



argusmedia.com

## Argus White Paper: Argus RINs prices

### Argus RINs growing as benchmarks

Argus has been publishing RINs prices in the US for 5 years and has emerged as the industry’s most respected publisher of biofuels market data. CME Group has chosen Argus RINs prices as the benchmark for a series of new derivatives markets listed on CME Nymex.

Significant volatility in RINs prices has accelerated the need for sophisticated hedging tools. Participants in the biofuels markets have pushed for a cleared swap futures based on Argus’ prices. Producers and refiners can now lock in the selling and acquisition cost through hedging their RIN value. In addition, companies that participate in the market through tolling agreements with plants can buy feedstock, sell biofuels and hedge their RIN risk.

This listing follows the highly successful Argus Rotterdam biodiesel swap future, which reflects the FAME o°C CFPP grade and has become the main biofuels financial instrument in Europe. Argus price indexes are also used in two other Rotterdam biodiesel contracts for Rapeseed (RME) and Palm (PME).

The Argus SME biodiesel contract on CME remains the only exchange listed biodiesel swap in the Americas. Argus price indexes are used in several other successful US-based cleared swap futures contracts for crude and refined products. Argus LLS crude swaps are seeing significant growth, with open interest doubling in the 1st quarter of 2013.

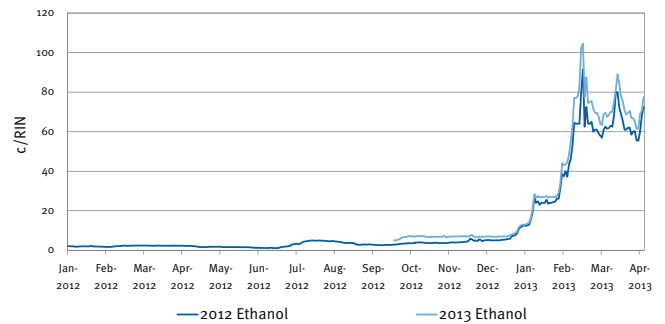
### Argus US RINs prices are trusted

Argus RINS prices are trusted because they reflect market prices across the entire trading day as a low and high of deals done. An entire day price is a reliable indicator of physical market values as it incorporates the broadest possible pool of spot market liquidity and has acceptance from industry. Argus publishes a RINS deals done table in its US Ethanol and US Products reports in order to support price transparency.

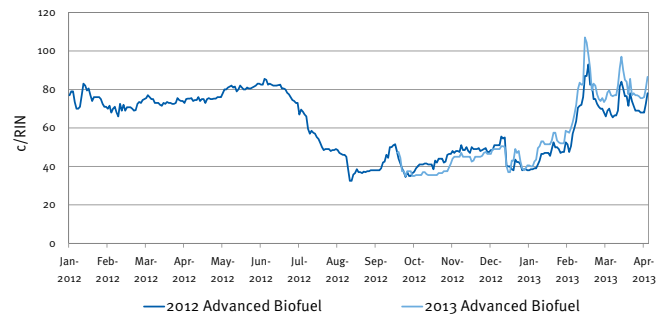
Argus publishes daily RINs prices for Ethanol (Renewable Fuel D6 category), Advanced Biofuel (Advanced Biofuel D5 category), Biodiesel (Biomass-based Diesel D4 category) and Cellulosic (Cellulosic Biofuel D3 category).

Argus assesses current year and previous year RINs corresponding to the product delivery date (see table). As liquidity allows, Argus will begin assessing three sets of RINs, which reflect previous year, current year and future year. Argus also publishes a continuous “current year” assessment.

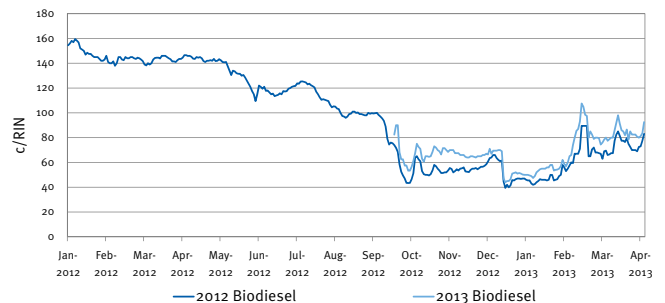
#### ARGUS ETHANOL RINS (D6) ASSESSMENTS



#### ARGUS ADVANCED BIOFUEL (D5) RINS ASSESSMENTS



#### ARGUS BIODIESEL RINS (D4) ASSESSMENTS



Bioenergy

illuminating the markets

Argus values transparency

Argus operates according to best practices in the publishing field, and maintains thorough compliance procedures throughout the firm. We want to be seen as a preferred provider by the biofuels trading community, which is held to equally high standards, while at the same time maintaining our editorial integrity and independence.

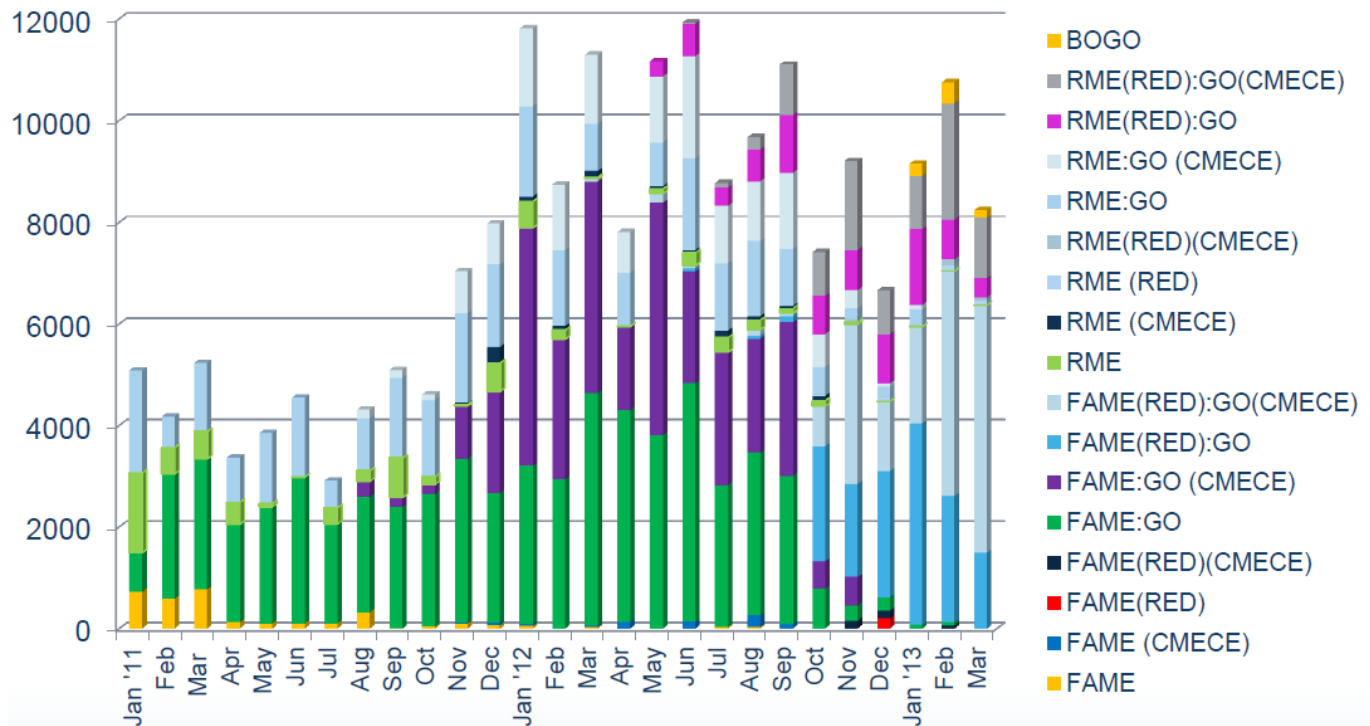
Argus has a strict ethics policy that applies to all staff. The Argus Global Compliance Policy can be found on our website at [www.argusmedia.com](http://www.argusmedia.com). Included in this policy are restrictions against staff trading in any energy commodity or energy related stocks, and guidelines for accepting gifts. Argus also has strict policies regarding central archiving of email and instant messenger communication, maintenance and archiving of notes, and archiving of spreadsheets and deal lists used in the price assessment process.

Argus prices used globally in physical indexation

Argus works closely with the industry to develop market-appropriate pricing methodologies. As a result, the Argus approach has been widely adopted across US energy markets. In clean products, many US refiners make extensive use of Argus gasoline and diesel contracts throughout the supply chain, including in ethanol and biodiesel contracts. Argus is the primary index in the US domestic crude markets, and the Argus Sour Crude index is used to price all US imports from Saudi Arabia, Iraq and Kuwait.

Because Argus is used extensively to price physical transactions in the energy markets, the industry has come to trust Argus prices for regulation-created credit markets like RINs. Argus prices have been extensively used in other credit trading markets like SOX and NOX in the US, the RED program in Europe and the European Emission Trading system.

EUROPEAN BIODIESEL MONTHLY VOLUMES



Source: CME Group

## What is a Renewable Identification Number (RIN)?

Under the Clean Air Act, the US Federal Environmental Protection Agency (EPA) is required to set annual standards of renewable fuel sold in the United States.

The Renewable Fuels Standard (RFS2) requires diesel and gasoline producers and importers, otherwise known as obligated parties, to blend certain minimum volumes of renewable fuels in the US fuel supply. Obligated parties must meet individual Renewable Volume Obligations (RVO) by submitting to regulators Renewable Identification Numbers (RINs), representing each gallon of blended biofuel. The current standard mandates annual increases climbing from 16.55 bn USG in 2013 to 36 bn USG in 2022.

The US Environmental Protection Agency created the RINS system to facilitate compliance with the RFS2. A RIN is a 38-digit numeric code that is generated by the production or import of renewable fuels into the U.S. Once a gallon of renewable fuel is blended, the RIN may be detached from the physical fuel and sold. Obligated parties may keep RINS detached from fuel they blend or secure through contract, or they may purchase RINS separated by others to demonstrate compliance with their RVO.

RINS are tracked through the EPA Moderated Tracking System (EMTS) set up by the EPA. The size of the market will continue to grow as the volume that obligated parties need to fulfill their renewable obligation on an annual basis increases.

RINs			
¢/RIN	Low	High	+/-
<b>Ethanol RINs</b>			
2012	64.00	67.00	-3.50
2013	74.00	77.00	-2.50
<b>Biodiesel RINs</b>			
2012	75.00	80.00	
2013	84.00	86.00	-1.00
<b>Cellulosic RINs</b>			
2012	77.00	79.00	
2013	41.00	43.00	
<b>Advanced Biofuel RINs</b>			
2012	74.00	79.00	
2013	83.00	85.00	-1.00

From: April 12, 2013

## Understanding price dynamics

Understanding the RIN system and the prices for RINs when bought and sold can provide key insights into the supply/demand dynamics of biofuel and feedstock markets.

### RINs values are determined by three major factors:

- The US government's federally mandated use of renewable fuels and the market's general Renewable Volume Obligation
- The demand for on-road motor fuels in the US
- The production of renewable fuels in the US

Because the government's current demand levels for refiners and importers use of renewable fuels outstrips the available fuel supply to blend in renewable fuels, RINs have become increasingly volatile in the US. The traded RIN, essentially, is a financial tool which refiners and importers can purchase to cover any shortfall in their RVO.

When RIN prices are lower than physical fuel it can be advantageous for parties to purchase available RINs rather than blend in renewable fuels to cover their RVO. Other parties may lack any blending capability and so must secure their entire RVO by purchasing RINs. As RIN prices rise, refiners may increase exports and, along with importers, try to maximize their use of physical fuel to avoid paying for RINs.

RINs Deals Done		
Market	Price (¢/RIN)	Volume '000 RINs
<b>Advanced Biofuel</b>		
2013	84.00	1,000
<b>Biodiesel</b>		
2013	85.00	500
2013	85.00	1,000
<b>Ethanol</b>		
2012	64.00	1,000
2012	67.00	1,000
2013	76.00	500
2013	75.00	1,000
2013	74.00	1,000
2013	74.00	1,000
2013	76.00	1,500
2013	77.00	2,000

From: April 12, 2013

### Argus US RINs Futures listed on CME

CME Group has listed the RIN Renewable Fuel contracts (subject to the rules and regulations of the New York Mercantile Exchange (NYMEX)) based on Argus' RIN prices. The new futures were available for trading on the NYMEX trading floor, on CME Globex and for submission of clearing through CME ClearPort on May 13, 2013.

The RINs futures contracts will be used to hedge the price risk associated with the U.S. Environmental Protection Agency's (EPA) renewable fuel standard (RFS2).

#### Contract Specifications

Contract Name	Code	Rule Chapter	Listing Schedule	First Listed Contract	Contract Size	Prices and Fluctuations
D4 Biodiesel RINs (Argus) 2012 Futures	D42	1157	ClearPort/Floor: Monthly through Feb 2014 Globex: Front month	May 2013	50,000 RINs	Minimum price tick = \$0.0001 per RIN. Value per tick = \$5.00
D4 Biodiesel RINs (Argus) 2013 Futures	D43	1158	ClearPort/Floor: Monthly through Feb 2015 Globex: Front month	May 2013	50,000 RINs	Minimum price tick = \$0.0001 per RIN. Value per tick = \$5.00
D4 Biodiesel RINs (Argus) 2014 Futures	D44	1159	ClearPort/Floor: Monthly through Feb 2016 Globex: Front month	Jan. 2014	50,000 RINs	Minimum price tick = \$0.0001 per RIN. Value per tick = \$5.00
D5 Advanced Biofuel RINs (Argus) 2012 Futures	D52	1160	ClearPort/Floor: Monthly through Feb 2014 Globex: Front month	May 2013	50,000 RINs	Minimum price tick = \$0.0001 per RIN. Value per tick = \$5.00
D5 Advanced Biofuel RINs (Argus) 2013 Futures	D53	1161	ClearPort/Floor: Monthly through Feb 2015 Globex: Front month	May 2013	50,000 RINs	Minimum price tick = \$0.0001 per RIN. Value per tick = \$5.00
D5 Advanced Biofuel RINs (Argus) 2014 Futures	D54	1162	ClearPort/Floor: Monthly through Feb 2016 Globex: Front month	Jan. 2014	50,000 RINs	Minimum price tick = \$0.0001 per RIN. Value per tick = \$5.00
D6 Ethanol RINs (Argus) 2012 Futures	D62	1163	ClearPort/Floor: Monthly through Feb 2014 Globex: Front month	May 2013	50,000 RINs	Minimum price tick = \$0.0001 per RIN. Value per tick = \$5.00
D6 Ethanol RINs (Argus) 2013 Futures	D63	1164	ClearPort/Floor: Monthly through Feb 2015 Globex: Front month	May 2013	50,000 RINs	Minimum price tick = \$0.0001 per RIN. Value per tick = \$5.00
D6 Ethanol RINs (Argus) 2014 Futures	D64	1165	ClearPort/Floor: Monthly through Feb 2016 Globex: Front month	Jan. 2014	50,000 RINs	Minimum price tick = \$0.0001 per RIN. Value per tick = \$5.00

Source: CME Group



#### Contact Information

**Houston:**  
3040 Post Oak Boulevard, Suite 550  
Houston, Texas 77056  
Tel: +1 713 968 0000  
Fax: +1 713 622 2991

**New York:**  
500 Fifth Avenue, Suite 2410  
New York, NY 10110  
Tel: +1 646 376 6130  
Fax: +1 646 376 6143

**Washington DC:**  
1012 Fourteenth Street NW, Suite 1500  
Washington, DC 20005  
Tel: +1 202 775 0240  
Fax: +1 713 622 2991

**Rio de Janeiro:**  
Av. Nossa Senhora de Copacabana  
330 – salas 1003/1004  
Copacabana, Rio de Janeiro, RJ  
Tel: +55 21 3514 1450

Email: [moreinfo@argusmedia.com](mailto:moreinfo@argusmedia.com)  
Web: [www.argusmedia.com](http://www.argusmedia.com)  
Twitter: [@argusmedia](https://twitter.com/argusmedia)