

**SUBMISSION COVER SHEET**

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

**Registered Entity Identifier Code (optional):** 18-295 (3 of 6)

**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):** 08/08/18    **Filing Description:** Initial Listing of Six (6) European Gasoline Futures Contracts

**SPECIFY FILING TYPE**

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

**Organization Rules and Rule Amendments**

- Certification § 40.6(a)
- Approval § 40.5(a)
- Notification § 40.6(d)
- Advance Notice of SIDCO Rule Change § 40.10(a)
- SIDCO Emergency Rule Change § 40.10(h)

**Rule Numbers:**

**New Product**

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

- Certification § 40.2(a)
- Certification Security Futures § 41.23(a)
- Certification Swap Class § 40.2(d)
- Approval § 40.3(a)
- Approval Security Futures § 41.23(b)
- Novel Derivative Product Notification § 40.12(a)
- Swap Submission § 39.5

**Official Product Name:** See filing.

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

- Certification § 40.6(a)
- Certification Made Available to Trade Determination § 40.6(a)
- Certification Security Futures § 41.24(a)
- Delisting (No Open Interest) § 40.6(a)
- Approval § 40.5(a)
- Approval Made Available to Trade Determination § 40.5(a)
- Approval Security Futures § 41.24(c)
- Approval Amendments to enumerated agricultural products § 40.4(a), § 40.5(a)
- "Non-Material Agricultural Rule Change" § 40.4(b)(5)
- Notification § 40.6(d)

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

**Rule Numbers:**

August 8, 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, DC 20581

**Re: CFTC Regulation 40.2(a) Certification. Notification Regarding the Initial Listing of six (6) European Gasoline Futures Contracts. NYMEX Submission No. 18-295 (3 of 6)**

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 six (6) European Gasoline Futures contracts (collectively, the “Contracts”) for trading on the CME Globex electronic trading platform and for submission of clearing via CME ClearPort, effective Sunday, August 26, 2018 for first trade date Monday, August 27, 2018 as noted in the table below.

<b>Contract Title</b>	Gasoline Eurobob Non-Oxy NWE Barges (Argus) Futures
<b>Commodity Code</b>	GNO
<b>NYMEX Rulebook Chapter</b>	1027
<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>	\$0.001 per metric ton
<b>Value per tick</b>	\$1.00
<b>First Listed Contract</b>	September 2018
<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 three (3) calendar years. Additional monthly contracts will be listed for a new calendar year following the termination of trading in the December of the current year.
<b>CME Globex Match Algorithm</b>	First-In, First-Out (FIFO)
<b>Block Trade Minimum Threshold</b>	5 contracts

<b>Contract Title</b>	Gasoline Eurobob Non-Oxy NWE Barges (Argus) BALMO Futures
<b>Commodity Code</b>	GNB
<b>NYMEX Rulebook Chapter</b>	1028
<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>	\$0.001 per metric ton

<b>Value per tick</b>	\$1.00
<b>First Listed Contract</b>	September 2018
<b>Termination of Trading</b>	Last business day of the contract month
<b>Listing Schedule</b>	Monthly contracts listed for three (3) consecutive months. A new monthly contract will be listed for a new contract month following the termination of trading in the previous monthly futures contract.
<b>CME Globex Match Algorithm</b>	First-In, First-Out (FIFO)
<b>Block Trade Minimum Threshold</b>	5 contracts

<b>Contract Title</b>	Gasoline Eurobob Non-Oxy NWE Barges (Argus) Crack Spread Futures
<b>Commodity Code</b>	GNS
<b>NYMEX Rulebook Chapter</b>	1029
<b>Settlement Type</b>	Financial
<b>Contract Size</b>	1,000 barrels
<b>Pricing Quotation</b>	U.S. dollars and cents per barrel
<b>Minimum Price Fluctuation</b>	\$0.001 per barrel
<b>Value per tick</b>	\$1.00
<b>First Listed Contract</b>	September 2018
<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 four (4) calendar years. Additional monthly contracts will be listed for a new calendar year following the termination of trading in the December of the current year.
<b>CME Globex Match Algorithm</b>	First-In, First-Out (FIFO)
<b>Block Trade Minimum Threshold</b>	10 contracts

<b>Contract Title</b>	RBOB Gasoline vs. Eurobob Non-Oxy NWE Barges (Argus) (349,860 gallons) Futures
<b>Commodity Code</b>	RGF
<b>NYMEX Rulebook Chapter</b>	1030
<b>Settlement Type</b>	Financial
<b>Contract Size</b>	349,860 gallons (1,000 metric tons)
<b>Pricing Quotation</b>	U.S. dollars and cents per gallon
<b>Minimum Price Fluctuation</b>	\$0.00001 per gallon
<b>Value per tick</b>	\$3.4986
<b>First Listed Contract</b>	September 2018
<b>Listing Schedule</b>	Monthly contracts listed for the current year and the next three (3) calendar years. Additional monthly contracts will be listed for a new calendar year following the termination of trading in the December of the current year.
<b>CME Globex Match Algorithm</b>	First-In, First-Out (FIFO)
<b>Block Trade Minimum Threshold</b>	5 contracts

<b>Contract Title</b>	Gasoline Eurobob Non-Oxy NWE Barges (Argus) vs. Gasoline Eurobob Oxy NWE Barges (Argus) Futures
<b>Commodity Code</b>	GES
<b>NYMEX Rulebook Chapter</b>	1031
<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>	\$0.001 per metric ton

<b>Value per tick</b>	\$1.00
<b>First Listed Contract</b>	September 2018
<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 three (3) calendar years. Additional monthly contracts will be listed for a new calendar year following the termination of trading in the December of the current year.
<b>CME Globex Match Algorithm</b>	First-In, First-Out (FIFO)
<b>Block Trade Minimum Threshold</b>	5 contracts

<b>Contract Title</b>	Singapore Gasoline 92 Unleaded (Platts) vs. Gasoline Eurobob Non-Oxy NWE Barges (Argus) Futures
<b>Commodity Code</b>	SGF
<b>NYMEX Rulebook Chapter</b>	1032
<b>Settlement Type</b>	Financial
<b>Contract Size</b>	1,000 barrels
<b>Pricing Quotation</b>	U.S. dollars and cents per barrel
<b>Minimum Price Fluctuation</b>	\$0.001 per barrel
<b>Value per tick</b>	\$1.00
<b>First Listed Contract</b>	September 2018
<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 three (3) calendar years. Additional monthly contracts will be listed for a new calendar year following the termination of trading in the December of the current year.
<b>CME Globex Match Algorithm</b>	First-In, First-Out (FIFO)
<b>Block Trade Minimum Threshold</b>	10 contracts

**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 an hour break each day beginning at 5:00 p.m. ET (4:00 p.m. CT).

**Exchange Fees:**

**GNO, GNB, GES, RGF**

<b>Exchange Fees</b>	<b>Member</b>	<b>Non-Member</b>	<b>International Incentive Programs (IIP/IVIP)</b>
CME Globex	\$7.00	\$9.00	\$8.00
EFP	\$7.00	\$9.00	
Block	\$7.00	\$9.00	
EFR/EOO	\$7.00	\$9.00	

<b>Processing Fees</b>	<b>Member</b>	<b>Non-Member</b>
Cash Settlement	\$1.00	\$1.00

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

#### **GNS, SGF**

<b>Exchange Fees</b>	<b>Member</b>	<b>Non-Member</b>	<b>International Incentive Programs (IIP/IVIP)</b>
CME Globex	\$0.85	\$1.25	\$1.05
EFP	\$0.85	\$1.25	
Block	\$0.85	\$1.25	
EFR/EOO	\$0.85	\$1.25	

<b>Processing Fees</b>	<b>Member</b>	<b>Non-Member</b>
Cash Settlement	\$0.10	\$0.10

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

The Exchange is also notifying the CFTC that it is self-certifying the insertion of the terms and conditions for the Contracts into the Position Limit, Position Accountability and Reportable Level Table and Header Notes located in the Interpretations and Special Notices Section of Chapter 5 of the NYMEX Rulebook in relation to the listing of the Contracts. The terms and conditions establish the all month/any one-month accountability levels, expiration month position limit, reportable level, and aggregation allocation for the new contract. Please see Exhibit B, attached under separate cover.

NYMEX is self-certifying block trading on the following contracts with a minimum block threshold of five (5) lots: Gasoline Eurobob Non-Oxy NWE Barges (Argus) Futures (commodity code GNO), Gasoline Eurobob Non-Oxy NWE Barges (Argus) BALMO Futures (commodity code GNB), RBOB Gasoline vs. Eurobob Non-Oxy NWE Barges (Argus) (349,860 gallons) Futures (commodity code RGF), Gasoline Eurobob Non-Oxy NWE Barges (Argus) vs. Gasoline Eurobob Oxy NWE Barges (Argus) Futures (commodity code GES) contracts. The block threshold minimum is consistent with the Exchange's existing futures energy that are traded in unit quantities of 1,000 metric tons or equivalent.

NYMEX is self-certifying block trading on the following contracts with a minimum block threshold of ten (10) lots: Singapore Gasoline 92 Unleaded (Platts) vs. Gasoline Eurobob Non-Oxy NWE Barges (Argus) Futures (commodity code SGF) and Gasoline Eurobob Non-Oxy NWE Barges (Argus) Crack Spread Futures (commodity code GNS). The block threshold minimum is consistent with the Exchange's existing energy futures contracts that are traded in unit quantities of 1,000 barrels or equivalent.

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

- **Compliance with Rules:** Trading in the Contracts will be subject to all CME Rules, including prohibitions against fraudulent, noncompetitive, unfair and abusive practices as outlined in CME Rule Chapter 4, the Exchange’s trade practice rules, the majority of which are contained in Chapter 5 and Chapter 8 of the CME Rulebook, and the dispute resolution and arbitration procedures of CME Rule Chapter 6. As with all products listed for trading on one of CME Group’s designated contract markets, trading activity in the Contracts will be subject to 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 based on a cash price series that are reflective of the underlying cash market are commonly relied on and used as a reference price by cash market brokers and commercial market participants.
- **Prevention of Market Disruption:** Trading in the Contracts will be subject to the rules of the Exchange, which include prohibitions on manipulation, price distortion, and disruption to the cash settlement process. As with any new product listed for trading on a CME Group designated contract market, trading activity in the 3 futures 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 information on the contract’s specifications on its website, together with daily trading volume, open interest and price information.
- **Daily Publication of Trading Information:** The Exchange will publish contract 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 Contract:** All contracts traded on the Exchange will be cleared by the CME Clearing House which is a registered derivatives clearing organization with the Commission and is subject to all Commission regulations related thereto.
- **Protection of Market Participants:** Rulebook Chapters 4 and 5 contain multiple prohibitions precluding intermediaries from disadvantaging their customers. These rules apply to trading on all of the Exchange’s competitive trading venues and will be applicable to transactions in these products.
- **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 rules. Trading in these 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 these contracts will be subject to the arbitration provisions set forth in Chapter 6 of the Rulebook. The rules in Chapter 6 allow 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 the rules in 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 Regulations 40.2(a), the Exchange hereby certifies that listing the Contracts comply with the Act, including regulations under the Act. There were no substantive opposing views to the proposal.

The Exchange certifies that this submission has been concurrently posted on the CME Group 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 Limits, 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 Chapters

#### Chapter 1027

#### Gasoline Eurobob Non-Oxy NWE Barges (Argus) Futures

##### 1027100. SCOPE OF CHAPTER

The provisions of these Rules shall apply to all contracts bought or sold on the Exchange for cash settlement based on the Floating Price.

##### 1027101. CONTRACT SPECIFICATIONS

The Floating Price for each contract month is equal to the arithmetic average of the mid-point of the high and low quotations from the Argus Media European Products Report under the heading Northwest Europe Light Products barges for Eurobob non-oxy for each business day that it is determined during the contract month.

##### 1027102. TRADING SPECIFICATIONS

The number of days open for trading at a given time shall be determined by the Exchange

###### **1027102.A. Trading Schedule**

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

###### **1027102.B. Trading Schedule**

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.

###### **1027102.C. Price Increments**

Prices shall be quoted in U.S. dollars and cents per metric ton. The minimum price fluctuation shall be \$0.001 per metric ton. There shall be no maximum price fluctuation.

###### **1027102.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.

###### **1027102.E. Termination of Trading**

Trading shall cease at the close of the business day of the daily contract.

##### 1027103. FINAL SETTLEMENT

Delivery under the contract shall be by cash settlement. Final settlement will be based on the Floating Price. The final settlement price will be the Floating Price calculated for each contract.

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## Chapter 1028

### Gasoline Eurobob Non-Oxy NWE Barges (Argus) BALMO Futures

#### 1028100. SCOPE OF CHAPTER

The provisions of these Rules shall apply to all contracts bought or sold on the Exchange for cash settlement based on the Floating Price.

#### 1028101. CONTRACT SPECIFICATIONS

The Floating Price for each contract month is equal to the Balance of Month arithmetic average of the mid-point of the high and low quotations from the Argus Media European Products Report under the heading Northwest Europe Light Products barges for Eurobob non-oxy for each business day that it is determined during the contract month, starting from the selected date through the end of the contract month inclusive.

#### 1028102. TRADING SPECIFICATIONS

The number of days open for trading at a given time shall be determined by the Exchange

##### **1028102.A. Trading Schedule**

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

##### **1028102.B. Trading Schedule**

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.

##### **1028102.C. Price Increments**

Prices shall be quoted in U.S. dollars and cents per metric ton. The minimum price fluctuation shall be \$0.001 per metric ton. There shall be no maximum price fluctuation.

##### **1028102.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.

##### **1028102.E. Termination of Trading**

Trading shall cease at the close of the business day of the daily contract.

#### 1028103. FINAL SETTLEMENT

Delivery under the contract shall be by cash settlement. Final settlement will be based on the Floating Price. The final settlement price will be the Floating Price calculated for each contract.

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## Chapter 1029

### Gasoline Eurobob Non-Oxy NWE Barges (Argus) Crack Spread Futures

#### 1029100. SCOPE OF CHAPTER

The provisions of these Rules shall apply to all contracts bought or sold on the Exchange for cash settlement based on the Floating Price.

#### 1029101. CONTRACT SPECIFICATIONS

The Floating Price for each contract month is equal to the arithmetic average of the mid-point between the high and low quotations from the Argus Media European Products Report under the heading Northwest Europe Light Products barges for Eurobob Non-Oxy minus the Brent Crude Oil (ICE) Futures contract first nearby settlement price (using non-common pricing).

The settlement prices of the first nearby contract month will be used except on the last day of trading for the expiring Brent Crude Oil Futures contract when the settlement prices of the second nearby contract will be used.

For purposes of determining the Floating Price, the Argus Media Eurobob non-oxy assessment price will be converted each day to U.S. dollars and cents per barrel, rounded to the nearest cent. The conversion factor will be 8.33 barrels per metric ton.

#### 1029102. TRADING SPECIFICATIONS

The number of days open for trading at a given time shall be determined by the Exchange

##### 1029102.A. Trading Schedule

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

##### 1029102.B. Trading Schedule

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

##### 1029102.C. Price Increments

Prices shall be quoted in U.S. dollars and cents per barrel. The minimum price fluctuation shall be \$0.001 per barrel. There shall be no maximum price fluctuation.

##### 1029102.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.

##### 1029102.E. Termination of Trading

Trading shall cease at the close of the business day of the daily contract.

#### 1029103. FINAL SETTLEMENT

Delivery under the contract shall be by cash settlement. Final settlement will be based on the Floating Price. The final settlement price will be the Floating Price calculated for each contract.

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**Chapter 1030**  
**RBOB Gasoline vs Eurobob Non-Oxy NWE Barges (Argus) (349,860 gallons)**  
**Futures**

**1030100. SCOPE OF CHAPTER**

The provisions of these Rules shall apply to all contracts bought or sold on the Exchange for cash settlement based on the Floating Price.

**1030101. CONTRACT SPECIFICATIONS**

The Floating Price for each contract month is equal to the arithmetic average of the RBOB Gasoline Futures first nearby contract month settlement price minus the high and low quotations from the Argus Media European Products Report under the heading Northwest Europe Light Products barges for Eurobob Non-Oxy for each business day during the contract month (using non-common pricing).

For purposes of determining the Floating Price, the Eurobob Non-Oxy assessment price will be converted each day to U.S. dollars and cents per gallon, using the conversion factor of 8.33 barrels per metric ton, and 42 gallons per barrel. The Floating Price is calculated using the non-common pricing convention. In calculating the spread differential, the monthly average for each component leg of the spread shall be calculated by using all trading days in the month for each component leg of the spread, followed by the calculation of the spread differential between the two averages.

**1030102. TRADING SPECIFICATIONS**

The number of days open for trading at a given time shall be determined by the Exchange

**1030102.A. Trading Schedule**

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

**1030102.B. Trading Schedule**

The contract quantity shall be 349,860 gallons (equivalent to 1,000mt). Each contract shall be valued as the contract quantity (349,860) multiplied by the settlement price.

**1030102.C. Price Increments**

Prices shall be quoted in U.S. dollars and cents per gallon. The minimum price fluctuation shall be \$0.00001 per gallon. There shall be no maximum price fluctuation.

**1030102.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.

**1030102.E. Termination of Trading**

Trading shall cease at the close of the business day of the daily contract.

**1030103. FINAL SETTLEMENT**

Delivery under the contract shall be by cash settlement. Final settlement will be based on the Floating Price. The final settlement price will be the Floating Price calculated for each contract.

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## Chapter 1031

### Gasoline Eurobob Non-Oxy NWE Barges (Argus) vs Gasoline Eurobob Oxy NWE Barges (Argus) Futures

#### 1031100. SCOPE OF CHAPTER

The provisions of these Rules shall apply to all contracts bought or sold on the Exchange for cash settlement based on the Floating Price.

#### 1031101. CONTRACT SPECIFICATIONS

The Floating Price for each contract month is equal to the arithmetic average of the Argus Eurobob Non-Oxy Gasoline price, as published by Argus in the European Products Report under the heading Northwest Europe Light Products barges minus the high and low quotations from the Argus Media European Products Report under the heading Northwest Europe Light Products barges for Eurobob Oxy for each business day during the contract month. The Floating Price is calculated using the non-common pricing convention. In calculating the spread differential, the monthly average for each component leg of the spread shall be calculated by using all trading days in the month for each component leg of the spread, followed by the calculation of the spread differential between the two averages.

#### 1031102. TRADING SPECIFICATIONS

The number of days open for trading at a given time shall be determined by the Exchange

##### **1031102.A. Trading Schedule**

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

##### **1031102.B. Trading Schedule**

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.

##### **1031102.C. Price Increments**

Prices shall be quoted in U.S. dollars and cents per metric ton. The minimum price fluctuation shall be \$0.001 per metric ton. There shall be no maximum price fluctuation.

##### **1031102.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.

##### **1031102.E. Termination of Trading**

Trading shall cease at the close of the business day of the daily contract.

#### 1031103. FINAL SETTLEMENT

Delivery under the contract shall be by cash settlement. Final settlement will be based on the Floating Price. The final settlement price will be the Floating Price calculated for each contract.

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## Chapter 1032

### Singapore Gasoline 92 Unleaded (Platts) vs Gasoline Eurobob Non-Oxy NWE Barges (Argus) Futures

#### 1032100. SCOPE OF CHAPTER

The provisions of these Rules shall apply to all contracts bought or sold on the Exchange for cash settlement based on the Floating Price.

#### 1032101. CONTRACT SPECIFICATIONS

The Floating Price for each contract month is equal to the arithmetic average of the mid-point of the high and low quotations from the Platts Asia-Pacific/Arab Gulf Marketscan for Gasoline 92 unleaded under the heading Singapore minus the arithmetic average of the mid-point of the high and low quotations for Argus Media for Gasoline Eurobob Non-Oxy NWE Barges for each business day that each assessment is determined during the contract month (using non-common pricing).

In all cases, for the purpose of determining the Floating Price, the Argus Gasoline Eurobob Non-Oxy assessment will be converted each day to U.S dollars and cents per barrel, rounded to the nearest cent using a conversion factor of 8.33 barrels per metric ton.

The Floating Price is calculated using the non-common pricing convention. In calculating the spread differential, the monthly average for each component leg of the spread shall be calculated by using all trading days in the month for each component leg of the spread, followed by the calculation of the spread differential between the two averages.

#### 1032102. TRADING SPECIFICATIONS

The number of days open for trading at a given time shall be determined by the Exchange

##### **1032102.A. Trading Schedule**

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

##### **1032102.B. Trading Schedule**

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

##### **1032102.C. Price Increments**

Prices shall be quoted in U.S. dollars and cents per barrel. The minimum price fluctuation shall be \$0.001 per barrel. There shall be no maximum price fluctuation.

##### **1032102.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.

##### **1032102.E. Termination of Trading**

Trading shall cease at the close of the business day of the daily contract.

#### 1032103. FINAL SETTLEMENT

Delivery under the contract shall be by cash settlement. Final settlement will be based on the Floating Price. The final settlement price will be the Floating Price calculated for each contract.

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**Exhibit B**

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

**Position Limits, 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”)**

**NYMEX Rule 588.H. – (“Globex Non-Reviewable Trading Ranges”) Table**

(additions are underscored)

<b>Instrument Name</b>	<b>Globex Symbol</b>	<b>Globex Non-Reviewable Ranges (NRR)</b>	<b>NRR: Globex Format</b>	<b>NRR: Ticks</b>
<u>Gasoline Eurobob Non-Oxy NWE Barges (Argus) Futures</u>	<u>GNO</u>	<u>\$2.00 per metric ton</u>	<u>2000</u>	<u>2000</u>
<u>Gasoline Eurobob Non-Oxy NWE Barges (Argus) BALMO Futures</u>	<u>GNB</u>	<u>\$2.00 per metric ton</u>	<u>2000</u>	<u>2000</u>
<u>Gasoline Eurobob Non-Oxy NWE Barges (Argus) Crack Spread Futures</u>	<u>GNS</u>	<u>\$1.00 per barrel</u>	<u>1000</u>	<u>1000</u>
<u>RBOB Gasoline vs Eurobob Non-Oxy NWE Barges (Argus) (349.860 gallons) Futures</u>	<u>RGF</u>	<u>\$0.025 per gallon</u>	<u>2500</u>	<u>2500</u>
<u>Gasoline Eurobob Non-Oxy NWE Barges (Argus) vs Gasoline Eurobob Oxy NWE Barges (Argus) Futures</u>	<u>GES</u>	<u>\$2.00 per metric ton</u>	<u>2000</u>	<u>2000</u>
<u>Singapore Gasoline 92 Unleaded (Platts) vs Gasoline Eurobob Non-Oxy NWE Barges (Argus) Futures</u>	<u>SGF</u>	<u>\$1.00 per barrel</u>	<u>1000</u>	<u>1000</u>

## Exhibit D

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

The Exchange intends to introduce a series of Futures contracts based on the Argus non-oxy Eurobob assessment. These contracts are financially settled against the Argus assessment for non-oxy Eurobob.

The final settlement prices for the **Gasoline Eurobob Non-Oxy NWE Barges (Argus) Futures**, **Gasoline Eurobob Non-Oxy NWE Barges (Argus) BALMO Futures**, and the **Gasoline Eurobob Non-Oxy NWE Barges (Argus) vs Gasoline Eurobob Oxy NWE Barges (Argus) Futures** are based on the prices assessed and published by Argus Media ("Argus"). For the **Gasoline Eurobob Non-Oxy NWE Barges (Argus) Crack Spread Futures**, the final settlement price is based on prices assessed and published by Argus but for the Brent the reference is against the Brent settlements as published by the Intercontinental Exchange. The final settlement price for the **RBOB Gasoline vs Eurobob Non-Oxy NWE Barges (Argus) (349,860 gallons) Futures** is based on the NYMEX RBOB futures settlement price and the price for Eurobob non-oxy assessed and published by Argus Media. The final settlement price for the **Singapore Gasoline 92 Unleaded (Platts) vs Gasoline Eurobob Non-Oxy NWE Barges (Argus) Futures** is based on the price for Singapore Gasoline assessed and published by S&P Global Platts ("Platts") and the price for Eurobob non-oxy assessed and published by Argus Media.

#### Data Sources:

Data provided by **Eurostat**<sup>1</sup> was used as the basis of the analysis for Urals crude oil in both Northwest Europe and the Mediterranean. Eurostat is compiled by the statistical office of the European Union and aims to provide the EU with accurate statistics that enable comparisons between countries and regions. The statistical authorities in each individual member state are responsible for collecting the data. After verification and analysis, the individual authorities send the data to Eurostat who consolidate such data. In addition, Eurostat ensures that all parties are employing the same methodology in collecting and reporting data. The Exchange determined to use Eurostat data for sulphur content of gasoline in Northwest Europe because of the highly specialized statistical categories collected by Eurostat.

**Bloomberg data** for the Brent was used as the basis of the analysis for both the Dated Brent and the Mediterranean Dated Brent (strip). They compile total loaded volumes of BFOE (Brent, Forties, Oseberg and Ekofisk) by calendar month and is displayed via the Bloomberg terminal. This was adjusted to reflect the addition of Troll crude oil last year. The total loaded volume figures, referred to as BFOET have been applied from January 2018 onwards.

**UN Comtrade**<sup>2</sup> is a repository of official trade statistics reported by statistical authorities of close to 200 countries or areas. The database provides free access to detailed global trade data. It contains annual trade statistics starting from 1962 and monthly trade statistics since 2010.

**European Environment Agency** is a governmental body in charge of environmental policy for Europe. The agency works closely with 33-member countries and gathers data and produces assessments on a wide range of topics related to the environment. They produce the European Fuels Quality Report which the Exchange has used as the basis of calculation for the E10 in this analysis.

The **EIA**<sup>3</sup> is the principal agency of the US Federal Statistical System responsible for collecting, analysing and disseminating energy information to promote sound policymaking, efficient markets, and public understanding of energy and its interaction with the economy and the environment. The EIA provides a wide range of information and data covering Energy Production, Consumption, Stocks, Demand, Imports, Exports and Prices and prepares ad-hoc special reports on topics of interest on a periodic basis.

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<sup>1</sup> <http://ec.europa.eu/eurostat>

<sup>2</sup> <https://comtrade.un.org/>

<sup>3</sup> <https://www.eia.gov/>

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**Platts** is a leading Oil Price Reporting Agency who provide price assessments to the Energy industry and beyond to help to determine the value of the key Crude Oil and Refined Products. They are also involved in the price assessment process for Natural Gas, LNG and Power. Platts is one of the major pricing services used in the OTC market for the pricing of swap contracts, and the methodology utilized by Platts is well-known in the oil industry. Their pricing methodology<sup>5</sup> is derived from telephone surveys and electronic data collected from multiple market participants to determine market value. Platts has a long-standing reputation in the industry for price benchmarks that are fair and not manipulated. NYMEX is a party to a license agreement with Platts to utilize their pricing data.

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<sup>4</sup> Argus Methodology Guide – European Refined Products  
<https://www.argusmedia.com/en/methodology/methodology-listing?page=1>

<sup>5</sup> <http://www.platts.com/IM.Platts.Content/MethodologyReferences/MethodologySpecs/asiaoilproductspecs.pdf>

## Market activity:

The European Gasoline market is based on a Eurobob grade which is grade of gasoline into which other components are blended. The main grade is referred to as a Eurobob Oxy blend which has a 5% Ethanol blend in it however, blends with a higher Ethanol content are starting to emerge and E10 is now becoming more prevalent on the Gasoline forecourts across Eurobob. However, unlike E5, the higher ethanol blend Gasoline is not widely available across all countries but national governments are reviewing the impact of its introduction. E10 gasoline is a Non-Oxy market i.e. the oxygenates have been removed but the Ethanol blend is 10% compared to the standard 5% Oxy market.

Gasoline is one of the main energy sources for the automotive sector and is classified as a road transport fuel. The product is made from the refining process from crude oil. The European market is a significant consumer of Gasoline, however significant volumes are exported to the United States and increasingly into West Africa as their economy continues to develop.

## Eurobob Oxy Gasoline and Non-Oxy Gasoline

**European Gasoline** is priced in USD and cents per metric ton. The standardized conversion factor between barrels and metric tons is 8.33 barrels per ton. This applies to both E5 and E10 Gasoline.

Eurobob Oxy with a 5% Ethanol blend is the main gasoline supplied across Europe however, Eurobob non-oxy is becoming more widespread as countries move to switch consumer habits to the higher Ethanol blend fuel (E10). Eurobob non-oxy is sold alongside the Eurobob Oxy market at the Gasoline forecourts. The Eurobob non-oxy is similar in quality to the RBOB Gasoline market in the US and therefore should facilitate a more seamless flow of Gasoline from Europe to the US without the need for as much blending when cargoes arrive into the US as the specs are broadly similar.

The European Renewable Ethanol association e-PURE<sup>6</sup>, says that E10 is currently available in Belgium, Finland as well as France and Germany. A broader use of E10 is expected in Europe. The European Union have adopted its climate and energy to stipulate that renewables in the transport sector should account for 10% by 2020<sup>7</sup>.

Blenders in Europe say that the production of E10 is a result of the blending process with E10 containing a 10% blend rather than the current 4.8% in the Eurobob Oxy Gasoline. The standard Gasoline specification remains EN228 which is standard across Northwest Europe, the material will tend to be non-oxy in the blending process to ensure the appropriate level of RVP and Octane is present in the Gasoline. E10 can be used in about 90% of all petrol driven cars across Europe, based on a market survey from ePure. Their analysis shows that currently E10 is widely available in Belgium, France, Germany, Finland but other countries are also looking at the adoption of it.

The Northwest European gasoline market is focused around Belgium, France, the Netherlands and Germany. There is a significant refining centre in ARA where there is close to 1.3 million barrels per day of refining capacity in the Netherlands, according to the Statistics website Statista<sup>8</sup>. refineries are also located close to the River Rhine where barges can be delivered into mainland Europe. The Eurostat data shows that the total size of the Gasoline market blended with bio components was 3.3 million tons per month, based on the production and imports data for Belgium, France, the Netherlands and Germany. A haircut of 50% has been applied to the France data to reflect northwest Europe with the remainder considered as the Mediterranean.

The E10 market is a smaller subset of the wider Gasoline market but is a growing market with more countries adopting E10 as either an alternative fuel choice or switching completely to E10. Ricardo-AEA and the EEA (the European Emissions Agency) produce aggregated national statistics on the retail sales

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<sup>6</sup> ePURE <http://epure.org/about-ethanol/fuel-market/fuel-blends/>

<sup>7</sup> [https://ec.europa.eu/clima/policies/strategies/2020\\_en](https://ec.europa.eu/clima/policies/strategies/2020_en)

<sup>8</sup> Statista – Dutch Refining Capacity (2016). <https://www.statista.com/statistics/703117/refinery-capacities-of-netherlands/>



volumes for each European country by fuel type. The Ricardo-AEA<sup>9</sup> was last produced in 2013 and has since been replaced by the EEA Fuels Quality Report from 2014 onwards. We have excluded the Ricardo analysis as we have focused on the 2014-2016 period. Each report, produced annually breaks down the volume of Gasoline sold by quality at the fuels forecourt in litres. Using the inland sales volumes of each fuel it is possible to show an approximate share that E10 represents on an aggregate basis across Northwest Europe.

In Belgium, the government announced<sup>10</sup> a wholesale change from E5 to E10 Gasoline meaning that 100% of the sales volume of E5 switched to E10 quality, assuming no change to overall sales volumes in the country. E-Pure have confirmed that there are very few vehicles which can't run on E10 therefore we do not expect much any significant decline in usage of E10 compared to what was consumed as E5. For Belgium as there is no E10 figures available, we have used the 2016 for E5 (when this was the main grade) and have assumed that 100% of this volume switched to E10 therefore meaning that 1.96 billion litres of E10 was sold in 2017 (see 2016 EU Fuels Quality Report on page 20 - <https://www.eea.europa.eu/publications/fuel-quality-in-the-eu>). There was a nationwide switchover from E5 to E10 from Jan 1, 2017<sup>11</sup>.

More broadly for Northwest Europe, the Exchange has calculated an estimated E10 sales volume for 2017 across Northwest Europe. To do this, we have used the E5 and E10 sales volumes for 2016 and assumed the same levels for 2017, therefore conservatively assuming flat consumption levels for gasoline

Using this approach, the Exchange has calculated E5 sales volumes for 2017 of 32.8 billion litres and the E10 sales volumes for 2017 were 8.5 billion litres (we have excluded any E5 volumes for Belgium in 2017 as the country introduced E10 across its petrol retailing networks from Jan 1, 2017). Total Gasoline sales in the retail market across Belgium, France, Germany and the Netherlands were therefore 41.3 billion litres in 2017 (see table below).

2017	Northwest Europe (Litres)
E5 Gasoline	32,873,699,119.00
E10 Gasoline	8,516,924,381.00
Combined retail sales of E5 + E10	41,390,623,500.00
% share of E10 (of the broader gasoline pool)	21%*

\*rounded up to the nearest whole number

Based on the national statistics and re-basing the figures to 2017, the total sales volume of E5 and E10 across Belgium, France, the Netherlands and Germany was 41.3 billion litres (31 million tons using a density of 0.755) and the 2017 sales volumes of E10 were about 8.5 billion litres (6.4 million tons using a density of 0.755). This represents about 21% of the total E5 and E10 Gasoline sales volumes in Northwest Europe and we have used this figure to approximate the percentage of the deliverable supply for production and imports) that the E10 represents.

The market penetration volumes in the retail market for each country vary. Analysis from the industry suggests that market share of E10 in the French retail market is around 40%, in the Belgian market around 100% (following the 2017 switch from E5 to E10). In Germany, the share of E10 in the retail market is lower at around 15% and in the Netherlands, it is not clear what % of the retail sales are E10. On an aggregate

<sup>9</sup> EEA 2013 report:

[https://ec.europa.eu/clima/sites/clima/files/transport/fuel/docs/fqm\\_report\\_2013\\_en.pdf](https://ec.europa.eu/clima/sites/clima/files/transport/fuel/docs/fqm_report_2013_en.pdf)

<sup>10</sup> <http://www.alcobiofuel.com/belgian-ministry-launches-e10-information-campaign/>

<sup>11</sup> Belgium switches from E5 to E10 Gasoline <http://www.alcobiofuel.com/belgian-ministry-launches-e10-information-campaign/>

basis, the share that E10 represents of the downstream retail market compared to E5 is around 21% as show in the table above. The Exchange has used the data on an aggregate basis to define the volume of E10 in northwest Europe.

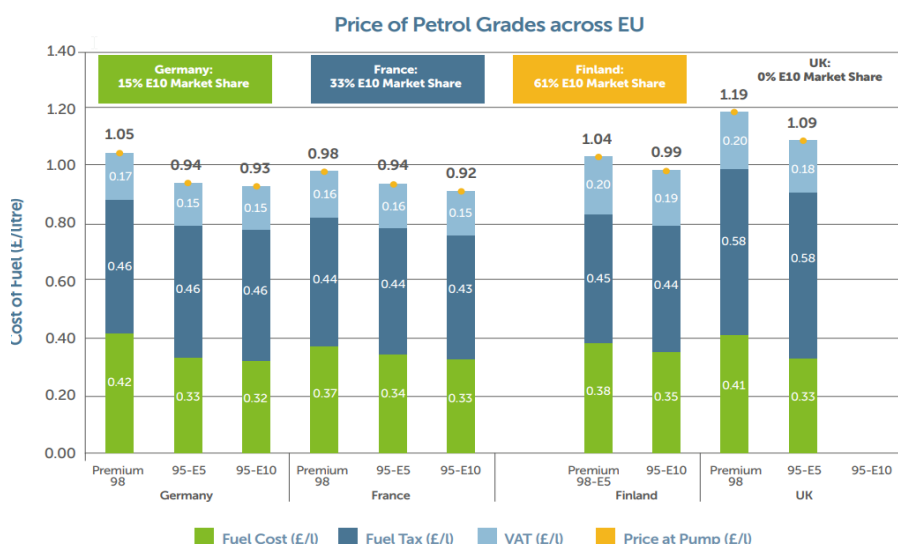
The reports for 2014<sup>12</sup>, 2015<sup>13</sup> and 2016<sup>14</sup> of the EEA report can be found here.

Retail sales volume of E5 Gasoline by quality and by country

Source: European Environment Agency – EEA<sup>15</sup>

Based on the Eurostat data, the three-year average monthly volumes of imports for Gasoline blended with bio components was 1.17 million tons per month. The Exchange has made an adjustment to the France data to reflect northwest Europe with the remaining 50% considered as Mediterranean deliveries. For the refinery production data, total monthly volumes over the three-year average period were 2.91 million metric tons. Combined production and import volumes for Gasoline in Northwest Europe were 4.07 million tons per month on average over the three-year period to end of 2017. A full breakdown of the data is shown in **Appendix A**. Applying the E10 market share figure, based on the retail sales volume of each fuel, E10 accounts for about 21% of the total volume meaning that 855,000 metric tons or 855 contract month equivalents (based on a contract size of 1,000 metric tons).

The Low Carbon Vehicle Partnership issued a March 2017 report<sup>16</sup> into the deployment of E10 across the UK. They carried out a study into the experience with other countries. Based on their analysis of France and Germany, the two largest markets for E10, the share of E10 in Germany was 15% and France was 33%.



<sup>12</sup> EEA 2014 report <https://www.eea.europa.eu/publications/eu-fuel-quality-monitoring-2014/file>

<sup>13</sup> EEA Fuel Quality 2015 report: <https://www.eea.europa.eu/publications/eu-fuel-quality-monitoring-2015>

<sup>14</sup> EEA Fuel Quality 2016 report: <https://www.eea.europa.eu/publications/fuel-quality-in-the-eu>

<sup>15</sup> <https://www.eea.europa.eu/>

<sup>16</sup> Successfully Deploying E10 Petrol: 9/12/2017 - <https://www.lowcvc.org.uk/resource-library/reports-and-studies.htm>

The market for E10 is evolving and volumes are expected to grow as fuel sales potentially transition from E5 to E10 and more countries adopt E10 as the standard gasoline spec. These figures will be reviewed on a periodic basis to ensure that the percentage share of E10 remains reflective of the current market dynamics.

## **Brent**

The North Sea market is comprised of a series of smaller oil fields in the UK and Norwegian North oil sectors. Each of the “satellite fields” connect into the large production systems such as Brent, Forties, Oseberg or Ekofisk. Norwegian crude oil Troll was added to the basket of Brent deliverable streams from January 2018<sup>17</sup>.

The most important streams in the North Sea are Brent, Forties, Oseberg and Ekofisk and Troll. Each stream has a principle operator that is responsible for the day to the day control of the operations including the scheduling of the cargoes based on the production from each of the smaller producing fields. The Brent, Forties, Oseberg, Ekofisk and Troll fields are known as BFOET and they underpin the Brent complex and are the key grades of oil that make up the trading of Dated Brent – the international crude oil physical benchmark price. The five BFOET fields lie in the North Sea. Brent and Forties are in the UK sector, whilst Ekofisk, Oseberg and Troll are in the Norwegian sector.

The core of the Brent market is a forward cash market consisting of the trading of cargoes of any of the BFOET streams for delivery beyond month ahead, with no specific dates assigned for loading. The cargoes traded are 600,000 barrels and, in the forward market, the precise loading dates are not provided, only the delivery month i.e. December BFOET Cargo. However, the commercial contracts, which are standardized, underlying the forward market to specify the minimum notification a seller must provide to a buyer is 10 days but the standard range is between 10 days and month ahead. After a holder of a BFOET forward notifies the buyer as to the loading date and which stream is being loaded, the contract is now considered to have moved from the forward market to the Dated Brent market, historically this moment is referred to as the cargo going “wet” i.e., it has loading dates attached to it and can therefore be sold as a Dated Brent cargo.

The Brent cash market is essentially a reseller market where buyers either: resell the oil to someone else; transport the cargo and resell it later; or transport the cargo to consume it. Most of the sales in the Brent market are conducted as spot-market transactions; in fact, Brent cargoes in the physical market are estimated to trade 10 or more times. Typically, there is a chronology of sales and purchases of crude oil in the Brent cash market that starts with a sale from the equity producer in a spot market transaction, and finishes with a purchase by an end-user to consume the crude oil. Equity producers typically utilize the robust spot market to sell their BFOET production at the cargo loading terminal, as a “Free on Board” (FOB) delivery. Traders play an active role in the Brent market as middlemen with the expressed responsibility of reselling the oil. Further, the refiners typically rely on the spot market to purchase Brent crude oil, because there is vibrant liquidity in the spot market, and hence, the refiners have developed a preference for short-term spot market purchases, rather than long-term contracts. This applies to refiners affiliated with equity producers as well as those not affiliated; this is the standard practice, established and institutionalized over the past 34 years.

Production of BFOE has been declining over the past few years due to the cost of drilling and the returns on investment compared to other regions in the world. This was one of the main reasons why the Troll crude stream was added to the Brent basket. All of the Brent grades are segregated blends delivered at different locations in the North Sea, and each can be substituted by the seller in the BFOET cash market (“the forward market”).

Quality adjustments ensure that all four grades can be delivered to a buyer under the standardized forward contract. The nomination period in the forward market was changed in March 2015 by Platts to 10 days to month ahead from 10 to 25 days and the futures expiry dates were aligned with this schedule in January

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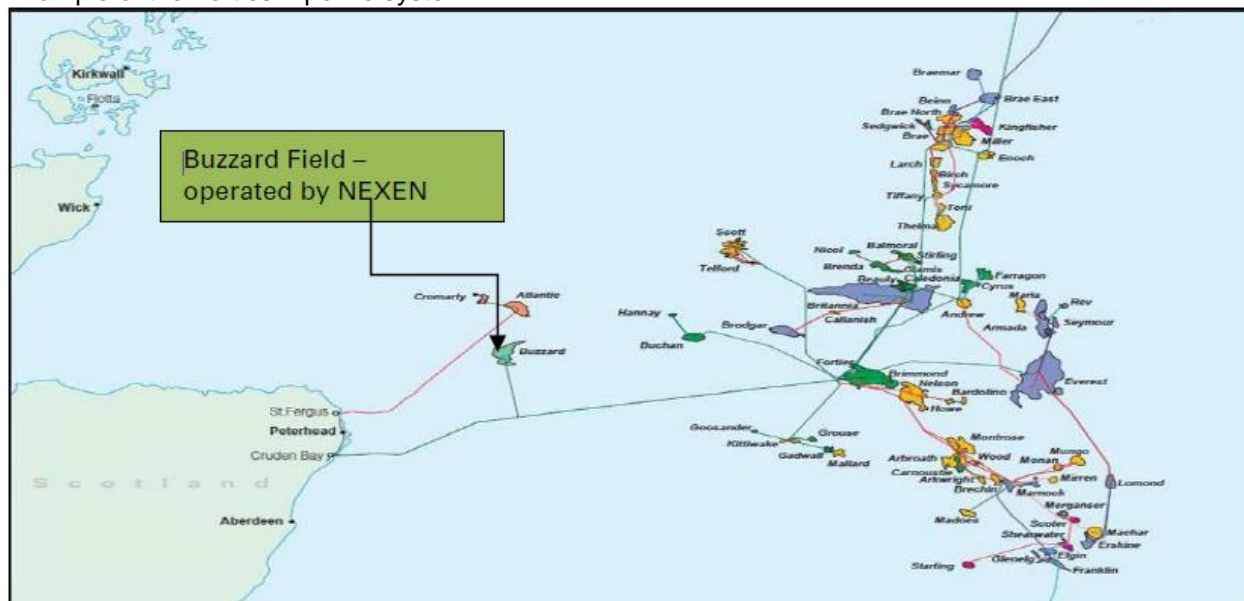
<sup>17</sup> Platts press release – Troll into Brent basket <https://www.platts.com/pressreleases/2017/022017>

2016 (for the March 2016 delivery month). The process of moving from a forward to the physical market where a forward Brent cargo becomes a physical North Sea Dated Brent cargo happens as follows:

1. Refiners, producers and traders enter into a forward agreement for a specific month.
2. The Operator of each field being Shell for Brent; Ineos for Forties (in November 2017); ConocoPhillips for Oseberg and Statoil for Ekofisk and Troll will announce the loading programs for each contract month a few days prior to the beginning of the month (one month prior) to each loading month (i.e. cargoes in the delivery month start to load). For example, for a June 2018 contract month, the field operators will announce the loading schedules a few days prior to the beginning of April 2018. The equity producers will begin the chain of nominating cargoes to buyers (or they can decide to keep the cargo). A buyer benefiting from a nomination can keep the cargo or pass it to another player with whom it has another forward contract.
3. Buyers trade the cash BFOET on the basis that they will accept any cargo as nominated, provided it is done so within the agreed notice period (10 days to month ahead) by 4pm London time. Any cargo not nominated by this time will remain with the participant last notified. After 4pm London time, the cargo becomes wet physical with precise loading dates attached.
4. Cargoes that are wet physical will be sold as a Dated Brent cargo with cargo loading dates between 10 days and month ahead (forward).

The chart below shows the makeup of the fields in the Forties pipeline system (FPS) which is currently operated by INEOS following its sale, subject to regulatory approval, by BP to the company in April 2017<sup>18</sup>. The deal was finalized on November 1, 2017. There are over 50 offshore fields that flow through within the FPS. The delivery point for Forties crude oil is Hound Point, which is on the East coast of Scotland a short distance from the UK oil capital Aberdeen. Forties is a blended crude oil from all the fields that feed into it.

Example of the Forties Pipeline system



The blend changed at the beginning of 2007 when crude oil from the Buzzard field began to flow into it. Crucially Buzzard is now the largest field within the FPS. Buzzard crude oil is a medium gravity, sour crude oil with an API of 32.6° and a sulphur content of 1.44% therefore the yield is very similar to that of Urals crude oil (from Russia). The INEOS FPS produces a forward estimate, based on the field operators of the volume of crude oil to be available in the system as well as the % blend of Buzzard crude within the Forties

<sup>18</sup> BP Press Release – Forties Pipeline System sale to INEOS

<https://www.bp.com/en/global/corporate/media/press-releases/bp-to-sell-forties-pipeline-system-to-ineos.html>

blend as this will affect the outright price of Forties crude oil, due to the sourer nature of the Buzzard crude oil stream. Due to the inclusion of Buzzard, the value of Forties has generally always been the cheapest of the four grades to deliver into Dated Brent as a dated cargo.

Table 4. Volume of Buzzard Crude in the Forties Blend Estimates<sup>19</sup>

Date	Buzzard percentage in Forties	Forties Blend un-stabilized crude oil (kbd)
June 18	31.8%	391.4
July 18	32.2%	396.5
August 18	34.8%	297.6
September 18	32.8%	417.6

Bloomberg LP (“Bloomberg”) provides details of the BFOET loading programs for the five grades that comprise the Brent market. Based on the most recent 3-year average of the Bloomberg data on BFOET loadings (from July 2015 to June 2018), total loadings of Brent (BFOET) crude oil was approximately 887,498 barrels per day, which is equivalent to approximately 26.62 million barrels per month.

The Monthly loading schedule of Brent, Forties, Oseberg, Ekofisk and Troll is shown in **Appendix A**.

## RBOB Gasoline

### Methodology and Data Sources

The Exchange considered three components in evaluating deliverable supply estimates of RBOB Gasoline for the New York Harbor delivery location of the RBOB Gasoline Futures contract:

- (1) Refinery and Blender Production;
- (2) Pipeline flows and net receipts to the delivery area;
- (3) Storage levels in the delivery area.

The Exchange determined to use data collected by the U.S. Department of Energy (“DOE”) Energy Information Administration (“EIA”) for its analysis and evaluation of deliverable supply estimates for RBOB Gasoline in New York Harbor. The EIA provides detailed data on the key components of deliverable supply. The EIA provides such data on a weekly, monthly, and annual basis.

The New York Harbor RBOB Gasoline Futures contract is the main benchmark used for pricing of gasoline in the U.S. petroleum products market. The U.S. gasoline market represents a large physical market, with total U.S. refinery capacity of 9.0 million to 9.5 million barrels per day of gasoline.

In the U.S. gasoline market, there are two main formulations for gasoline: Reformulated Gasoline and Conventional Gasoline, as required by a complex network of federal and state regulations. The U.S. Environmental Protection Agency (“EPA”) administers the Clean Air Act (“CAA”) requirements, and various state agencies regulate their own specific air rules. Under the CAA, the urban areas with the highest levels of smog pollution are required to use clean-burning Reformulated Gasoline blended with 10% ethanol. These urban areas include the entire Northeastern United States, California, Chicago, Atlanta, and Houston. These areas account for approximately 40% of U.S. gasoline demand. The 10% ethanol blending requirement in Reformulated Gasoline requires that the ethanol be segregated from the gasoline at the wholesale level in the pipeline distribution system. In the wholesale market, the gasoline is shipped unfinished (without the ethanol) and it is called Reformulated Blendstock for Oxygen Blending (RBOB). The ethanol blending occurs at the last stage of the delivery process when the gasoline is loaded into the tanker truck for retail delivery.

<sup>19</sup> Ineos Forties Pipeline System – Forties Blend Assay <https://www.ineos.com/businesses/ineos-fps/business/forties-blend-quality/>

## **New York Harbor Delivery Region**

New England and the Central Atlantic Coast of the United States, collectively defined by the EIA as the “Northeast,” is a well-connected and integrated geographical region in terms of oil and products infrastructure. The region is part of the larger PADD 1<sup>20</sup> (Petroleum Administration Defense District), and more specifically defined by PADD 1A (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont) and PADD1B (Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania).<sup>21</sup>

Located in both New York and New Jersey, the New York Harbor area is the largest oil importing and third largest container port in the nation, and is the main oil and refined products pricing and trading hub. Petroleum products in New York Harbor are supplied by refineries located in New Jersey, Delaware and Pennsylvania, all located within 100 miles of the New York Harbor area. East Coast refineries, a majority of which are located in New Jersey and Philadelphia, send products by local pipelines into New York Harbor.

Many of the petroleum products delivered to New York Harbor are redistributed to smaller ports where they supply local demand. In particular, the Hudson River, which meets the Atlantic Ocean in New York Harbor, provides a major inland water route for petroleum product barges supplying eastern New York and parts of western New England. Significant volumes are shipped to New England via barge from New York Harbor. On the other side of the state, western New York product markets are primarily supplied from Canada at the Port of Buffalo, and via the Buckeye and Sunoco pipeline systems from Pennsylvania and the Midwest<sup>22</sup>.

## **Refineries and Refinery Capacity Overview**

The Colonial Pipeline is the largest refined products pipeline in the U.S. and a key products supply link for the Northeast. The pipeline connects the Northeast to refinery output from the U.S. Gulf Coast and foreign imports, principally from Canada, Virgin Islands, Caribbean and Europe. Colonial's network of pipelines crosses 13 states, serving more than 265 marketing terminals in the Southern and Eastern United States. The pipeline provides a link from the US Gulf Coast to the New York Harbor area through the south and across the Eastern seaboard. It generally takes from 14 to 24 days for a product batch on the Colonial Pipeline to get from Houston, Texas to the New York Harbor, with 18.5 days the average time. The Trainer, Marcus Hook and Philadelphia refineries are strategically located along the pipeline.

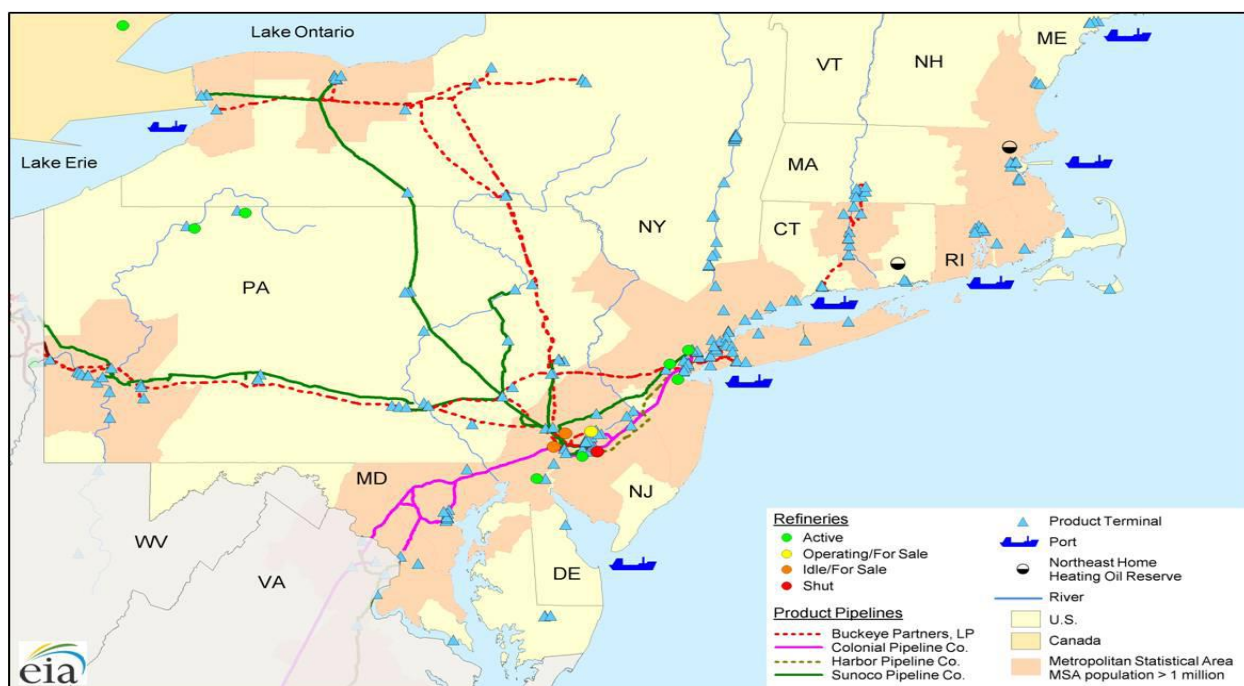
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<sup>20</sup> <http://www.eia.gov/tools/glossary/index.cfm>

<sup>21</sup> <http://www.eia.gov/analysis/petroleum/refining/prelim/>

<sup>22</sup> <http://205.254.135.7/state/state-energy-profiles-analysis.cfm?sid=NY>

**Figure 1 - Northeast Refined Products Market Logistics<sup>23</sup>**



In 2011, Colonial Pipeline expanded the northern end of its Houston-to-New York system, adding 100,000 b/d of capacity. In addition, the company completed a series of system upgrades leading to more than 100,000 b/d of capacity for distillates<sup>24</sup> specifically serving the New Jersey, Pennsylvania, and New York markets. Also, Colonial Pipeline added an additional 100,000 b/d of gasoline and distillates capacity in early 2013<sup>25</sup> to meet demand on the northern portion of the line (Greensboro, NC to Linden, NJ).

In the U.S., there were 139 operating refineries and three idle refineries in the US with total atmospheric crude oil distillation capacity (ACDU) of 17.9 million barrels per day (bbl/d), a 101,000 bbl/d increase in capacity from January 1, 2013<sup>26</sup>. The East Coast (PADD 1) has nine refineries, which are currently operating, with 1.1 million barrels per day (b/d) of atmospheric crude distillation capacity. The region has 475,800 b/d of fluid catalytic cracking (FCC) capacity. PADD 1 includes all states in New England, the Mid-Atlantic, and the South Atlantic and is subdivided into three sub-PADDs.

- PADD 1A – New Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut
- PADD 1B – New York, Pennsylvania, New Jersey, Delaware, Maryland, Washington DC
- PADD 1C - West Virginia, Virginia, North Carolina, South Carolina, Georgia, Florida

Supply dynamics for each of the three sub-PADDs vary. PADD 1A, New England, has no refineries and relies on imports and transfers from other PADDs, primarily PADD 1B. PADD 1C, the South Atlantic, also has no operating refineries and relies primarily on pipeline transfers and marine shipments from PADD 3 and imports. PADD 1B is supplied by a combination of in-region refineries, transfers from other PADDs -- primarily from PADD 3 but also from PADD 2 -- and imports<sup>27</sup>. As stated above, the majority of PADD 1B refineries are located in New Jersey, Delaware and Pennsylvania, and within 100 miles of the New York

<sup>23</sup> <http://www.eia.gov/analysis/petroleum/nerefining/update/pdf/neprodmkts.pdf>

<sup>24</sup> [http://www.eia.gov/pressroom/presentations/sieminski\\_10102012.pdf](http://www.eia.gov/pressroom/presentations/sieminski_10102012.pdf)

<sup>25</sup> <http://www.colpipe.com/home/news-media/press-releases/pressdetail?ID=7cb2e327-d0b3-6eb4-9c07-ff0009907dd>

<sup>26</sup> <http://www.eia.gov/todayinenergy/detail.cfm?id=16911>

<sup>27</sup> [http://www.eia.gov/pressroom/testimonies/howard\\_03192012.pdf](http://www.eia.gov/pressroom/testimonies/howard_03192012.pdf)

Harbor area. These refineries are directly connected to the New York Harbor market by local pipelines and/or waterborne barges. A list of Northeast refineries is provided in Table 1.

**Table 1 – Mid-Atlantic (PADD 1B) Refineries**

Name	State	Owner	Capacity	Status
Port Reading	NJ	Hess	70,000 b/d	CLOSED
Marcus Hook	PA	Sunoco Logistics	178,000 b/d	CLOSED. Being converted to NGL storage.
Delaware City Refinery	DE	PBF Energy	182,200 b/d	Operational
Perth Amboy	NJ	Buckeye Partners	80,000 b/d (Asphalt only)	Operational
Bayway Refinery	NJ	Phillips 66 Company	238,000 b/d	Operational
Paulsboro Asphalt	NJ	Nustar Asphalt Refining	70,000 b/d (Asphalt only)	Operational
Paulsboro Refining	NJ	PBF Energy LLC	160,000 b/d	Operational
Bradford	PA	American Refining Group	11,000 b/d	Operational
Philadelphia	PA	Philadelphia Energy Solutions/Carlyle Group	335,000 b/d	Operational
Warren	PA	United Refining Inc.	65,000 b/d	Operational
Trainer	PA	Monroe Energy LLC/Delta Airlines	185,000 b/d	Operational

## Deliverable Supply Estimates

### A. Refinery and Blender Production

In recent years, Northeast refineries supplied about 40% of gasoline (and 60% of the ULSD) consumed in the Northeast. Net receipts from the Gulf Coast and imports supply the remainder of the market.<sup>28</sup> The EIA provides gasoline production data for RBOB Gasoline that is produced by both refiners and blenders, under the category of “refiner and blender net production” as shown in Table 2 below. The majority of PADD 1 refineries are located in New Jersey, Delaware and Pennsylvania, with direct connection to the New York Harbor market by pipelines and/or waterborne barges. In addition, the “refiner and blender” category includes RBOB produced by blenders that use imported gasoline blending components.

Blenders are significant producers of RBOB gasoline, and a vast amount of RBOB blending components are sourced through imported gasoline blendstocks that enter via the New York Harbor. Generally gasoline blenders are large trading companies that operate in the global market, such as Vitol, Morgan Stanley, JP Morgan, Glencore, Cargill, Koch, Trafigura, and Northville. Given that the blenders’ production of RBOB is sourced from imported gasoline blending components, these imported components are imbedded in the category of “blender” production. Therefore, given that imported gasoline blending components are included in the “blender” production category, the Exchange will include only the EIA’s “Refiner and Blender Net Production” category as the key component of New York Harbor supply (and not *add* imports).

According to EIA data from 2013 through 2015, and as presented in Table 2 below, the three-year average of RBOB production by refiners and blenders in PADD 1 was 1.22 million barrels per day, or 36.6 million barrels per month. The RBOB gasoline that is produced in PADD 1 is in the vicinity of New York Harbor, and the majority of this RBOB is transshipped and/or stored in NYH terminals.

<sup>28</sup> [http://www.eia.gov/pressroom/testimonies/howard\\_03192012.pdf](http://www.eia.gov/pressroom/testimonies/howard_03192012.pdf)



**Table 2 – PADD 1 Production and Net Imports**

<b>RBOB Gasoline, in thousand b/d</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
Refinery and Blender Net Production <sup>29</sup>	1,196	1,217	1,250	<b>1,221</b>
Imports of RBOB Gasoline Blending Components <sup>30</sup>	186	132	167	<b>162</b>
Exports <sup>31</sup>	0	0	0	<b>0</b>

In conversations with market participants, it was explained that a portion of the Philadelphia refinery production is used to supply the Pennsylvania market via the Buckeye Laurel Pipeline. Based on EIA's prime supplier sales data<sup>32</sup>, the Exchange estimates that the gasoline supplied to Pennsylvania was approximately 200,000 barrels per day for the three-year period of 2013 through 2015. Therefore, the Exchange reduced the total refinery and blender net production by 200,000 barrels per day to account for gasoline supplied to Pennsylvania directly from Philadelphia-area refineries. Consequently, the total refinery and blender net production available for the New York Harbor market is approximately 1.0 million barrels per day, which is equivalent to 30.0 million barrels per month.

Further, according to input from market participants, approximately 30% to 40% of RBOB production is committed to retail distribution networks, and the remaining portion is available for re-selling in the spot market. Therefore, at least 60% of PADD 1 production of RBOB would be available for re-selling in the New York Harbor spot market. Consequently, we estimate that approximately 18.0 million barrels of RBOB would be deliverable in New York Harbor.

The majority of gasoline imports into PADD 1 arrive in the New York Harbor area, the largest oil import hub in the US. According to industry sources, approximately 50% of PADD 1 imports occur in the New York Harbor area. According to EIA data from 2013 through 2015, average imports of RBOB blending components into PADD 1 were approximately 160,000 b/d. It is worth emphasizing that blenders have the flexibility to produce RBOB gasoline using either imported blending components or other gasoline blending components. However, as previously mentioned, to prevent potential double-counting of imported blending components with domestic as reported by the EIA, the Exchange will not use imports in its deliverable supply analysis.

### **Pipeline Flows and Net Receipts**

The U.S. Gulf Coast, or PADD 3, refining capacity accounts for 50% of total US production of refined products, and provides approximately 284,000 b/d of RBOB gasoline to PADD 1 (See Table 3 below) via pipeline and water. However, the majority of PADD 1 pipeline receipts of RBOB from PADD 3 do not end up in the New York Harbor area as they are delivered at points further south of NYH in the Washington, DC metropolitan area. According to market participants, only about 25% to 30% of PADD 1 gasoline pipeline receipts are delivered to the New York Harbor area at Linden, NJ. Therefore, using the 25% estimate for RBOB pipeline shipments of 284,000 b/d, the pipeline supply to New York Harbor accounts for approximately 70,000 barrels per day, or 2.1 million barrels per month.

<sup>29</sup> EIA, <http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=WGRRPP12&f=W>

<sup>30</sup> EIA, [http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=m\\_epobgrr\\_im0\\_r10-z00\\_mbbld&f=a](http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=m_epobgrr_im0_r10-z00_mbbld&f=a)

<sup>31</sup> EIA, <http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MGREXP11&f=M>

<sup>32</sup> EIA Prime Supplier Sales Volumes by State, [http://www.eia.gov/dnav/pet/pet\\_cons\\_prim\\_dcu\\_SPA\\_a.htm](http://www.eia.gov/dnav/pet/pet_cons_prim_dcu_SPA_a.htm)

**Table 3 – RBOB Movements from PADD 3 into PADD 1<sup>33</sup>**

Year	(Barrels per Day)
2013	273,989
2014	283,950
2015	294,303
<b>Average</b>	<b>284,081</b>

**Inventories of Gasoline in the New York Harbor Market**

New York Harbor has a petroleum bulk terminal storage capacity of over 75 million barrels, making it the largest petroleum product hub in the country. For the purposes of RBOB delivery in NY Harbor against the NYMEX RBOB Gasoline Futures contract, the Exchange has 13 approved delivery terminals. Based on conversations with these facilities the total cumulative working tank capacity for RBOB at all Exchange-approved delivery terminals equals 28,494,400 barrels. Table 4 below details the list of facilities approved by the Exchange.

**Table 4 – RBOB Facilities in NY Harbor<sup>34</sup>**

Name of Facility	Facility Code	RBOB Gasoline Terminal
PHILLIPS 66 - TREMLEY POINT	E78	x
INTERNATIONAL MATEX TANK TERMINAL (IMTT) - BAYONNE	E79	x
BUCKEYE PERTH AMBOY TERMINAL LLC	E80	x
CITGO - LINDEN	E82	x
SHELL OIL PRODUCTS US - NEWARK	E83	x
KINDER MORGAN - CARTERET	E85	x
BUCKEYE PORT READING TERMINAL LLC	E86	x
SHELL OIL PRODUCTS US - SEWAREN	E89	x
ST TERMINAL - LINDEN	E91	x
KINDER MORGAN - PERTH AMBOY	E94	x
KINDER MORGAN - STATEN ISLAND	E95	x
BUCKEYE RARITAN BAY TERMINAL LLC	E96	x
PHILLIPS 66 - BAY WAY	E97	x
CENTER POINT TERMINAL NEWARK, LLC	E99	x

\*name changed to Shell Oil Products US – February 2018

The three-year average of gasoline stocks held in the Central Atlantic region, or PADD1b, including New York, New Jersey, and Pennsylvania is approximately 30.3 million barrels (See Table 5 below). According to market participants, the New York Harbor RBOB market accounts for 25% to 30% of the inventories reported in EIA's PADD 1B inventory statistics. Using a conservative estimate of 25% of PADD 1b inventories, the average stock level of gasoline is estimated to be about 7.6 million barrels in New York Harbor. Based on estimates from industry experts, we determined that the operational minimum levels for storage tanks in the New York Harbor area are approximately 10%. Therefore, the Exchange estimates

<sup>33</sup> EIA, Annual Data in barrels per day, [http://www.eia.gov/dnav/pet/pet\\_move\\_ptb\\_dc\\_R10-R30\\_mbbbl\\_a.htm](http://www.eia.gov/dnav/pet/pet_move_ptb_dc_R10-R30_mbbbl_a.htm)

<sup>34</sup> NYMEX Rulebook Chapter 7

<https://www.cmegroup.com/content/dam/cmegroup/rulebook/NYMEX/1/7.pdf>

that approximately 750,000 barrels of the approximately 7.6 million barrels of stored gasoline in New York Harbor is used for operations, leaving 6.8 million barrels available for spot month delivery from inventory.

**Table 5 – Gasoline Stocks in PADD 1B<sup>35</sup>**

<b>Year</b>	<b>Inventory (in Thousand Barrels)</b>
<b>2013</b>	31,531
<b>2014</b>	28,773
<b>2015</b>	31,695
<b>Average</b>	<b>30,333</b>

While the EIA does not report RBOB blending component stocks data for PADD 1B specifically, weekly statistics are provided for PADD 1. Accordingly, stocks of RBOB blending components in PADD 1 averaged approximately 18.8 million barrels in 2013-2015<sup>36</sup>.

### **Singapore Gasoline**

Singapore, possessing extensive storage capacity and appropriate refining infrastructure, is the main trading hub for the Asian petroleum market. The Singapore petroleum markets are extremely diverse and actively traded by refiners, traders, importers and smaller distributors, which explains the numerous energy trading firms located there.

The country is also a vibrant import and export center for petroleum products, as a result, the majority of Asian gasoline is sold in relation to the price of gasoline from Singapore. Singapore RON 92 Gasoline assessment by Platts is widely used as the pricing basis for physical and derivatives trading in the region. There is a large physical flow of Asian gasoline into European market and there is an active East-West gasoline derivatives market trading the spread between Platts Singapore gasoline cargoes and Argus European (Eurobob Oxy) gasoline barge assessments.

UN Comtrade publishes Singapore exports data of gasoline. The annual data is available through year 2017. As shown in table 1 below, the average total annual Singapore exports of gasoline for the most recent three years (2015-2017) were 23,698,732 metric tons. This equates to 1,974,894 metric tons per month, or 16,450,869 barrels per month using the conversion factor of 8.33 barrels per metric ton.

**Table 1. Selected Singapore Gasoline Exports Volume<sup>37</sup>**

Units: Metric Tons

Source: UN Comtrade

<b>Exports</b>		<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>3 Year Average</b>
Singapore Gasoline	Metric tons	24,634,788	22,758,105	23,703,305	<b>23,698,732</b>
Singapore Gasoline*	Barrels	205,207,784	189,575,015	197,448,531	<b>197,410,443</b>

\* converted using 8.33 barrels per metric ton.

<sup>35</sup> [http://www.eia.gov/dnav/pet/pet\\_stoc\\_wstk\\_dcu\\_r1y\\_w.htm](http://www.eia.gov/dnav/pet/pet_stoc_wstk_dcu_r1y_w.htm)

<sup>36</sup> [http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=m\\_epobgrr\\_sae\\_r10\\_mbbf&f=m](http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=m_epobgrr_sae_r10_mbbf&f=m)

<sup>37</sup> <https://comtrade.un.org/data/> HS code: 271012 Petroleum spirit for motor vehicles

## Analysis of Deliverable Supply

In estimating deliverable supply for the futures contract, the Exchange relied on long-standing precedent, which provides that the key component in estimating deliverable supply is the portion of typical production and supply stocks that could reasonably be considered to be readily available for delivery. In its guidance on estimating deliverable supply, the Commodity Futures Trading Commission (“CFTC” or “Commission”) states:

*In general, the term “deliverable supply” means 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. Typically, deliverable supply reflects the quantity of the commodity that potentially could be made available for sale on a spot basis at current prices at the contract’s delivery points. For a non-financial physical-delivery commodity contract, this estimate might represent product which is in storage at the delivery point(s) specified in the futures contract or can be moved economically into or through such points consistent with the delivery procedures set forth in the contract and which is available for sale on a spot basis within the marketing channels that normally are tributary to the delivery point(s).<sup>38</sup>*

Term supply contracts do exist but in a typical term agreement in the cash market there is a provision that allows flexibility for re-trading of the contracted quantity in the spot market, so the term agreements do not restrict the potential deliverable supply.

### **Eurobob Oxy Gasoline**

For the **Eurobob Oxy Gasoline**, we have defined deliverable supply as the volume of production and imports for Gasoline blended with bio components in France, Germany, the Netherlands and Belgium. The data for France has been reduced by 50% to reflect the Northwest European market with the remainder being more typically classified as the Mediterranean. This approach is consistent with previous submissions on markets in Northwest Europe to best reflect the volumes being sold from or delivered into the region. The Exchange has used the Eurostat monthly data and averaged the data over the period 2015 to 2017. Based on the data, imports were 2.9 million metric tons per month on average and domestic production was around 1.17 million metric tons per month. Combined production and imports, the basis of calculation for deliverable supply, was about 4.07 million tons per month or 4,070 contract month equivalents (contract size 1,000 metric tons). The current spot month position limit for Eurobob Oxy Gasoline is 500 lots equating to 12.28% of deliverable supply. A month by month breakdown for Production and Imports is shown in **Appendix A**.

### **Eurobob non-oxy Gasoline**

To define the deliverable supply of **Eurobob non-oxy**, we have used the same initial basis of deliverable supply i.e. production and imports of Gasoline blended with bio components. The same haircut has been applied for France so the data has been halved to reflect Northwest European volumes only.

There is no deliverable supply data on production and imports for E10 therefore the Exchange has relied on the total sales volumes, as reported in the national statistics to estimate the share of the broader Gasoline pool that E10 represents. Based on the national statistics, sales volumes sold at the Gasoline forecourts in Northwest Europe was 41 billion litres (or 31 million tons using a density of 0.755). The Exchange has calculated a figure for 2017 by taking the volumes sold in 2016 and re-applying those volumes to 2017. For Belgium, which switched to E10 from E5 from Jan 1, 2017, the Exchange has added the 2.2 billion litres of E5 sold in 2016 and assumed that this volume migrated to E10 in 2017 as the change

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<sup>38</sup> [http://www.ecfr.gov/cgi-bin/text-idx?SID=74959c3dbae469e2efe0a42b45b8dfae&mc=true&node=ap17.1.38\\_11201.c&rgn=div9](http://www.ecfr.gov/cgi-bin/text-idx?SID=74959c3dbae469e2efe0a42b45b8dfae&mc=true&node=ap17.1.38_11201.c&rgn=div9)

occurred at the beginning of the year. Using the National statistics, we have calculated that the size of the E10 retail market is about 20% of the total Gasoline market on the retail market.

Applying a market share figure of E10 of 21% to the Production and Imports data for Gasoline blended with bio components gives an estimate of the deliverable supply data for Northwest Europe. Based on this calculation, the E10 (production and imports) is around 854,000 tons per year or 854 contract month equivalents based on a standard contract size of 1,000 metric tons for Gasoline. This figure represents 20% of the deliverable supply figure reflected in the Eurostat data for Gasoline blended with bio components.

The Exchange proposes to apply a spot month position limit of 150 lots or 150,000 metric tons which equals 17.5% of the monthly deliverable supply. An aggregate position of 500 lots of Eurobob Oxy and 150 lots of non-oxy would equal to around 15.97% of the total monthly deliverable supply of Gasoline (blended with bio components) and below the 25% threshold.

### **RBOB Gasoline**

In estimating deliverable supply for the RBOB Gasoline Futures, New York Mercantile Exchange, Inc. (“NYMEX” or “Exchange”) relied on long-standing precedent, which provides that the key component in estimating deliverable supply is the portion of typical production and supply stocks that could reasonably be considered to be readily available for delivery. The Commodity Futures Trading Commission (“CFTC” or “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.)

For RBOB Gasoline, the Exchange determined at this time to base its estimates of deliverable supply on the sum of:

- A. Refinery and Blender Production = 18.0 million barrel
- B. Pipeline flows to the delivery area = 2.1 million barrels
- C. Storage levels in the delivery area = 6.8 million barrels

The spot month position limits for the contracts proposed herein shall be 1,000 contracts. The Exchange estimates the monthly deliverable supply of RBOB gasoline in the New York Harbor to be approximately 26.9 million barrels, which is equivalent to **26,900** contracts per month (contract size 42,000 gallons or 1,000 barrels). Therefore, the spot month limit of 1,000 contracts represents 3.7% of the monthly deliverable supply.

### **Brent Crude oil**

The basis of the deliverable supply estimate in the Brent market is BFOET loadings in the North Sea. The Exchange has determined that the volume of loaded barrels of BFOET crude oil from Brent, Forties, Oseberg, Ekofisk, and Troll best meets the definition of supply readily available for delivery. In addition, the Exchange has reduced the deliverable supply of Forties to account for the long-term commitment for crude oil purchases by the Grangemouth refinery. The Grangemouth oil refinery is located close to the delivery point of the Forties pipeline and volumes from the outer fields are connected directly via a series of pipelines to the refinery<sup>39</sup>. Based on the Bloomberg data on BFOET loadings (July 2015 to June 2018), total loadings of BFOET crude oil was approximately 26.62 million barrels per month, or 26,620 contract equivalents (contract size 1,000 barrels). Further, to account for the crude oil purchases by the

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<sup>39</sup> [http://www.bp.com/en/global/forties-pipeline/about\\_fps/Technical/technical\\_information.html](http://www.bp.com/en/global/forties-pipeline/about_fps/Technical/technical_information.html) - BP Forties Pipeline system

Grangemouth refinery, the deliverable supply would be reduced by 3 million barrels<sup>40</sup> per month<sup>41</sup>. Therefore, the total deliverable supply of BFOET is approximately 23.62 million barrels per month which is equivalent to 23,620 contracts.

The existing spot month limit of Brent Crude Oil Penultimate Financial Futures (commodity code BB) is 4,000 lots. This equates to around 16.9% of deliverable supply.

### **Singapore Gasoline**

The UN Comtrade data does not distinguish between the different Research Octane Number (RON) gasoline. The RON is a widely used measurement by the industry for gasoline octane content rating. The higher the octane content, the higher the compression ratio the fuel can perform and hence more resistant to engine knock – which is ignition of air-fuel mixture outside of the desired timing. In gasoline production, the RON is adjusted via gasoline blending with additive such as MTBE oxygenate. The different desirable levels of RON can be achieved by adjusting the type and quantity of additive blended. Therefore, the Exchange decided not to make an adjustment of deliverable supply based on the RON. In addition, the typical term agreement in the cash market allows flexibility for re-trading of the contracted quantity in the spot market, so the term agreements do not restrict the potential deliverable supply.

The Platts proposed methodology for Singapore Mogas will require a lower Sulphur content of 50 ppm from July 2019. This reflects the evolving gasoline quality in Asia-Pacific as countries in region continue switching to higher fuel standards. Gasoline with a Sulphur content of less than 50 ppm is already used in China, India, Japan, Korea, Thailand, Australia, New Zealand and Philippines. Other large gasoline importing countries currently consuming higher Sulphur fuel, for example Indonesia<sup>42</sup> and Malaysia<sup>43</sup>, have a control program in place aiming to switch to the low Sulphur standard in the near-term futures. The Exchange does not expect market disruption from Platts new methodology implementation.

Based on the UN Comtrade data of Singapore gasoline exports, the deliverable supply of gasoline in Singapore was approximately 23,698,732 metric tons per year or 1,974,894 metric tons per month. Using the conversion factor of 8.33 barrels per metric ton, this equates to 16,450,867 barrels per month, or 16,450 contract equivalents (contract size 1,000 barrels).

Currently the spot month position limits for the three outright Singapore Mogas contracts, Singapore Mogas 92 Unleaded (Platts) Futures (Code 1N), Singapore Mogas 95 Unleaded (Platts) Futures and Singapore Mogas 97 Unleaded (Platts) Futures are all set at 1,000 contract equivalents. This is 6.07% of the monthly gasoline deliverable supply for each of the three contracts, or together, 18.23%.

Positions in both the **Gasoline Eurobob Non-Oxy NWE Barges (Argus) Futures** and the **Gasoline Eurobob Non-Oxy NWE Barges (Argus) BALMO Futures**, will aggregate into the Gasoline Eurobob Non-Oxy NWE Barges (Argus) Futures (commodity code GNO) and the proposed spot month position limit for this contract is 150 contracts. The deliverable supply of non-oxy Gasoline is 854,000 metric tons or 854 contract month equivalents therefore a spot month position limit of 150 contracts is 17.56% of the monthly deliverable supply.

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<sup>40</sup> UKPia – Petroineos Grangemouth Refinery capacity

[http://www.ukpia.com/industry\\_information/refining-and-uk-refineries/Petroineos-grangemouth-refinery.aspx](http://www.ukpia.com/industry_information/refining-and-uk-refineries/Petroineos-grangemouth-refinery.aspx)

<sup>41</sup> Market suggests 50% of the processing capacity for Grangemouth is Forties therefore we have reduced the deliverable supply of Forties by 3-million barrels per month (the full capacity of the refinery is 6 million barrels per month).

<sup>42</sup> <https://www.platts.com/latest-news/oil/jakarta/indonesias-balongan-refinery-launches-euro-iv-27860562>

<sup>43</sup> <https://www.platts.com/latest-news/oil/singapore/malaysia-to-implement-euro-4m-specifications-27779432>

Positions in the **Gasoline Eurobob Non-Oxy NWE Barges (Argus) Crack Spread Futures** will aggregate into the **Gasoline Eurobob Non-Oxy NWE Barges (Argus) Futures (commodity code GNO)** and the **Brent Crude Oil Penultimate Financial Futures (commodity code BB)**. The deliverable supply of non-oxy Gasoline is 854,000 metric tons or 854 contract month equivalents therefore a spot month position limit of 150 contracts is 17.56% of the monthly deliverable supply. The deliverable supply of Brent is 23.62 million barrels per month. The existing spot month limit of Brent Crude Oil Penultimate Financial Futures (commodity code BB) is 4,000 lots. This equates to around 16.9% of deliverable supply.

Positions in the **RBOB Gasoline vs Eurobob Non-Oxy NWE Barges (Argus) (349,860 gallons) Futures** will aggregate into **RBOB Gasoline Last Day Financial Futures (commodity code 27)** and the **Gasoline Eurobob Non-Oxy NWE Barges (Argus) Futures (commodity code GNO)**. The deliverable supply of RBOB Gasoline is approximately 26,900 contracts per month (contract size 42,000 gallons or 1,000 barrels). The spot month position limit for the RBOB Gasoline Last Day Financial Futures (commodity code 27) is 1,000 contracts and therefore represents 3.7% of the monthly deliverable supply. The deliverable supply of non-oxy Gasoline is 854,000 metric tons or 854 contract month equivalents therefore a spot month position limit of 150 contracts is 17.56% of the monthly deliverable supply.

Positions in the **Gasoline Eurobob Non-Oxy NWE Barges (Argus) vs Gasoline Eurobob Oxy NWE Barges (Argus) Futures** will aggregate into the **Gasoline Eurobob Non-Oxy NWE Barges (Argus) Futures (commodity code GNO)** and the **Gasoline Eurobob Oxy NWE Barges (Argus) Futures (commodity code 7H)**. The deliverable supply of non-oxy Gasoline is 854,000 metric tons or 854 contract month equivalents therefore a spot month position limit of 150 contracts is 17.56% of the monthly deliverable supply. The deliverable supply of Oxy Gasoline is 4.07 million tons per month or 4,070 contract month equivalents. Therefore, the current spot month position limit for Eurobob Oxy Gasoline is 500 lots equating to 12.28% of deliverable supply.

Positions in the **Singapore Gasoline 92 Unleaded (Platts) vs Gasoline Eurobob Non-Oxy NWE Barges (Argus) Futures** will aggregate into the **Singapore Gasoline 92 Unleaded Gasoline (Platts) Futures (commodity code 1N)** and the **Gasoline Eurobob Non-Oxy NWE Barges (Argus) Futures (commodity code GNO)**. The deliverable supply of Singapore Gasoline is 23.69 million tons per year or 1.97 million tons per month (16,450,867 million barrels per month or 16,450 monthly contract equivalents) based on a contract size of 1,000 barrels. The spot month position limit of Singapore Gasoline 92 Unleaded is 1,000 contracts which equates to around 6.07% of the monthly gasoline deliverable supply. The deliverable supply of non-oxy Gasoline is 854,000 metric tons or 854 contract month equivalents therefore a spot month position limit of 150 contracts is 17.56% of the monthly deliverable supply.

## **Appendix A**

Monthly production volumes of Gasoline in Northwest Europe

Source: Eurostat data (Transformation output from refineries)

Units: Thousand metric tons per month

	Gasoline Production blended with bio components			
	Belgium	Germany	France (adjusted to 50%)	Netherlands
Jan-15	452	1,760	477	534
Feb-15	369	1,567	442	539
Mar-15	368	1,431	489	515
Apr-15	447	1,434	484	506
May-15	432	1,810	462	423
Jun-15	455	1,775	398	439
Jul-15	435	1,588	477	464
Aug-15	438	1,723	510	456
Sep-15	401	1,731	474	390
Oct-15	339	1,757	535	391
Nov-15	325	1,736	514	359
Dec-15	423	1,816	540	422
Jan-16	474	1,755	545	379
Feb-16	411	1,627	502	303
Mar-16	401	1,652	519	383
Apr-16	352	1,570	548	218
May-16	412	1,790	460	250
Jun-16	418	1,717	322	327
Jul-16	381	1,818	477	345
Aug-16	419	1,848	497	276
Sep-16	395	1,653	494	369
Oct-16	355	1,834	432	425
Nov-16	388	1,783	460	243
Dec-16	388	1,826	522	397
Jan-17	429	1,685	492	334
Feb-17	325	1,418	419	305
Mar-17	415	1,648	439	202
Apr-17	345	1,604	493	235
May-17	399	1,657	488	265
Jun-17	367	1,423	471	210
Jul-17	408	1,660	511	318
Aug-17	387	1,698	554	141
Sep-17	378	1,636	516	226
Oct-17	383	1,754	501	145



Nov-17	384	1,720	511	288	
Dec-17	390	1,901	506	291	
Average	397	1,689	485	342	<b>2,913</b>

\*Data for France is halved to exclude Mediterranean volumes

	Imports of Gasoline blended with bio components			
	Belgium	Germany	France (adjusted to 50%)	Netherlands
Jan-15	92	101	22	844
Feb-15	103	94	11	748
Mar-15	101	114	14	908
Apr-15	115	218	25	870
May-15	86	194	31	896
Jun-15	109	166	30	757
Jul-15	64	275	28	780
Aug-15	76	252	16	760
Sep-15	120	156	13	756
Oct-15	143	115	21	900
Nov-15	140	124	12	809
Dec-15	147	100	35	993
Jan-16	231	110	47	1,045
Feb-16	154	107	20	798
Mar-16	298	135	23	936
Apr-16	135	165	36	1,075
May-16	112	160	68	937
Jun-16	104	161	114	809
Jul-16	148	130	50	594
Aug-16	80	108	34	716
Sep-16	109	122	37	585
Oct-16	143	97	29	742
Nov-16	61	120	38	992
Dec-16	66	86	35	868
Jan-17	69	139	27	1,031
Feb-17	98	121	83	785
Mar-17	101	169	33	1,149
Apr-17	126	172	64	857
May-17	137	255	74	733
Jun-17	84	302	75	760
Jul-17	103	330	118	889
Aug-17	77	157	49	683
Sep-17	106	146	62	670
Oct-17	116	133	48	1,020

Nov-17	122	119	37	1,035	
Dec-17	101	105	39	1,153	
<b>Average</b>	<b>116</b>	<b>154</b>	<b>41</b>	<b>858</b>	<b>1,170</b>

\*Data for France is halved to exclude Mediterranean volumes

### North Sea Crude Oil Loading - Brent, Forties, Oseberg, Ekofisk and Troll

Units: Barrels

Source: Bloomberg (LOSDFOET Index)

<b>Delivery Month</b>	<b>Barrels per day</b>
Jul-15	890,323
Aug-15	832,258
Sep-15	940,000
Oct-15	967,742
Nov-15	900,000
Dec-15	929,032
Jan-16	974,194
Feb-16	950,690
Mar-16	870,968
Apr-16	960,000
May-16	870,968
Jun-16	760,000
Jul-16	812,903
Aug-16	812,903
Sep-16	780,000
Oct-16	793,548
Nov-16	880,000
Dec-16	909,677
Jan-17	987,097
Feb-17	900,000
Mar-17	909,677
Apr-17	880,000
May-17	1,006,452
Jun-17	900,000
Jul-17	851,613
Aug-17	716,129
Sep-17	800,000
Oct-17	870,968
Nov-17	800,000
Dec-17	600,000
Jan-18	974,645
Feb-18	985,714
Mar-18	1,025,806
Apr-18	978,867
May-18	967,742
Jun-18	960,000
<b>Average</b>	<b>887,498</b>