

Renewable Identification Numbers (RINs) and Renewable Fuel Standard (RFS) Compliance

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The [Renewable Fuel Standard \(RFS\)](#) requires U.S. transportation fuel to contain a minimum volume of renewable fuel. Recent developments pertaining to the [mandate](#)—including recent market activity for the compliance system, letters from selected stakeholders about the compliance system to the [U.S. Environmental Protection Agency \(EPA\)](#), and the release of the [2017 final rule](#) for the RFS—have placed an emphasis on RFS compliance not seen since 2013 and could lead to additional congressional interest. Some issues with RFS compliance touch on broader issues with the mandate; addressing these issues could lead to a larger discussion about the mandate within Congress.

Renewable Fuel Standard Compliance

Each year, EPA is obliged to announce the RFS, expressed both according to volume (e.g., 19.28 billion gallons of renewable fuel for 2017) and percentage (e.g., 10.7% of renewable fuel for 2017). The percentage standards are set so that if every obligated party meets the percentages, then the amount of renewable fuel used will meet the applicable volumes established. The final standard is converted into an annual obligation, referred to as the Renewable Volume Obligation (RVO), for obligated parties to meet. There is an RVO for each fuel category. Essentially, the [RVO](#) is the obligated party's total gasoline and diesel sales multiplied by the annual renewable fuel percentage standards. Obligated parties—refiners or importers that produce or import gasoline or diesel fuel within the 48 contiguous states or Hawaii during a compliance period—meet their annual obligation by blending renewable fuel into nonrenewable transportation fuel or by submitting credits (i.e., Renewable Identification Numbers, or RINs) to EPA.

RFS compliance also involves cellulosic waiver credits—credits EPA must issue if it lowers the cellulosic biofuel standard from the statutory level. Obligated parties may purchase the waiver credits to comply with the cellulosic biofuel RVO. EPA has repeatedly reduced the [cellulosic biofuel requirements](#). Because waiver credits are not RINs, they are not included in this RFS compliance discussion.

Renewable Identification Numbers

[RINs](#) are tradable credits used to prove RFS compliance. The process by which RINs are used to demonstrate RFS compliance, in general, involves six steps:

- 1. A batch of renewable fuel is produced.
- 2. RINs are assigned to that batch of renewable fuel.
- 3. The batch of renewable fuel is sold.
- 4. The batch of renewable fuel is blended with nonrenewable fuel, and the RINs can then be separated from the batch of blended fuel.
- 5. The separated RINs are traded.
- 6. Obligated parties submit to EPA RINs that satisfy their RVO to show compliance.

RINs have various restrictions. For instance, RINs are valid only for the compliance year in which they are generated or the following year. RINs can be generated only by renewable fuel producers or importers. RINs can be traded only by market participants—domestic or international—categorized by EPA as obligated parties, renewable fuel exporters, renewable fuel producers, and registered RIN market participants. RIN transactions are registered and monitored with the EPA moderated transaction system (EMTS). A [voluntary quality assurance program](#) audits and verifies RINs. Once RINs are used for compliance, they are retired. RINs not used for compliance, called carryover RINs, are carried into the next compliance year to provide flexibility.

RIN value can differ depending on its [D-code](#). A D-code is assigned to a renewable fuel with a specific fuel pathway consisting of a certain feedstock, production process, and greenhouse gas emission reduction threshold, among other things. There are five D-codes for four categories of renewable fuel (cellulosic biofuel has two D-codes). Some RINs can be used to satisfy the various fuel category requirements (e.g., a D3 RIN, for cellulosic biofuel, may be used to satisfy the cellulosic biofuel, advanced biofuel, and total renewable fuel categories). Thus, some RINs may have a higher value because they can be used to satisfy the RVO for multiple renewable fuel categories.

Concerns

Three primary areas of concern plague the RFS compliance system: RIN prices, the RIN market, and the requests of obligated parties. According to [market data](#), RIN prices have increased since the beginning of 2016 for all four fuel categories. For example, prices increased by approximately 48% for D6 RINs (ethanol)—the fuel category for which the most RINs have been generated in 2016 thus far. An increase in RIN prices may simply reflect market conditions, but questions have been raised about market [manipulation](#). The RIN market is not a "public" market with the transparency features associated with other markets (e.g., commodity futures market), making it difficult for stakeholders to determine the cause of the RIN price increase. It is not clear how many RIN trades are taking place and between whom. EPA monitors RIN transactions, and the public has limited access to observe the transactions. Some market limitations may be due to efforts to maintain the confidential business information of certain RFS participants. [One stakeholder](#) has requested that EPA and the U.S. Commodity Futures Trading Commission (CFTC) examine recent RIN activity that the stakeholder deems irregular and volatile. To this end, CFTC and EPA signed a [memorandum of understanding](#) in March 2016 to share RFS data and analysis.

Lastly, some [obligated parties](#) contend that the obligation to show compliance with the RFS should occur elsewhere (e.g., with another party in the fuel supply chain). Others counter the aforementioned claims, insisting that [infrastructure improvements](#) (e.g., a refiner expanding its ability to store and blend ethanol internally so that it is not subject to purchasing RINs from external sources) and [increased use](#) of higher ethanol blends could put these obligated parties in a better position to meet the mandate than in the past. EPA is proposing to [deny the request](#) to initiate a rulemaking to change the point of obligation. Additionally, others have presented [policy options](#) to reform the RFS, including RFS compliance.

Issues with RFS compliance—particularly RINs—are not new. A spike in 2013 D6 RIN prices prompted EPA to issue an [analysis](#) in 2015 explaining the cause of the increase and the impact of rising prices on various types of refiners; EPA concluded that the rise in D6 RIN prices could largely be explained by the increasing total renewable fuel requirement of the RFS program. Further, there have been several occurrences of [fraudulent activity](#) regarding biodiesel RINs with penalties issued.