

# The Renewable Fuel Standard (RFS): An Overview

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#### **SUMMARY**

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## The Renewable Fuel Standard (RFS): An Overview

The Renewable Fuel Standard (RFS) requires U.S. transportation fuel to include a minimum volume of renewable fuel each year. The RFS—established by the Energy Policy Act of 2005 (EPAct05; P.L. 109-58) and expanded in 2007 by the Energy Independence and Security Act (EISA; P.L. 110-140)—began with requiring 4 billion gallons of renewable fuel in 2006 and gradually increasing that requirement until it reached 36 billion gallons in 2022. However, for a variety of reasons, the statutory volume requirement for total renewable fuel—which may include both conventional biofuel and advanced biofuel—was not met from 2014 to 2022. As of 2023, the U.S. Environmental Protection Agency (EPA) has the authority to determine annual volume obligations.

EPA administers the RFS and is responsible for several related tasks. Using the statutory criteria, EPA evaluates which renewable fuels are eligible for the RFS program. EPA also monitors compliance with the RFS requirements using a system of tradable credits referred to as *renewable identification numbers* (RINs). From the program's inception through 2022, EPA established the amount of total renewable fuel that refiners and importers had to account for in the coming year based on statutory targets, fuel supply, and other conditions. EPA exercised statutory waiver authorities to reduce volumes when necessary. For the final nine years of the program's statutory annual requirements (i.e., the latter half of 2014 through 2022), EPA set the total renewable fuel volume below the statutory amount—using its waiver authorities—mainly due to underproduction of advanced biofuel.

The RFS began a new phase in 2023, when EPA began to have statutory authority and an obligation to determine the annual volume requirements. Under the current statutory authority, EPA is to determine the volume requirements, in coordination with the Secretaries of Energy and Agriculture, based on a review of program implementation for prior years and an analysis of various criteria (e.g., the impact of renewable fuels on the energy security of the United States). EPA has used such authority previously. EPA determined the volume amounts for biomass-based diesel from 2013 onward, via the rulemaking process, after the annual statutory targets for biomass-based diesel ended in 2012.

EPA is issuing "set rules" in accordance with what the agency refers to as the "set authority," the authority for the agency to set applicable volumes for years not specified in the statutory tables. The Set 1 Rule covers the applicable volume requirements and percentage standards for 2023 through 2025, along with regulatory changes. In June 2025, EPA released a notice of proposed rulemaking for the set rule that covers the applicable volume requirements and percentage standards for 2026 and 2027. EPA also proposes to reduce the number of compliance credits (i.e., RINs) generated for imported renewable fuel and renewable fuel produced from foreign feedstocks; remove renewable electricity as a qualifying renewable fuel from the program; partially waive the 2025 cellulosic biofuel volume requirement; update existing renewable fuel pathways and add new renewable fuel pathways; clarify and update compliance reporting requirements; and more.

Congress has expressed interest in various facets of the RFS. EPA gives attention to some of these issues in the 2026 and 2027 RFS proposed rule (e.g., treatment of renewable electricity, and a fuel pathway for renewable jet fuel produced from corn ethanol). Recent legislative activity (e.g., P.L. 119-21), presidential actions (e.g., executive orders), and legal challenges may also be of interest to Congress in its ongoing oversight of the RFS.

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## Introduction

Established by Congress in an amendment to the Clean Air Act, the Renewable Fuel Standard (RFS) mandates that U.S. transportation fuels contain a minimum volume of renewable fuel. The mandated minimum volumes specified in statute increased annually from 2006 through 2022, with the U.S. Environmental Protection Agency (EPA) determining the volume amounts after 2022. The standard has generally been met using both conventional biofuel (e.g., corn starch ethanol) and advanced biofuel (e.g., cellulosic ethanol). For a renewable fuel to be applied toward the mandate, it must be used for certain purposes (i.e., fuel used in on-road motor vehicles, jet fuel, or heating oil) and meet certain environmental and biomass feedstock criteria. The EPA administers a program to oversee industry compliance with the mandate.

The statute outlines annual volume requirements—listed in tables for specific years—for four fuel categories: total renewable fuel, total advanced biofuel, cellulosic biofuel, and biomass-based diesel.<sup>3</sup> The total renewable fuel statutory volume required for any given year equates to the sum of conventional biofuel (which is unspecified in statute) and advanced biofuel (which is specified in statute).<sup>4</sup> Both cellulosic biofuel and biomass-based diesel are subcategories of advanced biofuel (both of which are specified in statute). There is also a third advanced biofuel category—"other advanced biofuel" (which is unspecified in statute).<sup>5</sup>

EPA provides public data for the RFS, including compliance data and the associated physical volumes of fuel.<sup>6</sup> EPA provides this data for multiple fuel categories.<sup>7</sup> The predominant biofuel used to satisfy the majority of the annual RFS total renewable fuel requirement has been and continues to be corn starch ethanol.<sup>8</sup> This predominance is reflective of both the final rulemakings for the statutory table tenure for the program and the final rulemakings for the "set authority" tenure for the program.<sup>9</sup>

The statutory RFS volume requirements for both total renewable fuel and total advanced biofuel were not met from 2014 to 2022. The EPA Administrator had the authority to waive the statutory

<sup>&</sup>lt;sup>1</sup> 42 U.S.C. §7545(o). The term *renewable fuel* is defined in statute as "fuel that is produced from renewable biomass and that is used to replace or reduce the quantity of fossil fuel present in a transportation fuel." 42 U.S.C. §7545(o)(1)(J).

<sup>&</sup>lt;sup>2</sup> The U.S. Energy Information Administration (EIA) defines *biofuels* as "liquid fuels and blending components produced from biomass feedstocks, used primarily for transportation." EIA, *Glossary*, 2025, https://www.eia.gov/tools/glossary/?id=B.

<sup>&</sup>lt;sup>3</sup> See 42 U.S.C. §7545(o)(2)(B) for the statutory tables.

<sup>&</sup>lt;sup>4</sup> The required volume of conventional biofuel is calculated by subtracting the advanced biofuel volume requirement from the total renewable fuel volume requirement.

<sup>&</sup>lt;sup>5</sup> The required volume of other advanced biofuels is calculated by subtracting the sum of the cellulosic biofuel volume requirement and the biomass-based diesel volume requirement from the total advanced biofuel volume requirement.

<sup>&</sup>lt;sup>6</sup> U.S. Environmental Protection Agency (EPA), "Public Data for the Renewable Fuel Standard," accessed July 1, 2025, https://www.epa.gov/fuels-registration-reporting-and-compliance-help/public-data-renewable-fuel-standard.

<sup>&</sup>lt;sup>7</sup> For some fuel categories, EPA provides data for the same fuel with different equivalence values (EVs) (e.g., renewable jet fuel and non-ester renewable diesel). For example, EPA provides data for renewable jet fuel with an EV of 1.7 and for renewable jet fuel with an EV of 1.6.

<sup>&</sup>lt;sup>8</sup> See footnote 38.

<sup>&</sup>lt;sup>9</sup> EPA, "Regulations and Volume Standards for Renewable Fuel Standards," accessed July 1, 2025, https://www.epa.gov/renewable-fuel-standard/regulations-and-volume-standards-renewable-fuel-standards. *Set authority* is EPA's authority to set applicable volumes for years not specified in the statutory tables, discussed later in this report.

RFS requirements, in whole or in part, if certain conditions outlined in statute occurred.<sup>10</sup> EPA used this waiver authority multiple times to reduce the volumes obligated parties were required to blend into transportation fuel (see **Table 1**).

A variety of factors—such as infrastructure limitations, limited progress in technological development, and limited federal assistance for developing biofuels—contributed to challenges in meeting the statutory total volume requirement established by Congress. Factors also included a lack of cellulosic biofuel production and the amount of time it took EPA to approve fuel pathways for the program. Other factors—such as oil prices, consumer demand for transportation fuel, and circumstances related to the COVID-19 pandemic—may have also contributed to the challenges in meeting the total statutory volume requirements.

The EPA Administrator has the statutory authority to determine the volume amounts for all fuel categories from 2023 onward in coordination with the Secretary of Energy and the Secretary of Agriculture. <sup>12</sup> Multiple factors affect the conditions under which the RFS operates—some external to RFS policy and some internal. These factors include programmatic changes, commodity supply and pricing, agricultural trade issues, consumer buying power, vehicle fuel efficiency standards, tax incentives, and crude oil and gasoline prices, among others. The impact of these factors can be challenging to identify and quantify in a timely manner.

Challenges to implementing the RFS have led to scrutiny of the program in Congress and to litigation about EPA's regulations. Some Members of Congress have expressed their perspectives on EPA's rulemakings as well as EPA's implementation of the program, many expressing concerns about the implementation and feasibility of the RFS. Some Members of Congress have also questioned whether to amend or repeal the RFS or whether to maintain the status quo. This report provides an overview of the RFS, including some of the widely discussed policy issues related to it. The

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<sup>&</sup>lt;sup>10</sup> For more information, see CRS Report R44045, *The Renewable Fuel Standard (RFS): Waiver Authority and Modification of Volumes*, by Kelsi Bracmort.

<sup>&</sup>lt;sup>11</sup> For an explanation of fuel pathways, see EPA, "Fuel Pathways Under Renewable Fuel Standard," https://www.epa.gov/renewable-fuel-standard/fuel-pathways-under-renewable-fuel-standard.

<sup>&</sup>lt;sup>12</sup> 42 U.S.C. §7545(o)(2)(B)(ii).

<sup>&</sup>lt;sup>13</sup> Since 2010, there have been numerous congressional hearings about the Renewable Fuel Standard (RFS). Additionally, there have been multiple legal challenges regarding EPA's administration of the RFS. In some cases, courts have found against EPA's rules for various reasons: in others, courts have affirmed EPA's authority.

<sup>&</sup>lt;sup>14</sup> For example, some Members have commented on the Notice of Proposed Rulemaking (NPRM) for the 2026 and 2027 renewable fuel standards. See Sen. Roger Marshall, "Senator Marshall: We Are Unleashing America's Energy Dominance," press release, June 13, 2025; Sen. Joni Ernst, "Ernst Applauds Trump Administration for Strengthening RFS and Delivering for Rural America," press release, June 13, 2025; Rep. Adrian Smith, "Smith Statement on Proposed Volumes for Renewable Fuel Standard," press release, June 13, 2025; Rep. Angie Craig, "Rep. Craig Statement on EPA RVO Announcement," press release, June 13, 2025.

<sup>&</sup>lt;sup>15</sup> Legislation has been introduced in the 119<sup>th</sup> Congress pertaining to the generation of compliance credits by small refineries for certain compliance years (see H.R. 1346). In addition, legislation introduced in the 118<sup>th</sup> Congress would have repealed, amended, or further supported the RFS (see, for example, H.R. 2778 and H.R. 3337 in the 118<sup>th</sup> Congress). For a brief discussion of potential legislative reform for the RFS, see CRS In Focus IF10842, *The Renewable Fuel Standard: Is Legislative Reform Needed?*, by Kelsi Bracmort.

<sup>&</sup>lt;sup>16</sup> For additional discussion, see CRS Report R40155, *Renewable Fuel Standard (RFS): Overview and Issues*, by Kelsi Bracmort.

## The Statute

The RFS was established by the Energy Policy Act of 2005 (EPAct05; P.L. 109-58). 17 It was expanded in 2007 by the Energy Independence and Security Act of 2007 (EISA; P.L. 110-140). (See the text box in this section for a discussion of the differences between the 2005 RFS and the 2007 RFS.) The RFS mandate requires that transportation fuels sold or introduced into commerce in the United States contain an increasing volume of a predetermined suite of renewable fuels. The statute required 4.0 billion gallons of renewable fuel in 2006, ascending to 36.0 billion gallons required in 2022, with EPA determining the volume amounts after 2022 in subsequent rulemakings.

The statute centers on four renewable fuel categories—total renewable fuel, advanced biofuel, cellulosic biofuel, and biomass-based diesel—each with its own target volume. 18 A key part of the statutory definition of each fuel category is whether the fuel achieves certain greenhouse gas (GHG) reductions relative to gasoline and diesel fuel. Each fuel is assigned a lifecycle GHG emission reduction percentage threshold (in proportion to baseline lifecycle GHG emissions for gasoline and diesel). <sup>19</sup> For example, the lifecycle greenhouse gas emissions for advanced biofuel must be at least 50% lower than the baseline lifecycle greenhouse gas emissions (from gasoline or diesel).20

The total renewable fuel requirement under the RFS is met with the combination of fuels from two renewable fuel categories: conventional biofuel and advanced biofuel. The requirement for advanced biofuel, in general, can be met with the combination of three types of advanced biofuel: cellulosic biofuel, biomass-based diesel, and other advanced biofuels. To date, the total annual volumes required have been met mostly with conventional biofuel (e.g., corn starch ethanol).<sup>21</sup> Beginning in 2015, the statutory renewable fuel volume tables implicitly capped the conventional biofuel volume amounts while increasing the requirement for advanced biofuel.<sup>22</sup> The RFS total advanced biofuel requirement specified in the statutory volume tables has increased over time-

<sup>&</sup>lt;sup>17</sup> More specifically, Section 1501 (Renewable Content of Gasoline) of the Energy Policy Act of 2005 (EPAct05) amended Section 211 of the Clean Air Act (CAA) by adding a Renewable Fuel Program. Section 1501 directed the EPA Administrator to ensure that gasoline sold or introduced into commerce in the United States contained a minimum volume of renewable fuel. This "original" 2005 RFS required 4.0 billion gallons of renewable fuel for 2006, ascending to 7.5 billion gallons by 2012. The amount of renewable fuel was prescribed in EPAct05 for the years 2006 through 2012. Beginning in 2013, the annual volume of renewable fuel was to be determined by the EPA Administrator and the Secretaries of Agriculture and Energy. Additionally, the RFS established in EPAct05 would have required that at least 250 million gallons of the renewable fuel be derived from cellulosic biomass starting in 2013.

<sup>&</sup>lt;sup>18</sup> The statute defines the four renewable fuels. 42 U.S.C. §7545(o)(1). Conventional biofuel is corn starch ethanol. Advanced biofuel is renewable fuel, other than corn starch ethanol, with lifecycle greenhouse gas emissions at least 50% lower than lifecycle greenhouse gas emissions from its gasoline or diesel counterpart. Cellulosic biofuel is renewable fuel derived from cellulose, hemicellulose, or lignin that is derived from renewable biomass, with lifecycle greenhouse gas emissions at least 60% lower than lifecycle greenhouse gas emissions from its gasoline or diesel counterpart. Biomass-based diesel is biodiesel or other renewable diesel with lifecycle greenhouse gas emissions at least 50% lower than lifecycle greenhouse gas emissions from its diesel counterpart. Additionally, biofuel from new facilities—those built after enactment of the 2007 law—must achieve at least a 20% greenhouse gas (GHG) reduction to qualify as a conventional renewable fuel. New facilities are facilities that commence construction after December 19, 2007. 42 U.S.C. §7545(o)(2)(A)(i).

<sup>&</sup>lt;sup>19</sup> 42 U.S.C. §7545(o)(1)-(2). For more discussion, see CRS Report R40460, Calculation of Lifecycle Greenhouse Gas Emissions for the Renewable Fuel Standard (RFS), by Brent D. Yacobucci and Kelsi Bracmort.

<sup>&</sup>lt;sup>20</sup> 42 U.S.C. §7545(o)(1)(B).

<sup>&</sup>lt;sup>21</sup> See footnote 38.

<sup>&</sup>lt;sup>22</sup> Starting in 2015, the implicit cap for conventional biofuel is 15 billion gallons. From 2015 onward, increases in the total renewable fuel statutory target stem from increases in the advanced biofuel statutory target.

from approximately 7% of the total renewable fuel requirement in 2010, to 27% of the total renewable fuel requirement in 2015, and to 58% of the total renewable fuel target in 2022.<sup>23</sup>

#### Differences Between the 2005 ("RFS I") and the 2007 ("RFS 2") Laws

There are at least five major changes in the RFS as expanded in 2007 by EISA:

- larger annual volume targets specified in statute for an extended period of time (i.e., through 2022);
- the establishment of separate requirements for different classes of biofuels (e.g., cellulosic, advanced);
- the addition of greenhouse gas accounting requirements;
- a different renewable biomass definition;<sup>24</sup> and
- an expansion of EPA's waiver authority to lower RFS volumes.

The statute directs the EPA Administrator to determine the volume amounts for calendar years not identified in the statutory volume tables (i.e., 2013 and onward for biomass-based diesel, 2023 and onward for all other fuel categories). <sup>25</sup> The EPA Administrator is to determine the volume amounts, in coordination with the Secretaries of Energy and Agriculture, based on a review of the implementation of the program for the calendar years identified in the statutory volume tables and on an analysis of the following six factors, specified in statute:

The impact of the production and use of renewable fuels on the environment, including on air quality, climate change, conversion of wetlands, ecosystems, wildlife habitat, water quality, and water supply;

The impact of renewable fuels on the energy security of the U.S.;

The expected annual rate of future commercial production of renewable fuels, including advanced biofuels in each category (cellulosic biofuel and biomass-based diesel);

The impact of renewable fuels on the infrastructure of the U.S., including deliverability of materials, goods, and products other than renewable fuel, and the sufficiency of infrastructure to deliver and use renewable fuel;

The impact of the use of renewable fuels on the cost to consumers of transportation fuel and on the cost to transport goods; and

The impact of the use of renewable fuels on other factors, including job creation, the price and supply of agricultural commodities, rural economic development, and food prices.<sup>26</sup>

There are other conditions associated with the determination of the annual volumes for the calendar years that are not identified in the statutory volume tables. For example, the EPA Administrator must establish the volumes under this authority no later than 14 months before the first year for which the volumes will apply.<sup>27</sup> The applicable volume for advanced biofuel must be at least the same percentage of the applicable volume of total renewable fuel as for calendar year

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<sup>&</sup>lt;sup>23</sup> Calculations include the annual mandate required by statute in 2007 and do not take into account EPA's revision of the biofuel mandates for 2010 through 2018.

<sup>&</sup>lt;sup>24</sup> For instance, the *renewable biomass* definition for the RFS under EISA does not make the majority of woody biomass on federal lands available for use as a renewable feedstock.

<sup>&</sup>lt;sup>25</sup> 42 U.S.C. §7545(o)(2)(B)(ii). EPA refers to this section of the statute as the "set authority." EPA, "Renewable Fuel Standard (RFS) Program: Standards for 2026 and 2027, Partial Waiver of 2025 Cellulosic Biofuel Volume Requirement, and Other Changes," 90 *Federal Register* 25789, June 17, 2025 (hereinafter EPA, "RFS Program: Standards for 2026 and 2027").

<sup>&</sup>lt;sup>26</sup> 42 U.S.C. §7545(o)(2)(B)(ii).

<sup>&</sup>lt;sup>27</sup> 42 U.S.C. §7545(0)(2)(B)(ii).

2022. 28 Also, the applicable volume of cellulosic biofuel is to be set based on the assumption that the EPA Administrator will not need to issue a cellulosic biofuel waiver.<sup>29</sup>

## **Statutory Compliance**

EPA regulates compliance with the RFS using a tradable credit system. <sup>30</sup> Obligated parties (generally, refiners and importers) submit credits—called renewable identification numbers (RINs)—to EPA for each gallon of fuel in their annual obligation.<sup>31</sup> (Thus, generally, each gallon of fuel produced to meet the obligation generates its own unique RIN.<sup>32</sup>) In short, the annual obligation for an individual refiner or importer, referred to as the renewable volume obligation (RVO), is the obligated party's total gasoline and diesel sales multiplied by the annual renewable fuel percentage standards announced by EPA.<sup>33</sup> The RVO is used by an obligated party to determine how many RINs they are to submit to EPA at the end of a given year to be in compliance with the mandate.<sup>34</sup>

In general, the RIN lifecycle can be described in three steps:

- 1. a RIN is attached to a gallon of qualifying renewable fuel once that fuel is produced,
- 2. the RIN is separated once the renewable fuel is blended with gasoline or diesel fuel, or used unblended, and
- 3. the separated RIN may be submitted for compliance, traded, or banked for future use.

RINs are valid for use to demonstrate compliance in the year they are generated and in the following year.<sup>35</sup> RINs may be used by the party that generates them or they may be traded with

<sup>31</sup> EPA defines an *obligated party* as "any refiner that produces gasoline or diesel fuel within the covered location, or any importer that imports gasoline or diesel fuel into the covered location, during a compliance period." EPA defines a renewable identification number (RIN), in part, as "a unique number generated to represent a volume of renewable fuel." 40 C.F.R. §80.1401. There are five different RIN types that are assigned based on a fuel's "D-code" depending upon the specific type of fuel (40 C.F.R. §80.1426). For more information, see CRS Testimony TE10026, Background on Renewable Identification Numbers under the Renewable Fuel Standard, by Brent D. Yacobucci.

35 40 C.F.R. §80.1427(a)(6)(i).

<sup>&</sup>lt;sup>28</sup> 42 U.S.C. §7545(o)(2)(B)(iii).

<sup>&</sup>lt;sup>29</sup> 42 U.S.C. §7545(o)(2)(B)(iv).

<sup>30 42</sup> U.S.C. §7545(o)(5).

<sup>&</sup>lt;sup>32</sup> As discussed later in this section, some renewable fuels can generate more RINs per gallon of fuel, depending on the equivalence value assigned to the renewable fuel. 40 C.F.R. §80.1415. For example, biodiesel has an equivalence value of 1.5; thus, one actual physical gallon of biodiesel would be assigned 1.5 RINs. EPA, "RFS Program: Standards for 2026 and 2027."

<sup>&</sup>lt;sup>33</sup> The statute requires the EPA Administrator to express the annual renewable fuel obligation in percentages. 42 U.S.C. 7545(o)(3). See 40 C.F.R. §80.1405 for the annual renewable fuel standards in percentages for 2010 through 2025. If applicable, the annual renewable volume obligation (RVO) calculation for an obligated party may include a carryover deficit from the previous year. See 40 C.F.R. §80.1407 for the RVO calculations.

<sup>34 40</sup> C.F.R. §80.1427.

other parties.<sup>36</sup> The EPA Moderated Transaction System (EMTS) is used to register RIN transactions. 37 EPA provides the public with RIN data for the RFS. 38

An obligated party incurs a deficit if they are unable to submit enough RINs to meet their RVO for that compliance period.<sup>39</sup> An obligated party may carry a deficit for a variety of reasons (e.g., financial constraints for purchasing RINs, miscalculating how much gas or diesel they would produce). Obligated parties may carry a deficit from one year to the next, but in the year following the deficit, the obligated party must meet compliance for that year's renewable fuel volume requirement and purchase or generate enough credits to satisfy the deficit from the previous year.40

Different biofuels are not treated equally within the RFS. The categories are nested within each other, such that some fuels qualify for multiple categories (e.g., cellulosic ethanol), while others (mainly corn starch ethanol) may only be used to meet the overall RFS but not the advanced category or its nested subcategories.<sup>41</sup> For example, a gallon of cellulosic biofuel may be used to meet the cellulosic biofuel mandate, the advanced biofuel mandate, and the total renewable fuel mandate—possibly making it a more highly valued fuel. 42

In addition, some biofuels generate more RINs per volume than others because of the difference in the fuel's energy content. This difference is accounted for by a metric referred to as the equivalence value (EV) of the biofuel. 43 The EV of a renewable fuel represents the number of gallons that can be claimed for compliance purposes for every physical gallon of renewable fuel used. It is generally the ratio of the energy content of a gallon of the fuel to a gallon of ethanol. For example, non-ester renewable diesel has an EV of 1.7 when being used as an advanced

<sup>&</sup>lt;sup>36</sup> 40 C.F.R. §80.1428(b).

<sup>&</sup>lt;sup>37</sup> EPA, "Reporting RFS Transactions in the EPA Moderated Transaction System (EMTS)," accessed June 30, 2025, https://www.epa.gov/fuels-registration-reporting-and-compliance-help/reporting-rfs-transactions-epa-moderated.

<sup>38</sup> EPA, "Public Data for the Renewable Fuel Standard," accessed June 30, 2025, https://www.epa.gov/fuelsregistration-reporting-and-compliance-help/public-data-renewable-fuel-standard. Corn starch ethanol is the predominant renewable fuel used to demonstrate compliance with the RFS. According to the EPA RFS public data website, the D6 non-cellulosic ethanol fuel code produces the largest volumes of RINs used to meet the RFS requirement. The EPA RFS public data provided for RINs generated includes the fuel D-code and the fuel category, among other things. It does not include the feedstock for the fuel. The D-code for ethanol derived from corn starch is D6. EPA reports other feedstocks and fuel types that can also produce a D6 RIN (e.g., butanol derived from corn starch or ethanol derived from grain sorghum), but given that approximately 16 billion gallons of ethanol was produced in 2024 in the United States (according to EIA), it is not likely that these other D6 fuel pathways surpassed the D6 corn starch ethanol fuel pathway to be the predominant fuel for meeting the annual RFS requirement. See EPA, "RINs Generated Transactions," accessed July 15, 2025, and EIA, Monthly Energy Review, June 2025, Table 10.3.

<sup>&</sup>lt;sup>39</sup> EPA, "Overview of the Renewable Fuel Standard Program," accessed June 30, 2025, https://www.epa.gov/ renewable-fuel-standard/overview-renewable-fuel-standard-program.

<sup>&</sup>lt;sup>40</sup> 42 U.S.C. §7545(o)(5)(D).

<sup>&</sup>lt;sup>41</sup> Although a gallon of a biofuel may be used to fulfill individual sub-requirements or the overall requirement, each gallon counts only once against the overall renewable fuel use obligation.

<sup>&</sup>lt;sup>42</sup> See 40 C.F.R. §80.1427. The one exception to an obligated party being able to use the same RIN to meet multiple RVOs is that certain cellulosic diesel RINs may not be used to comply with both the cellulosic biofuel RVO and the biomass-based diesel RVO. 40 C.F.R. \$80.1427(a)(3). The value of any biofuel within the RFS, in part, depends on the RIN price at a given time. As different categories of RINs are used to meet the various standards, there is often a price difference between RINs (e.g., advanced biofuel RINs may be more expensive than conventional biofuel RINs). However, there is no public market for RINs, so real-time price data are difficult to obtain. EPA does provide historical weekly RIN price data. EPA, "RIN Trades and Price Information," accessed June 30, 2025.

<sup>&</sup>lt;sup>43</sup> 40 C.F.R. §80.1415.

biofuel, so 1,000 physical gallons of biodiesel would equal 1,700 RIN gallons of advanced biofuel.<sup>44</sup>

## **Final Rule for 2023-2025**

In June 2023, EPA announced the final rule—referred to as the "Set 1 Rule"—for the 2023, 2024, and 2025 RFS volume requirements. EPA increased the total renewable fuel for all three years from what was finalized in 2022 (see **Table 1**). EPA stated that it was setting standards for three years "to strike an appropriate balance between improving the program by providing increased certainty over a multiple number of years and recognizing the inherent uncertainty in longer-term projections." In longer-term projections."

The final rule contains other actions. For instance, EPA reported it is not finalizing the renewable electricity provisions (i.e., eRINs) that it proposed for the program in 2022; EPA reported that it "will continue to work on potential paths forward for the eRIN program." EPA also reported "that there are not likely to be small refinery exemptions (SREs) for 2023–2025 based on the information available at the present time." EPA's rule addressed a court remand of the 2014-2016 final rule by adding a second supplemental volume obligation of 250 million gallons for 2023. EPA also finalized several regulatory changes, including modifying the regulatory provisions for biogas-derived renewable fuels; enhancing the third-party oversight provisions of the program; revising the conversion factor in the formula for calculating the percentage standard for biomass-based diesel; and addressing flexibility for RIN generation. Lastly, in the final rule EPA referenced several things that it says will be used to inform future rulemaking decisions for the program—including legislative changes (e.g., P.L. 117-169, commonly known as the Inflation Reduction Act); transportation, energy, and environment landscape changes; and stakeholder perspectives.

In 2023, EPA provided an additional resource when it released the set rule: the *Model Comparison Exercise Technical Document*. EPA has acknowledged that its "previous [lifecycle analysis] framework is comparatively old, and that a better understanding of these newer models and data is needed." EPA reported there were various goals associated with conducting the model comparison exercise (MCE), including to "advance the science in the area of analyzing the lifecycle greenhouse gas emissions impacts from increasing use of biofuels." EPA included five models in its comparison exercise: the Greenhouse Gases, Regulated Emissions, and Energy Use in Technologies (GREET) model; the Global Biosphere Management Model (GLOBIOM); the Global Change Analysis Model (GCAM); the Global Trade Project (GTAP) model; and the

<sup>&</sup>lt;sup>44</sup> All equivalence values (EVs) are in relation to the energy content of ethanol. The EV for ethanol is 1.0. One gallon of non-ester renewable diesel contains roughly 1.7 times the energy of one gallon of ethanol, and thus has an EV of 1.7.

<sup>&</sup>lt;sup>45</sup> EPA, "Renewable Fuel Standard (RFS) Program: Standards for 2023-2025 and Other Changes," 88 *Federal Register* 44468-44593, July 12, 2023 (hereinafter EPA, "RFS Program: Standards for 2023-2025"). EPA refers to this rule as the "Set 1 Rule" in EPA, "RFS Program: Standards for 2026 and 2027."

<sup>&</sup>lt;sup>46</sup> EPA, "RFS Program: Standards for 2023-2025."

<sup>&</sup>lt;sup>47</sup> EPA, "RFS Program: Standards for 2023-2025."

<sup>&</sup>lt;sup>48</sup> EPA, "RFS Program: Standards for 2023-2025." As of August 12, 2025, there appear to have been no SREs granted for 2023, 2024, and 2025. EPA, *RFS Small Refinery Exemptions*, accessed August 12, 2025.

<sup>&</sup>lt;sup>49</sup> For more information, see EPA, *Renewable Fuel Standard (RFS) Program: RFS Annual Rules*, July 1, 2022, p. 39603.

<sup>&</sup>lt;sup>50</sup> EPA, Model Comparison Exercise, EPA-420-R-23-017, June 2023.

<sup>&</sup>lt;sup>51</sup> EPA, Model Comparison Exercise.

<sup>&</sup>lt;sup>52</sup> EPA, Model Comparison Exercise.

Applied Dynamic Analysis of the Global Economy (ADAGE) model. EPA reported that it drew several broad conclusions from the MCE, including the following:

- "supply chain LCA [lifecycle analysis] models," such as GREET, "produce a fundamentally different analysis than economic models," such as ADAGE, GCAM, GLOBIOM, and GTAP;
- "estimates of land use change (LUC) vary significantly among the models used in this study"; and
- "differences in model assumptions, parameters, and structure impact the results from each of the models."

EPA also stated that it hopes the MCE will "lend itself to informing the scientific discussion on which and to what extent biofuels contribute to reduced environmental harm in comparison to consuming petroleum-based fuels." 53

## Proposed Rule for 2026 and 2027

EPA released the proposed rule for the 2026 and 2027 RFS volume requirements in June 2025.<sup>54</sup> The proposed rule contains the volume requirements and percentage standards for cellulosic biofuel, biomass-based diesel, total advanced biofuel, and total renewable fuel for 2026 and 2027. It also proposes to partially waive the 2025 cellulosic biofuel volume requirement due to a shortfall in cellulosic biofuel production (see **Table 1**). EPA asserts that the proposed volumes for 2026 and 2027 "reflect the significant growth potential for renewable fuel production in the United States using domestic feedstocks."<sup>55</sup>

EPA reports it is seeking comment on "a variety of potential changes to the RFS program that EPA could consider in future actions that would increase the program's ability to achieve the goals of EPAct and EISA." 56 Some of the potential changes about which EPA is requesting comment include the following:

A general pathway for the production of renewable jet fuel from corn ethanol.

The definition of "produced from renewable biomass."

Additional program amendments to ensure that imported renewable fuels are produced from qualifying feedstocks and enhance EPA's ability to track feedstocks to their point of origin....

Program enhancements to increase the use of qualifying woody-biomass to produce renewable transportation fuel....

An option to apply the import RIN reduction provisions to imported renewable fuel and renewable fuel produced domestically from foreign feedstock from only a subset of countries to reflect the reduced economic, energy security, and environmental benefits of imported renewable fuel and feedstock from those countries.

Any other modifications to the RFS program designed to unleash the production of American energy.<sup>57</sup>

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<sup>&</sup>lt;sup>53</sup> EPA, Model Comparison Exercise.

<sup>&</sup>lt;sup>54</sup> EPA, "RFS Program: Standards for 2026 and 2027."

<sup>&</sup>lt;sup>55</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25788.

<sup>&</sup>lt;sup>56</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25788.

<sup>&</sup>lt;sup>57</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25788.

The proposed rule contains a section on the treatment of small refinery volumes. EPA acknowledges "[t]here is currently significant uncertainty regarding the number of small refinery exemption (SRE) petitions that could be granted for 2026 and 2027." EPA also reports that it has not yet taken action on the SRE petitions that were remanded back to the agency, and that it is still determining how it will "evaluate and decide those petitions, which would then inform how [it] would evaluate and decide any SRE petitions received for 2026 and 2027." <sup>59</sup>

The proposed rule also contains several regulatory changes for certain components of the RFS, described below.

**Imported fuels and feedstocks.** The rule proposes "to reduce the number of RINs [that may be] generated for imported renewable fuel and renewable fuel produced [domestically] from foreign feedstocks."<sup>60</sup>

**Renewable electricity.** The rule proposes "to remove renewable electricity as a qualifying renewable fuel under the RFS program" and rescind the regulations that allow for the generation of RINs from renewable electricity (i.e., eRINs).<sup>61</sup>

**Fuel equivalence values.** The rule proposes "to revise the equivalence values for renewable diesel, naphtha, and jet fuel to account for the non-renewable portion of these fuels." <sup>62</sup>

RINs. The rule proposes to

- add regulations that address "when RINs must be generated and assigned both for renewable fuel and for RNG [renewable natural gas]";<sup>63</sup> and
- "clarify that RINs cannot be generated for pure or neat biodiesel that is used for process heat or power generation." 64

**Percentage standard equations.** The rule proposes "several changes to the percentage standard equations" (e.g., "to clarify that the volume requirements used to calculate the percentage standards" for some fuel categories "are based on the number of 'gallon-RINs' of each fuel"). 65

#### Renewable fuel pathways. The rule proposes to

- make changes to existing renewable fuel pathways (e.g., "to add more precise language to the description of rows in Table 1 [of 40 C.F.R. §80.1426] that include the term 'any' to describe the production process requirements [i.e., Rows K, L, M, P, Q, and T]");<sup>66</sup> and
- add "fuel pathways ... for renewable naphtha and liquefied petroleum gas (LPG) produced from biogenic waste oils, fats, and greases through a hydrotreating

<sup>&</sup>lt;sup>58</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25833.

<sup>&</sup>lt;sup>59</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25833.

<sup>&</sup>lt;sup>60</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25787 and p. 25837.

<sup>&</sup>lt;sup>61</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25841.

 $<sup>^{62}</sup>$  EPA, "RFS Program: Standards for 2026 and 2027," p. 25842.

<sup>&</sup>lt;sup>63</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25843.

<sup>&</sup>lt;sup>64</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25844.

<sup>65</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25844.

<sup>&</sup>lt;sup>66</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25845. EPA states, "These regulatory clarifications to Table 1 to 40 C.F.R. §80.1426 do not affect renewable fuel producers that have successfully registered for any of the existing fuel pathways listed in Table 1." EPA also states, "We believe the proposed Table 1 revisions discussed in this section would benefit renewable fuel project developers by giving them additional clarity on what process technologies qualify under the existing renewable fuel pathways." EPA, "RFS Program: Standards for 2026 and 2027," p. 25848.

process to qualify for D5 (advanced biofuel) RINs" by modifying Row I of Table 1 in 40 C.F.R.  $\S 80.1426.^{67}$ 

## **Definitions.** The rule proposes to

- define the terms "renewable fuel producer," "renewable fuel oil," "renewable naphtha," and "renewable jet fuel";<sup>68</sup>
- update the definitions of "foreign renewable fuel producers" and "importers";<sup>69</sup>
- add activated sludge and converted oils as new biointermediates.<sup>70</sup>

## **Compliance.** The rule proposes to

- clarify that "exempt small refineries must file an annual compliance report";<sup>71</sup>
- clarify that "a small refinery or small refiner that receives an exemption for a given compliance year is not exempt from having to comply with any deficit RVOs that were carried forward from the previous compliance year";<sup>72</sup>
- make changes to compliance reporting requirements under 40 C.F.R. §80.1449,
   40 C.F.R. §80.1451, and 40 C.F.R. §80.1452 (e.g., remove the quarterly reporting requirement under 40 C.F.R. §80.1451);<sup>73</sup>
- change how often independent third-party auditors must renew their registrations, from annually to every two years;<sup>74</sup>
- "specify that engineering review site visits [for renewable fuel production facilities] must be conducted within six months prior to submitting a registration request in order to ensure that the site visit is reflective of the current operation of the facility."<sup>75</sup>

**Approved measurement protocols.** The rule proposes to "add additional measurement protocols to the list of approved methods for measuring the volume of RNG or treated biogas."<sup>76</sup>

**Biodiesel and renewable diesel requirements.** The rule "reiterat[es] that biodiesel and renewable diesel producers must comply with all of EPA's regulatory requirements for diesel producers in 40 C.F.R. part 1090 for the biodiesel and renewable diesel they produce, including demonstrating homogeneity for each batch of biodiesel and renewable diesel and testing each batch for sulfur content to ensure the fuel meets the 15 parts per million (ppm) standard."<sup>77</sup>

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<sup>&</sup>lt;sup>67</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25848.

<sup>&</sup>lt;sup>68</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25849.

<sup>&</sup>lt;sup>69</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25849.

<sup>&</sup>lt;sup>70</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25849. EPA defines *biointermediates* as "any feedstock material that is intended for use to produce renewable fuel" and that meets certain requirements. 40 C.F.R. §80.1401.

<sup>&</sup>lt;sup>71</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25850.

<sup>&</sup>lt;sup>72</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25850.

<sup>&</sup>lt;sup>73</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25850.

<sup>&</sup>lt;sup>74</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25850.

<sup>&</sup>lt;sup>75</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25851.

<sup>&</sup>lt;sup>76</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25851.

<sup>&</sup>lt;sup>77</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25851.

EPA states that it intends to meet the statutory deadline of October 31, 2025, for establishing the 2027 volume requirements, and to fulfill their obligation "to establish the 2026 volume requirements ahead of the 2026 compliance year."<sup>78</sup>

## **Opportunity for Stakeholder Comment**

Various stakeholders are impacted by the RFS program. In general, these stakeholders can be categorized into five groups: (1) renewable fuel producers and the agriculture industry;<sup>79</sup> (2) petrochemical producers and the oil industry;<sup>80</sup> (3) small refineries;<sup>81</sup> (4) environmental groups and conservation organizations;<sup>82</sup> and (5) state governors.<sup>83</sup> While other stakeholders (e.g., consumers and convenience store and fuel retail operators) are also impacted by the RFS, these five groups appear to provide the majority of comments on RFS legislation, policy, and regulation discussions.

EPA set a comment period for the 2026 and 2027 RFS proposed rule ending August 8, 2025. 84 EPA released statements from some stakeholders shortly after the proposed rule was announced. 85 Some stakeholders presented testimony at a July 8, 2025, public hearing. 86 As of August 13, 2025, there were 236 comments about the proposed rule from a range of stakeholders available in the docket. 87

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<sup>&</sup>lt;sup>78</sup> EPA, "RFS Program: Standards for 2026 and 2027," p. 25791. 42 U.S.C. §7545(o)(2)(B)(ii).

 $<sup>^{79}</sup>$  Examples include biofuel producer POET, LLC, and the American Soybean Association.

<sup>80</sup> Examples include Exxon Mobil and the American Petroleum Institute (API).

<sup>&</sup>lt;sup>81</sup> See, for example, Todd Neeley, "Small Refiners Ask Trump Administration for Seat at Table in RFS Discussions," *Progressive Farmer*, April 7, 2025.

<sup>82</sup> Examples include the Sierra Club and the National Wildlife Federation.

<sup>&</sup>lt;sup>83</sup> See, for example, State of South Dakota, "Gov. Rhoden and Colleagues Urge EPA to Increase Renewable Fuel Levels," press release, April 11, 2025.

<sup>84</sup> EPA, "RFS Program: Standards for 2026 and 2027."

<sup>&</sup>lt;sup>85</sup> EPA, "What They Are Saying: Leaders Praise EPA's Proposed New Renewable Fuel Standards to Strengthen U.S. Energy Security, Support Rural America, Expand Domestic Fuel Production," press release, June 16, 2025.

<sup>&</sup>lt;sup>86</sup> EPA, "Public Hearing for Renewable Fuel Standard (RFS) Program: Standards for 2026 and 2027, Partial Waiver of 2025 Cellulosic Biofuel Volume Requirement, and Other Changes," 90 Federal Register 25614, June 17, 2025.

<sup>&</sup>lt;sup>87</sup> Comments submitted to EPA may be viewed at https://www.regulations.gov/docket/EPA-HO-OAR-2024-0505.

Table I. Renewable Fuel Standard Statute and EPA Final Volumes

(billions of gallons)

Year	Statute, Final, or Proposed	Total Renewable Fuel	Amount from Advanced Biofuels			_	Due Date and
			Total Advanced Biofuel	Cellulosic Biofuel	Biomass- Based Diesel	Cap on Conventional Biofuel	Actual Date of Final Rule
2010	S	12.95	0.95	0.1000	0.65	12.00	Nov. 2009
	F	12.95	0.95	0.0065	1.15	12.00	Feb. 2010
2011	S	13.95	1.35	0.2500	0.80	12.60	Nov. 2010
	F	13.95	1.35	0.0060a	0.80	12.60	Nov. 2010
2012	S	15.20	2.00	0.5000	1.00	13.20	Nov. 2011
	F	15.20	2.00	0.0105b	1.00	13.20	Dec. 2011
2013	s	16.55	2.75	1.0000	≥1.00	13.80	Nov. 2012
	F	16.55	2.75	0.0008	1.28	13.80	Aug. 2013
2014	S	18.15	3.75	1.7500	≥1.00	14.40	Nov. 2013
	F	16.28	2.67	0.0330	1.63	13.61	Nov. 2015
2015	S	20.50	5.50	3.0000	≥1.00	15.00	Nov. 2014
	F	16.93c	2.88	0.1230	1.73	14.05	Nov. 2015
2016	S	22.25	7.25	4.2500	≥1.00	15.00	Nov. 2015
	F	18.11c	3.61	0.2300	1.90	14.50	Nov. 2015
2017	S	24.00	9.00	5.5000	≥1.00	15.00	Nov. 2016
	F	19.28	4.28	0.3110	2.00	15.00	Nov. 2016
2018	S	26.00	11.00	7.0000	≥1.00	15.00	Nov. 2017
	F	19.29	4.29	0.2880	2.10	15.00	Nov. 2017
2019	S	28.00	13.00	8.5000	≥1.00	15.00	Nov. 2018
	F	19.92	4.92	0.4180	2.10	15.00	Nov. 2018
2020	S	30.00	15.00	10.5000	≥1.0	15.00	Nov. 2019
	F	17.13	4.63	0.5100	2.43	12.50	July 2022
2021	S	33.00	18.00	13.5000	≥1.00	15.00	Nov. 2020
	F	18.84	5.05	0.5600	2.43	13.79	July 2022
2022	s	36.00	21.00	16.0000	≥1.00	15.00	Nov. 2021
	F	20.63 (+0.25) <sup>d</sup>	5.63	0.6300	2.76	15.00	July 2022
2023	Fe	20.94 (+0.25) <sup>d</sup>	5.94	0.8400	2.82	15.00	July 2023 <sup>f</sup>
2024	<b>F</b> e	21.54	6.54	1.0100g	3.04	15.00	July 2023f
2025	Fe	22.33	7.33	1.1900h	3.35	15.00	July 2023f
2026	Pe	24.02	9.02	1.3000	7.12i	15.00	June 2025

2027	Pe	24.46	9.46	1.3600	7.5i	15.00	June 2025

**Source:** Energy Independence and Security Act of 2007 (EISA; P.L. 110-140). Final rules are available at U.S. Environmental Protection Agency (EPA), "Regulations and Volume Standards for Renewable Fuel Standards," accessed July 29, 2025, https://www.epa.gov/renewable-fuel-standard-program/regulations-and-volume-standards-renewable-fuel-standards.

**Notes:** S = statute; F = final rule; P = proposed rule. All volumes are ethanol equivalent, except for biomass-based diesel from 2010 through 2025, which is actual. Compliance is based on renewable identification numbers (RINs), not physical gallons. One RIN is equivalent to one ethanol-equivalent gallon of renewable fuel. For more information, see EPA, "Is the Renewable Fuels Mandate in Ethanol Equivalent Gallons?," July 14, 2025, https://www.epa.gov/fuels-registration-reporting-and-compliance-help/renewable-fuels-mandate-ethanol-equivalent-gallons. The 2010 biomass-based diesel requirement of 1.15 billion gallons equals the 0.5 billion gallon requirement for 2009 plus the 0.65 billion gallon requirement for 2010. The cap on conventional biofuel equals the total renewable fuel requirement minus the total advanced biofuel requirement. The total advanced biofuel requirement equals the sum of cellulosic biofuel and biomass-based diesel (both of which have annual volume targets provided in statute, identified in italics in the table) plus other advanced biofuel (which does not have an annual volume target provided in statute).

- a. EPA rescinded the 2011 cellulosic biofuel standard.
- b. EPA, "Regulation of Fuels and Fuel Additives: 2012 Renewable Fuel Standards," 77 Federal Register 1320, January 9, 2012. Subsequently vacated under American Petroleum Institute v. EPA, 706 F.3d 474 (D.C. Cir. 2013).
- c. The D.C. Circuit Court vacated EPA's 2016 total renewable fuel volume requirement and remanded the 2015 final rule to EPA for reconsideration. Americans for Clean Energy v. EPA, 864 F.3d 691, 696-697 (D.C. Cir. 2017).
- d. Supplemental standard of 250 million gallons for 2022 and 2023 to partially address court remand of 2016 standard. EPA, "Renewable Fuel Standard (RFS) Program: RFS Annual Rules," 87 Federal Register 39600, July 1, 2022. EPA, "Renewable Fuel Standard (RFS) Program: Standards for 2023-2025 and Other Changes," 88 Federal Register 44468-44593, July 12, 2023.
- e. Volume amounts determined by the EPA Administrator. The EPA Administrator is to coordinate with the Secretaries of Energy and Agriculture and take into account an analysis of certain factors to determine the volume amounts. 42 U.S.C. §7545(o)(2)(B)(ii).
- f. July 2023 is the actual date of the final rule. The EPA Administrator must establish the volumes under this authority no later than 14 months before the first year for which the volumes will apply. 42 U.S.C. §7545(o)(2)(B)(ii).
- g. EPA partially waived the 2024 cellulosic biofuel requirement to 1.01. EPA, "Renewable Fuel Standard (RFS) Program: Partial Waiver of the 2024 Cellulosic Biofuel Volume Requirement," final rule, 90 Federal Register 29752, July 7, 2025.
- h. EPA proposes to partially waive the 2025 cellulosic biofuel volume requirement to 1.19.
- i. Through 2025, EPA specified the biomass-based diesel volume requirement in physical gallons rather than RINs. For the 2026 and 2027 biomass-based diesel volume requirements, EPA proposes to "now specify the BBD volume requirement in RINs, consistent with the other three renewable fuel categories, rather than physical gallons." EPA, "Renewable Fuel Standard (RFS) Program: Standards for 2026 and 2027, Partial Waiver of 2025 Cellulosic Biofuel Volume Requirement, and Other Changes," 90 Federal Register 25786, June 17, 2025.

## **Selected Considerations for Congress**

Congress may be interested in recent legislative activity, presidential actions, and legal challenges pertaining to the RFS. Listed below are some developments that have occurred in 2025 that Congress may consider as it continues to debate the merits and challenges of the RFS:

• P.L. 119-21, the FY2025 reconciliation act sometimes referred to as the One Big Beautiful Bill Act. Section 60007 of P.L. 119-21 rescinds the unobligated balances of amounts made available to carry out Section 60108 of P.L. 117-169,

sometimes referred to as the Inflation Reduction Act. 88 Section 60108 provides \$10 million to support investments in advanced biofuels and provides \$5 million to develop tests and protocols regarding effects of fuel and fuel additives; to update analyses of lifecycle greenhouse gases of a fuel; and to review impacts of transportation fuels on the general public and on low-income and disadvantaged communities. 89

- **FY2026 President's Budget.** EPA reports that it will continue to implement the RFS program and that the RFS is "a key federal support for domestic renewable energy, and implementing the program is consistent with Pillar 2: Restoring American Energy Dominance." EPA also provides an update on the corrective action and implementation status for Government Accountability Office (GAO) and EPA Office of the Inspector General (OIG) outstanding recommendations related to the RFS.
- Executive orders. Executive Order (E.O.) 14156, "Declaring a National Energy Emergency," included a provision about the year-round sale of E15 (see Section 2(b)). E15 is a fuel blend of gasoline and up to 15% ethanol—the primary fuel used to satisfy the RFS mandate. Congress has discussed the year-round sale of E15. In June 2025, the White House reported that more than \$700 million in ethanol exports will occur under E.O. 14309, "Implementing the General Terms of the United States of America-United Kingdom Economic Prosperity Deal." In July 2025, the White House announced a trade deal with the European Union (EU), reporting that the "EU will purchase \$750 billion in U.S. energy"; the Secretary of Agriculture noted that this includes ethanol.

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<sup>&</sup>lt;sup>88</sup> CRS did not perform a comprehensive search of P.L. 119-21 for every provision that may directly or indirectly impact the RFS.

 $<sup>^{89}</sup>$  EPA, Inflation Reduction Act Overview, January 2023, p. 33, https://www.epa.gov/system/files/documents/2022-12/12%2009%20202\_OAR%20IRA%20Overview\_vPublic.pdf.

<sup>&</sup>lt;sup>90</sup> EPA, Fiscal Year 2026 Justification of Appropriation Estimates for the Committee on Appropriations, EPA-190R25002, June 2025, https://www.epa.gov/system/files/documents/2025-06/fy-2026-epa-congressional-justification.pdf. EPA reports it is "currently developing the FY 2026-2030 EPA Strategic Plan, and the FY 2026 Budget will advance the Administrator's five strategic pillars." EPA reports that Pillar 2 is restoring American energy dominance. For more information, see EPA, FY2026 EPA Budget in Brief, EPA-190-R-25-00, May 2025, p. 3, https://www.epa.gov/system/files/documents/2025-05/fy-2026-epa-bib.pdf.

<sup>&</sup>lt;sup>91</sup> EPA, Fiscal Year 2026 Justification of Appropriation Estimates for the Committee on Appropriations, EPA-190R25002, June 2025, https://www.epa.gov/system/files/documents/2025-06/fy-2026-epa-congressional-justification.pdf.

<sup>&</sup>lt;sup>92</sup> CRS searched executive orders issued from January 20, 2025, through July 7, 2025, for selected terms (e.g., *biofuel*, *renewable fuel standard*, *renewable diesel*). The search yielded seven executive orders that contain the selected terms. Executive Order (E.O.) 14156 and E.O. 14309 appear to have the most direct relationship to the RFS.

<sup>93 90</sup> Federal Register 8433, January 29, 2025.

<sup>94</sup> For more information on E15, see CRS Insight IN10979, Year-Round Sale of E15, by Kelsi Bracmort.

<sup>95</sup> White House, Fact Sheet: U.S.-UK Reach Historic Trade Deal, May 8, 2025.

<sup>&</sup>lt;sup>96</sup> White House, Fact Sheet: The United States and European Union Reach Massive Trade Deal, July 28, 2025.

<sup>&</sup>lt;sup>97</sup> Secretary Brooke Rollins (@SecRollins), "HISTORIC US-EU DEAL MADE," X, July 27, 2025, https://x.com/SecRollins/status/1949620346044498169.

• Legal challenges. In June 2025, the D.C. circuit remanded—but did not vacate—the Set 1 Rule (the 2023-2025 volume standards). 98 Of the many arguments challenging the Set 1 Rule on review, the court concluded that two had merit and required remand. First, the court held that EPA had "disregarded the results of its own literature review without adequate explanation" when analyzing the effect of the rule on climate change. 99 Second, the court held that the U.S. Fish and Wildlife Service had "failed to adequately explain how its conclusion that the Set Rule will have 'no effect' on endangered species or their critical habitats accords with the legal framework set forth in its Consultation Handbook and the implementing regulations of the Endangered Species Act (ESA)." 100

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<sup>98</sup> Center for Biological Diversity v. Environmental Protection Agency, 141 F.4th 153 (D.C. Cir. 2025).

<sup>&</sup>lt;sup>99</sup> Center for Biological Diversity v. Environmental Protection Agency, 141 F.4<sup>th</sup> 153, 172 (D.C. Cir. 2025).

<sup>&</sup>lt;sup>100</sup> Center for Biological Diversity v. Environmental Protection Agency, 141 F,4th 153, 162 (D.C. Cir. 2025).