Government Cuts Biofuel Targets

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Amid heavy lobbying from the petroleum industry and manufacturers of biofuels, the Environmental Protection Agency has proposed lowering **production targets** for biofuels in the U.S. fuel mix—the agency's first reversal since a biofuel mandate was passed in 2007.

EPA is proposing to require fuel blenders to use 15.21 billion gal of renewable fuel in 2014. This is lower than the original target of 18.15 billion gal set in the Energy Independence & Security Act of 2007, the law that established the renewable fuel standard. It's also lower than this year's target of 16.55 billion gal.

The 2007 law was intended to drive development of U.S. produced motor fuels made from renewable domestic feedstocks. The new biofuel sources were to make the U.S. more energy independent as well as lower greenhouse gas emissions from oil and other fossil fuel sources of energy. Although corn-based ethanol production has exceeded production expectations, advanced biofuels made from cellulosic biomass have been slow to reach commercialization. The first cellulosic ethanol facilities are expected to begin production in 2014.

The EPA proposal of 15.21 billion gal of biofuel would be made up of 13.01 billion gal of conventional, or corn-based, ethanol and 2.20 billion gal of advanced biofuels not made from corn sugar. Biodiesel made from soybeans, used cooking oil, and other fats would contribute 1.28 billion gal to the advanced biofuels category. Notably, EPA expects only 17 million gal of cellulosic biofuels to enter the fuel supply in 2014, compared with 1.75 billion gal called for in the 2007 law.

Production of corn-based ethanol has steadily increased since 2007, but consumption of gasoline in the U.S. has slightly declined because of advances in vehicle fuel efficiency and a general economic slowdown. EPA notes that nearly all gasoline sold in the U.S. is now 10% ethanol, and to continue to use increasing amounts of biofuels, vehicles must accept higher ethanol blends. In 2010, EPA approved the use of a 15% ethanol-gasoline blend for vehicles newer than model year 2001 over strong objection from the petroleum industry, which has opposed the renewable fuels standard.

The so-called blend wall is a major reason that groups such as the American Petroleum Institute (API), a trade group representing oil firms, called for a dramatic lowering of the targets. The new EPA proposal would attempt to temporarily stall this conflict by lowering the government's ethanol target while seeking comments.

However, API says the reductions are not enough. "Ultimately, Congress must protect consumers by repealing this outdated and unworkable program once and for all," API President Jack Gerard says.

Meanwhile, backers of the U.S. biofuel industry say EPA should not sacrifice the biofuel targets because of concerns about the blend wall. They say there is plenty of room for ethanol in the fuel supply, and uncertainty over targets will hamper investments in advanced biofuels.

"The current proposal would have the effect of closing the market to renewable fuels and undermining the investment community's confidence in the program, starving advanced biofuel and biotech companies of the capital they need," says Brent Erickson, executive vice president of the Biotechnology Industry Organization's Industrial & Environmental Section. BIO is a trade group that represents biofuel manufacturers.

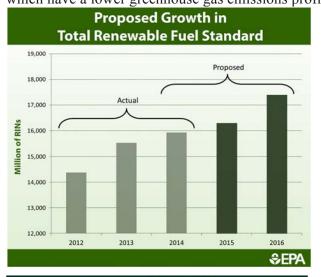
The proposal begins a 60-day comment period, and EPA plans to finalize the standard in the spring of next year.

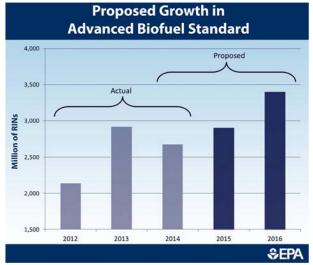
EPA Proposes Renewable Fuel Standards

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Under the Clean Air Act (CAA), the U.S. Environmental Protection Agency (EPA) is required to set the annual standards for the Renewable Fuel Standard (RFS) program for each year.

EPA is proposing volumes which, while below the volumes originally set by Congress, would increase renewable fuel use in the U.S. above historical levels and provide for steady growth over time. In particular, the proposed volumes would ensure continued growth in advanced biofuels, which have a lower greenhouse gas emissions profile than conventional biofuels...





Proposed Growth in Biomass Based Diesel Standard Proposed 2,100 1,900 Actual Million of Gallons 1,500 1,300 1.100 2012 2013 2014 2015 2016 2017 **\$EPA**

Billions of US gallons.

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	2014	2015	2016	2017
Cellulosic biofuel	0.033	0.106	0.206	n/a
Biomass-based diesel	1.63	1.70	1.80	1.90
Advanced biofuel	2.68	2.90	3.40	n/a
Total renewable fuels	15.93	16.30	17.40	n/a
Implied corn ethanol	13.25	13.40	14.00	n/a

All volumes are ethanol-equivalent, except for biomass-based diesel which is actual.

Due to constraints in the fuel market to accommodate increasing volumes of ethanol, along with limits on the availability of non-ethanol renewable fuels, the volume targets specified by Congress in the Clean Air Act for 2014, 2015 and 2016 cannot be achieved. However, EPA recognizes that the statutory volume targets were intended to be ambitious; Congress set targets that envisioned growth at a pace that far exceeded historical growth rates. Congress clearly intended the RFS program to incentivize changes that would be unlikely to occur absent the RFS program. Thus while EPA is proposing to use the tools provided by Congress to waive the annual volumes below the statutory levels, we are proposing standards that are directionally consistent with Congress' clear goal of increasing renewable fuel production and use over time. The proposed volumes would require significant growth in renewable fuel production and use over historical levels. EPA believes the proposed standards to be ambitious but within reach of a responsive marketplace.