# SKS Energy Daily

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## 1. News Summary (3 page)

2016년 6월 3일

| News | | Conclusion |
|---|---|---|
| *WTI comment* | OPEC 생산량 할당 실패 불구 재고감소로 상승 | |
| *Headline* | 사우디, 쿠웨이트, UAE. 일제히 6월 PE 가격 인하결정 | 성수기 불구 PE 가격약세 기조 지속 가능성 높음 |
| *News 1.* | OPEC 정례회의(169회 총회), 별 다른 결론 없이 마무리 | 애초에 산유량 동결내지 감산 기대감 없었음, 주요 이벤트 아니었음 |
| *News 2.* | - | - |
| *News 3.* | - | - |
| *News 4.* | - | - |

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

| Daily | Unit | Price | 1D | 1W | 1M | 3M | 12M |
|---|---|---|---|---|---|---|---|
| *Refinery* | | | % | % | % | % | % |
| WTI | $/bbl | 49.2 | 0.3 | (0.6) | 12.6 | 36.9 | (17.6) |
| Dubai | $/bbl | 46.2 | 1.6 | 0.9 | 7.3 | 43.5 | (25.9) |
| Gasoline | $/bbl | 60.9 | 1.2 | (0.6) | 6.3 | 25.4 | (28.3) |
| Diesel | $/bbl | 58.1 | 1.9 | 1.2 | 10.6 | 36.3 | (25.6) |
| Complex margin | $/bbl | 6.1 | 0.2 | (0.2) | 0.9 | (1.2) | (5.0) |
| 1M lagging | $/bbl | 9.2 | 2.1 | (2.0) | (2.8) | (2.7) | (1.1) |
| *Petrochemical* | | | % | % | % | % | % |
| Naphtha | $/t | 431 | 3.7 | 0.7 | 0.9 | 24.9 | (26.2) |
| Butadiene | $/t | 930 | (0.5) | (11.4) | (11.4) | (3.6) | (20.5) |
| HDPE | $/t | 1,100 | 0.0 | 0.0 | (2.2) | (0.9) | (18.2) |
| MEG | $/t | 610 | 1.3 | 1.3 | (6.4) | (10.9) | (35.3) |
| PX | $/t | 774 | 0.3 | 1.0 | (3.7) | 3.8 | (16.7) |
| SM | $/t | 968 | (0.2) | 0.7 | (9.2) | (8.8) | (22.7) |
| *Commodity* | | | % | % | % | % | % |
| Natural Gas | $/mmbtu | 2.41 | 1.0 | 11.8 | 7.5 | 21.8 | (20.8) |
| Natural rubber | $/t | 1,230 | (0.8) | 0.0 | (14.0) | 1.7 | (22.2) |
| Cotton | C/lbs | 62.7 | (0.5) | (2.0) | 2.7 | 11.9 | (5.1) |

*참고: 정제마진의 변동률은 %가 아닌 $/bbl임

| Weekly | Update | Unit | Price | 1W | 1M | 3M | 12M |
|---|---|---|---|---|---|---|---|
| *Petrochemical* | | | | % | % | % | % |
| Ethylene | 05/30 | $/t | 1,090 | (3.5) | (3.1) | 10.1 | (22.4) |
| Propylene | 05/30 | $/t | 690 | (0.7) | (5.5) | 8.7 | (21.1) |
| Benzene | 05/30 | $/t | 625 | (2.3) | (5.3) | 11.1 | (16.4) |
| Toluene | 05/30 | $/t | 620 | (4.6) | (7.5) | 5.1 | (22.5) |
| Xylene | 05/30 | $/t | 640 | (0.8) | (3.0) | 10.3 | (20.0) |
| PP | 05/30 | $/t | 955 | (1.0) | (6.4) | 8.5 | (29.5) |
| PVC | 05/30 | $/t | 800 | (3.0) | (2.4) | 7.4 | (6.4) |
| ABS | 05/30 | $/t | 1,270 | 0.0 | (5.6) | 10.0 | (23.5) |
| SBR | 05/30 | $/t | 1,440 | (4.6) | (6.2) | 17.1 | (4.0) |
| SM | 05/30 | $/t | 1,018 | (2.6) | (6.0) | (2.2) | (22.6) |
| BPA | 05/30 | $/t | 1,235 | (5.9) | 1.0 | 6.7 | (30.4) |
| Caustic | 05/30 | $/t | 295 | 0.9 | 1.7 | 2.6 | (4.1) |
| 2-EH | 05/30 | $/t | 790 | (2.5) | (2.5) | 12.9 | (24.8) |
| Caprolactam | 05/30 | $/t | 1,340 | 0.0 | 1.5 | 16.5 | (26.0) |
| *Solar* | | | | % | % | % | % |
| Polysilicon | 06/01 | $/kg | 17.0 | (0.2) | 2.6 | 24.7 | 8.6 |
| Module | 06/01 | $/W | 0.51 | (0.4) | (1.9) | (6.4) | (7.2) |

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

| | Unit | Price | 1D | 1W | 1M | 3M | 12M |
|---|---|---|---|---|---|---|---|
| *E&P* | | | % | % | % | % | % |
| ExxonMobil | USD | 88.5 | (0.8) | (1.4) | (0.7) | 7.0 | 4.0 |
| Shell | EUR | 1,661 | (0.3) | (1.3) | (6.7) | 0.2 | (14.1) |
| Petrochina | CNY | 7.33 | 0.1 | 1.5 | (1.2) | (2.8) | (40.7) |
| Gazprom | RUB | 144.0 | (0.5) | (3.3) | (14.5) | 2.8 | 2.3 |
| Petrobras | BRL | 8.4 | 2.7 | (3.1) | (17.4) | 48.7 | (34.6) |
| *Refinery* | | | | | | | |
| Phillips66 | USD | 80.8 | (0.0) | 1.0 | (1.7) | (4.4) | 2.2 |
| Valero | USD | 55.7 | (0.1) | 3.0 | (6.9) | (10.2) | (4.8) |
| JX | JPY | 419.5 | (1.9) | (2.4) | (8.7) | (8.3) | (24.9) |
| Neste Oil | EUR | 30.4 | (0.6) | 1.7 | 8.3 | 7.5 | 28.1 |

| | Unit | Price | 1D | 1W | 1M | 3M | 12M |
|---|---|---|---|---|---|---|---|
| *Petrochemical* | | | % | % | % | % | % |
| BASF | EUR | 69.6 | 0.1 | (0.2) | (0.5) | 11.7 | (16.1) |
| Dow Chemical | USD | 52.2 | 1.3 | 0.5 | (0.8) | 5.3 | (0.8) |
| SABIC | SAR | 82.6 | 1.1 | 0.2 | (1.8) | 11.9 | (20.6) |
| Formosa Pla. | TWD | 78.9 | (0.1) | 1.0 | (1.7) | (1.4) | 4.2 |
| Shin-Etsu | JPY | 6,188 | (2.9) | (2.0) | 1.1 | 4.1 | (17.8) |
| *Renewable* | | | | | | | |
| Wacker | EUR | 84.8 | 0.7 | 1.9 | 1.6 | 12.6 | (15.6) |
| Yingli | USD | 3.83 | 1.9 | 5.8 | 6.4 | (13.9) | (63.5) |
| Tesla | USD | 219.0 | (0.3) | (2.7) | (9.4) | 16.3 | (11.8) |
| BYD | CNY | 59.9 | 0.3 | 2.0 | (5.9) | 11.2 | (21.2) |

## 4. Coverage Summary

| | 06/02 | 1D | 1W | 1M | 3M | 6M | 12M | 투자의견 | TP | % | P/E | P/B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| KOSPI | 1,985 | 0.1 | 1.4 | (0.1) | 1.5 | (1.2) | (4.5) | | | | * 추정치는 12M fwd 기준임 | |
| KOSPI화학 | 5,392 | 0.6 | 1.7 | (1.3) | 3.3 | 0.6 | 9.9 | | | | * 모든 coverage 업체의 실적은 연결기준임 | |
| LG화학 | 269,000 | (0.2) | (1.3) | (7.9) | (9.7) | (14.7) | 5.9 | 매수 | 400,000 | 48.7 | 11.86 | 1.42 |
| 롯데케미칼 | 279,000 | 0.5 | (0.9) | (4.5) | (11.0) | 13.4 | 15.8 | 매수 | 340,000 | 21.9 | 9.43 | 1.08 |
| 한화케미칼 | 23,450 | 0.0 | 1.3 | (5.8) | (3.9) | (12.3) | 22.8 | 매수 | 30,000 | 27.9 | 9.26 | 0.76 |
| 금호석유화학 | 61,200 | (1.1) | (0.6) | (9.1) | 3.0 | 1.8 | (23.6) | 매수 | 70,000 | 14.4 | 12.07 | 1.21 |
| KCC | 394,000 | (2.0) | (3.4) | (3.8) | (6.7) | (14.4) | (25.2) | 매수 | 550,000 | 39.6 | 14.02 | 0.60 |
| OCI | 93,900 | (5.7) | (4.4) | (23.7) | (2.2) | 13.8 | (2.8) | 매수 | 120,000 | 27.8 | 17.64 | 0.82 |
| SKC | 27,650 | (0.7) | (0.9) | (2.6) | (11.8) | (20.4) | (31.0) | 매수 | 37,000 | 33.8 | 8.62 | 0.68 |
| 국도화학 | 60,100 | 4.3 | 2.0 | (5.1) | (3.1) | 0.3 | 0.8 | 매수 | 100,000 | 66.4 | 6.84 | 0.69 |
| SK이노베이션 | 157,000 | (0.3) | 0.6 | (0.6) | 5.0 | 23.6 | 35.3 | 매수 | 180,000 | 14.6 | 11.75 | 0.96 |
| S-Oil | 84,200 | 0.2 | 1.8 | (5.6) | 0.0 | 13.0 | 30.1 | 매수 | 100,000 | 18.8 | 11.87 | 1.46 |
| GS | 51,400 | (0.2) | (1.0) | (7.1) | (5.2) | 0.4 | 5.8 | 매수 | 65,000 | 26.5 | 7.36 | 0.86 |
| SK가스 | 84,900 | (0.9) | (0.5) | 2.3 | 16.5 | 6.7 | (19.9) | 매수 | 100,000 | 17.8 | 12.04 | 0.74 |
| 대우인터내셔널 | 23,900 | (1.8) | 2.4 | (0.2) | 15.7 | 23.2 | (10.2) | 매수 | 27,000 | 13.0 | 11.05 | 1.06 |
| LG상사 | 37,650 | (1.8) | (2.8) | 2.4 | 3.2 | 4.3 | (7.6) | 매수 | 42,000 | 11.6 | 11.12 | 0.97 |

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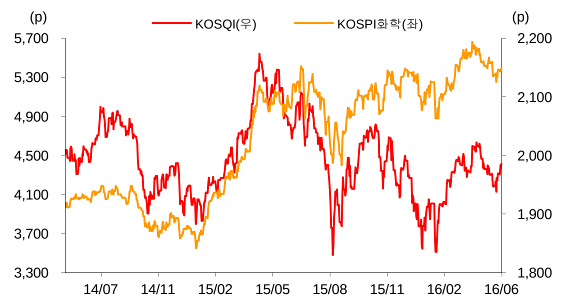
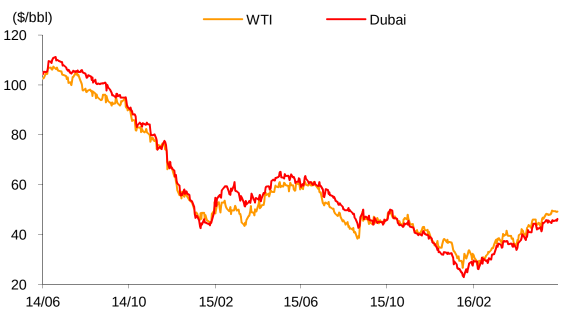
# Key Chart

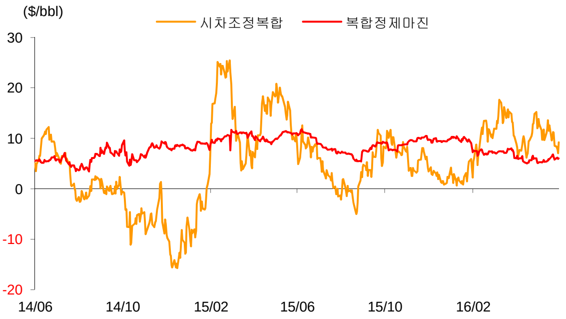
**KOSPI/KOSPI화학**



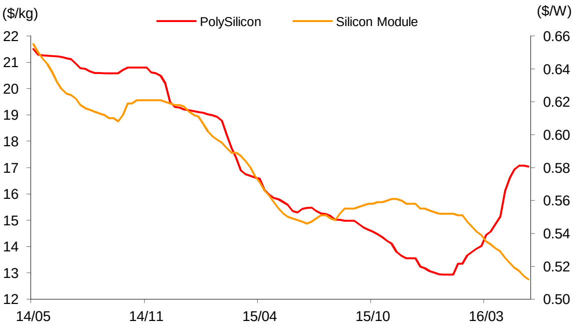

**WTI/Dubai**



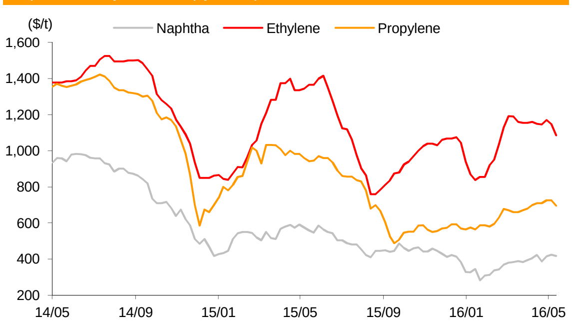

**Complex & 1M lagging margin**



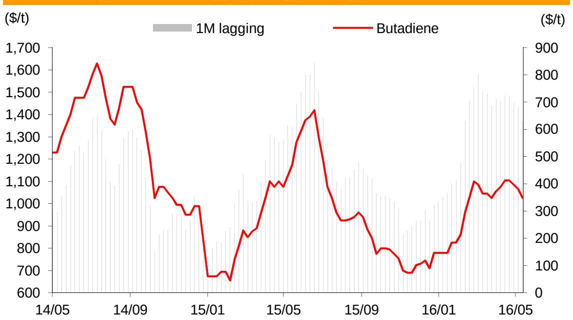

**Polysilicon & Module prices**



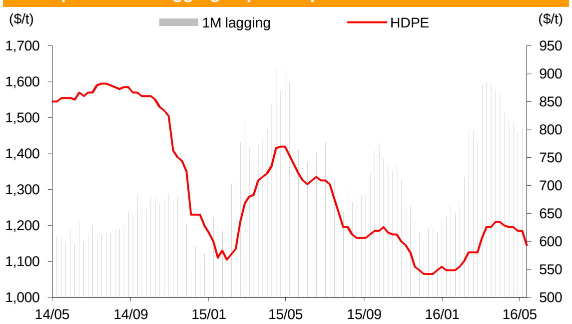

**Naphtha/Ethylene/Propylene prices**



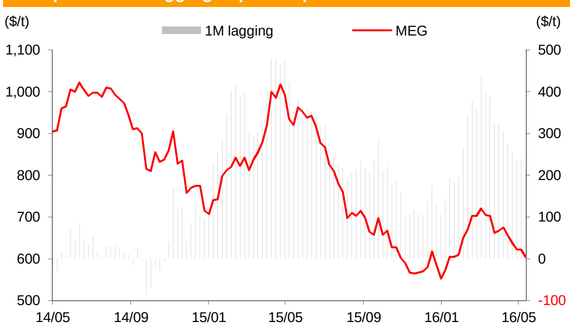

**Butadiene price & 1M lagging naphtha spread**



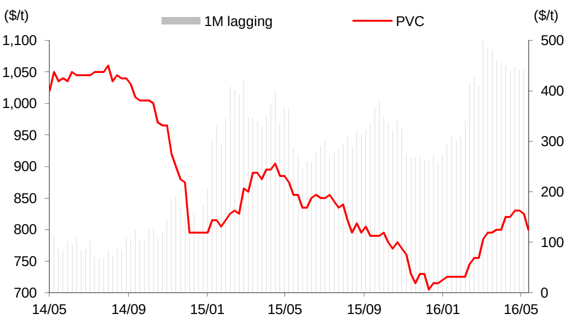

**HDPE price & 1M lagging naphtha spread**



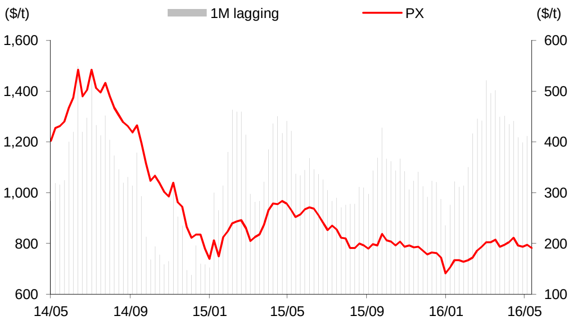

**MEG price & 1M lagging naphtha spread**




**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: 뉴스핌) |
|---|---|
| **제목** | 사우디, 쿠웨이트, UAE. 일제히 6월 PE 가격 인하결정 |
| **결론** | 성수기 불구 PE 가격약세 기조 지속 가능성 높음 |
| **세부** | |
| | 1) 사우디 SABIC, 전월대비 HDPE -$20/t, LDPE -$80/t, PP -$60/t 하향 |
| | 2) 쿠웨이트 Equate 역시 HDPE -$30/t, LLDPE -$60/t 하향 결정 |
| | 3) UAE Borouge도 HDPE -$40/t, PP -$50/t 하향 발표하였음 |
| | 4) 최근 spot 가격도 지속적으로 하락 중임 |
| | 5) 성수기 불구 PE 가격약세 기조 지속 가능성 높음 |

| WTI Comment | (출처: 연합뉴스) |
|---|---|
| 제목 | OPEC 생산량 할당 실패 불구 재고감소로 상승 |
| 상승 요인 | 미국 전주 원유재고 140만bbl 감소, 그러나 기대치(250만bbl)에는 미달 |
| 하락 요인 | OPEC 생산량 상한설정 실패 |

| Issue 1 | |
|---|---|
| 제목 | OPEC 정례회의(169회 총회), 별 다른 결론 없이 마무리 |
| 결론 | 애초에 산유량 동결내지 감산 기대감 없었음, 주요 이벤트 아니었음 |
| 세부 | |
| | 1) 회의 직후 발표성명, "회원국들은 시장 안정을 위해 노력한다" |
| | 2) 이미 이란 석유장관은 380만b/d까지 늘린 산유량 500만b/d까지 간다 발표 |
| | 3) 사우디 실세 빈 살만 부왕세자, "가격은 중요치 않다. 오로지 점유율" |
| | 4) 한편 OPEC 신임사무총장으로 나이지리마 모함메도 바르킨도 선출 |
| | 5) 애초에 산유량 동결내지 감산 기대감 없었음, 주요 이벤트 아니었음 |

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## Commodity Price Data

| Daily Price | | Today | 1D | 1W | 1M | 3M | 6M | 12M | YTD | 2014avg. | 2015avg. | 2016acc. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F/X | USD/EUR | 0.897 | 0.894 | 0.893 | 0.867 | 0.920 | 0.942 | 0.897 | 0.921 | 0.754 | 0.901 | 0.897 |
| | Change, % | | 0.3 | 0.4 | 3.4 | (2.5) | (4.8) | (0.0) | (2.6) | 18.9 | (0.5) | (0.1) |
| | USD/JPY | 108.9 | 109.5 | 109.8 | 106.4 | 113.5 | 123.2 | 124.1 | 120.6 | 105.9 | 121.1 | 112.8 |
| | Change, % | | (0.6) | (0.8) | 2.3 | (4.1) | (11.7) | (12.3) | (9.7) | 2.8 | (10.1) | (3.5) |
| | USD/KRW | 1,186.6 | 1,193.1 | 1,180.4 | 1,137.6 | 1,227.5 | 1,164.4 | 1,112.5 | 1,172.6 | 1,053.0 | 1,131.2 | 1,184.6 |
| | Change, % | | (0.5) | 0.5 | 4.3 | (3.3) | 1.9 | 6.7 | 1.2 | 12.7 | 4.9 | 0.2 |
| Agriculture | Corn | 415.3 | 413.8 | 408.3 | 390.3 | 354.5 | 364.0 | 359.0 | 358.8 | 415.6 | 376.8 | 371.2 |
| | Change, % | | 0.4 | 1.7 | 6.4 | 17.1 | 14.1 | 15.7 | 15.7 | (0.1) | 10.2 | 11.9 |
| | Soybean | 1,144.3 | 1,099.8 | 1,079.8 | 1,035.5 | 854.3 | 892.3 | 940.8 | 871.3 | 1,245.5 | 945.4 | 936.0 |
| | Change, % | | 4.0 | 6.0 | 10.5 | 33.9 | 28.2 | 21.6 | 31.3 | (8.1) | 21.0 | 22.2 |
| | Wheat | 485.5 | 473.8 | 481.3 | 477.0 | 442.8 | 452.3 | 512.5 | 470.0 | 588.0 | 508.1 | 466.9 |
| | Change, % | | 2.5 | 0.9 | 1.8 | 9.7 | 7.4 | (5.3) | 3.3 | (17.4) | (4.5) | 4.0 |
| | Rice | 11.4 | 11.0 | 11.1 | 11.1 | 10.2 | 11.4 | 9.8 | 11.6 | 14.0 | 11.1 | 10.8 |
| | Change, % | | 3.4 | 2.8 | 2.8 | 11.0 | (0.2) | 16.3 | (1.7) | (18.5) | 2.8 | 5.4 |
| | Oats | 190.8 | 190.3 | 191.3 | 192.3 | 167.5 | 264.3 | 252.8 | 217.3 | 373.1 | 250.2 | 191.4 |
| | Change, % | | 0.3 | (0.3) | (0.8) | 13.9 | (27.8) | (24.5) | (12.2) | (48.9) | (23.8) | (0.3) |
| MYR/mt | Palm Oil | 2,660.0 | 2,624.0 | 2,618.0 | 2,572.0 | 2,448.0 | 2,140.0 | 2,291.0 | 2,398.0 | 2,415.1 | 2,190.3 | 2,531.8 |
| | Change, % | | 1.4 | 1.6 | 3.4 | 8.7 | 24.3 | 16.1 | 10.9 | 10.1 | 21.4 | 5.1 |
| | Cocoa | 3,057.0 | 3,046.0 | 2,916.0 | 3,189.0 | 2,940.0 | 3,312.0 | 3,112.0 | 3,211.0 | 3,006.8 | 3,091.6 | 2,958.8 |
| | Change, % | | 0.4 | 4.8 | (4.1) | 4.0 | (7.7) | (1.8) | (4.8) | 1.7 | (1.1) | 3.3 |
| | Cotton | 62.9 | 63.2 | 64.3 | 64.4 | 58.0 | 62.1 | 63.6 | 63.3 | 76.4 | 63.3 | 60.6 |
| | Change, % | | (0.5) | (2.3) | (2.3) | 8.3 | 1.2 | (1.1) | (0.6) | (17.7) | (0.6) | 3.7 |
| | Sugar | 18.1 | 17.4 | 17.4 | 16.2 | 14.7 | 15.3 | 12.3 | 15.2 | 16.3 | 13.1 | 15.1 |
| | Change, % | | 3.8 | 3.8 | 11.5 | 23.2 | 17.9 | 46.8 | 18.6 | 10.8 | 37.6 | 20.1 |
| | Coffee | 123.0 | 121.9 | 121.5 | 119.1 | 113.4 | 117.8 | 132.7 | 126.7 | 177.1 | 132.6 | 121.4 |
| | Change, % | | 0.9 | 1.2 | 3.3 | 8.5 | 4.4 | (7.3) | (2.9) | (30.5) | (7.3) | 1.3 |
| Energy | WTI | 49.2 | 49.0 | 49.5 | 44.8 | 34.7 | 39.9 | 61.3 | 37.0 | 92.9 | 48.8 | 38.1 |
| | Change, % | | 0.3 | (0.6) | 9.8 | 41.9 | 23.1 | (19.7) | 32.7 | (47.1) | 0.7 | 29.1 |
| | Brent | 50.0 | 49.7 | 49.6 | 45.8 | 36.9 | 42.5 | 65.5 | 37.3 | 99.5 | 53.7 | 39.7 |
| | Change, % | | 0.6 | 0.9 | 9.2 | 35.5 | 17.8 | (23.6) | 34.2 | (49.7) | (6.8) | 26.2 |
| | Natural Gas | 2.4 | 2.4 | 2.0 | 2.0 | 1.7 | 2.2 | 2.7 | 2.3 | 4.3 | 2.6 | 2.0 |
| | Change, % | | 1.0 | 22.5 | 17.8 | 43.3 | 11.1 | (10.9) | 2.9 | (43.6) | (8.5) | 18.7 |
| | Ethanol | 1.7 | 1.7 | 1.6 | 1.5 | 1.4 | 1.5 | 1.5 | 1.4 | 2.1 | 1.5 | 1.5 |
| | Change, % | | 1.9 | 2.4 | 10.3 | 23.9 | 12.5 | 8.9 | 20.1 | (18.4) | 11.4 | 15.2 |
| | RBOB Gasoline | 163.5 | 161.5 | 162.0 | 156.3 | 131.1 | 129.3 | 206.5 | 126.7 | 262.6 | 163.6 | 132.7 |
| | Change, % | | 1.2 | 0.9 | 4.6 | 24.7 | 26.4 | (20.8) | 29.0 | (37.8) | (0.1) | 23.1 |
| | Coal | 39.6 | 39.8 | 44.8 | 43.6 | 43.7 | 43.4 | 44.4 | 43.3 | 57.5 | 45.2 | 43.4 |
| | Change, % | | (0.3) | (11.5) | (9.2) | (9.4) | (8.6) | (10.8) | (8.5) | (31.1) | (12.3) | (8.7) |
| Metal | Gold | 1,211.0 | 1,213.0 | 1,219.8 | 1,291.6 | 1,240.0 | 1,053.7 | 1,193.0 | 1,061.4 | 1,266.5 | 1,160.6 | 1,208.6 |
| | Change, % | | (0.2) | (0.7) | (6.2) | (2.3) | 14.9 | 1.5 | 14.1 | (4.4) | 4.3 | 0.2 |
| | Silver | 16.0 | 16.0 | 16.3 | 17.5 | 14.9 | 14.0 | 16.8 | 13.8 | 19.1 | 15.7 | 15.6 |
| | Change, % | | 0.2 | (2.0) | (8.9) | 7.0 | 14.2 | (4.8) | 15.8 | (16.2) | 1.7 | 2.8 |
| | Platinum | 958.7 | 970.6 | 993.2 | 1,079.8 | 934.8 | 831.0 | 1,112.6 | 891.1 | 1,384.6 | 1,055.7 | 955.7 |
| | Change, % | | (1.2) | (3.5) | (11.2) | 2.6 | 15.4 | (13.8) | 7.6 | (30.8) | (9.2) | 0.3 |
| | Palladium | 533.9 | 545.3 | 543.6 | 620.6 | 517.6 | 527.0 | 768.5 | 563.0 | 803.4 | 691.9 | 546.4 |
| | Change, % | | (2.1) | (1.8) | (14.0) | 3.2 | 1.3 | (30.5) | (5.2) | (33.5) | (22.8) | (2.3) |
| | Copper | 4,608.0 | 4,617.0 | 4,661.0 | 5,050.0 | 4,790.0 | 4,563.0 | 6,040.0 | 4,705.0 | 6,828.1 | 5,503.1 | 4,718.5 |
| | Change, % | | (0.2) | (1.1) | (8.8) | (3.8) | 1.0 | (23.7) | (2.1) | (32.5) | (16.3) | (2.3) |
| | Uranium | 28.0 | 27.3 | 27.3 | 27.7 | 32.1 | 36.1 | 35.6 | 34.4 | 33.5 | 36.9 | 30.7 |
| | Change, % | | 2.8 | 2.8 | 1.3 | (12.6) | (22.4) | (21.2) | (18.6) | (16.5) | (24.0) | (8.7) |
| | HR Coil | 615.0 | 615.0 | 608.0 | 560.0 | 404.0 | 384.0 | 464.0 | 391.0 | 653.2 | 461.5 | 459.7 |
| | Change, % | | 0.0 | 1.2 | 9.8 | 52.2 | 60.2 | 32.5 | 57.3 | (5.8) | 33.3 | 33.8 |
| | Scrap | 270.0 | 270.0 | 270.0 | 260.0 | 250.0 | 161.0 | 250.0 | 250.0 | 401.3 | 252.9 | 302.3 |
| | Change, % | | 0.0 | 0.0 | 3.8 | 8.0 | 67.7 | 8.0 | 8.0 | (32.7) | 6.7 | (10.7) |
| | Zinc | 1,982.0 | 1,971.0 | 1,876.0 | 1,938.5 | 1,815.0 | 1,549.0 | 2,158.0 | 1,609.0 | 2,165.0 | 1,941.9 | 1,765.6 |
| | Change, % | | 0.6 | 5.7 | 2.2 | 9.2 | 28.0 | (8.2) | 23.2 | (8.5) | 2.1 | 12.3 |

자료: Bloomberg

참고) NYMEX, ICE, LME 중 대표지수를 사용

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## Refining Price Data

| Daily Price | | 06/02 | 1D | 1W | 1M | 3M | 6M | 12M | YTD | 2014avg. | 2015avg. | 2016acc. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Crude Oil | **WTI** | 49.2 | 49.0 | 49.5 | 43.7 | 35.9 | 40.0 | 59.6 | 37.0 | 93.1 | 48.8 | 38.0 |
| | *Change, %* | | *0.3* | *(0.6)* | *12.6* | *36.9* | *23.0* | *(17.6)* | *32.7* | *(47.2)* | *0.8* | *29.3* |
| | **Dubai** | 46.2 | 45.4 | 45.7 | 43.0 | 32.2 | 39.1 | 62.3 | 32.2 | 96.7 | 50.8 | 35.2 |
| | *Change, %* | | *1.6* | *0.9* | *7.3* | *43.5* | *18.1* | *(25.9)* | *43.4* | *(52.3)* | *(9.1)* | *31.2* |
| Crude Oil Product | **Gasoline(휘발유)** | 60.9 | 60.2 | 61.3 | 57.3 | 48.6 | 56.9 | 84.9 | 54.8 | 110.9 | 69.5 | 52.7 |
| | *Change, %* | | *1.2* | *(0.6)* | *6.3* | *25.4* | *7.0* | *(28.3)* | *11.1* | *(45.1)* | *(12.4)* | *15.5* |
| | **Kerosene(등유)** | 58.5 | 57.8 | 58.1 | 53.2 | 44.6 | 53.6 | 76.4 | 44.2 | 112.6 | 64.7 | 46.6 |
| | *Change, %* | | *1.1* | *0.7* | *10.0* | *31.2* | *9.1* | *(23.5)* | *32.3* | *(48.1)* | *(9.7)* | *25.4* |
| | **Diesel(경유)** | 58.1 | 57.0 | 57.4 | 52.5 | 42.6 | 53.6 | 78.1 | 43.2 | 112.8 | 64.8 | 45.1 |
| | *Change, %* | | *1.9* | *1.2* | *10.6* | *36.3* | *8.4* | *(25.6)* | *34.4* | *(48.5)* | *(10.3)* | *28.8* |
| | **Bunker-C** | 35.4 | 34.7 | 35.5 | 33.1 | 25.1 | 32.9 | 58.3 | 25.3 | 86.5 | 45.3 | 27.8 |
| | *Change, %* | | *1.8* | *(0.3)* | *6.7* | *41.2* | *7.6* | *(39.3)* | *39.8* | *(59.1)* | *(21.9)* | *27.3* |
| | **Naphtha** | 45.8 | 44.3 | 45.3 | 43.0 | 36.5 | 48.3 | 61.8 | 43.5 | 94.3 | 52.6 | 39.4 |
| | *Change, %* | | *3.4* | *1.2* | *6.6* | *25.7* | *(5.2)* | *(25.9)* | *5.5* | *(51.4)* | *(12.9)* | *16.3* |
| Dubai Spread | **Gasoline(휘발유)** | 14.7 | 14.7 | 15.5 | 14.2 | 16.4 | 17.8 | 22.6 | 22.6 | 14.2 | 18.7 | 17.5 |
| | *Change* | | *(0.0)* | *(0.8)* | *0.5* | *(1.7)* | *(3.1)* | *(7.9)* | *(7.9)* | *0.5* | *(4.0)* | *(2.8)* |
| | **Kerosene(등유)** | 12.3 | 12.4 | 12.3 | 10.1 | 12.4 | 14.5 | 14.1 | 12.0 | 15.9 | 14.0 | 11.4 |
| | *Change* | | *(0.1)* | *(0.0)* | *2.2* | *(0.1)* | *(2.2)* | *(1.8)* | *0.3* | *(3.6)* | *(1.7)* | *0.9* |
| | **Diesel(경유)** | 11.9 | 11.6 | 11.7 | 9.5 | 10.5 | 14.5 | 15.8 | 11.0 | 16.0 | 14.0 | 9.9 |
| | *Change* | | *0.4* | *0.3* | *2.4* | *1.5* | *(2.6)* | *(3.9)* | *0.9* | *(4.1)* | *(2.1)* | *2.0* |
| | **Bunker-C** | (10.8) | (10.7) | (10.3) | (9.9) | (7.1) | (6.3) | (4.0) | (6.9) | (10.3) | (5.5) | (7.4) |
| | *Change* | | *(0.1)* | *(0.5)* | *(0.9)* | *(3.7)* | *(4.6)* | *(6.8)* | *(3.9)* | *(0.5)* | *(5.3)* | *(3.4)* |
| | **Naphtha** | (0.3) | (1.1) | (0.5) | (0.0) | 4.3 | 9.2 | (0.5) | 11.3 | (2.4) | 1.8 | 4.2 |
| | *Change* | | *0.8* | *0.1* | *(0.3)* | *(4.6)* | *(9.6)* | *0.1* | *(11.6)* | *2.1* | *(2.2)* | *(4.6)* |
| Refining Margin | **Simple(단순)** | (0.3) | (0.3) | (0.0) | (0.6) | 1.9 | 3.7 | 4.5 | 3.2 | (0.1) | 3.3 | 1.5 |
| | *Change* | | *0.1* | *(0.3)* | *0.4* | *(2.1)* | *(4.0)* | *(4.8)* | *(3.4)* | *(0.2)* | *(3.6)* | *(1.8)* |
| | **Complex(복합)** | 6.1 | 5.9 | 6.3 | 5.2 | 7.3 | 9.8 | 11.0 | 9.7 | 7.1 | 9.3 | 7.2 |
| | *Change* | | *0.2* | *(0.2)* | *0.9* | *(1.2)* | *(3.7)* | *(5.0)* | *(3.6)* | *(1.0)* | *(3.2)* | *(1.1)* |
| | **Complex(lagging)** | 9.2 | 7.1 | 11.2 | 12.0 | 11.9 | 3.4 | 10.3 | 2.1 | 2.3 | 7.3 | 9.2 |
| | *Change* | | *2.1* | *(2.0)* | *(2.8)* | *(2.7)* | *5.8* | *(1.1)* | *7.1* | *6.9* | *2.0* | *0.0* |

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

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## Petrochemical Price Data

| Daily Price | | | 06/02 | 06/01 | 05/31 | 05/30 | 05/27 | 05/26 | 05/25 | 05/24 | 05/23 | 05/20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spot Price | **Naphtha** | CFR Japan | 430.5 | 415.1 | 423.3 | 421.4 | 418.3 | 427.5 | 427.9 | 422.9 | 422.3 | 424.6 |
| | **Ethylene** | CFR SE Asia | 1,065.0 | 1,065.0 | 1,065.0 | 1,065.0 | 1,065.0 | 1,090.0 | 1,120.0 | 1,130.0 | 1,130.0 | 1,135.0 |
| | **Propylene** | FOB Korea | 699.0 | 699.0 | 695.0 | 695.0 | 700.0 | 690.0 | 690.0 | 695.0 | 705.0 | 710.0 |
| | **Butadiene** | FOB Korea | 930.0 | 935.0 | 945.0 | 945.0 | 945.0 | 1,050.0 | 1,060.0 | 1,065.0 | 1,070.0 | 1,075.0 |
| | **HDPE** | CFR FE Asia | 1,100.0 | 1,100.0 | 1,100.0 | 1,100.0 | 1,100.0 | 1,100.0 | 1,100.0 | 1,110.0 | 1,120.0 | 1,120.0 |
| | **LDPE** | CFR FE Asia | 1,115.0 | 1,115.0 | 1,115.0 | 1,115.0 | 1,130.0 | 1,130.0 | 1,130.0 | 1,120.0 | 1,130.0 | 1,130.0 |
| | **LLDPE** | CFR FE Asia | 1,090.0 | 1,090.0 | 1,090.0 | 1,090.0 | 1,110.0 | 1,110.0 | 1,110.0 | 1,100.0 | 1,110.0 | 1,110.0 |
| | **MEG** | CFR China | 610.0 | 602.0 | 611.0 | 603.0 | 602.0 | 602.0 | 603.0 | 604.0 | 614.0 | 619.0 |
| | **PP** | CFR FE Asia | 905.0 | 910.0 | 910.0 | 905.0 | 905.0 | 905.0 | 905.0 | 910.0 | 930.0 | 930.0 |
| | **PX** | CFR China | 773.7 | 771.5 | 776.5 | 767.8 | 765.3 | 766.3 | 759.3 | 759.7 | 764.7 | 775.3 |
| | **PTA** | CFR China | 602.0 | 602.0 | 602.0 | 600.0 | 600.0 | 598.0 | 598.0 | 598.0 | 599.0 | 603.0 |
| | **Benzene** | FOB Korea | 593.0 | 599.0 | 605.5 | 601.5 | 597.8 | 612.5 | 610.0 | 613.5 | 628.0 | 630.0 |
| | **Toluene** | FOB Korea | 573.0 | 574.0 | 569.5 | 566.5 | 568.5 | 573.5 | 576.5 | 578.5 | 582.0 | 588.0 |
| | **Xylene** | FOB Korea | 673.5 | 677.0 | 682.0 | 680.0 | 675.0 | 683.0 | 682.0 | 680.0 | 689.0 | 695.0 |
| | **SM** | FOB Korea | 968.0 | 970.0 | 972.0 | 957.0 | 950.0 | 961.0 | 974.0 | 972.0 | 986.0 | 994.0 |

| Weekly Price | | | Last Week | 1W | 1M | 3M | 6M | 12M | YTD | 2014avg. | 2015avg. | 2016acc. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spot Price | **Naphtha** | CFR Japan | 417.0 | 424.5 | 422.5 | 338.0 | 345.5 | 559.0 | 413.5 | 865.9 | 493.0 | 370.8 |
| | *Change, %* | | | *(1.8)* | *(1.3)* | *23.4* | *20.7* | *(25.4)* | *0.8* | *(51.8)* | *(15.4)* | *12.5* |
| | **Ethylene** | CFR SE Asia | 1,090.0 | 1,130.0 | 1,125.0 | 990.0 | 885.0 | 1,405.0 | 1,090.0 | 1,401.1 | 1,103.7 | 1,063.6 |
| | *Change, %* | | | *(3.5)* | *(3.1)* | *10.1* | *23.2* | *(22.4)* | *0.0* | *(22.2)* | *(1.2)* | *2.5* |
| | **Propylene** | CFR SE Asia | 690.0 | 695.0 | 730.0 | 635.0 | 645.0 | 875.0 | 650.0 | 1,254.2 | 770.0 | 642.3 |
| | *Change, %* | | | *(0.7)* | *(5.5)* | *8.7* | *7.0* | *(21.1)* | *6.2* | *(45.0)* | *(10.4)* | *7.4* |
| | **Butadiene** | CFR SE Asia | 985.0 | 1,025.0 | 1,065.0 | 920.0 | 740.0 | 1,125.0 | 720.0 | 1,281.7 | 877.5 | 921.4 |
| | *Change, %* | | | *(3.9)* | *(7.5)* | *7.1* | *33.1* | *(12.4)* | *36.8* | *(23.2)* | *12.3* | *6.9* |
| | **Benzene** | CFR SE Asia | 625.0 | 640.0 | 660.0 | 562.5 | 547.5 | 747.5 | 580.0 | 1,243.1 | 690.0 | 605.0 |
| | *Change, %* | | | *(2.3)* | *(5.3)* | *11.1* | *14.2* | *(16.4)* | *7.8* | *(49.7)* | *(9.4)* | *3.3* |
| | **Toluene** | CFR SE Asia | 620.0 | 650.0 | 670.0 | 590.0 | 575.0 | 800.0 | 630.0 | 1,082.5 | 700.8 | 627.5 |
| | *Change, %* | | | *(4.6)* | *(7.5)* | *5.1* | *7.8* | *(22.5)* | *(1.6)* | *(42.7)* | *(11.5)* | *(1.2)* |
| | **Xylene** | CFR SE Asia | 640.0 | 645.0 | 660.0 | 580.0 | 575.0 | 800.0 | 625.0 | 1,055.7 | 699.3 | 621.6 |
| | *Change, %* | | | *(0.8)* | *(3.0)* | *10.3* | *11.3* | *(20.0)* | *2.4* | *(39.4)* | *(8.5)* | *3.0* |
| Spread | **Ethylene** | -Naphtha | 673.0 | 705.5 | 702.5 | 652.0 | 539.5 | 846.0 | 676.5 | 535.2 | 610.6 | 692.8 |
| | *Change, %* | | | *(4.6)* | *(4.2)* | *3.2* | *24.7* | *(20.4)* | *(0.5)* | *25.7* | *10.2* | *(2.9)* |
| | **Propylene** | -Naphtha | 273.0 | 270.5 | 307.5 | 297.0 | 299.5 | 316.0 | 236.5 | 388.3 | 277.0 | 271.5 |
| | *Change, %* | | | *0.9* | *(11.2)* | *(8.1)* | *(8.8)* | *(13.6)* | *15.4* | *(29.7)* | *(1.4)* | *0.6* |
| | **Butadiene** | -Naphtha | 568.0 | 600.5 | 642.5 | 582.0 | 394.5 | 566.0 | 306.5 | 415.9 | 384.5 | 550.6 |
| | *Change, %* | | | *(5.4)* | *(11.6)* | *(2.4)* | *44.0* | *0.4* | *85.3* | *36.6* | *47.7* | *3.2* |
| | **Benzene** | -Naphtha | 208.0 | 215.5 | 237.5 | 224.5 | 202.0 | 188.5 | 166.5 | 377.3 | 197.0 | 234.2 |
| | *Change, %* | | | *(3.5)* | *(12.4)* | *(7.3)* | *3.0* | *10.3* | *24.9* | *(44.9)* | *5.6* | *(11.2)* |
| | **Toluene** | -Naphtha | 203.0 | 225.5 | 247.5 | 252.0 | 229.5 | 241.0 | 216.5 | 216.6 | 207.8 | 256.7 |
| | *Change, %* | | | *(10.0)* | *(18.0)* | *(19.4)* | *(11.5)* | *(15.8)* | *(6.2)* | *(6.3)* | *(2.3)* | *(20.9)* |
| | **Xylene** | -Naphtha | 223.0 | 220.5 | 237.5 | 242.0 | 229.5 | 241.0 | 211.5 | 189.9 | 206.3 | 250.8 |
| | *Change, %* | | | *1.1* | *(6.1)* | *(7.9)* | *(2.8)* | *(7.5)* | *5.4* | *17.4* | *8.1* | *(11.1)* |

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

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| Weekly Price | | | Last Week | 1W | 1M | 3M | 6M | 12M | YTD | 2014avg. | 2015avg. | 2016acc. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spot Price | HDPE | CFR SE Asia | 1,145.0 | 1,185.0 | 1,195.0 | 1,125.0 | 1,075.0 | 1,370.0 | 1,065.0 | 1,524.9 | 1,230.1 | 1,140.5 |
| | *Change, %* | | | (3.4) | (4.2) | 1.8 | 6.5 | (16.4) | 7.5 | (24.9) | (6.9) | 0.4 |
| | MEG | CFR SE Asia | 605.0 | 622.5 | 655.0 | 670.0 | 605.0 | 920.0 | 617.5 | 934.1 | 780.8 | 643.1 |
| | *Change, %* | | | (2.8) | (7.6) | (9.7) | 0.0 | (34.2) | (2.0) | (35.2) | (22.5) | (5.9) |
| | PVC | CFR SE Asia | 800.0 | 825.0 | 820.0 | 745.0 | 725.0 | 855.0 | 715.0 | 1,013.9 | 820.8 | 769.5 |
| | *Change, %* | | | (3.0) | (2.4) | 7.4 | 10.3 | (6.4) | 11.9 | (21.1) | (2.5) | 4.0 |
| | PP | CFR SE Asia | 955.0 | 965.0 | 1,020.0 | 880.0 | 835.0 | 1,355.0 | 835.0 | 1,503.0 | 1,109.8 | 935.9 |
| | *Change, %* | | | (1.0) | (6.4) | 8.5 | 14.4 | (29.5) | 14.4 | (36.5) | (13.9) | 2.0 |
| | 2-EH | CFR Korea | 790.0 | 810.0 | 810.0 | 700.0 | 685.0 | 1,050.0 | 680.0 | 1,397.1 | 930.1 | 746.6 |
| | *Change, %* | | | (2.5) | (2.5) | 12.9 | 15.3 | (24.8) | 16.2 | (43.5) | (15.1) | 5.8 |
| | ABS | CFR SE Asia | 1,270.0 | 1,270.0 | 1,345.0 | 1,155.0 | 1,120.0 | 1,660.0 | 1,130.0 | 1,897.7 | 1,431.1 | 1,232.0 |
| | *Change, %* | | | 0.0 | (5.6) | 10.0 | 13.4 | (23.5) | 12.4 | (33.1) | (11.3) | 3.1 |
| | SBR | CFR SE Asia | 1,440.0 | 1,510.0 | 1,535.0 | 1,230.0 | 1,210.0 | 1,500.0 | 1,150.0 | | 1,332.1 | 1,349.8 |
| | *Change, %* | | | (4.6) | (6.2) | 17.1 | 19.0 | (4.0) | 25.2 | | 8.1 | 6.7 |
| | SM | CFR SE Asia | 1,017.5 | 1,045.0 | 1,082.5 | 1,040.0 | 940.0 | 1,315.0 | 910.0 | 1,547.1 | 1,100.7 | 1,040.5 |
| | *Change, %* | | | (2.6) | (6.0) | (2.2) | 8.2 | (22.6) | 11.8 | (34.2) | (7.6) | (2.2) |
| | Caustic | FOB NEA | 295.0 | 292.5 | 290.0 | 287.5 | 290.0 | 307.5 | 285.0 | 310.0 | 296.8 | 287.7 |
| | *Change, %* | | | 0.9 | 1.7 | 2.6 | 1.7 | (4.1) | 3.5 | (4.8) | (0.6) | 2.5 |
| | PX | CFR SE Asia | 782.5 | 795.0 | 822.5 | 745.0 | 735.0 | 905.0 | 762.5 | 1,228.5 | 842.9 | 769.3 |
| | *Change, %* | | | (1.6) | (4.9) | 5.0 | 6.5 | (13.5) | 2.6 | (36.3) | (7.2) | 1.7 |
| | PO | CFR China | 1,235.0 | 1,312.5 | 1,222.5 | 1,157.5 | 1,057.5 | 1,775.0 | 1,257.5 | 2,179.2 | 1,683.4 | 1,221.0 |
| | *Change, %* | | | (5.9) | 1.0 | 6.7 | 16.8 | (30.4) | (1.8) | (43.3) | (26.6) | 1.1 |
| | Caprolactam | CFR SE Asia | 1,340.0 | 1,340.0 | 1,320.0 | 1,150.0 | 1,240.0 | 1,810.0 | 1,260.0 | 2,233.4 | 1,581.5 | 1,247.3 |
| | *Change, %* | | | 0.0 | 1.5 | 16.5 | 8.1 | (26.0) | 6.3 | (40.0) | (15.3) | 7.4 |
| | PTA | CFR SE Asia | 627.5 | 627.5 | 632.5 | 580.0 | 562.5 | 707.5 | 585.0 | 911.7 | 648.0 | 601.0 |
| | *Change, %* | | | 0.0 | (0.8) | 8.2 | 11.6 | (11.3) | 7.3 | (31.2) | (3.2) | 4.4 |
| Spread | HDPE | | 728.0 | 760.5 | 772.5 | 787.0 | 729.5 | 811.0 | 651.5 | 659.0 | 737.1 | 769.7 |
| | *Change, %* | | | (4.3) | (5.8) | (7.5) | (0.2) | (10.2) | 11.7 | 10.5 | (1.2) | (5.4) |
| | MEG | | 188.0 | 198.0 | 232.5 | 332.0 | 259.5 | 361.0 | 204.0 | 68.2 | 287.8 | 272.3 |
| | *Change, %* | | | (5.1) | (19.1) | (43.4) | (27.6) | (47.9) | (7.8) | 175.5 | (34.7) | (31.0) |
| | PVC | | 383.0 | 400.5 | 397.5 | 407.0 | 379.5 | 296.0 | 301.5 | 148.0 | 327.8 | 398.8 |
| | *Change, %* | | | (4.4) | (3.6) | (5.9) | 0.9 | 29.4 | 27.0 | 158.7 | 16.8 | (3.9) |
| | PP | | 538.0 | 540.5 | 597.5 | 542.0 | 489.5 | 796.0 | 421.5 | 637.1 | 616.8 | 565.1 |
| | *Change, %* | | | (0.5) | (10.0) | (0.7) | 9.9 | (32.4) | 27.6 | (15.6) | (12.8) | (4.8) |
| | 2-EH | | 373.0 | 385.5 | 387.5 | 362.0 | 339.5 | 491.0 | 266.5 | 531.3 | 437.0 | 375.8 |
| | *Change, %* | | | (3.2) | (3.7) | 3.0 | 9.9 | (24.0) | 40.0 | (29.8) | (14.7) | (0.7) |
| | ABS | | 853.0 | 845.5 | 922.5 | 817.0 | 774.5 | 1,101.0 | 716.5 | 1,031.9 | 938.1 | 861.3 |
| | *Change, %* | | | 0.9 | (7.5) | 4.4 | 10.1 | (22.5) | 19.1 | (17.3) | (9.1) | (1.0) |
| | SBR | BD spread | 455.0 | 485.0 | 470.0 | 310.0 | 470.0 | 375.0 | 430.0 | | 454.7 | 428.4 |
| | *Change, %* | | | (6.2) | (3.2) | 46.8 | (3.2) | 21.3 | 5.8 | | 0.1 | 6.2 |
| | SM | | 600.5 | 620.5 | 660.0 | 702.0 | 594.5 | 756.0 | 496.5 | 681.2 | 607.7 | 669.7 |
| | *Change, %* | | | (3.2) | (9.0) | (14.5) | 1.0 | (20.6) | 20.9 | (11.8) | (1.2) | (10.3) |
| | Caustic | | | | | | | | | | | |
| | *Change, %* | | | | | | | | | | | |
| | PX | | 365.5 | 370.5 | 400.0 | 407.0 | 389.5 | 346.0 | 349.0 | 362.6 | 349.9 | 398.5 |
| | *Change, %* | | | (1.3) | (8.6) | (10.2) | (6.2) | 5.6 | 4.7 | 0.8 | 4.5 | (8.3) |
| | PO | propylene sprea | 545.0 | 617.5 | 492.5 | 522.5 | 412.5 | 900.0 | 607.5 | 925.0 | 913.4 | 578.8 |
| | *Change, %* | | | (11.7) | 10.7 | 4.3 | 32.1 | (39.4) | (10.3) | (41.1) | (40.3) | (5.8) |
| | Caprolactam | benzene sprea | 715.0 | 700.0 | 660.0 | 587.5 | 692.5 | 1,062.5 | 680.0 | 990.3 | 891.6 | 642.3 |
| | *Change, %* | | | 2.1 | 8.3 | 21.7 | 3.2 | (32.7) | 5.1 | (27.8) | (19.8) | 11.3 |
| | PTA | px spread | 79.8 | 71.0 | 56.8 | 58.5 | 48.0 | 74.0 | 51.3 | 51.8 | 58.0 | 62.5 |
| | *Change, %* | | | 12.3 | 40.5 | 36.3 | 66.1 | 7.8 | 55.6 | 54.1 | 37.5 | 27.6 |

자료 : Cischem, Platts, SK증권

참고 : Spread는 Naphtha spread로 일괄적용

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## Global peers

| | Currency | 06/02 | 1D | 1W | 1M | 3M | 6M | 12M | YTD | MKT CAP (mil USD) | PER 15 | PER 16E | PBR 15 | PBR 16E | EV/EBITDA 15 | EV/EBITDA 16E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***Petrochemical*** | | | | | | | | | | | | | | | | |
| Dow Chemical | USD | 52.2 | 1.3 | 0.5 | (0.8) | 5.3 | (0.1) | (0.8) | 1.5 | 58,657 | 14.8 | 13.4 | 2.4 | 2.4 | 8.2 | 7.6 |
| Du Pont | USD | 68.1 | 2.6 | 1.7 | 3.1 | 9.6 | 1.2 | 0.6 | 2.3 | 59,486 | 21.7 | 18.5 | 6.2 | 4.9 | 12.3 | 10.6 |
| Eastman | USD | 73.7 | (0.3) | 0.1 | (4.3) | 9.5 | 2.7 | (4.2) | 9.2 | 10,897 | 10.5 | 9.5 | 2.4 | 2.1 | 8.1 | 7.7 |
| BASF | EUR | 69.6 | 0.1 | (0.2) | (0.5) | 11.7 | (7.9) | (16.1) | (1.6) | 71,329 | 15.2 | 13.8 | 2.0 | 2.0 | 7.8 | 7.3 |
| Akzo Nobel | EUR | 62.0 | 1.1 | (2.5) | (0.3) | 12.6 | (5.1) | (9.6) | 0.6 | 17,229 | 14.8 | 14.1 | 2.3 | 2.1 | 8.1 | 7.7 |
| Arkema | EUR | 74.4 | 0.4 | 1.2 | 6.8 | 28.5 | 11.0 | 10.0 | 15.2 | 6,266 | 14.9 | 12.8 | 1.5 | 1.4 | 6.3 | 5.9 |
| Lanxess | EUR | 43.4 | 1.2 | 0.6 | (5.7) | 6.0 | (7.1) | (13.5) | 1.6 | 4,428 | 20.1 | 15.5 | 1.6 | 1.5 | 5.7 | 5.2 |
| Sumitomo Chemical | JPY | 484 | (4.0) | 0.6 | (0.4) | (5.1) | (34.0) | (35.6) | (31.0) | 7,369 | 9.1 | 8.0 | 0.9 | 0.9 | 6.8 | 6.3 |
| Mitsubishi Chemical | JPY | 536 | (4.3) | (3.2) | (4.6) | (12.2) | (33.8) | (32.5) | (30.8) | 7,427 | 8.8 | 7.9 | 0.8 | 0.7 | 5.7 | 5.4 |
| Shin-Etsu Chemical | JPY | 6,188 | (2.9) | (2.0) | 1.1 | 4.1 | (11.0) | (17.8) | (6.5) | 24,592 | 17.5 | 16.2 | 1.2 | 1.2 | 6.0 | 5.5 |
| Asahi Kasei | JPY | 704 | (3.8) | (5.4) | (5.0) | 5.0 | (15.4) | (37.3) | (14.5) | 9,076 | 10.6 | 9.5 | 0.8 | 0.8 | 5.1 | 4.8 |
| JSR | JPY | 1,605 | (3.3) | 0.0 | 8.6 | (2.4) | (17.7) | (28.3) | (15.5) | 3,337 | 14.1 | 13.1 | 1.0 | 0.9 | 5.9 | 5.4 |
| Nitto Denko | JPY | 6,986 | (1.8) | (0.2) | 6.2 | 6.5 | (18.7) | (27.6) | (21.6) | 11,164 | 17.3 | 15.3 | 1.7 | 1.6 | 7.2 | 6.4 |
| SABIC | SAR | 82.6 | 1.1 | 0.2 | (1.8) | 11.9 | (7.9) | (20.6) | 7.9 | 66,044 | 16.7 | 14.9 | 1.4 | 1.4 | 7.7 | 7.0 |
| Yansab | SAR | 42.0 | 0.6 | 3.3 | 2.8 | 18.2 | (6.8) | (20.0) | 29.7 | 6,306 | 17.5 | 15.7 | 1.5 | 1.5 | 9.0 | 8.6 |
| Formosa Plastics | TWD | 78.9 | (0.1) | 1.0 | (1.7) | (1.4) | 4.8 | 4.2 | 2.5 | 15,400 | 16.1 | 14.9 | 1.6 | 1.6 | 23.9 | 21.6 |
| Formosa Fiber | TWD | 82.3 | 0.5 | 2.4 | (0.1) | 8.9 | 15.9 | 9.6 | 11.2 | 14,790 | 16.5 | 15.9 | 1.6 | 1.6 | 13.7 | 12.9 |
| Nan Ya Plastics | TWD | 61.7 | (0.5) | 1.6 | (2.4) | (4.5) | 1.1 | (15.6) | 1.1 | 15,003 | 14.1 | 14.4 | 1.4 | 1.4 | 13.8 | 13.3 |
| Sinopec Shanghai | CNY | 6.23 | 0.2 | 1.6 | (7.3) | (6.2) | (5.9) | (30.9) | (3.9) | 8,636 | 17.2 | 17.9 | 3.0 | 2.6 | 8.5 | 8.8 |
| Sinopec Yizheng(Fibe | CNY | 4.01 | (0.7) | 3.1 | (11.1) | (36.6) | (53.4) | (57.8) | (50.9) | 7,741 | #N/A N/A | 401.0 | 2.3 | 2.3 | 15.8 | 13.3 |
| Reliance | INR | 956 | 0.3 | 1.0 | (3.1) | (4.5) | (2.2) | 6.4 | (5.8) | 46,068 | 10.9 | 9.3 | 1.1 | 1.0 | 8.8 | 7.2 |
| Industries Qatar | QAR | 95.2 | (0.9) | (2.9) | (7.1) | (9.8) | (11.6) | (32.4) | (14.3) | 15,822 | 14.2 | 13.0 | 1.7 | 1.7 | 52.8 | 51.8 |
| PTT Chemical | THB | 60.5 | 1.7 | (0.4) | (3.2) | 9.5 | 15.2 | (7.6) | 21.0 | 7,573 | 10.9 | 10.0 | 1.1 | 1.0 | 5.3 | 5.0 |
| Petronas | MYR | 6.5 | (1.2) | (0.9) | (3.1) | (5.8) | (4.1) | 3.7 | (10.6) | 12,523 | 19.0 | 17.2 | 2.0 | 1.9 | 9.3 | 8.5 |
| LG화학 | KRW | 269,000 | (0.2) | (1.3) | (9.1) | (13.8) | (14.7) | 5.9 | (18.1) | 15,011 | 0.0 | 13.2 | 0.0 | 1.4 | 0.0 | 5.2 |
| 롯데케미칼 | KRW | 279,000 | 0.5 | (0.9) | (4.5) | (15.7) | 13.4 | 15.8 | 14.6 | 8,053 | 0.0 | 7.0 | 0.0 | 1.1 | 0.0 | 3.9 |
| 한화케미칼 | KRW | 23,450 | 0.0 | 1.3 | (6.6) | (8.6) | (12.3) | 22.8 | (13.8) | 3,254 | 0.0 | 8.7 | 0.0 | 0.8 | 0.0 | 8.3 |
| 금호석유 | KRW | 61,200 | (1.1) | (0.6) | (11.3) | (3.9) | 1.8 | (23.6) | 17.5 | 1,570 | 0.0 | 14.0 | 0.0 | 1.2 | 0.0 | 10.2 |
| SKC | KRW | 27,650 | (0.7) | (0.9) | (2.0) | (11.1) | (20.4) | (31.0) | (18.2) | 861 | 0.0 | 8.2 | 0.0 | 0.7 | 0.0 | 7.5 |
| 국도화학 | KRW | 60,100 | 4.3 | 2.0 | (5.9) | (3.1) | 0.3 | 0.8 | 1.3 | 294 | 0.0 | 7.0 | 0.0 | 0.8 | 0.0 | 3.7 |
| 효성 | KRW | 3,935 | (2.1) | (4.5) | (5.6) | 33.2 | 38.8 | 20.3 | 50.8 | 3,445 | 0.0 | 7.2 | 0.0 | 1.1 | 0.0 | 6.9 |
| **Average** | | | **(0.4)** | **(0.1)** | **(2.6)** | **1.2** | **(5.9)** | **(11.7)** | **(2.2)** | | | | | | | |
| ***Refinery*** | | | | | | | | | | | | | | | | |
| Valero | USD | 55.7 | (0.1) | 3.0 | (6.9) | (10.2) | (22.3) | (4.8) | (21.2) | 26,177 | 9.5 | 8.1 | 1.2 | 1.1 | 4.9 | 4.5 |
| Conoco Phillips | USD | 44.4 | 0.7 | (0.8) | (5.3) | 21.6 | (15.5) | (30.7) | (4.9) | 54,960 | #N/A N/A | 168.1 | 1.4 | 1.5 | 14.7 | 8.0 |
| Formosa Petrochemi | TWD | 88.2 | 0.3 | (0.8) | (3.8) | 3.0 | 15.1 | 16.2 | 11.9 | 25,761 | 18.3 | 18.5 | 3.1 | 3.0 | 11.5 | 11.6 |
| Tesoro | USD | 81.5 | 1.8 | 5.4 | 0.6 | (0.8) | (27.7) | (5.0) | (22.6) | 9,779 | 11.1 | 10.9 | 1.7 | 1.6 | 6.1 | 5.8 |
| Marathon Petroleum | USD | 36.7 | 0.7 | 6.2 | (4.9) | 5.7 | (36.8) | (28.8) | (29.2) | 19,434 | 10.3 | 8.7 | 1.4 | 1.3 | 7.0 | 6.3 |
| Devon Energy | USD | 36.8 | 1.8 | 2.5 | 6.5 | 71.1 | (15.4) | (43.2) | 15.0 | 19,288 | #N/A N/A | 44.3 | 3.1 | 3.0 | 17.1 | 10.1 |
| Hollyfrontier | USD | 28.0 | (0.7) | 5.0 | (21.2) | (15.7) | (42.4) | (31.7) | (29.9) | 4,934 | 12.3 | 8.3 | 0.9 | 0.9 | 6.2 | 5.1 |
| Phillips 66 | USD | 80.8 | (0.0) | 1.0 | (1.7) | (4.4) | (10.6) | 2.2 | (1.2) | 42,483 | 14.9 | 11.7 | 1.8 | 1.7 | 8.5 | 7.1 |
| Murphy Oil | USD | 30.5 | (0.7) | (1.8) | (13.3) | 57.9 | 12.3 | (29.0) | 35.7 | 5,247 | #N/A N/A | #N/A N/A | 1.0 | 1.1 | 9.5 | 6.7 |
| JX Holdings | JPY | 419.5 | (1.9) | (2.4) | (8.7) | (8.3) | (16.7) | (24.9) | (17.5) | 9,628 | 7.5 | 7.2 | 0.6 | 0.6 | 8.3 | 8.4 |
| Cosmo Oil | JPY | 164.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | (23.4) | 0.0 | 1,151 | #N/A N/A | #N/A N/A | #N/A N/A | #N/A N/A | #N/A N/A | #N/A N/A |
| Idemitsu | JPY | 2,185.0 | (1.5) | (4.7) | (6.7) | 22.7 | 5.8 | (12.1) | 12.7 | 3,215 | 6.3 | 5.9 | 0.6 | 0.5 | 6.7 | 6.4 |
| Tonengeneral | JPY | 1,014.0 | (2.1) | (2.0) | (0.7) | 15.6 | (14.6) | (14.4) | (0.8) | 3,413 | 9.5 | 9.1 | 1.4 | 1.3 | 6.5 | 6.6 |
| Nesteoil | EUR | 30.4 | (0.6) | 1.7 | 8.3 | 7.5 | 11.5 | 28.1 | 10.2 | 0 | 11.7 | 12.5 | 2.2 | 2.0 | 7.3 | 7.7 |
| Ashland | USD | 114.5 | 1.5 | 0.8 | 1.5 | 16.6 | 2.3 | (10.4) | 11.5 | 7,108 | 16.0 | 14.8 | 2.6 | 2.6 | 9.1 | 8.8 |
| Fuchs Petrolub | EUR | 36.8 | 0.9 | (1.1) | (3.3) | (3.6) | (16.6) | (8.9) | (15.4) | 5,417 | 20.6 | 19.7 | 4.2 | 3.8 | 11.9 | 11.4 |
| SK이노베이션 | KRW | 157,000 | (0.3) | 0.6 | 0.6 | 5.7 | 23.6 | 35.3 | 20.8 | 12,224 | 0.0 | 8.1 | 0.0 | 0.8 | 0.0 | 4.7 |
| S-Oil | KRW | 84,200 | 0.2 | 1.8 | (3.8) | 2.1 | 13.0 | 30.1 | 6.0 | 7,982 | 0.0 | 7.8 | 0.0 | 1.5 | 0.0 | 5.3 |
| GS | KRW | 51,400 | (0.2) | (1.0) | (6.5) | (6.7) | 0.4 | 5.8 | 1.4 | 4,022 | 0.0 | 7.2 | 0.0 | 0.7 | 0.0 | 8.4 |
| **Average** | | | **(0.0)** | **0.7** | **(3.6)** | **9.5** | **(7.1)** | **(7.9)** | **(0.9)** | | | | | | | |

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

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## Global peers

| | Currency | 06/02 | 1D | 1W | 1M | 3M | 6M | 12M | YTD | MKT CAP (mil USD) | PER 15 | PER 16E | PBR 15 | PBR 16E | EV/EBITDA 15 | EV/EBITDA 16E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***E&P/Shale*** | | | | | | | | | | | | | | | | |
| Exxon Mobil | USD | 89 | (0.8) | (1.4) | (0.7) | 7.0 | 11.3 | 4.0 | 13.6 | 367,099 | 33.4 | 21.0 | 2.2 | 2.1 | 11.4 | 8.7 |
| BP | GBP | 353 | (0.1) | (3.1) | (5.5) | 0.1 | (7.6) | (21.5) | (0.3) | 95,074 | 28.1 | 13.4 | 1.0 | 1.0 | 6.0 | 4.7 |
| Shell | EUR | 1,661 | (0.3) | (1.3) | (6.7) | 0.2 | (0.2) | (14.1) | 8.8 | 192,569 | 21.4 | 12.4 | 0.9 | 0.9 | 6.8 | 5.0 |
| Chevron | USD | 101 | (0.6) | (1.0) | (2.7) | 15.4 | 11.4 | (2.0) | 11.7 | 189,469 | 75.5 | 21.9 | 1.3 | 1.3 | 9.2 | 6.5 |
| Total | EUR | 42 | (1.6) | (3.8) | (3.6) | 0.3 | (9.2) | (8.3) | 2.6 | 117,086 | 15.8 | 11.3 | 1.2 | 1.1 | 7.4 | 5.7 |
| Sinopec | CNY | 5 | 0.0 | 1.7 | (0.8) | 6.2 | (5.1) | (35.6) | (2.6) | 87,922 | 18.9 | 13.2 | 0.8 | 0.8 | 5.7 | 5.0 |
| Petrochina | CNY | 7 | 0.1 | 1.5 | (1.2) | (2.8) | (15.2) | (40.7) | (12.2) | 195,135 | 87.3 | 23.6 | 1.1 | 1.1 | 8.1 | 6.6 |
| CNOOC | CNY | 13 | 0.3 | 2.0 | (4.3) | (3.4) | (22.9) | (54.3) | (19.1) | 7,065 | 91.6 | 42.1 | 1.3 | 1.3 | 14.1 | 11.6 |
| Gazprom | RUB | 144 | (0.5) | (3.3) | (14.5) | 2.8 | 5.2 | 2.3 | 5.8 | 50,925 | 3.9 | 3.7 | 0.3 | 0.3 | 3.9 | 3.3 |
| Rosneft | RUB | 311 | (0.5) | (2.7) | (11.3) | 8.5 | 20.4 | 31.1 | 22.9 | 49,293 | 9.7 | 7.0 | 1.1 | 0.9 | 4.7 | 3.9 |
| Anadarko | USD | 52 | (1.4) | (1.1) | (0.5) | 21.2 | (12.0) | (39.0) | 6.4 | 26,384 | #N/A N/A | #N/A N/A | 2.0 | 2.0 | 13.7 | 9.0 |
| Petrobras | BRL | 8 | 2.7 | (3.1) | (17.4) | 48.7 | 11.7 | (34.6) | 25.4 | 35,265 | 28.0 | 5.7 | 0.5 | 0.4 | 5.6 | 4.8 |
| Lukoil | USD | 2,597 | 0.7 | (3.0) | (5.6) | (1.6) | 2.4 | 3.3 | 10.7 | 32,679 | 6.2 | 4.8 | 0.4 | 0.4 | N/A | N/A |
| Kinder | USD | 18 | 0.0 | 0.2 | 2.1 | (3.5) | (13.1) | (56.5) | 20.4 | 47,497 | 27.0 | 23.1 | 1.1 | 1.1 | 11.5 | 10.9 |
| Statoil | NOK | 131 | 0.2 | (4.9) | (6.1) | 2.2 | (3.2) | (11.2) | 6.1 | 50,227 | 34.2 | 14.8 | 1.2 | 1.2 | 4.0 | 2.9 |
| BHP | AUD | 18 | (1.4) | (6.0) | (12.8) | 9.0 | (2.7) | (35.6) | 2.1 | 66,886 | 34.2 | 19.9 | 1.2 | 1.2 | 7.7 | 6.4 |
| PTT E&P | THB | 79 | 2.6 | 0.0 | 5.0 | 7.5 | 27.4 | (25.5) | 38.0 | 8,802 | 27.9 | 16.2 | 0.8 | 0.8 | 3.1 | 2.7 |
| Petronas gas | MYR | 22 | (0.5) | (0.1) | (1.8) | (3.4) | (6.2) | (1.6) | (4.9) | 10,283 | 23.5 | 23.1 | 3.5 | 3.4 | 13.7 | 13.3 |
| Chesapeake | USD | 4 | (2.7) | 0.5 | (35.5) | 25.0 | (23.0) | (69.8) | (5.6) | 2,910 | #N/A N/A | 9.4 | 5.0 | 3.0 | 14.5 | 9.6 |
| Noble Energy | USD | 35 | (0.1) | (0.6) | (2.7) | 14.1 | 0.1 | (19.5) | 7.6 | 15,225 | #N/A N/A | #N/A N/A | 1.6 | 1.7 | 10.8 | 9.1 |
| **Average** | | **0** | **(0.2)** | **(1.5)** | **(6.3)** | **7.7** | **(1.5)** | **(21.5)** | **6.9** | | | | | | | |
| ***PV*** | | | | | | | | | | | | | | | | |
| WACKER | EUR | 84.8 | 0.7 | 1.9 | 1.6 | 12.6 | 1.1 | (15.6) | 9.4 | 4,934 | 31.3 | 18.3 | 1.6 | 1.5 | 5.6 | 5.1 |
| GCL-Poly | HKD | 1.1 | (1.8) | (0.9) | (4.3) | (5.9) | (25.4) | (46.4) | (4.3) | 2,655 | 7.1 | 6.4 | 0.8 | 0.7 | 6.1 | 5.3 |
| REC | NOK | 107.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 0.0 | 519 | #N/A N/A | #N/A N/A | #N/A N/A | #N/A N/A | #N/A N/A | #N/A N/A |
| SunPower | USD | 17.4 | (1.4) | 1.8 | (10.4) | (27.8) | (33.5) | (43.5) | (42.0) | 2,402 | 13.2 | 10.9 | 1.5 | 1.5 | 8.0 | 6.4 |
| Canadian Solar | USD | 18.1 | (3.2) | (4.0) | 3.1 | (23.1) | (24.4) | (43.9) | (37.6) | 1,037 | 8.4 | 7.1 | 1.0 | 0.8 | 8.4 | 7.0 |
| JA Solar | USD | 7.8 | (1.5) | (3.8) | (8.8) | (14.4) | (11.0) | (5.3) | (19.5) | 372 | 4.8 | 4.2 | 0.4 | 0.3 | 3.0 | 2.6 |
| Trina Solar | USD | 8.0 | (0.7) | (7.7) | (15.2) | (22.9) | (17.8) | (35.2) | (27.0) | 743 | 6.3 | 6.4 | 0.6 | 0.5 | 6.0 | 5.7 |
| Solar City | USD | 21.7 | 1.4 | (8.6) | (26.6) | 11.5 | (36.8) | (64.2) | (57.5) | 2,133 | #N/A N/A | #N/A N/A | 5.9 | #N/A N/A | #N/A N/A | #N/A N/A |
| Yingli | USD | 3.8 | 1.9 | 5.8 | 6.4 | (13.9) | (49.6) | (63.5) | (15.5) | 70 | #N/A N/A | #N/A N/A | #N/A N/A | #N/A N/A | 42.7 | 82.0 |
| First Solar | USD | 49.8 | (0.5) | 0.2 | (9.1) | (27.9) | (16.5) | (2.2) | (24.5) | 5,096 | 11.6 | 15.8 | 0.8 | 0.8 | 5.9 | 6.4 |
| 한화솔라원 | USD | 12.2 | (5.5) | (0.7) | (3.2) | (30.6) | (34.0) | (30.7) | (44.4) | 1,025 | 7.3 | 7.1 | #N/A N/A | #N/A N/A | 5.3 | 5.2 |
| OCI | KRW | 93,900 | (5.7) | (4.4) | (18.7) | (2.4) | 13.8 | (2.8) | 25.2 | 1,886 | 0.0 | 7.1 | 0.0 | 0.7 | 0.0 | 8.3 |
| 웅진에너지 | KRW | 1,245 | 7.8 | 11.2 | 2.5 | (26.1) | (36.2) | (11.4) | (28.0) | 113 | N/A | 0.0 | 0.7 | 0.0 | 8.3 | 0.0 |
| 신성솔라에너지 | KRW | 1,640 | (0.9) | (0.3) | (4.4) | (6.6) | 0.2 | 32.2 | (11.6) | 139 | N/A | 0.7 | 0.0 | 8.3 | 0.0 | 7.2 |
| **Average** | | | **(0.7)** | **(0.7)** | **(6.2)** | **(12.7)** | **(19.3)** | **(23.6)** | **(19.8)** | | | | | | | |
| ***Gas Company*** | | | | | | | | | | | | | | | | |
| Towngas China | HKD | 4.4 | 2.1 | 6.9 | 7.9 | 0.5 | (10.5) | (45.6) | (3.3) | 1,492 | 9.1 | 8.7 | 0.8 | 0.8 | 10.9 | 10.3 |
| Kulun | HKD | 6.4 | 0.2 | 2.6 | (5.0) | 8.6 | (7.8) | (22.5) | (7.0) | 6,669 | 13.2 | 10.4 | 1.0 | 0.9 | 5.4 | 4.9 |
| Beijing Enterprise | HKD | 41.2 | 2.0 | 6.7 | 1.5 | 8.0 | (12.6) | (37.2) | (12.2) | 6,734 | 8.3 | 7.8 | 0.8 | 0.8 | 13.7 | 12.4 |
| ENN Energy | HKD | 38.2 | 1.5 | 1.1 | 0.5 | (2.4) | (6.7) | (24.6) | (7.7) | 5,314 | 12.0 | 10.7 | 2.2 | 1.9 | 7.7 | 7.0 |
| China Resources Gas | HKD | 22.0 | 1.6 | 1.9 | (0.2) | 1.2 | 0.0 | (7.6) | (5.2) | 6,282 | 14.2 | 12.8 | 2.4 | 2.1 | 9.0 | 8.1 |
| China Gas Holdings | HKD | 11.0 | (0.2) | 1.7 | (1.8) | 0.5 | 1.1 | (16.5) | (1.4) | 6,963 | 12.6 | 11.1 | 2.2 | 1.9 | 10.2 | 9.1 |
| Shenzen Gas | HKD | 11.6 | (0.3) | 0.5 | (8.3) | (6.3) | (8.8) | (14.0) | (18.8) | 2,845 | 11.0 | 10.1 | 1.1 | 1.0 | 7.4 | 6.8 |
| Shann Xi | CNY | 10.3 | (0.1) | 3.6 | 5.4 | 17.4 | (18.5) | (47.4) | (18.5) | 1,736 | 16.3 | 13.9 | #N/A N/A | #N/A N/A | #N/A N/A | #N/A N/A |
| Suntien | HKD | 0.8 | (2.4) | (3.6) | (10.1) | (20.0) | (37.0) | (57.2) | (35.5) | 382 | 8.5 | 6.5 | 0.3 | 0.3 | 8.6 | 7.1 |
| China Oil & Gas | HKD | 0.6 | 1.8 | 7.5 | 5.6 | 28.1 | (3.4) | (36.7) | 7.5 | 427 | 10.6 | 9.2 | 1.1 | 1.0 | 6.0 | 5.3 |
| **Average** | | | **0.6** | **2.9** | **(0.5)** | **3.6** | **(10.4)** | **(30.9)** | **(10.2)** | | | | | | | |
| ***EV*** | | | | | | | | | | | | | | | | |
| LG화학 | KRW | 269,000 | (0.2) | (1.3) | (9.1) | (13.8) | (14.7) | 5.9 | (18.1) | 15,011 | 12.5 | 11.2 | 1.3 | 1.2 | 5.4 | 5.0 |
| 삼성SDI | KRW | 118,000 | 0.9 | 8.8 | 3.1 | 16.8 | (1.3) | (3.3) | 3.5 | 6,833 | 18.9 | 26.4 | 0.7 | 0.7 | #N/A N/A | 8.6 |
| Panasonic | JPY | 976.1 | (3.4) | 0.8 | 6.0 | (4.7) | (30.7) | (46.0) | (21.3) | 22,022 | 12.7 | 10.6 | 1.1 | 1.0 | 3.4 | 3.1 |
| GS Yuasa | JPY | 450.0 | (1.7) | (1.3) | 2.7 | (4.9) | (4.7) | (16.2) | (0.4) | 1,712 | 12.6 | 10.9 | 1.1 | 1.0 | 6.1 | 5.6 |
| NEC | JPY | 254.0 | (0.4) | 1.2 | (0.8) | (2.3) | (38.0) | (37.6) | (34.0) | 6,085 | 10.3 | 9.3 | 0.8 | 0.7 | 5.7 | 5.5 |
| BYD Auto | CNY | 59.9 | 0.3 | 2.0 | (5.9) | 11.2 | (5.1) | (21.2) | (7.0) | 19,505 | 35.4 | 29.0 | 4.0 | 3.5 | 15.4 | 13.5 |
| Tesla Motors | USD | 219.0 | (0.3) | (2.7) | (9.4) | 16.3 | (5.6) | (11.8) | (8.8) | 32,248 | 328.3 | 79.5 | 16.7 | 13.8 | 42.5 | 23.6 |
| Kandi Technologies | USD | 7.0 | 1.5 | 0.0 | (2.7) | (4.0) | (30.8) | (26.4) | (36.2) | 331 | #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** | | | **(0.4)** | **0.9** | **(2.0)** | **1.8** | **(16.4)** | **(19.6)** | **(15.3)** | | | | | | | |

* Bloomberg 기준 / valuation multiple 또한 Bloomberg consensus 기준임