



## **Ethanol, Oil and the Facts – RFA Answers AP's Q&A**

Today, the Associated Press (AP) released a Q&A with itself. AP asked its own reporter, Dina Cappiello, a series of questions entitled "Ethanol, Oil, and What It Means to Be Green". **Bob Dinneen, President and CEO of the Renewable Fuels Association**, answers the same AP questions from a fact-based, fair perspective.

### **Q. What is the ethanol mandate?**

- A. We're not sure, because there's no such thing as an "ethanol mandate." There is, however, a program called the Renewable Fuel Standard (RFS), which requires oil refiners to blend increasing amounts of lower-carbon renewable fuels with gasoline and diesel. Ethanol is one of many renewable fuels that qualify for the RFS; the program is certainly not limited to ethanol. In fact, biodiesel, renewable diesel, bio-naptha, renewable gasoline, biogas, and even bio-heating oil have all been used to meet RFS requirements.

The RFS has enjoyed broad bipartisan support. It was originally passed by a Republican-controlled House and Senate and signed into law by a Republican president in 2005. The RFS was expanded in 2007 by a Democrat-controlled House and Senate and signed into law by a Republican president.

### **Q. Sounds straightforward. Green energy, right?**

- A. That's right. The RFS requires that conventional biofuels must reduce greenhouse gas (GHG) emissions by at least 20% compared to gasoline. Advanced biofuels must reduce GHG emissions by at least 50%, and qualifying cellulosic biofuels must achieve a 60% GHG reduction. In addition, the policy contained strict safeguards against conversion of non-agricultural lands, such as native grassland and forest. Finally, EPA may entirely waive the program's requirements if it determines implementation would result in "environmental harm" to the nation.

### **Q. But ethanol helps reduce global warming?**

- A. Yes. The latest peer-reviewed, published studies on the subject conclude that today's conventional ethanol significantly reduces GHG emissions compared to gasoline. The most recent study by scientists at Argonne National Laboratory found that corn ethanol reduces GHG emissions by an average of 34% compared to gasoline, even when hypothetical land use change emissions are considered. Meanwhile, ethanol from sources like corn stover and switchgrass reduce GHG emissions by an estimated 88-108%. In 2012 alone, corn ethanol reduced GHG emissions from the transportation sector by more than 33 million metric tons—that's like taking 5.2 million vehicles off the road.

**Q. The ethanol industry disputes [the AP's land conversion] numbers and says no virgin land has been lost. What gives?**

- A. Total cropland in the U.S. continued to shrink. In fact, farmers today plant about 2-3% fewer acres to crops like corn, soybeans, wheat, and cotton than they did in the 1990s. So, how could AP argue that farmers are converting native lands to cropland, when cropland is actually shrinking? Further, native grasslands, wetlands and other sensitive lands are protected by certain Farm Bill conservation programs. The AP story ridiculously attributes the drop in Conservation Reserve Program (CRP) acres since 2007 to ethanol and the RFS, but the truth is the 2008 Farm Bill cut funding for CRP by 20% and required farmers to decrease CRP acreage. Finally, the authors of the satellite analysis upon which AP relied admitted that a "shortcoming" of their work "was our inability to...distinguish between different types of grassland conversion, i.e. to separate native prairie conversion from change involving CRP, hay lands, or grass pasture." Yet, AP dismissed this admission of uncertainty and hid the fact that the satellite data on grassland conversion is wrong as often as it is right.

**Q. [Protecting against land conversion] must have been factored into the equation when the government wrote this policy, right?**

- A. Yes. Not only did EPA assess a punitive land use change emissions penalty against conventional biofuels in its GHG analysis, but Congress also clearly prohibited cultivation of native, non-agricultural lands for the purposes of making biofuels. EPA is required to annually evaluate whether the RFS is causing U.S. cropland to expand beyond the 2007 level of 402 million acres (the year the RFS was expanded). Each and every year, EPA has found that cropland has been below the 2007 baseline; and the 2012 cropland total was at its lowest point (384 million acres) since EPA began this annual analysis.

**Q. We're talking about corn. Like corn you eat in the summer?**

- A. No. The corn used for ethanol is "field corn" and is not the same as sweet corn. Humans do not directly consume field corn. Farmers produced a record crop of field corn in 2013 and just 22% of the record supply will be used for fuel ethanol. On a global basis, the U.S. ethanol industry uses just 2.9% of the world grain supply. The 2013 world grain supply is the largest in history and 25% larger than the global grain supply 10 years ago.

**Q. You don't hear a lot about this.**

- A. Yes, it's unfortunate that consumers don't hear more about the benefits of renewable fuels. Biofuels like ethanol have reduced our nation's dependence on imported petroleum, reduced GHG emissions, displaced and delayed the need for dirty fuels like tar sands and oil from fracking, created jobs in rural communities, and added value to farm products. The renewable fuels industry has a tremendous success story to tell; it's a shame that the AP chose to demonize biofuels rather than shine a light on the industry's many benefits.

**Q. So bottom line, is ethanol better for the environment than oil?**

- A. Without question. In today's fuel market, ethanol is competing against gasoline from environmentally destructive oil sources like tar sands and fracking. Ethanol substantially reduces GHG emissions compared to marginal crude oil, uses less energy and water to produce, and has far more benign effects on air and water quality. Further, ethanol is rapidly biodegradable, whereas oil remains noxious and toxic for long periods. A team of researchers from Duke University, the University of Minnesota, and Oak Ridge National Laboratory published an exhaustive comparison of the environmental impacts of ethanol and gasoline in 2012, finding that ethanol offered superior environmental performance across a broad range of indicators.

**Q. Then why does the government keep this going?**

- A. Because the RFS is the most successful and important U.S. energy policy in recent history. Petroleum imports are down, job creation in rural America is up, and GHG emissions from transportation are falling. But we still have a long way to go. Not only has the RFS encouraged the development of today's robust conventional biofuels industry, but it has created the market certainty and support for the next generation of biofuels. In 2014, commercial-scale volumes of cellulosic ethanol produced from agricultural waste will enter the market, ushering in the next phase of development in the biofuels industry. For these advanced and cellulosic biofuels to succeed, a strong and lasting commitment to the RFS is necessary.