OPIS Asia Naphtha & LPG Report

A Daily Report on Asia Naphtha, LPG and Gasoline Spot Prices, plus News and Commentary

Today's Outright Spot Naphtha Prices ($/mt)

Market	Low	High	Mean	Change
CFR JAPAN	489.50	490.50	490.00	10.50
CFR KOREA (Daesan-basis)	490.50	491.50	491.00	10.50
FOB SINGAPORE ($/bbl)	52.75	53.75	53.25	1.25
FOB ARAB GULF LR 1	469.25	470.25	469.75	11.25
FOB ARAB GULF LR 2	471.75	472.75	472.25	11.00

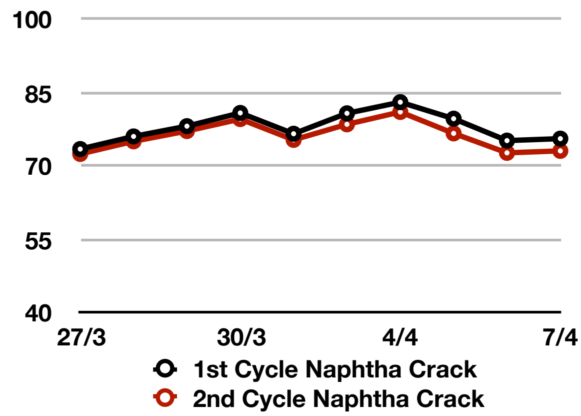
Spread/Differential ($/mt)

Price	Low	High	Mean	Change
NAP-BRENT CRACK	75.03	76.03	75.53	0.40
INTER-MONTH SPREAD	4.00	5.00	4.50	0.50
CFR SPOT DIFFERENTIAL	3.00	4.00	3.50	-0.50
FOB SPOT DIFFERENTIAL	11.50	12.50	12.00	0.50

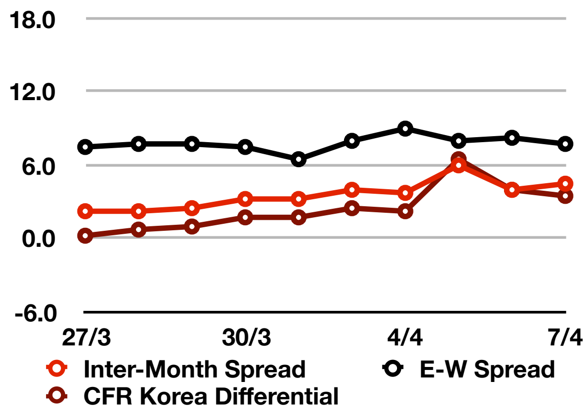
Naphtha Freight

Route	Value
SINGAPORE-JAPAN ($/bbl)	1.56
KOREA-JAPAN ($'000)	250.00
AG-JAPAN LR 1 ($/mt)	20.25
AG-JAPAN LR 2 ($/mt)	17.71
AG-JAPAN LR 1 (WS)	112.85
AG-JAPAN LR 2 (WS)	103.36

Naphtha Cracks



Naphtha Spreads



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NAPHTHA

- CFR, FOB Diff rises on tight AG supply
- May arbs likely to fall below 1 million mt
- SG Jan NAP imports surge to 15-month high

Sentiments in the Asian naphtha market remained firm amid the sustained concern over tight supply, while spot demand for H2 May barrels continued to emerge from Northeast Asia.

The naphtha crack to Brent recovered by 40 cents to $75.53/mt, while the inter-month spread widened by 50 cents to $4.50/mt backwardation.

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Open Spec Naphtha Mid-Day Paper ($/mt)

Laycan	Low	High	Mean	Change
H2 May	487.00	488.00	487.50	5.25
H1 Jun	484.50	485.50	485.00	5.00
H2 Jun	483.00	484.00	483.50	5.00

Open Spec Naphtha Close Paper ($/mt)

Laycan	Low	High	Mean	Change
H2 May	493.00	494.00	493.50	10.75
H1 Jun	490.50	491.50	491.00	10.75
H2 Jun	488.50	489.50	489.00	10.25

Northwest Europe Mid-Day Naphtha Swap ($/mt)

Laycan	Low	High	Mean	Change
May	472.00	473.00	472.50	4.75
Jun	469.00	470.00	469.50	5.00
Jul	467.00	468.00	467.50	5.00

Northwest Europe Close Naphtha Swap ($/mt)

Laycan	Low	High	Mean	Change
May	479.00	480.00	479.50	10.00
Jun	476.50	477.50	477.00	10.50
Jul	474.50	475.50	475.00	10.50

Naphtha East-West Spreads ($/mt)

Laycan	Low	High	E-W	Change
May	7.25	8.25	7.75	-0.50
Jun	8.00	9.00	8.50	-0.50
Jul	9.50	10.50	10.00	-0.25

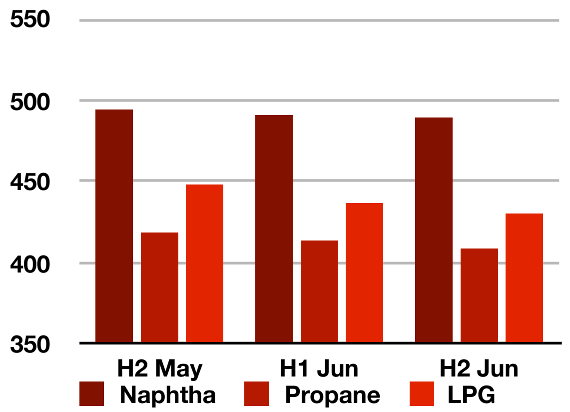
FOB Singapore Mid-Day Naphtha Swap ($/bbl)

Laycan	Low	High	Mean	Change
Apr	52.36	52.46	52.41	0.56
May	52.00	52.10	52.05	0.60
Jun	51.72	51.82	51.77	0.57

FOB Singapore Close Naphtha Swap ($/bbl)

Laycan	Low	High	Mean	Change
Apr	53.10	53.20	53.15	1.20
May	52.65	52.75	52.70	1.15
Jun	52.45	52.55	52.50	1.25

Naphtha vs Propane vs LPG



OPIS Asia Naphtha Methodology

OPIS Asia assesses the naphtha market in Asia, providing accurate and up-to-date price assessments based on CFR and FOB assessments seen in different markets in the world..

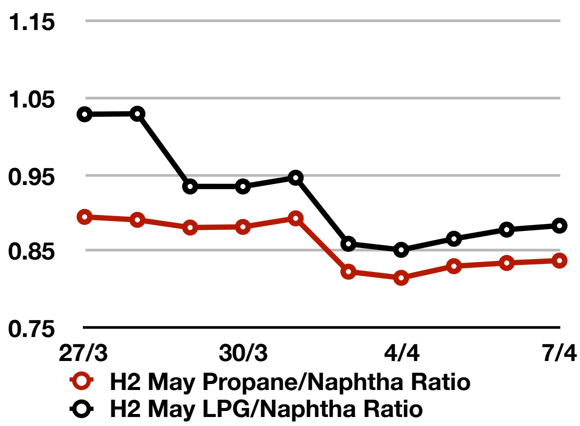
The Asian naphtha assessments reflect spot prices based primarily on deals, bids, and offers done typically on a fixed-price basis, reflecting values prevailing at the close of the market, with priority given to deals done in the markets.

OPIS naphtha methodology builds on the basis of the latest CFR FAR EAST OPEN SPEC NAPHTHA CONTRACT agreed upon in the industry.

OPIS uses daily forward paper/swaps value as a basis of our Asian daily assessments. While mid-day values are used as a reference, we use the numbers at market close (at 16:30 Singapore time) to calculate OPIS final signature values.

In markets where number of trades, bids and offers are limited due to low liquidity, price assessment may be assessed relative to other locations, for example, through direct freight netback.

CFR JP Prop/Nap, LPG/Nap Ratio



Today's Outright CFR Spot Propane Prices ($/mt)

Market	Low	High	Mean	Change
CFR JAPAN	415.50	416.50	416.00	10.50
CFR SOUTH CHINA	412.50	413.50	413.00	10.50

Today's Outright CFR Spot LPG (11:11) Prices ($/mt)

Market	Low	High	Mean	Change
CFR JAPAN	441.75	442.75	442.25	13.75
CFR SOUTH CHINA	438.75	439.75	439.25	13.75

Today's Outright FOB Arab Gulf Spot Prices ($/mt)

Market	Low	High	Mean	Change
PROPANE	387.50	388.50	388.00	10.00
BUTANE	437.50	438.50	438.00	10.00

Today's FOB Arab Gulf Spot Differential ($/mt)

Market	Low	High	Mean	Change
PROPANE	-2.50	-1.50	-2.00	0.00
BUTANE	47.50	48.50	48.00	0.00

Far East Propane Paper ($/mt)

Laycan	Low	High	Mean	Change
H1 May	418.00	419.00	418.50	10.50
H2 May	413.00	414.00	413.50	10.50
H1 Jun	408.00	409.00	408.50	13.50
H2 Jun	406.00	407.00	406.50	15.50

Far East LPG (11:11) Paper ($/mt)

Laycan	Low	High	Mean	Change
H1 May	448.00	449.00	448.50	15.50
H2 May	435.50	436.50	436.00	12.00
H1 Jun	430.50	431.50	431.00	22.50
H2 Jun	432.50	433.50	433.00	28.50

LPG CP Propane Swaps ($/mt)

Laycan	Low	High	Mean	Change
May	389.50	390.50	390.00	10.00
Jun	390.50	391.50	391.00	12.00
Jul	395.50	396.50	396.00	13.00

Saudi Aramco LPG Contract Prices

Date	Propane	Change	Butane	Change
Apr-17	430	-50	490	-110
Mar-17	480	-30	600	0
Feb-17	510	75	600	105
Jan-17	435	55	495	75
Dec-16	380	-10	420	-20

Sonatrach LPG Contract Prices

Date	Propane	Change	Butane	Change
Apr-17	350	-55	380	-110
Mar-17	405	-35	490	-10
Feb-17	440	40	500	70
Jan-17	400	55	430	50
Dec-16	345	-5	380	-3

Industry Events

* The 26th Open Specification Naphtha (OSN) Meeting will take place over Apr 25-26 in Tokyo, Japan

* The IHS Markit Asia LPG Seminars and Workshops will take place over Jul 11-13 at the Grand Hyatt Hotel, Singapore

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LPG

- CFR market slows; players adopt wait-and-see stance
- FOB sentiments bearish amid low demand from India and Far East
- Unfavourable arb economics keep interests dim for ex-U.S. cargoes

Prices in the Asia LPG market soared on Friday, lifted by the firmer crude prices but liquidity on the CFR front eased, with activities seen mainly in the physical trading window.

The May CP swaps value advanced $10 to around $390/mt as crude prices strengthened, with the May-Jun timespread flipping to a contango of around $1/mt.

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Today's Spot Gasoline Prices ($/bbl)

Market	Low	High	Mean	Change
97-RON	70.24	70.34	70.29	1.31
95-RON	68.95	69.05	69.00	1.31
92-RON	65.98	66.08	66.03	1.31

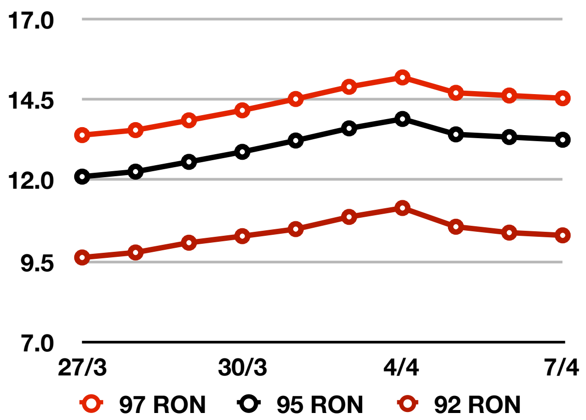
Today's Spot Gasoline Differential ($/bbl)

Market	Low	High	Mean	Change
97-RON	17.27	17.37	17.32	0.13
95-RON	15.98	16.08	16.03	0.13
92-RON	13.01	13.11	13.06	0.13

Today's Spot Gasoline Cracks ($/bbl)

Market	Low	High	Mean	Change
97-RON	14.51	14.61	14.56	-0.07
95-RON	13.22	13.32	13.27	-0.07
92-RON	10.25	10.35	10.30	-0.07

Gasoline Cracks



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FOB Singapore Spot Diff. Calculation (92 RON)

Date	Bid	Offer	Deal	Diff
22-Apr			13.09	13.09
23-Apr			13.09	13.09
24-Apr			13.09	13.09
25-Apr			13.14	13.14
26-Apr	13.11		13.14	13.14
27-Apr	13.11		13.19	13.19
28-Apr	13.11	13.12	13.19	13.19
29-Apr	13.11	13.12	13.19	13.19
30-Apr	13.11	13.12		13.12
1-May		13.12		12.96
2-May		13.12		12.96
3-May				12.96
4-May				12.96
5-May				12.96
6-May				12.96
7-May				12.96
Notional Diff		12.96	Diff	13.06

OPIS Asia Gasoline Methodology

FOB Singapore assessments generally reflect pricing of products loading 15 to 30 days from the date of publication. In other words, a report for March 1 will reflect reflection of forward prices from March 16-30.

In our assessments, we use a variety of inputs which include outright, floating as well as a combination of both in terms of daily bids, offers and strike prices in the respective oil product market on both the physical and swaps trading.

We calculate the mid-value of the trading window by using the weighted average calculation that use the curve of 1st and 2nd cycle of swaps value. Then we add a discount or premium to calculate the FOB Singapore quotes.

For discount/premium assessments for FOB Singapore quotes, we take transactions with a minimum size of 50,000 barrels for gasoline.

Gasoline

- China export-cuts raise concerns of supply destabilization
- Indonesia/Vietnam to reduce reliance on imports in the long run
- Asian market buoyed on Chinese export cuts and Western stock draws

Market players raised concerns over the export quota cuts from China as major importers such as Vietnam and Indonesia may be affected.

"Indonesia and Vietnam are major importers of Chinese oil products. With the cut in oil exports, these importers may have to seek cargoes elsewhere," a trader commented.

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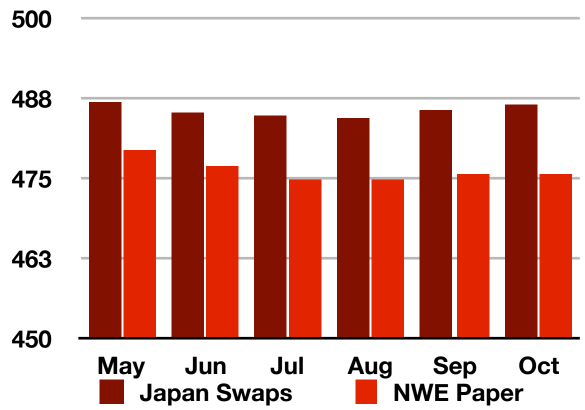
CFR Japan Close Naphtha Swap ($/mt)

Laycan	Low	High	Mean	Change
May	486.75	487.75	487.25	10.00
Jun	485.00	486.00	485.50	10.50
Jul	484.50	485.50	485.00	10.75

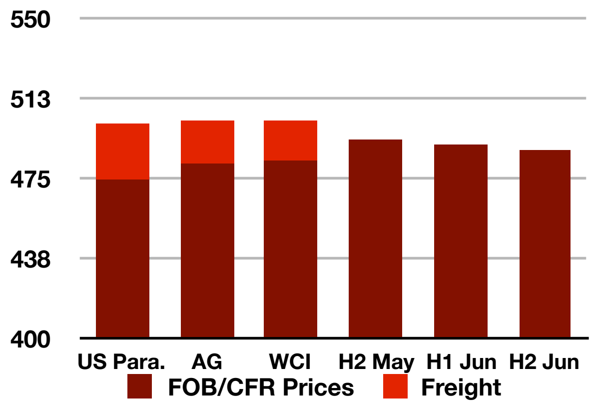
CFR Propane, LPG/CFR Naphtha Ratio

Laycan	Pro/Nap	Change	LPG/Nap	Change
H2 May	0.84	0.00	0.88	0.01
H1 Jun	0.83	0.01	0.88	0.03
H2 Jun	0.83	0.01	0.89	0.04

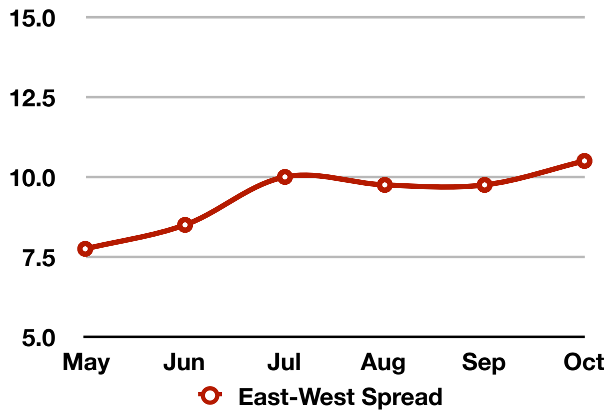
Japan Swaps vs. Naphtha NWE



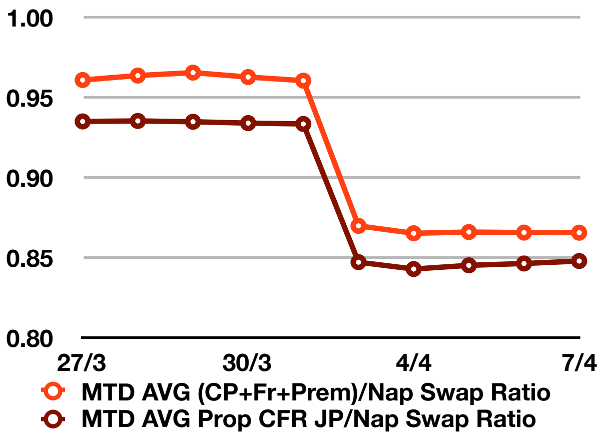
Naphtha Spot Cargo Flow Economics



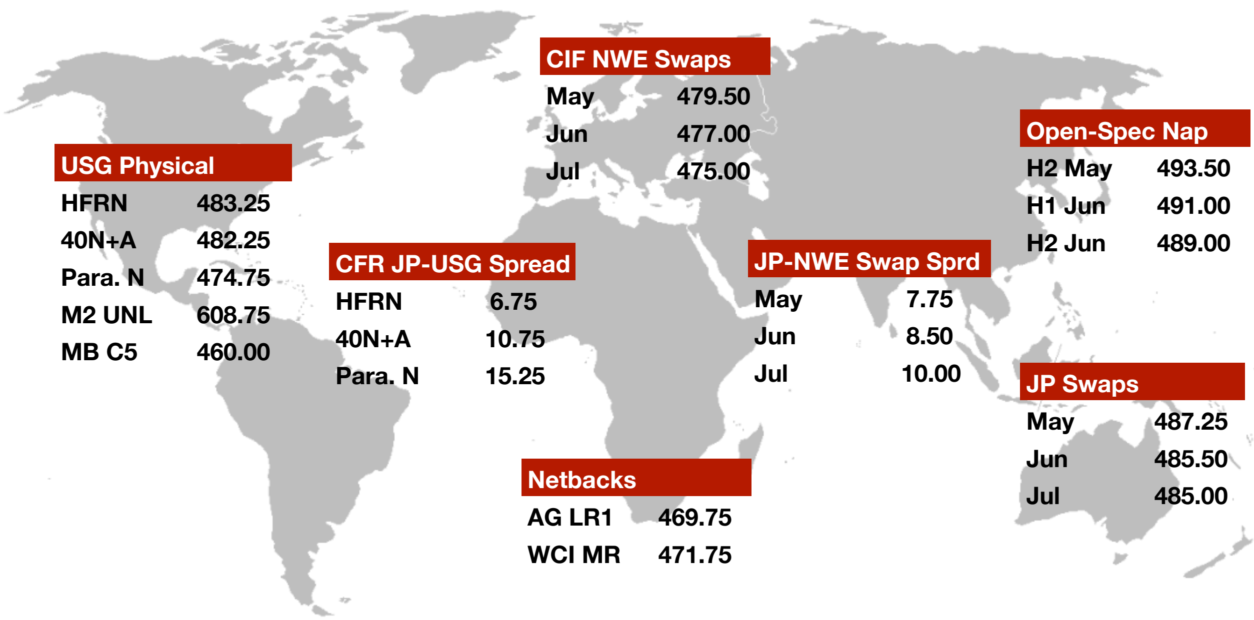
Naphtha East-West Spread



Month-to-Date Avg Propane/Naphtha Ratio



Naphtha Spot Cargo Flow Economics*



* Values contain projection values

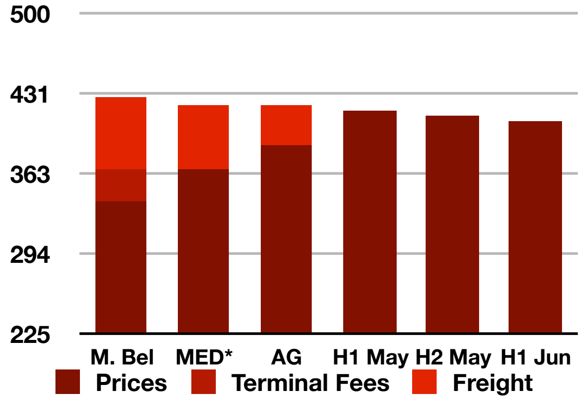
Est'd Spot Prices with Freight to Japan ($/mt)

Loading	Low	High	Mean	Change
Mt. Bel	423.50	433.50	428.50	7.75
MED	417.00	427.00	422.00	7.50
A. Gulf	418.00	428.00	423.00	9.75

LPG Mont Belvieu Forward ($/mt)

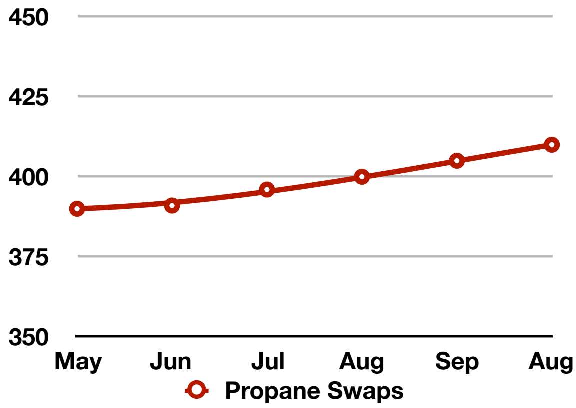
Laycan	Low	High	Mean	Change
Apr	338.00	339.00	338.50	6.50
May	334.00	335.00	334.50	8.50
Jun	334.00	335.00	334.50	8.50

Propane Spot Cargo Flow Economics

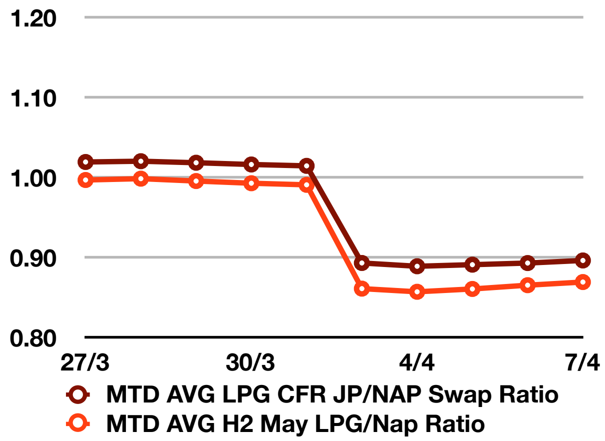


*Estimated level

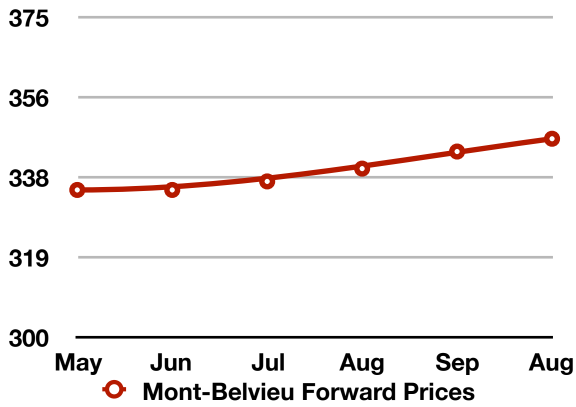
CP Swaps Values



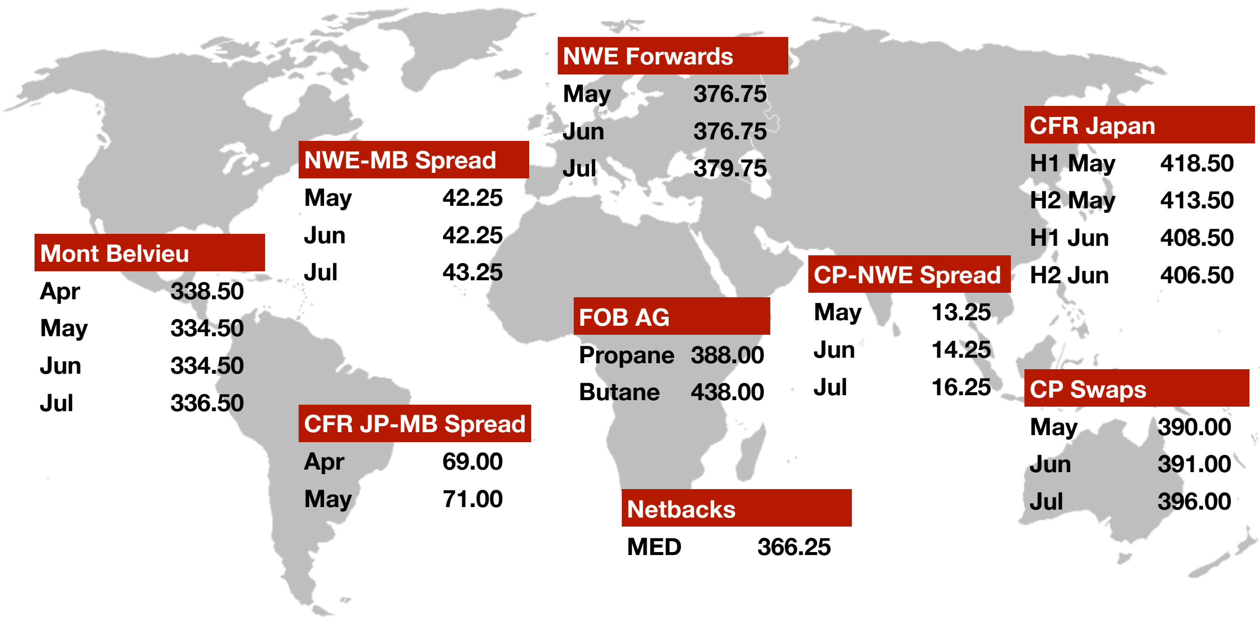
Month-to-Date Avg LPG/Naphtha Ratio



Mont Belvieu Forward Prices



Propane Spot Cargo Flow Economics*



* Values contain projection values

NAPHTHA

The naphtha price rose sharply by $10.25-10.75/mt, with notional values for H2 May ending at $493.50/mt, H1 Jun at $491.00/mt and H2 Jun at $489.00/mt.

There were two deals done during the afternoon trading window, with an H1 Jun lot that was traded between Socar and Trafigura at $491.00/mt, while an H2 Jun lot was also traded between Itochu and Trafigura at $489.00/mt.

Japan's Maruzen Petrochemical was heard to have secured some volumes of H2 May-arrival open-spec naphtha (OSN) for Chiba-delivery at premiums of slightly below $4.00/mt to Japan quotes based on a 45-day pricing.

This would be higher compared with the last H1 May Japan-delivery volumes that were transacted at slight discounts to premium to Japan quotes.

On the supply-front, several Indian tenders were completed on Thursday evening for lifting over May.

Mangalore Refinery and Petrochemicals Limited (MRPL) was heard to have sold 35,000 mt of naphtha for lifting over May 17-19 from New Mangalore at premiums of around $13.00-13.50/mt to Middle East quotes, possibility to a Japanese trading house.

A fellow Indian producer Reliance Industries Ltd (RIL) was also heard to have completed a tender, selling 55,000 mt of paraffinic naphtha for lifting over May 4-6 from Sikka at mid-teen premiums to Middle East quotes, possibly to a Western major.

The latest FOB differentials would be higher compared with the last Indian tenders for end-April loading, which were mostly settled at premiums of around $11.00-12.00/mt to Middle East quotes, OPIS record shows.

The rise in FOB premium could have been prompted by the expectation of tight supply from the Middle East producers due to a series of refinery troubles heard.

The expectation of tight supply from the Middle Eastern producers is likely to serve as a momentum for FOB differentials and is also expected to translate into higher demand for Indian barrels.

As reported earlier, operational issues that were heard at Qatar's Laffan Refinery splitters since early in the week have injected bullish sentiments, as disruptions in production came into a reality.

While a 146,000-b/d Laffan Refinery 2 (LR2) splitter was reportedly shut over the last weekend and restarted since Wednesday, Laffan Refinery 1 (LR1) splitter remains offline, with many trade sources suggesting that it is likely to remain shut until the end of April.

The two splitters with a 146,000-b/d capacity each, is able to produce up to 520,000-540,000 mt of naphtha each month when running at full tilt, while some trade sources noted that nearly 500,000 mt of full-range naphtha is produced from the two splitters.

The production loss of full-range naphtha from the two splitters is considered significant, as it can be used for both splitters and crackers.

Meanwhile, the latest shipping data showed that an LR2-sized vessel named Free Spirit chartered by Trafigura is attempting to move naphtha from Tuapse to East for lifting over Apr 30, while another LR2-sized vessel chartered by Total is attempting to ship naphtha from Eleusis to Japan for lifting over Apr 25.

With the latest vessels included arbitrage barrels into Asia for May-arrival are estimated at around 400,000-500,000 mt, while trade sources expected that total volumes would be lower than 1 million mt.

This would be even lower compared with April-arrival volumes estimated at around 1.30 million mt.

Trade sources noted that solid gasoline blending demand from West Africa and Americas have prompted increased naphtha shipments from Europe to these two regions, which however discouraged shipments to the East.

Just as importantly, the upcoming refinery turnaround at Skikda from end-April is expected to further reduce naphtha avails, while the continued firm petrochemical demand has been prompting the European producers to run their crackers at full tilt.

In addition, gasoline stocks continued to decrease in the U.S., falling by 600,000 bbl on-week in the week ended on Mar 31, according to Energy Information Administration (EIA), which is expected to increase naphtha shipments from Europe to the U.S.

Arbitrage economics remained unfavorable, with the East-West naphtha spread falling by 50 cents to $7.75/mt as of Friday, OPIS assessment shows.

Over in Singapore, naphtha imports surged to a 15-month high of 741,134 mt in January, up by 26.49% on-month and 78.50% compared with the same month last year, according to data released from International Enterprise (IE) Singapore.

The sharp rise in Singapore's naphtha imports could have been prompted by the sustained strong petrochemical margins, which translated into high cracker run-rates.

According to data obtained from IHS, OPIS' parent company, petrochemical margins, mainly ethylene, propylene and butadiene margins still remain steady despite falling prices, which prompted end-users to run their crackers at maximum operating rates.

The CFR Northeast Asia ethylene prices have been hovering around $1,120-1,170/mt, while that for butadiene have been staying at $1,800-1,850/mt in the week ending Apr 6.

The spread between naphtha and ethylene still remains at above $650/mt, which would be more than sufficient to run the crackers at full tilt, given that the conventional break-even point is about $500/mt.

LPG

In the CFR forward market, a European oil major tabled a bid for a 23,000-mt propane parcel for H1 May at plus $9/mt to May Far East quotes, working out to be around $416/mt.

The oil major also tabled a bid for a similar lot for H2 May at plus $6/mt to May Far East quotes, which worked out to be around $413/mt.

For evenly split parcel, a Western trading house submitted a bid for a 23,000-mt lot for H1 May at plus $4/mt to May Far East quotes.

No deal was concluded, with a Japanese importer offering a similar parcel for H1 May at plus $20/mt to May Far East quotes.

Propane assessments for H1 May, H2 May and H1 Jun climbed to $418.50/mt, $413.50/mt and $408.50/mt, with the LPG assessments at $448.50/mt, $436/mt and $431/mt respectively, reflecting the gain in swaps value.

Meanwhile, liquidity slowed in the CFR market on Friday as some players seemed to have retreated to the sideline, “taking stocks” of the recent deals, which limited activities mostly to the trading window.

Overall however there appeared to have been more sellers heard this week, both outside and within the window, suggesting that May market is still treading on the lengthy spectrum, according to one source.

The deals seen this week were a welcomed jolt to the spot market, but demand for May moving forward is still in question, commented another source.

Currently there seemed to be demand coming mainly from the petrochemical front, with up to three crackers expressing interests to use LPG as feedstock over May but the demand will likely be met by local suppliers.

Similarly, it was also heard that one or two Japanese petrochemical players may have room to buy 10,000-30,0000 mt of LPG for cracking.

Additionally, players are also eyeing PDH demand as the the propane-propylene margins remained favourable for spot propane cargoes.

Sellers will continually turn to the petrochemical market to absorb the spot supply, noted one source.

Early this week, a European oil major was said to have sold a 23,000-mt propane lot at $14/mt premium to May Far East quotes.

Another Western oil major then sold a 23,000-mt evenly split parcel and a 33,000-mt mixed cargo from Escravos to a South China importer.

The Western oil major was also heard to have won the tender for an early May delivery parcel into Taiwan at slightly above mid-$60's/mt discounts to May Japan naphtha quotes.

On the FOB front, progress remained limited as demand from India took a hiatus, as buyers from the Far East also indicated limited interests.

It was perceived that the muted demand from India had led to more avails for butane-composition cargo, but due to the steep butane prices for April lots, interests from the Far East were also thin, according to sources.

There were also rumours that players for the Indian market may be looking to re-sell their FOB cargoes as demand from the region weakened.

Moreover, the spot chartering rates are still considered high despite the falling values seen since the mid-week, which also contributes to the curbed interests.

As a result, sentiments in the Mideast FOB market remained bearish with players just waiting for the respective May acceptances to be fixed.

Similarly, interests from the Far East for ex-U.S. cargoes were also thin due to the negative arbitrage margins.

Furthermore, Mont Blevieu prices had been lifted by the recent higher crude prices, which worsened the arbitrage economics further.

The May CFR market continued to look lengthy in a slightly backwardated pricing structure, hence the demand to bring cargoes East is feeble, quipped one source.

While no cancellation had been heard thus far for May-loading cargoes, the possibility is still there and may not be so remote, commented another source.

On the shipping front, freight rates on the major route from Middle East to Japan dropped 98 cents to $33.60/mt.

Chartering rates for Algeria, West Africa and Houston to Japan (via Panama) were approximated at around $55/mt, $45/mt and $60/mt, respectively.

GASOLINE

However, some opined that regular supplies will not be affected as the export major continues to be seen playing a big role in the Asia Pacific oil market.

“China will still be exporting, but maybe not as much as before. After all, their refiners still have left over export quotas from last quarter and two other quarters upcoming,” commented an analyst, suggesting that cargoes will still flow from China.

"For Indonesia and Vietnam, supplies is not likely to decrease, rather, it should open up cargo outlets for other countries if there is a supply gap from China," the analyst added, addressing the concern raised.

In addition, Indonesia and Vietnam will likely reduce reliance on cargo imports as long term plans are in place to upgrade their refineries.

In Indonesia, Pertamina is upgrading six of its oldest refineries to increase their overall capacities and is slated to complete in year 2020.

On the other hand, Vietnam's 200,000-b/d Nghi Son refinery which is likely coming up last quarter this year, will also reduce its demand for imported cargoes.

In Singapore, the onshore light distillates inventories which consist of gasoline and its blending materials are being "stocked up ahead of the long weekend", one trader commented, referring to a rise in the inventory levels.

Inventories rose 259,000 bbls to two-week high of around 14.45 million bbls, according to data released by IE Singapore.

Apart from the Easter weekends, oil firms are also gearing up for the Ramadan festival, which is observed in end-May to early July largely in Indonesia and Malaysia. Demand is expected to rise sharply during the period.

Separately, Asian market sentiments remained bullish for the week ended Apr 7 due to news of Chinese export cuts and influence from the West as gasoline stocks decline.

The U.S. Energy Information Administration (EIA) reported further gasoline stock draws of around 600,000 bbls for the week ended Mar 31, resulting in a seven-week low inventory count of 239.1 million bbls.

As a result, the Singapore 92 RON gasoline crack narrowed by 7 cents to $10.30/bbl on Friday, with those for the 95 and 97 RON gasoline closing at $13.27/bbl and $14.56/bbl.

The price assessments, for 92, 95, and 97 RON gasoline closed higher at $66.03/bbl, $69.00/bbl and $70.29/bbl, respectively amid two 92 RON deals done in the paper market.

P66 bought an Apr 22-26 loading cargo from Vitol at $66.15/bbl to Singapore quotes while PetroChina bought an Apr 25-29 loading cargo from Hin Leong at $66.20/bbl to Singapore quotes.

The deal worked out to $13.09/bbl and $13.19/bbl to naphtha quotes respectively.

CONDENSATE

- **Sour condensate sentiments remain bearish on ample supply**
- **Additional DFC, LSC likely available for June on LR1 splitter issues**
- **June NWSC differentials expected to surge on strong demand, limited supply**

Asian condensate market was mixed on Friday, with sour condensate sentiments remaining bearish on concerns over ample supply, while that for sweet condensate such as NWSC continued to be firm on strong regional demand and limited supply.

The differential for the Qatari deodorised field condensate (DFC) was assessed at around $2.60-2.70/bbl premium to Dubai, while low sulfur condensate (LSC) took the second slot at $2.00-2.10/bbl premium.

The South Pars condensate (SPC) spot differential was assessed at premiums of $1.00-1.10/bbl to Dubai, while that for the Australian North West Shelf condensate (NWSC) was assessed at 70-80 cents/bbl premiums to Dated Brent.

Concerns over rising supply from the Middle East suppliers came into a reality, with multiple trade sources suggesting that a 146,000-b/d Laffan Refinery 1 (LR1) splitter is likely to remain shut until the end of April.

As reported earlier, the Qatar Petroleum for the Sale of Petroleum Products Co Ltd (QPSPP) had so far sold about 1.50 million bbls of condensate comprised of two DFC lots and one LSC lot since last week for lifting over mid-Apr and May.

Provided that LR1 splitter remains offline throughout April, it is highly likely that the Qatari firm would offer additional barrels of DFC and LSC for June program.

“They have limited tankage and it seems that their tanks are all full,” said a trade source.

Consequently, trade sources said that differentials for DFC and LSC are likely to narrow in June amid the expectation on increased supply, while demand is likely to be limited due to a splitter turnaround in South Korea, coupled with the sharp reduction in splitter capacity in Japan.

As for the May-lifting tender, a trading firm Glencore and South Korean refiner SK Energy took DFC and LSC barrels each at around $2.65/bbl and $2.05/bbl premium to Dubai, respectively, while it was also heard that PetroChina took an additional DFC lot via a private negotiation.

Just as importantly, at least five end-users from Western Europe and East Asia received offers for early May-lifting volumes of Khuff condensate from Aramco in recent weeks, which raise the possibility of the firm to shut its 225,000-b/d Ras Tanura splitter in May for maintenance.

Unlike bearish outlook for sour condensate market, the outlook for sweet condensate market remains largely bullish, thanks to the sustained demand from the regional splitter operators, coupled with limited supply.

As reported, the provisional June NWSC schedule includes four lots of a 650,000-bbl cargo each, allocated to Chevron, Shell, Mitsubishi Corp and Mitsui & Co Ltd (MIMI) and BHP Billiton, with loading schedules of June 6-10, June 10-14, June 19-23 and June 26-30.

Some trade sources noted that the differentials for NWSC barrels for June are expected to hike, as demand from splitter operators in the region such as Indonesia's Trans Pacific Petrochemicals Indotama (TPPI) and South Korea's Hanwha Total remain strong.

As for May-lifting program, it was heard that two lots were taken by TPPI, while the remaining two lots were secured by Hanwha Total.

In particular, TPPI is likely to seek additional volumes of NWSC, as it was heard that the firm's 100,000-b/d splitter is only able to take cleaner condensate such as NWSC due to its configuration.

"If not, they will have to take other alternatives such as Pluto and Bayu Undan but supply is always limited," said a trade source.

Just as importantly, Taiwan's CPC Corp may also seek NWSC to feed its new 50,000-b/d splitter in Talin complex during the early stage of commercial operations that is expected in July.

The Taiwanese refiner had secured a May-delivery Bayu Undan lot of 650,000 bbl for delivery into Kaohsiung to feed its new splitter during a test-run period in May-June.

It is expected that the firm to feed the new splitter with sweet condensate in the beginning, while sour condensates such as DFC may also be considered in the later stage.

Finally, the continuously narrow Brent-Dubai exchange of futures for swaps (EFS) is also supportive of Brent-linked condensate such as NWSC.

The mean spread between Dubai and Brent has been at $1.30/bbl during the first week of April, while that for March was at $1.51/bbl, OPIS data shows.

"Sweet condensate demand is stronger while supply is limited," said a trade source.

"I expect that NWSC differentials to rise sharply to around $1.00-1.50/bbl to Dated Brent for June," the source added.

The May NWSC program was mostly settled at 60-80 cents premium to Dated Brent, OPIS record shows.

REFINING NEWS

India's Bharat Petroleum Corp Ltd (BPCL) was said to have started up a light naphtha isomerization unit at its Mumbai refinery in March, with the low-temperature Isomalk-2 process technology provided by GTC Technology, according to GTC Technology.

Installation of the unit, which produce an isomerised gasoline blend stock component, came at a time when the country's refiners moved to the new norms effective since April 1, for the entire nation's switch to using Bharat Stage IV (BS-IV) with maximum 50 ppm sulfur content fuels including gasoline and gasoil, tackling the air pollution.

Under the Auto Fuel Policy 2025, the Indian government has laid down a roadmap to improve the fuel quality meeting BS-VI norms by April 2020, while skipping the BS V norms, which were initially scheduled for 2019.

Separately, BPCL and two other state-owned refiners; Indian Oil Corp (IOC) and Hindustan Petroleum Corp Ltd (HPCL) was reported to have signed a pact to build a 60 million-mt/year (approximately 1.2 million b/d) refinery in Maharashtra state on the west coast.

IOC is said to hold the majority stake of 50%, while the other two partners will take up 25% of the share each.

The refinery, when built, will be the biggest refinery in the sub-continent, with the construction to be carried out in two phases.

Phase 1 will see the refinery with a total crude processing capacity of 40 million mt/year (800,000 b/d), along with other secondary processing units such as hydrotreaters, and a naphtha cracking unit, and a petrochemical complex.

The second phase will add another 20 million-mt/year (400,000-b/d) capacity to the refining complex.

Gulf suppliers were said to be interested to be involved in the project, as the country's Oil Minister, Dharmendra Pradhan said at the Global Natural Resources Conclave that Saudi Aramco and Abu Dhabi National Oil Co (ADNOC) were currently in talks for investment in the IOC sector.

He also said that the Aramco was interested in the refinery, while ADNOC was looking at the petrochemical plant.

In addition, ADNOC was seen expanding its presence in crude oil storage in India, agreeing with the Indian government on establishing a strategic crude oil storage in the southern Indian city of Mangalore, as reported earlier.

The agreement between the Gulf supplier and the Indian Strategic Petroleum Reserves Ltd. (ISPRL) is to store 5.86 million bbl of the former's crude oil in underground rock caverns at the Karnataka state, taking about half capacity of the storage facility, while the other half was heard to have already been filled with Iranian crude oil.

ADNOC supplies three grades of crude oil including Murban, Das blend and Upper Zakum, while the former was heard to be likely the grade that would be stored in Mangalore.

Fellow Gulf supplier, Kuwait National Petroleum Company (KNPC) has opened up its assets of Shuiba refinery on a public auction, which has ceased operations as of April 1, according to a document obtained by OPIS.

The document also showed that "KNPC is also intending to sell Process Units located in Mina Abdullah (MAB) and Mina Ahmadi (MAA) refineries upon their Operation cease, tentatively by end of 2018."

The scrapping of the Shuaiba refinery with 200,000 b/d of capacity comes as the country's Kuwait National Petroleum Co. (KNPC) prepares for the clean fuels project.

The project is an upgrade and expansion of the nation's two biggest existing refineries, with the focus on producing cleaner higher-value fuels such as diesel and kerosene for export purpose.

As of now, KNPC runs two refineries — 466,000-b/d Mina al-Ahmadi, 270,000-b/d Mina Abdullah.

With the ongoing project, Mina al-Ahmadi refinery capacity will be reduced to 347,000 b/d, while that for Mina Abdulla will rise to 454,000 b/d.

The firm has been working on construction of Al-Zour refinery with capacity of 615,000 b/d, for which the initial operation will start in December, 2018.

Once the two ongoing projects are completed, the country's total refining capacity will rise to 1.416 million b/d.

Meanwhile, as of 4:30 pm in Singapore, Brent futures stood at $55.74/bbl, up by $1.39, while that for Dubai and U.S. West Texas Intermediate (WTI) crude were trading at $54.43/bbl and $52.97/bbl, also up by $1.43 and $1.44, respectively, all for the month of June.

The spread between Brent and Dubai narrowed by 4 cents, ending the session at $1.31/bbl, while that for Dubai and WTI also narrowed by 1 cents to $1.46/bbl.

Friday, April 7, 2017

OPIS Naphtha Assessment Explanatory Sheet (ONAES)

Summary

Cycle	OPIS Assessment	Using Japan Swaps Value	Using EW Spread	Using NWE Change	Using Brent Change
H2 May	493.50	494.00	494.25	492.75	493.00
spread	2.50	2.50	2.50	2.50	2.50
H1 Jun	491.00	491.50	491.75	490.25	490.50
spread	2.00	2.00	2.00	2.00	2.00
H2 Jun	489.00	489.50	489.75	488.25	488.50
Ref. Value	486.700	487.250	487.370	485.998	486.288

Assessment	Previous CFR JP Assessment	Today's CFR JP Assessment	% Change	Previous CFR KR Assessment*	Today's CFR KR Assessment*
Value	479.50	490.00	2.19%	480.50	491.00

* Daesan-basis

OSN Assessment Explanations

1) **Two outright deals were concluded in the OSN window today.**
2) **The deal-first principle determines that the H1 Jun and H2 Jun assessments as per the trades, are to be at \$491/mt and \$489/mt respectively.**
3) **Assessment value for H2 May will be obtained using the respective inter-cycle timespread.**
4) **Since there is/are outright deal(s) done in the market, there is no need to use secondary reference points for assessment. The reference points are only for your reference and valuable input.**

CFR Korea Assessment Explanations

1. **Since there is no CFR South Korea outright deal traded today, there is a need to use the CFR JP assessment as secondary reference value for assessment.**
2. **CFR KR Assessment = 480.50 + 2.19% ≈ 491.00 (rounded to nearest 25 cents)**
   \$480.50 : Previous CFR KR assessment
   2.19% : % Change of CFR JP assessment

For illustration and feedback-gathering only

- **The other assessment values are calculated using Japan Swaps, EW-Spread, NWE-Change and Brent-Change values.**
- **These values are used to solicit feedbacks only and are NOT used for assessment when there are OSN outright deals done.**
- **Reference points are taken as they were at 4:30pm Singapore time.**

The below is only for reference when NO DEAL is done.

For illustration purpose only

Friday, April 7, 2017

OPIS
an IHS Markit company

Using Japan Swaps Values

Type	Japan Swaps @ 4:30pm	H2 May/H2 Jun Spread	H2 May/H1 Jun Spread	H1 Jun/H1 Jul Spread	H2 Jun/H2 Jul Spread
Value	487.25	4.50	2.50	3.25	2.25

Cycle	Swaps Value as Reference	Highest Bid	Lowest Offer	Cycle	Today's OSN Assessment
H2 May	494.050	-	-	H2 May	494.00
spread	2.50			spread	2.50
H1 Jun	491.550	487.00	496.00	H1 Jun	491.50
spread	2.00			spread	2.00
H2 Jun	489.550	485.00	496.00	H2 Jun	489.50
spread	1.25				
H1 Jul	488.300				
spread	1.00				
H2 Jul	487.300				
spread	1.00				
H1 Aug	486.300				
Ref. Value	487.250				

Explanations:

1) Japan Swaps value as of 4:30pm is used as the reference value ($487.250/mt)
2) Using *formula** below for Reference Value (RV), the H1 Jul, H2 Jul and H1 Aug values can be calculated. The H2 May, H1 Jun and H2 Jun values are calculated using inter-month timespreads.
3) The indicative value for H1 Jun ($491.550) is WITHIN the bid-offer range, the H1 Jun assessment is therefore $491.50/mt, rounded to the nearest 25 cents.
4) The H2 May and H2 Jun assessment values will be obtained using inter-cycle timespreads.

** Reference Value (RV) = ((9*H1 Jul)+(20*H2 Jul)+(11*H1 Aug))/20/2*
(Note: 9 working days in H1 May, 11 in H2 May, and 20 in whole of May)

Friday, April 7, 2017

Using East-West Spread

EW Spread	NWE Value	H2 May/H2 Jun Spread	H2 May/H1 Jun Spread	H1 Jun/H1 Jul Spread	H2 Jun/H2 Jul Spread
7.75	479.62	4.50	2.50	3.25	2.25

Cycle	EW Spread as Reference	Highest Bid	Lowest Offer	Cycle	Today's OSN Assessment
H2 May	494.170	-	-	H2 May	494.25
spread	2.50			spread	2.50
H1 Jun	491.670	487.00	496.00	H1 Jun	491.75
spread	2.00			spread	2.00
H2 Jun	489.670	485.00	496.00	H2 Jun	489.75
spread	1.25				
H1 Jul	488.420				
spread	1.00				
H2 Jul	487.420				
spread	1.00				
H1 Aug	486.420				
Ref. Value	487.370				

Explanations:

1) East-West Spread as of 4:30pm is used as the reference value.
2) Using EW-spread value and the NWE value, the Reference Value (RV) is (7.75+479.62) = $487.370
3) Using *formula** below for Reference Value (RV), the H1 Jul, H2 Jul and H1 Aug values can be calculated. The H2 May, H1 Jun and H2 Jun values are calculated using inter-month timespreads.
4) The indicative value for H1 Jun ($491.670) is WITHIN the bid-offer range, the H1 Jun assessment is therefore $491.75/mt, rounded to the nearest 25 cents.
5) The H2 May and H2 Jun assessment values will be obtained using inter-cycle timespreads.

** Reference Value (RV) = ((9*H1 Jul)+(20*H2 Jul)+(11*H1 Aug))/20/2*
(Note: 9 working days in H1 May, 11 in H2 May, and 20 in whole of May)

Using Past-Day NWE Value

Prev-Day NWE	Today NWE	H2 May/H2 Jun Spread	H2 May/H1 Jun Spread	H1 Jun/H1 Jul Spread	H2 Jun/H2 Jul Spread
469.56	479.62	4.50	2.50	3.25	2.25

Cycle	Prev-NWE as Reference	Highest Bid	Lowest Offer	Cycle	Today's OSN Assessment
H2 May	492.798	-	-	H2 May	492.75
spread	2.50			spread	2.50
H1 Jun	490.298	487.00	496.00	H1 Jun	490.25
spread	2.00			spread	2.00
H2 Jun	488.298	485.00	496.00	H2 Jun	488.25
spread	1.25				
H1 Jul	487.048				
spread	1.00				
H2 Jul	486.048				
spread	1.00				
H1 Aug	485.048				
Ref. Value	485.998				

Explanations:

1) **Three values are used to derive the Reference Value today**
2) **Today's Reference Value = 475.938 + (479.62-469.56) = 485.998**
   \$475.938 : Reference Value of Previous-Working-Day
   \$479.62 : 4:30pm NWE Today
   \$469.56 : 4:30pm NWE Previous-Working-Day
3) **Using *formula** below for Reference Value (RV), the H1 Jul, H2 Jul and H1 Aug values can be calculated. The H2 May, H1 Jun and H2 Jun values are calculated using inter-month timespreads.**
4) **The indicative value for H1 Jun (\$490.298) is WITHIN the bid-offer range, the H1 Jun assessment is therefore \$490.25/mt, rounded to the nearest 25 cents.**
5) **The H2 May and H2 Jun assessment values will be obtained using inter-cycle timespreads.**

**** Reference Value (RV) = ((9*H1 Jul)+(20*H2 Jul)+(11*H1 Aug))/20/2***
(Note: 9 working days in H1 May, 11 in H2 May, and 20 in whole of May)

Friday, April 7, 2017

Using Past-Day Brent Value

Prev-Day 4:30pm Brent	Today 4:30pm Brent	H2 May/H2 Jun Spread	H2 May/H1 Jun Spread	H1 Jun/H1 Jul Spread	H2 Jun/H2 Jul Spread
54.35	55.73	4.50	2.50	3.25	2.25

Cycle	Prev-Brent as Reference	Highest Bid	Lowest Offer	Cycle	Today's OSN Assessment
H2 May	493.088	-	-	H2 May	493.00
spread	2.50			spread	2.50
H1 Jun	490.588	487.00	496.00	H1 Jun	490.50
spread	2.00			spread	2.00
H2 Jun	488.588	485.00	496.00	H2 Jun	488.50
spread	1.25				
H1 Jul	487.338				
spread	1.00				
H2 Jul	486.338				
spread	1.00				
H1 Aug	485.338				
Ref. Value	486.288				

Explanations:

1) Three values are used to derive the Reference Value today
2) Today's Reference Value = 475.938 + [(55.73-54.35)*7.5] = 486.288
   - $475.938 : Reference Value of Previous-Working-Day
   - $55.73 : 4:30pm Brent Today
   - $54.35 : 4:30pm Brent Previous-Working-Day
   - 7.5 : Conversion factor for Brent from bbls into mt
3) Using *formula** below for Reference Value (RV), the H1 Jul, H2 Jul and H1 Aug values can be calculated. The H2 May, H1 Jun and H2 Jun values are calculated using inter-month timespreads.
4) The indicative value for H1 Jun ($490.588) is WITHIN the bid-offer range, the H1 Jun assessment is therefore $490.50/mt, rounded to the nearest 25 cents.
5) The H2 May and H2 Jun assessment values will be obtained using inter-cycle timespreads.

** Reference Value (RV) = ((9*H1 Jul)+(20*H2 Jul)+(11*H1 Aug))/20/2*

(Note: 9 working days in H1 May, 11 in H2 May, and 20 in whole of May)