 13.7 | 13.4 | 1.7 | 1.7 | 11.6 | 11.5 |
| Nan Ya Plastics | TWD | 84.2 | 0.1 | 0.6 | (3.4) | 3.2 | 4.0 | 11.5 | 8.1 | 20,648 | 14.8 | 15.3 | 1.7 | 1.7 | 16.2 | 16.4 |
| Sinopec Shanghai | CNY | 5.35 | 0.2 | 1.1 | (6.0) | (8.1) | (20.6) | (21.6) | (15.5) | 9,462 | 12.0 | 12.6 | 2.2 | 2.0 | 6.8 | 7.3 |
| Sinopec Yizheng(Fibe | CNY | 1.92 | (1.0) | 1.1 | 0.0 | (4.5) | (34.0) | (39.2) | (28.1) | 5,394 | 50.4 | 66.3 | 5.3 | 5.0 | 13.9 | 10.3 |
| Reliance | INR | 1,151 | 1.9 | 2.8 | 18.4 | 19.5 | 21.1 | 44.4 | 26.6 | 93,404 | 14.4 | 12.9 | 1.7 | 1.5 | 9.4 | 8.7 |
| Industries Qatar | QAR | 124.0 | 1.6 | 3.4 | 15.9 | 10.7 | 10.7 | 25.9 | 27.8 | 16,144 | 14.5 | 13.9 | 1.6 | 1.5 | 46.4 | 27.2 |
| PTT Chemical | THB | 81.5 | 0.0 | 0.6 | 11.6 | (16.8) | (16.0) | 13.2 | (4.1) | 11,766 | 10.7 | 10.4 | 1.4 | 1.3 | 5.5 | 5.4 |
| Petronas | MYR | 8.9 | 0.1 | 0.5 | 5.2 | 4.7 | 8.7 | 27.3 | 14.9 | 15,624 | 16.1 | 15.5 | 2.0 | 1.9 | 9.2 | 8.9 |
| LG화학 | KRW | 377,000 | 0.7 | 13.2 | 13.0 | 4.7 | (13.5) | 16.7 | (6.9) | 27,313 | 13.8 | 12.8 | 1.8 | 1.6 | 6.5 | 6.1 |
| 롯데케미칼 | KRW | 354,000 | 0.4 | 6.6 | 1.7 | (14.5) | (15.5) | (2.5) | (3.8) | 11,632 | 5.5 | 5.2 | 0.9 | 0.8 | 3.6 | 3.3 |
| 한화케미칼 | KRW | 21,050 | (1.2) | 4.0 | (3.7) | (27.3) | (40.7) | (35.0) | (33.4) | 5,050 | 5.7 | 5.5 | 0.8 | 0.7 | 6.7 | 6.5 |
| 금호석유 | KRW | 111,500 | 2.8 | 1.4 | (4.3) | 3.7 | 10.4 | 47.1 | 12.1 | 2,969 | 14.1 | 11.9 | 1.6 | 1.5 | 9.3 | 8.4 |
| SKC | KRW | 44,050 | (0.1) | 5.9 | 2.1 | 15.6 | (1.8) | 22.4 | (6.3) | 1,643 | 9.9 | 8.7 | 1.1 | 1.0 | 8.8 | 7.9 |
| 국도화학 | KRW | 58,100 | 6.0 | 9.8 | (5.5) | (16.0) | (9.5) | 2.3 | (7.9) | 359 | #N/A N/A | #N/A N/A | #N/A N/A | #N/A N/A | #N/A N/A | #N/A N/A |
| 효성 | KRW | 6,250 | 1.1 | 6.8 | (3.8) | (18.3) | (39.9) | 5.2 | (17.5) | 4,595 | 8.2 | 7.3 | 1.1 | 1.0 | 7.2 | 6.8 |
| **Average** | | | **0.4** | **3.5** | **3.2** | **0.2** | **(6.3)** | **10.5** | **(0.2)** | | | | | | | |
| ***Refinery*** | | | | | | | | | | | | | | | | |
| Valero | USD | 117.3 | 0.8 | 10.3 | 5.8 | 5.7 | 24.3 | 75.8 | 27.6 | 40,608 | 14.1 | 13.4 | 2.0 | 2.0 | 6.9 | 6.9 |
| Conoco Phillips | USD | 72.3 | 1.1 | 3.3 | 3.8 | 10.3 | 23.6 | 59.7 | 31.7 | 66,136 | 34.0 | 25.9 | 2.2 | 2.2 | 7.2 | 6.7 |
| Formosa Petrochemic | TWD | 119.0 | (0.8) | (1.7) | (2.9) | (2.1) | (4.0) | 12.8 | 3.0 | 37,040 | 18.2 | 18.7 | 3.2 | 3.2 | 11.7 | 12.1 |
| Andeavor | USD | 150.8 | 0.3 | 9.3 | 15.0 | 9.0 | 38.5 | 54.1 | 31.9 | 17,904 | 12.9 | 11.4 | 1.8 | 1.7 | 7.3 | 7.1 |
| Marathon Petroleum | USD | 81.5 | 0.6 | 11.6 | 16.2 | 8.8 | 17.9 | 48.2 | 23.5 | 32,812 | 15.0 | 12.8 | 2.6 | 2.7 | 7.7 | 7.5 |
| Devon Energy | USD | 45.1 | 1.1 | 1.9 | 2.5 | 24.0 | 8.5 | 35.7 | 8.8 | 22,192 | 17.5 | 14.0 | 2.7 | 2.3 | 8.4 | 7.4 |
| Hollyfrontier | USD | 74.9 | 1.1 | 5.6 | 9.5 | 23.4 | 60.9 | 165.2 | 46.3 | 9,094 | 16.8 | 15.2 | 1.8 | 1.8 | 8.0 | 8.0 |
| Phillips 66 | USD | 122.2 | 2.8 | 10.6 | 8.8 | 9.7 | 19.4 | 46.0 | 20.8 | 51,561 | 15.6 | 14.5 | 2.3 | 2.2 | 9.0 | 8.8 |
| Murphy Oil | USD | 32.9 | 2.0 | 4.0 | (2.6) | 9.3 | 0.9 | 21.2 | 6.0 | 5,548 | 162.4 | 113.2 | 1.2 | 1.1 | 4.9 | 4.5 |
| JX Holdings | JPY | 816.8 | (1.5) | 2.6 | 6.1 | 14.3 | 11.3 | 64.5 | 12.4 | 22,130 | 8.8 | 8.0 | 0.9 | 0.9 | 7.0 | 6.6 |
| Idemitsu | JPY | 5,010.0 | (1.8) | 2.7 | 26.8 | 16.9 | 20.6 | 89.6 | 10.7 | 8,360 | 7.9 | 7.5 | 1.0 | 0.9 | 6.8 | 6.8 |
| Nesteoil | EUR | 70.4 | (0.2) | 4.2 | 4.8 | 0.7 | 29.1 | 90.4 | 32.0 | 16,473 | 16.7 | 16.7 | 2.9 | 2.7 | 10.2 | 10.3 |
| Ashland | USD | 81.8 | (1.0) | (0.8) | 4.6 | 23.6 | 12.5 | 24.9 | 14.8 | 4,550 | 21.6 | 18.7 | 1.3 | 1.3 | 10.2 | 9.6 |
| Fuchs Petrolub | EUR | 44.7 | 0.4 | 2.1 | 5.9 | 0.4 | 1.8 | (10.9) | 1.1 | 7,127 | 22.1 | 20.9 | 4.1 | 3.7 | 13.0 | 12.3 |
| SK이노베이션 | KRW | 204,000 | 2.8 | 3.8 | 1.0 | 3.8 | (2.9) | 16.6 | (0.2) | 17,975 | 7.9 | 7.7 | 0.9 | 0.9 | 4.9 | 4.8 |
| S-Oil | KRW | 117,000 | 3.5 | 4.5 | 6.8 | 6.4 | (6.8) | 2.6 | 0.0 | 12,400 | 9.3 | 8.1 | 1.8 | 1.6 | 7.6 | 6.6 |
| GS | KRW | 53,500 | 1.5 | 3.5 | (1.7) | (12.7) | (22.9) | (27.6) | (14.0) | 5,467 | 6.0 | 5.5 | 0.7 | 0.6 | 6.9 | 6.3 |
| **Average** | | | **0.8** | **4.6** | **6.5** | **8.9** | **13.7** | **45.2** | **15.1** | | | | | | | |

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

# SK Energy Daily

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R.A. 유승우 I 3773-9180, yswbest@sk.com

## Global peers

| | Currency | 07/30 | 1D | 1W | 1M | 3M | 6M | 12M | YTD | MKT CAP (mil USD) | PER 18E | PER 19E | PBR 18E | PBR 19E | EV/EBITDA 18E | EV/EBITDA 19E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***E&P/Shale*** | | | | | | | | | | | | | | | | |
| Exxon Mobil | USD | 82 | (0.2) | 0.4 | (1.2) | 5.1 | (5.8) | 2.7 | (2.3) | 346,074 | 17.2 | 15.3 | 1.8 | 1.7 | 7.7 | 7.1 |
| BP | GBP | 566 | (0.3) | (0.2) | (2.2) | 5.1 | 11.3 | 27.5 | 8.2 | 148,469 | 13.5 | 12.6 | 1.4 | 1.4 | 5.3 | 5.0 |
| Shell | EUR | 2,598 | (0.0) | (2.2) | (1.2) | 2.6 | 4.7 | 22.8 | 4.8 | 287,126 | 12.5 | 10.8 | 1.4 | 1.4 | 5.8 | 5.4 |
| Chevron | USD | 128 | 1.5 | 5.4 | 1.1 | 2.2 | 2.1 | 18.2 | 2.1 | 244,278 | 16.3 | 15.3 | 1.6 | 1.6 | 6.6 | 6.3 |
| Total | EUR | 55 | 0.3 | 4.8 | 5.6 | 5.4 | 18.6 | 28.3 | 19.8 | 172,252 | 12.3 | 11.2 | 1.4 | 1.3 | 5.8 | 5.4 |
| Sinopec | CNY | 7 | (0.3) | 2.6 | 1.7 | (4.5) | (8.5) | 8.0 | 7.7 | 116,950 | 10.3 | 9.9 | 1.0 | 1.0 | 3.9 | 3.9 |
| Petrochina | CNY | 8 | 0.1 | 1.7 | (1.6) | (0.8) | (16.7) | (6.3) | (6.2) | 196,238 | 23.9 | 20.1 | 1.1 | 1.1 | 5.4 | 5.3 |
| CNOOC | CNY | 9 | 0.3 | 1.8 | (1.6) | (17.9) | (28.8) | (16.4) | (11.1) | 73,500 | 9.1 | 9.0 | 1.2 | 1.2 | 3.9 | 3.9 |
| Gazprom | RUB | 139 | 0.7 | 0.4 | (1.5) | (4.8) | (3.2) | 18.8 | 6.4 | 52,835 | 3.0 | 3.1 | 0.2 | 0.2 | 2.5 | 2.5 |
| Rosneft | RUB | 406 | 0.7 | 3.0 | 2.6 | 6.1 | 18.8 | 32.9 | 39.4 | 69,215 | 7.7 | 6.4 | 0.9 | 0.9 | 4.6 | 4.3 |
| Anadarko | USD | 74 | 1.8 | 3.7 | 0.6 | 9.5 | 23.4 | 59.1 | 37.4 | 37,967 | 24.2 | 18.8 | 2.9 | 2.6 | 7.0 | 6.1 |
| Petrobras | BRL | 20 | 0.6 | 3.3 | 15.7 | (13.4) | 2.1 | 51.5 | 23.5 | 73,930 | 7.4 | 6.5 | 0.8 | 0.7 | 4.5 | 4.2 |
| Lukoil | USD | 4,410 | (0.3) | 1.6 | 1.4 | 6.1 | 18.8 | 57.8 | 32.3 | 60,016 | 5.5 | 5.7 | 0.8 | 0.7 | N/A | N/A |
| Kinder | USD | 18 | (0.8) | 0.3 | 0.5 | 12.2 | (2.6) | (13.0) | (1.8) | 47,497 | 21.7 | 18.0 | 1.1 | 1.2 | 10.6 | 10.4 |
| Equinor ASA | NOK | 213 | (0.3) | (0.3) | (1.8) | 3.5 | 18.4 | 43.9 | 21.3 | 87,221 | 13.5 | 12.5 | 2.0 | 1.8 | 3.5 | 3.3 |
| BHP | AUD | 34 | (0.6) | 5.4 | 0.8 | 10.5 | 12.7 | 35.0 | 15.6 | 129,149 | 14.7 | 16.4 | 2.3 | 2.2 | 6.4 | 6.6 |
| PTT E&P | THB | 138 | 0.0 | 3.8 | (1.8) | 3.0 | 16.9 | 57.3 | 38.0 | 16,414 | 13.4 | 12.6 | 1.4 | 1.3 | 4.3 | 4.0 |
| Petronas gas | MYR | 19 | 0.6 | 4.5 | 10.5 | 7.3 | 6.8 | 0.8 | 9.4 | 9,323 | 20.1 | 19.9 | 2.9 | 2.8 | 11.0 | 10.9 |
| Chesapeake | USD | 5 | 5.9 | 3.5 | (10.9) | 57.2 | 28.7 | (7.7) | 17.9 | 4,258 | 5.8 | 6.0 | 14.0 | 4.1 | 6.3 | 6.2 |
| Noble Energy | USD | 36 | 2.4 | 4.7 | 2.6 | 7.0 | 19.1 | 24.8 | 24.2 | 17,537 | 31.1 | 22.9 | 1.6 | 1.6 | 7.9 | 6.6 |
| **Average** | | **0** | **0.6** | **2.4** | **1.0** | **5.1** | **6.8** | **22.3** | **14.3** | | | | | | | |
| ***PV*** | | | | | | | | | | | | | | | | |
| WACKER | EUR | 121.8 | 0.6 | 4.9 | 8.6 | (18.6) | (27.6) | 20.0 | (24.9) | 7,439 | 17.8 | 16.1 | 1.9 | 1.8 | 6.5 | 6.3 |
| GCL-Poly | HKD | 0.7 | 0.0 | 4.5 | (5.4) | (28.6) | (48.1) | (17.6) | (50.0) | 1,638 | 6.3 | 5.6 | 0.4 | 0.4 | 6.5 | 5.9 |
| SunPower | USD | 6.8 | (1.6) | (7.6) | (11.6) | (20.5) | (17.1) | (40.3) | (19.6) | 955 | #N/A N/A | #N/A N/A | 1.3 | 1.3 | 16.3 | 9.5 |
| Canadian Solar | USD | 13.2 | (0.2) | 4.7 | 7.4 | (15.9) | (15.8) | (21.6) | (22.0) | 770 | 8.8 | 8.8 | 0.8 | 0.7 | 7.8 | 8.5 |
| JA Solar | USD | 7.5 | 0.0 | 0.0 | 10.0 | 6.1 | 1.2 | 17.8 | 0.4 | 356 | #N/A N/A | #N/A N/A | 1.8 | 2.0 | 4.9 | 7.1 |
| Yingli | USD | 0.4 | (2.4) | 5.3 | (72.0) | (78.1) | (77.5) | (82.9) | (76.3) | 7 | #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 | 51.6 | (0.2) | (2.0) | (2.1) | (27.3) | (23.1) | 5.5 | (23.6) | 5,405 | 31.6 | 16.7 | 1.0 | 0.9 | 7.6 | 3.9 |
| 한화큐셀 | USD | 6.3 | (3.1) | 7.5 | (2.3) | (11.3) | (12.5) | (25.9) | (10.1) | 525 | 11.3 | 23.4 | #N/A N/A | #N/A N/A | 8.0 | 8.3 |
| OCI | KRW | 100,500 | (1.0) | 6.2 | (2.4) | (35.6) | (40.0) | 10.0 | (26.1) | 2,144 | 0.0 | 11.3 | 0.0 | 0.7 | 0.0 | 4.9 |
| 웅진에너지 | KRW | 3,175 | 0.2 | 5.8 | (10.3) | (48.0) | (64.6) | (60.8) | (61.4) | 84 | N/A | 0.0 | 0.7 | 0.0 | 4.9 | 0.0 |
| 신성솔라에너지 | KRW | 1,315 | 0.4 | 4.8 | (8.7) | (18.3) | (32.6) | (43.4) | (31.3) | 203 | N/A | 0.7 | 0.0 | 4.9 | 0.0 | 2.4 |
| **Average** | | | **(0.7)** | **3.1** | **(8.1)** | **(26.9)** | **(32.5)** | **(21.8)** | **(31.4)** | | | | | | | |
| ***Gas Company*** | | | | | | | | | | | | | | | | |
| Towngas China | HKD | 7.7 | (1.4) | (2.2) | 1.6 | 10.1 | 21.7 | 40.0 | 23.1 | 2,768 | 15.0 | 13.4 | 1.3 | 1.2 | 12.6 | 11.5 |
| Kulun | HKD | 6.8 | (1.5) | 2.0 | (1.7) | 0.0 | (13.0) | (10.9) | (17.1) | 6,943 | 10.1 | 8.7 | 1.1 | 1.0 | 5.7 | 5.2 |
| Beijing Enterprise | HKD | 38.7 | 0.1 | (2.0) | 1.2 | (2.2) | (18.8) | (4.9) | (16.7) | 6,215 | 6.8 | 6.1 | 0.7 | 0.6 | 11.9 | 11.3 |
| ENN Energy | HKD | 81.0 | 1.1 | (5.0) | 5.0 | 9.8 | 39.2 | 54.9 | 45.3 | 11,200 | 18.4 | 15.5 | 3.7 | 3.2 | 10.8 | 9.4 |
| China Resources Gas | HKD | 36.6 | 0.7 | 0.1 | 7.5 | 25.8 | 42.5 | 24.5 | 28.9 | 10,357 | 18.9 | 16.8 | 3.3 | 2.8 | 10.3 | 9.3 |
| China Gas Holdings | HKD | 32.4 | (1.8) | (5.7) | 2.5 | 15.5 | 38.5 | 74.9 | 49.8 | 20,480 | 20.9 | 17.5 | 4.8 | 4.0 | 15.8 | 13.3 |
| Shenzen Gas | HKD | 15.0 | (0.3) | 2.7 | (7.8) | (13.2) | (5.8) | 13.5 | 0.7 | 4,025 | 9.1 | 7.9 | 1.2 | 1.1 | 5.8 | 5.0 |
| Shann Xi | CNY | 7.6 | 1.7 | 0.3 | 8.6 | 2.2 | (5.8) | (13.1) | (10.0) | 1,240 | 17.5 | 15.3 | 1.4 | 1.3 | #N/A N/A | #N/A N/A |
| Suntien | HKD | 2.5 | 2.4 | 10.5 | 11.9 | (4.2) | 28.4 | 51.5 | 22.2 | 1,198 | 6.7 | 6.0 | 0.9 | 0.8 | 8.6 | 7.5 |
| China Oil & Gas | HKD | 0.6 | 1.7 | 1.7 | 0.0 | 3.4 | (22.8) | 8.9 | (28.2) | 454 | #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** | | | **0.3** | **0.2** | **2.9** | **4.7** | **10.4** | **23.9** | **9.8** | | | | | | | |
| ***EV*** | | | | | | | | | | | | | | | | |
| LG화학 | KRW | 377,000 | 0.7 | 13.2 | 13.0 | 4.7 | (13.5) | 16.7 | (6.9) | 23,807 | 14.5 | 13.1 | 1.6 | 1.5 | 6.7 | 6.0 |
| 삼성SDI | KRW | 228,000 | (2.8) | 3.4 | 6.5 | 24.3 | 11.5 | 37.3 | 11.5 | 14,025 | 21.3 | 15.4 | 1.3 | 1.2 | 14.0 | 11.0 |
| Panasonic | JPY | 1432.0 | (0.2) | 0.5 | (4.1) | (12.3) | (12.0) | (5.1) | (13.2) | 31,664 | 13.0 | 11.5 | 1.8 | 1.6 | 4.8 | 4.4 |
| GS Yuasa | JPY | 525.0 | 1.9 | 5.0 | 4.0 | (11.0) | (11.2) | 1.2 | (6.4) | 1,957 | 15.8 | 14.6 | 1.2 | 1.1 | 7.2 | 6.6 |
| NEC | JPY | 3055.0 | (1.5) | 1.0 | 0.5 | 1.7 | (3.6) | 2.9 | 0.5 | 7,173 | 23.2 | 13.0 | 0.9 | 0.8 | 7.2 | 5.6 |
| BYD Auto | CNY | 42.5 | (1.1) | (2.3) | (10.9) | (19.8) | (33.0) | (14.1) | (34.7) | 16,395 | 25.8 | 19.3 | 2.0 | 1.8 | 11.9 | 10.1 |
| Tesla Motors | USD | 290.2 | (2.4) | (4.3) | (15.4) | (1.3) | (16.1) | (13.4) | (6.8) | 49,269 | #N/A N/A | 121.4 | 9.1 | 8.2 | 56.1 | 18.2 |
| Kandi Technologies | USD | 4.0 | (0.6) | (4.2) | (5.3) | (17.9) | (34.6) | (1.8) | (40.8) | 205 | #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)** | **1.5** | **(1.5)** | **(3.9)** | **(14.1)** | **3.0** | **(12.1)** | | | | | | | |

* Bloomberg 기준 / valuation multiple 또한 Bloomberg consensus 기준임