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Renewable Fuels Association

State of the Industry Address

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At this event a year ago, an analyst who has followed U.S. ethanol producers since the fledgling days when we were barely a billion gallon industry clawing to be used by independent gasoline marketers said to me, “my take away from this year’s conference is that the industry has finally matured.” It seemed like an odd comment at the time, but as I reflected upon it later, she was absolutely right. The industry had just come through the worst drought in 50 years - wreaking havoc on profitability, but also driving innovation and cost savings at the plant, and compelling even more focus on market development – here and abroad. But we came through it all stronger than ever.

For many in the industry, I’m sure they felt like the English dramatist, Tom Stoppard, who opined “maturity is a high price to pay for growing up!”

But those growing pains made us who we are, and steeled us for the good times and bad times ahead.

This past year, we experienced the single most profitable year in the industry’s history – producing a record 14.3 billion gallons of ethanol, 39 million metric tons of animal feed, 16 billion pounds of CO₂ gas, and 2.5 billion pounds of corn distillers’ oil used. That’s a whopping \$39.1 billion in output reverberating across the entire economy.

And as a result, in 2014, the U.S. ethanol industry’s economic footprint included:

- 83,949 direct jobs,
- 295,265 indirect and induced jobs,
- \$53 billion contribution to GDP,
- \$27 billion in household income, and
- \$10 billion in tax revenues.

Think further about these numbers for a moment. They provide an insight into the very definition of a value-added industry. In 2014, for every \$1 spent on feedstock, the U.S. ethanol industry created \$1.83 in clean energy and animal feed.

The U.S. ethanol industry has revitalized rural America. It is no coincidence that the past five years have been the most profitable in the history of U.S. agriculture. From 1997 to 2006, corn prices were below the cost of production, and farmers were reliant on government payments to offset losses. From 2007-2013, however, corn prices were above the cost of production, meaning farmers earned their income from the market—not the taxpayer. So ethanol has saved taxpayers on April 15, and saved consumers at the pump every day of the year.

But on a deeper level, the value added signature of ethanol also distinguishes what we do from what the oil industry does. We create value. They extract value. The oil industry trumpets the jobs created by the “energy renaissance” occurring across the Bakken today.

But those jobs run dry as quickly as the wells being drilled. Look at what’s happening in towns all across the Bakken today. As the price of oil has fallen, rig numbers have fallen too. Jobs are lost. Communities are abandoned. Just last week, the Department of Labor reported that the U.S. lost 1,900 oil and gas jobs in January alone. That’s nearly 10% of the population of Williston, North Dakota – the epicenter of the fracking boom.

While the falling price of oil has most certainly squeezed our margins also, we’re not abandoning our customers or our communities. Even in this low oil price environment, ethanol remains the lowest cost octane source on the market, a value for refiners that can benefit from a 70 cent RIN with every gallon of ethanol purchased, and a critical source of competition for consumers seeking options at the pump.

The growth, evolution and maturity of the ethanol industry were most assuredly on display in three very specific ways throughout 2014.

First, consider that ethanol companies succeeded in 2014 in spite of, certainly not because of, EPA’s implementation of the Renewable Fuels Standard.

When, in the fall of 2013, the Agency proposed reducing the 2014 RVO from the 14.4 billion gallons specified by the statute to just 13 billion gallons – a devastatingly negative signal was sent to farmers making planting decisions, marketers weighing whether or not to install blender pumps to enable E15, and investors determining the efficacy of cellulosic ethanol market opportunities. What might have been possible had EPA not adopted the oil company narrative about the “blend wall” and allowed the RFS program to work as designed, with RINs providing the market based incentive to promote investments in infrastructure that will tear down the blend wall?!

Second, in part because of EPA's failure to promulgate an RVO consistent with the statute and driving the market to higher ethanol blends in this country, the industry turned its market development effort to increased exports.

As the world's largest and most cost effective ethanol producer, the U.S. industry has solidified its position as the world's top supplier. We exported 836 million gallons of ethanol in 2014, approximately 6% of our production, to 51 different countries on all six inhabited continents of the globe, from Canada to our north, Brazil to our south, the United Arab Emirates to the east and the Philippines to the west. That level of exports represents \$2.1 billion in sales benefiting the U.S. balance of trade and the industry's profitability.

Third, 2014 was the year cellulosic ethanol was finally and definitively commercialized, ushering in a new era of ethanol production technology and silencing the naysayers who have carped about phantom fuels and pixie dust. POET-DSM, Quad County Corn Processors, Abengoa Bioenergy, and soon Dupont have demonstrated that cellulosic feedstocks can cost-effectively compete in this market by opening commercial scale facilities.

Combined with biogas, a whopping 33 million D3 cellulosic RINs were generated in 2014, nearly twice the level proposed in EPA's rescinded RVO. The only thing preventing these technologies from exponential growth is Washington's apparent ambivalence about the RFS as a tool for marketplace change.

Thus, as I contemplate the state of the U.S. ethanol industry today, it is without hesitation or hyperbole that I conclude it is brimming with the confidence of an industry that has seen tough times and thrived, good times and prepared, and turbulent times and never wavered. The state of the ethanol industry is strong. The market today may be challenging, but we have weathered worse than this. Critics may be legion, but we know the facts support us and we will prevail. The government's resolve may be vacillating, but the market is the ultimate arbiter, and we remain the lowest cost liquid transportation fuel on the planet. We are here to stay.

But we will not rest on our laurels. Obviously, to realize the vision for this industry we all share, there is much work yet to do. The RFA is committed to an aggressive 10-point agenda that will move the industry forward and assure continued growth and evolution.

One, we will work with EPA to put the RFS back on a trajectory that shatters the blend wall and motivates investment in new technologies as Congress intended when it passed the RFS with broad bipartisan support.

I remain convinced the Administration's stated support for ethanol generally and the RFS specifically is sincere. Their task is not an easy one, and it has been made significantly more challenging by an oil industry that is intent upon undermining the program at every opportunity; refusing to make the investments in infrastructure to accommodate higher level blends, bullying their franchisees from offering E15; and spending lavishly from their taxpayer padded coffers to

manufacture angst, recreate legislative history, and propagate a narrative about America's energy future that ignores reality.

EPA must allow the RIN system to work. Indeed, the RIN mechanism was just beginning to create fissures in the so-called "blend wall" when EPA pulled the plug. If the Administration continues to think it can micromanage the RIN market to avoid some refiners having to pay for compliance, the program will never effect the investments necessary to move beyond 10% ethanol.

The RFA has provided the Agency with reams of data demonstrating NO correlation between rising RIN prices and gasoline prices. In fact, the data shows it is more typical that retail gas prices *fall* when RIN prices rise! RINs are traded amongst obligated parties. There will be winners and losers among refiners. But the RIN market is essentially a zero sum game and the consumer is insulated.

2014 was a lost opportunity as far as the RFS is concerned. 2015 may well be the same as the Agency remains paralyzed, trapped between a statute driving marketplace change and an incumbent industry intent upon preserving the status quo. But if the Agency is able to promulgate a rule for 2016 soon, it will have an opportunity to send a signal that it will not be held hostage by an imaginary blend wall and get the renewable fuels renaissance moving again. As it is, every day the Agency allows the RFS to drift in a sea of uncertainty is a day the Agency is in violation of the law. It is not a trivial violation. It is jeopardizing the more than \$30 billion in investments the people in this room have made in response to a commitment posited by the government. It denies consumers across the country access to higher octane, lower priced renewable fuels. And it robs America of its energy future, one founded upon low carbon clean fuels that represent the best hope for reversing global climate change.

The RFA, the people in this room, and ethanol advocates and farmers across the country will continue to lead the effort to restore the RFS to its intended purpose. The 300,000 comments you sent to EPA last year had an impact. To you, I say thank you but we'll be calling again. To EPA, I offer our technical and legal counsel, and our sincere commitment to work with you. Let's get this right.

Two, no matter what happens with the RFS; the RFA will continue working to build market opportunities for E15, E85 and other higher level blends. Any marketer willing to offer their customers a choice at the pump has access to the RFA's E15 Retail Handbook and accompanying Advisories, our Misfueling Mitigation Plan required by EPA, technical support for the RFGSA E15 survey, and regulatory support to navigate a sea of complex state requirements. Heck, we'll even give you the labels you'll need to be in compliance. Through our efforts, E15 is now allowed in 29 states with more coming every week.

What we will not do is allow E15 to be demonized by a blizzard of misinformation. When a Wisconsin Congressman bloviates that auto companies say E15 doesn't work, we'll tell him again that 70% of the cars produced today provide explicit warranty coverage for E15 in their owners' manuals. When AAA warns against E15 use because it will damage engines, we'll point out that through 100 million miles of E15 use in this country there has not been a single reported case of engine trouble or misfueling. We'll also suggest to those interested that there are many other motor clubs out there providing the same services without the anti-ethanol dogma, including Better World, Travelers Motor Club, and Association Motor Club Marketing.

And we need to call out those auto companies that have yet to clearly approve E15 in their vehicles. Come on Chrysler, what's wrong with your vehicles? We appreciate your past commitment to FFV's, but how is it that Ford, GM, Honda, Toyota, Volkswagen, Porsche, Jaguar, Land Rover, and Audi all say E15 is just fine for all their new vehicles, but you won't?

Three, the industry has come together to fund an aggressive program to "Prime the Pump" for E15 infrastructure. That's a phenomenal effort that is helping major retail chains get on board with our industry's vision. And Chicago may soon pass an ordinance providing for consumer choice there. But E15 will never realize its full potential until there is parity with regard to EPA volatility regulations for E10 and E15. To date, the Agency has rejected our efforts to secure parity, thereby ensuring that E15 is at best a seasonal fuel, a huge disincentive for marketers to adopt E15 at their stations. I was involved in the regulatory effort to secure the RVP waiver for 10% ethanol from EPA in 1988. And I will not rest until either the same treatment is afforded E15, or the waiver is removed for E10. Unless and until E15 and E10 are treated the same, E15 will be at the whim of refiners unwilling to provide the specially tailored blendstock necessary for widespread distribution.

Four, the RFA Board of Directors has prioritized the export market for particular focus. Without question, exports have offered the most immediate source of demand growth in recent years and there is good reason to believe that demand can be expanded quickly. The 836 million gallons exported last year was great, but moving forward we intend to regularly top the 1.2 billion gallons exported in 2011. Some have questioned whether that will be possible at a time of low global oil prices. But there are 61 countries across the globe with some kind of renewable fuel program, and as noted earlier, ethanol remains the lowest cost octane source on the planet. Markets will be there, but education and development is needed. The RFA is working closely with the US Grains Council and Growth Energy in a cooperative Ethanol Export program. We've already convened trade missions to Brazil, Peru, Panama, Philippines, Japan, South Korea and China. More are planned. We will leave no corner of the globe untouched.

We will also continue to challenge unfair trade barriers wherever they exist. The most striking example, of course, is the EU's completely unjustified and illegal anti-dumping duty applied to the entire industry, despite NO evidence of dumping having been identified. With Growth Energy, we have challenged the duty in Luxemburg. But the U.S. government must preserve the

integrity of 100 years of international trade law and challenge this nonsensical duty at the WTO. We've been waiting for more than two years now; it is time for USTR to finally take action. Come on Ambassador Froman, it's time to act!

Five, the kryptonite to the super power of cellulosic biofuels is inconsistent government policy. The RFA will continue to work with the Advanced Ethanol Council and others to secure a long term tax benefit for cellulosic biofuels. Think of the absurdity of our energy tax situation ... the oil industry, that is well established, highly profitable, and the recipient of a century's worth of largesse from the taxpayer continues to be subsidized with permanently fixed tax breaks to the tune of at least \$4-6 billion every year. Meanwhile, clean renewable fuels that are struggling to break into the market with new technologies that will provide immense benefit to the nation's energy and economic future struggle to have a production tax incentive renewed every year. The annual drama keeps investors on edge and encourages even more money flowing to the incumbent industry.

Last December, just as cellulosic ethanol began production and was finally able to see a tax benefit, Congress extended the lapsed incentive for the balance of the year, meaning it was in place for two weeks before expiring again! For all those Members of Congress that talk about an "all of the above" energy strategy but only fight for that which is "below the ground" I implore you, "get your act together and pass meaningful tax reform that finally ends 100 years of oil subsidies and gives renewable energy resources a chance to succeed!"

Six, for more than three decades, refiners and blenders have used low levels of ethanol (10% or less) to boost the octane rating and oxygen content of finished gasoline. However, a growing body of research shows that ethanol's distinctive attributes are best utilized when it comprises 20-40% of the fuel blend. At a 20-40% blend, ethanol can significantly increase the octane value of the fuel to "premium" gasoline levels or higher, enhancing engine performance and efficiency. Further, using more ethanol means using less hydrocarbon aromatics, like benzene, toluene, and xylene. Removing those toxic substances from gasoline greatly improves tailpipe emissions and improves air quality. As a result, mid-level ethanol blends are being referred to as "Renewable Super Premium," or RSP.

Many automakers view RSP, when coupled with optimized engines, as a promising pathway toward compliance with increasingly stringent federal fuel economy and tailpipe GHG regulations. When paired with downsized, high-compression, turbo-charged engines, RSP can provide the same—or better—fuel economy as gasoline. Indeed, EPA has recognized that RSP "...could help manufacturers who wish to raise compression ratios to improve vehicle efficiency as a step toward complying with the 2017 and later GHG and CAFE standards." The RFA is working with DOE and other stakeholders to make RSP a reality for future growth.

Seven, by most accounts, 2014 was the hottest year in recorded history. The Administration has determined that climate change represents a real and significant threat to our security. Biofuels represent the best hope of addressing greenhouse gas emissions from transportation fuels – today! In addition to its primary role of bolstering energy security, the RFS also serves as a surrogate low carbon fuel program. But few realize the meaningful GHG reductions that are occurring or the improved reductions that will occur with cellulosic biofuels because EPA has yet to correct its flawed modeling that is now 7 years old. Tim Searchinger’s spurious and now debunked projections of indirect land use have no place in a regulatory compliance mechanism. They never did. But we now have real world data to prove it. Real world data show conclusively that cropland in many regions has been *reduced* since the RFS began, forest land in key regions has *increased*, and ethanol produced from corn in the United States today is at least 34% better than gasoline. Farmers responded to increased demand and higher prices by using existing cropland more efficiently – NOT by converting forest and grassland to crops.

To EPA, I implore you again, update your modeling. Not only does your 2008 analysis unfairly give biofuels a bad name, but it makes your Agency look out of touch. Science completed since your original analysis prove you wrong. Use the best available science. And recognize that while ethanol’s carbon footprint is improving, gasoline’s is getting worse with every well drilled for fracking and every tree sacrificed for tar sands.

To those states contemplating Low Carbon Fuel Programs, I say, good for you! But get it right. And be fair to all fuel options. Don’t allow the modern day Malthusians to bully you into a scientifically indefensible position that discourages biofuel use and only sustains the incumbent industry longer. The RFA will support LCFS programs done right, but we will continue to aggressively fight those that demonize corn ethanol in misplaced allegiance to a fringe environmental movement that would sacrifice the very good in search of the perfect.

Eight, rail service issues continue to plague the industry and the RFA is committed to working with the Surface Transportation Board and stakeholders until a snowdrift in North Dakota does not impair our ability to ship product to wherever it needs to go. To the railroads I would say this, “we understand the need to build new business, and we applaud the oil companies for recognizing the value of our virtual pipeline, but it is a poor business model to build at the expense of existing customers, and as soon as that real pipeline is completed, all that new business will abandon you. We will not.”

We also recognize the need to make improvements to the 111 tank car and have supported modifications that will have a meaningful impact; ethanol is not the highly volatile and explosive petroleum products that have precipitated such concern. Compare the two recent incidents – Dubuque, IA & Mount Carbon, WV – one was a fire that was allowed to burn out and remediated quickly. The other was an explosive fireball with a thick black smoke that shut down drinking water supplies for the region and will impact the area for years. We are not Bakken crude. If even a modified 111 tank car is not appropriate for volatile crude oil – fine, then

prioritize crude oil cars, require those more involved modifications first, and allow the tank car industry to move forward with certainty. But to the FRA I'll also say this, "the tank car has yet to cause a single derailment. Any effort to address rail safety must start with a careful review of operations and rail integrity. We all need the virtual pipeline – keep the trains on the tracks!"

Nine, the RFA remains committed to safety – at the plant, in transport, and at the pump. We will continue to provide training, webinars and best practices to assure the U.S. ethanol remains the model of safety it has become and, indeed, continues to improve. Since 2006, ethanol shipments have reached their destination without a release caused by a train accident 99.994 percent of the time. That success reflects a history of steady improvement. The RFA plans to continue its award-winning partnership with TRANSCAER® to educate operators about the safe shipment of ethanol.

We're also showing improvement at the plant. The ethanol industry continues to improve the accident frequency rate at our production facilities with an enviable incident rate of 2.3 in the latest data from the Bureau of Labor and Statistics. And our safety committee is working to reduce that even further.

Ten, none of this agenda happens without a sound technical foundation. The RFA is committed to continuing to do that work. I heard a well-meaning ethanol advocate recently opine that we're too faithful to the facts; that we need more passion to win politically. Some have suggested we adopt the "fast and loose" strategy embraced by our opponents. But that's not who we are. I agree we need to motivate the troops, but passion without facts is just empty rhetoric that will never succeed. So the RFA is doing that research, focused on expanding existing markets, creating new opportunities and addressing fuel quality, regulatory and technical issues. The list of projects for this year include among many more: back-casting and validating indirect land use models, examining the economic impact of removing the 1 psi volatility waiver for E10 blends, providing a critical evaluation of EPA's MOVES model, a detailed assessment of specific export markets, and, working with DOE, a roadmap for the commercialization of Renewable Super Premium.

To those RFA members here I say thank you for allowing us to do this work. To those that are not members, I'll tell you plainly that you need to be involved because the industry needs these technical projects to assure future success. It isn't just the RFA that uses – and benefits from – the analysis, facts, and data developed through our research projects – it's the entire biofuels industry.

It is already clear that 2015 will likely not be a repeat of last year. But that's ok. You are the U.S. ethanol industry. You have been tested by the hottest fire and you are steeled for whatever comes your way.

You see a challenge, and you meet it.

You see an opportunity, and you seize it.

You see innovation, and you adopt it.

You see something wrong, and you correct it.

You see a need, and you take action.

You are the U.S. ethanol industry. I am proud to be counted among you, and I thank you for what you do each and every day to make America cleaner, safer and more prosperous for all.

Thank you.