

# The Officials

## The Benchmark Publication

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### Tug of war



Prices just can't decide between up or down. So, they do both. Up, then back down again. It's more fun that way. It keeps us guessing. Overall, though, the line of travel is clear. The downward plunge this afternoon was briefly interrupted by the EIA's stocks report showing a chunky draw on gasoline stocks, but quickly regathered for another dive. The fall continued even after the close at \$72.40/bbl, to quickly wipe out the daily settlement change, with some interest. Before 18:00 GMT we were troubling \$72.

Following the STEO yesterday, the EIA released its weekly inventory report, delayed from the usual Wednesday schedule by the federal holiday on Monday. Crude stocks grew by 2 mb nationwide, exceeding expectations of a 1.85 mb build and continuing a general trend of builds since late September. But the real action was in gasoline. You go in expecting a 1 mb build. What do you get? A 4.4 mb draw! The Americans aren't following in the Chinese footsteps with mass EV-adoption. They just love their gas guzzlers too much. We shouldn't expect an imminent reversal in US gasoline demand, either; holiday season is coming, so prepare for lots of driving around Thanksgiving and Christmas next month.

Exxon entered the window bidding for a Midland at Dated +\$1.40 and raised this incrementally to \$1.55 over Dated, 5c above its bid yesterday. But the American major cut a lonely figure in the window, the only one who came out to play, finding out his friends hadn't been let out by their parents. After such a chaotic window with bids flying left, right and centre yesterday, a moment of tranquillity was well deserved for traders. Even Petrolneos took a day off, bucking a trend of bidding or trading for the past 5 consecutive windows. Even the most ambitious occasionally need a moment to recover, or to focus on the shipping to Asia. The joint British-Chinese venture is putting those cargoes to work and is apparently planning to move a VLCC of North Sea Forties for late-November to early-December to Asia. Those saying lower allocations would see Chinese buyers chasing crude on the spot market were spot on. Looking at the North Sea and Dubai windows combined, PetroChina's been hoovering the stuff up.

### Summary

#### Physical and Futures

|                  |          | 14-Nov-24 | 1-Day Change | 7-Day Change |
|------------------|----------|-----------|--------------|--------------|
| Brent Jan (fut)  | (\$/bbl) | 72.400    | +0.230       | -2.690       |
| WTI Jan (fut)    | (\$/bbl) | 68.370    | +0.140       | -3.040       |
| Dubai Jan (phys) | (\$/bbl) | 71.545    | +0.270       | -2.585       |

#### OBI Continuous

|  |          |        |        |        |
|--|----------|--------|--------|--------|
|  | (\$/bbl) | 72.400 | +0.230 | -2.690 |
|--|----------|--------|--------|--------|

#### Crude Swaps Dec

|       |          |        |        |        |
|-------|----------|--------|--------|--------|
| Brent | (\$/bbl) | 72.040 | +0.210 | -2.670 |
| DFL   | (\$/bbl) | 0.410  | +0.010 | +0.180 |
| WTI   | (\$/bbl) | 68.270 | +0.140 | -3.000 |
| Dubai | (\$/bbl) | 71.240 | +0.220 | -2.650 |

#### Tenor

#### Crude Futures

|             |          | Jan-25 | Feb-25 | Mar-25 |
|-------------|----------|--------|--------|--------|
| Brent (fut) | (\$/bbl) | 72.400 | 72.070 | 71.830 |
| WTI (fut)   | (\$/bbl) | 68.370 | 68.110 | 67.900 |



## In detail

Once again, we had a big price move. And, as we've seen this week, much of it was undone by the time we reached the European close. After a big rise through the morning, Brent finally closed at \$72.40/bbl, a rise of \$0.23/bbl. Front spreads bulked up further, like a body builder preparing for competition, reaching 33c, from 30c yesterday and continuing their recovery. WTI saw a similar trajectory to Brent, gaining \$0.14/bbl to end the day at \$68.37/bbl. Big intraday price moves just aren't sticking at the moment. Other assets have moved decisively since the US elections, but oil just doesn't know which way to go. But long-term there's only one option... This sucker is going down.

US stocks are up: the S&P 500 is almost 5% higher since the start of last week, the Russell 2000 is up 6.3%. Cryptocurrencies have been booming and Bitcoin has gained more than 30%!! The gold game is over, though, and the shiny stuff has descended nearly 6%. The USD is keeping up its post-election momentum and today the DXY hit its highest point since October 2023. That's not helping crude buyers from non-dollar countries, many of whom are already struggling with weak economic performance (cough, cough Europe).

Surprisingly, however, Europe got a rare bit of good news today. Employment in Q3 grew more than expected, with a 1% rise y/y, beating expectations of 0.9%. We know, it's marginal, but we're just happy to see any improvement at all by this point 😊 The second estimate for Euro Area GDP for Q3 came in at 0.9% growth, y/y, in line with expectations. It's just everything else that's going to the dogs.

The most worrying thing is the industrial data. It's a real downer. Chinese diesel is dead in the water, deep in contraction and Europe isn't signalling that it'll be recovering any time soon, either. In September, Euro Area industrial production declined 2.8% y/y and 2% m/m! Output for capital goods particularly dragged on the print, down 3.8% m/m, reversing the gains made in August. As we're becoming accustomed to, Germany was the biggest culprit, whose production fell 2.7% m/m. Spain is doing its best to pick up the baton of European growth, with an 0.9% m/m expansion, but it's got a mountain to climb to overcome German sluggishness.

As was the case with the CPI print yesterday, US PPI came in entirely in line with expectations. The m/m figure saw 0.2% inflation, as prices of services rose and the costs for goods such as carbon steel scrap climbed too, as well as food prices. Excluding food and energy, Core CPI printed 0.3% m/m inflation. No need for alarmism here and the Fed is likely content with its strategy of containment and calm action. The OIS is now pricing 74 bp of cuts by the end of October next year, suggesting a more conservative approach, in line with the Fed's communication.

Well, we didn't believe it. But miracles do happen. Nigeria's NNPC says the west African country has increased crude and condensate production to 1.8 mb/d. They're over halfway to achieving the dream of 2 mb/d by December. Anything can happen in the next two weeks. Shoot for the moon and you could land among the stars

Exactly how that booming output sits with OPEC leaves plenty of room for speculation... Conveniently counting condensate within the total 1.8 mb/d figure could allow for a bit of slippage. That could come in handy, given Nigeria's agreed production quota is 1.5 mb/d. Nigeria typically produces around 250 kb/d of condensate and they didn't think to specify the volume of condensate production contributing to their total figure in the press release announcing the accomplishment... In any case, the national crackdown on crude theft appears to be paying dividends.

Speaking of West Africa, FGE believes Europe will be cutting refinery runs to compensate for losing export market share to the region, likely as Dangote fires up his cacking and coughing engine. There's already plenty of maintenance already going on, with Pernis as the flagship for maintenance season, and this could add fuel to the fire.

Speaking of cutting, Exxon reportedly wants to cut almost 20% of Pioneer's staff by May 2026, having acquired the Permian Basin operator. An aggressive efficiency drive inspired by a certain Mr Trump? Maybe. Struggling crude prices and bleak global demand outlook don't fill you with confidence looking at Exxon's upcoming earning potential.

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| <b>Front Month Outrights</b> |          |                |                  |                     |                     |
|------------------------------|----------|----------------|------------------|---------------------|---------------------|
| <b>December Swaps</b>        |          |                | <b>14-Nov-24</b> | <b>1-Day Change</b> | <b>7-Day Change</b> |
| <b>Crude</b>                 |          |                |                  |                     |                     |
| Brent                        | (\$/bbl) | <b>72.040</b>  | <b>+0.210</b>    | <b>-2.670</b>       |                     |
| WTI                          | (\$/bbl) | <b>68.270</b>  | <b>+0.140</b>    | <b>-3.000</b>       |                     |
| Dubai                        | (\$/bbl) | <b>71.240</b>  | <b>+0.220</b>    | <b>-2.650</b>       |                     |
| <b>Distillates</b>           |          |                |                  |                     |                     |
| Gasoil 0.1 NWE               | (\$/mt)  | <b>670.350</b> | <b>+6.150</b>    | <b>-8.470</b>       |                     |
| NWE Jet                      | (\$/mt)  | <b>719.600</b> | <b>+3.900</b>    | <b>-11.720</b>      |                     |
| Singapore 10ppm              | (\$/bbl) | <b>87.210</b>  | <b>+0.610</b>    | <b>-1.560</b>       |                     |
| Sing Kero                    | (\$/bbl) | <b>87.990</b>  | <b>+0.610</b>    | <b>-1.680</b>       |                     |
| <b>Gasoline</b>              |          |                |                  |                     |                     |
| RBOB                         | (c/gal)  | <b>194.980</b> | <b>+1.510</b>    | <b>-6.620</b>       |                     |
| EBOB                         | (\$/mt)  | <b>657.000</b> | <b>+4.860</b>    | <b>-20.150</b>      |                     |
| Singapore 92                 | (\$/bbl) | <b>77.670</b>  | <b>+0.400</b>    | <b>-2.670</b>       |                     |
| Singapore 95                 | (\$/bbl) | <b>82.110</b>  | <b>+0.200</b>    | <b>-2.680</b>       |                     |
| <b>Naphtha</b>               |          |                |                  |                     |                     |
| US C5 ENT                    | (c/gal)  | <b>145.280</b> | <b>-0.490</b>    | <b>-7.180</b>       |                     |
| NWE Naphtha                  | (\$/mt)  | <b>607.430</b> | <b>-3.290</b>    | <b>-33.100</b>      |                     |
| MOPJ Naphtha                 | (\$/mt)  | <b>626.430</b> | <b>-3.790</b>    | <b>-34.600</b>      |                     |
| <b>Fuel Oil</b>              |          |                |                  |                     |                     |
| 3.5% barges                  | (\$/mt)  | <b>409.770</b> | <b>-2.470</b>    | <b>-8.190</b>       |                     |
| Singapore 380                | (\$/mt)  | <b>422.770</b> | <b>-4.320</b>    | <b>-5.440</b>       |                     |
| Singapore 180                | (\$/mt)  | <b>434.520</b> | <b>-3.140</b>    | <b>-6.190</b>       |                     |
| 0.5% barges                  | (\$/mt)  | <b>487.240</b> | <b>+1.910</b>    | <b>-15.810</b>      |                     |
| Singapore 0.5%               | (\$/mt)  | <b>532.640</b> | <b>+0.950</b>    | <b>-17.970</b>      |                     |
| <b>NGLs</b>                  |          |                |                  |                     |                     |
| US Propane LST               | (c/gal)  | <b>78.789</b>  | <b>-0.601</b>    | <b>-2.255</b>       |                     |
| NWE Propane                  | (\$/mt)  | <b>550.490</b> | <b>+2.320</b>    | <b>-20.250</b>      |                     |
| Saudi Propane CP             | (\$/mt)  | <b>618.990</b> | <b>-1.090</b>    | <b>-8.250</b>       |                     |
| Asian Propane FEI            | (\$/mt)  | <b>615.990</b> | <b>-3.090</b>    | <b>-15.110</b>      |                     |
| US Butane ENT                | (c/gal)  | <b>104.790</b> | <b>-2.950</b>    | <b>-9.230</b>       |                     |
| Saudi Butane CP              | (\$/mt)  | <b>610.990</b> | <b>-4.000</b>    | <b>-17.070</b>      |                     |



## Long Tenor Swaps

|                    |          | Balmo   | Dec-24  | Jan-25  | Feb-25  | Mar-25  | Q1-25   | Q2-25   |
|--------------------|----------|---------|---------|---------|---------|---------|---------|---------|
| <b>Crude</b>       |          |         |         |         |         |         |         |         |
| Brent              | (\$/bbl) | 72.350  | 72.040  | 71.800  | 71.630  | 71.480  | 71.637  | 71.200  |
| WTI                | (\$/bbl) | 68.420  | 68.270  | 68.020  | 67.840  | 67.680  | 67.847  | 67.367  |
| Dubai              | (\$/bbl) | 71.590  | 71.240  | 70.930  | 70.660  | 70.470  | 70.687  | 70.190  |
| <b>Distillates</b> |          |         |         |         |         |         |         |         |
| Gasoil 0.1 NWE     | (\$/mt)  | 673.750 | 670.350 | 667.160 | 666.590 | 665.000 | 666.250 | 661.903 |
| NWE Jet            | (\$/mt)  | 726.000 | 719.600 | 715.410 | 716.340 | 714.750 | 715.500 | 711.403 |
| Singapore 10ppm    | (\$/bbl) | 87.810  | 87.210  | 86.810  | 86.620  | 86.550  | 86.660  | 86.407  |
| Sing Kero          | (\$/bbl) | 88.290  | 87.990  | 87.340  | 86.870  | 86.550  | 86.920  | 86.140  |
| <b>Gasoline</b>    |          |         |         |         |         |         |         |         |
| RBOB               | (c/gal)  | 198.050 | 194.980 | 195.280 | 197.180 | 215.530 | 202.663 | 214.173 |
| EBOB               | (\$/mt)  | 664.000 | 657.000 | 654.000 | 657.750 | 663.000 | 658.250 | 697.250 |
| Singapore 92       | (\$/bbl) | 77.270  | 77.670  | 77.720  | 77.830  | 77.960  | 77.837  | 77.257  |
| Singapore 95       | (\$/bbl) | 82.260  | 82.110  | 81.510  | 81.570  | 81.810  | 81.630  | 81.017  |
| <b>Naphtha</b>     |          |         |         |         |         |         |         |         |
| US C5 ENT          | (c/gal)  | 146.780 | 145.280 | 144.900 | 144.400 | 142.900 | 144.067 | 139.567 |
| NWE Naphtha        | (\$/mt)  | 612.180 | 607.430 | 603.680 | 599.430 | 594.930 | 599.347 | 586.513 |
| MOP-Japan Naphtha  | (\$/mt)  | 627.930 | 626.430 | 622.930 | 618.680 | 614.180 | 618.597 | 605.013 |
| <b>Fuel Oil</b>    |          |         |         |         |         |         |         |         |
| 3.5% barges        | (\$/mt)  | 426.770 | 409.770 | 403.520 | 399.770 | 398.520 | 400.603 | 395.603 |
| Singapore 380      | (\$/mt)  | 436.270 | 422.770 | 413.270 | 408.270 | 406.770 | 409.437 | 403.353 |
| Singapore 180      | (\$/mt)  | 446.770 | 434.520 | 424.520 | 419.270 | 417.520 | 420.437 | 414.103 |
| 0.5% barges        | (\$/mt)  | 491.740 | 487.240 | 482.990 | 479.240 | 476.360 | 479.530 | 471.240 |
| Singapore 0.5%     | (\$/mt)  | 541.140 | 532.640 | 525.140 | 519.890 | 515.640 | 520.223 | 508.140 |
| <b>NGLs</b>        |          |         |         |         |         |         |         |         |
| US Propane LST     | (c/gal)  | 78.539  | 78.789  | 79.039  | 78.539  | 76.164  | 77.914  | 72.789  |
| NWE Propane        | (\$/mt)  | 559.490 | 550.490 | 539.490 | 525.990 | 506.990 | 524.157 | 479.323 |
| Saudi Propane CP   | (\$/mt)  | 618.990 | 618.990 | 609.490 | 600.990 | 585.490 | 598.657 | 541.157 |
| Asian Propane FEI  | (\$/mt)  | 616.490 | 615.990 | 610.990 | 602.490 | 583.990 | 599.157 | 552.823 |
| US Butane ENT      | (c/gal)  | 108.040 | 104.790 | 104.040 | 100.660 | 94.160  | 99.620  | 88.113  |
| Saudi Butane CP    | (\$/mt)  | 610.990 | 610.990 | 605.990 | 600.490 | 584.490 | 596.990 | 541.657 |



| <b>Front Month Spreads</b> |          |                  |                     |                     |
|----------------------------|----------|------------------|---------------------|---------------------|
| <b>Dec/Jan</b>             |          | <b>14-Nov-24</b> | <b>1-Day Change</b> | <b>7-Day Change</b> |
| <b>Crude</b>               |          |                  |                     |                     |
| Brent                      | (\$/bbl) | 0.240            | +0.000              | -0.010              |
| WTI                        | (\$/bbl) | 0.250            | -0.010              | -0.120              |
| Dubai                      | (\$/bbl) | 0.310            | +0.010              | -0.170              |
| <b>Distillates</b>         |          |                  |                     |                     |
| Gasoil 0.1 NWE             | (\$/mt)  | 3.190            | +1.880              | +3.350              |
| NWE Jet                    | (\$/mt)  | 4.190            | +2.380              | +3.350              |
| Singapore 10ppm            | (\$/bbl) | 0.400            | +0.050              | +0.060              |
| Sing Kero                  | (\$/bbl) | 0.650            | +0.020              | -0.050              |
| <b>Gasoline</b>            |          |                  |                     |                     |
| RBOB                       | (c/gal)  | -0.300           | +0.040              | +0.020              |
| EBOB                       | (\$/mt)  | 3.000            | +0.500              | -0.250              |
| Singapore 92               | (\$/bbl) | -0.050           | +0.030              | -0.210              |
| Singapore 95               | (\$/bbl) | 0.600            | +0.080              | -0.210              |
| <b>Naphtha</b>             |          |                  |                     |                     |
| US C5 ENT                  | (c/gal)  | 0.380            | -0.120              | +0.380              |
| NWE Naphtha                | (\$/mt)  | 3.750            | +0.250              | -0.500              |
| MOP-Japan Naphtha          | (\$/mt)  | 3.500            | +0.000              | -1.750              |
| <b>Fuel Oil</b>            |          |                  |                     |                     |
| 3.5% barges                | (\$/mt)  | 6.250            | -0.250              | +1.250              |
| Singapore 380              | (\$/mt)  | 9.500            | -0.750              | +3.250              |
| Singapore 180              | (\$/mt)  | 10.000           | -0.250              | +2.750              |
| 0.5% barges                | (\$/mt)  | 4.250            | +0.250              | -0.250              |
| Singapore 0.5%             | (\$/mt)  | 7.500            | +0.000              | -1.250              |
| <b>NGLs</b>                |          |                  |                     |                     |
| US Propane LST             | (c/gal)  | -0.250           | +0.000              | +0.000              |
| NWE Propane                | (\$/mt)  | 11.000           | +2.250              | -2.000              |
| Saudi Propane CP           | (\$/mt)  | 9.500            | +0.500              | +2.500              |
| Asian Propane FEI          | (\$/mt)  | 5.000            | +0.500              | +1.000              |
| US Butane ENT              | (c/gal)  | 0.750            | -0.500              | -2.250              |
| Saudi Butane CP            | (\$/mt)  | 5.000            | +0.000              | +0.000              |



| <b>Front Month Cracks and Diffs</b>                  |                  |                     |                     |
|--|------------------|---------------------|---------------------|
| <b>December</b>                                      | <b>14-Nov-24</b> | <b>1-Day Change</b> | <b>7-Day Change</b> |
| <b>Crude</b>   |                  |                     |                     |
| Brent/Dubai (\$/bbl)                                 | 0.800            | -0.020              | -0.020              |
| WTI/Brent (\$/bbl)                                   | -3.790           | -0.090              | -0.340              |
| <b>Distillates</b>                                   |                  |                     |                     |
| Gasoil 0.1 NWE crack (\$/bbl)                        | 17.890           | +0.590              | +1.500              |
| NWE Jet crack (\$/bbl)                               | 19.240           | +0.260              | +1.160              |
| NWE Jet Diff (\$/mt)                                 | 49.250           | -2.250              | -3.250              |
| Gasoil E/W (\$/bbl)                                  | -20.600          | -1.470              | -3.100              |
| Regrade (Sing Kero vs Sing 10ppm) (\$/bbl)           | 0.780            | +0.000              | -0.120              |
| <b>Gasoline</b>                                      |                  |                     |                     |
| TA Arb (RBOB vs EBOB) (c/gal)                        | 7.200            | +0.100              | -0.850              |
| EBOB crack (\$/bbl)                                  | 6.800            | +0.360              | +0.250              |
| Singapore 92 crack (\$/bbl)                          | 5.610            | +0.190              | +0.010              |
| Gasoline E/W (Sing 92 vs EBOB) (\$/bbl)              | -1.200           | -0.180              | -0.250              |
| European Gasnaph (EBOB vs Naphtha) (\$/mt)           | 49.400           | +8.230              | +12.940             |
| Asian Gasnaph (Sing 92 vs MOPJ) (\$/bbl)             | 20.480           | +7.300              | +12.460             |
| <b>Naphtha</b>                                       |                  |                     |                     |
| US C5 ENT vs WTI Crack (\$/bbl)                      | -7.260           | -0.340              | -0.020              |
| NWE Naphtha Crack (\$/bbl)                           | -3.800           | -0.600              | -1.050              |
| MOPJ Naphtha Crack (\$/bbl)                          | -1.660           | -0.650              | -1.210              |
| Naphtha E/W (NWE vs MOPJ) (\$/mt)                    | 19.000           | -0.500              | -1.500              |
| <b>Fuel Oil</b>                                      |                  |                     |                     |
| 3.5% barges crack (\$/bbl)                           | -7.550           | -0.650              | +1.350              |
| Singapore 380 crack (\$/bbl)                         | -5.500           | -0.940              | +1.790              |
| Singapore 180 crack (\$/bbl)                         | -3.650           | -0.740              | +1.670              |
| Visco (180-380) (\$/mt)                              | 11.750           | +1.250              | -0.750              |
| HSFO E/W (380 vs 3.5% barges) (\$/mt)                | 13.000           | -1.850              | +2.750              |
| 0.5% barges crack (\$/bbl)                           | 4.650            | +0.050              | +0.150              |
| Singapore 0.5% crack (\$/bbl)                        | 11.800           | -0.100              | -0.180              |
| VLSFO E/W (Sing 0.5% vs 0.5% barges) (\$/mt)         | 45.400           | -0.960              | -2.100              |
| European Hi5 (0.5% barges vs 3.5% barges) (\$/mt)    | 77.470           | +4.450              | -7.620              |
| Asian Hi5 (Sing 0.5% vs 380) (\$/mt)                 | 109.870          | +5.340              | -12.470             |
| 0.5% barges/gasoil (\$/mt)                           | -183.310         | -4.250              | -7.440              |
| Sing 0.5% vs Sing 10ppm (\$/mt)                      | -117.260         | -3.620              | -6.460              |
| <b>NGLs</b>  |                  |                     |                     |
| US Propane LST vs NWE Propane (\$/mt)                | -140.000         | -5.500              | +8.500              |
| US Propane LST vs Asian Propane FEI (\$/mt)          | -205.500         | +0.000              | +3.500              |
| Asian Propane FEI vs NWE Propane (\$/mt)             | 65.500           | -5.500              | +5.000              |
| Asian Propane FEI vs Saudi Propane CP (\$/mt)        | -3.000           | -2.000              | -7.000              |
| European Pronap (NWE Propane vs NWE Naphtha) (\$/mt) | -57.030          | +5.610              | +12.850             |
| Asian Pronap (FEI vs MOPJ) (\$/mt)                   | -7.570           | +2.660              | +26.310             |



## Long Tenor Cracks / Diffs

|   | Balmo    | Dec-24   | Jan-25   | Feb-25   | Mar-25   | Q1-25    | Q2-25    |
|---|----------|----------|----------|----------|----------|----------|----------|
| <b>Crude</b>                                  |          |          |          |          |          |          |          |
| Brent/Dubai (\$/bbl)                          | 0.760    | 0.800    | 0.880    | 0.970    | 1.010    | 0.953    | 1.010    |
| WTI/Brent (\$/bbl)                            | -3.940   | -3.790   | -3.800   | -3.800   | -3.820   | -3.807   | -3.850   |
| <b>Distillates</b>                            |          |          |          |          |          |          |          |
| Gasoil 0.1 NWE crack (\$/bbl)                 | 18.00    | 17.89    | 17.71    | 17.77    | 17.75    | 17.74    | 17.61    |
| NWE Jet crack (\$/bbl)                        | 19.74    | 19.24    | 18.95    | 19.24    | 19.19    | 19.13    | 19.03    |
| NWE Jet Diff (\$/mt)                          | 52.25    | 49.25    | 48.25    | 49.75    | 49.75    | 49.25    | 49.50    |
| Gasoil E/W (\$/bbl)                           | -19.57   | -20.60   | -20.29   | -21.19   | -20.21   | -20.56   | -18.19   |
| Regrade (Sing Kero vs Sing 10ppm) (\$/bbl)    | 0.48     | 0.78     | 0.53     | 0.25     | 0.00     | 0.26     | -0.27    |
| <b>Gasoline</b>                               |          |          |          |          |          |          |          |
| TA Arb (RBOB vs EBOB) (c/gal)                 | 8.270    | 7.200    | 8.350    | 9.180    | 26.030   | 14.520   | 14.880   |
| EBOB crack (\$/bbl)                           | 7.340    | 6.800    | 6.690    | 7.320    | 8.090    | 7.367    | 12.480   |
| Singapore 92 crack (\$/bbl)                   | 4.900    | 5.610    | 5.900    | 6.190    | 6.460    | 6.183    | 6.033    |
| Gasoline E/W (Sing 92 vs EBOB) (\$/bbl)       | -2.440   | -1.200   | -0.790   | -1.130   | -1.630   | -1.183   | -6.447   |
| European Gasnaph (EBOB vs Naphtha) (\$/mt)    | 51.650   | 49.400   | 50.150   | 58.150   | 67.900   | 58.733   | 110.567  |
| Asian Gasnaph (Sing 92 vs MOPJ) (\$/bbl)      | 15.650   | 20.480   | 24.390   | 29.560   | 35.140   | 29.697   | 38.450   |
| <b>Naphtha</b>                                |          |          |          |          |          |          |          |
| US C5 ENT vs WTI Crack (\$/bbl)               | -6.780   | -7.260   | -7.160   | -7.200   | -7.660   | -7.340   | -8.753   |
| NWE Naphtha Crack (\$/bbl)                    | -3.580   | -3.800   | -3.990   | -4.290   | -4.640   | -4.307   | -5.310   |
| MOPJ Naphtha Crack (\$/bbl)                   | -1.810   | -1.660   | -1.830   | -2.130   | -2.480   | -2.147   | -3.230   |
| Naphtha E/W (NWE vs MOPJ) (\$/mt)             | 15.750   | 19.000   | 19.250   | 19.250   | 19.250   | 19.250   | 18.500   |
| <b>Fuel Oil</b>                               |          |          |          |          |          |          |          |
| 3.5% bgs crack (\$/bbl)                       | -5.180   | -7.550   | -8.310   | -8.720   | -8.760   | -8.597   | -8.943   |
| Singapore 380 crack (\$/bbl)                  | -3.690   | -5.500   | -6.770   | -7.380   | -7.460   | -7.203   | -7.723   |
| Singapore 180 crack (\$/bbl)                  | -2.030   | -3.650   | -5.000   | -5.640   | -5.770   | -5.470   | -6.030   |
| Visco (180-380) (\$/mt)                       | 10.500   | 11.750   | 11.250   | 11.000   | 10.750   | 11.000   | 10.750   |
| HSFO E/W (380 vs 3.5% bgs) (\$/mt)            | 9.500    | 13.000   | 9.750    | 8.500    | 8.250    | 8.833    | 7.750    |
| 0.5% bgs crack (\$/bbl)                       | 5.050    | 4.650    | 4.210    | 3.800    | 3.500    | 3.837    | 2.970    |
| Singapore 0.5% crack (\$/bbl)                 | 12.830   | 11.800   | 10.850   | 10.200   | 9.680    | 10.243   | 8.780    |
| VLSFO E/W (Sing 0.5% vs 0.5% bgs) (\$/mt)     | 49.400   | 45.400   | 42.150   | 40.650   | 39.280   | 40.693   | 36.900   |
| European Hi5 (0.5% bgs vs 3.5% bgs) (\$/mt)   | 64.970   | 77.470   | 79.470   | 79.470   | 77.840   | 78.927   | 75.637   |
| Asian Hi5 (Sing 0.5% vs 380) (\$/mt)          | 104.870  | 109.870  | 111.870  | 111.620  | 108.880  | 110.790  | 104.787  |
| 0.5% bgs/gasoil (\$/mt)                       | -182.210 | -183.310 | -184.190 | -187.550 | -188.840 | -186.860 | -190.863 |
| Sing 0.5% vs Sing 10ppm (\$/mt)               | -113.230 | -117.260 | -121.780 | -125.690 | -129.350 | -125.607 | -135.780 |
| <b>NGLs</b>                                   |          |          |          |          |          |          |          |
| US Propane LST vs NWE Propane (\$/mt)         | -150.31  | -140     | -127.7   | -116.81  | -110.18  | -118.23  | -100.097 |
| US Propane LST vs Asian Propane FEI (\$/mt)   | -207.31  | -205.5   | -199.2   | -193.31  | -187.18  | -193.23  | -173.597 |
| Asian Propane FEI vs NWE Propane (\$/mt)      | 57       | 65.5     | 71.5     | 76.5     | 77       | 75       | 73.5     |
| Asian Propane FEI vs Saudi Propane CP (\$/mt) | -2.5     | -3       | 1.5      | 1.5      | -1.5     | 0.5      | 11.667   |
| European Pronap (\$/mt)                       | -52.78   | -57.03   | -64.32   | -73.53   | -88.03   | -75.293  | -107.32  |
| Asian Pronap (FEI vs MOPJ) (\$/mt)            | -9.07    | -7.57    | -13.57   | -17.82   | -28.82   | -20.07   | -63.987  |



| <b>Inter-month Crack Spreads</b>                     |                  |                     |                     |
|--|------------------|---------------------|---------------------|
| <b>Dec/Jan</b>                                       | <b>14-Nov-24</b> | <b>1-Day Change</b> | <b>7-Day Change</b> |
| <b>Crude</b>   |                  |                     |                     |
| Brent/Dubai (\$/bbl)                                 | -0.080           | -0.020              | +0.140              |
| WTI/Brent (\$/bbl)                                   | 0.010            | -0.020              | -0.100              |
| <b>Distillates</b>                                   |                  |                     |                     |
| Gasoil 0.1 NWE crack (\$/bbl)                        | 0.180            | +0.260              | +0.410              |
| NWE Jet crack (\$/bbl)                               | 0.290            | +0.280              | +0.400              |
| NWE Jet Diff (\$/mt)                                 | 1.000            | +0.500              | +0.000              |
| Gasoil E/W (\$/bbl)                                  | -0.310           | -1.240              | -3.010              |
| Regrade (Sing Kero vs Sing 10ppm) (\$/bbl)           | 0.250            | -0.030              | -0.110              |
| <b>Gasoline</b>                                      |                  |                     |                     |
| TA Arb (RBOB vs EBOB) (c/gal)                        | -1.150           | -0.120              | +0.090              |
| EBOB crack (\$/bbl)                                  | 0.110            | +0.040              | -0.030              |
| Singapore 92 crack (\$/bbl)                          | -0.290           | +0.020              | -0.190              |
| Gasoline E/W (Sing 92 vs EBOB) (\$/bbl)              | -0.410           | -0.030              | -0.180              |
| European Gasnaph (EBOB vs Naphtha) (\$/mt)           | -0.750           | +0.250              | +0.250              |
| Asian Gasnaph (Sing 92 vs MOPJ) (\$/bbl)             | -3.910           | +0.260              | +0.000              |
| <b>Naphtha</b>                                       |                  |                     |                     |
| US C5 ENT vs WTI Crack (\$/bbl)                      | -0.100           | -0.040              | +0.260              |
| NWE Naphtha Crack (\$/bbl)                           | 0.190            | +0.030              | -0.040              |
| MOPJ Naphtha Crack (\$/bbl)                          | 0.170            | +0.010              | -0.170              |
| Naphtha E/W (NWE vs MOPJ) (\$/mt)                    | -0.250           | -0.250              | -1.250              |
| <b>Fuel Oil</b>                                      |                  |                     |                     |
| 3.5% barges crack (\$/bbl)                           | 0.760            | -0.030              | +0.220              |
| Singapore 380 crack (\$/bbl)                         | 1.270            | -0.110              | +0.540              |
| Singapore 180 crack (\$/bbl)                         | 1.350            | -0.030              | +0.460              |
| Visco (180-380) (\$/mt)                              | 0.500            | +0.500              | -0.500              |
| HSFO E/W (380 vs 3.5% barges) (\$/mt)                | 3.250            | -0.500              | +2.000              |
| 0.5% barges crack (\$/bbl)                           | 0.440            | +0.040              | -0.010              |
| Singapore 0.5% crack (\$/bbl)                        | 0.950            | +0.000              | -0.170              |
| VLSFO E/W (Sing 0.5% vs 0.5% barges) (\$/mt)         | 3.250            | -0.250              | -1.000              |
| European Hi5 (0.5% barges vs 3.5% barges) (\$/mt)    | -2.000           | +0.500              | -1.500              |
| Asian Hi5 (Sing 0.5% vs 380) (\$/mt)                 | -2.000           | +0.750              | -4.500              |
| 0.5% barges/gasoil (\$/mt)                           | 0.880            | -1.550              | -3.500              |
| Sing 0.5% vs Sing 10ppm (\$/mt)                      | 4.520            | -0.380              | -1.700              |
| <b>NGLs</b>  |                  |                     |                     |
| US Propane LST vs NWE Propane (\$/mt)                | -12.300          | -2.250              | +2.000              |
| US Propane LST vs Asian Propane FEI (\$/mt)          | -6.300           | -0.500              | -1.000              |
| Asian Propane FEI vs NWE Propane (\$/mt)             | -6.000           | -1.750              | +3.000              |
| Asian Propane FEI vs Saudi Propane CP (\$/mt)        | -4.500           | +0.000              | -1.500              |
| European Pronap (NWE Propane vs NWE Naphtha) (\$/mt) | 7.290            | +1.950              | -1.460              |