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Platts Dubai/Oman benchmarks

What are the Platts Dubai/Oman crude oil benchmarks?

Platts Dubai and Oman crude oil benchmarks are the primary pricing references for physical crude oil delivered from the Middle East Gulf, Russia, US Gulf Coast, Mexico and other parts of the world to refiners, and have been so since spot markets emerged in the 1980s. With deep financial markets available for hedging using Platts Dubai as a settlement, Dubai's influence as the world's leading reference price for physical medium, sour crude oil has grown through the years. As one half of Brent/Dubai spreads, Platts Dubai also provides the key barometer for understanding the relative value of sweet and sour crude oil, which is the very engine that drives which crude oil, from which countries, moves through the global oil refining system.

How much physical crude oil is priced against Platts Dubai/Oman?

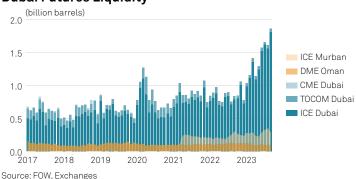
The vast majority of physical sour crude oil trading East of Suez is priced against the Platts Dubai and Platts Oman crude benchmarks, typically against the monthly average, on both free on board (FOB) Middle East and delivered bases. Many National Oil Companies (NOCs) in the Middle East also price long-term crude oil sales to customers using an Official Selling Price (OSP) for their major crude streams which are published as a differential to Platts Dubai, or Platts Dubai/Oman. Many companies also use Platts Dubai as a reference for internal transfer prices. In addition, condensates loading from the Middle East including Deodorized Field Condensate (DFC), Low Sulfur Condensate (LSC) and South Pars also price against Platts Dubai. Russian grades such as Sokol, Sakhalin Blend, ESPO, as well as Urals delivered into Asia also reference Platts Dubai.

What volume of derivatives price against Platts Dubai?

An estimated 10.2 billion barrels — or around 28 million barrels per day — of Dubai oil futures traded in 2022. Platts Dubai derivatives are listed on major futures exchanges including the Intercontinental Exchange (ICE), Chicago Mercantile Exchange (CME) and Tokyo Commodity Exchange. Dubai derivatives contracts listed include Dubai futures, Dubai inter-month time spreads, Brent/ Dubai spreads, WTI/Dubai spreads and Dubai/refined oil product cracks. Dubai derivatives contracts listed on ICE in September 2023 hit a record 1.806 million trades. The month also saw record open interest and market participation on ICE's Platts Dubai derivatives contracts. This record activity was driven by strong demand for sour

barrels and increased hedging of Russian Urals crude trades pricing against Platts Dubai.

Dubai Futures Liquidity



How are Platts Dubai/Oman benchmarks assessed?

Platts Dubai/Oman assessments reflect the repeatable, transactable price of Dubai and Oman crude oil for loading two, three and four months ahead of the assessment date. Platts considers bids, offers and trades for full and partial cargoes of crude oil in these benchmarks, with a large amount of flat-price activity reported in lot sizes of 25,000 barrels, with physical convergence at 500,000 barrels, or 20 partials, to a full cargo. All cargoes declared by the seller upon convergence must be free of any restrictions or limitations placed on the buyer, such as resale or destination clauses. The operational tolerance for these cargoes is +/-1,000 barrels in the buyers' option. Partials between two counterparties that have not converged to full cargoes at the end of the calendar month settle financially using the relevant Platts assessment on the last day of that month.

How does the alternative delivery mechanism work?

Platts Dubai assessments reflect the value of Middle East sour crude oil, where upon convergence, the buyer is willing to accept physical delivery of Dubai crude oil itself, or alternative delivery of Oman, Upper Zakum, Al Shaheen, or Murban, at the seller's option. Platts Oman assessments reflect the value of Middle East sour crude oil, where upon convergence, the buyer is willing to accept delivery of Oman itself, or alternative delivery of Murban, at the seller's option. A Quality Premium (QP) is paid by a buyer to a seller for the nomination and delivery of a cargo of Murban crude oil into a physical convergence of Dubai or Oman. Neither the seller nor the buyer has the right to deny delivery or to refuse lifting.

How has participation in the Platts Middle East Market On Close process evolved over time?

The partials mechanism for Middle East crude was launched in 2004. The rise of trading activity in Asia in recent years has been reflected in the Middle East crude MOC, which sees participation from a broad cross section of the market, including Asian refiners, oil majors and trading houses. 2022 saw more than 3,000 partials trade, with 77 convergence cargoes declared. These consisted of 51 cargoes of Upper Zakum, 20 cargoes of Oman, four cargoes of Al Shaheen and two cargoes of Murban. Increased partials trading activity has continued into 2023, mirroring the rise in Dubai derivatives traded. An all-time high of 1,732 partials traded in the Middle East crude MOC in June 2023, surpassing the previous high of 1,710 partials traded in August 2015.

How does the Platts Dubai benchmark relate to Brent?

Brent and Dubai are by far the most widely used benchmarks in the world for pricing physical crude oil, and are closely connected by the highly active Brent/ Dubai Exchange of Futures for Swaps (EFS) derivatives contracts, which measure the difference in value that is observable between each Brent futures contract month and the corresponding Dubai derivatives for that contract month. The Dubai derivatives contracts in turn settle against the monthly average of the Platts Dubai physical assessment.

Why were additional crudes added to the Dubai/Oman crude benchmarks over the years?

Platts Dubai and Oman crude assessments are designed to reflect the value of widely tradeable, readily deliverable spot barrels of crude oil loading from the Middle East. The addition of new crudes as alternative delivery ensures that there is suitable availability of crudes to meet spot market demand. Dubai has evolved to represent the overall basket of crudes, rather than just the original single grade. Production of Dubai crude itself has fallen to around three cargoes a month in the last several years, but the benchmark represents around 60 times that volume through alternative delivery. Platts has progressively included additional grades into the Middle East crude benchmarks, with Qatar's Al Shaheen crude and Abu Dhabi's Murban crude the latest grades added from January 4, 2016.

What is the total production of Dubai, Oman, Upper Zakum, Al Shaheen and Murban crudes?

Currently there are five crude grades included in the Platts Dubai basket: namely Dubai, Oman, Upper Zakum, Al Shaheen and Murban, a total of more than 3.5 million b/d of crude production.

Why has Platts listed cleared Dubai derivative instruments on eWindow?

In line with market feedback. Platts introduced eWindow instruments for cleared Dubai crude derivative contracts on May 8, 2023, replacing previous instruments for bilaterally settled Dubai Swaps. Dubai crude derivative contracts financially settle on the monthly average of the front month Platts physical Dubai assessments (PCAATOO). Approved participants can submit bids or offers for a minimum of 25,000 barrels or larger volumes in multiples of 25,000 barrels in the Platts MOC assessment process for Asia crude oil paper on publishing days, with a cut off for submission of new bids and offers at 4.15 pm Singapore time for time-spreads, and 4.20 pm Singapore time for outright indications. Companies that wish to participate in the Platts MOC assessment process may submit their interest at https://www.spglobal.com/ commodityinsights/en/our-methodology/participationreview.

How do Dubai derivatives assessments relate to the Platts physical Dubai benchmark?

Platts assesses prices for physical Dubai and Dubai derivatives independent of each other, running a daily Market On Close assessment process for both physical and derivatives markets in parallel. However, in the absence of information on partial or full cargoes for a specific contract month, Platts Dubai physical assessments may take into consideration relevant information including from the corresponding Dubai derivative contracts. More details can be found here https://www.spglobal.com/commodityinsights/en/our-methodology/subscriber-notes/050823-platts-lists-cleared-dubai-derivative-instruments-on-ewindow.

Does Platts publish differentials to Dubai derivatives for Middle East crude grades?

Following industry feedback, Platts has in recent years added assessments for Middle East crude grades' differentials to front-month Dubai derivatives, including all Dubai basket grades, Abu Dhabi grades, as well as Qatar Marine and Qatar Land. These differentials reflect the spread between Platts' outright assessment of each grade loading M+2 against same-month Dubai derivatives.

What is the DME Oman Daily Marker Price and how is it different from Platts Oman?

Platts Oman and Dubai Mercantile Exchange (DME) Oman reflect different definitions of Oman crude oil and employ different methodologies in producing a final value. A record spike in DME Oman Daily Marker Price was recorded in September 2018, and over time we have seen Platts Oman

and DME Oman regularly diverge in value. Platts Oman assessments reflect the tradeable value of physical Oman crude at 4.30 pm Singapore time, where there is alternative delivery available of Murban, should the market need it. The DME Oman Daily Marker Price reflects a volume weighted average of trades executed in the time period between 4.25 pm to 4.30 pm Singapore time on the exchange of Oman futures contracts, which is a physically delivered contract and does not have an alternative delivery mechanism. In physical crude markets, alternative delivery mechanisms are an essential component in ensuring adequate availability of barrels at all times in the market, particularly in the event of possible supply disruptions or surges in demand.

What is the Quality Premium for delivery of Murban crude oil upon physical convergence?

Platts introduced a Quality Premium (QP) in July 2016 for Murban crude oil delivered into its Middle East crude oil assessment processes for cargoes nominated from September 2016 onwards. The QP is paid by a buyer to a seller for the nomination and delivery of a cargo of Murban crude oil into a physical convergence of Dubai, Oman, Al Shaheen or Upper Zakum.

Why has the Murban QP methodology evolved in February 2023?

Murban QP methodology evolved in February 2023 to reflect a daily QP at 50% of the net price differences between Platts front-month Murban assessments and Platts front-month Oman assessments over 15 business days prior to the day of publication. A QP of \$0.00/b will be announced if 50% of the observed price difference between the Platts Murban and Oman assessments during the 15 business days prior is less than 50 cents/b. Platts publishes the Murban QP prior to 11 am Singapore time each assessment day. The Murban QP applicable for payment from a buyer to the seller will be the QP published on the day of the convergence where a Murban cargo is declared. The changes in the Murban QP to a 15-day rolling mechanism are aimed at ensuring that the QP continues to reflect prevailing Murban/Oman spreads while tempering the impact of any sharp day-to-day moves.

Where can I find more details about the Platts Dubai/ Oman crude assessments?

More information on Platts Dubai/Oman crude assessment methodology is publicly available on our website at https://www.spglobal.com/commodityinsights/ plattscontent/_assets/_files/en/our-methodology/methodology-specifications/apag-crude-methodology.pdf.

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