CRS INSIGHT

Renewable Fuel Standard (RFS): Final Rule for 2014, 2015, and 2016

December 2, 2015 (IN10405)

_|

_

Related Author

<u>Kelsi Bracmort</u>

Kelsi Bracmort, Specialist in Agricultural Conservation and Natural Resources Policy (kbracmort@crs.loc.gov, 7-7283)

The Environmental Protection Agency (EPA) released the <u>final rule for the Renewable Fuel Standard</u> (RFS) on November 30, 2015. While the rule contains wide-ranging information as required by <u>statute</u>, most stakeholders are primarily concerned with the annual volume amounts for total renewable fuel, advanced biofuel, cellulosic biofuel, and biomass-based diesel. Further, the final rule is notable in that the total renewable fuel volume required for 2016 (18.11 billion gallons) is approximately a 9% increase relative to the total renewable fuel volume required for 2013 (16.55 billion gallons).

The RFS mandates that U.S. transportation fuel contain a minimum volume of biofuel, increasing annually (see CRS Report R43325, *The Renewable Fuel Standard (RFS): In Brief*). EPA administers the RFS and must fulfill several requirements, including setting annual volume amounts, a process that can and has involved using waiver authority granted to EPA to reduce the amounts contained in statute when certain conditions prevail (see CRS Report R44045, *The Renewable Fuel Standard (RFS): Waiver Authority and Modification of Volumes*). The Clean Air Act requires that each year's standards—the required renewable fuel volume amounts—be announced by November 30 of the previous year, although EPA has missed the deadline repeatedly. In releasing the 2016 final rule, EPA is back on statutory schedule for the RFS.

Final Rule

The final rule contains the following major actions:

- establishes volume requirements and annual percentage standards for total renewable fuel, advanced biofuel, cellulosic biofuel, and biomass-based diesel for 2014, 2015, and 2016;
- establishes applicable volume of biomass-based diesel for 2017;
- rescinds the cellulosic biofuel standard for 2011;
- denies waiver petitions for the 2014 RFS submitted by the petroleum industry and eight governors;
- clarifies that, currently, biofuels produced from oil manufactured only from algae grown photosynthetically are an <u>approved fuel pathway for the RFS</u>; and
- finalizes revisions to the annual compliance reporting and attest reporting deadlines for the 2013, 2014, and 2015 compliance years.

The final volume amounts for 2014, 2015, and 2016 (and 2017 for biomass-based diesel) appear in Table 1. For the first

time since the RFS was established, EPA reduced the total renewable fuel volume, including the volume implicitly allowed for conventional biofuel, and reduced the total advanced biofuel requirement below what was in the statute. Previously, EPA repeatedly reduced the cellulosic biofuel requirement, leaving the total advanced biofuel requirement unchanged and allowing other advanced biofuels to backfill the difference. EPA has used both the general and the cellulosic biofuel waiver authorities to reduce these volume amounts. EPA used these waiver authorities to reduce the volume amounts, in part, due to "real-world challenges" that include substantial limitations in the supply of cellulosic biofuel, insufficient supply of other advanced biofuels to offset the shortfall in cellulosic biofuel, and practical and legal constraints on the market's ability to supply renewable volumes to vehicles that can use them.

The final rule gives some insight into how EPA is interpreting the statute and the complexity surrounding EPA's ability to administer the RFS. According to EPA,

[t]he fact that Congress chose to mandate increasing and substantial amounts of renewable fuel clearly signals that it intended the RFS program to create incentives to increase renewable fuel supplies and overcome constraints in the market.

EPA describes the challenges of implementing a policy that impacts the market. Further, EPA reports that the RFS is only one component of the effort to increase renewable fuel use, an overall objective that is supported by programs and activities at the Departments of Agriculture and Energy.

Stakeholder Response

Views about the final rule differ. Some in the renewable fuel community argue the final rule will "<u>severely cripple</u> the program's ability to incentivize infrastructure investments that are crucial to break through the so-called blend wall and create a larger market for all biofuels." Some in the petroleum community are calling for reform or repeal of the RFS "to <u>protect consumers</u>." Some in the soybean community—a primary feedstock for biomass-based diesel—assert " [although] the volumes in the Final Rule do not fully capitalize on the capacity and growth potential of U.S. biodiesel, it does <u>provide a step in the right direction</u>." The Secretary of Agriculture said the final rule is "a <u>positive step forward</u> providing for continued growth in all parts of the Renewable Fuel Standard ... building on the Obama Administration's and USDA's commitment to biofuels and American-grown renewable-energy."

Legislative Concerns

The RFS has driven biofuel production and use over the last few years—primarily that of conventional biofuel—an outcome that has elicited diverse reactions among policymakers. Some have applauded the substantial progress made over a relatively short time to significantly increase production of conventional biofuel and other notable but less visible achievements from the advanced biofuel community, such as increased biomass-based diesel production and the advent of new cellulosic biofuel pathways—including renewable compressed and renewable liquefied natural gas. Some biofuel supporters have expressed concern that infrastructure is needed to make conventional and advanced biofuel more easily available to the average consumer. Some are disappointed that advanced biofuel production, particularly cellulosic biofuel, has not seen the gains some thought possible when the RFS was modified in 2007. Others have looked upon the RFS as promoting a product that is not ready for commercial application. Some have seen biofuels as impinging upon their market share and may not be as willing to see biofuel become a readily accessible choice for consumers.

Whether one supports or opposes the RFS, this final rule is additional evidence that biofuel production and use is associated with many moving parts—agriculture, environment, transportation, energy, infrastructure, markets, technology, and more. The difficulty of aligning the various parts under one statute has forcibly affected fuel producers' ability to meet the statutory volume amounts for the RFS. Going forward, Congress may choose to consider biofuel policy more holistically, taking into consideration the firm signals that investors, researchers, and the market may need to accomplish the goals set by Congress.

Table 1. Renewable Fuel Standard Statute and EPA Final Volume Amounts

(in billions of gallons)

	2012		2013		2014		2015		2016		2017	
	S	F	S	F	S	F	S	F	S	F	S	F
Total Renewable Fuel	15.2	15.2	16.55	16.55	18.15	16.28	20.5	16.93	22.25	18.11	24.0	TBD
Cap on Conventional Biofuel	13.2	13.2	13.8	13.8	14.4	13.61	15.0	14.05	15.0	14.50	15.0	TBD
Total Advanced Biofuels	2.0	2.0	2.75	2.75	3.75	2.67	5.5	2.88	7.25	3.61	9.0	TBD
Cellulosic	0.5	0.0105 <mark>a</mark>	1.0	0.0008	1.75	0.033	3.0	0.123	4.25	0.230	5.5	TBD
Biomass- Based Diesel	1.0	1.0	≥1.0	1.28	≥1.0	1.63	≥1.0	1.73	≥1.0	1.9	≥1.0	2.0
Date of Final Rule	Nov. 2011	Dec. 2011	Nov. 2012	Aug. 2013	Nov. 2013	Nov. 2015	Nov. 2014	Nov. 2015	Nov. 2015	Nov. 2015	Nov. 2016	TBD

Source: Energy Independence and Security Act of 2007 (<u>P.L. 110-140</u>); Contact the author for EPA final and proposed rule citations.

Notes: S = Statute, F = Final, TBD = To be determined by EPA.

a. RFS Final Rule 2012, *Federal Register*, January 9, 2012. Subsequently vacated under API v. EPA.