

**SUBMISSION COVER SHEET**

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

Registered Entity Identifier Code (optional): 15-132 (1 of 3)

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): April 2, 2015 Filing Description: Notification Regarding the Initial Listing of Three (3) Renewable Identification Number (RIN) Futures

**Contracts**

**SPECIFY FILING TYPE**

Please note only ONE choice allowed per Submission.

**Organization Rules and Rule Amendments**

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

**Rule Numbers:**

**New Product**

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

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

**Official Product Name:** D4 Biodiesel RINs (Argus) 2015 Futures; D5 Advanced Biofuel RINs (Argus) 2015 Futures; D6 Ethanol RINs (Argus) 2015 Futures

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

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

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

**Rule Numbers:**

April 2, 2015

**VIA ELECTRONIC PORTAL**

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

**Re: CFTC Regulation 40.2(a) Certification. Notification Regarding the Initial Listing of Three (3) Renewable Identification Number (RIN) Futures Contracts.  
NYMEX Submission No. 15-132 (1 of 3)**

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 three (3) new cash-settled Renewable Identification Number (RIN) futures contracts (the “Contracts”) for trading on CME Globex and the NYMEX trading floor and for submission for clearing via CME ClearPort effective on Sunday, April 19, 2015, for trade date Monday, April 20, 2015. The Contracts will be financially-settled based on the Argus index for three (3) types of renewable fuel (D4 Biodiesel, D5 Advanced Biofuel, and D6 Ethanol), and each type will be listed for one (1) vintage year; 2015.

Pursuant to Commission Regulation 40.6(a), NYMEX is separately self-certifying block trading on this Contract with a minimum threshold of five (5) contracts as listed in NYMEX/COMEX Submission No. 15-131.

Contract specifications are as follows:

<b>Contract Title</b>	D4 Biodiesel RINs (Argus) 2015 Futures	D5 Advanced Biofuel RINs (Argus) 2015 Futures	D6 Ethanol RINs (Argus) 2015 Futures
<b>Rule Chapter</b>	1300	1301	1302
<b>Commodity Code</b>	D45	D55	D65
<b>Listing Schedule</b>	All months including and between May 2015 – February 2017	All months including and between May 2015 – February 2017	All months including and between May 2015 – February 2017
<b>Contract Size</b>	50,000 RINs	50,000 RINs	50,000 RINs
<b>Minimum Price Fluctuation</b>	0.0001	0.0001	0.0001
<b>First Listed Contract</b>	May 2015	May 2015	May 2015
<b>Value per Tick</b>	\$5.00	\$5.00	\$5.00
<b>Block Trade Minimum Threshold</b>	5 contracts	5 contracts	5 contracts

<b>Termination of Trading</b>	Trading ceases on the last business day of the contract month	Trading ceases on the last business day of the contract month	Trading ceases on the last business day of the contract month
<b>CME Match Algorithm</b>	First In First Out (F)	First In First Out (F)	First In First Out (F)

### **TRADING AND CLEARING HOURS**

CME Globex and CME ClearPort	Sunday - Friday 6:00 p.m. - 5:15 p.m. (5:00 p.m. - 4:15 p.m. Chicago Time/CT) with a 45-minute break each day beginning at 5:15 p.m. (4:15 p.m. CT)
Trading Floor	Monday - Friday 9:00 a.m. - 2:30 p.m. (8:00 a.m. to 1:30 p.m. CT)

### **FEES**

<b>Exchange Fees</b>	<b>Trading Floor</b>	<b>CME Globex</b>	<b>CME ClearPort</b>	<b>Agency Cross</b>
Member Day Rate	0.85	0.85		
Member Overnight Rate	0.85	0.85	0.85	0.85
Cross Division Rate	1.10	1.10		
Non-Member Rate	1.35	1.35	1.35	1.35
International Incentive Program (IIP)		1.10		
<b>Other Processing Surcharges</b>	<b>Member</b>	<b>Non-Member</b>		
Cash Settlement	0.50	0.50		
Facilitation Fee	0.30			
Give-up Surcharge	0.05			
Position Transfer/Position Adjustment	0.10			

The Exchange is also notifying the CFTC that it is self-certifying the insertion of the terms and conditions for the new futures 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. These terms and conditions establish the all month/any one month accountability levels, expiration month position limit, reportable level, and aggregation allocation for the Contracts.

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

- **Compliance with Rules:** Trading in the Contracts will be subject to the rules in Rulebook Chapter 4 which includes prohibitions against fraudulent, noncompetitive, unfair and abusive practices. Additionally, trading in these contracts will also be subject to the full range of trade practice rules, the majority of which are contained in Chapter 5 and Chapter 8 of the Rulebook. As with all products listed for trading on one of CME Group’s designated contract markets, activity in the new products will be subject to extensive monitoring and surveillance by CME Group’s Market Regulation Department. The Market Regulation Department has the authority to exercise its investigatory and enforcement power where potential rule violations are identified.

- Contracts not Readily Susceptible to Manipulation: The Contracts are not readily susceptible to manipulation as a result of the deep liquidity and robustness of the underlying cash market and the settlement index. Pursuant to the Exchange's obligations under this core principle, the final settlement indices are published by Argus Media and sub-licensed to CME. The indices are based on the volume weighted-average price of transactions done during the entire trading day.
- Prevention of Market Disruption: Trading in the Contracts will be subject to the Rules of NYMEX which include prohibitions on manipulation, price distortion and disruptions of the delivery or cash-settlement process. As with all products listed for trading on one of CME Group's designated contract markets, activity in the new products will be subject to extensive monitoring and surveillance by CME Group's Market Regulation Department.
- Position Limits or Accountability: The spot month position limits for the contract is set at less than the threshold of 25% of the deliverable supply in the underlying market in accordance with the Commission guidance.
- Availability of General Information: The Exchange will publish on its website information in regard to futures contract specifications, terms, and conditions, as well as daily trading volume, open interest, and price information for the Contracts.
- 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 platform and New York Trading Floor, and for clearing through the CME ClearPort platform. The CME Globex trading venue provides for competitive and open execution of transactions. CME Globex affords the benefits of reliability and global connectivity. The CME ClearPort platform provides a competitive, open and efficient mechanism for novating transactions that are competitively executed by brokers.
- 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 Transactions: The Contracts will be cleared by the CME Clearing House, a derivatives clearing organization registered with the Commodity Futures Trading Commission and subject to all CFTC regulations related thereto.
- Protection of Markets and Market Participants: CME Rulebook Chapters 4 and 5 set forth multiple prohibitions that preclude intermediaries from disadvantaging their customers. These rules apply to trading in all of the Exchange's competitive trading venues.
- Disciplinary Procedures: Chapter 4 of the Rulebook contains provisions that allow the Exchange to discipline, suspend or expel members or market participants that violate the Rulebook. Trading in the Contracts will be subject to Chapter 4, and the Market Regulation Department has the authority to exercise its enforcement power in the event rule violations in these products are identified.
- Dispute Resolution: Disputes with respect to trading in the Contracts will be subject to the arbitration provisions set forth in Chapter 6 of the Rulebook. Chapter 6 allows all nonmembers to submit a claim for financial losses resulting from transactions on the Exchange to arbitration. A member named as a respondent in a claim submitted by a nonmember is required to participate in the arbitration pursuant to Chapter 6. Additionally, the Exchange requires that members resolve all disputes concerning transactions on the Exchange via arbitration.

Pursuant to Section 5c(c) of the Act and CFTC Regulation 40.2(a), the Exchange hereby certifies that the amendments comply with the Act, including all regulations under the Act. There were no substantive opposing views to this proposal.

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

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

Sincerely,

/s/ Christopher Bowen  
Managing Director and Chief Regulatory Counsel

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

## **Appendix A**

### **NYMEX Rulebook Chapters**

#### **Chapter 1300**

#### **D4 Biodiesel RINs (Argus) 2015 Futures**

##### **1300100. SCOPE OF CHAPTER**

The provisions of these Rules shall apply to all futures contracts based on D4 Biodiesel RINs for vintage year 2015 bought or sold on the Exchange for cash settlement based on the Floating Price. The term "RIN" refers to the Renewable Identification Number (RIN) which is utilized to identify each gallon of renewable fuel that is produced or imported as mandated by the U.S. Environmental Protection Agency for compliance with the Renewable Fuels Standard (RFS2). The procedures for trading, clearing and cash settlement of this contract, and any other matters not specifically covered herein shall be governed by the general rules of the Exchange.

##### **1300101. CONTRACT SPECIFICATIONS**

The Floating Price for each contract month is equal to the monthly arithmetic average of the midpoint of the high and low daily closing prices from Argus Media for D4 Biodiesel RINs for vintage year 2015 for each business day during the contract month.

##### **1300102. TRADING SPECIFICATIONS**

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

###### **1300102.A. Trading Schedule**

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

###### **1300102.B. Trading Unit**

The contract quantity shall be 50,000 RINs. Each contract shall be valued as the contract quantity (50,000) multiplied by the settlement price.

###### **1300102.C. Price Increments**

Prices shall be quoted in dollars and cents per RIN. The minimum price fluctuation shall be \$.0001 (.01 cents) per RIN.

###### **1300102.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.

###### **1300102.E. Termination of Trading**

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

##### **1300103. FINAL SETTLEMENT**

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

##### **1300104. DISCLAIMER**

Argus Media ("Argus") licenses the New York Mercantile Exchange, Inc. ("NYMEX") to use various Argus price assessments in connection with the trading and/or clearing of the contract.

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ARGUS MAKE NO WARRANTIES, EXPRESS OR IMPLIED, AND HEREBY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE WITH RESPECT TO THE PRICE ASSESSMENT OR ANY DATA INCLUDED THEREIN. WITHOUT LIMITING ANY OF THE FOREGOING, IN NO EVENT SHALL NYMEX, ITS AFFILIATES OR ARGUS HAVE ANY LIABILITY FOR ANY LOST PROFITS OR INDIRECT, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS), EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES.

## Chapter 1301 D5 Advanced Biofuel RINs (Argus) 2015 Futures

### **1301100. SCOPE OF CHAPTER**

The provisions of these Rules shall apply to all futures contracts based on D5 Advanced Biofuel RINs for vintage year 2015 bought or sold on the Exchange for cash settlement based on the Floating Price. The term "RIN" refers to the Renewable Identification Number (RIN) which is utilized to identify each gallon of renewable fuel that is produced or imported as mandated by the U.S. Environmental Protection Agency for compliance with the Renewable Fuels Standard (RFS2). The procedures for trading, clearing and cash settlement of this contract, and any other matters not specifically covered herein shall be governed by the general rules of the Exchange.

### **1301101. CONTRACT SPECIFICATIONS**

The Floating Price for each contract month is equal to the monthly arithmetic average of the midpoint of the high and low daily closing prices from Argus Media for D5 Advanced Biofuel RINs for vintage year 2015 for each business day during the contract month.

### **1301102. TRADING SPECIFICATIONS**

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

#### **1301102.A. Trading Schedule**

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

#### **1301102.B. Trading Unit**

The contract quantity shall be 50,000 RINs. Each contract shall be valued as the contract quantity (50,000) multiplied by the settlement price.

#### **1301102.C. Price Increments**

Prices shall be quoted in dollars and cents per RIN. The minimum price fluctuation shall be \$.0001 (.01 cents) per RIN.

#### **1301102.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.

#### **1301102.E. Termination of Trading**

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

### **1301103. FINAL SETTLEMENT**

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

### **1301104. DISCLAIMER**

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## Chapter 1302

### D6 Ethanol RINs (Argus) 2015 Futures

#### **1302100. SCOPE OF CHAPTER**

The provisions of these Rules shall apply to all futures contracts based on D6 Ethanol RINs for vintage year 2015 bought or sold on the Exchange for cash settlement based on the Floating Price. The term "RIN" refers to the Renewable Identification Number (RIN) which is utilized to identify each gallon of renewable fuel that is produced or imported as mandated by the U.S. Environmental Protection Agency for compliance with the Renewable Fuels Standard (RFS2). The procedures for trading, clearing and cash settlement of this contract, and any other matters not specifically covered herein shall be governed by the general rules of the Exchange.

#### **1302101. CONTRACT SPECIFICATIONS**

The Floating Price for each contract month is equal to the monthly arithmetic average of the midpoint of the high and low daily closing prices from Argus Media for D6 Ethanol RINs for vintage year 2015 for each business day during the contract month.

#### **1302102. TRADING SPECIFICATIONS**

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

##### **1302102.A. Trading Schedule**

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

##### **1302102.B. Trading Unit**

The contract quantity shall be 50,000 RINs. Each contract shall be valued as the contract quantity (50,000) multiplied by the settlement price.

##### **1302102.C. Price Increments**

Prices shall be quoted in dollars and cents per RIN. The minimum price fluctuation shall be \$.0001 (.01 cents) per RIN.

##### **1302102.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.

##### **1302102.E. Termination of Trading**

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

#### **1302103. FINAL SETTLEMENT**

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

#### **1302104. DISCLAIMER**

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PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS), EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES.

**Appendix B**

**NYMEX Rulebook Chapter 5 Position Limit Table**

(Attached under separate cover)

## Appendix C

### NYMEX Rule 588.H – Globex Non-Reviewable Ranges

Instrument	Non-Reviewable Range (NRR) in Globex format	NRR including Unit of Measure	NRR Ticks
D4 Biodiesel RINs (Argus) 2015 Futures	200	\$0.02 per RIN	200
D5 Advanced Biofuel RINs (Argus) 2015 Futures	200	\$0.02 per RIN	200
D6 Ethanol RINs (Argus) 2015 Futures	200	\$0.02 per RIN	200

## Appendix D

### CASH MARKET ANALYSIS

#### BACKGROUND

The US Environmental Protection Agency (EPA) is responsible for developing and implementing regulations to ensure that transportation and heating fuel sold in the United States contains a minimum volume of renewable fuel. The Renewable Fuel Standard (RFS) <sup>1</sup> program was created pursuant to the requirements of Clean Air Act (CAA) section 211(o)<sup>2</sup>, which were added through the Energy Policy Act (EPA) of 2005<sup>3</sup>. The program, which was developed in collaboration with refiners, renewable fuel producers and other stakeholders established the first renewable fuel volume mandate in the United States.

The original RFS program that began in 2006 is known as RFS1 and required 7.5 billion gallons (bgal) of renewable fuel to be blended into gasoline by 2012, with at least 250 million gallons of cellulosic biofuels starting in 2013. The statutory requirements for the RFS program were subsequently modified, resulting in the promulgation of major revisions to the regulatory requirements on March 26, 2010<sup>4</sup>. The Energy Independence and Security Act (EISA) of 2007 established RFS2, which included diesel in addition to gasoline.

RFS2 expanded and significantly increased volume requirements, setting a target renewable fuel requirement of 36 billion gallons by 2022, with at least 16 billion gallons from cellulosic biofuels, and a cap of 15 billion gallons for corn-starch ethanol. RFS volume mandates are not exclusive, and generally result in nested requirements. For example, any renewable fuel that meets the requirement for cellulosic biofuel or biomass-based diesel is also valid for meeting the advanced biofuel requirement.

RFS2 also established four separate categories of renewable fuels, each with a separate, but nested, volume requirement, and included greenhouse gas (GHG) reduction levels in the definitions of each category. Table 1 illustrates the categories and associated GHG levels and Table 2 details EPA statutory mandates through 2022.

*Table 1: RFS Fuel Categories and Target GHG Reduction<sup>5</sup> Thresholds*

<b>Renewable Fuel</b>	20%
<b>Cellulosic Biofuel</b>	60%
<b>Biomass-based Diesel</b>	50%
<b>Advanced Biofuel</b>	50%

*Table 2: Renewable Fuel Volume Requirements for RFS2 (billion gallons)<sup>6,7</sup>*

<sup>1</sup> <http://www.epa.gov/otaq/fuels/renewablefuels/index.htm>

<sup>2</sup> <http://www.law.cornell.edu/uscode/text/42/7545>

<sup>3</sup> <http://www.gpo.gov/fdsys/pkg/PLAW-109publ58/pdf/PLAW-109publ58.pdf>

<sup>4</sup> <http://www.gpo.gov/fdsys/pkg/FR-2010-03-26/html/2010-3851.htm>

<sup>5</sup> Percent reduction from a 2005 gasoline or diesel baseline

<sup>6</sup> <http://www.gpo.gov/fdsys/pkg/FR-2010-03-26/pdf/2010-3851.pdf>

<sup>7</sup> For years 2008-2013 table reflects actual volumes and may differ from original statutory limits. Volumes beyond 2013, except for the full compliance year of 2022, are statutory, and may change as the EPA sets annual targets each November.

Year	Renewable Fuel (Total)	Cellulosic Biofuel	Biomass-based Diesel	Advanced Biofuel
2008	9.00	-	-	-
2009	11.10	-	0.50	0.60
2010	12.95	0.10	1.15	0.95
2011	13.95	0.25	0.80	1.35
2012	15.20	0.50	1.00	2.00
2013	16.55	1.00	1.28	2.75
2014	18.15	1.75	Minimum 1.00	3.75
2015	20.50	3.00	Minimum 1.00	5.50
2016	22.25	4.25	Minimum 1.00	7.25
2017	24.00	5.50	Minimum 1.00	9.00
2018	26.00	7.00	Minimum 1.00	11.00
2019	28.00	8.50	Minimum 1.00	13.00
2020	30.00	10.50	Minimum 1.00	15.00
2021	33.00	13.50	Minimum 1.00	18.00
2022	36	16	Minimum 1.00	21

The RFS program requires the EPA to set the volumes of renewable fuel annually by November 30<sup>th</sup> for the following year. If the projected volume, which is based in part on information provided from the Energy Information Agency (EIA), is lower than statutory volumes illustrated in Table 2, the EPA has the authority to waive RFS requirements in whole or in part. In setting annual target volumes, EPA first estimates the total volume of transportation fuel that is expected to be used in the United States during the upcoming year using EIA data. EPA then publishes applicable percentage standard of renewable fuel annually that apply to the sum of all gasoline and diesel produced or imported. The percentage standards are set so that if every obligated party<sup>8</sup> meets them, then the amount of renewable fuel, cellulosic biofuel, biomass-based diesel, and advanced biofuel used meet the volumes required on a nationwide basis. The percentage standards are used to determine each individual company's renewable volume obligation (RVO); or the volume of renewables of which an obligated party is required to prove ownership on a scheduled timeline. An obligated party may comply for all of its refineries in the aggregate, or for each refinery individually.

#### RINS PROGRAM

Under the RFS, producers and importers of renewable fuel generate a 38-character Renewable Identification Number (RINs); a tracking system used by petroleum refiners and importers to demonstrate compliance with their renewable fuel obligations. In other words, RINs are the “currency” of the RFS2 program used for compliance with renewable volume obligations. RINs are traded in D-Codes, which are EPA-designated fuel categories. Table 3 details EPA D-Code definitions.

*Table 3: D-Code Definitions per RFS2*

Code	RFS2 Definition	Fuel Examples
D3	Cellulosic biofuel	Ethanol (cellulosic)
D4	Biomass-based diesel (incl. jet fuel and heating oil)	Biodiesel (mono alkyl esters), Non-ester renewable diesel

<sup>8</sup> A refiner that produces or an importer that imports gasoline and diesel fuel within the 48 contiguous states

<b>D5</b>	Advanced biofuel	Ethanol (sugarcane), Naphtha/LPG from camelina oil
<b>D6</b>	Renewable fuel	Ethanol (corn), Biobutanol (corn)
<b>D7</b>	Cellulosic diesel	Cellulosic diesel

Assignment of the D code includes a consideration of the type of feedstock and the process used to produce the renewable fuel. For instance, cellulosic biofuel (D3) must be made from cellulosic feedstock, advanced biofuel (D5) cannot be corn starch ethanol, and biomass-based diesel (D4) cannot be produced from co-processing renewable biomass and petroleum. Table 4 shows the share of each type of fuel within a D-Code using EPA data from 2014.

*Table 4: RIN Fuel Composition per D-Code (2014)*<sup>9</sup>

<b>D4 Biodiesel RIN</b>	
<b>Biodiesel (EV 1.5)</b>	79.46%
<b>Non-ester Renewable Diesel (EV 1.7)</b>	20.09%
<b>Non-ester Renewable Diesel (EV 1.6)</b>	0.44%
<b>Non-ester Renewable Diesel (EV 1.5)</b>	0.01%
<b>D5 Advanced Biofuel RIN</b>	
<b>Non-cellulosic Ethanol (EV 1.0)</b>	63.01%
<b>Biogas (77000 Btu LHV/1 gallon)</b>	14.20%
<b>Naphtha (EV 1.5)</b>	12.50%
<b>Non-ester Renewable Diesel (EV 1.7)</b>	10.21%
<b>Renewable Heating Oil (EV 1.6)</b>	0.08%
<b>D6 Ethanol RIN</b>	
<b>Non-cellulosic Ethanol (EV 1.0)</b>	97.65%
<b>Non-ester Renewable Diesel (EV 1.7)</b>	1.79%
<b>Biodiesel (EV 1.5)</b>	0.56%

Under RFS2, each RIN generated uniquely identifies not only a specific batch of renewable fuel, but also every gallon assigned to that batch. Equivalence Values (EV) are used to calculate the number of RINs, or RIN-gallons, that can be claimed for compliance purposes for every physical gallon of renewable fuel. EV varies depending on the energy content of the fuel. The following equation is used to determine the RIN volume to be generated from a volume of fuel:

$$\text{Number of RINs} = \text{EV} * \text{Physical Volume in gallons}$$

*Table 5: Renewable Fuel D-Code Classification and Equivalence Values*<sup>10</sup>

<b>Fuel</b>	<b>EV</b>
<b>Biodiesel</b>	1.5
<b>Ethanol</b>	1.0

<sup>9</sup> <http://www.epa.gov/otaq/fuels/rfsdata/2014emts.htm>

<sup>10</sup> <http://www.epa.gov/otaq/fuels/rfsdata/2012emts.htm>

<b>Non-ester Renewable Diesel</b>	1.5/1.6/1.7
<b>Heating Oil</b>	1.1/1.2/1.6
<b>Biogas</b>	1.0

## COMPLIANCE AND RECORD KEEPING

As of July 1, 2010, the RFS2 regulations require all regulated parties to submit all RIN generation information and other RIN transactions to EPA Moderated Transaction System (EMTS)<sup>11</sup>. Any party that owns RINs at any point during the year (including domestic and foreign producers, refiners, exporters, and importers of renewable fuels) must register with the EPA and follow RIN record-keeping and reporting guidelines<sup>12</sup>. Using data generated from EMTS, EPA provides aggregated monthly data on RIN generation and renewable fuel volume production for specific fuel categories.

EMTS allows for real-time recording of transactions involving RINs and provides a mechanism for screening and tracking RIN credits. The screening process checks that the information provided by the RIN generator is consistent with an existing registration. After RINs have entered EPA's EMTS system, parties may then trade them based on agreements outside of EMTS. The system simplifies trading by allowing RINs to be traded generically. Only some specifying information will be needed to trade RINs, such as RIN quantity, fuel type, RIN assignment, RIN year, RIN price or price per gallon.

Recordkeeping, including product transfer documents (PTD) support the enforcement of the use of RINs for compliance purposes. Obligated parties keep copies of all PTDs they generate and receive, as well as copies of all reports submitted to EPA and all records related to the sale, purchase, brokering or transfer of RINs, for five years.

An underlying principle of RIN ownership is one of "buyer beware" and the EPA has no "good faith" provision to RIN ownership. RINs may be prohibited from use at any time if they are found to be invalid. Because of the "buyer beware" aspect, the EPA offers the option for a buyer to accept or reject RINs from specific RIN generators or from classes of RIN generators.

## RINS TRADING

In addition to compliance demonstration, RINs can be used as tradable paper environmental credits as either attached or separated. Specifically, RINs can be obtained through acquisition of physical fuel, which have RINs attached (K1-coded RINs) or through acquisition of just the RINs (K2-coded RINs) from parties who participate in the RINs market.

RINs generated during the current year may be used to satisfy either the current year or the following year's volume requirement; essentially giving them a two-year lifespan. If a fuel supplier has already met its mandated share and has supplied surplus biofuels for a particular biofuel category, it can sell the extra RINs to another supplier (who has failed to meet its mandate for that same biofuel standard) or it can hold onto the RINs for future use. Deficit carryovers can be any amount but for any individual company, up to 20% of the current year's RVO may be met by RINs from the previous calendar year.

A RIN assigned to a volume can be separated when the volume that the RIN is assigned to is blended with gasoline or diesel to produce a motor fuel or the volume is exported. Assignment of a RIN occurs when the producer or importer of the renewable fuel transfers a RIN to another party along with a volume of renewable fuel.

Since biofuels supply and demand can vary over time and across regions, a market has developed for RINs. Because four separate biofuel mandates must be met, the RIN value may vary across the

<sup>11</sup> <http://www.epa.gov/otaq/fuels/rfsdata/>

<sup>12</sup> <http://www.fas.org/spp/crs/misc/R40155.pdf>



individual biofuel categories as well as geographically with variations in specific biofuels supply and demand conditions<sup>13</sup>.

As the magnitude of the renewable fuel mandates increase, obligated parties such as petroleum refiners have greater need for forward RIN instruments as a mechanism to manage their fuel obligations. By purchasing a RIN contract, a refiner could hedge its price exposure in a rising market. Similarly, a biodiesel manufacturer seeks to lock in the value of the RINs associated with a portion of its production in order to hedge downward price risk exposure.

Currently, without a forward market, the spot RINs market operates mostly through bilateral contracts. However, as market size grows, so does the need for forward instruments to mage the volatility in RIN prices. As the value of a RIN can account for a significant portion of a gallon of fuel, obligated parties seek mechanisms to stabilize cash flows and manage risk. Furthermore, the availability of a RINs market will help biofuel producers and processor to manage their price volatility by locking in a significant portion of the biofuel price. A financially settled RINs futures contract will allow biofuel producers to lock in RIN values.

## Production

RINs are generated for each gallon of qualified renewable fuel by the fuel manufacturer or importer at the time of production or import. Table 6 below provides the number of RINs generated on an annual basis.

*Table 6: Number of Net RINs Generated, Annual*

	2012 <sup>14</sup>	2013 <sup>15</sup>	2014 <sup>16</sup>	Average
<b>D4 Biodiesel RIN</b>	1,730,881,259	2,729,681,144	2,703,492,434	<b>2,388,018,279</b>
<b>D5 Advanced Biofuel RIN</b>	597,374,834	551,583,652	143,220,826	<b>430,726,437</b>
<b>D6 Ethanol RIN</b>	12,980,894,787	13,325,610,271	14,341,173,730	<b>13,549,226,263</b>

As previously mentioned, RINs are valid for the year they are generated and the following year. Additionally, RINs that are valid in a given year are composed 20% of RINs produced in the previous year (per the 20% carryover limit) and those RINs that are generated in the current year. Specifically:

$\text{Available RINs in 2014} = 20\% (\text{Net Generation in 2013}) + \text{Net Generation in 2014}$
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## Imports

EPA allows importers of renewable fuel to generate RINs only if the foreign producer of that renewable fuel had not already done so. In order to generate RINs, importers would need to obtain information from the registered foreign producers concerning the point of origin of their fuel's feedstock and whether it meets the definition of renewable biomass. If a batch of foreign-produced renewable fuel does not have RINs accompanying it when it arrives at a US port, an importer must obtain documentation that proves that the fuel's feedstock meets the definition of renewable biomass from the fuel's producer, who must have registered with the RFS program and conducted a third-party engineering review. With such documentation, the importer could generate RINs prior to introducing the fuel into commerce in the US<sup>17</sup>.

<sup>13</sup> <http://www.fas.org/sgp/crs/misc/R40155.pdf>

<sup>14</sup> <http://www.epa.gov/otaq/fuels/rfsdata/2012emts.htm>

<sup>15</sup> <http://www.epa.gov/otaq/fuels/rfsdata/2013emts.htm>

<sup>16</sup> <http://www.epa.gov/otaq/fuels/rfsdata/2014emts.htm>

<sup>17</sup> <http://www.gpo.gov/fdsys/pkg/FR-2010-03-26/html/2010-3851.htm>

The majority of RINs that trade in the US are domestically-generated by renewable fuel producers. Direct Brazilian imports have typically made up a sizeable portion of total ethanol imported into the US. The most current and complete estimate indicates that total Brazilian ethanol exports will likely reach 3.8-4.2 billion gallons by 2022<sup>18</sup>. Table 7 provides the annual breakdown of RINs generated by source.

**Table 7: Number of RINs Generated by Source, Annual<sup>19</sup>**

Year	D-Code	Domestic Generated	Importer Generated	Foreign Generated
2012	D4	1,591,526,666	50,170,499	95,636,832
	D5	51,279,587	575,793,102	-
	D6	12,987,841,601	-	-
2013	D4	2,185,987,174	266,262,275	286,883,870
	D5	122,511,420	435,313,268	-
	D6	13,107,997,361	46,157,135	196,357,089
2014	D4	2,213,854,030	203,985,011	291,970,178
	D5	78,838,620	64,474,655	-
	D6	14,015,931,916	79,009,021	257,366,277

#### DELIVERABLE SUPPLY

EPA publishes annual and monthly RIN generation data covering the time period from July-2010 to February-2015<sup>20</sup>. In determining the deliverable supply components of the RINs market, the Exchange considered both the supply and demand sides as the two are closely aligned. The net number of RINs generated<sup>21</sup> by renewable fuel producers represents the supply, or production side, while the number of retired<sup>22</sup> RINs represents the demand, or the quantity that importers and producers of gasoline and diesel consumed in order to comply with RFS. The difference between the two components is explained by locked<sup>23</sup> RINs and unused RINs, which are carried over to the following year.

In its final determination of deliverable supply, the Exchange used the three-year average of net generation as published by the EPA. Net RINs generated shows the total number of RINs generated minus the invalid RINs generated. Table 8 below shows net generation of RINs for years 2012-2014.

**Table 8: Net RIN Generation per Year<sup>24</sup>**

RINS per Year	2012 <sup>25</sup>	2013 <sup>26</sup>	2014 <sup>27</sup>	Average
<b>D4 Biodiesel RIN</b>	1,730,881,259	2,729,681,144	2,703,492,434	<b>2,388,018,279</b>

<sup>18</sup> <http://www.gpo.gov/fdsys/pkg/FR-2010-03-26/html/2010-3851.htm>

<sup>19</sup> <http://www.epa.gov/otaq/fuels/rfsdata/index.htm>

<sup>20</sup> <http://www.epa.gov/otaq/fuels/rfsdata/index.htm>

<sup>21</sup> Per the EPA, RIN Generation refers to the process of creating a new RIN to represent a particular type and volume of renewable fuel. Only producer or importers of a qualified renewable fuel may generate RINs. <http://www.epa.gov/otaq/fuels/renewablefuels/emtsdocs/420b13024.pdf>

<sup>22</sup> Per the EPA, Retired RINs refer to those that have been used by an obligated party, such as a gasoline refiner, to meet its renewable volume obligation and to demonstrate annual compliance with RFS. A retired RIN is reported to EPA in a RIN transaction report and the total number of RINs retired during a quarter is reported to EPA in the gallon-RIN activity report. <http://www.epa.gov/otaq/fuels/renewablefuels/emtsdocs/420b13024.pdf>

<sup>23</sup> Per the EPA, locked RINs are those either been locked by a RIN holder or in rare circumstances, the EPA. Locked RINs are not available for any transactions. <http://www.epa.gov/otaq/fuels/renewablefuels/emtsdocs/420b13024.pdf>

<sup>24</sup> <http://www.epa.gov/otaq/fuels/rfsdata/index.htm>

<sup>25</sup> <http://www.epa.gov/otaq/fuels/rfsdata/2012emts.htm>

<sup>26</sup> <http://www.epa.gov/otaq/fuels/rfsdata/2013emts.htm>

<sup>27</sup> <http://www.epa.gov/otaq/fuels/rfsdata/2014emts.htm>

<b>D5 Advanced Biofuel RIN</b>	597,374,834	551,583,652	143,220,826	<b>430,726,437</b>
<b>D6 Ethanol RIN</b>	12,980,894,787	13,325,610,271	14,341,173,730	<b>13,549,226,263</b>

Table 9 below details calculated deliverable supply values using the three-year average of the annual net generation data from Table 8 above and converting to monthly net generation. Contract-equivalent values are calculated by dividing monthly deliverable supply by contract size of 50,000 RINs. Position limits proposed by the Exchange are also shown in Table 9, both in number of contracts and as a percentage of monthly supply.

*Table 9: Deliverable Supply and Position Limits<sup>28</sup>*

	<b>Monthly Deliverable Supply (Net Generation)</b>	<b>Contract-Equivalent</b>	<b>Spot Position Limit</b>	<b>Limit in % of Supply</b>
<b>D4 Biodiesel RINs Futures</b>	199,001,523	3,980	850	21%
<b>D5 Advanced Biofuel RINs Futures</b>	35,893,870	718	150	21%
<b>D6 Ethanol RINs Futures</b>	1,129,102,189	22,582	5,000	22%

<sup>28</sup> <http://www.epa.gov/otaq/fuels/rfsdata/2012emts.htm>