

The Outlook for Conventional Biofuels is Brighter Than You Think

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Opinion / Editorial

Editorial The EPA's mandate for corn-based ethanol biofuel is a bad idea



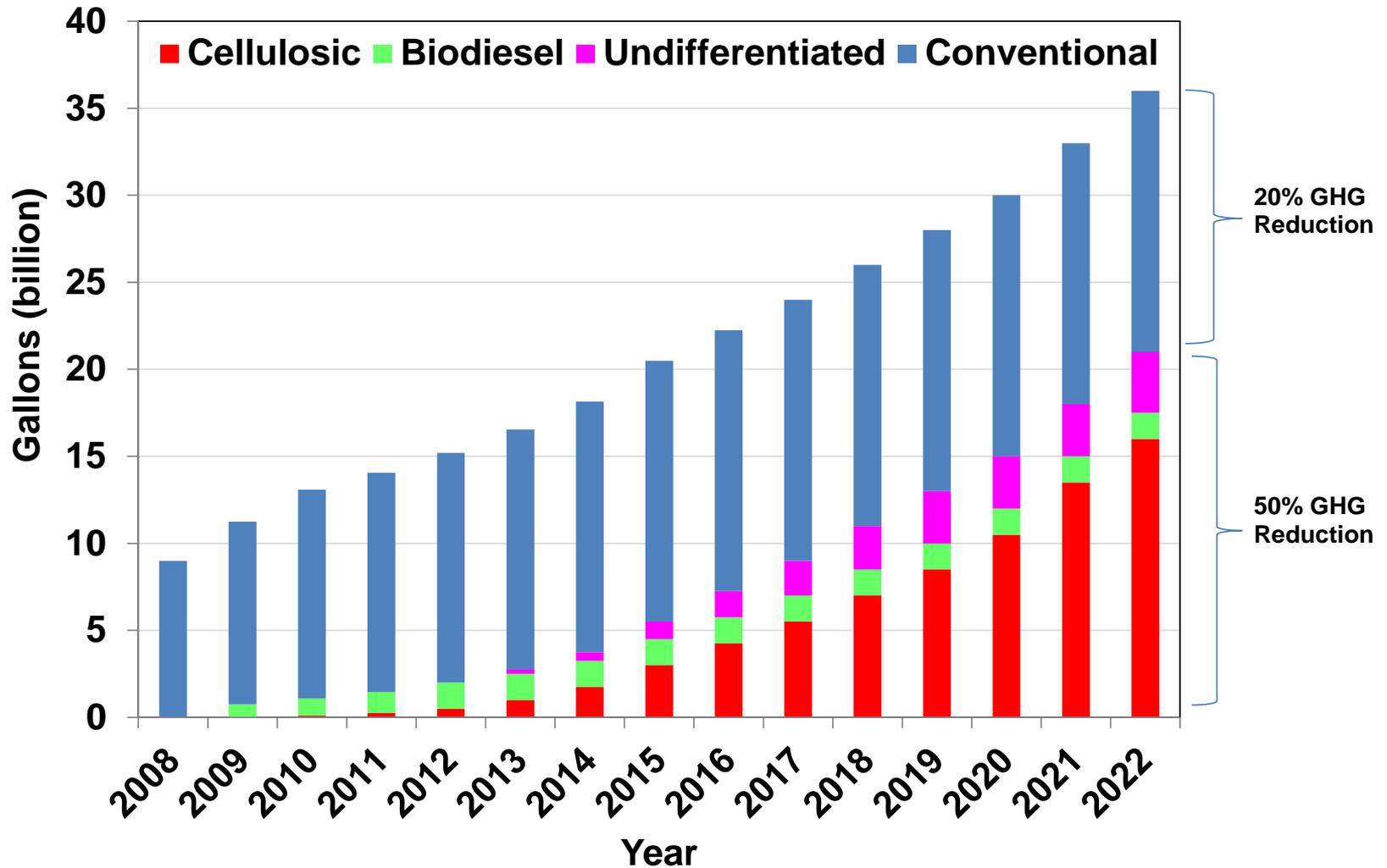
A fuel nozzle for E-85, left, and traditional gasoline is seen at a gas station in Batesville, Miss. in August of 2014. The Obama administration is boosting the amount of corn-based ethanol and other renewable fuels in the U.S. gasoline supply. (Rogelio V. Solis / Associated Press)

By **The Times Editorial Board** · **Contact Reporter**

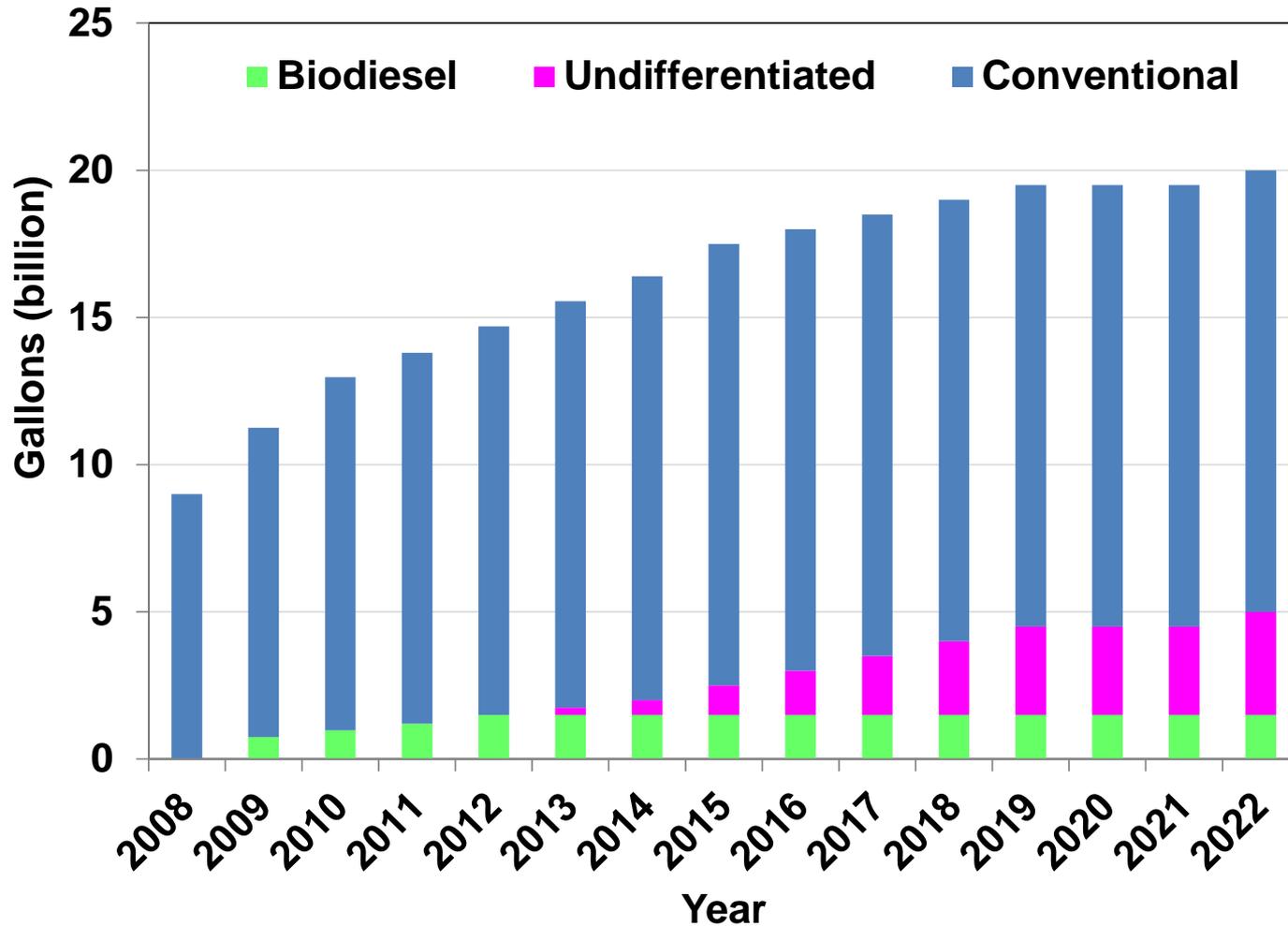
DECEMBER 6, 2015, 5:00 AM

<http://www.latimes.com/opinion/editorials/la-ed-1206-epa-renewable-fuel-20151205-story.html>

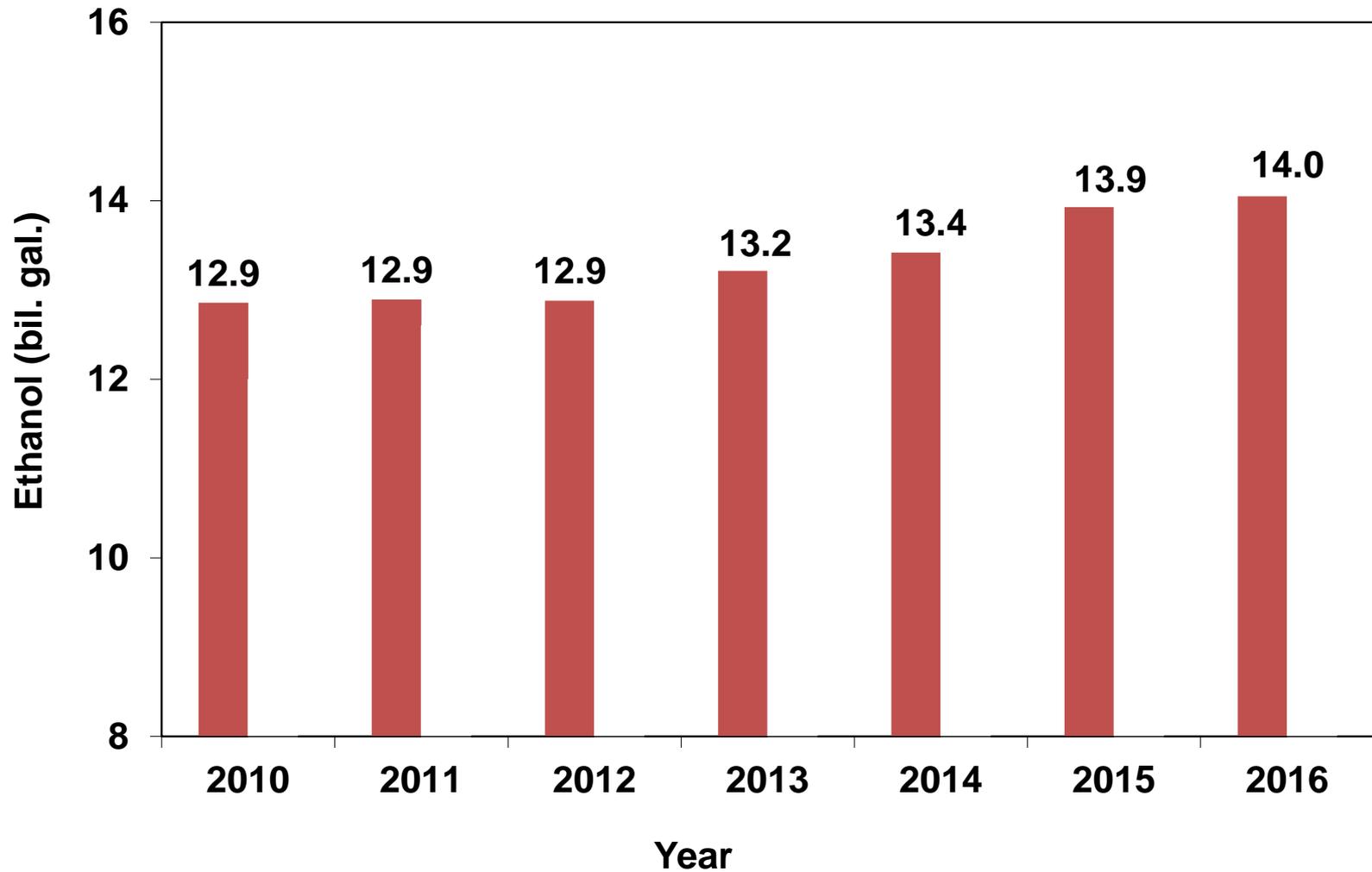
U.S. Renewable Fuels Standards, 2008-2022



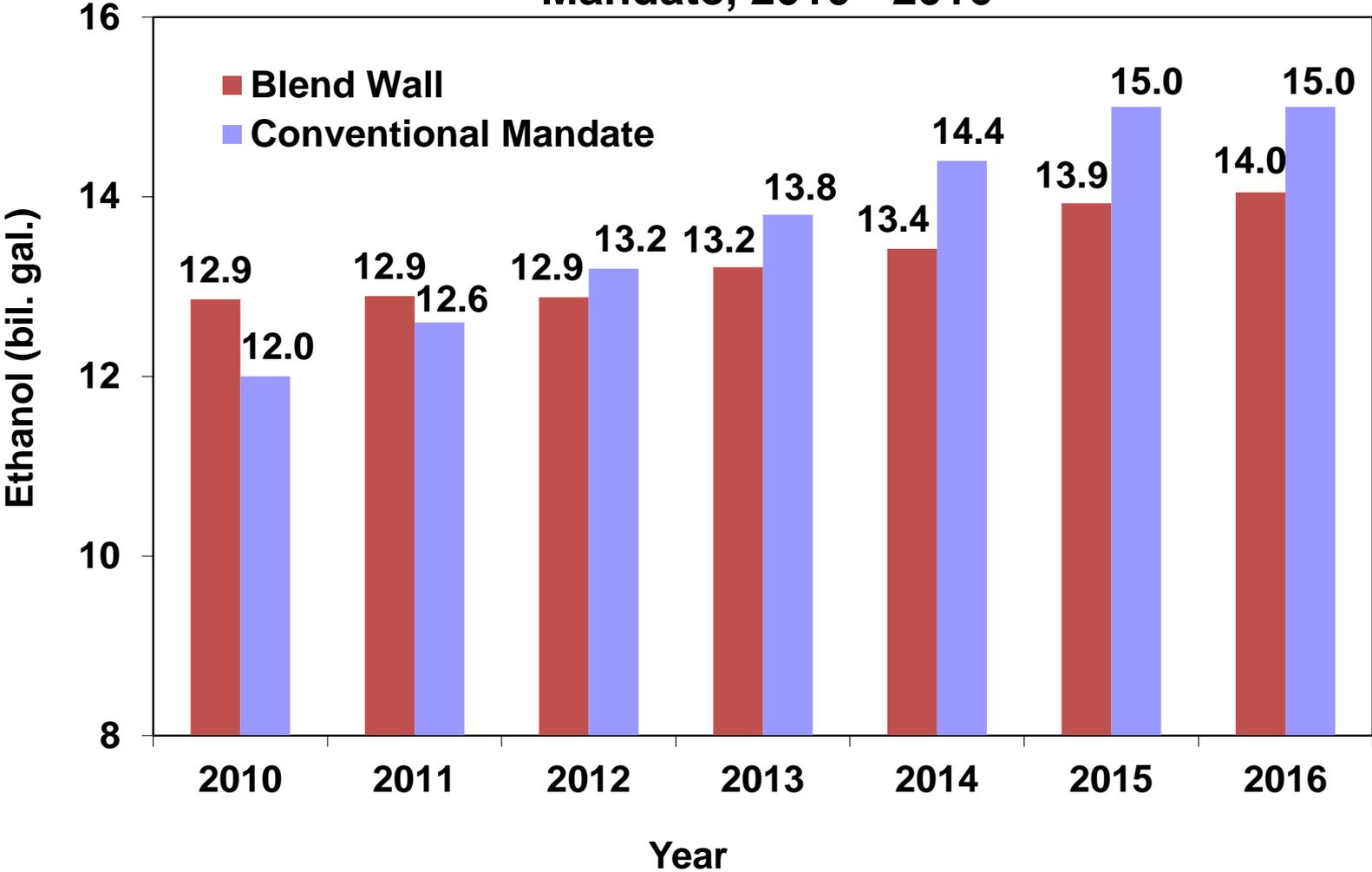
U.S. Renewable Fuels Standards after Waiving Cellulosic Volumes, 2008-2022



E10 Blend Wall, 2010 - 2016



E10 Blend Wall and RFS Statutory Conventional Mandate, 2010 - 2016



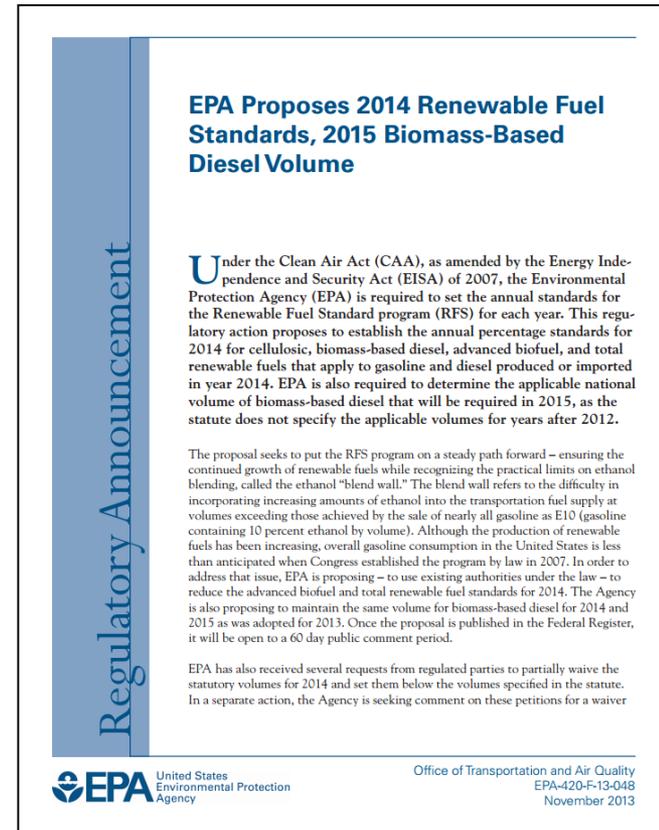
November 2013: EPA's 1st Proposal for 2014 RFS Standards

E10 blend wall challenges drove EPA policy shift:

"The proposal seeks to put the RFS program on a steady path forward - ensuring the continued growth of renewable fuels while recognizing the practical limits on ethanol blending, called the ethanol "blend wall."

Novel legal argument for renewable mandate write down:

"inadequate domestic supply"



EPA Proposes 2014 Renewable Fuel Standards, 2015 Biomass-Based Diesel Volume

Regulatory Announcement

Under the Clean Air Act (CAA), as amended by the Energy Independence and Security Act (EISA) of 2007, the Environmental Protection Agency (EPA) is required to set the annual standards for the Renewable Fuel Standard program (RFS) for each year. This regulatory action proposes to establish the annual percentage standards for 2014 for cellulosic, biomass-based diesel, advanced biofuel, and total renewable fuels that apply to gasoline and diesel produced or imported in year 2014. EPA is also required to determine the applicable national volume of biomass-based diesel that will be required in 2015, as the statute does not specify the applicable volumes for years after 2012.

The proposal seeks to put the RFS program on a steady path forward – ensuring the continued growth of renewable fuels while recognizing the practical limits on ethanol blending, called the ethanol “blend wall.” The blend wall refers to the difficulty in incorporating increasing amounts of ethanol into the transportation fuel supply at volumes exceeding those achieved by the sale of nearly all gasoline as E10 (gasoline containing 10 percent ethanol by volume). Although the production of renewable fuels has been increasing, overall gasoline consumption in the United States is less than anticipated when Congress established the program by law in 2007. In order to address that issue, EPA is proposing – to use existing authorities under the law – to reduce the advanced biofuel and total renewable fuel standards for 2014. The Agency is also proposing to maintain the same volume for biomass-based diesel for 2014 and 2015 as was adopted for 2013. Once the proposal is published in the Federal Register, it will be open to a 60 day public comment period.

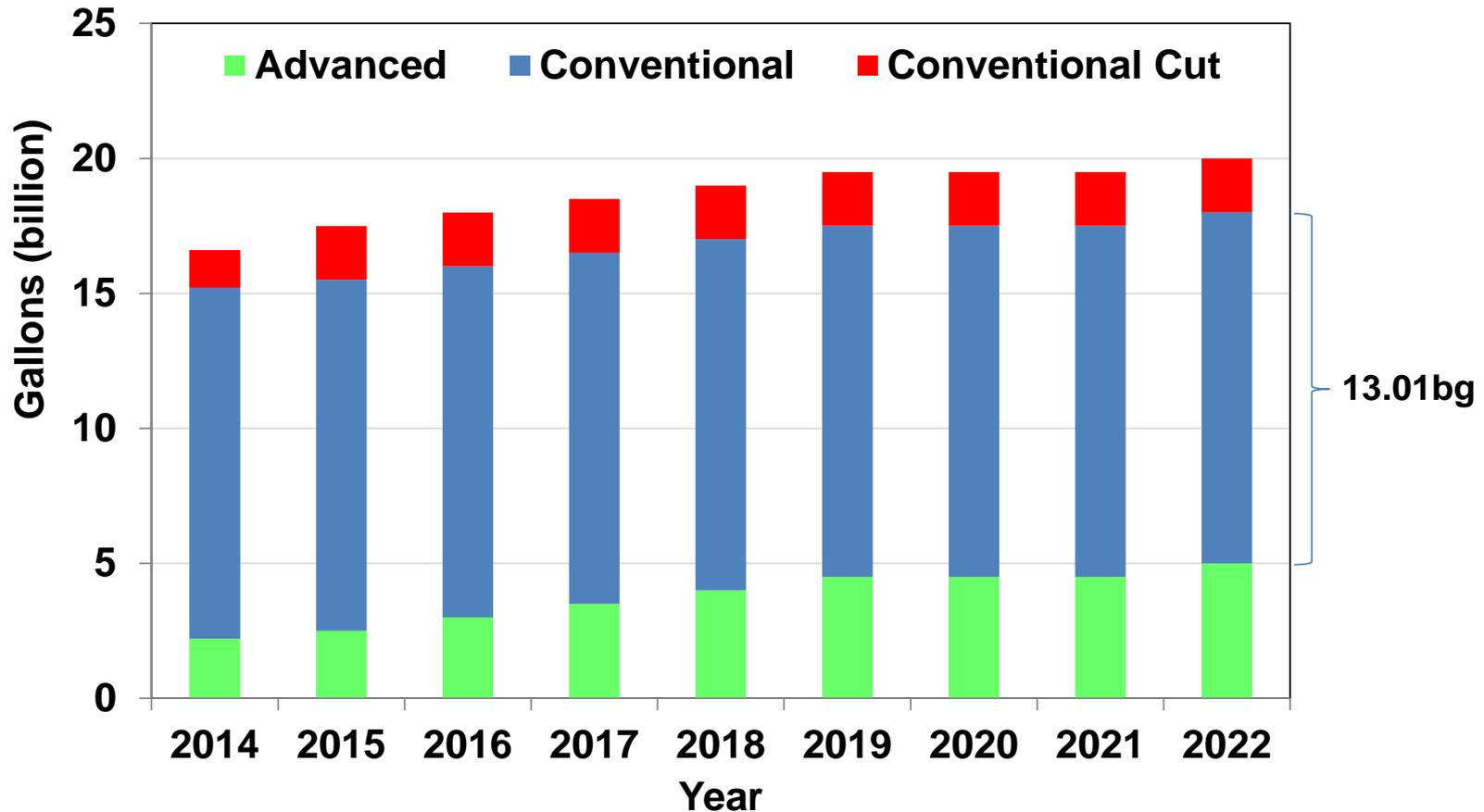
EPA has also received several requests from regulated parties to partially waive the statutory volumes for 2014 and set them below the volumes specified in the statute. In a separate action, the Agency is seeking comment on these petitions for a waiver

 United States Environmental Protection Agency

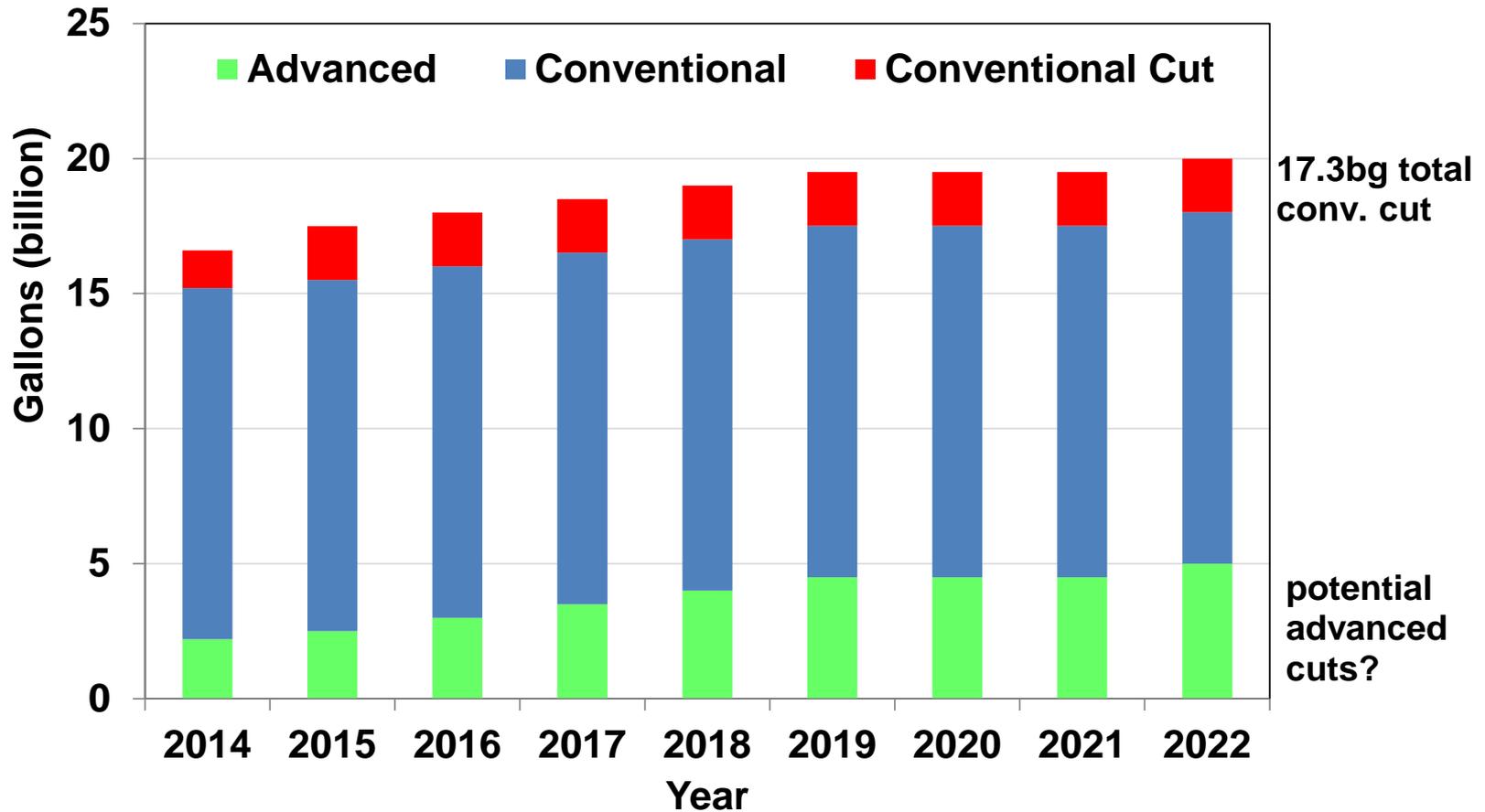
Office of Transportation and Air Quality
EPA-420-F-13-048
November 2013

<http://www.epa.gov/OTAQ/fuels/renewablefuels/documents/420f13048.pdf>

U.S. Renewable Fuels Standards after Waiving Cellulosic Volumes under EPA November 2013 Proposal, 2014-2022



U.S. Renewable Fuels Standards after Waiving Cellulosic Volumes under EPA November 2013 Proposal, 2008-2022



November 15, 2013, 02:00 pm

EPA retreats on ethanol mandate

By Ben Geman



Rationale for EPA Renewable Fuel Standard proposal questioned

Does EPA biofuel mandate proposal play into oil company hands?

David Bennett

Nov. 26, 2013



EPA proposal, advanced biofuels industry's "worst nightmare"

by Lynn Grooms in Farm Industry News Blog

Dec. 4, 2013



OPIIS biofuels news service reported on February 25, 2014:

Senator Charles Grassley of Iowa last week told reporters, "I would doubt there would be a complete reversal [from the proposal], which is what I would like to happen. I'd be surprised if there wasn't some modification of the original rule that still might be considered a partial victory for ethanol."



<http://thegazette.com/wp-content/uploads/2011/08/grassley485.jpg>

November 2015: EPA's Final Rules for 2014, 2015 & 2016 RFS Standards

E10 blend wall challenges still driving EPA policy shift:

"...realworld constraints, such as the slower than expected development of the cellulosic biofuel industry and constraints in the marketplace needed to supply certain biofuels to consumers, have made the timeline laid out by Congress impossible to achieve."

Novel legal argument for renewable mandate write down still used:

"inadequate domestic supply"

The EPA Administrator, Gina McCarthy, signed the following final rule on 11/30/2015, and EPA is submitting it for publication in the Federal Register (FR). While we have taken steps to ensure the accuracy of this Internet version of the rule, it is not the official version of the rule for compliance. Please refer to the official version in a forthcoming FR publication, which will appear on the Government Printing Office's FDSys website (www.gpo.gov/fdsys/search/home.action) and on Regulations.gov (www.regulations.gov) in Docket No. EPA-HQ-OAR-2015-0111. Once the official version of this document is published in the FR, this version will be removed from the Internet and replaced with a link to the official version.

6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 80

[EPA-HQ-OAR-2015-0111; FRL-XXXX-XX-OAR]

[RIN 2060-AS22]

Renewable Fuel Standard Program: Standards for 2014, 2015, and 2016 and Biomass-Based Diesel Volume for 2017

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: Under section 211 of the Clean Air Act, the Environmental Protection Agency (EPA) is required to set renewable fuel percentage standards every year. This action establishes the annual percentage standards for cellulosic biofuel, biomass-based diesel, advanced biofuel, and total renewable fuel that apply to all motor vehicle gasoline and diesel produced or imported in the years 2014, 2015, and 2016. The EPA is establishing a cellulosic biofuel volume for all three years that is below the applicable volume specified in the Act, and is also rescinding the cellulosic biofuel standard for 2011. Relying on statutory waiver authorities, the EPA is adjusting the applicable volumes of advanced biofuel and total renewable fuel for all three years. The 2016 standards are expected to spur further progress in overcoming current constraints in renewable fuel distribution infrastructure, which in turn is expected to lead to substantial growth over time in the production and use of renewable fuels. In this action, we are also establishing the applicable volume of biomass-based diesel for 2017. Finally, we are setting the compliance and attest reporting deadlines for the years 2013, 2014, and 2015, as well as finalizing regulatory amendments to clarify the scope of the existing algal biofuel pathway.

DATES: This final rule is effective on [Insert date 60 days following the publication in the Federal Register]

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2015-0111. All documents in the docket are listed on the <http://www.regulations.gov> web site. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed in the electronic docket and will be publicly available only in hard copy

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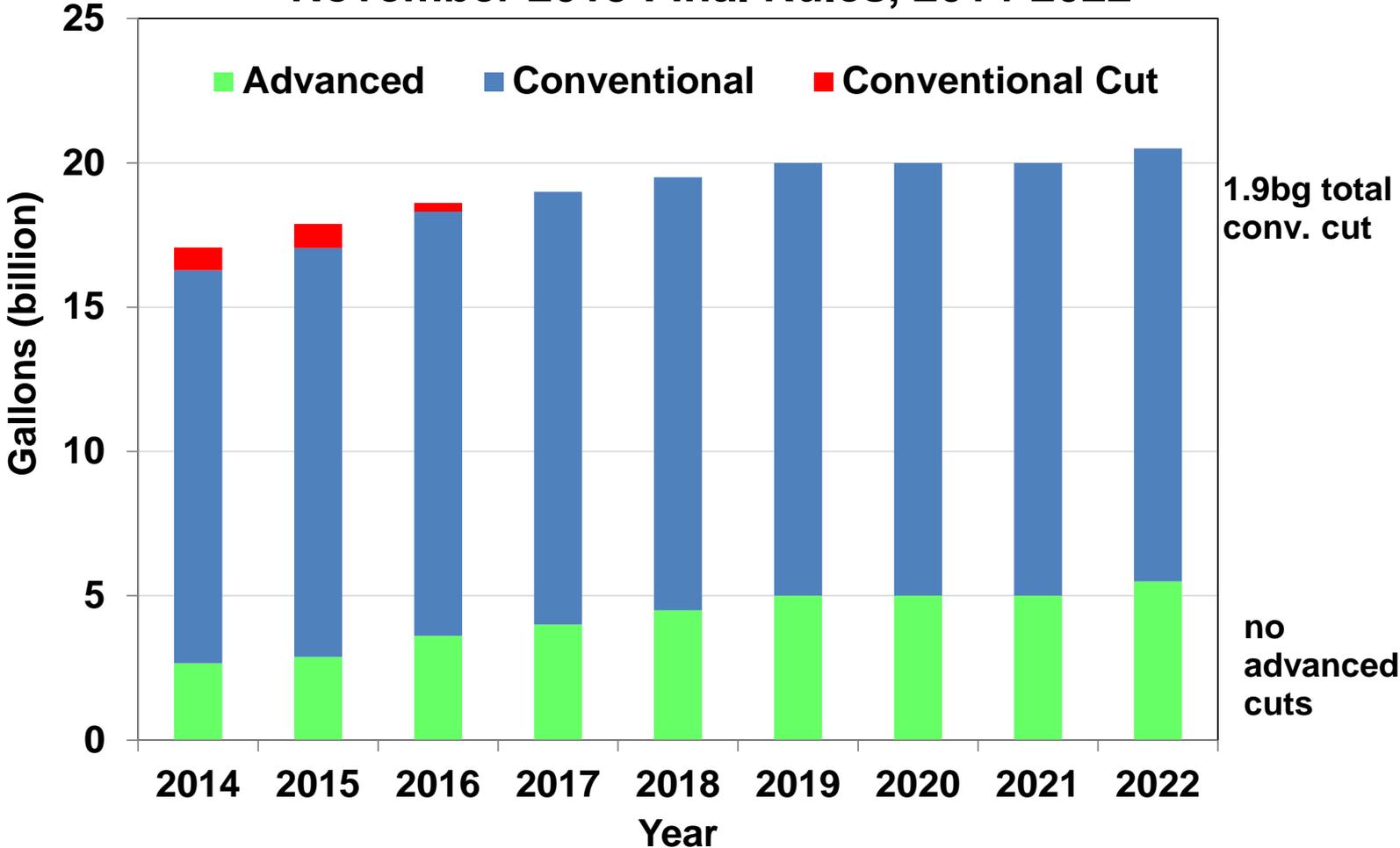
<http://www.epa.gov/sites/production/files/2015-11/documents/rfs-2014-2015-2016-annual-rule-frm.pdf>

Final Renewable Fuels Standards Volume Requirements for the U.S., 2014-2017 (billion gallons)

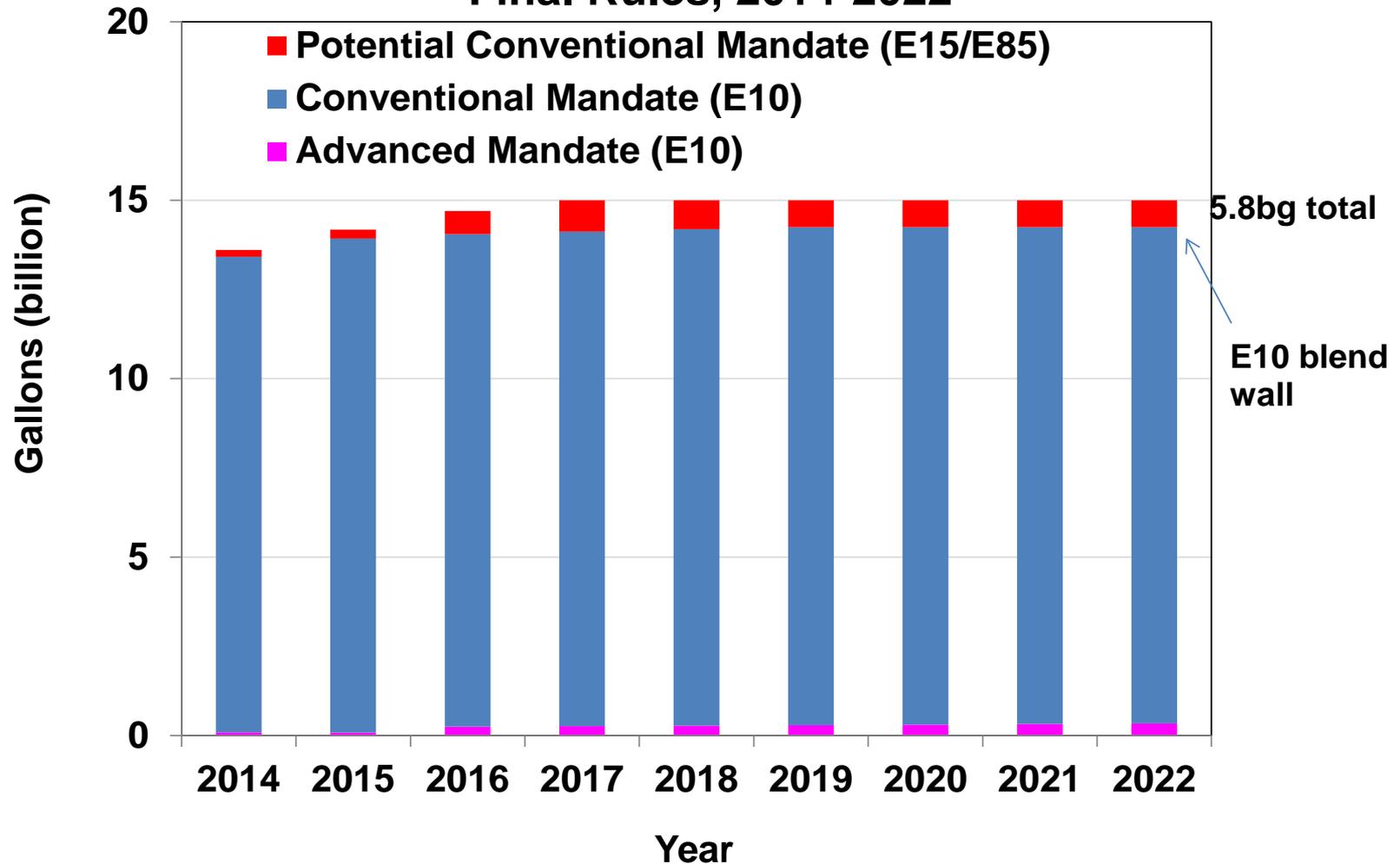
Category	2014	2015	2016	2017
Cellulosic Biofuel	0.033	0.123	0.230	NA
Biomass-Based Diesel	1.63	1.73	1.90	2.00
Advanced Biofuel	2.67	2.88	3.61	NA
Total	16.28	16.93	18.11	NA
Implied Conventional	13.61	14.05	14.50	NA

Note: These volumes are stated in billion gallons of ethanol equivalents, except for biomass-based diesel which is stated in billion gallons of "wet" physical volume terms. NA stands for not applicable.

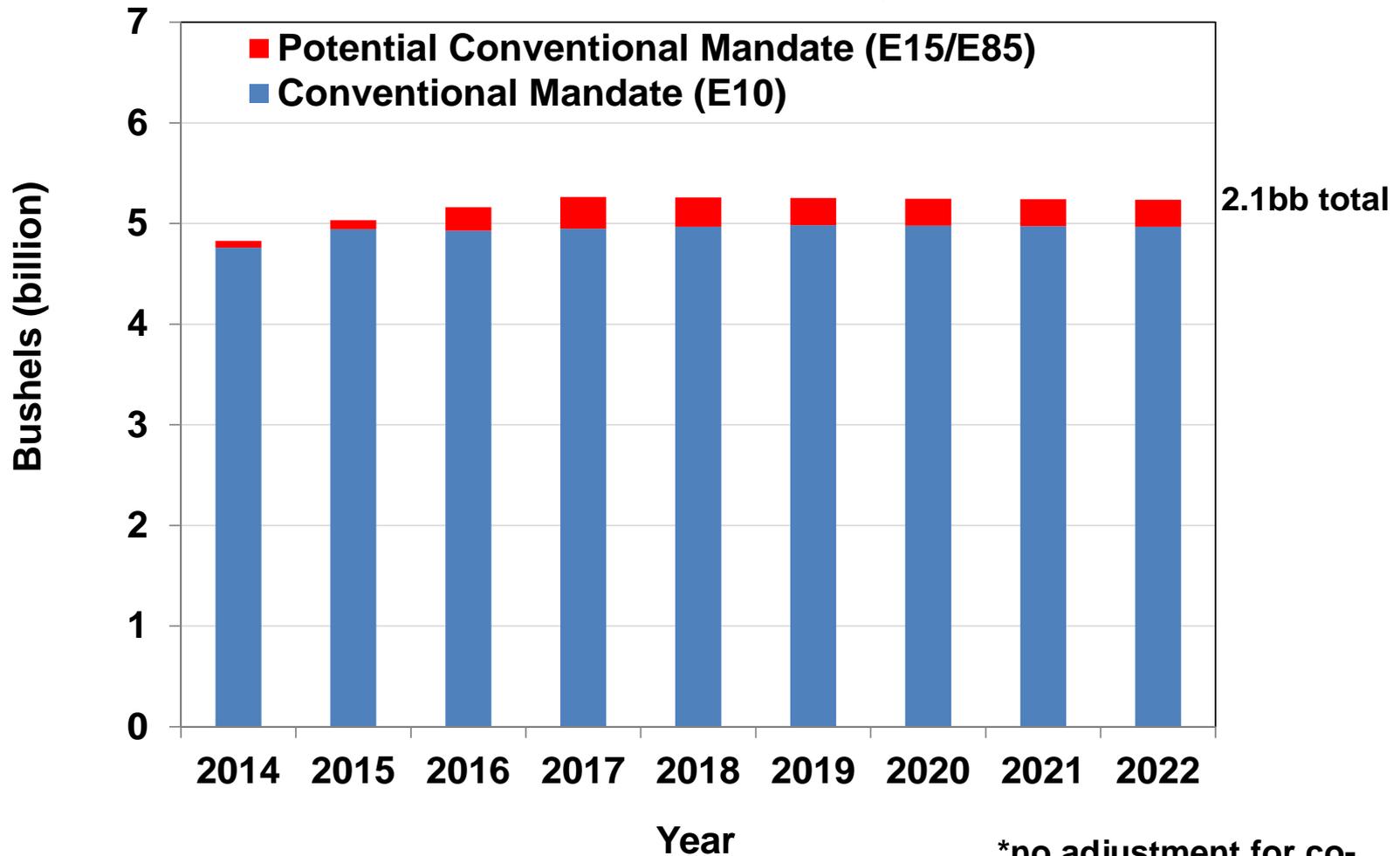
U.S. Renewable Fuels Standards under the EPA November 2015 Final Rules, 2014-2022



Domestic Ethanol Use under EPA November 2015 Final Rules, 2014-2022

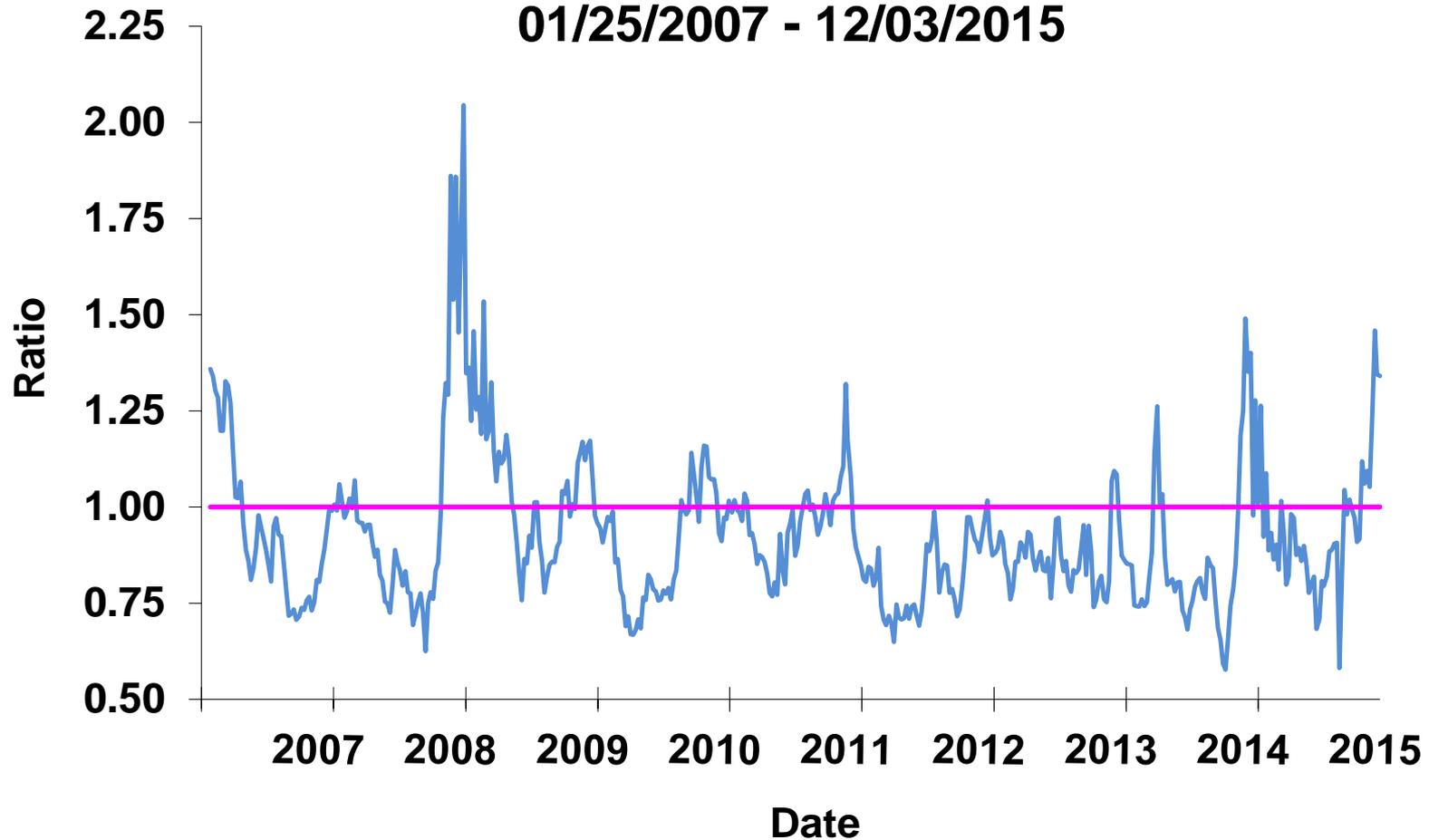


Corn for Domestic Ethanol Use under EPA November 2015 Final Rules, 2014-2022*



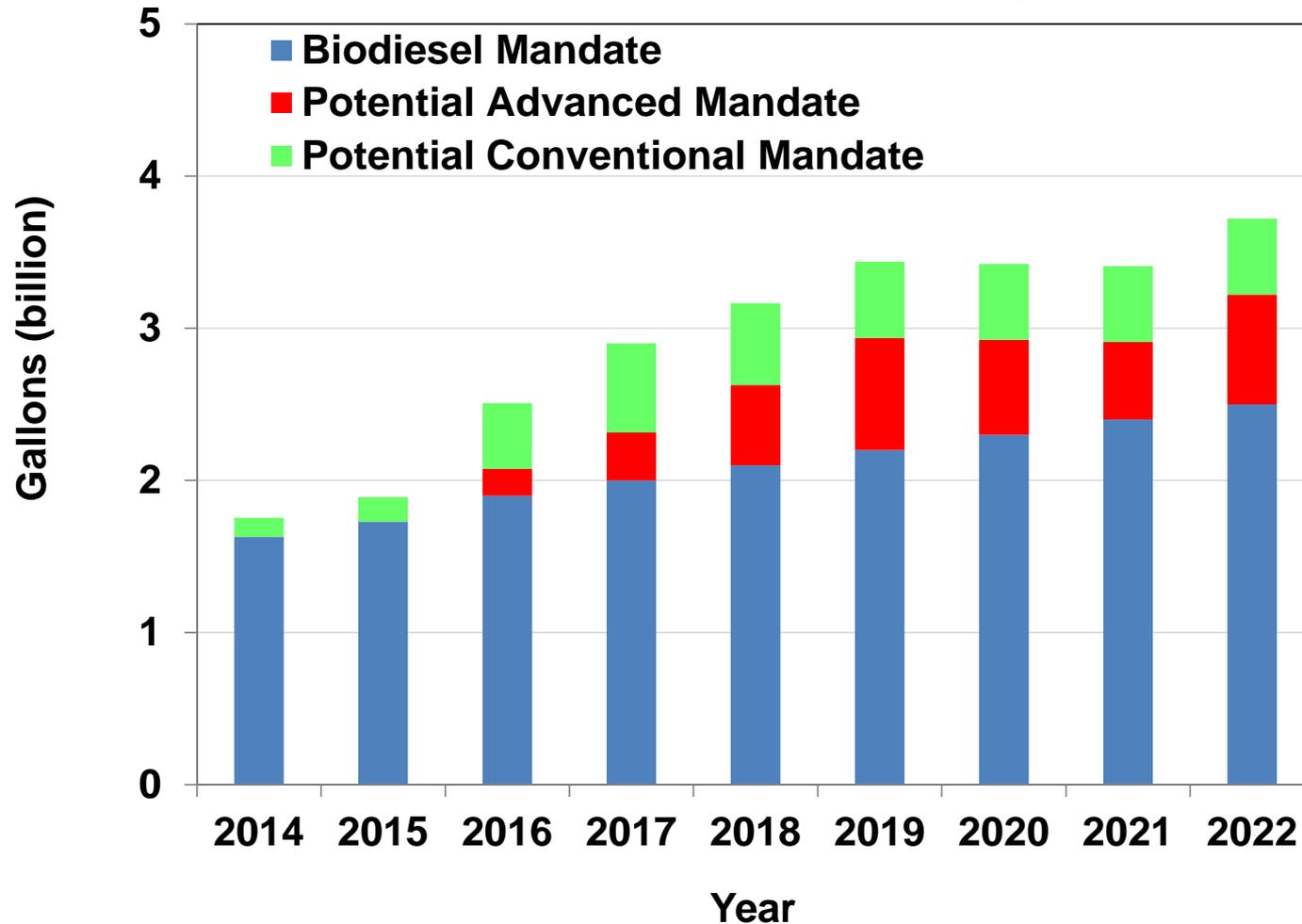
*no adjustment for co-product production

Weekly (Thursday) Ratio of Wholesale Ethanol to CBOB Gasoline Price at Chicago, 01/25/2007 - 12/03/2015

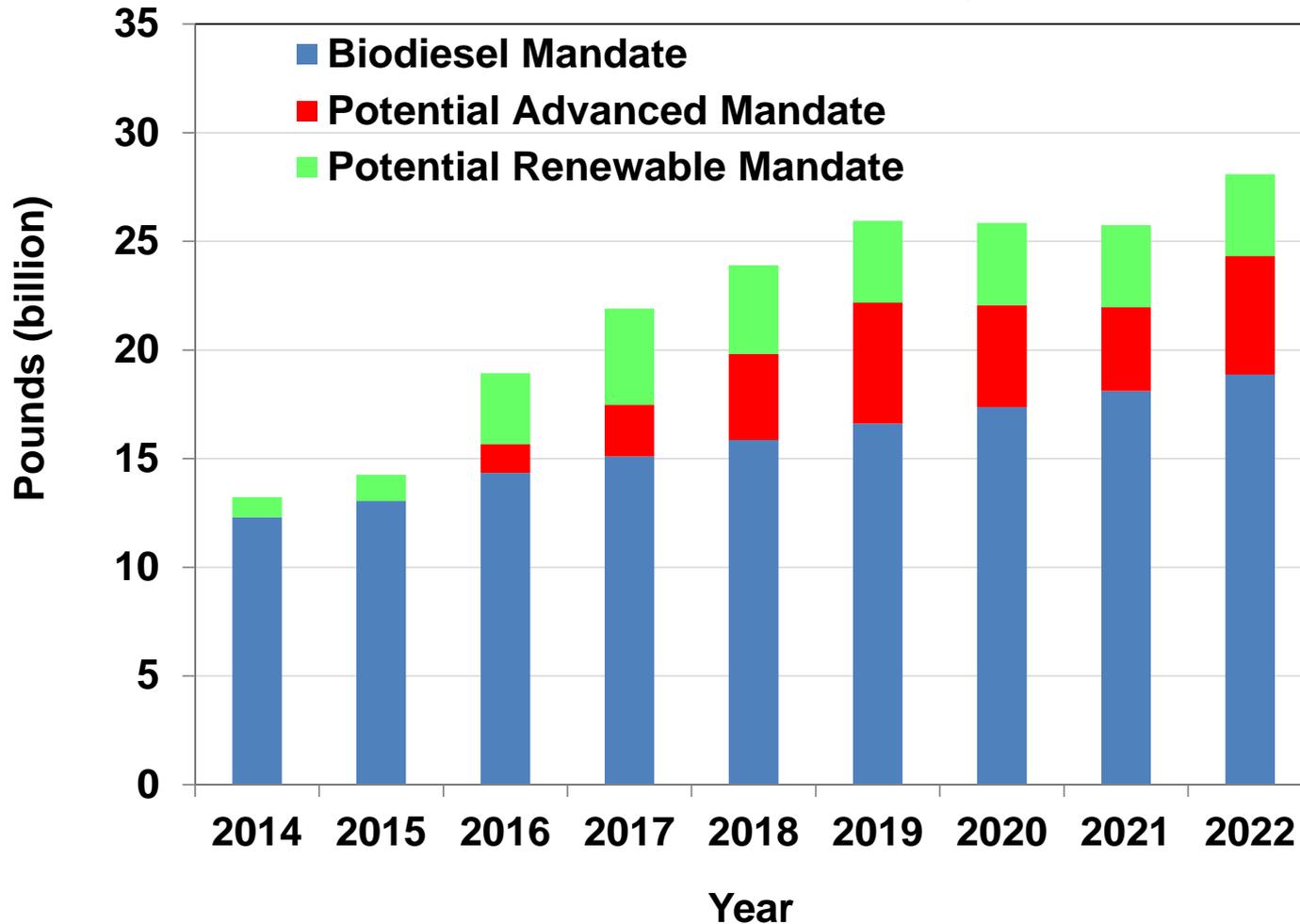


Source: OPIS

Domestic Biodiesel Use (physical gallons) under EPA November 2015 Final Rules, 2014-2022



Fats and Oil Use for Domestic Biodiesel under EPA November 2015 Final Rules, 2014-2022



Summary

- 1. Latest RFS rules from the EPA represent a major win for ag and conventional biofuels**
- 2. Modest increase in ethanol use, but a very high safety net**
- 3. Large increases in biodiesel and renewable diesel on the horizon**