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State of the Industry 2012

As Prepared for Delivery:

The most successful visionary of our times -- Steve Jobs -- once said, "Innovation distinguishes between a leader and a follower."

Well, more than 30 years after the emergence of the U.S. ethanol industry, we have always innovated, we have always led, and our best days are still ahead of us.

Because we innovate, we are the leading renewable energy resource available today.

Because we innovate, we are the most efficient and lowest cost ethanol producers in the world.

Because we innovate, we are providing the leading clean air additive that reduces carbon monoxide and ozone pollution across the country.

Because we innovate, we are leading a revitalization of America's rural economy, transforming dying communities into thriving economic engines.

And because we innovate, we are leading this nation toward energy independence with every gallon we produce and every barrel we displace.

We are standing tall in some of the toughest times America has endured in our lifetimes.

Despite a world-wide recession deeper and more severe than any since the Great Depression, the U.S. ethanol industry has been the fastest growing industry in the nation, with the value of our output growing by an average annual rate of 7.9% since 1998.

During that same period, the American economy grew by an average of just 2.2% a year.

The American ethanol industry's sustained growth beats the internet publishing and broadcasting industry.

Our growth rate beats the petroleum refining and oil and gas extraction industries.

Our growth rate beats the medical instrument industry.

And we beat hundreds of other sectors tracked by the Bureau of Economic Analysis – from rubber tires to the record companies.

And that's not all. When you look at some industries that are outpacing the Gross Domestic Product – such as farm equipment and fertilizer -- you'll find that ethanol has helped their success as well.

So let me state the plain and simple truth. In the midst of hard times for our nation and the entire world, the American ethanol industry has become a critically important contributor to the economy. That's not just a talking point – that's a fact.

- There are 209 plants in operation across 24 different states, with annual capacity of 14.9 billion gallons.
- Last year we produced a record 13.9 billion gallons of ethanol, found in more than 95% of all U.S. gasoline and sold coast to coast, border to border – and across the pond – and, on top of that, we produced 39 million metric tons of high-protein feed used by livestock here and abroad.
- We employ 90,000 working Americans in direct jobs, with another 311,000 in indirect jobs. And those are high wage jobs with benefits.
- Last year, we added $43 billion to the Gross Domestic Product and pumped $30 billion into the budgets of hundreds of thousands of American households – and that doesn't count the $800 a year we saved families by reducing the cost of gasoline.
- According to a study conducted last year by economists at Iowa State University and the University of Wisconsin, the increased use of ethanol reduced wholesale gasoline prices by an average of $0.89 per gallon in 2010.
- The analysis also found that the growth in ethanol production reduced gasoline prices by an average of $0.25 per gallon, or 16%, over the entire decade of 2000-2010.
- Department of Energy data shows U.S. gasoline use averaged 138 billion gallons per year from 2000 to 2010, meaning annual savings due to ethanol during the decade averaged $34.5 billion.

By any reasonable economic metric, the state of the ethanol industry is sound. We are helping to grow the economy, add jobs and stimulate investment in domestic energy supplies -- right here, right now.

As the U.S. ethanol industry has grown, America's dependence on imported oil has fallen. Because of you we have grown and prospered, and Americans can now say with confidence, "No Tanks Iraq." That's not just a bumper sticker – that's a fact.

- Because American ethanol production has ramped up, U.S. oil imports from some of the world's most hostile regions have fallen dramatically. Since 2000, oil imports from Venezuela are down nearly 30%, while imports from Iraq and the rest of the Persian Gulf are down 25%.
- Since hitting a low in 2005, the year the Renewable Fuels Standard was passed, domestic liquid fuel production has been increased back to levels not seen since 1990, with ethanol leading the

charge. When compared to 2005, ethanol production accounts for 58% of the increased domestic fuel supply we benefit from today.

- Ethanol now accounts for one out of every four gallons of fuel (for gasoline vehicles) produced from domestic energy sources.
- In 2000, 55% of our gasoline supply came from imported oil and 1% came from ethanol. Today, ethanol makes up 10% of our gasoline supply, and oil imports have dropped to 45%.
- That's right, in 2010, booming ethanol production helped send U.S. oil import dependence below 50% for the first time since 1997. Oil import dependence dropped to 45% in 2011.

The Wall Street Journal and others contend it is increased domestic oil production and fracking that is responsible for this remarkable reduction in petroleum imports. Wrong! It is ethanol. And it is the Renewable Fuels Standard that provided the policy foundation for that success.

<u>On a cumulative basis, ethanol has accounted for 81% of new domestic fuel production since 2005.</u> Since the start of the RFS, on a net basis, America's ethanol industry has added 838 million barrels of new fuel to our energy supply, compared to 197 million barrels of new oil production. I'm sorry the Wall Street Journal missed that! The pundits seem to forget that the boom in domestic oil production is only a recent phenomenon. U.S. oil production actually fell in 2006, 2007, and 2008—even though our oil import reliance was declining during that time. Without question, the trend toward less oil import dependence that began in 2005 began because of rapid growth in ethanol production.

Without ethanol, without the RFS, our 2011 oil import dependence would have been 52%. Better than the 60% it was in 2005, yes. But not the 45% it is today. That's the fact. So if measured by our success in meeting the challenge of oil import dependency, I would say the state of the ethanol industry is shale rock solid!

One of the driving policy objectives of the RFS was to address urban air pollution and global climate change. In fact, the Renewable Fuel Standard was the very first program – anywhere – that incorporated a carbon metric for qualifying fuels. And while EPA did their level best to underestimate the carbon benefits of ethanol by applying an unjustified and specious land use change penalty, ethanol is today leading the way toward improved air quality and lower carbon fuels. That's not the ranting of a seasoned ethanol lobbyist, that's the fact.

- Ethanol reduces emissions of carbon monoxide (CO), exhaust hydrocarbons (VOC) that form ozone, and particulates. Ethanol also displaces toxics like benzene, toluene and xylene.
- Unfortunately, the air quality benefits of ethanol are not well understood, even by public health groups. Consider these facts from EPA:
    - Mobile sourced CO has dropped 54% since 2000.
    - VOC emissions are down 35% since 2000, and as a consequence, ground level ozone is down 11% and dropped below the national standard for the first time in 2009.
    - Due in large part to the increased oxygen content of gasoline, fine particulates (PM2.5) are down 27% since 2000.

- And ethanol is the only gasoline additive available today that is helping to reduce global climate change. The 13.9 billion gallons of ethanol produced in 2011 reduced tailpipe equivalent CO2 emissions by 25.3 million metric tons. That's equal to the emissions of 4 million vehicles!

Clearly, increased consumption of ethanol fuel in recent years has mitigated the growth in transportation emissions. As the Energy Information Administration concluded in a recent report, "Emissions from gasoline and diesel fuel combustion in the transportation sector generally have paralleled total vehicle miles traveled since 1990. In 2009, however, vehicles miles traveled rose slightly while combined emissions from gasoline and diesel fuel declined—likely as a result of more efficient vehicles and increased consumption of biofuels." Thus, I would say from an air quality perspective, the state of the ethanol industry is breathing easy.

Perhaps the most telling evidence of the state of the ethanol industry and the success that it has become is the economic revitalization happening all across rural America. Ethanol has become the single most important value added market for farmers, stimulating investment and allowing farmers to get their income from the marketplace, not the taxpayer. That's not theory, that's a fact.

The emergence of the ethanol industry over the past decade has served as an incredibly important catalyst, transforming the grain business from a stagnating, surplus-driven market to a vibrant, high-tech, demand-driven marketplace.

Farmers, for the first time, are earning a fair price for their labor and their income is coming from the marketplace—not the government. And that new income is being re-invested in better seed, more efficient farm machinery, and other cutting edge technologies that are enabling farmers to become even more productive. That re-investment in row crop agriculture—the result of farmers finally getting an honest price for their products—is the reason the last five corn crops have averaged 12.6 billion bushels. Compare that to a 10.5-billion-bushel average from the previous five years and a 9.6-billion bushel average in the five-year period before that—when corn prices still hovered under $2/bushel.

That increased productivity has allowed the ethanol industry to grow <u>without</u> "diverting" corn supplies away from other important markets. In fact, more corn was available for non-ethanol uses in the most recent 5-year period than in the previous two 5-year periods or at any time in the history of the corn industry. Indeed, the value-added benefit of ethanol has driven increased revenue for all of agriculture. You might not read that on a box of cereal, but that's a fact.

- Net farm income is forecast at a record $100.9 billion for 2011, up $21.8 billion (28 percent) from 2010. This is the first time ever net farm income has crested $100 billion.
- Crop sales are expected to exceed $200 billion in 2011 for the first time in U.S. history, with record or near-record levels across different crop categories.
- Livestock receipts are also at record levels, topping $165 billion in 2011. Far from driving livestock companies into bankruptcy, the distiller's feed we produce is reducing their feed costs and increasing their profitability! Over the past several years, DDGS has been priced at roughly 80% the price of corn, and USDA says a ton of DDGS replaces about 1.2 tons of conventional feed in livestock and poultry rations.

- The amount of distiller's grain produced by the ethanol industry last year is more than the total amount of feed consumed by cattle at feedlots in this country.
- The Midwest is home to the three states with the lowest unemployment rates in the nation and two more states are in the top 10. Not coincidentally, these states are among the top grain, ethanol and livestock producing states in the nation.
- Iowa State estimates that each 5-cent per bushel increase in the local corn price that is attributable to the presence of an ethanol plant creates 13 new induced jobs in the local area.

Importantly, this revitalization of rural America is having a decidedly positive impact on the federal budget and is allowing Congress to consider a dramatically different farm bill this year. You helped make that possible!

- Government payments to farmers are forecast to be $10.6 billion in 2011, a 14.4-percent decrease from 2010 and the lowest in 14 years. Total government payments in 2011 will be less than half of the $24.5 billion spent in 2005—the last year corn prices averaged $2/bushel.
- Government payments that are a function of crop prices—such as countercyclical and loan deficiency payments—have dropped from $11 billion in 2005 (the year the Renewable Fuel Standard was enacted) to almost zero in 2011.

We sometimes forget or shy away from it, and our detractors may even object to it, but perhaps the most important objective of the U.S. ethanol program was to increase rural income, reduce farm program costs and lift all agriculture by creating value added markets for farmers. By that metric, I would say the state of the ethanol industry is proudly satisfied.

None of this would have happened, of course, without innovative and progressive public policy. The frustrating fact is, without the carrot and stick of government policy, we would not have seen the growth in ethanol that we have seen. That's not a criticism of the refining industry. That's simply recognition of the fact that our customers are not in the business of through-putting our carbohydrates; they extract, refine and market hydrocarbons. So Congress enacted a tax incentive to encourage cost-effective ethanol supply and later created the RFS to assure demand for biofuels, and to force technology innovation that would lower carbon even more.

As of January 1, of course, the ethanol tax incentive is no longer available. The proof of its success is that we did not fight to keep it. It had done the job it was intended to do. It built an industry. It did so cost effectively, returning $6 to the treasury for every dollar given to oil companies using our fuel. But now was the right time to move beyond it.

The marketplace has changed. With sustained $80-$100 per barrel oil, the taxpayer need not provide refiners with an incentive to blend when economics are already dictating that they do so. Ethanol is less expensive than gasoline today—and has been for most of the past four years; and with projections of $150/bbl oil as yet this year and far higher prices if conflict with Iran threatens the Strait of Hormuz, the economics of ethanol should mean far greater demand.

The industry has changed. This is not your granddaddy's ethanol industry. Technology innovations you adopted have reduced energy inputs, increased efficiency and diversified output. In just the past few years, you have embraced oil extraction, you're rapidly deploying combined heat and power and you've begun the process of morphing your ethanol plants into sophisticated bio-refineries capable of producing a wide range of fuel, food, feed, and chemical products.

Policy has changed. With the successful implementation of the RFS providing the bedrock of demand, the tax incentive became less meaningful. When viewed in the context of the mountain of debt facing the nation, the U.S. ethanol industry demonstrated uncommon vision and leadership by standing down and letting it expire. I commend you for it. I only wish other energy industries would match your principled conviction. If it no longer makes sense for the taxpayer to support the use of renewable fuels, it certainly no longer makes sense for the taxpayer to subsidize drilling, fracking and offshore foreign energy investments, which are today permanent provisions of law.

The government's role should be limited to encouraging investment in new energy sources, innovative technologies and more sustainable fuels. The cellulosic ethanol tax incentive fits that criterion. The section 199 credits, foreign tax credits, and intangible drilling expensing (which has been around since 1916) do not! Congress needs to level and reform our energy tax structure NOW!

But make no mistake. The discontinuation of the tax incentive makes the importance of maintaining the RFS absolutely critical to the continued evolution of the biofuels industry. Already, the petro-cheerleaders are questioning the necessity and viability of the RFS. They say the advanced biofuel targets will never be met, the grain ethanol demand too aggressive, and its carbon benefit anathema to a growing chorus of disbelievers in anthropogenic climate change.

More than that, at a recent conference, one prominent oil industry advocate actually said the RFS was anachronistic because it was conceived at a time when we thought we were going to be short on oil and today we're awash in new sources of oil from Canadian tar sands and Marcellus shale. So, he went on, we need to shelve the RFS to make way for more oil.

Let me tell you something: we can't frack our way to energy security!

I happen to agree that the world's energy situation is such that we need ALL energy resources. So frack if it can be done safely and cleanly. Bring on the tar sands if Canada is satisfied it can manage the ecological consequences of its extraction and processing. But we can't allow the current infatuation with unconventional oil resources to undermine or reverse the progress we have made and the promise of continued technological innovation in renewable energy resources.

So, if viewed through the lens of public policy, I would have to say the state of the U.S. ethanol industry is confident and focused on continuing its evolution by extending incentives and programs that will diversify feedstocks and commercialize new fuels. But there are clearly troubling headwinds from those who simply want cheap grain and those who do not accept that oil is ultimately a finite resource that cannot power our economy through the 21st century.

As I look to the future, guided by the RFA Board of Directors and informed by thoughtful analysis, I see an industry that will continue to grow and evolve. I see an industry that is committed to innovation and will most certainly continue to lead. We need to concentrate on several priorities.

We must work with policymakers and stakeholders to expand domestic markets for higher blends of ethanol and next generation biofuels.

Recently, the RFA and other industry stakeholders submitted final health affects data to EPA. The RFA has also completed a comprehensive Misfueling Mitigation Plan that gasoline marketers and ethanol producers will have to adopt prior to E15 commercialization. The Misfueling Mitigation Plan includes a requirement to survey markets where E15 is to be sold. You will hear more about all of this shortly from Kristy Moore. But the bottom line is that while we are getting ever closer to E15 commercialization, there is still much work to be done, particularly at the state level and with marketers to assure consumers have the choice to use E15. The RFA is committed to doing that work.

But E15, alone, will not allow ethanol and other biofuels to meet their energy or economic potential. Nor will it allow the RFS targets to be met. To do that, we'll have to move beyond low level blends. We'll have to encourage the commercialization of higher ethanol blends and E85. The RFA has been working with the Open Fuel Standard coalition to promote innovation and consumer choice so that we can grow beyond the 9 million FFV's on the road today and develop the infrastructure to support higher blends. To those that see that as a threat to so-called "drop-in" fuels, I would simply say that a more flexible infrastructure will ultimately benefit all biofuels and create a rising tide for all.

Ultimately, what we need to do is build the technical underpinnings and stakeholder recognition of ethanol's octane benefits. We have begun this process. There is a growing body of evidence to support the fact that future vehicles will likely need higher octane if automakers are to meet much more stringent CAFÉ standards. The final panel at this conference will discuss this issue in detail. But I would caution that here it might be best if we led by following the direction of the automakers, whose responsibility it will ultimately be to build vehicles meeting both emissions standards and performance expectations.

One of the most important things we need to do as an industry is to demonstrate our continued evolution by successfully building and operating the first wave of cellulosic ethanol facilities.

Here there are encouraging signs on the horizon with several commercial size facilities under construction today, including several projects right here in the State of Florida. I think it is safe to say we need to demonstrate success soon. The cellulose targets in the RFS are aggressive, and the industry's inability to meet them in a tough financial marketplace is being spun as abject failure, and being offered as an argument against the RFS itself.

The RFA will be working aggressively to extend the existing tax incentives for cellulosic ethanol and looking for other ways to enhance the prospects of commercialization. Certainly, the economic collapse and financing freeze over the past several years has delayed commercialization. But we should be careful not to confuse delay with failure. The industry is making progress, and the promise of ethanol

from new technologies and new feedstocks is too important to the future public and political support for biofuels that we cannot allow it to fail.

We must expand markets for ethanol and other bioproducts beyond our shores to growing markets overseas.

This we are already doing! 2011 was a watershed year for ethanol exports. The U.S. industry exported an astonishing 1.19 billion gallons of ethanol—roughly 9% of our total production--to all corners of the globe. High sugar prices and poor crops have prevented Brazil from meeting its own demand. Thus, Brazil, with 395 million gallons of fuel ethanol imports was our biggest customer.

Canada was the second-leading importer, accounting for 25% of total shipments in 2011. The Netherlands (124 mg) and the United Kingdom (119 mg) ranked third and fourth. And my personal favorite, the United Arab Emirates, an OPEC member, ranked fifth with 64.8 million gallons of imports from the U.S. Fellow OPEC member Nigeria was a regular importer of American-made ethanol as well.

In today's market, export opportunities are keeping plants open and operating, and exports will continue to be critical to our profitability moving forward. Naturally, not everyone is thrilled with our success. Brazil lowered its blend level from 25% to 20% in a direct response to its own failure to keep up with domestic demand and increased U.S. imports. The European Union has challenged U.S. exports, alleging unfair trade practices because of the now-expired tax incentive. The RFA is intent on dismantling trade barriers wherever they exist and assuring open access for our products. We will defend the U.S. ethanol industry against the specious charges of the EU, and work to assure Brazil's own trade practices match their lofty rhetoric of the past several years.

The U.S. is now the lowest cost ethanol producer in the world. That's the fact. And that's why a focus of the RFA is going to be to open new markets across the globe so that all biofuel producers will see increased demand.

Perhaps our most vexing challenge, however, will be to restore and grow political and public support for ethanol and biofuels generally.

We have been a victim of our success; because as we have grown rapidly over the past several years, those who object to our industry taking more of the barrel, and those who object to fair grain prices have joined together in a well-financed and highly motivated coalition against the continued growth of this industry. The angry birds, mad cows and fracking fanatics have succeeded in swinging the pendulum decidedly against biofuels. Certainly, if viewed from the lens of public perception, the state of the U.S. ethanol industry would be frustratingly, but decidedly, negative.

I don't believe we can race to a quick resolution here. I believe we're going to have to rebuild public support one community at a time – locally. There are ethanol production facilities in operation or under construction in 29 states across the country. There are suppliers and venders benefitting from this industry in all 50 states. We need to educate community leaders, businesses and political representatives of the very real impact our industry is having in these communities. As evident by the

statistics I have provided here, we have a great story to tell, we need to tell it, and tell it we will. Later today, there will be a great discussion of how ethanol producers can mobilize local resources to tell their story.

We also need to hold elected officials accountable. There is no excuse, for example, for Members of Congress from ethanol producing districts to support ignorant efforts to repeal EPA's E15 ruling or deny USDA funding for ethanol infrastructure. That requires all of us to get active in the political process. It is essential. Throughout the Iowa Caucus process, the RFA teamed with the Iowa RFA on a Fueled with Pride grassroots education effort to engage candidates in a conversation about ethanol policy. We forced every candidate to be on record with regard to their views on the RFS, E15, ethanol infrastructure and a fair energy tax policy. As a consequence, 4 of the 5 candidates for President, including of course President Obama, are on record supporting the RFS and our other priorities. We intend to continue this effort in battleground states during the general election. But you need to engage in similar efforts at state and local elections in your communities.

The pendulum does swing. The current fracking frenzy will cool and folks will put things back in perspective, including a world big enough for unconventional oil, conventional biofuels, and emerging advanced and cellulosic biofuels. But it will take time and effort. The RFA is committed to providing both.

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Steve Jobs also said, "It's not about faith in technology. It's about faith in people." I second that emotion. That's why I am so confident this industry will continue to grow and evolve and lead. I have faith in the people in this room. For 25 years I have been witness to the fruits of your innovation. I watched you build an industry from a regional curiosity to a national economic juggernaut. I watched you seize the opportunity of progressive public policy and drive this nation to a more secure energy future. And I am privileged to watch you today, build the next generation of ethanol production technologies, demonstrating once again your innovative spirit and leadership.

Thanks to you, the state of the ethanol industry is strong and getting stronger.

Thank you.