

**SUBMISSION COVER SHEET**

**IMPORTANT:** Check box if Confidential Treatment is requested

**Registered Entity Identifier Code (optional):** 18-466 (2 of 2)

**Organization:** New York Mercantile Exchange, Inc. ("NYMEX")

**Filing as a:** DCM SEF DCO SDR

**Please note - only ONE choice allowed.**

**Filing Date (mm/dd/yy):** 12/24/2018 **Filing Description:** Initial Listing of Two (2) Freight Futures Contracts

**SPECIFY FILING TYPE**

**Please note only ONE choice allowed per Submission.**

**Organization Rules and Rule Amendments**

- |                          |                                     |            |
|--------------------------|-------------------------------------|------------|
| <input type="checkbox"/> | Certification                       | § 40.6(a)  |
| <input type="checkbox"/> | Approval                            | § 40.5(a)  |
| <input type="checkbox"/> | Notification                        | § 40.6(d)  |
| <input type="checkbox"/> | Advance Notice of SIDCO Rule Change | § 40.10(a) |
| <input type="checkbox"/> | SIDCO Emergency Rule Change         | § 40.10(h) |

**Rule Numbers:**

**New Product**

**Please note only ONE product per Submission.**

- |                                     |                                       |            |
|-------------------------------------|---------------------------------------|------------|
| <input checked="" type="checkbox"/> | Certification                         | § 40.2(a)  |
| <input type="checkbox"/>            | Certification Security Futures        | § 41.23(a) |
| <input type="checkbox"/>            | Certification Swap Class              | § 40.2(d)  |
| <input type="checkbox"/>            | Approval                              | § 40.3(a)  |
| <input type="checkbox"/>            | Approval Security Futures             | § 41.23(b) |
| <input type="checkbox"/>            | Novel Derivative Product Notification | § 40.12(a) |
| <input type="checkbox"/>            | Swap Submission                       | § 39.5     |

**Product Terms and Conditions (product related Rules and Rule Amendments)**

- |                          |   |                      |
|--------------------------|---|----------------------|
| <input type="checkbox"/> | Certification   | § 40.6(a)            |
| <input type="checkbox"/> | Certification Made Available to Trade Determination     | § 40.6(a)            |
| <input type="checkbox"/> | Certification Security Futures                          | § 41.24(a)           |
| <input type="checkbox"/> | Delisting (No Open Interest)                            | § 40.6(a)            |
| <input type="checkbox"/> | Approval  | § 40.5(a)            |
| <input type="checkbox"/> | Approval Made Available to Trade Determination          | § 40.5(a)            |
| <input type="checkbox"/> | Approval Security Futures                               | § 41.24(c)           |
| <input type="checkbox"/> | Approval Amendments to enumerated agricultural products | § 40.4(a), § 40.5(a) |
| <input type="checkbox"/> | “Non-Material Agricultural Rule Change”                 | § 40.4(b)(5)         |
| <input type="checkbox"/> | Notification  | § 40.6(d)            |

**Official Name(s) of Product(s) Affected:**

**Rule Numbers:**



Christopher Bowen  
Managing Director and Chief Regulatory Counsel  
Legal Department

December 24, 2018

**VIA ELECTRONIC PORTAL**

Mr. Christopher J. Kirkpatrick  
Office of the Secretariat  
Commodity Futures Trading Commission  
Three Lafayette Centre  
1155 21st Street, N.W.  
Washington, D.C. 20581

**Re: CFTC Regulation 40.2(a) Certification. Notification Regarding the Initial Listing of Two (2) Freight Futures Contracts.  
NYMEX Submission No. 18-466 (2 of 2)**

Dear Mr. Kirkpatrick:

New York Mercantile Exchange, Inc. (“NYMEX” or “Exchange”) is notifying the Commodity Futures Trading Commission (“CFTC” or “Commission”) that it is self-certifying the initial listing of two (2) freight futures contracts (the “Contracts”) for trading on the CME Globex electronic trading platform and for submission for clearing via CME ClearPort effective on Sunday, January 13, 2019 for trade date Monday, January 14, 2019, as described below.

<b>Contract Title</b>	USGC to China (Platts) Dirty Freight Futures	USGC to UK Continent (Platts) Dirty Freight Futures
<b>NYMEX Rulebook Chapter</b>	677	678
<b>Commodity Code</b>	USC	USE
<b>Settlement Type</b>	Financial	
<b>Contract Size</b>	1,000 metric tons	
<b>Pricing Quotation</b>	U.S. dollars and cents per metric ton	
<b>Minimum Price Fluctuation</b>	\$0.0001 per metric ton	
<b>Value per tick</b>	\$0.10	
<b>First Listed Contract Month</b>	January 2019	
<b>Termination of Trading</b>	Last business day of the contract month	
<b>Listing Schedule</b>	Monthly contracts listed for the current year and the next 5 calendar years. Add monthly contracts for a new calendar year following the termination of trading in the December contract of the current year.	
<b>Block Trade Minimum Threshold</b>	5 contracts	
<b>CME Globex Match Algorithm</b>	First-In, First-Out (FIFO)	

## Exchange Fees

	Member	Non-Member	International Incentive Programs (IIP/IVIP)
CME Globex	\$2.60	\$3.25	\$2.90
EFP	\$2.60	\$3.25	
Block	\$2.60	\$3.25	
EFR/EOO	\$2.60	\$3.25	

Processing Fees	Member	Non-Member
Cash Settlement	\$0.50	\$0.50

Other Processing Fees	Fee
Facilitation Fee	\$0.60
Give-Up Surcharge	\$0.05
Position Adjustment/Position Transfer	\$0.10

## Trading and Clearing Hours

CME Globex and CME ClearPort	Sunday - Friday 6:00 p.m. - 5:00 p.m. Eastern Time/ET (5:00 p.m. - 4:00 p.m. Central Time/CT) with a 60-minute break each day beginning at 5:00 p.m. ET (4:00 p.m. CT)
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NYMEX is self-certifying block trading on the Contracts with a minimum block threshold of five (5) lots for the Contracts which is aligned with the Exchange's similar products.

The Exchange reviewed the designated contract market core principles ("Core Principles") as set forth in the Commodity Exchange Act ("CEA" or "Act") and identified that the Contract may have some bearing on the following Core Principles:

- Compliance with Rules:** Trading in the Contracts will be subject to the rules in Rulebook Chapter 4 which include prohibitions against fraudulent, noncompetitive, unfair and abusive practices. Additionally, trading in this Contracts will also be subject to the full panoply of trade practice rules, the majority of which are contained in Chapter 5 and Chapter 8 of the Rulebook. As with all products listed for trading on one of CME Group's designated contract markets, activity in the Contracts will be subject to extensive monitoring and surveillance by CME Group's Market Regulation Department. The Market Regulation Department has the authority to exercise its investigatory and enforcement power where potential rule violations are identified.
- Contracts Not Readily Subject to Manipulation:** The Contracts are not readily subject to manipulation because of the active underlying market and reliance on a well administered index. Final settlements are based on the index published by S&P Global Platts (Platts) and sub-licensed to the Exchange.
- Prevention of Market Disruption:** Trading in the Contracts will be subject to the Rules of NYMEX, which include prohibitions on manipulation, price distortion, and disruption to the cash settlement

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process. As with any new product listed for trading on a CME Group designated contract market, trading activity in the Contracts proposed herein will be subject to monitoring and surveillance by CME Group's Market Regulation Department.

- **Position Limitations or Accountability:** The speculative position limits for the Contracts as demonstrated in this submission are consistent with the Commission's guidance.
- **Availability of General Information:** The Exchange will publish on its website information regarding the Contract's specifications, terms, and conditions, as well as daily trading volume, open interest, and price information.
- **Daily Publication of Trading Information:** The Exchange will publish the Contract's trading volumes, open interest levels, and price information daily on its website and through quote vendors for the Contracts.
- **Execution of Transactions:** The Contracts will be listed for trading on the CME Globex electronic trading and for clearing through CME ClearPort. The CME Globex trading venue provides for competitive and open execution of transactions. CME Globex affords the benefits of reliability and global connectivity.
- **Trade Information:** All requisite trade information for the Contracts will be included in the audit trail and is sufficient for the Market Regulation Department to monitor for market abuse.
- **Financial Integrity of Contracts:** The Contracts will be cleared by the CME Clearing House, a derivatives clearing organization registered with the CFTC and subject to all CFTC regulations related thereto.
- **Protection of Market Participants:** NYMEX Rulebook Chapters 4 and 5 set forth multiple prohibitions that preclude intermediaries from disadvantaging their customers. These rules apply to trading in all of the Exchange's competitive trading venues.
- **Disciplinary Procedures:** Chapter 4 of the Rulebook contains provisions that allow the Exchange to discipline, suspend or expel members or market participants that violate the Rulebook. Trading in the Contracts will be subject to Chapter 4, and the Market Regulation Department has the authority to exercise its enforcement power in the event rule violations in these products are identified.
- **Dispute Resolution:** Disputes with respect to trading in the Contracts will be subject to the arbitration provisions set forth in Chapter 6 of the Rulebook. Chapter 6 allows all nonmembers to submit a claim for financial losses resulting from transactions on the Exchange to arbitration. A member named as a respondent in a claim submitted by a nonmember is required to participate in the arbitration pursuant to Chapter 6. Additionally, the Exchange requires that members resolve all disputes concerning transactions on the Exchange via arbitration.

Pursuant to Section 5c(c) of the Act and CFTC Regulation 40.2(a), the Exchange hereby certifies that listing the Contracts complies with the Act, including regulations under the Act. There were no substantive opposing views to listing of the Contracts.

The Exchange certifies that this submission has been concurrently posted on the Exchange's website at <http://www.cmegroup.com/market-regulation/rule-filings.html>.

Should you have any questions concerning the above, please contact the undersigned at (212) 299-2200 or via e-mail at [CMEGSubmissionInquiry@cmegroup.com](mailto:CMEGSubmissionInquiry@cmegroup.com).

Sincerely,

/s/ Christopher Bowen  
Managing Director and Chief Regulatory Counsel

Attachments: Exhibit A: NYMEX Rulebook Chapters  
Exhibit B: Position Limit, Position Accountability, and Reportable Level Table in Chapter 5 of the NYMEX Rulebook (attached under separate cover)  
Exhibit C: NYMEX Rule 588.H. – (“Globex Non-Reviewable Trading Ranges”) Table  
Exhibit D: Cash Market Overview and Analysis of Deliverable Supply

## **Exhibit A**

### **NYMEX Rulebook**

#### **Chapter 677 USGC to China (Platts) Dirty Freight Futures**

**677100. SCOPE OF CHAPTER**

The provisions of these rules shall apply to all futures contracts bought or sold on the Exchange for cash settlement based on the Floating Price. The procedures for trading, clearing and cash settlement of this contract, and any other matters not specifically covered herein shall be governed by the general rules of the Exchange.

**677101. CONTRACT SPECIFICATIONS**

The Floating Price for each contract month is equal to the arithmetic average of the high and low quotations from the "Platts Dirty Tankerwire" under the heading "America's Dirty Tankers" subheading "VLCC" and "\$mt" for the USGC to China route for each business day that it is determined during the contract month.

**677102. TRADING SPECIFICATIONS**

Contracts shall be listed for a range of calendar months. The number of months open for trading at a given time shall be determined by the Exchange.

**677102.A. Trading Schedule**

The hours of trading for this contract shall be determined by the Exchange.

**677102.B. Trading Unit**

The contract quantity shall be 1,000 metric tons. Each contract shall be valued as the contract quantity (1,000) multiplied by the settlement price.

**677102.C. Price Increments**

Prices shall be quoted in U.S. dollars and cents per metric ton. The minimum price fluctuation shall be \$0.0001 per metric ton.

**677102.D. Position Limits, Exemptions, Position Accountability and Reportable Levels**

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

**677102.E. Termination of Trading**

Trading shall cease on the last business day of the contract month.

**677103. FINAL SETTLEMENT**

Final settlement under the contract shall be by cash settlement. Final settlement, following termination of trading for a contract month, will be based on the Floating Price. The final settlement price will be the Floating Price calculated for each contract month.

**677104. DISCLAIMER**

See NYMEX/COMEX [Chapter iv. \("DISCLAIMERS"\)](#) incorporated herein by reference.

## Chapter 678 USGC to UK Continent (Platts) Dirty Freight Futures

### 678100. SCOPE OF CHAPTER

The provisions of these rules shall apply to all futures contracts bought or sold on the Exchange for cash settlement based on the Floating Price. The procedures for trading, clearing and cash settlement of this contract, and any other matters not specifically covered herein shall be governed by the general rules of the Exchange.

### 678101. CONTRACT SPECIFICATIONS

The Floating Price for each contract month is equal to the arithmetic average of the high and low quotations from the "Platts Dirty Tankerwire" under the heading "America's Dirty Tankers" subheading "Aframax" and "\$mt" for the USGC to UK Continent route for each business day that it is determined during the contract month.

### 678102. TRADING SPECIFICATIONS

Contracts shall be listed for a range of calendar months. The number of months open for trading at a given time shall be determined by the Exchange.

#### **678102.A. Trading Schedule**

The hours of trading for this contract shall be determined by the Exchange.

#### **678102.B. Trading Unit**

The contract quantity shall be 1,000 metric tons. Each contract shall be valued as the contract quantity (1,000) multiplied by the settlement price.

#### **678102.C. Price Increments**

Prices shall be quoted in U.S. dollars and cents per metric ton. The minimum price fluctuation shall be \$0.0001 per metric ton.

#### **678102.D. Position Limits, Exemptions, Position Accountability and Reportable Levels**

The applicable position limits and/or accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Person seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

#### **678102.E. Termination of Trading**

Trading shall cease on the last business day of the contract month.

### 678103. FINAL SETTLEMENT

Final settlement under the contract shall be by cash settlement. Final settlement, following termination of trading for a contract month, will be based on the Floating Price. The final settlement price will be the Floating Price calculated for each contract month.

### 678104. DISCLAIMER

See NYMEX/COMEX [Chapter iv. \("DISCLAIMERS"\)](#) incorporated herein by reference.

**Exhibit B**  
**NYMEX Rulebook**  
**Chapter 5**  
**(“Trading Qualifications and Practices”)**

**Position Limit, Position Accountability, and Reportable Level Table  
in Chapter 5 of the NYMEX Rulebook**

(Attached under separate cover)



## Exhibit C

### NYMEX Rulebook Chapter 5 ("Trading Qualifications and Practices")

#### Rule 588.H. ("Globex Non-Reviewable Ranges") Table

(Additions are underscored.)

Instrument Name	Globex Symbol	Outright			Spreads	
		Globex Non-Reviewable Ranges (NRR)	NRR: Globex Format	NRR: Ticks	NRR: Globex Format	NRR: Minimum Outright Ticks
<u>USGC to China (Platts) Dirty Freight Futures</u>	<u>USC</u>	<u>\$0.20 per metric ton</u>	<u>2000</u>	<u>2000</u>	<u>N/A</u>	<u>N/A</u>
<u>USGC to UK Continent (Platts) Dirty Freight Futures</u>	<u>USE</u>	<u>\$0.20 per metric ton</u>	<u>2000</u>	<u>2000</u>	<u>N/A</u>	<u>N/A</u>

## **Exhibit D**

### **Cash Market Overview and Analysis of Deliverable Supply**

#### **Data Sources:**

The Exchange based its analysis of deliverable supply on data provided by the Review of Maritime Transport<sup>1</sup>, British Petroleum's Statistical Review of World Energy, the US Energy Information Administration (EIA). The Review of Maritime Transport data are compiled by UNCTAD, a permanent inter-governmental body established by the United Nations General Assembly in 1964. The Review of Maritime Transport is one of UNCTAD's flagship publications, published since 1968. The Review provides analyses of structural and cyclical changes affecting seaborne trade, ports and shipping, as well as an extensive collection of statistical information. Its data is published in its Review of Maritime Transport annually; and is a reliable source for those looking to get the most complete and accurate data on the shipping transportation. We have referred to UNCTAD data in our analyses of global seaborne trade of crude oil and refined products. British Petroleum (BP) is a global energy business operating in more than 70 countries worldwide. It finds and produces oil and gas on land and offshore and moves energy around the globe. The BP Statistical Review of World Energy provides high-quality objective and globally consistent data on world energy markets. The review is published annually using robust global data; and provides an objective overview of what happened to energy markets. We have referred to the BP data to supplement the UNCTAD data in our analyses of global seaborne trade of crude oil, and the BP data provides further granularity to enable the volumes transported along the specific freight routes to be estimated. The Joint Oil Data Initiative (JODI), which was launched in April 2001 by six international organizations (Asia Pacific Economic Cooperation (APEC), Statistical Office of the European Communities (Eurostat), International Energy Agency (IEA), Latin American Energy Organization (OLADE), Organization of the Petroleum Exporting Countries (OPEC), United Nations Statistics Division (UNSD), provides a reliable, freely accessible and comprehensive database of energy statistics. JODI's data is dependent upon what each country reports and in what timeframe. Participating countries complete a standard data table in JODI Oil Questionnaire and/or JODI-Gas Questionnaire every month for the two most recent months (M-1 and M-2) and submit it to the JODI partner organization(s) of which it is a member. The respective organization compiles the data and forwards it to the IEF which is responsible for the JODI World Databases.

The final settlement prices for each of the proposed new contracts are based on the price assessment of the respective underlying physical markets as assessed and published by

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<sup>1</sup> United Nations Conference on Trade and Development (UNCTAD) Review of Maritime Transport series  
[https://unctad.org/en/Pages/Publications/Review-of-Maritime-Transport-\(Series\).aspx](https://unctad.org/en/Pages/Publications/Review-of-Maritime-Transport-(Series).aspx)

Platts<sup>2</sup>, a division of S&P Global ("Platts"). Platts is a leading global provider of energy, freight, petrochemicals, metals and agriculture information, and a premier source of benchmark price assessments for those commodity markets. Since 1909, Platts has provided information and insights that help customers make sound trading and business decisions and enable the markets to perform with greater transparency and efficiency. The freight rate assessments for Dirty tankers in the America's reflect the transactional value prevailing at 14:30 hours EST; and align with the closing Futures Settlement Prices as made public by NYMEX. Platts freight assessments are derived from a review of fixtures (fully fixed or on subjects), and market levels reported, in the period since the previous set of assessments was published. Its aim is to reflect market activity, and to publish a representative value at which it believes chartering activity could occur, given movements in related markets. Platts gives priority to fully verified, transparent and firm data. The information is published in real time as it is received on Platts information services and Platts Global Alert; and is published daily in the Clean Tanker wire and Market Data Shipping reports.

### **Freight Market Overview**

The products referenced in this submission relate to the international seaborne tanker freight market i.e. the market for providing shipping for crude oil and refined products.

UNCTAD estimates that the world crude oil trade in 2017 was 1.87 billion tons, up 2.4% from 2016<sup>3</sup>, supported by increasing exports from the United States and rising global refining activity in Asia. Export volumes originating in the Atlantic Basin have been destined for Asia-Pacific, most notably China. See the table below.

<b>Table 1.5 Oil and gas trade 2016–2017</b> (Million tons and percentage annual change)			
	2016	2017	Percentage change 2016–2017
Crude oil	1 831.4	1 874.9	2.4
Other tanker trade	1 223.7	1 271.2	3.9
<i>of which</i>			
Liquefied natural gas	268.1	293.8	9.6
Liquefied petroleum gas	87.5	89.3	2.0
Total tanker trade	3 055.1	3 146.1	3.0

The UNCTAD report notes the important role that China plays in the Global Oil market and its rise to become the leading importer of crude oil. Declining shipments from OPEC member countries to Western Asia (following the 2016 production cuts) have been offset by growing shipments from the United States.

<sup>2</sup> S&P Global Platts - <https://www.spglobal.com/platts/en>

<sup>3</sup> UNCTAD Report 2018 – published October 3<sup>rd</sup> 2018 Page 9 (Developments in International Seaborne Trade) [https://unctad.org/en/PublicationsLibrary/rmt2018\\_en.pdf](https://unctad.org/en/PublicationsLibrary/rmt2018_en.pdf)

The chartering of seaborne freight is a privately negotiated activity between the ship owner and the charterer, with each transaction having unique features. However, standards have been established for the marketplace by trade associations, most notably the Baltic Exchange<sup>4</sup> based in London.

The size of a vessel is measured by its deadweight tonnage ('DWT'), which is a measure of the weight in metric tonnes a vessel can safely carry, including cargo, fuel, water etc. Oil tankers are loosely categorized into a range of vessel sizes.

According to the UNCTAD a **Very Large Crude Carrier** is the term given to vessels with 200,000 deadweight tons (dwt) and above. These vessels typically carry crude oil on long sea-going voyages from regions like the USGC to Asia. **Suezmax** vessels are smaller in size than VLCCs, typically between 120,000 and 200,000 dwt, and are so named as they represent the largest tankers that can transit, the Suez Canal. **Aframax** vessels are typically between 80,000 and 119,999 dwt and **Panamax** crude tankers range from 60,000 to 79,999 dwt and are the smallest of the crude oil tankers.

There are two main types of vessel charter arrangement. Voyage charters involve the charterer hiring the vessel to carry a cargo between two specified ports. The freight payment for a voyage charter is assessed in terms of dollars per ton of cargo carried. Time charters involve the charterer hiring the vessel for defined time-period during which the charterer can direct the movement of the vessel, although typically the vessel will follow a route between two ports. The freight payment for a time charter is assessed in terms of dollars per day of charter. Tanker charters are typically voyage charter arrangements. The pricing of the transaction is expressed as percentage of the Worldscale flat rate (officially known as the "New Worldwide Tanker Nominal Freight Scale"), assessed and published by the Worldscale Association which is set on an annual basis. This flat rate represents a fixed value in dollars per metric ton for a specific route. In some cases, market convention is to quote current tanker freight prices as a percentage of this flat rate figure (quoted in Worldscale points), rather than an explicit dollar value for each transaction. For example, if the flat rate is \$10 per ton for a specific route and the worldscale rate is WS120 then the USD 12/mt (when converted).

Platts has developed standard definitions for freight routes which are frequently chartered. Reporters collate market price data from shipbrokers and charterers on these specified routes; and publishes daily market price assessments for each route. Other Price Reporting Agencies such as Argus Media also collate and publish market price data. The Baltic Exchange, now owned by the Singapore Exchange also publishes price reference data for certain tanker routes and more specifically in the Dry Cargo markets where it has widely become the industry benchmark.

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<sup>4</sup> The Baltic Exchange <https://www.balticexchange.com/>

## US Crude Exports

The relevancy of US crude oil is growing in the International markets following the move by the US in December 2015 to reverse the long-standing ban on crude oil exports and since then the volume of US crude oil has continued to rise. Asia has been one of the largest beneficiaries of US crude exports along with European markets.

The US Energy Information Administration publishes data on the volume of US crude oil exports by destination. According to the latest data, which is available up to August 2018, the volume of crude oil sold from the US to Asia (see table below) was 153.29 million barrels on average over the period 2015 to 2018 (2018 data annualized through August 2018). For the region UK Continent or UKC (broadly Northwest Europe) imports of US crude oil, the 3-year average was 71.94 million barrels.

US exports to the Americas including Canada was 162.89 million barrels of this total around 133.89 million barrels was exported to Canada (average 2016-2018) but we have excluded the America's data from the analysis as these products are focused on the volume of exports to Asia and the UK Continent.

The Exchange has highlighted in the table below the data for the countries that it has used as the calculation of deliverable supply for Asia-Pacific and UK Continent.

Asia-Pacific	UK Continent (UKC)
Australia	Denmark
China	France
Hong Kong	Ireland
India	Netherlands
Japan	Belgium
South Korea	Germany
Malaysia	United Kingdom
Singapore	Sweden
Taiwan	Norway
Thailand	

\*French volumes divided by 2 to reflect UKC

## US Crude oil exports by destination – 2015 to 2018.

Source: US Energy Information Administration

Thousand Barrels	Asia-Pacific	Northern Europe ("UKC")	Americas
2016	19,355	22,704	154,114
2017	151,132	76,179	158,015
2018 (annualized)*	289,404	116,945	176,542
3-year average	153,297	71,943	162,890

\*Latest data is Aug-18 so have annualized the data

## Oil: Inter-area movements 2017

By way of comparison, we have also reviewed the BP Statistical Review of World Energy report for 2018<sup>5</sup>. Total US crude exports were about 46 million tons (45.8) in 2017 or 343.04 million barrels or equivalent to around 940,000 barrels per day on average, but this data includes destinations outside of Asia and the UK Continent therefore the Exchange has not included this data in our analysis of the market. The BP data shows that the US exported 7.7 million tons to China (57.3 million barrels) and 10.8 million tons (80.46 million barrels) to Europe in 2017. In 2016, the US exported 27.6 million tons, according to the BP review.

### Oil: Inter-area movements 2017

Crude (million tonnes)	To															Total exports
	US	Canada	Mexico	S. & Cent. America	Europe	Russia	Other CIS	Middle East	Africa	Australasia	China	India	Japan	Singapore	Other Asia Pacific	
US	-	16.1	-	3.9	10.8	-	†	0.1	0.3	0.2	7.7	1.2	1.4	0.1	4.2	<b>45.8</b>
Canada	170.3	-	†	0.1	2.2	-	-	†	†	†	0.6	0.1	-	-	-	<b>173.3</b>
Mexico	30.3	-	-	1.0	10.9	-	-	0.1	-	†	1.3	7.2	2.2	†	4.2	<b>57.3</b>
S. & Cent. America	68.4	0.5	†	-	11.0	†	-	-	0.1	-	57.2	24.5	2.3	0.4	4.3	<b>168.8</b>
Europe	3.2	2.2	-	0.5	-	†	†	0.4	0.3	†	9.9	0.5	0.1	0.3	6.2	<b>23.6</b>
Russia	2.4	0.3	-	3.0	170.2	-	18.1	2.8	†	0.7	59.8	2.8	9.0	1.4	6.7	<b>277.2</b>
Other CIS	0.3	1.7	-	-	66.4	0.6	-	5.3	0.4	-	3.8	3.2	1.3	0.2	6.7	<b>90.0</b>
Iraq	30.0	0.1	-	0.4	50.6	†	-	4.5	1.7	-	36.9	41.0	2.7	1.0	20.1	<b>189.0</b>
Kuwait	7.2	-	-	-	9.9	-	-	†	2.8	0.1	18.2	11.2	11.5	6.5	34.2	<b>101.6</b>
Saudi Arabia	47.0	5.0	-	3.9	37.0	-	-	13.7	8.3	0.3	52.2	34.1	63.4	10.1	82.4	<b>357.5</b>
UAE	1.0	-	-	†	0.4	†	-	†	0.1	5.0	10.2	16.4	37.7	14.4	40.6	<b>125.7</b>
Other Middle East	0.8	-	-	†	39.6	-	0.1	0.1	0.1	0.2	66.5	31.6	24.1	11.1	41.1	<b>215.4</b>
North Africa	6.5	1.4	-	2.1	52.8	-	0.1	1.6	†	1.2	5.6	4.1	†	0.8	4.9	<b>81.2</b>
West Africa	25.3	2.3	-	8.2	53.0	†	†	†	8.3	1.9	72.3	26.4	0.8	0.5	15.1	<b>214.2</b>
East & S. Africa	†	-	-	-	1.2	†	†	†	†	-	4.7	1.2	†	†	0.2	<b>7.4</b>
Australasia	0.1	†	-	0.1	†	-	†	†	†	-	2.1	-	0.4	0.8	6.5	<b>9.9</b>
China	-	-	-	†	-	-	-	†	†	†	-	-	1.9	0.2	2.6	<b>4.7</b>
India	-	-	-	†	†	-	-	-	†	†	†	-	-	†	†	<b>†</b>
Japan	-	-	-	-	†	-	-	-	-	†	-	-	-	-	0.1	<b>0.1</b>
Singapore	-	-	-	†	-	-	-	-	†	1.5	-	†	-	-	0.1	<b>1.7</b>
Other Asia Pacific	1.2	-	-	†	†	-	-	0.1	†	10.4	13.3	5.5	3.5	5.9	-	<b>39.9</b>
<b>Total imports</b>	<b>394.1</b>	<b>29.7</b>	<b>†</b>	<b>23.1</b>	<b>516.0</b>	<b>0.6</b>	<b>18.3</b>	<b>28.6</b>	<b>22.7</b>	<b>21.5</b>	<b>422.1</b>	<b>211.1</b>	<b>162.5</b>	<b>53.7</b>	<b>280.2</b>	<b>2184.2</b>

Source: BP Statistical review of World Energy 2018

† - LESS THAN 0.05 – non-significant value

<sup>5</sup> BP Statistical Review of World Energy – Oil Trade Movements (page 24)

<https://www.bp.com/content/dam/bp/en/corporate/pdf/energy-economics/statistical-review/bp-stats-review-2018-full-report.pdf>

## **Analysis of Deliverable Supply**

The Commission defines deliverable supply as the quantity of the commodity meeting a derivative contract's delivery specifications that can reasonably be expected to be readily available to short traders and saleable by long traders at its market value in normal cash marketing channels at the derivative contract's delivery points during the specified delivery period, barring abnormal movement in interstate commerce. (See Appendix C to 17 CFR part 38.)

To determine the deliverable supply, the US Energy Information Administration (EIA) data was the primary data source that was used as information was available for the previous 3 years on the volume of US crude oil exported by destination<sup>6</sup>. For 2018, the EIA has published data up to August 2018 therefore the Exchange has annualized the data for the full year 2018.

For US exports to China, the Exchange has looked at US Crude exports to the broader Asia region and therefore has included imports into Australia, China, Hong Kong, India, Japan, South Korea, Malaysia, Singapore, Taiwan and Thailand. Data for these countries can broadly be considered as "Asia" deliverable volume. Cargoes sold basis one location within Asia can be re-diverted into other location via a standard charter party option which is negotiated with the seller and the owner of the ship.

For US exports to Europe, the Exchange has included the delivered volumes to destinations considered as "UK/Continent" i.e. those countries that sit in between Bilbao and Hamburg plus Southern Sweden and Western Norway. Therefore, the Exchange has used crude exports to the following countries: Denmark, France (adjusted by 50%), Ireland, Netherlands, Norway, UK, Germany and Belgium. Mediterranean based destinations have been excluded from this analysis. For France, the Exchange has made an adjustment of 50% to reflect the fact that only about half of the crude deliveries sold into France can be considered as Northwest Europe, therefore fitting the criteria of a "UKC" port with the remaining volumes sold into the Mediterranean ports. Supply and demand will tend to fluctuate based on refinery activity in the market. For example, when refineries go into maintenance there will be an adjustment to volume of crude oil that they typically purchase.

In the freight markets, shipping fixtures are typically concluded "as and when" depending on regional requirements. Ships can be re-traded where market conditions change and for the oil itself, it can be transferred into storage or can be re-traded to other lifters. Therefore, the Exchange has not made any further adjustments to the deliverable supply to account for this.

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<sup>6</sup> US EIA – Crude Oil Exports by destination -

[https://www.eia.gov/dnav/pet/pet\\_move\\_expc\\_a\\_EPC0\\_EEX\\_mbb1\\_m.htm](https://www.eia.gov/dnav/pet/pet_move_expc_a_EPC0_EEX_mbb1_m.htm)

For any Long-term crude supply agreements that exist between producers and refiners however, these typically afford a degree of flexibility and the volumes can be re-traded into the spot market therefore do not affect the determination of deliverable supply. The lot size for the Futures contracts are based on 1,000 metric tons therefore an adjustment to the crude oil exports has been made to convert the volumes from 1,000 barrels to 1,000 metric tons using a conversion factor of 7.33<sup>7</sup> barrels per metric ton of crude oil.

For the Freight Route **USGC to China (Platts) (Dirty) Freight Future**, the Exchange has determined that on average the volume of US crude oil exported to China, Hong Kong, Japan, South Korea and Taiwan was 153.29 million barrels over the three-year period up to 2018. This equates to a monthly deliverable supply of 12.77 million barrels or 1.74 million tons using a crude conversion factor of 7.33 barrels per metric ton. Based on a contract size of 1,000 metric tons this equates to 1,740 monthly Futures lots. The Exchange proposes a spot month position limit of 350 lots which equates to 20.11% of the monthly deliverable supply.

For the Freight Route **USGC to UK Continent (Platts) (Dirty) Freight Future**, the Exchange has determined that on average the volume of US crude oil exported to the UK Continent was 71.94 million barrels over the three-year period up to 2018. This equates to a monthly deliverable supply of 5.99 million barrels or 817,871 metric tons. Based on a Futures contract size of 1,000 metric tons this equates to 817 monthly Futures lots. The Exchange proposes a spot month position limit of 200 lots which equates to 24.47% of the monthly deliverable supply.

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<sup>7</sup> CME Group Conversion factor table – Crude Oil [https://www.cmegroup.com/tools-information/calc\\_crude.html](https://www.cmegroup.com/tools-information/calc_crude.html)