

**State of the Industry Remarks  
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**“Zeroing in on New Opportunities”**

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*As Prepared*

As I was thinking about the theme of this year’s conference, the story of Andrew Carnegie came to mind. Many people think of Carnegie as the most important industrialist and, perhaps, the most important philanthropist in our nation’s history. But many don’t know the story of how he got there.

In 1848, as famine swept across the British Isles, Carnegie and his family left Scotland to escape certain impoverishment and starvation. But things weren’t much better when they arrived in Pennsylvania. When his father’s weaving business failed, Carnegie, still just a 12-year-old boy, went to work in a cotton mill, earning just 1 dollar and 20 cents per week—which was barely enough to feed himself.

But it was during those years that Carnegie took advantage of an incredibly rare opportunity that would change his life: Colonel James Anderson, a pillar of the local community, owned a library and, in the evenings, he opened it for local working boys and orphans, something that would have been considered taboo in those days. When he wasn’t working in the mill, the library is where Andrew Carnegie spent his time. This is where he educated himself and learned the valuable lessons that would one day make him the nation’s most successful businessmen. Several years later, at the age of 20, Carnegie seized on another opportunity; he was offered 10 shares in a growing rail delivery company. He had no money, so he mortgaged his home in order to buy those shares. This was his very first investment, and he turned it into one of the largest fortunes in history—before giving most of that fortune away to charity.

Much later in life, as he reflected on his success, Carnegie summed it up this way: “The world of great opportunity is available now, as it has always been, only for those with great vision.”

We are fortunate to work in an industry that has always had great vision and has always made the most of every opportunity.

When smog filled the skies in the 1990s, the ethanol industry seized on the opportunity to reduce tailpipe pollution and clean up our air. When it was discovered that MTBE was contaminating groundwater in the early 2000s, we seized on the opportunity to provide a cleaner, safer source of octane and oxygen. When growing reliance on oil imports from the Middle East threatened our nation’s economic stability, we seized on the opportunity to secure the first-ever Renewable Fuel Standard. And in 2007, as greenhouse gas emissions rose to

record levels, we seized on the opportunity to transform the RFS into a program that required significant growth in the use of lower-carbon fuels like ethanol.

As the ethanol industry has demonstrated time after time, great opportunity is indeed available for those with great vision. And, as I'll explain in a moment, RFA and our partners are now Zeroing in on a New Opportunity unlike any other in the industry's history.

But first, let's take a brief look back at 2021, which turned out to be a year of incredible resilience and recovery for the U.S. ethanol industry.

After the COVID pandemic devastated world energy markets in 2020, U.S. ethanol producers got back on their feet in 2021 and produced 15 billion gallons of low-carbon renewable fuel. That was an 8 percent increase over 2020 and the largest annual volume growth since 2010. The output of distillers grains also rebounded, and production of distillers oil hit a new record of more than 3.8 billion pounds.

The increase in ethanol production in 2021 was driven by surging domestic demand. After COVID-related lockdowns slammed fuel consumption in 2020, Americans emerged in the spring of 2021 eager to travel and return to their normal routines. By summer, U.S. fuel demand had returned to pre-pandemic levels in much of the country.

And at 10.4 percent, ethanol comprised a larger share of U.S. gasoline than ever before, as increased consumption of E15 and E85 continued to pull the average inclusion rate above the so-called E10 blend wall.

U.S. ethanol exports also showed resilience in 2021, even in the face of protectionist trade barriers in key markets like Brazil, China, and Colombia. At 1.24 billion gallons, exports were down a bit from 2020, but still the fifth-highest ever.

The combination of rebounding demand and higher market prices for ethanol and co-products in 2021 resulted in a dramatic increase in the value of the industry's output. In fact, the \$52 billion in gross domestic product generated by the ethanol industry in 2021 was the second-highest ever recorded. And according to a new analysis from the University of Illinois, the industry's profitability in 2021 was the highest in seven years and second-highest in at least 15 years.

In addition, the ethanol industry directly supported 73,000 jobs in manufacturing and agriculture, as well as more than 330,000 indirect and induced jobs across all sectors of the U.S. economy. Those jobs added \$28.7 billion in income for households across the country.

So, while I might stop short of saying 2021 was a fantastic year, I think it is safe to say that 2021 was a pretty good year for the U.S. ethanol market.

It was also an encouraging year for ethanol policy and regulation, as our hard work and persistence finally produced a real opportunity to get the Renewable Fuel Standard back on track.

Just a month after President Joe Biden was sworn in as our nation's 46th president, EPA announced that it was changing its position on the use of small refinery exemptions under the RFS. The agency said that, after careful consideration, it now supported the Tenth Circuit's decision in the *RFA v. EPA* case, in which the court found EPA had vastly exceeded its authority in granting certain small refinery exemptions.

In December, EPA proposed to make its new position on SREs official. The agency announced its plans to deny 65 pending SRE petitions and apply the Tenth Circuit decision nationwide moving forward. EPA also announced that if it does grant any SREs in the future, it will reallocate those exempted volumes to ensure that annual RFS standards are maintained. Incidentally, the 65 pending denials represent nearly 3.1 billion gallons of required biofuel blending under the RFS. That's what's at stake here.

But that's not all that's at stake. In response to a separate legal challenge led by RFA, EPA is also revisiting 31 exemptions granted by the Trump administration for compliance year 2018. Those exemptions erased 1.3 billion gallons from the 2018 standards. If EPA also applies the Tenth Circuit decision to those exemptions—as we believe they should—it could result in some or all of that illegally waived volume being restored as well.

So, here we are today—nearly four years after RFA and our partners filed our lawsuit in the Tenth Circuit and two years after the Court ruled in our favor—and we are inches away from finally putting an end to the rampant abuse of the SRE program under the last administration.

None of this would have happened without the vision of the Renewable Fuels Association and our friends at NCGA, NFU, and ACE. We saw an opportunity to put a stop to the SRE nightmare and we seized it.

As you'll hear directly from EPA in a few moments, the agency has also proposed to set the 2022 RFS requirement for conventional renewable fuels at the statutory volume of 15 billion gallons, which we strongly support. This proposal, along with the assurance that SREs won't be used to erode volumes, would—for the first time ever—result in the enforcement of a true 15-billion-gallon requirement, as intended by Congress.

And, at long last, EPA also proposed to restore 500 million gallons of RFS blending requirements that were illegally waived from the 2016 RFS standards during the Obama Administration. Back then, RFA and other groups sued EPA over its misuse of its waiver authority, and in 2017 a federal court found in our favor and ordered EPA to restore the volume. It's taken five years, but EPA under new leadership is finally addressing this issue by adding a supplemental blending requirement to the standards for 2022 and 2023.

Unfortunately, EPA also proposed to retroactively revise the 2020 RFS standards, which were finalized more than two years ago. And this one is a real head-scratcher. Revising the 2020 standards now would unfairly penalize market participants who invested and acted in good faith to comply, while only benefitting those oil refiners who purposely avoided blending sufficient biofuel volumes or purchasing RIN credits during the pandemic.

Refiners say that an adjustment to the 2020 standards is necessary because COVID caused a substantial drop in gasoline and diesel consumption, making it harder for them to blend required volumes of renewable fuel. However, because EPA converts annual volume obligations to percentage standards, the actual renewable fuel volumes required had already adjusted lower with reduced gasoline and diesel consumption.

The bottom line is that a retroactive revision to the 2020 standards would set a dangerous precedent and would be completely inconsistent with the agency's past positions and statements.

But aside from reopening the final 2020 standards, RFA believes EPA's proposals represent an important and long-awaited step toward restoring order, integrity and stability to the Renewable Fuel Standard program--and the Biden Administration deserves credit for that.

So, to provide certainty to the marketplace this year, we are encouraging EPA to expeditiously finalize the 2022 standards, the court-ordered supplemental volume, and the new approach on SREs. At the same time, we are urging them to eliminate the ill-conceived and illegal 2020 revision.

While we won't rest until the final rules are published, at long last and with the unwavering support of the people in this room, things appear to be headed in the right direction for the RFS.

Increased blending of low-cost ethanol under a strong RFS in 2022 wouldn't just be good news for ethanol producers and farmers—it would also be good news for American consumers, who are currently facing the highest energy price inflation since 2008 and feeling pain at the pump with each fill-up.

Resurgent global demand, sluggish output, supply chain woes, and geopolitical tensions pushed crude oil prices to a seven-year high in 2021. Not surprisingly, retail gas prices also hit a seven-year high. And the average American household spent nearly \$1,000 more for gasoline in 2021 than it did in 2020.

Prices have continued to rise so far in 2022, with oil prices topping \$95 per barrel last week and average retail gas prices hitting \$3.50 a gallon. We haven't seen prices this high since the summer of 2014.

All of this reminds us of an inconvenient reality: We cannot frack our way to low gas prices and energy security. Whether we like it or not, pump prices here in America continue to be influenced by the whims of OPEC, and geopolitical events—like the current situation in Ukraine. Clearly, increased domestic production of crude oil alone is not enough to insulate American consumers from price shocks and volatility at the pump.

In recent weeks, President Biden has been saying, "I'm going to work like the devil to bring gas prices down."

But so far, the administration's efforts to put a lid on gas prices simply haven't worked. They have called upon OPEC to increase the global supply of crude oil; they have called for investigations into anti-consumer behavior by oil companies; they have released oil from the strategic petroleum reserve; and, now, they are looking at suspending the federal gas tax, which pays for maintenance and improvements for our nation's roads and bridges.

Still, crude oil prices continue to rise, and high gas prices continue to bedevil the administration.

On numerous occasions in recent months, RFA has reminded the White House that it is overlooking a key opportunity to immediately provide relief at the pump for American consumers. Allowing retailers to sell higher blends of low-cost ethanol—like E15—would instantly help moderate prices at the pump.

The proof is in the pudding. Today, fuel blenders can buy a gallon of ethanol for about 50 cents less than a gallon gasoline. At retail, E15 is typically 5 to 15 cents cheaper than E10, and we've seen that discount as large as 25 cents in some places in recent weeks. Simply replacing E10

with E15 would reduce our nation's spending on gasoline by about \$15 billion, saving the average American household \$125 on its annual gasoline bill.

Make no mistake, the quickest way to lower gas prices would be to restore the ability of retailers to sell E15 year-round and allow them to do it through existing equipment. The Biden administration could make that happen with little more than the stroke of a pen, and we will continue to encourage them to pursue this commonsense strategy for reducing consumer fuel prices in the near term.

But now it's time to zero in on new opportunities for ethanol. It's time to look forward and craft our vision for ethanol's future.

Just as the ethanol industry seized on opportunities to stimulate the rural economy, reduce smog-forming air pollution, and bolster energy security, we now have—right in front of us—another great opportunity to provide a solution to one of the world's most daunting challenges: reducing carbon emissions and combatting climate change.

Indeed, the quest to achieve net-zero carbon emissions economy-wide by 2050 may very well be the greatest opportunity for growth and value creation in the industry's history. And we cannot afford to miss this opportunity—not just because it will help our industry grow and thrive, but because the very health of the planet is at stake!

As the leading source of greenhouse gas emissions in the United States, the transportation sector will continue to be the top priority for national decarbonization efforts. Every year, hundreds of millions of cars, trucks, buses, planes, trains, boats and other vehicles spew nearly 2 billion tons of GHG emissions into the atmosphere.

Going from 2 billion tons to zero emissions by 2050 will not be easy—and, I would argue, it simply won't be possible without a much larger role for renewable fuels like ethanol. Now, some would like you to believe that “electrifying everything” is the only way to address this problem; but, for all the reasons we discussed in depth at last year's NEC, there is a growing recognition that liquid fuels will be needed for a very, very long time. We need to take action NOW to decarbonize those fuels! And while we're on the topic, you definitely don't want to miss Bob McNally's comments on the future of liquid fuels this afternoon.

The good news is, ethanol is already halfway down the road to net-zero emissions. According to the Department of Energy's Argonne National Laboratory, typical corn ethanol provides a 44-52 percent GHG savings compared to gasoline. The researchers also found that ethanol's carbon intensity has fallen by 23 percent since 2005, as new technologies and innovation increased the efficiency of every step in the supply chain.

Similarly, researchers affiliated with Harvard University, MIT, and Tufts University concluded that today's corn ethanol offers an average GHG reduction of 46 percent versus gasoline.

And the list goes on. The California Air Resources Board found that the ethanol used in the state in 2020 reduced GHG emissions by an average of 41 percent, and research conducted for RFA by Life Cycle Associates shows that the use of renewable fuels since 2008 has reduced GHG emissions by nearly 1 billion metric tons.

With the rapid emergence of new technologies and more efficient practices, even greater emissions reductions are coming to the ethanol sector very soon, and we are already well on

our way to producing carbon-neutral liquid fuel. Adoption of carbon capture utilization and storage; the use of biogas and renewable electricity at biorefineries; climate-smart farming practices; and other technologies will take corn ethanol to net-zero emissions in the decades ahead.

In fact, RFA's member companies are so confident about the promise of carbon neutral ethanol that they adopted a resolution last summer to achieve a net-zero carbon footprint, on average, for ethanol by 2050 or sooner. That pledge was memorialized in a letter to President Biden last July, and RFA's members are already taking major steps toward that goal. A little later this morning you are going to hear about a brand new study that lays out the many pathways available to ethanol producers for reaching net zero emissions.

But the light-duty passenger vehicle fleet isn't the only segment of the transportation sector where rapid decarbonization is needed. As I showed earlier, nearly one-quarter of total transportation sector emissions come from medium- and heavy-duty trucks and another 15 percent comes from aircraft, boats and rail. But with new engine technologies and emerging renewable fuel conversion processes, ethanol will soon help reduce carbon emissions from those transportation sources as well. Just ask our friends at ClearFlame and John Deere, or the sustainable aviation fuel pioneers Gevo and LanzaJet, who you'll hear from tomorrow.

And it doesn't end there. With the right chemistry and technology, ethanol can serve not only as a future low-carbon fuel for jets, ocean liners, trucks and farm equipment, but also as the fundamental building block for sustainable chemicals and plastics. In reality, anything you can do with a barrel of crude oil, we can do with a barrel of renewable ethanol. And as you'll hear from Volkswagen at our luncheon today, ethanol is even poised to serve as a leading feedstock for green hydrogen to power fuel cells.

It's been at least 15 years since we've seen this level of innovation and investment in renewable fuels and chemicals. And the new uses and applications for ethanol being developed today were previously unimaginable.

So, what's driving all of this activity and interest? The answer is simple and can be summed up in one word: CARBON.

Governments, businesses, investors, and consumers around the world are demanding sustainable, lower-carbon products—including fuels and chemicals. And ethanol is available here and now at a low cost to meet those demands.

The movement toward low-carbon fuels and chemicals has been picking up speed for several years, but this transition could really kick into high gear with the right mix of policies, regulatory certainty, and investment. Policies that create transparent economic incentives to reduce carbon could open a world of new opportunities for the ethanol industry.

That all starts with the RFS. As the only existing federal law on the books today that requires the use of lower-carbon renewable fuels, the RFS should continue to serve as the bedrock for our nation's decarbonization efforts.

Later this spring or early summer, EPA is expected to propose the RFS volumes for 2023 and possibly beyond. And as many of you know, the law passed by Congress in 2007 only specified volume requirements through 2022. So, EPA does have more discretion in setting future

volumes—but the agency must also remain faithful to Congress’s clear intent that the RFS must drive growth in renewable fuel production and use well beyond 2022.

If our nation’s leaders are serious about decarbonization, the only logical path forward for the RFS is to increase the volume requirements and maximize the program’s ability to drive carbon reduction in the transportation fuels sector. That’s what RFA has been encouraging EPA to do.

In addition, we believe the next chapter of the RFS makes it easier for new low-carbon renewable fuels and feedstocks to participate in the program. EPA has already taken a step toward doing this by proposing to allow the use of bio-intermediates, but more can be done to facilitate innovation and open the door to new pathways and processes.

And while the RFS will continue to serve as the foundational policy for reducing GHG emissions from transportation, getting to net-zero emissions will require additional, complementary policy measures that create market-based incentives for reducing carbon. That’s why RFA supports the concept of a national Low Carbon Fuel Standard, and we are working with members of Congress to begin serious discussions around such a policy in 2022.

It’s also why we support the Next Generation Fuels Act, introduced last year by Rep. Cheri Bustos of Illinois. That bill would require liquid fuel suppliers to meet certain carbon performance and fuel quality standards, while incentivizing more efficient engine technologies.

Whether it’s a Low Carbon Fuel Standard or a High-Octane Low-Carbon program, we believe future decarbonization policies must take a technology-neutral, performance-based approach that focuses on reducing carbon emissions and increasing fuel efficiency—without tipping the scales toward electrification or dictating the use of specific fuels or vehicles.

And that means we have to have science-based, consistent, and transparent lifecycle accounting tools for estimating the carbon footprint of various low-carbon fuel and vehicle options. When it comes to assessing the carbon impacts of our transportation decisions, we simply can’t have different rules and different tools for different fuels.

RFA continues to strongly support the use of the Department of Energy’s GREET model, which is peer reviewed, accepted worldwide, regularly updated, and is the most robust and authoritative tool for lifecycle carbon accounting. And we have to continue to correct the record and aggressively push back when junk science—like the new study from the University of Wisconsin—is used to make false and inflammatory claims about ethanol’s carbon footprint.

A strong RFS in 2023 and beyond; complementary fuel decarbonization policies that are technology-neutral; and intellectually honest, science-based carbon accounting – these are the keys to our success moving forward. Just as Andrew Carnegie said, a world of great opportunity truly is available now. And this is RFA’s vision for zeroing in on that opportunity.

Now, it’s been suggested that I use too many baseball analogies and anecdotes to illustrate my points, so I’ll refrain from doing that this year. Which is fine—unless the players and owners get their act together soon, we may not have baseball this year anyway! So, in closing, and in honor of the Rams’ recent Super Bowl win, I’ll leave you with a football story instead.

This is a story about a guy who had incredible vision, determination, and confidence in his abilities as a young football player. He always imagined he’d play professional football one day. But he wasn’t drafted out of college and he was cut from the Green Bay Packers training camp.

He never was given the chance to fully realize his potential or to show the world what he could do. So, rather than scoring touchdowns in the NFL, he ended up stocking shelves at a grocery store to make ends meet while he bounced around in semi-pro leagues.

But when his big opportunity finally came knocking, Kurt Warner—the pride of Burlington, Iowa—was ready for it. Filling in for injured pro-bowler Trent Green, the Warner remarkably led the St. Louis Rams to a storybook season in 1999 and an improbable victory in Super Bowl XXXIV.

Against all odds, Kurt Warner would go on to have a Hall of Fame career—all because he had the great vision to seize a great opportunity.

...What will we do with our great opportunity? Thank you!