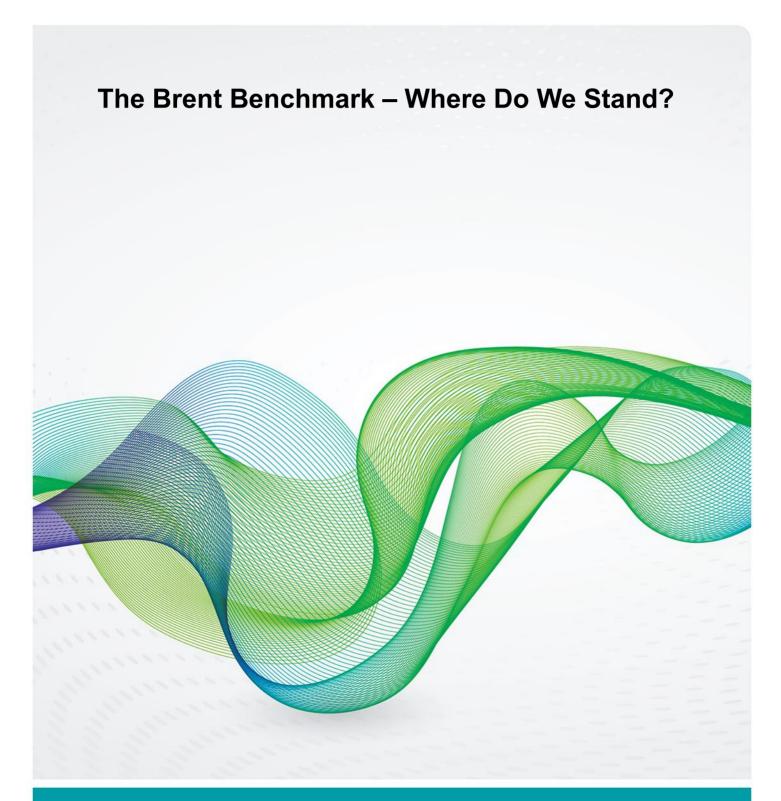


July 2022





Introduction

The introduction of the WTI Midland crude oil into the 'Brent' benchmark¹ has caused a fair amount of controversy, debate, and argument, but the industry seems to be gradually reaching a consensus regarding the broad format of the new benchmark:

- Brent assessment will remain as if it was a 'Free on Board' (FOB) basis, despite the inclusion
 of the WTI Midland crude loaded on the US Gulf Coast.
- The cargo size will change to from 600k to 700k barrels reflecting the usual size of oil loaded in the US and bound for Europe as well as the size of modern Aframax vessels.
- The 'Dated' Brent bids, offers, and trades for this grade delivered into Rotterdam² will be
 adjusted to freight in Northwest Europe (NWE) so that the prices of WTI Midland and rest of
 the 'Brent basket' crudes are comparable.
- The US grade can also be nominated into the Brent forward contract. While the detailed mechanics of the workings of the cash market do not seem to have been fully agreed yet, it is likely to resemble Dated Brent in as much as the value of WTI Midland will have to reflect the realities of the North Sea cash market. In other words, any Midland crude delivered to a cash buyer in Rotterdam should have its price adjusted for freight, 'as if it loaded in the North Sea'.

Several versions of bilateral contracts or general terms and conditions (GT&Cs) for the 'new' Brent benchmark have emerged. The purpose of this Energy Comment is to discuss these proposed terms and other outstanding issues that need to be settled before the contract starts trading next year. Also, we point to a possible need for the price assessment to account for the different timing in payment terms for WTI Midland, relative to the other BFOET grades, in the case where the US crude is paid on different terms.

The latest 'Brent' announcement

On June 8, 2022, Platts, part of S&P Global Commodity Insights, announced³ that it would reflect cargoes of WTI Midland crude oil in its Dated Brent crude oil benchmark, with effect from June 2023 cargo deliveries. Platts will maintain the assessment of the Dated Brent benchmark and Cash BFOE as FOB North Sea values, with Cash BFOE methodology to be finalized in the coming months.

What is new in this proposal, compared to the one published on Feb. 14, 2022, is that the Freight Adjustment Factor (FAF) to be applied to WTI Midland is be set at 80%, in line with all the other BFOE barrels⁴. It is important to note that the original 40% FAF proposed for Midland.⁵ was just a suggestion, and it was probably introduced to minimize the dominance of WTI Midland in the Brent contract (the volumetric dominance of WTI can clearly be seen in Figure 1). However, these concerns could be resolved using the quality premium (QP) adjustment mechanism⁶. In the case of WTI Midland, the applicable QP would likely be negative. As it is a differential and not an absolute price, we see no reason why a negative quality differential should not be used if deemed appropriate⁷. Platts has indicated 'it would be able to apply such an adjustment if necessary.'

¹ We shall use interchangeably Brent, 'Brent basket' and BFOET (Brent, Forties, Oseberg, Ekofisk and Troll).

² Assessment is basis Rotterdam. Of course, the grade can be delivered anywhere in the NEW.

³ 'Platts to reflect WTI Midland in Dated Brent, Cash BFOE from June 2023', June 8, 2022. https://plattslive.com/commodity/crude-oil

⁴ See: https://www.spglobal.com/platts/plattscontent/ assets/ files/en/our-methodology/methodology-specifications/dated-brent-cif-rotterdam.pdf

⁵ 'The Future of the Brent Oil Benchmark: A Radical Makeover', OIES Energy Comment, 4/4/2022; https://www.oxfordenergy.org/publications/the-future-of-the-brent-oil-benchmark-a-radical-makeover/

⁶ See S&P Global, Specifications Guide, Europe and Africa Crude Oil, Latest update: July 2022; page 10, https://www.spglobal.com/commodityinsights/plattscontent/ assets/ files/en/our-methodology/methodology-specifications/emea-crude-methodology.pdf

⁷ 'Platts will review the applicability of a quality premium or any similar adjustment mechanism for WTI Midland cargoes in the Brent complex after initial implementation'. https://plattslive.com/commodity/crude-oil



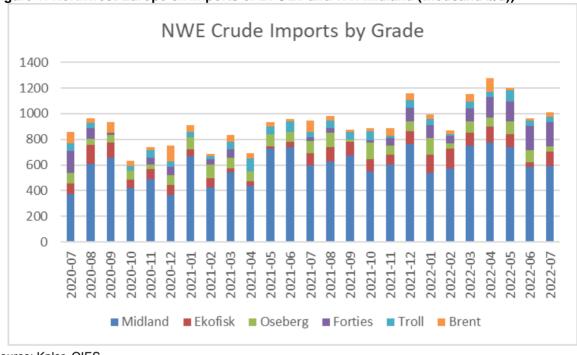


Figure 1: Northwest Europe oil Imports of BFOET and WTI Midland (thousand b/d))

Source: Kpler, OIES

SUKO General Terms and Conditions (GT&Cs)

From the earliest days of the Brent forward trading, Shell UK was the largest primary seller of Brent crude oil.⁸ It was only natural that the market would eventually settle for SUKO GT&Cs⁹ which had been revised on numerous occasions since 1990s¹⁰. The advantage of having a common set of GT&Cs is that traders can focus on negotiating the price, knowing in advance all the other important elements of an agreement such as quality, quantity, law, freight provisions and others. Equally, when all the cargoes are traded on the same terms, their price is easily comparable.

Since the original Platts announcement, on February 14th, 2022, we have seen the original Shell UK (Suko) 1990 GT&Cs proposal for further amendments, to reflect the inclusion of WTI in the Brent contract¹¹.

For the important quality specification, the original Platts WTI Midland specifications are amended by adding limits on organic chloride (OC) at maximum of 1 ppm (probably with the major OC contamination of Russian Urals back in 2019 still fresh in mind) as well as adding some distillation specifications¹².

The quality of WTI Midland has been one of the main concerns for the European buyers as the contractual crude quality can often be met by blending various heavy grades with condensates. Such blends may have very different refining properties, yielding lower volumes of premium products and impacting the refining value of crude oil. To that end, the proposed changes to the SUKO GT&Cs also

⁸ 'The Market for North Sea Crude Oil', Robert Mabro et.al. Oxford University press for the OIES, 1986, page 216.

⁹ According to some market accounts, this was due to Shell's readiness to change their terms. From interviews with ex-BNOC traders, Ms. Bosley, and Mr. Bryce.

¹⁰ See: https://www.shell.com/business-customers/trading-and-supply/trading/general-trading-terms-and-conditions.html

https://www.shell.com/business-customers/trading-and-supply/trading/general-trading-terms-and-conditions/jcr_content/par/toptasks_copy.stream/1653300136349/ca261c49650e0c850ee18c6e82650ad3dfdfba95/suko-90-final-amendments-2023.pdf

The amendments are "... to be reflected in the SUKO 90 General Terms and Conditions in due course'. Ibid, page 1.

¹² Ibid, page 2, section d).



include distillation specifications and a preliminary list of eligible terminals at Port Arthur, Houston, Corpus Christi, and Louisiana, for delivery of WTI Midland into the Brent forward contract.¹³

However, any GT&Cs will have to leave the terminal inclusion open-ended as to avoid a legal 'non-compete' clause. ¹⁴ This issue is likely to become one of assessment rather than contractual. PRAs do have very strict terms for inclusion into their 'assessment windows' and there is no reason why similar approach cannot be used to the terminals loading WTI Midland.

However, the latest SUKO amendments include only a Cost, Insurance and Freight (CIF) delivery provision for WTI Midland where 'Risk and Title of the crude oil shall pass from the Seller to the Buyer immediately as the vessel carrying the crude leaves the Economic Exclusion Zone (EEZ) of the United States of America having left the last port in the United States'¹⁵. It is not clear why the proposed amendments to the SUKO terms would only include a CIF delivery of WTI Midland when 'In its proposal, Platts stated that, on being nominated an FOB WTI Midland cargo, a buyer should charter a vessel acceptable to seller and the nominated terminal, with title and risk passing from seller to buyer in international waters'¹⁶.

One possibility is that Shell was trying to avoid any exposure to the US jurisdiction and regulation of the contract. This issue goes back to 1990 and the court case that a Bermuda-based company Transnor lodged in the United States (US) District Court in New York against BP, Shell and other oil companies involved in trading of the forward Brent contract¹⁷. A US Federal judge ruled that Transnor could pursue its claim: '... because the Brent market was "primarily" a United States futures market¹⁸. The Transnor claim was settled out of court and the ruling was never quite clarified¹⁹. As a result of this continuing lack of clarity, most key participants in the Brent market have always avoided trading with US-based entities.

The other important reason is avoiding possible exposure to the US tax authorities. Normally, any FOB sale involves passing of the title and risk from the seller to the buyer at the loading port. Any other contractual arrangement regarding the title passing elsewhere, while remaining on the FOB basis may be seen in breach of the US tax regulations. For this reason, if most of the Brent players see the same problem as Shell, some form of CIF cash contract may have to be accepted. However, the nature of GT&Cs (FOB or CIF) should not be confused with the essence of the price assessment. Trades in oil based on CIF GT&Cs can be used to derive an FOB price.

Alternative contracts

Two alternative contracts have been in circulation²⁰ in the marketplace: a BP Oil International (BPOI) draft of proposed amendments and Vitol GT&Cs.²¹

Since we have seen only drafts and not officially published documents, we cannot formally review them. However, from what we have seen, it appears that they are both designed to accommodate the Platts latest proposals. The BP proposal does seem to include a sulphur escalator, which could further

¹³ Ibid, page 5.

¹⁴ Excluding some terminals could be seen as preventing competition.

¹⁵ Ibid, page 3.

¹⁶ 'Platts to reflect WTI Midland in Dated Brent, Cash BFOE from June 2023', June 8, 2022. https://plattslive.com/commodity/crude-oil

¹⁷ 738 F. Supp. 1472 (1990) TRANSNOR (BERMUDA) LIMITED, Plaintiff, v. BP NORTH AMERICA PETROLEUM, Conoco Inc., Shell Oil Company, BP Oil International Ltd., Conoco (U.K.) Ltd., Shell U.K. Ltd., Shell International Trading Co., and Exxon Corporation, Defendants. No. 86 Civ. 1493 (WCC). United States District Court, S.D. New York, April 18, 1990.

¹⁸ Reuters on May 23, 1990,

¹⁹ 'A panel appointed by the Commodity Futures Trading Commission said it would recommend that the Federal agency take no action in the Brent forward market. A joint statement by the commodity commission and the British Government said the Brent oil market was international and could not be regulated as if it were exclusively a United States market'. Ibid.

²⁰ To our knowledge, the two have not been formally published for public scrutiny. They have been circulating among the Brent market participants only, so it is impossible to formally review them.

²¹ GENERAL TERMS AND CONDITIONS FOR BRENT/ FORTIES/ OSEBERG/ EKOFISK/ TROLL/ MIDLAND TRANSACTIONS ("BFOETM22 GTCs" 1st Ed. 2022



discount Midland WTI offered into the Brent contract²². There is still a fair bit of time for new proposals and amendments to be put forward as well as for the existing ones to be changed.

So how crucial is it for the terms and conditions to be agreed before the formal trading in the new Brent contract commences in February 2023, when the June Cash BFOE value will begin to be assessed?

While it would clearly be useful to have a one standard GT&Cs for the new Brent contract, it is not necessary, especially if the terms are not materially different. It is quite possible that two or more 'terms and conditions' may be used simultaneously, leaving the PRAs to assess if they give a buyer or a seller some price advantage.

However, it will be essential to agree on the nature of GT&Cs. The industry will have to discuss and accept the terms that can be traded and if there are tax impediments to FOB GT&Cs, alternative, delivered terms may have to be accepted, while preserving the FOB nature of the Brent price assessment.

A standardised Brent Forward contract will also aid in the calculation of the Brent Index which ICE uses to settle the Brent Futures contract.

Payment terms

Another issue regarding the inclusion and the assessment of the value of WTI crude in the Brent basket concerns the difference in payment terms. This has become more obvious with the recent rise in interest rates, which makes the value of different payment terms between delivered WTI and the BFOET grades of North Sea oil even more exaggerated.

North Sea BFOET grades normally trade with payment thirty days after the bill of lading (b/l). Having such a short transit time (1-2 days), Rotterdam buyers pay for these barrels some 28 days after delivery. However, when WTI Midland is delivered into Europe, the buyer often pays five to ten days²³ after the delivery. This means receivers are paying for WTI Midland 23 days earlier than for North Sea BFOET (28 minus 5 days). With oil prices close to \$100/bbl and interest rates rising, WTI Midland, with its earlier payment terms, is almost 30 cents per barrel less competitive than the BFOET grades.²⁴

There does seems to be a mixed opinion in the market on this point.²⁵ Some explain that the terms are inherent in the nature of the contracts and accounted for in the buyers' linear programming (LP) models, while others believe that the value of differing payment terms should be accounted for in the assessment of the grades. If the latter view prevails, an agreement on the basis for the interest calculation (number of days and the rate of interest) will need to be formalised.²⁶

The London interbank borrowing rate (LIBOR) is no longer used to issue new loans in the U.S. and is being replaced by the Secured Overnight Financing Rate (SOFR). SOFR should be a more accurate and more secure pricing benchmark as it is based on the actual transactions in the Treasury repurchase (repo) market. In Europe, LIBOR is still widely used with an understanding that SOFR will probably prevail by the end of next year²⁷. As most oil market participants may not be able to obtain credit at this rate, an adjustment of additional hundred basis points (one percent) may be necessary.

In other words, a simple methodology may be agreed for calculating the payment discrepancy on any one day. For example, WTI Midland, with 5 days after Rotterdam delivery payment could be discounted

²² The version of the proposed BP GT&Cs seen by the author states that: 'A sulphur penalty (governed by Platts) shall be in place for the seller to deliver Midland over 0.15% sulphur with a hard limit at 0.2% exactly. We believe this is paramount to confidence in deliverable Midland'.

²³ Payment tends to be 5 days following CIF deliveries, while the outturn sales tend to be agreed with 10 days after delivery payment terms.

 $^{^{24}\ \$100}$ oil at 5% interest over20 days gives \$0.28 a barrel difference in price.

²⁵ The authors have raised it with a small sample of market participants.

²⁶ In article 12.2 c), Vitol GT&Cs propose SOFR rate without any adjustment to be applicable on Bookouts.

²⁷ From conversations with the industry participants.

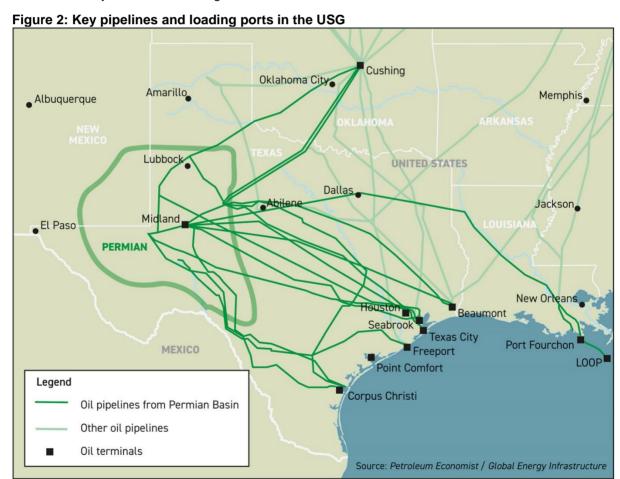


further by the amount equal to the cost of financing for a barrel of crude at the SOFR rate published (settled) on that day plus a hundred basis points over the period of 23 days.

Even simpler solution would be if industry accepted universal '30 days after the bill of lading' payment terms, regardless of delivery terms. WTI Midland competes with light, sweet North Sea and West African crude oils which all have similar sailing and payment terms.

Terminals and quality parameters

All crude oil streams are blends. This is particularly true of pipeline barrels where numerous inputs make up the end-product. WTI Midland has established itself as the US crude oil export grade of choice due to its consistently higher level of quality over WTI Cushing. Pipelines that deliver crude directly from the Permian Basin to the Gulf Coast (see Figure 2), should be more likely to deliver 'pure' WTI Midland. These currently include BridgeTex, Longhorn, Midland-to-Echo I/II/III, Cactus I/II, EPIC, Gray Oak, Permian Express, and Wink-to-Webster. And correspondingly the loading facilities at the end of these pipelines in Corpus Christi, Texas City, Houston, Beaumont, Nederland, and Port Arthur (see their relative importance in Figure 3) are logical choices from which WTI Midland loading programs should be accepted. Not surprisingly the further East on the Gulf Coast crude is lifted, the greater likelihood one could receive WTI Midland barrels transhipped via Cushing, OK, or in the case of LOOP, barrels that may have not even originated in the Permian.



Source: With permission from the Petroleum Economist and Global Energy Infrastructure

Platts has stipulated that any terminal seeking approval "must not have receipt directly from any Cushing origin pipeline." Also, simply loading an Aframax cargo of 700,000 barrels is not enough. The approved terminals need to operate at a level consistent with the existing BFOET North Sea terminals



of Sullom Voe, Hound Point, Mongstad and Tees. This may mean publishing month-ahead loading windows in line with the North Sea loading programs. At very least, it means that the terminal should guarantee that any cargo traded into the brent complex exists with a given loading dates that will not be deferred²⁸.

Up until the introduction of WTI Midland into the benchmark, quality aspects of the benchmark have been relatively straightforward. With the only exception of Forties, the grades in the 'Brent basket', were sold as 'per normal export quality' defined by the loading terminal. Only Forties had some variations in the sulphur content since the introduction of the Buzzard field and this was remedied with the introduction of a sulphur escalator²⁹.

In their latest SUKO 1990 GT&C proposed amendment, Shell has spelled out additional requirements to include no ship-to-ship transfer, static tank loading and the ability to issue a certificate of quality. They seem to have prioritised the quality of the barrels over the barrel's origin.

While in line with Platts on the defined quality for WTI Midland, the proposed Shell GT&C amendments have also gone a bit further. Shell also introduced Organic Chlorides content of no greater than 1ppm and a High Temperature Simulate Distillation that top and bottoms light ends and residual³⁰.

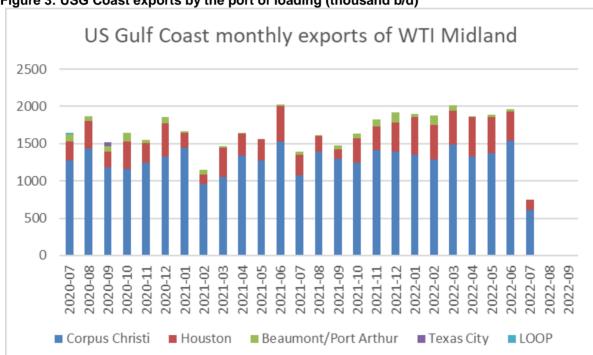


Figure 3: USG Coast exports by the port of loading (thousand b/d)

Source: Kpler, OIES

This is an important point when considering the myriad of USGC loading facilities potentially eligible to export WTI Midland. The oil products trading community finds this commonplace due to the disparate location and technical complexity of the world's oil refineries. The more stringent specs should help reduce the debate about which loading facilities can be approved for lifting.

²⁸ This is seen as the minimum requirement to make a WTI Midland cargo included into 'Brent'.

²⁹ https://www.spglobal.com/commodityinsights/PlattsContent/_assets/_files/en/our-methodology/methodology-specifications/north-sea-desescalator.pdf

³⁰ All information referenced from Shell proposed 2023 amendments to SUKO 90 GTCs and S&P Global Commodity Insights Specification Guide, Americas Crude Oil, July 2022.



Conclusion

The inclusion of WTI Midland crude oil in the Brent contract is not far away—the 'new' Dated Brent assessments will begin in May 2023, and the associated June forward BFOE assessment will start even earlier, in February 2023. There are still some details to be ironed out. The latest amendments to SUKO 1990 GT&Cs are a step in the right direction but the nature of the cash 'Brent' contract which includes WTI Midland is still under discussion. Tax and legal aspects of the business are important in the commodity business and must be considered carefully. The key insight is that a delivered nature of any contract is not incompatible with a FOB assessment of its value.

It would be useful for the industry to settle on one standard set of bilateral contractual terms, simplifying the assessments of the price reporting agencies (PRAs). If history of the Brent contract is anything to go by, it is likely that two or more GT&Cs may be used in parallel with the industry settling on one only after several years.

The issue of quality and terminals remains important, but this can also be implemented over time, through a process of learning and agreement on commonly accepted parameters. There is no guarantee that some terminals will ever accept constraints of a Brent contract. As we have pointed out before,³¹ transparency in terms of loading programs and quality is in the interest of terminals and sellers as it will enhance the value of their exports. However, it may take time for that value to become apparent.

The payment terms issue should be resolved before the first contracts trade. We propose a simple and hopefully only a temporary adjustment to reflect the occasional difference in the WTI Midland payment terms relative to BFOET grades.

³¹ 'The Future of the Brent Oil Benchmark: A Radical Makeover', OIES Energy Comment, 4/4/2022; https://www.oxfordenergy.org/publications/the-future-of-the-brent-oil-benchmark-a-radical-makeover/