DISCUSSION DRAFT: THE 21ST CENTURY TRANSPORTATION FUELS ACT

HEARING

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENT

OF THE

COMMITTEE ON ENERGY AND COMMERCE

HOUSE OF REPRESENTATIVES

ONE HUNDRED FIFTEENTH CONGRESS

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C O N T E N T S

WITNESSES

SUBMITTED MATERIAL

DISCUSSION DRAFT: THE 21ST CENTURY TRANSPORTATION FUELS ACT

TUESDAY, DECEMBER 11, 2018

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ENVIRONMENT,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittee met, pursuant to call, at 10:02 a.m., in room 2123, Rayburn House Office Building, Hon. John Shimkus (chairman of the subcommittee) presiding.

Members present: Representatives Shimkus, McKinley, Barton, Olson, Johnson, Flores, Hudson, Walberg, Carter, Duncan, Walden (ex officio), Tonko, Ruiz, Peters, and Green.

Also present: Representative Loebsack.

Staff present: Jerry Couri, Deputy Chief Counsel, Environment; Wyatt Ellertson, Professional Staff Member, Energy and Environment; Adam Fromm, Director of Outreach and Coalitions; Ali Fulling, Legislative Clerk, Oversight and Investigations, Digital Commerce and Consumer Protection; Jordan Haverly, Policy Coordinator, Environment; Mary Martin, Chief Counsel, Energy and Environment; Sarah Matthews, Press Secretary, Energy and Environment; Brandon Mooney, Deputy Chief Counsel, Energy; Caitlin Haberman, Minority Professional Staff Member; Rick Kessler, Minority Senior Advisor and Staff Director, Energy and Environment; Alexander Ratner, Minority Policy Analyst; Tim Robinson, Minority Chief Counsel; Andrew Souvall, Minority Director of Communications, Member Services, and Outreach; Teresa Williams, AAAS Fellow.

Mr. SHIMKUS. The Subcommittee on the Environment will now come to order.

Before I do my opening statement, I want to—my last chance to be in the chair, I want to thank the loyal opposition and the minority.

I think the subcommittee has had a pretty good record of moving some very contentious pieces of legislation, from TSCA to the Safe Drinking Water Act to Brownfields to the nuclear waste reauthorization language that passed 340 to 72.

In all honesty, couldn't do it without your help, and so I want to publicly say that and thank you.

I'll now recognize myself for 5 minutes for an opening statement.

OPENING STATEMENT OF HON. JOHN SHIMKUS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Good morning, and thank you all for being here. Given the large number of witnesses and in the interest of maximizing time for questions and discussions, I will keep my opening as brief as possible and welcome others to do the same.

Over the last 2 years, many of you have heard me say transportation fuels legislation was one of my "reach goals" for this Congress.

To that end, interested Members participated in three stakeholder roundtables to get this conversation started and the Environment Subcommittee held five hearings to further explore the future of transportation fuels.

I want to thank Chairman Walden for not just allowing but encouraging this effort. I also want to thank the witnesses before us today who actively engaged in those roundtables and hearings, and I especially want to thank Congressman Flores who coauthored the resulting discussion draft with me.

Rather than looking at individual Federal transportation fuel policies on their own, the draft 21st Century Transportation Fuels Act takes a wider view of those

policies and considers how they might work together to bring more value to consumers and more certainty to stakeholders.

The draft would transition from blend-specific mandates to performance-based standards for future fuels and vehicles, remove long-standing barriers to the availability and usability of higher ethanol blends, provide an additional decade of certainty for advanced biofuels, and harmonize EPA and DOT vehicle efficiency programs.

The need for this type of comprehensive reform is timely. Stakeholders on all sides of this debate have been whipsawed by months, by rumors and actual administration actions, and that uncertainty will only increase after 2022 when EPA receives even broader discretion to set biofuel blending requirements.

In fact, given EIA projections of declining liquid transportation fuel demand, it's difficult to envision a post-2022 scenario in which biofuel volumes would not actually be lower than they are today.

I look forward to a constructive dialogue about what the future holds as well as what the discussion draft would mean for the various stakeholders.

[The prepared statement of Mr. Shimkus follows:]

PREPARED STATEMENT OF HON. JOHN SHIMKUS

Good morning and thank you all for being here. Given the large number of witnesses, and in the interest of maximizing time for questions and discussion, I will keep my opening as brief as possible and welcome others to do the same.

Over the last 2 years, many of you have heard me say transportation fuels legislation was one of my 'reach goals' this Congress. To that end, interested Members participated in three stakeholder roundtables to get this conversation started, and the Environment Subcommittee held five hearings to further explore the future of transportation fuels. I want to thank Chairman Walden for not just allowing but encouraging this effort, I also want to thank the witness before us today who all actively engaged in those roundtables and hearings, and I especially want to thank Congressman Flores who coauthored the resulting discussion draft with me.

Rather than looking at individual Federal transportation fuel policies on their own, the draft 21st Century Transportation Fuels Act takes a wider view of those

policies and considers how they might work together to bring more value to consumers and more certainty to stakeholders. The draft would transition from blend-specific mandates to performance-based standards for future fuels and vehicles, remove long-standing barriers to the availability and usability of higher ethanol blends, provide an additional decade of certainty for advanced biofuels, and harmonize EPA and DOT vehicle efficiency programs.

The need for this type of comprehensive reform is timely. Stakeholders on all sides of this debate have been whipsawed for months by rumored and actual administrative actions, and that uncertainty will only increase after 2022 when EPA receives even broader discretion to set biofuel blending requirements. In fact, given EIA projections of declining liquid transportation fuel demand, it's difficult to envision a post-2022 scenario in which biofuel volumes would not actually be lower than they are today. I look forward to a constructive dialogue about what the future holds as well as what the discussion draft would mean for the various stakeholders. And with that I yield the remainder of my time to Mr. Flores.

Mr. SHIMKUS. And with that, I yield the remainder of my time to Mr. Flores.

Mr. FLORES. Thank you, Mr. Chairman.

I appreciate you calling this hearing on today's discussion draft. I'd also like to extend a warm welcome to one of the folks that grew up in the same little town I did up in the Texas Panhandle, Mr. Wesley Spurlock. Great to have you here as a witness.

Since the RFS was first established in 2005 and expanded in 2007, much has changed in the market for transportation fuels. If Federal policies are not routinely evaluated and updated to reflect market conditions, consumers end up having less than optimal choices.

Let me give you a few examples of the concerns that have been raised before this committee about the current status quo of American fuels policy.

Number one, biofuels producers raise concerns on the annual implementation of the RFS and other regulatory barriers to the market.

Two, refiners face increasing cost of complying with the RFS.

Three, automakers face challenges in complying with efficiency programs under two different agencies inside the EPA and the DOT.

As Chairman Shimkus—number four, some environmental communities believe that the current generation ethanol or gen 1 ethanol is an environment—creates environmental problems.

As Chairman Shimkus stated, the 21st Century Transportation Fuel Act Discussion Draft takes a larger view of Federal transportation fuel policies.

This draft incorporates into legislative text many of the ideas from three bipartisan roundtables and five subcommittee hearings.

For consumers, higher-octane fuels can bring increased economy and performance for the next generation of engines for stakeholders transitioning to the RFS.

Transitioning RFS to national octane standards creates a new market opportunity for biofuels producers and gives compliance certainty to refiners and automakers.

And before the panel starts, I have a few reflections on the testimony that I read today. One is we have to put the consumers and the environment first, not our self-interest.

Number two, the choice is clear. We can either go with the status quo, which almost everybody has said is broken, or we can have a

compromise solution because I can guarantee you there is not going to be a perfect solution that's going to make each of you 100 percent happy.

These organizations spent valuable time giving feedback on this and that constructive feedback was appreciated. Some organizations spent their time bashing other stakeholders. That was not productive.

And so the thing I would ask you is to stay engaged and remember that we don't all get 100 percent of what we want. We are trying to come up with an optimal solution for the consumers and the environment.

Thank you, and I yield back the balance of my time.

Mr. SHIMKUS. The gentleman yields back his time.

The Chair now recognizes the ranking member of the subcommittee, Mr. Tonko, for 5 minutes.

OPENING STATEMENT OF HON. PAUL TONKO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. TONKO. Thank you, Chair Shimkus.

And Mr. Chair, I do want to thank you for your leadership of the subcommittee and your cooperative spirit that has moved us along in the right direction.

I agree with your assessment. We have been productive and very successful as a subcommittee. And I thank our witnesses, not just for joining us this morning but also for your input in this process over the course of the 115th Congress.

Before we go any further, I do want to recognize Chair Shimkus and Mr. Flores for all the work that went into producing this discussion draft. For the past 2 years, the subcommittee has hosted three stakeholder roundtables and five hearings on transportation fuels policy.

As we heard at previous hearings, this is a complicated problem with no easy solution. So I appreciate the effort that went into developing the proposal.

These Members were given an incredibly difficult assignment, trying to find common ground on an issue where many stakeholders say it does not exist.

While I have some serious concerns with the draft as it is currently written, I do think that the chair and Mr. Flores have done an admirable job and conducted a process in good faith to try to create that common ground.

For the past 2 years, we have heard about issues with the implementation of the Renewable Fuel Standard program, which has existed under administrations from both parties.

In my mind, the program can certainly be improved. We will hear about the use of small refinery waivers and the challenges with pathway approvals this morning and, despite some flaws, I believe it is critical, whether through RFS or another program, that the benefits of our Nation's clean energy transition are shared throughout the country including rural communities.

Unfortunately, this administration's actions indicate that they do not share this belief. We have seen it through unnecessary trade disputes that hit farmers hardest. We have seen it when the president continues to deny the threat of climate change, despite the

National Climate Assessment's finding that changes in precipitation coupled with rising extreme temperatures could reduce Midwest agricultural productivity to levels of the 1980s before midcentury.

These types of actions are harming and will continue to harm rural economies and undermine the goals of the RFS. We should be working on legislation that meets our collective need for a cleaner energy future while directly benefitting and creating opportunities in rural communities.

From the start of this process I have told stakeholders that I support the RFS or its potential replacement to the extent that it results in fewer greenhouse gas emissions.

I am not certain that would be the outcome under the proposal before us. So while I look forward to hearing everyone's feedback, I do have concerns in its current form.

I specifically want to mention the proposal's changes to the CAFE program in Title 3 of the draft. Perhaps all of today's witnesses will acknowledge the potential for high-octane fuels as a method to achieve fuel economy standards.

If CAFE compliance will become easier through a high-octane performance standard on top of the administration's freeze of previously announced standards, I do not think we should also provide additional credits to achieve compliance as would occur under Title 3.

If we really want to drive efficiency and innovation while creating certainty, this discussion draft should drop the so-called harmonization language and include legislation written by our colleague, Ms. Matsui, to preserve the previously announced CAFE standards.

Finally, I want to say perhaps the only thing that will unite today's witnesses—granted, it is unity through opposition.

It is my belief that the Federal Government should be advancing policies that reduce demand and reliance on liquid fuels. I am not naive enough to think this will happen overnight. But we know that the transportation sector is now the greatest source of greenhouse gas emissions in the United States and that our climate policy must address it.

Earlier this year, we held a hearing that focused on electrification. But, sadly, none of the ideas discussed are reflected in the 21st Century Transportation Fuels Act.

If we are going to do a major overhaul of Federal fuel and vehicle programs, we must look at how to further promote EVs as well.

For the time being, while liquid fuels continue to be the predominant energy source in transportation, these fuels should be as clean and used as efficiently as possible.

I thank you again, Mr. Chair, for your hard work on developing this proposal and with that, yield back.

[The prepared statement of Mr. Tonko follows:]

PREPARED STATEMENT OF HON. PAUL TONKO

Thank you, Chairman Shimkus. And thank you to our witnesses, not just for joining us this morning, but also for all your input in this process over the course of the 115th Congress.

Before we go any further, I want to recognize Chairman Shimkus and Mr. Flores for all the work that went into producing this discussion draft.

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In my mind, the program can certainly be improved. We will hear about the use of small refinery waivers and the challenges with pathway approvals this morning.

And despite some flaws, I believe it is critical—whether through RFS or another program—that the benefits of our Nation's clean energy transition are shared throughout the country, including rural communities.

Unfortunately, this administration's actions indicate that they do not share this belief.

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These types of actions are harming, and will continue to harm, rural economies and undermine the goals of the RFS.

We should be working on legislation that meets our collective need for a cleaner energy future while directly benefiting, and creating opportunities in, rural communities.

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If CAFE compliance will become easier through a high-octane performance standard—on top of the administration's freeze of previously announced standards—I do not think we should also provide additional credits to achieve compliance, as would occur under Title III.

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If we are going to do a major overhaul of Federal fuel and vehicle programs, we must look at how to further promote EVs as well.

For the time being, while liquid fuels continue to be the predominant energy source in transportation, these fuels should be as clean, and used as efficiently, as possible.

Thank you again, Mr. Chairman, for your hard work on developing this proposal. I yield back.

Mr. SHIMKUS. The gentleman yields back his time.

The Chair now recognizes the chairman of the full committee, Chairman Walden, for 5 minutes.

OPENING STATEMENT OF HON. GREG WALDEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OREGON

Mr. WALDEN. Thank you, Mr. Chairman.

I appreciate that, and I want to thank you and Mr. Flores and others for their work on this recent release of your discussion draft on the topic of our hearing today.

You have done an amazing job on this and it is tough work, and I appreciate the seriousness that you have brought to this matter and I am glad you have followed through on your promise to push toward a legislative solution rather than let the traditional parties on this issue comfortably sit in their foxholes in perpetuity.

It is one of the reasons why this hearing today is so important. This draft did not happen overnight.

We all know that, and I want to acknowledge and commend the countless hours both you and Mr. Flores and our staffs and your staffs have spent trying to figure out what makes sense for our Nation's transportation fuel mix.

As you have already said, Mr. Chairman, over the past 2 years, this subcommittee has held three roundtable discussions to educate Members and another five hearings—today marking the sixth—to fine tune the committee's understanding of a range of issues related to liquid fuels and the motor vehicles powered by them.

Throughout this process, I have been struck by the acknowledgment that liquid-fuel-powered motor vehicles are expected to be the dominant type of vehicle used by Americans for decades to come and no one knows what is going to happen regarding our Nation's renewable fuel mix beginning in 2023, which is why this draft is so important.

By transitioning to higher-octane fuel blends and vehicles whose engines are designed to maximize fuel efficiency, we can both incorporate more renewable liquid fuels into the fuel supply while also increasing miles per gallon for consumers.

I am pleased the discussion draft includes provisions I strongly support, especially the one which removes the gross inequity in Federal fuel policy regarding wood and forest management, so that woody biomass can play a larger role in the RFS program.

But as the chairman stated, this draft is not a final product. We all know that. Getting this policy right is not easy, especially with complex and sometimes contentious issues like the Renewable Fuel Standard and vehicle fuel economy standards.

Like any major legislation just starting out, it needs additional refinement. I am interested in learning from stakeholder expertise about what necessary refinements are needed for this bill and to hear about any important items that are not contained in it but that you believe should be.

I am also concerned about what makes sense for the interests of consumers, especially as it relates to access to and pricing for and the availability and quantity of the engines and fuels that consumers demand or that Federal legislation requires.

These are issues that were tangentially discussed in our hearings, but I feel can only be appropriately honed when people are evaluating a concrete proposal and providing real feedback about the best way to accomplish these goals.

So to me, the bottom line is that new fuels and vehicles must first and foremost deliver benefits to consumers while improving our environment.

I know some folks will want to discuss electric vehicles in conjunction with this bill and, frankly, as a hybrid driver on both coasts, I am certainly interested in hearing more on this subject. But liquid fuels for motor vehicles and the looming question arising in 2023 make the most sense to tackle right now.

As I said at our third hearing, as things stand right now I have great concerns about the viability of EVs in meeting the needs of rural America, not to mention range and price issues that make EVs unrealistic for many Americans today, even as new innovations make their use more and more reasonable for many in our urban and suburban areas.

I want to welcome our witnesses and those who chose to send the committee their comments to be included in the record. I look forward to learning from stakeholder expertise and really appreciate you all being here today.

I know some interests have chosen either to be hypercritical or not to offer suggestions. But recognizing time is short for addressing this issue in a timely manner, I think they do so at the peril of their members.

With that, Mr. Chairman, I thank you and Mr. Flores and others for your work, and I yield back the balance of my time.

[The prepared statement of Mr. Walden follows:]

PREPARED STATEMENT OF HON. GREG WALDEN

Thank you, Mr. Chairman, for recognizing me for an opening statement.

I congratulate you and Mr. Flores on the recent release of your discussion draft, the topic of our hearing today. I appreciate the seriousness that you have brought to this matter; and I am glad you have followed through on your promise to push toward a legislative solution rather than let the traditional parties on this issue comfortably sit in their foxholes in perpetuity. It is one of the reasons why this hearing today is so important.

This draft did not happen overnight.

I want to acknowledge and commend the countless hours both you and Mr. Flores, and your staffs, have spent trying to figure out what makes sense for our Nation's transportation fuel mix. As you have already said, Mr. Chairman, over the past 2 years, this subcommittee has held three roundtable discussions to educate Members and another five hearings—today making six—to fine tune the committee's understanding of a range of issues related to liquid fuels and the motor vehicles powered by them.

Throughout this process, I have been struck by the acknowledgement that liquid fuel powered motor vehicles are expected to be the dominant type of vehicle used by Americans for decades to come and that no one knows what is going to happen regarding our Nation's renewable fuel mix beginning in 2023, which is why this draft is so important. By transitioning to higher-octane fuel blends and vehicles—whose engines are designed to maximize fuel efficiency, we can both incorporate more renewable liquid fuels into the fuel supply while also increasing miles per gallon for consumers.

I am pleased the discussion draft includes provisions I strongly support—especially the one which removes the gross inequity in Federal fuel policy regarding wood and forest management so that woody biomass can play a larger role in the RFS program; but as the chairman stated, this draft is not a final product. Getting the policy right isn't always easy, especially with complex and sometimes contentious issues like the Renewable Fuel Standard and vehicle fuel economy standards. Like any major legislation just starting out, it needs additional refinement. I am interested in learning from stakeholder expertise about what necessary refinements are needed for this bill and to hear about any important items that are not contained in it, but they believe should be.

I am most concerned about what makes sense for the interests of consumers, especially as it relates to access to, pricing for, and the availability and quality of the engines and fuels that consumers demand or that Federal legislation requires. These are issues that were tangentially discussed in our hearings, but I feel can only be appropriately honed when people are evaluating a concrete proposal and providing feedback about the best way to accomplish these goals. To me, the bottom line is that new fuels and vehicles must first and foremost deliver benefits to consumers while improving our environment.

I know some folks will want to discuss electric vehicles in conjunction with this bill. As a hybrid driver on both coasts, I am certainly interested in hearing more on this subject, but liquid fuels for motor vehicles and the looming questions arising in 2023 make the most sense to tackle right now. As I said at our third hearing, as things stand right now, I have great concerns about the viability of EV's in meeting the needs of rural America, not to mention range and price issues that make EVs unrealistic for many Americans today, even as new innovations make their use more and more reasonable for many in our urban and suburban areas.

I want to welcome our many witnesses and those who chose to send the committee their comments to be included in the record. I look forward to learning from stakeholder expertise about how to improve this bill. Further, since we want discussion, I encourage you to be forthright, but constructive about these proposals. I know some interests have chosen either to be hyper-critical or not to offer suggestions, but recognizing time is short for addressing this issue in a timely manner, I think they do so at the peril of their members.

Thank you, again, Mr. Chairman, for this time. I yield back whatever remaining time I might have.

Mr. SHIMKUS. The gentleman yields back the balance of his time.

The ranking member of the full committee is not able to be here. So we will now conclude with Members' opening statements. The Chair would like to remind Members that, pursuant to committee rules, all Members' opening statements will be made part of the record.

We want to thank our witnesses for being here today and to testify to the subcommittee. Today's witnesses will have the opportunity to give opening statements followed by a round of questions from Members.

And our first witness panel is seated. I will introduce you as you're asked to speak, and we would like to start with Mr. Steve Zimmer, executive director, United States Council for Automotive Research, USCAR.

Sir, you are welcome and you're recognized for 5 minutes.

STATEMENTS OF STEVE ZIMMER, EXECUTIVE DIRECTOR, UNITED STATES COUNCIL FOR AUTOMOTIVE RESEARCH; R. TIMOTHY COLUMBUS, COUNSEL, NATIONAL ASSOCIATION OF CONVENIENCE STORES AND SOCIETY OF INDEPENDENT GASOLINE MARKETERS OF AMERICA; WESLEY SPURLOCK, PAST PRESIDENT AND CHAIRMAN, NATIONAL CORN GROWERS ASSOCIATION; EMILY SKOR, CHIEF EXECUTIVE OFFICER, GROWTH ENERGY; GEOFF COOPER, PRESIDENT AND CHIEF EXECUTIVE OFFICER, RENEWABLE FUELS ASSOCIATION; AND CHET THOMPSON, PRESIDENT AND CHIEF EXECUTIVE OFFICER, AMERICAN FUEL AND PETROCHEMICAL MANUFACTURERS

STATEMENT OF STEVE ZIMMER

Mr. ZIMMER. Thank you.

Chairman Walden, Chairman Shimkus, Ranking Member Tonko, and members of the committee, my name is Steve Zimmer, execu-

tive director of the United States Council for Automotive Research, LLC, also known as USCAR.

It's a collaborative automotive technology research organization of FCA US, Ford Motor Company, and General Motors.

USCAR provides a legal framework for its three members to conduct noncompetitive research supporting a broad technical research portfolio in eight broad areas: power trains, electrification, electronics, batteries, hydrogen and fuel cells, manufacturing safety and materials.

The research conducted at USCAR results in a shared knowledge base that enables development of new automotive technologies that solve industry-wide challenges and strengthens the U.S. auto industry.

This approach supports multiple pathways to continually improve or evolve new automotive propulsion systems that meet current and future fuel efficiency, emissions and safety requirements, and creates innovative and environmentally responsible solutions for customers.

Each USCAR member has its own independent research organization and portfolio, but at USCAR they work together. These research tasks would be impossible to achieve as quickly, if at all, as individual companies.

I appreciate the committee's invitation to appear today to address the discussion draft for the 21st Century Transportation Fuels Act. As you know, personal mobility is changing at an unprecedented pace.

The automobile industry has and will deliver mobility options that balance many technical, safety, and society requirements for the driving public.

However, now more than ever all major mobility stakeholders must better coordinate and develop integrated energy and mobility strategies together.

This committee's discussion draft is a great milestone and excellent example of such an integrated approach. Setting a national minimum octane standard is a necessary step towards the continuing development of the next generation of high-efficiency vehicles.

We commend the committee and the industry stakeholders involved and for their collaboration in this effort. We believe the proposed increase to 95 research octane number, or RON, as the new U.S. standard for regular gasoline for year 2023 and beyond will be a win for consumers, the auto industry, fuel producers, agriculture, retailers, and society.

USCAR and its member companies are encouraged by the proposed 21st Century Transportation Fuels Act, the discussion draft that provides an excellent starting point for national octane standard legislation, higher-octane-rated gasoline facilities and the development of more efficient spark ignition engines.

It is estimated that an increase in RON to 95 enables an average 3 percent improvement in fuel economy of newer vehicles. Increasing octane is beneficial for virtually all spark ignition engines regardless of the manufacturer, engine size, or architecture and does include both hybrid, electric, and plug-in hybrid electric vehicles.

While establishing a new 95 RON grade is the critical piece of this proposed approach, it doesn't preclude the availability of a higher RON octane grades for use in high-performance vehicles.

In Europe, 95 RON is regular while performance grade is 98 RON or higher. While we view the discussion draft as a significant step in the right direction, we have some concerns and questions regarding several provisions.

These include the provisions relating to a waiver for fuels containing up to 20 percent ethanol, vehicle design requirements and NIST fueling provisions.

USCAR and its member companies look forward to working with the committee to address our concerns in other areas of the legislation.

Ultimately, we believe the discussion draft led by this committee is the only viable near-term pathway for implementation of a 95 RON minimum and the benefits it can deliver.

USCAR members are ready to move forward and implement this initiative. Thank you again for the opportunity to be here with you today and to provide testimony in support of this discussion draft proposing a high-octane fuel that will enable higher efficiency vehicles.

Thank you very much.

[The prepared statement of Mr. Zimmer follows:]

Written Testimony (SUMMARY) of Steve Zimmer, United States Council for Automotive Research LLC (USCAR), Executive Director, Before the House Committee on Energy and Commerce Subcommittee on Environment

Discussion Draft of "21st Century Transportation Fuels Act"
December 11, 2018

- The United States Council for Automotive Research LLC, or USCAR, is the collaborative automotive technology research organization for FCA US, Ford Motor Company and General Motors. USCAR provides a legal framework for its three members to conduct non-competitive research.
- We commend the committee and industry stakeholders involved for their collaboration in this effort.
- Setting a national minimum octane standard is a necessary step towards the continuing development of the next generation of high efficiency vehicles. We support the proposed increase to 95 Research Octane Number (RON) as the new U.S. standard for regular gasoline for vehicle model year 2023.
- Higher octane rated gasoline facilitates the development of more efficient spark ignition engines. It is estimated that an increase in RON to 95 enables an average 3% improvement in fuel economy of new vehicles. Increasing octane is beneficial for virtually all spark ignition engines.
- Establishing a new 95 RON grade is the critical piece of this proposed approach; it doesn't preclude the availability of higher RON octane grades for use in high-performance vehicles.
- We have some concerns and questions regarding several provisions: a waiver for fuels containing up to 20% ethanol; vehicle design requirements and misfueling prevention.
- We believe the discussion draft led by this Committee is the only viable near-term pathway for implementation of a 95 RON minimum and the benefits it can deliver.

Written Statement of Steve Zimmer, United States Council for Automotive Research LLC (USCAR), Executive Director, Before the House Committee on Energy and Commerce Subcommittee on Environment

Discussion Draft of "21st Century Transportation Fuels Act"
December 11, 2018

Chairman Walden, Chairman Shimkus, Ranking Member Pallone, Ranking Member Tonko, and members of the committee, my name is Steve Zimmer, Executive Director of the United States Council for Automotive Research LLC, or USCAR, the collaborative automotive technology research organization for FCA US, Ford Motor Company and General Motors. USCAR is located in Southfield, Michigan.

Founded in 1992, USCAR provides a legal framework and forum that allows its three member companies to conduct non-competitive research to accelerate development of enabling automotive technologies that address the future personal transportation needs of society. USCAR is not a manufacturer, lobbying organization or a trade association.

USCAR has a broad technical research portfolio, predominantly in eight technical areas: advanced powertrain, vehicle electrification, automotive electronics, advanced batteries, hydrogen and fuel cells, manufacturing, safety and materials. This research is accomplished by teams of experts from each member company, while leveraging the expertise of external collaborators, including suppliers, government agencies, national laboratories and universities.

USCAR research results in a shared knowledge base that enables development of new automotive technologies, offers solutions to industry-wide challenges and strengthens the competitiveness of the U.S. auto industry.

This approach supports multiple pathways to continually improve or evolve new automotive propulsion systems that meet current and future fuel efficiency, emission and safety requirements, and create innovative and environmentally responsible personal transportation solutions for customers.

Each USCAR member company has its own independent research organization and portfolio, but at USCAR, they can do more, better and faster, while achieving significant efficiencies. These research tasks would be far more difficult, and in many instances, impossible to achieve as quickly, if at all, as individual companies. Each company then decides how to implement the resulting data as it sees fit.

I appreciate the Committee's invitation to appear before you to discuss the discussion draft of the 21st Century Transportation Fuels Act. As you know, personal mobility, and therefore the automotive industry, is changing at an unprecedented pace. The automotive industry has and will continue to deliver mobility options that balance the many technical, safety and societal requirements for the driving public. However, now more than ever, all major mobility stakeholders must better coordinate and develop integrated energy and mobility strategies together. The Committee's discussion draft is a great milestone and excellent example of such an integrated approach. Changing U.S. fuel standards, and more specifically, setting a national

minimum octane standard is a necessary step towards the continuing development of the next generation of high efficiency vehicles. We commend the Committee and industry stakeholders involved for their collaboration in this effort to bring about significant benefits to both consumers and the environment. We believe the proposed increase to 95 Research Octane Number, or RON, as the new U.S. standard for regular gasoline for model year 2023 and beyond, will be a win for consumers, the automotive industry, fuel producers, agriculture, retailers and society.

Higher octane gasoline facilitates the development of more efficient spark ignition engines by enabling an increase in compression ratio, improved combustion or a combination of both. Based on experimental data published in numerous studies conducted by industry, academia and National Labs, it is estimated that an increase to 95 RON enables an average 3% improvement in fuel economy of vehicles equipped with spark ignition engines. It is noteworthy that unlike most efficiency-enabling technologies being implemented today, increasing octane is beneficial for virtually all spark ignition engine designs, regardless of manufacturer and engine size or architecture. Considering that more than 95% of all light-duty vehicles currently sold in the U.S. are powered by a spark ignition engine (including hybrid electric and plug-in hybrid electric vehicles), increasing the minimum RON to 95 is a foundational enabler for improved vehicle efficiency and lower emissions that can have a significant impact in both the near- and long-term.

USCAR and its member companies are encouraged by the proposed 21st Century Transportation Fuels Act. The discussion draft provides an excellent starting point for national octane standard

legislation. Inter-industry and academic technical analyses have repeatedly shown that national fuel standardization is foundational for new vehicle engines to be tuned for optimal efficiency.

The implementation of 95 RON gasoline will provide commonality with European gasoline specifications. In the 1970s and 1980s, European automakers conducted joint studies with European refiners and the European Economic Community to identify an optimum minimum octane rating. 95 RON was identified as optimum and Europe uses this standard to this day. Having the same minimum octane rating in the U.S. will commonize the design of engines for automakers across regions.

While establishing a new 95 RON grade is the critical piece of this proposed approach, it doesn't preclude the availability of higher RON octane grades for use in high-performance vehicles, such as Hellcats, Corvettes and Mustangs. In Europe, 95 RON is regular, while performance grade is 98 RON or higher. Today's regular unleaded fuel will remain in the market for the existing car population. Fuel dispenser to vehicle misfueling prevention will protect future 95 RON-optimized engines from operation on current regular unleaded gasoline.

The 95 RON octane level minimum is critical to achieving greater vehicle efficiency, however there are many ways to formulate gasoline to this octane level. This discussion draft promotes market competition within a few necessary, high-level, defined vehicle design constraints. Today, USCAR members provide vehicle products to the US market with fuel ethanol capability of "Up to E15" and other products that are capable to E85, also known as Flex Fuel Vehicles.

A provision in this discussion draft calls for operation with gasoline containing "up to E20". It is important to protect the current U.S. car fleet that is warranted to E10 or E15. Any proposed new fuel blend should allow automakers appropriate lead time, collaborating with all stakeholders to ensure the fuel blend and vehicles are introduced at the same time. Automakers document the specific ethanol capability limit in the owners' manual for each vehicle and, with the exception of Flex Fuel Vehicles, today only five vehicle models sold in the U.S. warrant ethanol content above 15%.

Our member companies are also concerned about the discussion draft's vehicle design requirement that states automakers shall "improve fuel economy connected to the use of gasoline that has a research octane number of 95 or higher." Automakers are continuously improving efficiency and fuel economy to meet customer demand and regulatory requirements. This vague requirement in addition to existing regulation is therefore unnecessary. The discussion draft includes language requiring the use of a different fuel filler nozzle size to prevent misfueling. However, there are other newer approaches to misfueling prevention that should be investigated.

Industry projections suggest that vehicles with spark ignition engines, including hybrid- and plug-in hybrid electric vehicles, will remain as an important component of the vehicle fleet for some time. It should be noted that 95 RON will also benefit the many variants of future hybrid vehicles that include clean and efficient internal combustion engines for decades to come.

Ultimately, we believe the discussion draft led by this Committee is the only viable near-term pathway for implementation of a 95 RON minimum and the benefits it can deliver. USCAR members are ready to move forward and implement this initiative.

Thank you again for the opportunity to be here with you today and to provide testimony in support of this discussion draft proposing a higher-octane fuel that will enable higher efficiency vehicles.

Mr. SHIMKUS. Thank you.

The Chair now recognizes Mr. Timothy Columbus, general counsel, Steptoe & Johnson, on behalf of the National Association of Convenience Stores and Society of Gasoline Marketers.

You are recognized for 5 minutes, sir.

STATEMENT OF R. TIMOTHY COLUMBUS

Mr. COLUMBUS. Here we are again, Mr. Chairman.

Mr. Chairman, Ranking Member Tonko, members of the committee, my name is Tim Columbus. I am with the law firm of Steptoe & Johnson. I appear today on behalf of our clients, the National Association of Convenience Stores and the Society of Independent Gasoline Marketers of America.

These associations represent something over 80 percent of the retail fuel sales in the United States.

It's important that you understand that neither association today has a position on the discussion draft we are talking about. We do not support it. We do not oppose it.

We commend the committee and the staff who have put a lot of time into this and we think it's an excellent start. There's still questions you have to answer and we have to answer before we know where we'll end up on this.

In my written statement I touch on a number of issues and suggestions. I am going to touch on only five of those today.

Specifically, we would suggest the draft language be modified to, one, make clear that any technological solution adopted to prevent misfueling must be cost effective with the auto makers but also for retailers.

It is important to the retailing community that we don't end up carrying the costs of implementation on this ourselves. These are mostly small businesses and they're very cost sensitive. They will be happy to do their part, but this is going to have to be everybody doing their part.

Number two, make clear that a retailer who complies with the misfueling prevention requirements is protected from liability resulting from any consumer activity, i.e., behaviour over which it has no control.

Number three, make clear that existing dispensing equipment need not be hardened to ethanol blends above E10 unless those higher blends are in fact dispensed through that pump or dispensing equipment.

Require EPA and FTC to harmonize their labelling regimes and those required labels must be clear regarding the octane and content levels being dispensed from any particular pump.

That is not—they don't have to say exactly what it is but there should be some this would be up to E15, this could be up to E20.

The fact is that the legacy fleet is not ready. I am an old man. The chairman knows this. I drive a very old car. It's very happy on E10. It is not prepared to drink E15 and it will spit up E20.

So I have to know when I take that car to fuel what I am buying and that's really what we are looking for here.

Finally, make clear that any price posting requirements that you set forth be compatible with relevant State and local laws and, cru-

cially, not impair a retailer's ability to communicate cost-saving offers to consumers.

Let me give you an example here. Most State laws require that the highest price for anyone to come in and buy a particular commodity be posted and we are fine with that.

However, many retailers offer multiple prices at a pump. For example, if you come in and buy a carwash you may get 8 cents a gallon off. Or if you are a member of an affinity program, you may have a bargain.

The key here is to make sure that we can comply with State law but also not interfere with retailers' ability to offer consumers via the price signs a means of saving money.

With that, I am going to wind up. I am not going to use all my time.

Again, we don't have a position on this today. We look forward to working with all of you, going forward, on this project and commend you for what you have done so far.

I will be happy to respond to any questions my testimony may have raised. Thank you.

[The prepared statement of Mr. Columbus follows:]

Statement of

R. Timothy Columbus

Counsel to the

National Association of Convenience Stores (NACS)

and

Society of Independent Gasoline Marketers of America (SIGMA)

Before the

U.S. House Committee on Energy and Commerce,

Subcommittee on Environment

December 11, 2018

Hearing on

"Discussion Draft: The 21st Century Transportation Fuels Act."

I. SUMMARY OF TESTIMONY

- With respect to the comments provided on the discussion draft, I emphasize that NACS and SIGMA (hereinafter the "Associations") currently have **no position** on the legislation.

- The Associations appreciate that the drafters have incorporated many of the concerns that they have shared with lawmakers over the course of the past year into the draft text. Today, however, I am here to share comments on the discussion draft related to provisions that the Associations believe are unclear, or about which there remain concerns and a potential need for further modification.

- The Committee has specified that any technological solution to prevent misfueling must be "technically and economically feasible."[1] However, the text does not clarify for whom the solution must be feasible. Given the likelihood that misfueling will involve interactions between the vehicle and the dispenser, the choice of technology that is implemented to prevent misfueling must take into account the feasibility for both auto manufacturers and retailers. Specifically, the Associations wish to reiterate the importance of ensuring that such a solution is technically and economically feasible **for retailers** as well as auto manufacturers.

- In addition, the Associations are concerned that the text is too specific regarding the size of nozzles to be used to dispense fuels with a research octane number of 95 or higher. The bill states that a nozzle must be no more than 0.77 inches in diameter.[2] It is the Associations' understanding that such a nozzle specification would impose significant costs on automobile manufacturers that would undoubtedly be passed down to consumers.

- NACS and SIGMA commend the drafters for including misfueling liability protections in the discussion draft. The bill text, however, must clarify that a retailer who complies with all applicable signage and other misfueling prevention requirements is protected from liability under state, federal, and common law with regard to damages resulting from any misfueling activity of a consumer. This protection is necessary to ensure that retailers who comply with all necessary labeling requirements are not susceptible to penalties for behavior over which they have no control.

- The Associations appreciate that the bill's requirements for dispenser systems are *prospective* and do not require retailers to automatically upgrade infrastructure to handle fuel blends they do not plan to sell. NACS and SIGMA urge the Committee to maintain this posture. Many existing dispenser systems are not certified to handle more than E10 and installing new dispensers is extremely burdensome and costly for retailers. Upon enactment of this bill, not all retailers will immediately switch to selling fuel blends over E10, thus, it is important that retailers continue to be able to use their existing equipment

[1] The 21st Century Transportation Fuels Act, Discussion Draft, 115th Cong. § 101.

[2] *Id.*

until such time as they decide to change their fuel offerings (and upgrade their equipment accordingly).

- With regard to fuel labeling, NACS and SIGMA urge the Committee to clarify two points in the legislation: (1) the Environmental Protection Agency (EPA) and the Federal Trade Commission (FTC) ought to be required to harmonize their labeling regimes, particularly as more ethanol blends have the potential to be added into the fuel supply; and (2) labels must be clear on the octane content and ethanol range[3] of fuels to ensure consumers with legacy vehicles can make appropriate fueling decisions.

- Finally, the Associations note that in the discussion draft, the Committee has laid out a section specifying requirements for the posting of 95 RON fuel prices. While the Associations do not oppose the posting of prices,[4] any legislation must ensure that federal price sign requirements are consistent with the existing state and local requirements to the greatest extent possible and that retailers are not subject to multiple penalties (both federal and state/local) for non-compliance with price sign requirements. And, federal regulation must not preclude the ability of fuel retailers to also use the signs to inform consumers of deals that may alter the final price of fuel. Such deals may include joining a rewards program, paying in cash, purchasing an add-on service such as a car wash, etc.

- Thank you for the opportunity to testify before you today. NACS and SIGMA appreciate the opportunity to continue the dialogue on RFS reform and look forward to working further with the Committee on this issue

[3] Disclosure of the ethanol range does not mean a specific accounting of the precise volume of ethanol in any particular gallon. Rather, it means retailers must inform consumers that a certain fuel may contain, for example, "up to 10 percent ethanol" or "up to 15 percent ethanol."

[4] The Associations do not oppose posting fuel prices on a store's main price sign and on fuel dispensers where 95 RON product is dispensed. For more information, see *infra* Section IV.F.

II. INTRODUCTION

Chairman Shimkus, Ranking Member Tonko, and Members of the Subcommittee, thank you for the opportunity to testify today regarding reform of the Renewable Fuel Standard (RFS) and the proposed discussion draft of the 21st Century Transportation Fuels Act. My name is Tim Columbus of the law firm Steptoe & Johnson LLP, and I appear today on behalf of our clients the National Association of Convenience Stores ("NACS") and the Society of Independent Gasoline Marketers of America ("SIGMA") (collectively the "Associations"). Together, the Associations represent approximately 80 percent of retail motor fuels sales in the United States.

III. OVERVIEW OF THE ASSOCIATIONS

NACS is an international trade association representing the convenience store industry with more than 2,500 retail and 1,600 supplier companies as members, the majority of whom are based in the United States. SIGMA represents a diverse membership of approximately 260 independent chain retailers and marketers of motor fuel.

In 2017, the fuel retailing and convenience industry employed approximately 2.5 million workers and generated $601.1 billion in total sales. Of those sales, approximately $364 billion came from fuel sales alone. The industry is a highly competitive, consumer-facing industry. If fuel retailers don't constantly respond to consumer demand, they will go out of business. In short, convenience stores sell what customers want to buy—be it food or fuel.

IV. COMMENTS ON THE DISCUSSION DRAFT

Currently, NACS and SIGMA have **no position** on the draft legislation. Thus, any and all comments that are shared indicate the Associations' thoughts about particular provisions, but do

not constitute support for, or opposition to, the discussion draft. In general, the Associations are in favor of setting performance specifications for fuel that the market can meet in the most practical and affordable way for both retailers and consumers.

With regard to the specific legislation being discussed here today, the Associations appreciate that many concerns they have shared with lawmakers have been incorporated into the text. Today, however, I am here to share comments on the discussion draft related to provisions that the Associations believe are unclear, or about which there remain concerns and a potential need for further modification. Specifically, I will discuss concerns regarding the misfueling liability section, equipment upgrades, labeling, and the posting of fuel prices.

A. Misfueling Technology Must Be Cost-Effective for Retailers

The discussion draft specifies that any technological solution to prevent misfueling must be "technically and economically feasible."[5] However, the text does not clarify *for whom* the solution must be feasible or whether the cost-effectiveness for one sector outweighs or supersedes that for another. Automobile manufacturers will undoubtedly have a part to play in ensuring that any solution implemented at the pump works with new and existing vehicles, but the Associations wish to reiterate the importance of ensuring that such a solution is technically and economically feasible **for retailers** as well as auto manufacturers.

The fuel retailing and convenience industry is a small business industry. About 80 percent of convenience stores/fuel outlets are owned by someone with 10 stores or fewer, and approximately 63 percent of convenience store owners operate just a single store. The retail fuel market is also one of the most competitive and transparent markets in the world. Fuel retailers

[5] The 21st Century Transportation Fuels Act, Discussion Draft, 115th Cong. § 101.

operate on narrow margins and are unable to absorb incremental cost increases without passing them on to consumers. And in the retail fueling business, every cent matters; consumers will often change where they buy gas to save just a few cents per gallon.[6]

Given the competitive realities of the fuel market, it is critical that the costs borne by retailers in any RFS reform solution remain as low as possible to ensure that the connected customer costs remain as low as possible.

B. The Associations Are Concerned with the Proposed Nozzle Size

The Associations are concerned that the text is too specific regarding the size of nozzles to be used to dispense fuels with a research octane number of 95 or higher. The bill states that a nozzle must be no more than 0.77 inches in diameter,[7] which is smaller than existing nozzles.[8] NACS and SIGMA appreciate that the intent of such a provision would be to help prevent consumers from misfueling new cars that are designed to run on higher octane fuels with lower octane fuels. Specifying a 0.77-inch diameter standard for nozzles, however, would impose significant costs for automobile manufacturers. It is the Associations' understanding that given the potential effects of a smaller nozzle on flow rate and associated flow characteristics of the fuel, significant changes may have to be made in newer vehicles to allow them to be properly fueled by a smaller nozzle. While these changes *could* likely be made, the Associations understand they would result in an excessive cost burden on manufacturers that would be passed

[6] According to a 2017 NACS survey, 67% of consumers say they would drive five minutes out of their way to save 5 cents per gallon and 61% say that price is the most important factor in determining where they buy gas. See *How Consumers Behave at the Pump,* NACS, http://www.convenience.org/YourBusiness/FuelsCenter/Pages/How-Consumers-Behave-at-the-Pump.aspx#.Ws4QQS7wbb0.

[7] See *supra* note 5.

[8] The applicable SAE International standard currently says nozzles should be 0.807/0.840 in. in diameter. *See* "Dispenser Nozzle Spouts for Liquid Fuels Intended for Use with Spark Ignition and Compression Ignition Engines(STABILIZED May 2012)," SAE Standard J285, Stab. May, 2012.

down to consumers.[9] While the Associations appreciate that there will likely need to be a physical change of some sort made to nozzles and/or fill pipes to help ensure that consumers cannot accidentally put lower octane fuels into new vehicles that are made to run on higher octane fuels, NACS and SIGMA remain unconvinced that 0.77 inches is the correct specification.[10]

C. Misfueling Liability Protection Is Essential for a Successful Fuel Transition

NACS and SIGMA were pleased to see the inclusion of misfueling liability protection in the discussion draft. The bill text, however, must clarify that a retailer who complies with all applicable signage and other misfueling prevention requirements is protected from all liability under state, federal, and common law with regard to any damages resulting from the misfueling activity of a consumer. That liability protection should include all types of misfueling whether a consumer uses fuel that has less than 95 RON in a new vehicle that requires it or whether a consumer uses E15 or E20 gasoline in an older vehicle that cannot handle those levels of ethanol in fuel. This will ensure that retailers that follow the law cannot be penalized for misfueling actions over which they have no effective control. This protection for retailers is not insignificant.

[9] Additional information on this topic may be provided by the auto manufacturers.

[10] For example, it may be possible to use a "notch" in newer cars that would prevent customers from being able to put a nozzle dispensing older fuel into a new car. Such a notch may be easier for auto manufacturers to accommodate. In providing this example, however, the Associations do not intend to imply that this may be the only or even the preferred solution of all stakeholders. It is simply offered to point out that there may be alternatives to mandating a nozzle size.

For example, today—despite a retailer following labeling requirements outlined in EPA's rule authorizing the sale of E15[11]—there is still liability exposure if customers choose to put the wrong fuel in their vehicles. Thus, retailers find themselves in a precarious situation. If a fuel retailer properly offers E15 and a consumer uses that fuel in a non-approved engine, the retailer can be held responsible for violating the Clean Air Act and be subject to fines of up to $37,500 per violation. In addition, a retailer may be subject to civil litigation under the Act's private right of action provision.[12]

Ultimately, if retailers are in compliance with labeling and other applicable misfueling prevention requirements, they should not face enforcement actions from EPA regarding actions they cannot control. Liability should fall on the person who engages in the misfueling activity.

D. Dispenser Upgrade Requirements Must Remain Prospective

Another concern of the Associations is related to the fueling infrastructure owned and operated by retailers. Specifically, it is vital that requirements in the bill related to new dispenser systems and related infrastructure remain **prospective** and do not require retailers to automatically upgrade infrastructure.

Occupational Safety and Health Administration ("OSHA") regulations require retailers to use equipment that has been listed by a nationally recognized testing laboratory as compatible with the fuel the equipment is storing and dispensing.[13] The primary testing laboratory is

[11] *See* 40 C.F.R. 80.1504; *see also* EPA, Final Rule, Regulation to Mitigate the Misfueling of Vehicles and Engines with Gasoline Containing Greater Than Ten Volume Percent Ethanol and Modifications to the Reformulated and Conventional Gasoline Programs, 76 Fed. Reg. 44406 (July 25, 2011).

[13] 29 C.F.R. 1926.152(a)(1) ("Only approved containers and portable tanks shall be used for storage and handling of flammable and combustible liquids.") "Approved" is defined at 29 C.F.R. 1910.106(35) ("Approved unless

Underwriters Laboratories ("UL"). However, the first year UL listed a single dispenser as compatible with any ethanol concentration greater than 10 percent was 2010. Further, under UL's policy, no device listing can be revised. Consequently, retailers who wish to sell any gasoline containing more than 10 percent ethanol (such as E15 or E85) must acquire a new dispenser that has been listed as compatible with the product if they have not purchased new dispensers since 2010.[14] Dispensers can cost upwards of $20,000, a big expense for a small business.

The discussion draft allows for the use of fuel blends up to E20, which the Associations support as it will allow fuel blend flexibility. However, not all retailers will choose to offer the same fuel blends in the first years of the transition and, under the draft bill, will not be required to install new infrastructure capable of handling fuel blends with higher ethanol content. The Associations are pleased the bill does not require retailers to immediately upgrade existing infrastructure when the bill goes into effect.[15] Retailers should only be required to install E20 compatible dispensers when they choose to offer those fuels.

In sum, given the costs of infrastructure upgrades, it is critical that any infrastructure requirements prescribed by the bill be prospective and not require immediate upgrades across the board. This will allow retailers to make choices about which fuel blends they want to offer and

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otherwise indicated, approved, or listed by a nationally recognized testing laboratory.") *See also* 29 C.F.R. 1910.7 (definition and requirements for a nationally recognized testing laboratory).

[14] The Associations appreciate that the bill text correctly recognizes that unlike dispensers, Underground Storage Tanks have already been regulated by EPA. *See* Environmental Protection Agency, Final Rule, Revising Underground Storage Tank Regulations – Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training, 80 Fed. Reg. 41566 (July 15, 2015), *available at* https://www.gpo.gov/fdsys/pkg/FR-2015-07-15/pdf/2015-15914.pdf.

[15] The Associations assume that this interpretation is correct. If the Committee believes that the bill does, in fact, require immediate upgrades, then the Associations urge the Committee to update the text to ensure that retailers only need to upgrade equipment at such time as they choose to offer fuel blends that are not compatible with their existing infrastructure.

when they plan to offer those blends, and upgrade infrastructure accordingly. The Associations appreciate that the bill's requirements for dispenser systems and related infrastructure are currently prospective and urge the Committee to maintain this posture.

E. Labeling Regimes Must Be Streamlined and Clear

Currently, both EPA and the FTC play an important role in the labeling of automotive fuels. EPA's regulations guide the labeling of fuel with ethanol content up to 15 percent,[16] while the FTC's regulations guide the labeling of both higher-level ethanol blends[17] and the octane content of a fuel.[18] Given the potential of the fuel market to see both expanded octane options and expanded ethanol blends under the draft legislation, it will be important to clearly label fuels moving forward to avoid customer confusion.

Therefore, NACS and SIGMA urge the Committee to clarify two points in the legislation: (1) EPA and the FTC ought to be required to harmonize their labeling regimes, particularly as more ethanol blends have the potential to be added into the fuel mix; and (2) labels must be clear on both octane content and ethanol ranges[19] to ensure consumers with legacy vehicles can make appropriate fueling decisions.

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[16] 40 C.F.R. §80.1501.

[17] *See* 16 C.F.R. §306.10(f)(2) regarding percent of ethanol content and 16 C.F.R. §306.12 regarding the size and appearance of labels.

[18] *See* 16 C.F.R. §306.10 regarding where to label and 16 C.F.R. §306.12 regarding the size and appearance of such labels.

[19] As discussed in *supra* note 2, use of ethanol range here does not mean a specific accounting of the precise volume of ethanol in any particular gallon. Rather, it means retailers must inform consumers that a certain fuel may contain, for example, "up to 10 percent ethanol" or "up to 15 percent ethanol." This will allow consumers to make proper choices about which fuel to put in their vehicles.

1. Streamlining Labeling Regimes

NACS and SIGMA appreciate that the draft bill calls for the FTC to regulate labels so they are understandable to consumers and car owners, as well as affordable for fuel retailers.[20] This is an important first step in ensuring that a new labeling regime is clear and cost-effective. In considering the question of clarity, however, it is important to consider not just how the labels themselves appear, but also how *many* labels appear on a fuel dispenser. Between federal and state labeling regimes relating to fueling and other areas (e.g., the Americans with Disabilities Act), a fuel dispenser often has so many labels it looks like it has the chicken pox.

With the shift to higher octane blends under this draft legislation, it will be important to consider whether it makes sense to have a separate octane rating label and ethanol range label, or whether there may be a way to combine these labels to provide greater simplicity and precision. Such combinations could be important as fuel retailers currently must comply with a variety of labeling requirements, but fuel pumps have limited "real estate" with which to post labels. Whether a new labeling regime ultimately determines that one label or several will be clearer and more cost-effective, it is clear that both the FTC and EPA will have a role to play. *As such, it is imperative that the Committee clarify that EPA and the FTC must work together to streamline their labeling requirements.* The legislation currently makes no such clarification, which will likely lead to a labeling regime that is excessively complicated and excessively burdensome for both retailers and consumers.

2. Labeling and Legacy Vehicles

It will be particularly important to provide labeling clarity for consumers with legacy vehicles that use today's premium fuel (which would generally equate to a research octane

[20] The 21st Century Transportation Fuels Act, Discussion Draft, 115th Cong. § 102.

number (RON) of 95). Under the fuel regime proposed by the discussion draft, owners of these vehicles could see a preponderance of 95 RON options in the future, some of which may have an ethanol content that is greater than 10 percent. Legacy vehicles (pre-2001) may not be fueled with a product that is more than E10. It will therefore be critical that any labeling regime be simple, clear, and easy to follow. Customers must be able to understand what is in the fuel they are choosing to avoid damaging their engines.

F. Requirements Regarding the Posting of Fuel Prices Must Work with Current Regulations and Not Preclude "Consumer Savings Offers" on Signs

The discussion draft lays out a section specifying requirements for the posting of 95 RON fuel prices.[21] In general, the Associations' members have traditionally embraced exterior price signs, which inform consumers of the price for a certain grade of fuel, as a way to compete for business. In fact, these price signs are already highly regulated by states and localities across the country. Introducing federal requirements for price signs creates risks of inconsistent regimes or lack of clarity in how properly to comply with multiple sets of regulations. Given those potential risks, the Associations recommend that the discussion draft make clear that federal requirements should follow state and local regulations to the greatest extent feasible. And, legislation should prevent any possibility that federal regulation will result in duplicative penalties for retailers. For example, states and localities should not be allowed to impose penalties on a retailer for violations of their price sign regulations if the FTC has already imposed a penalty for the same sign(s). And, the opposite should be true as well: the FTC should not be able to penalize a retailer for a federal violation once that retailer has been penalized by its state or locality for the violation.

[21] The 21st Century Transportation Fuels Act, Discussion Draft, 115th Cong. § 105.

In addition, any legislation and subsequent regulation must not preclude the ability of fuel retailers to also use the signs to inform consumers of deals that may alter the final price of fuel. For example, customers currently may be able to lower their fuel prices by joining a rewards program, paying in cash or with a debit card, purchasing an add-on service such as a car wash, bundling certain other purchases, and a host of other methods. Given the transparent and incredibly competitive nature of the fuel retailing industry, it is vital that retailers continue to be able to advertise these incentives to attract business.

In addition, the bill text states that the pricing of 95 RON product must be displayed on "*any sign* on which such person displays the price of the most-sold grade of automotive fuel…"(emphasis added).[22] The Associations urge the Committee to clarify this text so that retailers are not required to post 95 RON pricing on dispensers that do not dispense 95 RON product. In other words, this price posting requirement should only apply to a retail fueling location's main price sign, which is generally visible from the road, and on dispensers where 95 RON product is dispensed.

V. CONCLUSION

Thank you for the opportunity to testify before you today. To reiterate, while NACS and SIGMA currently have no position on the legislation, the Associations appreciate the opportunity to continue the dialogue on RFS reform. NACS and SIGMA look forward to working further with the Committee on this issue. I am happy to answer any questions this testimony may have raised.

[22] *Id.*

Mr. SHIMKUS. The Chair thanks the gentleman.

The Chair now recognizes Mr. Wesley Spurlock, past president and chairman of the National Corn Growers Association.

Sir, you're recognized for 5 minutes, and welcome.

STATEMENT OF WESLEY SPURLOCK

Mr. SPURLOCK. Thank you, Chairman Shimkus, Ranking Member Tonko, and subcommittee members. I appreciate the opportunity to be here for the National Corn Growers Association.

I am Wesley Spurlock and our family raises corn, cotton, and cattle in the Texas Panhandle. As producers of the primary feedstock used in ethanol, corn farmers have a strong vested interest in the future of transportation fuels.

The Renewable Fuel Standard has created significant opportunity for the farmers. The RFS is one of the most ambitious and successful energy, environmental, and economic policies Congress has enacted not only for farmers and rural communities but also for our drivers, our air quality, and our Nation's energy security.

As use of homegrown renewable fuels has grown and has farmers have become more productive using fewer resources, the benefit of the RFS has exceeded the congressional projected.

Agriculture met the challenge to help fuel America, not by putting more land into production but by becoming more productive with existing resources.

Farmers today produce more corn with less land because the average has increased on corn by more than 25 bushels since 2007.

Ethanol production creates value-added coproducts such as distiller's grain for feed, corn oil for biodiesel, and some corn provides—the same corn provides food and fuel. The value added by ethanol and increased farmer productivity has had a positive impact on rural America, helping the next generation return to their family farms.

But it's not only the farmers who benefit from the renewable fuels. Renewable fuels save drivers money. Environmental advocates backed enactment of the RFS. The RFS is the only Federal law that requires greenhouse gas emission reductions.

Based on actual corn and ethanol production, the sustainability improvements in both today's corn ethanol results in 43 percent lower greenhouse gas emissions than gasoline. Clean burning ethanol is the fuel that displaces the more harmful compounds in gasoline, reducing tailpipe emissions and improving air quality.

Chairman Shimkus' and Congressman Flores' discussion draft includes provisions corn growers do support. In addition to the RVP parity that allows higher ethanol blends and lower evaporative to be sold year round, we also support more regulatory certainty when it comes to approval of the higher blends such as E20.

We support a high-octane vehicle test fuel so automakers can expedite new optimized vehicles. However, NCGA believes this discussion draft would undo successful renewable fuel policy. The net impact of this proposal would not maintain the market access renewable fuels currently have with the RFS and offer opportunity to expand ethanol as an octane source.

Corn growers support high-octane fuels such as midlevel ethanol blends. We know high-octane fuels would give automakers the abil-

ity to design optimized engines with greater fuel efficiencies and with fewer greenhouse gas emissions.

Ethanol is the lowest-cost, lowest-carbon octane source. Today's corn production practices are increasing soil carbon sequestration and ethanol's carbon footprint is shrinking.

NCGA recently submitted comments on the administration's safe vehicle rule outlining the fuel economy of emissions benefits from a high-octane, low-carbon midlevel blend.

We recommend regulatory steps that would remove barriers to fuel competition and high-octane fuel. An octane standard such as 95 RON that refiners can easily meet with current premium fuels cannot replace the market access for renewable fuels provided by the RFS.

We cannot continue to reduce emissions with an octane standard that could be met by using octane from hydrocarbons.

Chairman Shimkus, corn growers are grateful for your advocacy for farmers and the renewable fuels. We appreciate the time you have spent considering future transportation fuel needs.

We also appreciate being asked to contribute to today's discussion. Should the committee undertakes future legislative discussion we ask that incoming Chairman Pallone and Tonko consider NCGA a source on renewable fuels policy and allow us to continue to work with the committee.

Thank you.

[The prepared statement of Mr. Spurlock follows:]

Thank you, Chairman Shimkus and Ranking Member Tonko. I appreciate the opportunity to testify today on behalf of the National Corn Growers Association (NCGA). NCGA represents nearly 40,000 dues-paying corn farmers and the interests of more than 300,000 growers who contribute through corn checkoff programs in their states.

My name is Wesley Spurlock, and my family and I raise corn, other crops and cattle in the upper Texas panhandle. For the past three years, I have been part of NCGA's officer team.

NCGA and its 49 affiliated state associations and checkoff organizations work together to create and increase opportunities for our members and our industry. As producers of the primary feedstock used for ethanol, corn farmers have a strong vested interest in the future of transportation fuel.

The Renewable Fuel Standard (RFS) has created significant opportunities for our members and our industry. Corn growers, ethanol producers, environmental advocates and others worked together with Members of Congress over several years to enact the RFS in 2005 and to expand the policy in 2007. The RFS is one of the most ambitious and successful energy, environmental and economic polices Congress has enacted, not only for famers and rural communities, but also for drivers, our air quality and our nation's energy security. As use of homegrown renewable fuels has grown and as farmers have become more productive using fewer resources, the benefits of the RFS have extended well beyond those Congress projected.

When Congress expanded the RFS, many questioned whether it was possible to produce 15 billion gallons of ethanol. In the 10 years between 2007 and 2017, domestic ethanol production increased dramatically -- from 6.5 billion gallons to nearly 16 billion gallons. In 2017, corn farmers produced 1.6 billion more bushels of corn than they did in 2007.

Agriculture met the challenge to help fuel America, not by putting more land into production, as some had predicted, but by becoming more productive with existing resources.

In 2018, farmers planted four million fewer acres to corn than they planted in 2007. Compared to planted corn acres in 2012, 2018 planted acres are eight million acres less. And it's not just fewer corn acres – the total area planted to principle crops is also less today.

Farmers today produce more corn with less land because their average yield has increased by more than 25 bushels per acre – or 17 percent - since 2007. Farmers' increased productivity has ensured they have kept up with demand across all uses – from feed, food and industrial and exports – while meeting new and growing demand for ethanol. Even with increased demand, carryout of recent crops has eclipsed 2 billion bushels per year.

Farmers' productivity and ethanol demand have added significant value to the corn crop. Ethanol fuel production primarily uses the starch from corn. This process creates value added co-products, such as distillers grains for animal feed and corn oil for biodiesel, from the

remaining protein, fiber and oil. This value-added process allows the same corn to provide both food and fuel.

New demand for corn, the valued added by ethanol production and increased farmer productivity have all had a tremendous positive impact on rural America. Many NCGA members will tell you ethanol allowed the next generation to return to the family farm. The RFS has done more to revitalize the rural economy than a host of other rural development programs combined. While low commodity prices are currently making it difficult for many farmers to break even, the value ethanol adds to their corn crop is making the difference for many farmers.

But it's not only farmers and rural communities that benefit from the RFS.

Renewable fuel saves drivers money: ethanol costs less per gallon than gasoline at the wholesale level. Recent wholesale ethanol prices have been up to 70 cents less per gallon. A study published last year in the American Journal of Agricultural Economics concluded that ethanol lowered fuel prices by 18 cents per gallon at the pump in 2015, a total fuel cost savings of $17.8 billion for drivers.

There are strong reasons why environmental advocates backed enactment of the RFS. The RFS is one of the only federal laws that requires reductions in greenhouse gas emissions. Due to improved efficiency in the ethanol production process, changes in agriculture production

practices and increased farm productivity, the carbon footprint of corn ethanol continues to shrink. Based on evaluation of actual production experience – not projections made when the U.S. ethanol industry was in its infancy – today's corn ethanol results in 43 percent lower greenhouse gas emissions than gasoline.

Increased volumes of ethanol in fuel displace the most harmful compounds in gasoline. Ethanol burns cleaner, reducing emissions of particulate matter, carbon monoxide, and air toxics. EPA data show that between 2000 and 2016, as ethanol blending increased from less than 1 percent to today's standard 10 percent, compounds with high cancer-causing potential dropped as a share of gasoline volume. As EPA concluded, "ethanol's high octane value has allowed refiners to significantly reduce the aromatic content of gasoline."

Congress also enacted the RFS to diversify our transportation fuel supply. The market access the RFS creates has enabled homegrown renewable fuel to compete at the pump and reduce our reliance on fossil fuels as the single source of transportation fuel. Although domestic oil and gas production has risen since adoption of the RFS, continued diversity in our fuel supply enhances our energy security. Consumers shouldn't be dependent on one fuel source.

Chairman Shimkus' and Congressman Flores' discussion draft includes policy provisions corn growers support. In addition to RVP parity that allows higher ethanol blends with lower evaporative emissions to be sold year-round, we also support more regulatory certainty when it

comes to approval of higher blends, such as E20. We support a high-octane vehicle test fuel so automakers can expedite the design and testing of new, optimized vehicles.

However, the net impact of all the provisions is our most important consideration. As NCGA evaluated this draft, our conclusion is that this proposal would not maintain the market access renewable fuels currently have with the RFS or offer sufficient opportunity to expand the use of ethanol as an octane source.

This proposal would increase our dependence on oil for transportation fuel, increasing GHG emissions and impacting air quality. Ethanol blending has decreased GHG and tailpipe emissions. It's not possible to continue to reduce emissions with an octane standard that could be met with increased oil use. Greater use of oil would have negative health consequences.

Corn growers support high octane fuels, such as a mid-level ethanol blend. We know high octane fuels would give auto makers the ability to design optimized engines with greater fuel efficiency and fewer GHG emissions. Ethanol is a high-octane fuel, and higher blends of ethanol as a source of octane would deliver even greater efficiency improvements and GHG reductions.

Using ethanol to meet a higher octane level would minimize changes in fuel cost, compared to the increased use of costly and harmful hydrocarbon aromatics. While ethanol may not be the only source of fuel octane, it is the lowest cost - and lowest carbon - octane source currently available. Ethanol's carbon intensity has shown steady improvement since 2010. Further, high-yield corn—combined with the steady adoption of best practices such as reductions in tillage

intensity—is sequestering carbon from the atmosphere into the soil. This sequestration is increasing soil carbon levels and reducing atmospheric carbon dioxide.

Two weeks ago, the U.S. Energy Information Agency released an analysis of gasoline octane costs and future gasoline octane scenarios. This analysis concluded that refiners could produce 95 RON fuel – a similar octane to today's premium-grade fuel – using current refinery capacity and without significant capital investment. Refiners could also meet this higher octane level without blending additional ethanol.

An octane standard such as 95 RON that refiners can easily meet today with current premium fuels cannot replace the market access for renewable fuels provided by the RFS. Without market access and the ability to fairly compete, consumers will be the loser with higher prices.

This discussion draft would undo successful renewable fuel policy that has had a large positive impact on rural communities. At a time when farm income has declined more than 50 percent over the past five years and farmers continue to face market challenges from trade disruptions, we can't afford more uncertainty.

While the statutory volumes Congress set in the RFS do not extend beyond 2022, Congress set parameters for EPA to continue to set renewable fuel volumes. The RFS does not expire unless Congress ends it.

We understand automakers' need for higher octane fuels to design future vehicles that meet fuel economy and emissions reduction requirements. Through an Ag/Auto/Ethanol Working Group, NCGA, along with automakers and other stakeholders, have undertaken technical work to accelerate the introduction of high-octane, low-carbon fuels.

We are also not limited to legislation to advance an octane standard. NCGA recently submitted extensive comments to the Environmental Protection Agency and the National Highway Transportation Safety Administration's SAFE Vehicles Rule, addressing the fuel economy and emissions reductions from high-octane, low-carbon fuels such as a mid-level ethanol blend. We recommended regulatory actions that would remove barriers to fuel competition and high-octane fuels.

The oil industry has spent tens of millions of dollars over the past 13 years trying to hold down renewable fuel blending and control choice at the pump. They've somehow missed the fact that RFS compliance is easiest when renewable fuel blending goes up – that's how Congress designed the law to work.

Chairman Shimkus, corn growers are grateful for your advocacy for farmers and renewable fuels. We appreciate the time you have put into considering future transportation fuel needs and working on this draft. We also appreciate being asked to add our input to today's discussion. Should the Committee undertake further legislative discussions, we ask that you ---

and incoming Chairmen Pallone and Tonko -- consider NCGA a resource on renewable fuel policy and allow us to continue to work with the Committee.

As I noted earlier in this testimony, several provisions in this draft are consistent with NCGA policy, which is set by our grower members. However, our assessment of the net effect of this discussion draft is that it would not uphold the public's best interest and could take renewable fuels backward.

We should build on the success of the RFS when moving a future fuel policy forward.

Thank you for the opportunity to share NCGA's views.

Mr. SHIMKUS. Thank you.

The Chair now recognizes Ms. Emily Skor, chief executive officer of Growth Energy. You're recognized for 5 minutes, and welcome.

STATEMENT OF EMILY SKOR

Ms. SKOR. Thank you.

Chairman Shimkus, Ranking Member Tonko, members of the subcommittee, thank you for the opportunity to provide our perspective on the discussion draft being discussed today.

My name is Emily Skor and I am the CEO Of Growth Energy, the leading ethanol industry association representing 100 producer plants, more than half of the industry's total production.

A transportation fuel mixed with more ethanol lowers costs for consumers, revitalizes our country's rural economy, and improves our environment. Our members thank you for attending to our 21st century transportation needs and recognizing the important of high-octane and continuing to advance these national interests.

We have thoroughly reviewed the discussion draft and applaud the authors for, first, recognizing that octane plays a critical role in helping automakers meet fuel economy and greenhouse gas standards; second, allowing the year-round sale of higher ethanol blends like E15; and, third, granting Federal approval for fuel beyond E15, demonstrably supporting the research that affirms ethanol blends above 10 percent do not harm passenger vehicles.

However, where we believe this draft falls short is in the assumption that the Renewable Fuel Standard, the RFS, is broken and needs to be fixed. We wholeheartedly disagree with that perspective.

In fact, despite years of mismanagement, the RFS has fulfilled its congressional intent to increase domestic energy supplies, improve farm incomes and reduce carbon emissions with the added benefit of lowering the price at the pump.

By any objective measurements, the RFS has been an overwhelming success. Repealing the RFS is unnecessary and will further destabilize a struggling farm economy and ethanol sector.

Moreover, the draft does nothing to stop EPA's continued misuse of the small refinery exemption authority or even acknowledge the agency's unprecedented and possibly illegal use of this authority.

EPA has already waived up to 2.25 billion gallons of biofuel blending, undermining demand by failing to reallocate those gallons in line with congressional intent and we face additional exemptions for 2018 and in the recently released 2019 RFS rule.

We applaud the examination of an octane standard. But the draft's proposed 95 RON is easily met with today's premium gasoline, which costs consumers about 50 cents more per gallon than regular fuel.

A recent report from the Energy Information Administration cites that refiners would only need to make minor operational adjustments to supply the increased octane requirement of a 95 RON baseline fuel.

And in previous congressional testimony refiners stated that they planned to meet the 95 RON fuel standard with a current 10 percent ethanol blend.

Today, ethanol is 25 cents less per gallon than gasoline and was as much as 90 cents earlier this year. As I previously testified, the past decade has shown oil companies will actively ignore economic incentives to prevent market entry of higher ethanol blends.

Only by coupling a stable RFS to maintain market access with a significant boost in octane from a midlevel ethanol blend can consumers realize significant cost savings, increased engine efficiency, and substantial environmental benefits.

Unfortunately, this draft as proposed will lead to reduced blending of cleaner biofuel and it will raise fuel costs for American drivers.

We commend the authors for following sound science in approving E20. But the draft provides minimal guidance on approving ethanol blends beyond E20.

E15 was approved nearly a decade ago and we are still working through hurdles erected to keep this legal fuel out of the market. This draft should recognize and seek to eliminate the myriad challenges to approving ethanol blended fuels to enable a reasonable pathway for their entry into the marketplace.

While one of the draft's primary goals is to make the U.S. fuel supply uniform, it does not unify the availability of ethanol-blended fuels above 10 percent. Simply preventing future actions does nothing to break down State-level hurdles that exist today.

This draft may even block the States from moving forward with higher blends. We must avoid backsliding on the progress of the RFS which has helped launch a more affordable low-carbon alternative to traditional petroleum fuels.

While we do support certain aspects of this discussion draft, we believe it misses an opportunity to lay out a bold vision for the future of affordable liquid fuels and to make a significant impact restoring growth in America's rural communities and decarbonizing our Nation's fuel supply.

Thank you, and I look forward to your questions.

[The prepared statement of Ms. Skor follows:]

Testimony before the

United States House Committee
on Energy and Commerce

Subcommittee on the Environment

"The 21st Century Transportation Fuels Act – Discussion Draft"

Emily Skor, CEO
Growth Energy

December 11, 2018

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Emily Skor

CEO, Growth Energy

Chairman Shimkus, Ranking Member Tonko, and members of the House Committee on Energy and Commerce Subcommittee on the Environment:

Thank you for the opportunity to provide our perspective on the draft "21st Century Transportation Fuels Act", particularly on the subjects of the repeal of the Renewable Fuel Standard (RFS) and a high-octane fuel standard being discussed today.

My name is Emily Skor, and I'm the CEO of Growth Energy, the leading ethanol industry association that represents 100 producer plants, 89 associated ethanol supply chain companies, and tens of thousands of ethanol supporters around the country. Together, we are working to bring consumers better choices at the fuel pump, grow America's economy, and improve the environment for future generations.

Our industry remains committed to helping our country further diversify our energy portfolio and drive down costs of transportation fuels, and we appreciate the committee's attention to what our fuel mix should look like in the coming decades.

At Growth Energy, we recognize that a fuel mix with more ethanol will lower costs for consumers, revitalize our country's economy, and improve our environment. To that end, we support the following key aspects of the draft legislation:

1. The recognition that octane plays a critical role in helping automakers meet current and future fuel economy and greenhouse gas standards;
2. A call to allow the year-round sale of higher level ethanol-blends by lifting the Reid Vapor Pressure (RVP) summer fueling barrier; and
3. Federal approval for fuel beyond E15, further supporting the research that shows that ethanol-blends above ten percent do not harm passenger vehicles.

However, as this committee considers what could help with our future energy mix, we hope you will look to the RFS for inspiration rather than work under the false assumption that it needs to be fixed. We wholeheartedly disagree with that perspective. In fact, despite years of mismanagement under both the Obama Administration and former U.S. Environmental Protection Agency (EPA) Administrator Scott Pruitt, the RFS has still been able to fulfill its original intent – to increase domestic energy supplies, improve farm incomes, and reduce carbon emissions. By any objective measurement, the RFS has been an overwhelming success and

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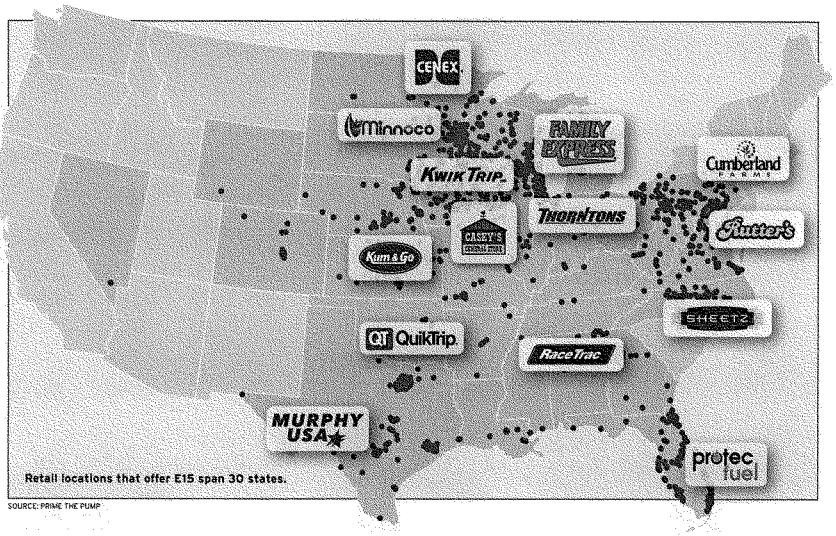

SOURCE: PRIME THE PUMP

serves as the bedrock policy that has allowed our nation's ethanol industry to flourish since 2005.

The absolute repeal of the RFS is unnecessary and will further destabilize the farm economy and the ethanol sector, both of which are already suffering from the EPA's excessive use of small refinery exemptions, roadblocks erected by the oil industry to ethanol-blended fuel, and export barriers. We cannot support legislation that would ultimately turn back the clock on our nation's commitment to renewable biofuels, completely undermining the benefits that consumers have come to expect from ethanol at the pump.

Furthermore, this draft is not bold enough when it comes to pursuing a plan to provide consumers with cleaner, more affordable fuels. It sets the minimum octane level at a 95 Research Octane Number (RON), which is roughly in line with a 91 Anti-Knock Index (AKI) fuel. AKI represents the current octane rating you see at the pump today. 91 AKI fuel is currently a low-level premium fuel that is found throughout the country and already contains up to ten percent ethanol. In fact, 98 percent of all gasoline sold in the U.S. today contains ten percent ethanol[1]. Moving to a 95 RON baseline fuel would require almost no changes from refiners across the country. A recent study by the Energy Information Administration confirms this fact, specifically citing that the demand for additional octane investment for refiners would be minimal.[2]

The draft also fails to fully recognize the "sweet spot" of where ethanol can help achieve the dual gains of increased fuel efficiency and reduced emissions: 30 percent ethanol-blended fuel. While the

1 U.S. Department of Energy: "Ethanol Fuel Basics", https://afdc.energy.gov/fuels/ethanol_fuel_basics.html

2 U.S. Energy Information Administration: "Future Gasoline Octane Scenarios" July 23, 2018. https://www.eia.gov/analysis/octanestudy/pdf/phase2.pdf

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draft does provide for an optional certification fuel using 30 percent ethanol, it does not provide for E30 to be a fully-approved legal fuel, nor does it provide for any sort of reasonable pathway for E30 to become a legal fuel for all vehicles. This gap is puzzling. After almost eight years of trying to work through hurdles to get E15, the most tested fuel in use, into the fuel supply, this draft should recognize the myriad of challenges to approving ethanol-blended fuels and look to eliminate them to enable a reasonable pathway for their entry into the marketplace.

Our key concern and basis for why we cannot support this initiative in its current form is that the draft eliminates the RFS for corn ethanol over a period of five years. Additionally, it does nothing to stop the misuse of the small refinery exemption authority in the intervening years, causing further loss of biofuel demand even before the permanent end to the RFS. Not including the exemptions anticipated for this year and in the 2019 RFS rule released last week, we have had up to 2.25 billion gallons of biofuels exempted[3]. EPA's unprecedented – and possibly illegal – use of this authority is not even acknowledged in this draft. Further, the sentiment of an EPA "boogeyman" taking control of the program in 2023 is vastly overstated by those who support ending the RFS. Since 2013, biodiesel volumes have been set without any statutory targets, and the program has still functioned correctly.

While one of the draft's primary goals is to make the U.S. fuel supply uniform, it does nothing to unify the availability of ethanol-blended fuels above ten percent, because it includes a half-hearted federal pre-emption provision aimed only at future action. By simply preventing future actions from limiting blending, this does nothing to break down any existing state-level hurdles, like caps on the percentage of oxygen in fuel or on ethanol concentration – neither of which exist at the federal level. Real hurdles exist right now in a small number of states, but the discussion draft does nothing to break down these market barriers. Further, it is unclear if the draft provision would prevent a state or locality from increasing the use of ethanol blended fuel, a scenario that the ethanol industry would not support.

Lastly, one of the biggest reasons for this conversation is that some believe there is vast uncertainty beyond 2022 under the RFS. Instead addressing this uncertainty, the draft legislation would repeal the RFS program in 2022 for corn ethanol. Moreover, this draft has no safeguards to protect against reduced blending by those who would seek to substitute oil-refined products for renewable biofuels. This draft also limits access to the marketplace and provides a narrow, very difficult pathway for stability and growth. Ending the RFS will actually provide more uncertainty beyond 2022 than there exists today.

"THE 21ST CENTURY TRANSPORTATION FUELS ACT – DISCUSSION DRAFT"

PROS AND CONS:

- ✓ Recognizes the importance of high-octane fuels
- ✓ Allows higher level ethanol-blends to be sold year-round
- ✓ Provides federal approval for fuel blends beyond E15

- ✗ Unnecessarily sunsets the RFS
- ✗ Sets octane level too low to fully realize benefits of high-octane fuels – should be 98 or 100 RON minimum
- ✗ Federal fuel approval level should be for E30 at minimum
- ✗ Does not address EPA's excessive use of small refinery exemptions
- ✗ Federal pre-emption component is toothless, only applying to future actions and may limit ability to increase ethanol beyond current amounts
- ✗ No protections against decreased ethanol blending

3 U.S. Environmental Protection Agency: "Federal Register" Vol. 83, No. 132, July 10, 2018. https://www.gpo.gov/fdsys/pkg/FR-2018-07-10/pdf/2018-14448.pdf

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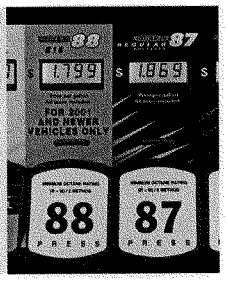
IMPORTANCE OF HIGH-OCTANE FUELS

Octane is a measurement of resistance to fuel detonation or "knock". There are three different ways to measure octane: RON (research octane number), MON (motor octane number), and AKI (Anti-Knock Index). What we see at the pump is the AKI or pump octane which is lower than the measurement in RON. AKI is actually RON plus MON divided by 2, or (R+M/2).

Both international and U.S. fuel economy standards for vehicles are increasingly becoming more and more stringent. Automobile manufacturers are being forced to move toward higher efficiency engines that require high-octane fuels to operate effectively, meet fuel economy standards, and lower greenhouse gas emissions. Ethanol continues to be the most valuable and competitive source of octane in the world, and because it is also lower in greenhouse gas emissions[4], it provides substantial benefits to automobile manufacturers.

OCTANE LABELING 101

Octane is a measurement of resistance to fuel detonation or "knock". There are three different ways to measure octane: RON (research octane number), MON (motor octane number), and AKI (Anti-Knock Index). What we see at the pump is the AKI or pump octane which is lower than the measurement in RON. AKI is actually RON plus MON divided by 2, or (R+M/2).



Growth Energy has been an industry leader in advocacy in this area, first commenting to both EPA and the California Air Resources Board on the need for higher octane, mid-level ethanol-blends when the greenhouse gas standards for vehicles were first developed in 2012. At that time, we submitted a proposal for a 100 Research Octane Number (RON), E30 fuel for both vehicle certification and for consumer use.

The science supporting the benefits of a high-octane fuel, and specifically a mid-level ethanol-blend in the E20 to E30 range, in conjunction with a high compression ratio engine has been well-explored by several national laboratories including Oak Ridge National Laboratory, National Renewable Energy Laboratory, and Argonne National Laboratory, as well as automobile manufacturers and other scientific institutions. Ethanol has a very high octane number relative to other gasoline hydrocarbons, a lower carbon content than the gasoline components it generally replaces, and many other benefits that assist in combustion to increase engine efficiency and reduce both tailpipe greenhouse gas and criteria pollutant emissions. The key studies that have been conducted over the past five years that highlight the efficiency improvements and environmental benefits associated with mid-level ethanol-blends include:

- Leone, T., Anderson, J., Stein R. et al., Effects of Fuel Octane Rating and Ethanol Content on Knock, Fuel Economy, and CO2 for a Turbocharged DI Engine, SAE 2014-01-1228, April 1, 2014.
- Leone, T., Anderson, J. et al., The Effect of Compression Ratio, Fuel Octane Rating, and Ethanol Content on Spark-Ignition Engine Efficiency, Environmental Science and Technology, 2015, 49, 10778-10789.
- West B, McCormick, R., Wang M. et al., Summary of High-Octane, Mid-Level Ethanol Blends Study, ORNL/TM-2016/42, July 2016.
- Jung, H., Shelby, M., Stein, R. et al., Effect of Ethanol on Part Load Thermal Efficiency and CO2 Emissions of SI Engines, SAE 2013-01-1634, April 8, 2013.
- Leone, T., Anderson, J. et al., Fuel Economy and CO2 Emissions of Ethanol-Gasoline Blends in a Turbocharged DI Engine, SAE 2013-01-1321, April 8, 2013.

To briefly summarize, multiple studies have shown that a high RON, mid-level ethanol-blend (e.g. 96-RON E20 or 100-RON E30) when paired with various higher compression ratio engines yield tailpipe carbon emissions reductions of at least

4 U.S. Department of Agriculture: "A Life-Cycle Analysis of the Greenhouse Gas Emissions of Corn-Based Ethanol" January 12, 2017. https://www.usda.gov/oce/climate_change/mitigation_technologies/USDAEthanolReport_20170107.pdf

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five percent, which, in most instances, were also coupled with efficiency gains. Some studies also showed significant volumetric miles per gallon savings associated with the higher efficiency engines and a high-octane fuel. One study that was submitted to EPA in response to their Draft Technical Assessment Report (TAR) by Air Improvement Resources, "Evaluation of Costs of EPA's 2022-2025 GHG Standards with High Octane Fuels and Optimized High Efficiency Engines," showed that the use of a 98 RON, E25 blend would reduce the cost of a model year 2025 vehicle by $400 and a popular crossover SUV by as much as $873.

Not only are the benefits of mid-level ethanol-blends well-understood by the scientific community, but the automobile industry has for years acknowledged the importance of affordable, high-octane fuels coupled with high-compression ratio engines as important to attaining regulatory compliance and improving vehicle performance in the most economical manner possible. A couple of examples can be found below:

- In 2013, Daimler (Mercedes-Benz) identified a worldwide strategy that incorporates E20 to E25 as the main grade gasoline fuel for the 2017-2020 period because "[i]ncreased octane with mid-blend ethanol fuels is [the] key to simultaneously achieve GHG compliance with high customer satisfaction." "Advanced Powertrain Technology Coupled with Octane & Ethanol – Benefits and Opportunities" at 19, William Woebkenberg, Mercedes-Benz Research and Development North America, 2013 SAE High Octane Fuels Symposium.
- Ford Motor Company, having done extensive research into high-octane fuels, highlighted the GHG emissions benefits of biofuels in its 2014/2015 Sustainability Report and referenced the efficiency gains of naturally high-octane ethanol, with optimized engines. See Ford Sustainability Report 2014/2015, available at: http://corporate.ford.com/content/dam/corporate/en/company/2014-15-Sustainability-Report.pdf

When you examine the data, there are clear benefits of moving to a high-octane, mid-level ethanol-blend, such as E30, including increased vehicle engine efficiency, lower tailpipe emissions, and increased use of renewable fuel. We believe that the use of mid-level ethanol-blends will continue to drive investment in more efficient vehicles, as well as more advanced biofuels, such as cellulosic ethanol.

THE RENEWABLE FUEL STANDARD: AN AMERICAN SUCCESS STORY

The RFS has been one of our country's great success stories. It provides motorists with more affordable choices at the pump, keeps the air clean, and drives demand for our farmers, who harvest the feedstock for renewable biofuel.

Today, our industry produces over 16 billion gallons of renewable fuels and over 44 million tons of high protein animal feed to help feed and fuel our world[5]. We are also exporting record numbers of ethanol to countries like Canada, Brazil, and India[6].

This stellar production in the U.S. means that every gallon of our earth-smart and engine-kind ethanol helps to decrease our dependence on foreign oil and improve our energy security. In fact, since 2005 – the year the RFS was enacted – ethanol has helped cut our oil imports by nearly 70 percent[7].

Ethanol is a more affordable option at the pump and is a major part of the reason gas is less expensive than it was just a few years ago. It reduces gas prices, with those who choose E15 saving up to ten cents per gallon[8].

Ethanol is now blended into 98 percent of our fuel supply, meaning it is already in ten percent of your fuel tank. And because ethanol has the highest octane of any available liquid alternatives - not to mention that it is also cleaner and cooler burn-

5 U.S. Energy Information Administration: "U.S. Fuel Ethanol Production Capacity Continues to Increase" August 1, 2018. https://www.eia.gov/todayinenergy/detail.php?id=36774

6 U.S. Foreign Agricultural Service: "Global Agricultural Trade System" October, 2018. https://apps.fas.usda.gov/Gats/default.aspx

7 U.S. Energy Information Administration: "Petroleum and Other Liquids" November 30, 2018. https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=mttntus2&f=a

8 CSP Daily News: "E15 Fuel Rises in Popularity" August 29, 2018. https://www.cspdailynews.com/fuels-news-prices-analysis/fuels-news/articles/e15-fuel-rises-popularity

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ing - ethanol allows for better performing engines that have greater fuel efficiency.

U.S. ethanol production supports nearly 360,000 jobs[9] and plays a critical role in helping to sustain vibrant economies and small communities throughout rural America. For example, in Redfield, South Dakota, a town with a population of just over 2,000, the 60 million gallon ethanol plant, Redfield Energy[10], LLC, employs a staff of 40.

It is no secret that it has been a difficult year for rural America. Inclement weather disrupted the harvest in many areas, and trade disputes placed international shipments on hold, driving prices down below the cost of producing a crop. Farm income is down 46 percent over the past five years[11], and foreign nations are targeting our agricultural exports. Stronger markets at home could provide the breathing room we need to weather the storm. This draft would not provide that breathing room.

The ethanol industry is seeing ethanol prices at 13-year lows, resulting in very narrow profit margins and in some instances, a loss – driven in part by demand destruction caused by the misuse of small refinery exemptions under the RFS and trade barriers that have grown as a response to trade disputes. Sunsetting the RFS could put this precarious situation even more at risk at the same time we are already seeing plants idle production or shut down permanently.

Our farmers need certainty and market access for their products, and history shows that home-grown biofuels, like ethanol, can deliver. The addition of ethanol to the fuel mix has been the single most important aspect to the revitalization of U.S. agriculture. Adding more biofuels could provide a bigger market for farm commodities.

The RFS is also the single most effective policy tool we have to decarbonize our transportation fuels. It is protecting our planet and cleaning the air. Unlike fossil fuels, which increase our carbon dioxide (CO2) emissions, ethanol reduces emissions. Research by the U.S. Department of Agriculture shows that corn ethanol reduces transportation CO2 emissions by 43 percent, and studies at the U.S. Department of Energy's Argonne National Laboratory demonstrate that advanced varieties made with a more diverse bio-based feedstock can reduce emissions by 100 percent or more.[12] These benefits continue to grow with ongoing innovations in biofuel production, innovations spurred by the positive market signals created through a strong RFS.

In fact, each year, ethanol production and use decreases greenhouse gas emissions by 110 million metric tons, which is the carbon equivalent of removing 20 million cars from the road.[13]

In addition to being carbon reductive, ethanol displaces the need for toxic, cancer-causing chemicals that have been linked to asthma, smog, and groundwater contamination.

Ethanol also replaces harmful carcinogens and toxic additives like methyl tertiary-butyl ether (MTBE) and benzene that can be found in petroleum-based fuels, while providing a naturally high octane. Chemicals replaced by ethanol also include toxic aromatics, like xylene, and carbon monoxide, which forms ozone in sunlight and contributes to smog in urban communities. Because of ethanol, there are fewer toxic, dirty chemicals in our fuel, water, and our air.

In addition, farmers are making more efficient use of existing cropland, utilizing fewer resources to grow larger and larger crops. In fact, American farmers are growing record-breaking harvests on

9 Ethanol Producer Magazine: "Ethanol industry makes significant contribution to the economy" February 14, 2018. http://ethanolproducer.com/articles/15044/ethanol-industry-makes-significant-contribution-to-the-economy

10 Redfield Energy, LLC. http://www.redfieldenergy.com/about/

11 U.S. Department of Agriculture: "Highlights From the November 2018 Farm Income Forecast" November 30, 2018. https://www.ers.usda.gov/topics/farm-economy/farm-sector-income-finances/highlights-from-the-farm-income-forecast/

12 U.S. Department of Agriculture: "USDA Releases New Report on Lifecycle Greenhouse Gas Emission Balance of Ethanol", January 12, 2017. https://www.usda.gov/media/press-releases/2017/01/12/usda-releases-new-report-lifecycle-greenhouse-gas-balance-ethanol; Argonne National Laboratory, Michael Wang: "Well-to-wheels energy use and greenhouse gas emissions of ethanol from corn, sugarcane and cellulosic biomass for US use", 2012. http://iopscience.iop.org/article/10.1088/1748-9326/7/4/045905/pdf

13 National Corn Growers Association: "Fueling the Future". http://www.worldofcorn.com/pdf/ncga-fueling-the-future.pdf

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less land than was under cultivation in the 1930s[14]. Between 1980 and 2011 alone, the amount of land required to produce one bushel of corn fell by 30 percent[15].

The numbers and the facts are clear: the RFS has been an overwhelmingly successful national policy. At Growth Energy, we will continue working with EPA to illustrate the job creation, energy security, environmental performance, and other benefits of biofuel growth with one goal in mind: to keep moving the RFS forward, not backward.

EPA COULD REQUIRE A 95 OR HIGHER RON STANDARD WITHOUT LEGISLATION

It is vital to think about fuels and vehicles as a system. Regardless of where future vehicle standards may go, a wealth of data supports moving to a high-octane, mid-level ethanol-blend. Benefits from a high-octane, mid-level ethanol-blend include reduced greenhouse gas emissions, lower cost to consumers, and further investment in rural America and our agricultural economy.

Our recommendations for future EPA engagement include:

1. EPA can and should immediately approve a high-octane, low-carbon, mid-level ethanol-blend such as the 100 RON, E30 fuel that we submitted to the agencies in 2012.
2. EPA can and should exercise its authority under the Clean Air Act to require a minimum octane standard. Higher octane fuels give automakers the additional flexibility they need to meet increasing fuel economy and greenhouse gas standards.
3. EPA can and should correct its fuel economy formula to encourage the use of mid-level ethanol-blends. We would urge that the R-Factor be updated and appropriately adjusted.
4. The National Highway Transportation Safety Administration and EPA should work together to re-establish credits for flex-fuel vehicles or at a minimum look at some of the newest data, particularly out of California on alternative fuel refueling and the significant growth of E85.

We would also be remiss in not outlining how the growth of E15 and the sale of dispensers approved up to E25 are poised to deliver these high-octane fuels once regulatory hurdles are removed.

ENERGY INFORMATION ADMINISTRATION STUDY SHOW LIMITED UPSIDE TO 95 RON

One of the greatest worries of ethanol producers is that replacing the RFS with a 95 RON standard fuel is that the new octane requirement will provide limited – if any – market space for increased ethanol blending. This is because 95 RON fuels already exist in the marketplace and the infrastructure already exists in the current refinery fleet to meet this need, limiting the octane market penetration opportunity for ethanol. Also, the transportation fuel marketplace is not like other markets; petroleum interests hold the keys to be able to access drivers, controlling refining, blending, distribution, and retail supply chains. Furthermore, they will often tie up many retail fueling operations, preventing them from offering fuels like E15 because they compete with petroleum-based fuels.

A recent study by the Energy Information Administration confirms this concern, stating that "U.S. refineries would be able to supply the increased octane requirements in 2027 with minor operational adjustments."[16] This report states that the need for additional sources of octane in a 95 RON world is limited. And despite a clear incentive in the RFS and previously the Volumetric Ethanol Excise Tax Credit, refiners have repeatedly shown limited interest in blending beyond what they want for minimal octane requirements. In fact, ethanol today sells for $1.20/gallon and refiners have shown little initiative to take advantage of this low-cost fuel. It is our belief that absent a need for higher

14 U.S. Department of Agriculture: "National Agricultural Statistics Service". https://quickstats.nass.usda.gov/

15 U.S. Department of Agriculture: "Major Land Uses" February 05, 2018. https://www.ers.usda.gov/data-products/major-land-uses/major-land-uses/#Cropland

16 U.S. Energy Information Administration: "Analysis of Octane Costs" November 28, 2018. https://www.eia.gov/analysis/octanestudy/

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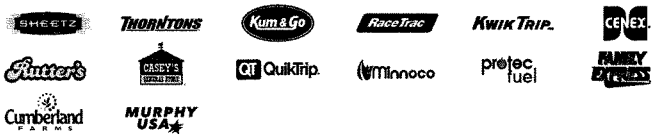
E15 RETAIL PARTNERS



amounts of octane outside what the refinery fleet can produce, the benefits will be limited.

YEAR-ROUND E15

Since EPA approved the waiver for E15 for all vehicles model year 2001 and newer in 2011, our industry, along with our retail partners, have been working to install infrastructure to facilitate the introduction of not only E15 and E85, but mid-level ethanol-blends as well. Today, there are more than 1,600 stations in 30 states offering E15, and more than 4,000 sites offering E85.

Since the administration's October 2018 announcement to begin rulemaking that will allow for year-round sales of E15 beginning next summer, we have already seen additional retail commitments to expand E15 offerings, with Casey's committing up to 500 stores and Cumberland Farms adding another 120 locations[17]. Additionally, since 2016, Wayne Fueling Systems has only sold fuel dispensing equipment that is compatible up to E25, and we are hopeful that additional manufacturers will follow suit[18].

With the president's announcement and the development of more and more dispensing infrastructure, we believe the retail market is primed and ready to accommodate a high-octane, mid-level ethanol-blend in the 25-30% ethanol range.

CLOSING

I appreciate the opportunity to provide comments on this draft. I encourage the subcommittee to continue examining the benefits of high-octane fuels as a way to increase engine efficiency and vehicle mileage, and drive down emissions.

Unfortunately, we cannot support the draft before us as it ends the bedrock policy for biofuel blending, the RFS, without a clear pathway forward for growth and opportunity. We believe that any initiative must avoid reversing the progress the RFS has helped achieve in moving America forward through the increased use of domestically sourced and manufactured renewable ethanol in our transportation fuel mix. In addition, this draft misses clear opportunities to address issues that currently exist such as ending EPA's abuse of small refinery exemptions. Finally, this initiative lacks a forward-leaning perspective on what can be achieved for automakers, consumers, air quality, and the U.S. economy by using high-octane, mid-level ethanol fuel blends. While we do support certain aspects of this draft, we believe it misses an opportunity to lay out a bold and visionary mission for the future of liquid fuels and to make a significant impact in restoring growth in America's rural communities and decarbonizing our nation's fuel supply.

17 Growth Energy: "Casey's Unveils Groundbreaking Partnership with Prime the Pump", Oct. 11, 2018. https://growthenergy.org/2018/10/11/caseys-unveils-groundbreaking-partnership-with-prime-the-pump/; Growth Energy: "Growth Energy Announces New Prime the Pump Partnership with Cumberland Farms to Sell E15", Oct. 16, 2018. https://growthenergy.org/2018/10/16/growth-energy-announces-new-prime-the-pump-partnership-with-cumberland-farms-to-sell-e15/

18 Wayne Fueling Systems: "Wayne Standardizes Offering for All North American Retail Fuel Dispensers to E25", Aug. 30, 2016. https://wayne.com/en/press-releases/2016-08-30-wayne-standardizes-offering-for-all-north-american-retail-fuel-dispensers-to-e25/

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Mr. SHIMKUS. The Chair thanks the gentlelady.

The Chair now recognizes Mr. Geoff Cooper, president and CEO of the Renewable Fuels Association.

You're recognized for 5 minutes.

STATEMENT OF GEOFF COOPER

Mr. COOPER. Thank you.

Good morning, Chairman Shimkus, Ranking Member Tonko, and members of the subcommittee.

My name is Geoff Cooper, and I am the new president and CEO of Renewable Fuels Association, the national trade group representing the U.S. ethanol industry.

I want to thank the chairman and the members of the subcommittee for your thoughtful consideration of our Nation's future energy policy needs and objectives.

RFA has been an active participant throughout this process and we have appreciated the opportunity the share our perspectives on the vital role that biofuels can play in our energy future.

The draft legislation we are here to discuss today represents an important first step forward in the debate about future fuels policy and specifically the role of high-octane fuels.

Because ethanol is by far the most economical and cleanest source of octane available on the market today, it would seem on the surface that any effort to establish a high-octane fuel standard would benefit ethanol producers and the farmers who supply them.

But it's not quite that simple. As currently drafted, RFA cannot support the proposal because it falls short of providing the future market certainty and the clear path to growth that our industry needs.

By eliminating the Renewable Fuel Standard requirements for conventional biofuels in 2022 and adopting a no-growth methodology for advanced biofuel requirements through 2032, the draft bill would destabilize the considerable progress our Nation has made for greater energy security, economic vitality, and environmental health.

We simply cannot support eliminating the RFS program as the draft envisions without a much stronger signal to the market that ethanol's role in our fuel supply will continue to grow.

Even though ethanol is far superior to other octane boosters in terms of cost and environmental performance, a 95 RON standard, when paired with elimination of the RFS, would not result in increased market opportunities for ethanol.

To the contrary, we believe the 95 RON standard in the absence of the RFS or other environmental performance requirements could reduce demand for ethanol.

Refiners and blenders would simply meet demand for more octane by increasing reformer severity and producing greater volumes of higher-octane hydrocarbons like aromatics, which are often toxic in nature, worsen air quality, and are typically two times the cost of ethanol.

Thus, consumers would just end up paying more for dirtier gasoline.

In fact, a new EIA Commission Study concludes that oil refiners would have, quote, "no problem," quote, meeting a requirement to

produce 95 RON gasoline beginning in 2022 and assumes that refiners would meet that standard with E10 gasoline.

The study found that, quote, "no significant changes in refinery configuration our through put would be required to meet the minimum 95 RON gasoline requirement," end quote.

And contrary to testimony previously offered to this subcommittee, the EIA study finds, quote, "no industry wide capital intensive projects would be needed to meet the requirements," end quote.

There are elements of the discussion draft that we do find very encouraging. We appreciate the provision requiring automakers to warrant vehicles built in 2023 and later for E20 and we welcome the requirement that EPA approve an E20 fuel waiver.

However, we believe ethanol blends above E20 like E25 and E30 will be necessary to deliver the octane levels that best facilitate greater fuel economy and emissions reductions.

We also very much appreciate that the discussion draft again demonstrates this subcommittee's support for addressing the antiquated RVP barrier that is currently keeping E15 out of the marketplace on a broader scale.

In closing, RFA strongly believes a high-octane fuel standard can work I concert with, not in conflict with, the RFS. The measures would be complementary and the RFS would assure that clean renewable octane sources like ethanol are able to access a high-octane fuel market that might otherwise be closed to competition.

With proper oversight and implementation, the RFS can continue to work in tandem with a high-octane fuel standard to continue to drive innovation, support rural economies, and provide cleaner fuel choices at the pump well beyond 2022.

We thank you again for starting this very important conversation and look forward to its continuation.

Thank you, and I look forward to your questions.

[The prepared statement of Mr. Cooper follows:]

RFA RENEWABLE FUELS ASSOCIATION

TESTIMONY OF
GEOFF COOPER
PRESIDENT & CEO, RENEWABLE FUELS ASSOCIATION
BEFORE THE
COMMITTEE ON ENERGY AND COMMERCE, SUBCOMMITTEE ON ENVIRONMENT
HEARING ON
"DISCUSSION DRAFT: THE 21ST CENTURY TRANSPORTATION FUELS ACT"

DECEMBER 11, 2018

Good morning, Chairman Shimkus, Ranking Member Tonko, and Members of the Subcommittee. My name is Geoff Cooper and I am president and CEO of the Renewable Fuels Association (RFA), the national trade association representing the U.S. ethanol industry.

The RFA has been the leading trade association for America's renewable fuels industry for over 37 years. Our mission is to advance the development, production and use of renewable fuels by strengthening America's ethanol industry and raising awareness about the benefits of biofuels. Founded in 1981, RFA serves as the premier organization for industry leaders and supporters. With over 300 members, we are working to help America become cleaner, safer, more energy secure, and economically vibrant.

The ethanol industry makes a vital contribution to our nation's economy. The production of 15.9 billion gallons of ethanol in 2017 directly employed 71,906 American workers in the manufacturing and agriculture sectors. In addition, the ethanol industry supported 285,587 indirect and induced jobs across all sectors of the economy. The industry created $24 billion in household income and contributed $45 billion to the national Gross Domestic Product (GDP). Moreover, ethanol producers paid nearly $10 billion in federal, state and local taxes, and spent $32 billion on raw materials, inputs, and other goods and services.[1]

I want to thank the Chairman and the members of the Committee for their thoughtful

[1] John M. Urbanchuk (ABF Economics). "Contribution of the Ethanol Industry to the Economy of the United States in 2017." February12, 2018. Available at: https://ethanolrfa.org/wp-content/uploads/2018/02/RFA-2017-Ethanol-Economic-Impact-01_28_17_Final.pdf

consideration of future energy policy approaches. RFA has been an active participant throughout this process, and we have appreciated the opportunity to share our perspective on the vital role that biofuels like ethanol can play in our energy future. The draft legislation we are here to discuss today reflects a good deal of those deliberations; it represents an important first step in the debate about future fuels policy, and specifically the role of high octane low carbon (HOLC) fuels.

As currently drafted, however, RFA cannot support the proposal because it falls short of providing the future market certainty and clear growth trajectory our industry needs. By eliminating the Renewable Fuel Standard (RFS) requirements for conventional biofuels in 2022 and adopting a no-growth methodology for advanced and cellulosic biofuel requirements through 2032, the draft bill would undermine the considerable progress our nation has made toward greater energy security, economic vitality, and environmental health.

We believe the RFS has been a remarkable success. It has lowered consumer fuel prices, decreased reliance on imported petroleum, reduced emissions of harmful tailpipe pollutants and greenhouse gases (GHG), supported hundreds of thousands of jobs in rural America, and added value to the crops produced by our nation's farmers.[2]

The RFS *does not* end in 2022, and with proper oversight and implementation, the program will continue to drive innovation, support rural economies, and provide cleaner and more affordable fuel choices at the pump. We simply cannot support eliminating the RFS program, as the draft envisions, without a much stronger signal to the market that ethanol's role in our fuel supply will continue to grow. A 95 RON standard does not provide that signal and is not a suitable replacement for the RFS beyond 2022. Indeed, as concluded in a new study commissioned by the Energy Information Administration (EIA), oil companies could easily meet a 95 RON standard without using any additional ethanol beyond current levels.[3]

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[2] RFA. "The RFS2: Then and Now." December 2017. Available at: https://ethanolrfa.org/wp-content/uploads/2017/12/RFS2-Ten-Years.pdf. *See also*, Gal Hochman and David Zilberman. "Corn Ethanol and U.S. Biofuels Policy 10 Years Later: A Quantitative Assessment." *American Journal of Agricultural Economics*, Volume 100, Issue 2, 1 March 2018, Pages 570–584, https://doi.org/10.1093/ajae/aax105.

[3] Baker & O'Brien for U.S. Energy Information Administration. "Analysis of Octane Costs: Phase 2 Report." November 2018. Available at: www.eia.gov/analysis/octanestudy/ (Attached)

I. BACKGROUND

Today, ethanol is blended into roughly 98 percent of the gasoline sold in the United States, the majority as E10 (blends containing 10% ethanol and 90% gasoline). As a blend component, ethanol provides a valuable clean octane boost, displacing toxic substances in gasoline and helping refiners comply with obligations under the Clean Air Act. Not only is ethanol a thoroughly tested, safe, and effective motor fuel, it is the lowest cost source of octane available to refiners and blenders today. Increasing the use of high-octane, low-carbon ethanol is the first and easiest step we can take to improve engine efficiency, lower tailpipe emissions, and reduce greenhouse gases from transportation while reducing costs at the pump.

Because ethanol is the cleanest and most affordable source of octane available today, it will play a pivotal role in enabling low-cost advanced vehicle technologies that will improve fuel economy and significantly reduce harmful tailpipe pollution and GHG emissions. Ethanol has unique properties that make it a highly attractive component of the liquid fuels that will enable the advanced engines of tomorrow. Not only is ethanol a renewable fuel that offers superior GHG performance, but it also is the most economical octane source, possesses an extremely high-octane rating (109 RON "pure component," 108-119 AKI "blending octane"), a high heat of vaporization, and high octane sensitivity. The auto engineers, government scientists, and academic researchers who are examining the costs and benefits of our future liquid fuel options have identified these attributes as highly desirable.[4]

II. DISCUSSION DRAFT: THE 21ST CENTURY TRANSPORTATION FUELS ACT

The discussion draft is a comprehensive effort to address a variety of issues that have been raised by stakeholders over the past several years. The following reflects our views on several key provisions of the draft that are of particular interest to ethanol producers.

a. Eliminating the conventional biofuel provisions of the RFS after 2022

By any measure, the RFA believes the RFS has been a tremendous success. It has lowered our

[4] The significant technical and economic advantages of utilizing ethanol as a source of octane were enumerated in the attached letter from the RFA to the committee on April 12, 2018 (Attached).

dependence on imported petroleum, expanded domestic fuel supplies, and lowered gasoline prices at the pump. Meanwhile, the RFS helped undergird the economic revival of rural America; ethanol has provided a tremendously important value-added market for farmers, allowing significant reductions in federal farm program costs. Moreover, the RFS has reduced pollution in our nation's cities while reducing GHG emissions from transportation fuels.

The RFS is stimulating investment in next generation biofuels, with dozens of existing corn ethanol facilities evolving into true biorefineries that also produce advanced biofuels and bioproducts. The RFS is also driving the marketplace beyond ethanol's use as an "additive," which was a fundamental objective of the program. Higher ethanol blends, from E15 to E85, are providing consumers lower-cost choices at the pump.

The oil industry does not like the RFS—precisely because it has worked to reduce petroleum consumption and provide access to a market that is otherwise closed to competition. But the oil industry's dislike for the RFS is no reason to scrap a program that has delivered so many benefits to consumers across the country. Indeed, the RFS can work in concert with, not in conflict with, a high-octane fuel requirement. In this scenario, the RFS would assure clean, renewable octane sources like ethanol remain available and are allowed to compete as increased demand for high-octane fuels materializes.

Some stakeholders have suggested the uncertainty associated with EPA's discretion to set RFS volumes for 2023 and beyond should motivate us to discuss legislative changes. However, the risk and uncertainty associated with more Administrative discretion post-2022 is not alleviated by simply eliminating the program's conventional renewable fuel requirements altogether. That is particularly true when the proposal's 95 RON requirement, as drafted, will not drive increased market opportunities for renewable fuel producers.

b. Establishing a 95 RON Octane Standard for 2023 and Later Vehicles

The RFA strongly supports a transition to high-octane fuels. Establishing a 95 RON standard for all light-duty vehicles produced in 2023 and beyond is potentially a step in the right direction. But while a 95 RON standard could help automakers meet increasingly stringent fuel economy and emissions standards, we are not convinced it would expand the market for ethanol, despite

ethanol's cost effectiveness and inherently lower carbon content.

Numerous studies by the automotive industry, U.S. Department of Energy, and academia have examined the efficiency gains and emissions reductions that can be achieved when HOLC fuels are used in internal combustion engines with high compression ratio, turbocharging, and other advanced technologies. These studies have repeatedly shown that high octane fuels (98-100 RON) used in high compression engines improve efficiency and reduces emissions by 4-10%, depending on drive cycle and other factors. Studies also demonstrate that fuel economy and vehicle range using HOLC blends like E25 and E30 are equivalent or superior to the vehicle's performance using E10, even though the E25 and E30 blends have lower energy density. In other words, less energy is needed to travel the same distance, resulting in lower emissions per mile.

Even though ethanol is far superior to other octane boosters in terms of cost, GHG emissions, health impacts, and other factors, a 95 RON standard—when paired with elimination of the RFS conventional renewable fuel requirements—would *not* result in increased market opportunities for ethanol. To the contrary, we believe a 95 RON standard in the absence of the RFS, or other environmental and economic performance requirements, would reduce demand for ethanol. Gasoline producers and blenders would simply meet the demand for more octane by increasing reformer severity and producing greater volumes of higher octane hydrocarbons.

A new EIA-commissioned study concludes that U.S. petroleum refineries would have "no problem" meeting a requirement to produce 95 RON gasoline beginning in 2022, and assumes that refiners would not use more ethanol beyond current levels to meet such an octane standard. The study, conducted by oil industry consulting firm Baker & O'Brien, Inc., examines a scenario in which all new vehicles beginning with model year 2023 require the use of 95 RON gasoline. According to the study, refiners would simply increase reformer severity to produce higher octane gasoline blendstock, which would then be blended with 10% ethanol to produce a 95 RON finished fuel. The authors found that "...no significant changes in refinery configuration or throughput would be required to meet the minimum 95 RON gasoline requirement."

Increasing the reformer severity to make higher octane gasoline at the refinery "is well within the range of normal operations," the report says, noting that "...existing domestic refineries should have no problem meeting the (95 RON) requirements..." Even as the demand for 95 RON

gasoline grows as more 95 RON-required vehicles enter the fleet in the study's 2027 scenario, refiners "...appear to be able to meet the increased 2027 octane requirements with minor operational adjustments." Contrary to the testimony previously offered to this Subcommittee by witnesses representing the oil industry, the EIA study finds, "No industry-wide capital intensive projects would be needed to meet the 2027 requirements." In fact, the report notes that "...domestic refinery reformer capacity utilization and severity were well below full potential in 2016. This underutilized capacity represents a significant source of potential octane."

The EIA report's central conclusion (i.e., that refiners could easily meet a 95 RON requirement without using more ethanol) is supported by research conducted for the United States Council for Automotive Research (USCAR). The USCAR work shows the incremental cost to refiners of increasing the pool octane rating to 95 RON would be just 3 cents per gallon. In a statement confirming that refiners would not be compelled to use more ethanol, USCAR concludes that "A national 95 RON minimum *E10* gasoline is a near-term, cost-effective fuel economy solution."

The Petroleum Marketers Association of America provided further confirmation that a 95 RON standard would not result in more ethanol use, stating in a recent newsletter that "95 RON can be produced with E0, but...E10 would likely be used to meet the 95 RON standard."

Based on research conducted by the automakers and government laboratories, RFA strongly believes that a national standard establishing a minimum 98-100 RON fuel would provide much greater fuel efficiency gains and greater reductions in tailpipe pollution and GHG emissions. At the same time, a 98-100 RON standard would truly provide new market opportunities for ethanol producers and the farmers who supply feedstock to the ethanol industry. Over the past several years, a growing chorus of automotive engineers and executives, government scientists, expert panels, and university researchers has called for the introduction of HOLC fuels in the 98-100 RON range. This includes the following key statements regarding the need for 98-100 RON fuel from senior automotive executives[5]:

- "Higher octane is necessary for better engine efficiency. It is a proven low-cost enabler to lower CO2; **100 RON fuel is the right fuel for the 2020-2025 timeframe**."— *Dan*

[5] Richard Truett (Automotive News). "Powertrain executives press for higher octane gasoline to help meet mpg, CO2 rules." April 13, 2016.

Nicholson, vice president of global propulsion systems, GM

- **"100 RON has been on the table for a long time.** The only way we will ever get there is to continue to push and work in a collaborative way." — *Tony Ockelford, director of product and business strategy for powertrain operations, Ford Motor Company*

- "We need to find a new equilibrium. **Whether it is 98 or 100 (RON) octane, we need something at that level.**"— *Bob Lee, head of powertrain coordination, Fiat Chrysler*

The RFA firmly believes a 98-100 RON standard is what is needed to achieve the full potential of HOLC fuels to maximize efficiency benefits, emissions reductions, consumer savings, and market opportunities for renewable fuel producers and farmers.

c. Directing EPA to allow the use of a 98 RON certification test fuel

While we appreciate that the discussion draft directs EPA to "take such actions as are necessary to allow the use of..." a 98 RON certification test fuel, we note that current statute already allows automakers to petition the Agency to use such a certification test fuel. According to EPA's "Tier 3" regulations:

> ...we will allow vehicle manufacturers to specify an alternative test fuel under certain situations. ...if manufacturers were to design vehicles that required operation on a higher octane, higher ethanol content gasoline (e.g., dedicated E30 vehicles or FFVs optimized to run on E30 or higher ethanol blends), ...they can petition the Administrator for approval of a higher octane, higher ethanol test fuel...This could help manufacturers who wish to raise compression ratios to improve vehicle efficiency as a step toward complying with the 2017 and later light-duty greenhouse gas and CAFE standards.[6]

To date, no automakers have used this process to apply for an alternative certification test fuel.

[6] 79 Fed. Reg. 23528 (April 28, 2014)

d. Specifying the method for determining 2023-2032 RFS requirements for biomass-based diesel, cellulosic biofuel, and advanced biofuel

While we appreciate that the discussion draft does not propose elimination of the RFS requirements for biomass-based diesel, cellulosic biofuel, and other advanced biofuels until 2032, we are concerned by the proposed method for determining future renewable volume obligations for these fuels. Specifically, requiring that the Administrator set future RFS requirements for these renewable fuels based on the previous year's actual production would undermine the market-driving intent and growth focus of the program. In the absence of a growing market opportunity under the RFS, investors will not finance new facilities and technologies and industry would risk flatlining. If the upcoming year's standard can be met with existing facilities and static output levels, there is no incentive to expand production of cellulosic and advanced biofuels, and the RFS becomes a self-fulfilling prophesy of stagnation.

e. Requiring automakers to warrant light-duty vehicles to operate with gasoline containing up to 20% ethanol

The RFA generally supports this provision of the discussion draft, but we believe automakers could and should warrant motor vehicles to operate on blends containing 30% ethanol (E30). Much of the research by automakers and the Department of Energy on ethanol-based HOLC fuels demonstrates that ethanol's unique properties (e.g., high octane number, high octane sensitivity, low carbon content, etc.) are best captured in a blend containing 25-30% ethanol. Further, blending more ethanol with today's marketplace E10 until the ethanol content blended fuel reaches 25-30% results in a finished fuel with an octane rating in the 98 RON range. Meanwhile, adding 20% ethanol to today's typical E0 gasoline blendstock would result in a finished E20 fuel blend with just 95-96 RON, forgoing the additional efficiency and emissions benefits inherent to a 98-100 RON fuel.

f. Requiring the Administrator to grant a fuel waiver allowing the use of gasoline containing 20% ethanol

Just as we believe the proposed provision requiring automakers to warrant their vehicles to operate on E20 should be adjusted to E30, RFA believes this provision should require the EPA to

grant a fuel waiver allowing the use of up to E30 in light-duty vehicles, not just E20. For the reasons described in the previous section, a fuel waiver for blends up to E30 would provide more flexibility and would allow refiners and blenders to more fully capture ethanol's octane and carbon benefits. Moreover, we note that EPA itself has noted the potential of E30 to "enhance the environmental performance of ethanol as a transportation fuel by using it to enable more fuel efficient engines."[7]

g. Extending the 1 psi volatility waiver to blends containing 10% ethanol "*or more*"

RFA supports efforts to establish regulatory parity for all ethanol blends, including volatility requirements. However, we note that a regulatory process is already under way at EPA to alleviate the marketplace barrier associated with EPA's decade's old gasoline volatility regulations.

Reid Vapor Pressure (RVP) is a measure of a fuel's volatility, which is necessary for ignition. Fuels with low volatility are slow to ignite; fuels with a high volatility will ignite quickly. But increased volatility can potentially mean increased evaporative emissions, and consequently the EPA has regulated gasoline volatility in the summer months since the 1980s, generally requiring gasoline to have no more than 9 psi RVP.

Ethanol itself has a very low volatility (roughly 2 psi RVP). But when mixed into gasoline at low levels (10% or less), ethanol reacts with certain hydrocarbons to increase the RVP of the finished blend approximately 1 psi, or generally to about 10 psi RVP.

To accommodate increased ethanol use as an octane component and means of reducing tailpipe emissions, EPA in 1989 provided a 1 psi RVP tolerance to gasoline blended with 9-10% ethanol. EPA did so for two reasons. First, the Agency realized that in the absence of a volatility waiver gasoline marketers intending to use ethanol would have to secure a specially tailored sub-RVP blendstock that was simply not available. Second, the Agency concluded after numerous air quality analyses that the exhaust emissions benefits of ethanol, including greater carbon monoxide and hydrocarbon reductions, outweighed the negligible impact of increased

[7] 79 Fed. Reg. 23529 (April 28, 2014)

evaporative emissions attributable to the 1 psi waiver.

EPA limited its regulatory relief to up to 10% ethanol blends because at the time 10% ethanol was the only ethanol blend with a 211(f) fuel waiver allowing it to be sold commercially. In 2011, EPA granted a partial 211(f) fuel waiver for 15% ethanol, but failed to extend the volatility tolerance to the new fuel, greatly limiting its marketplace opportunities for the exact same reason 10% blends would have been limited – marketers were unable to secure a specially-tailored, sub-RVP blendstock.

The disparate treatment on volatility regulation between E10 and E15 or higher blends has been the single most important barrier to ethanol growth over the past 5 years. Recent research considering changes in vehicle technology since the original RVP waiver was granted has demonstrated the reduced evaporative emissions from today's automobiles and the increased oxygen content of higher ethanol blends provides even more air quality improvement than E10, and that emissions are reduced with higher ethanol blends.

EPA was recently directed by President Trump to initiate a rulemaking extending the RVP waiver to E15 blends. We strongly support this effort. The Agency has committed to completing this rulemaking by June 1, 2019, which is the beginning of the summer "VOC control season" during which retailers in conventional gasoline markets find it difficult or impossible to continue selling E15. It is critical that EPA meet this deadline for a final rule, lest the ethanol industry lose another summer season to bureaucratic malaise.

We appreciate that the discussion draft demonstrates, again, Congressional support for addressing this antiquated and costly RVP barrier.

III. CONCLUSION

Today, the ethanol industry faces needless market constraints and an oversupply related to EPA's failure to implement the RFS appropriately. Thus, consumers are being prevented from accessing lower-cost and cleaner fuel options at the pump. Meanwhile, farmers are dealing with crippling commodity surpluses and the most challenging economics in a generation. And, at the same time, auto companies are seeking high-octane fuels to enable the advanced engine technologies needed to meet increasingly stringent fuel efficiency and emissions standards.

All of these dynamics do create an opportunity for a future energy policy benefiting everyone, while continuing to build on the undeniable successes of the RFS. While a good conversation starter, this discussion draft does not provide the long-term certainty and growth path that America's renewable fuel producers, farmers, automakers, and consumers need. Future fuel policy should augment the RFS program, not simply replace it. We continue to believe future policy measures should recognize both the high-octane benefits of ethanol *and* the carbon benefits of renewable fuels. Following the successful model of the RFS, any future fuel policy should endeavor to simultaneously achieve multiple public policy objectives including economic growth, energy security, environmental improvement, and innovation. The RFA looks forward to continuing to be a part of that discussion.

Thank you.

Mr. SHIMKUS. The Chair thanks the gentleman.

And last but not least on the first panel we have Mr. Chet Thompson, president of American Fuel and Petrochemical Manufacturers.

Sir, you're recognized for 5 minutes, and welcome.

STATEMENT OF CHET THOMPSON

Mr. THOMPSON. Thank you, Mr. Chairman, Ranking Member Tonko, other members of the subcommittee. I really appreciate the opportunity to be here this morning and share the views of the U.S. refining industry on this discussion draft.

Let me start by thanking you, Mr. Chairman, Mr. Flores, and your committee staff for the incredible work you have done over the last year on this really critical topic.

No doubt the easy thing for you to have done was to run quickly away from this issue a year ago. You didn't. You chose to stick it out, and we appreciate it.

We also appreciate the release of this discussion draft.

Mr. Chairman, when you told us a few months ago this was coming you promised us it would be far from perfect. You also promised us that all of us stakeholders would find something in it that we loved and something in it that we hate.

Rest assured, your premonition was spot on. Well, unfortunately, we are not in a position to support the draft in its current form. But we do think it moves the ball.

We think and hope it will generate momentum for further discussion and eventually statutory reform—reform that most of the stakeholders believe is so critical.

As I have testified before this subcommittee on multiple occasions, most recently last April, the RFS in its current form is unsustainable. It's bad for consumers and it's only destined to get worse if reform does not happen before EPA takes over this program in 2022.

I also testified that a proper transition from the RFS to a fuel-neutral 95 RON octane standard would be better for all stakeholders and could better harmonize our country's fuel and transportation policies.

A 95 RON standard would help our auto companies improve the efficiency and reduce the emissions of the existing fleet and future fleets and comply with CAFE.

It would provide retailers with optionality, to quote Mr. Columbus. It would provide farmers and ethanol producers with the potential for greater market share, contrary to what you have heard already this morning, and it would certainly provide relief for my members from the broken RFS.

But most importantly, it would provide relief to consumers—relief in the form of lower prices.

Against this backdrop, there are aspects of this discussion draft that we support and those that we don't. So let me start with the positive—what we can support.

We certainly support the sunsetting of the RFS in exchange for 95 RON standard, you know, presuming or assuming it's done correctly.

After years of study with the autos, a 95 RON performance standard has been demonstrated to be the most cost effective option for consumers for improving the efficiency of the transportation fleet, at least in the near term.

Indeed, there's no other fuel option that is realistic I in the time frame we are talking about this morning. We support requiring all light-duty vehicles starting in 2023 to be designed specifically to run on this fuel, on at least a 95 octane rating and potentially higher.

Finally, we support the comprehensive misfueling requirements and liability protections afforded in the—in the draft. However, we do believe those protections need to be expanded to include the U.S. refining industry.

Unfortunately, and, again, as highlighted much more extensively in my testimony, there are a few provisions, Mr. Chairman, as you might imagine, we can't support. So let me just highlight a few.

First, we absolutely can't support a new 15 billion gallon per year mandate for a conventional ethanol. Such a mandate is unfeasible.

Let me put this in a perspective. To hit this mark by 2020, which the draft would require, ethanol blending in our country would have to increase by 700 million gallons. Seven hundred million.

Because of the blend wall, which is real, this would require E15 sales to increase by 3,000 percent—3,000 percent in a mere 12, 13 months. This is simply not possible.

Nor can we support extending the RFS program until 2032. The program must end when a new 95 RON standard takes effect in 2023.

Nor can we support the draft's various E20 mandates. Autos should decide how to harden their vehicles to run on a new 95 RON fuel, not the Government, and environmental and technical analysis that supports subsim determinations that can't be short-circuited through legislation.

E20 should not be authorized to be released and used in the market until we have a full understanding of what the impact of E20 would be on existing automobiles.

Finally, we do not support establishing 98 RON as a certification fuel. There is simply no nexus between a 98 RON cert fuel and a 95 RON that the draft would develop and create.

There's already a pathway for EPA and for the autos to pursue to get a new cert fuel and there's absolutely no reason that this legislation needs to address this issue.

So, again, in closing, let me say we appreciate your leadership over the past years, Mr. Chairman. Again, Mr. Flores and staff, we appreciate everything you have done.

There are real opportunities here. The folks at this table have been at this for many years and we believe we are really starting to advance and there's lots of opportunities around a 95 RON standard. We hope this remains a priority for this subcommittee next year.

So I look forward to answering any of your questions.

Thank you.

[The prepared statement of Mr. Thompson follows:]

AFPM
American
Fuel & Petrochemical
Manufacturers

Testimony of Chet Thompson, President and CEO, American Fuel & Petrochemical Manufacturers

U.S. House Energy and Commerce Subcommittee on the Environment

"Discussion Draft: The 21st Century Transportation Fuels Act."

December 5, 2018

The American Fuel & Petrochemical Manufacturers ("AFPM") appreciates the opportunity to provide testimony on *The 21st Century Transportation Fuels Act*. AFPM's members operate approximately 120 refineries, representing more than 95 percent of U.S. refining capacity, to produce the gasoline, diesel, jet fuel, and building blocks for the thousands of products that make innovation and progress possible.

Today's discussion draft advances a dialogue about what the best transportation fuel policy is for the American people. We applaud Chairman Shimkus and Congressman Flores for their leadership and for continuing a robust discussion in an attempt to find the correct balance for the future of transportation fuel.

AFPM supports competitive markets for transportation fuels and policies that both protect consumers and reduce regulatory barriers to competition. As we testified in April, AFPM believes that if implemented correctly, a transition from the Renewable Fuel Standard ("RFS") to a fuel-neutral, 95-RON performance standard has the potential to better address the needs of all stakeholders: the auto industry, marketers, biofuel producers, farmers, refiners, and most importantly consumers. While AFPM is unable to support the discussion draft in its current form, we do recognize that it gets some issues right, misses the mark on others, and includes areas we

are simply unable to support as they fail to promote free market competition for fuels. We look forward to engaging all stakeholders in further discussions on this policy.

I. PROPERLY STRUCTURED, A TRANSITION FROM THE RFS TO A FUEL-NEUTRAL 95-RON OCTANE STANDARD CAN BE A BETTER POLICY FOR ALL STAKEHOLDERS

If policymakers enact legislation to transition from the RFS into a fuel-neutral octane standard, AFPM agrees that 95 RON is the appropriate minimum octane level. A 95 RON octane fuel, when paired with automobiles optimized for such fuel, can deliver a 3-4 percent efficiency gain at a lower well-to-wheels cost than other technologies. A 3-4 percent efficiency gain is the carbon equivalent of more than 700,000 electric vehicles on the road each year. And at a time when policymakers and consumers are looking for increased fuel efficiency, a 95 RON standard would enable the refining industry to reduce emissions more cost-effectively for consumers than other options available to automakers.

As with any fuels policy, the feasibility of introducing a new fuel is a function of market and regulatory conditions. 95 RON has the benefit of being available on a nationwide basis on day one, minimizing disruptive infrastructure requirements and other market barriers associated with higher RON levels.

Moreover, a 95 RON can be produced within all of the most stringent air quality standards in place today—including in California. Recognizing California's restrictive predictive model on air quality and restrictions on the sale of ethanol blends exceeding 10 percent, 95 RON is the effective upward limit on a federal octane standard that can be achieved in all 50 states. Such a standard would also provide maximum flexibility for retailers and lower costs for consumers.

For a transition from the RFS to a 95 RON octane standard to work, legislation must include certain core elements.

1. **Congress should refrain from establishing new product-specific mandates or subsidies that will distort the functioning of the fuels market.** A transition to a fuel-neutral 95 RON octane standard should be preferable fuel policy for all stakeholders, but markets must be permitted to function efficiently. New or additional requirements will add cost and uncertainty and undermine the intent of the policy proposal.

2. **The standard must be limited to 95 RON**. For the reasons already articulated above and in our April testimony, mandatory RON specifications exceeding 95 RON are not feasible nationwide on a timeline enabling efficiency gains for fuel economy targets. Automakers can utilize existing regulatory pathways for additional certifications if they choose.

3. **Congress should preempt state laws that conflict with a nationwide adoption of a fuel-neutral octane standard**. The benefit of 95 RON is that the fuel can be available to satisfy the demands of a nationwide auto fleet on a timeline to help meet the 2022-25 fuel economy standards. To minimize uncertainty and the costs of the transition, Congress should prevent states from interfering with misfuelling regulations or fuel composition.

4. **To provide incentive for transitioning infrastructure, Congress should provide liability protection for retailers and refiners that comply with misfuelling regulations.** Potential liability for misfuelling is a barrier to entry for new fuels that Congress can address through legislation. AFPM suggests a limited scope of safe-harbor liability protection limited to damage caused by misfuelling with subgrade octane,

provided refiners, retailers, and automakers have complied with their responsibilities under the law and implementing regulations.

5. **The RFS must sunset when the standard takes effect.** An octane standard has the potential to be the most cost efficient and consumer friendly way to meet emissions targets, but it also requires multiple billions of dollars in investment. The RFS is an incredibly expensive program, so to realize any type of cost benefit, an octane standard must be paired with an RFS sunset. Ethanol is a cost-competitive source of octane, and could reduce the investments needed in the refining system, but to drive down cost a 95 RON octane standard must enable competition instead of mandating specific fuels.

6. **Congress should provide for a robust and meaningful consumer education campaign.** The introduction of a new fuel has the potential to cause consumer confusion. Thus, Congress should build in authorization and funding for a significant consumer education effort as new vehicles enter the market.

7. **Congress should require EPA and FTC to evaluate and establish misfuelling and labeling regulations to prevent misfuelling of new vehicles with sub-octane fuel.** The misfuelling provisions should be cost-effective, account for legacy vehicles, and facilitate a smooth transition for retailers. Likewise, Congress should ensure that EPA and FTC update labeling, product transfer, and other regulations that need to be addressed for the new fuel to enter the market.

These suggestions should be core elements of any legislative package, but are not an exclusive list. In light of these guiding principles on the core elements, AFPM believes the discussion draft is moving in the right direction on many of these elements, but falls short on others. AFPM

could not support the legislation as drafted, but offers suggestions for improving the bill in the following section.

II. THE DISCUSSION DRAFT NEEDS MODIFICATION IN KEY AREAS

AFPM appreciates the leadership of the Committee to advance this important discussion. We offer the following suggestions to improve the draft:

Sunset the entire RFS in 2023. The core of any legislation should be to sunset the RFS before any new requirements take effect. The RFS is characterized by litigation, waivers, volatile RIN prices, phantom fuels, and fraud—issues that will only get worse and more uncertain as the mandates rise and as EPA considers both volume resets and a post-2022 regulatory environment where no stakeholder knows how the program will be administered. Bringing certainty to the market by sunsetting the RFS after the statutory tables expire is the right policy, and as a result, AFPM recommends that the legislation sunset the full RFS in 2023.

AFPM supports market competition for fuels, including a market-driven adoption of ethanol blends. AFPM projects that a 95 RON octane standard would provide a healthy market for ethanol, including significant potential for more market penetration than under the RFS. After 15 years of mandates and several decades of subsidies, further government support for ethanol is unnecessary.

Remove provisions establishing a conventional ethanol mandate pre-2022. AFPM is unable to support provisions establishing a 15 billion gallon corn ethanol mandate for 2020-2022. According to the Energy Information Administration ("EIA"), the U.S. is on track to consume approximately 14.4 billion gallons of ethanol in 2018. To reach 15 billion gallons of ethanol consumption this year, the U.S. would have needed to sell an additional 12 billion gallons of

E15. According to analysis conducted with our members, this would require nearly 47,000 stations selling E15—30 times the number of stations selling E15 today, at a cost of more than $3.5 billion—starting only 13 months from today. The math becomes even more challenging as projected gasoline demand continues to decline, placing even more pressure on the E15 market, and is further exacerbated by the fact that E15 is not legal in California and six other states (Arizona, Delaware, Montana, New York, Oregon, and Wisconsin). Without alternative compliance mechanisms, waivers, or other similar mechanisms, this is completely infeasible. To address the RFS before 2022, AFPM recommends reducing the total renewable volumes to better align with market realities. AFPM further recommends that Congress limit advanced biofuel mandates to demonstrated domestic production of advanced biofuel and ensure important cost-containment mechanisms are retained to protect consumers.

Remove provisions defining E20 as gasoline. AFPM recommends removing provisions that appear to forgo environmental reviews of E20 under the Clean Air Act §211(f)(4). The Clean Air Act provides a process by which fuel blends, including E20, are evaluated for suitable use as gasoline in the transportation fleet and are approved if they will not "cause or contribute to the failure of an emissions control device." As drafted, §212 of the legislation appears to compel a waiver for E20 notwithstanding the results of any environmental review. The waiver would effectively permit the use of E20 in all on-road and off-road legacy vehicles and engines, regardless of compatibility with engines or impacts on durability and performance. AFPM recommends that the Committee refrain from automatic waivers, and actually strengthen the 211(f)(4) review process by including a review of the impact of new fuels on legacy engine durability and performance.

Remove provisions creating mandates for E20 warranties and infrastructure. The requirements for retailers to install E20 compatible infrastructure and for automakers to warranty their vehicles for E20 should be removed from the legislation. E20 is not a legal fuel for any vehicles other than flex-fuel vehicles, and therefore any such requirements are adding expense to the fuel system without a demonstrated need. This is particularly true in states like California and New York, which restrict the sale of ethanol blends exceeding 10 percent. Retailers and consumers in those states would be compelled to pay for hardened vehicles and infrastructure that no consumer will be able to use, even if EPA were to deem E20 a legal fuel in other states. As Congress asks retailers to invest in misfuelling equipment to protect again misfuelling for octane, it should not further increase costs for retailers by adding further requirements.

Remove the provision establishing a 98 RON certification fuel. The market should determine what additional certification fuels should be considered and as a result AFPM recommends removing requirements for EPA to establish a 98 RON certification fuel. There is an existing Clean Air Act process for automakers to seek certification on alternative certification fuels. AFPM recommends that Congress refrain from predicting how the market for higher octane fuels may develop. If there are concerns about the efficacy of the process for seeking new certification fuels, AFPM is willing to engage on improving the process without prescribing the certification fuel octane level for future high-performance vehicles. In combination, the provisions necessitating the 98 RON certification fuel and the requirements regarding E20 result in an implied federal mandate for E20 unsubstantiated by scientific research. This is something AFPM would adamantly oppose.

Strengthen liability protection and preemption provisions. A core aspect of a successful transition to a new octane standard is to promote both ease and certainty in the introduction of

the new fuels and vehicles. To that end, AFPM recommends strengthening the preemption provisions to prevent states from interfering with the introduction of a new fuel by establishing additional protections for the composition or marketing of the fuel. Similarly, the liability protection provision should be expanded to include refiners.

Remove the NAS sensitivity study. AFPM recommends removing the sensitivity study requirement. This study would create uncertainty while the new 95 RON policy is being implemented. For current and near-term vehicle technology, RON is the best measure to use for improving fuel economy, and adding a MON or sensitivity specification at a later date will complicate implementation and potentially increase the cost to produce gasoline. Importantly, future vehicle technologies may have different octane requirements for RON, MON, and sensitivity. It is unknown if and when these technologies will be implemented and what the specific octane requirements will be. An NAS study is likely to be inconclusive, and would need to be reevaluated when future technology requirements become clear.

Remove provisions governing advertising. AFPM places a high value on transparency and consumer education, but advertising at retail stations is heavily influenced by state and local law governing the size and location of signs. The advertising requirements, as drafted, would likely cause jurisdictional conflicts in many instances, and cause retailers to incur additional costs.

Finally, the draft identifies some important issues that need to be more fully considered and developed. AFPM is also compiling detailed comments on the misfuelling and labeling provisions that need to be calibrated to ensure the fuel is widely available when the new cars are in the market. Our initial recommendations are to strengthen the rulemaking requirements for the Federal Trade Commission to update labeling, for EPA to update its regulations on Product

Transfer Documents, and for the default misfuelling provisions to allow for other prevention measures.

These are critical details and AFPM looks forward to working with the Committee, our retailer partners, and others to further explore and develop a policy structure to enable an orderly transition.

III. CONCLUSION

AFPM appreciates the leadership of Chairman Shimkus and Congressman Flores and their efforts to find a path forward. AFPM believes a transition from the RFS to a 95 RON octane standard has the potential to be a better path forward for all stakeholders and consumers, and appreciates the opportunity to provide our views on policies that work and those that do not. We offer the suggestions in this testimony in the spirit of trying to find the best policy to promote competition and protect consumers, and stand ready to work with Committee to get the policy right.

* * *

Mr. SHIMKUS. The Chair thanks the gentleman.

We appreciate you all being here today, and now I will recognize myself for 5 minutes to open up the round of questions for this panel.

2022 is a real date. We've asked the EPA about what could happen and EPA has told us that they have, quote-unquote, "broad authority" they will have in 2023 and beyond, which could result in biofuel volumes lower than those provided in the statutory tables.

Given that EIA projects a 31 percent decrease in motor fuel consumption between 2017 and 2025, do you expect RVOs to be higher or lower post-2022 than they are today?

Mr. Zimmer, do you have any input? No.

Mr. Columbus?

Mr. COLUMBUS. I will take pass on that.

Mr. SHIMKUS. Mr. Spurlock.

Mr. SPURLOCK. As the——

Mr. SHIMKUS. You heard how I laid out the question. 2022 liquid transportation fuels are projected to decline. EPA has broad authority to reset the tables.

Will they be higher or will they be lower post-2023?

Mr. SPURLOCK. I think we will show that we have done such a great job with the ethanol and where it's at as a additive in the fuel system that we'll be—we will come through fine on the reset.

Mr. SHIMKUS. You say higher?

Mr. SPURLOCK. Yes, sir.

Mr. SHIMKUS. Ms. Skor.

Ms. SKOR. We would anticipate that the RVOs—if the blending is—the actual blending is consistent with the numbers, you'd be at 15 billion gallons of conventional corn-based ethanol.

Mr. SHIMKUS. Mr. Cooper.

Mr. COOPER. Well, we certainly see no rationale for reducing the volumes post-2022 and EPA is——

Mr. SHIMKUS. Do you accept the premise that the EIA information—that there will be less liquid transportation fuel on our market?

Mr. COOPER. I do.

Mr. SHIMKUS. OK.

Mr. COOPER. Yes, I agree that we are going to see a decline in gasoline consumption long term.

Mr. SHIMKUS. Do you think EPA will then raise the blending limit?

Mr. COOPER. Again, I think there's no rationale for going below the 15 billion for conventional biofuels.

Mr. SHIMKUS. OK. Mr. Thompson.

Mr. THOMPSON. There's absolutely a rationale for doing it and if EPA follows the data they must do it. If transportation fuel demand goes down, E15 blending by definition goes down and the E15 market is still so nascent as not to pick up the slack. It has to go down.

Mr. SHIMKUS. Thank you.

Let me go to Mr. Spurlock. First of all, I want to thank the Corn Growers for being very involved in this work and I want to recognize that.

In your testimony, you state that without the mandates in the RFS refiners would immediately default to petroleum-based octane enhancers to rise from their own feedstocks.

Given that ethanol is such an overwhelmingly cheap octane enhancer in addition to your noted environmental benefits, wouldn't some refineries be more competitive if they were to opt for this lower cost source of octane?

Mr. SPURLOCK. Yes, I feel that they would.

Mr. SHIMKUS. OK. Let me go to Mr. Columbus.

Would your retailers like lower prices for the exact same fuel or higher prices for the exact same fuel?

Mr. COLUMBUS. Now, that I will not pass on. Retailers want lower prices. We interface with the consumer every day and the simple reality is that the competition drives the price to the lowest plausible level and that includes the use of feedstocks by midlevel blenders as well as refineries to generate the lowest cost of product for the consumer.

Mr. SHIMKUS. Let me go back to Mr. Thompson. I would like for you to comment on Mr. Cooper's quote of the EIA study on renewable fuel. Can you comment on that?

Mr. THOMPSON. Is that for me, Mr. Chairman?

Mr. SHIMKUS. Yes, sir.

Mr. THOMPSON. Yes, I can. I mean, it's a—unfortunately, it's a mischaracterization of the analysis. Look, and it's consistent with what we've been saying.

The EIA is a nothing burger. They said if we look in 2023 would there have to be substantial new investment assuming E10 in order to make a 95 RON fuel. No, of course it wouldn't.

At that point the new fleet of autos that require 95 would just be taking off. It also assumes E10, which contrary to what we said, assumes that the status quo remains—that the ethanol is using at baseline.

Then the EIA analysis only went out to 2023, I believe. So it's 5 years of implementation. So all it says is that the U.S. refining industry, based on E10, has enough octane capacity if it wants to meet the needs.

It doesn't speak to what happens when the program is fully implemented and at that point we think there are 19 billion gallons of octane up for grabs, and we think that that octane could be met through lots of sources including ethanol.

Ethanol has a 4-cent advantage over other sources of octane. This is—it's inaccurate to suggest this is not potentially good market share for the ethanol industry.

Mr. SHIMKUS. Thank you. My time has expired.

The Chair now recognizes the ranking member of the subcommittee, Mr. Tonko, for 5 minutes.

Mr. TONKO. Thank you, Mr. Chair.

I would like to get witnesses' views on the preemption language that's included in the discussion draft. While California's low California fuel standard is not strictly in ethanol law, ethanol is certainly one potential pathway to compliance with the law.

Based on your reading, do you have any thoughts as to whether Section 204 would prohibit another State from adopting a low-carbon fuel standard similar to that of California's program?

Mr. Zimmer, can we start with you?

Mr. ZIMMER. Excuse me. I don't have a comment on this specific question.

Mr. TONKO. Mr. Columbus.

Mr. COLUMBUS. The fewer people defining different fuels in the United States, the more efficient the overall system is going to be. So, historically, our clients have supported preemption of State fuel standards and State mandates.

Mr. TONKO. And Mr. Spurlock.

Mr. SPURLOCK. I will take a pass on that. I am not sure what our standing would basically be on the question, and I do understand what you're asking.

Mr. TONKO. OK.

Ms. Skor.

Ms. SKOR. We believe that the preemption language doesn't go far enough. It's looking at future actions but it isn't looking at eliminating many of the legitimate roadblocks that exist in several States today.

So what we would be looking for is to make sure that what happens at the Federal level is also followed through in all 50 States.

Mr. TONKO. Mr. Cooper.

Mr. COOPER. We did not take a position on the preemption provisions in the draft. However, our read of it, I guess, would be that yes, future policies like a low-carbon fuel standard potentially would be preempted.

But, again, we did not take a position.

Mr. TONKO. And Mr. Thompson.

Mr. THOMPSON. I would certainly interpret 204 to potentially prohibit other States from adopting a low-carbon fuel standard if they actually specify how much ethanol can and cannot be in a gallon of gasoline.

So I would interpret it that way and we would support that. You know, there's a lot of resources by all the stakeholders that would go into establishing a new 95 RON standard and a patchwork system does not work.

Mr. TONKO. Do you believe this language might impact California's ability to expand or make changes to its existing program?

Let me start with you, Mr. Thompson, and work back.

Mr. THOMPSON. I don't think it would. It's my understanding that the draft says expressly that this doesn't impact existing prohibitions and to the extent California has prohibitions already on the books, by definition this provision wouldn't touch it.

Mr. TONKO. And Mr. Cooper.

Mr. COOPER. I would agree with that response with the one caveat being if California did at some point in the future decide to increase the level of ethanol that's permitted in the State, this provision could potentially keep them from doing that.

Mr. TONKO. Ms. Skor.

Ms. SKOR. I would agree that if California wants to go further in terms of blending more renewable biofuel it might be prohibited, based on the language that we see in the discussion draft.

Mr. TONKO. And Mr. Spurlock.

Mr. SPURLOCK. Yes, I would agree with Emily and Geoff.

Mr. TONKO. And Mr. Columbus.

Mr. COLUMBUS. I think they're all right about this. So the reality is yes, it can get in the way of California doing something.

Mr. TONKO. And finally, Mr. Zimmer.

Mr. ZIMMER. [No audible response.]

Mr. TONKO. It's my understanding that while ethanol may be the cheapest source of octane, at the moment there's no guarantee in this discussion draft that it will be used in a future high-octane fuel.

Would anyone like to comment on why or why not the source octane should be left open?

Mr. Cooper.

Mr. COOPER. Well, thanks, and I would like to use my time responding to that question to really respond to what Mr. Thompson said about the EIA report.

I mean, I do think it's a very good study that underscores exactly that point, that refiners would not likely choose ethanol as the source of octane for a 95 RON fuel.

You know, there's a number of refinery modeling studies out there that show refiners could get to 95 RON with just an extra 2 or 3 cents per gallon in incremental costs. They could happily pass that along to the consumer and, you know, the other thing the EIA study pointed out, and it did look longer term than just 2023. They did look further into the future and analyse whether the refining sector could meet an incrementally larger demand of high-octane in the future and came to the same conclusion.

The study also found that there is a significant amount of underutilized reforming and alkylation capacity today in the refining sector that could easily be switched on to provide that extra octane.

Mr. TONKO. Ms. Skor.

Ms. SKOR. You're absolutely right. By taking away the guardrails provided by the RFS that enable market access you're essentially closing the market from competition.

The transportation fuel marketplace it is not a free market. If it were a free market, right now the better quality, better-priced octane enhancer would be in much higher demand than it is today.

So a high octane standard coupled with guardrails to ensure that we are using renewable octane would be the path forward.

Mr. TONKO. Thank you.

And Mr. Columbus.

Mr. COLUMBUS. With respect, I disagree with Ms. Skor. I think the most important thing is refiners are not the only source of motor fuel in the United States.

People who don't own refineries manufacture motor fuel via blending of components which are available from domestic refineries as well as foreign sources.

Mr. Tonko, you and I have had this conversation before. What drives the costs to manufacture is the big stupid price sign at retail. The lowest cost wins. If a refiner wanted to forget about the lowest-cost octane source in the country, I don't believe his competitors would permit that in a commercial sense. Competition actually works.

Mr. SHIMKUS. The gentleman's time has expired.

The Chair now recognizes the chairman emeritus, Joe Barton, for 5 minutes.

Mr. BARTON. Well, thank you, Mr. Chairman.

The former Senator from the great State of Texas, Phil Gramm, whom many of you know, had a saying: "Truth is a powerful drug. Use it sparingly."

And as a retiring Member, this may be my last hearing after 32 years on this committee. So I am going to tell us what I think are some Barton truths. Now, they may not be truth, but I think they're truth.

First of all, I think that Mr. Flores and Mr. Shimkus have done a very good job in trying to patch together a compromise bill that's good politics, and I think it would also work.

I don't think it would work perfectly, but I think it'd work and I think the politics of it, potentially, work.

Now, having said that, let me give you the Barton Bill and just raise the hackles on everybody's hair in this room. I would repeal every existing regulation and law on oxygen and CAFE standards. Repeal them all except for a few and maintain the oxygen requirement in the Clean Air Act. I think that makes sense.

I would require that any money put into the leaking underground trust fund, which the acronym is LUST, actually be used to clean up leaking underground storage tanks.

And I might—and I would listen to my corn growers on this one—I might keep the quotas on imported ethanol. I might not. But I would repeal everything else.

If we did that and went to a pure market for ethanol, it would work. It would work. Back in 2005 when I was chairman, we passed the Energy Policy Act of 2005 and at the request of then-Speaker Denny Hastert we put in mandates to use ethanol, or renewable fuels.

We also created a lot of research programs for renewable fuels and alternative energy, and if you look at the energy markets in the United States today, solar is doing very well. Wind is doing very well, and I—although the ethanol market has been up and down, I think you could argue that at least it's a mature market. It's not a struggling start-up market.

But then in 2007 we came back and increased these mandates and we also increased the fuel—the CAFE standards. And the current law, folks, is unworkable. It's not going to work, and come 2020 don't kid yourself. If we throw all this to whoever's running EPA, they don't have any magic wands over there. They're not going to be able to bring order out of chaos.

So, again, I want to go back to Mr. Shimkus and Mr. Flores. They have tried to look at the politics of it, I think, and they've tried to come up with something that works.

Now, having said that, it's not going to—we are certainly not going to mark this bill up tomorrow and put it on the floor next week and go to the Senate and the Senate miraculously pass it.

But you might—you have got a fighting chance to do something in the next Congress. So this is a good—this is a good place to start.

So my question, you know, since this is the question period, Mr. Chairman, I got to ask at least one question. I can't just vent here.

Mr. SHIMKUS. You haven't done that before, though, so——

[Laughter.]

Mr. BARTON. I have. So I am going to ask Mr. Thompson. You won the lottery here. If we did what I said, pass the Barton Bill and don't—the politics of that are terrible, so I know that's not a starter, but it is true—would ethanol be used? Would there be a market that ethanol would compete for and be successful competing—corn-grown ethanol from the United States?

Mr. THOMPSON. Thank you for the question, and we would support the Barton Bill. But absolutely ethanol would continue to compete. The RFS could go away tomorrow and the E10 would be the dominant fuel in this country.

It is the cheapest source of octane and, as you know, when you go to the pump we are trying to put octane into the fuel from regular grade up to premium grade. It is the cheapest source of octane.

It has a 4-cent advantage over anything else. You know, E0 is 22 cents more expensive to make than E15 and it's, like, 15 cents more expensive than E10.

My guys are a lot of things, but wasteful of money is not one of them. The refiners own 20 percent of the ethanol market. Ethanol is here to stay. The notion that it won't be is just—it's inconsistent with reality.

Mr. SHIMKUS. The gentleman's time has——

Mr. BARTON. The last thing I will say, Mr. Chairman, I ought to be commended because the Barton Bill did not bring back MTBE, and if I really wanted to be competitive I would make it legal to——

Mr. SHIMKUS. The gentleman's time definitely has expired.

[Laughter.]

The Chair recognizes the gentleman from California, Mr. Peters, for 5 minutes.

Mr. PETERS. Thank you. I want to thank Mr. Barton for his service but I also want to say I endorse the Barton Bill with a couple of amendments. I would also repeal all the tax credits that we have for energy and I would send a market signal that's technology neutral through a carbon tax.

And we could—I know, so maybe the amendment—you know, I won't get your vote in the next Congress either, I know. But I think that would be the appropriate way to push these incentives.

But for the time being, I wanted to talk to Ms. Skor. We have another witness who I think is on the next panel, Brooke Coleman, who is the executive director of the Advanced Biofuels Business Council.

Her testimony includes the following and I would like you to react to this because you talk about backsliding. She says, quote, "The RFS is indirectly to date a renewable octane cetane requirement. The 21st Century Transportation Fuels Act would phase out the renewability requirement and the greenhouse gas requirement contained in the RFS and, as discussed, all companies will use more petroleum additives instead of biofuels because it's in their economic self-interest." She goes on to explain how that's backsliding.

Is that the concern you expressed and can you maybe flesh out a reaction to that?

Ms. SKOR. That's absolutely our concern.

If you look at the price of ethanol today, if we are talking about price competitiveness today wholesale it sells 25 cents lower per gallon than gasoline. But what you see is absent a mechanism to force competition and give the ethanol producer access to the end user, the consumer, we don't have a way to compete in this marketplace.

The RFS provides important guardrails and not only for market access but for environmental impact. As Mr. Spurlock said, 43 percent reduction in greenhouse gas emission—that's with conventional biofuel. Advanced biofuel is up to 100 percent.

So we are cleaning the air because we've got fewer—and it's good for not only environmental health but human health as well.

Mr. PETERS. You recognize the bind the Government is in with the bill the way it is. What would be your suggestions about how to move?

Ms. SKOR. I mean, you know, our overall suggestion is that you couple—we absolutely applaud seeking a high-octane, low-carbon national standard. But that's got to be coupled with the guardrails that we see in the Renewable Fuel Standard that provide for market access.

That would be the path forward for the most significant cost savings, the greatest fuel economy, and the greatest environmental benefit.

Mr. PETERS. OK. Well, again, I think we are sort of in this contortion to respond to these markets and I think that, again, a market—a market incentive that's technology neutral is preferable to this. It could save us a lot of time and meetings next year.

But I do appreciate you taking it up. I think there's more work to do on this. I know it's not easy, and I look forward to working with you in the next Congress.

And I yield back.

Mr. SHIMKUS. The Chair thanks the gentleman.

The Chair now recognizes the gentleman from West Virginia, Mr. McKinley, for 5 minutes.

Mr. MCKINLEY. Thank you, Mr. Chairman.

Over the last number of years, we've talked a lot about and I've heard a lot of folks talk about the greenhouse gas emissions and how we need to address it through a variety of standards, regulations, or whatever.

But this is a summary from the MIT study that says if you want to reduce greenhouse gas emissions it's six to fourteen times more effective if you put a gasoline tax on than worried about efficiencies.

I've never heard any—here anyone ever, if they're really serious on the other side, talking about reducing greenhouse gases why they have not proposed raising the gasoline tax.

Secondly, we've also talked around this table a lot about uncertainty. I am concerned about, for example, a small refinery trying to make the change, going to spending millions to convert to 95 or some other level of octane standards. But yet there's a movement coming from the other side of the aisle that within the next 10 years we are going to decarbonize our transportation fuels.

I don't know whether to take them seriously or not. But I see it in the media as beating the drum every day that over the next 10 years the Green New Deal should be sweeping through Congress.

It should be taken very seriously. So the uncertainty is that why would a small refinery or any refinery go out and spend billions of dollars—billions of dollars—to make a change in carbon fuels when in 10 years we are going to do away with them anyway?

So I just—my question to you, to any of you, essentially is is it realistic to be thinking about this Green New Deal and all the effort that's been made in crafting this legislation that goes out the window if we are going to pass something within the next 10 years that does away with fuel?

Starting with you—starting with you, how realistic is this? Is this some crackpot idea?

Mr. ZIMMER. Well, thank you.

And, first of all, we think that going to a 95 RON regular is extremely important and very doable for the stakeholders as well as—and a value proposition to the consumer.

So we think it is the only—the low-cost solution to improving the fuel efficiency of vehicles and it's broadly applied and it will impact a lot of——

Mr. MCKINLEY. If we are trying to eliminate greenhouse gases, why isn't someone promoting a gasoline tax because it's proven time and time again that that's going to be the quickest way to eliminate greenhouse gases? No one's doing that.

So we are talking about a—I want to know more about what effect—we are going to see a lot of debate over the next 2 years over this Green New Deal.

Is it realistic to do away with fossil fuels in transportation, as they're calling for? I would like to hear from any one of you. I only have a minute left.

Mr. COLUMBUS. In the short term, sir, no. It's not going to happen in the short term, and I certainly commend Mr. Tonko and his colleagues for starting that conversation.

There are a lot of things about EVs that have to be sorted out. There are a lot of things about EV recharging structures that have to be sorted out.

I can remember many years ago people talking about we are going to have——

Mr. MCKINLEY. Could we have the other people answer as well, just—so yours is—it's not realistic.

Mr. Spurlock.

Mr. SPURLOCK. As we look at the news recently and we are talking about putting a high fuel tax on in order to improve greenhouse gas and cut the fuel down, I think if we look at what's happening in France, that's what they tried to do in France. That is not working very well publicly right now.

Ms. SKOR. Liquid fuels will remain the dominant fuel source for many years to come, and so what is realistic is to look for ways to provide automakers with greater fuel economy, consumers with cost savings, and cleaner air.

So there is an important conversation to be had and a path forward in that regard.

Mr. COOPER. It takes, roughly, 17, 18 years for the fleet to turn over, right. So every new vehicle being sold today, the overwhelming majority of which are internal-combustion-engine, liquid-fuel vehicles, are going to be around on the roads driving on liquid fuel for, you know, the better part of the next 20 years.

It is going to take a long time to get to the electric vehicles and some of the ideas that are contemplated in a Green New Deal.

So, you know, we think there's an immediate opportunity to help decarbonize that liquid fuel that's going to be used in that intervening period.

Mr. THOMPSON. Yes. We firmly believe that fossil fuels and the internal combustion engine will be here for many decades to come.

Mr. MCKINLEY. Thank you.

I guess what I am—my point is——

Mr. SHIMKUS. Gentleman's time has——

Mr. MCKINLEY [continuing]. That I am worried about, Mr. Chairman, and as we close out on this is small refineries are going to be challenged under this. I just hope there's some language—something can be worked into your bill that takes care of the small refineries that gives them some protection as compared to the larger—the Marathons and the Mobils.

Mr. SHIMKUS. We'll talk about that. The gentleman's time has expired.

Mr. MCKINLEY. Yield back.

Mr. SHIMKUS. The Chair now recognizes the gentleman from Texas, Mr. Olson.

Mr. OLSON. I thank the chair.

I would like to open my questions by saying congratulations to Chairman Shimkus, not only for this bill but this past Saturday his Army squeaked by my Navy in a football game in Philadelphia.

Mr. SHIMKUS. I was being kind and didn't dig anything into you. So it's your mouth to God's ears, right?

Mr. OLSON. I said congratulations. Congratulations.

Also congratulations to my Texas colleague, Bill Flores. You guys have done a lot of hard work to get this bill where it is right now—this discussion draft.

It's too late for this to become law in this Congress. But the table has been set for real action in the 116th Congress, and thank you all for that.

My first question is for you, Mr. Zimmer. In your testimony you mentioned that 95 RON is a, quote, "fundamental enabler," end quote, for lower emissions. As someone who represents an area that's made great emissions progress—Houston, Texas area—and is making every effort right now to reduce emissions but are still in noncompliance.

I know that vehicle emissions are critical to continuing this trend we see. My question is can you talk about what sort of environmental benefits we've seen from moving to 95 RON?

Mr. ZIMMER. Thank you for the question.

We believe that 95 RON with engines that are designed to use it effectively, and it's that system that's very important, can achieve on average 3 percent fuel efficiency across the board and it's, you know, a broad spectrum of products. Doesn't matter who the manufacturer is or the architecture—we'll see that benefit.

So we think it's—we think RON 95 is doable right now—it's the only thing that's really doable—and deliver that type of result.

It also—you will find a lot of internal combustion engines are used in hybrids and plug-in hybrids. Those vehicles will also benefit from that efficiency improvement.

Mr. OLSON. Good point.

Question for you, Mr. Columbus, and I want to first off thank you. You hosted me at a Stripes store at the Westpark Tollway in Texas 22 a couple weeks ago, or a couple years ago, actually.

I worked the cash register. I rolled out the worst tortillas ever in American history—terrible, terrible, terrible—and I also pumped E10 gasoline.

And so most Americans have no idea at the pump what we are talking about today. They just hear the word ethanol and see it on the gas tank but have no implications—no idea what implies—happens to their whole vehicle system with this in the product.

They know what ethanol is but all they want is for their car to work and their fuel to be affordable prices. So I am always concerned about issues with misfueling and our policies can make the lives of average Americans easier.

Can you talk—in your opening statement you had some comments about issues with misfueling. How about more details on what you see at your stores with misfueling challenges with E15 today and how these new challenges, going forward, may impact the price at the pump and also just the perception of people that are paying for the gasoline?

Mr. COLUMBUS. OK. With respect to E15, as you're aware, in many areas of the country we can only sell it 8 months a year because of the ozone season. So in that sense, the products had a very hard time catching on, going forward.

There are many retailers who do not have the facilities at their retail outlets to sell anything more than E10. The Environmental Protection Agency requires a retailer to be able to demonstrate on an affirmative basis that his dispensing and storage equipment is compatible with whatever's in the ground with the product.

So having said that, our experience is that, very simply, consumers want the lowest cost motor fuel they can put their hands on on which their cars will run.

In my comments, I said as long as people are aware this car is warranted up to E15—this car is warranted up to E20, whatever—as long as those levels are posted at the retail outlet, the overwhelming preponderance of consumers take their own self-interest into account and fuel properly.

There are those for whom I have no help. I cannot help people who put gasoline in a diesel engine. I cannot help people who see a big sign that says, this car has to be used for something—don't use this fuel for anything before 2001 model year and pump it into my 1987 car.

If I do that, it's my fault. It's not the retailer's. But I believe that low-cost provider still wins in the retail market. I think it would——

Mr. OLSON. Time to yield back?

Mr. SHIMKUS. The gentleman's time has expired.

Mr. OLSON. Congratulations, Mr. Chairman.

Mr. SHIMKUS. Thank you very much.

Mr. OLSON. Three years in a row.

Mr. SHIMKUS. A little streak.

The Chair now recognizes the gentleman—the other gentleman from Texas, Mr. Flores, for 5 minutes.

Mr. FLORES. Thank you, Chairman. I appreciate—again, I appreciate all of you participating in this hearing today.

So I have—let me start with one question for each of you and that is you got two options. One is keep the status quo the way it is today. Make no changes. Let the regulatory agencies sort out how CAFE is going to work, how the emissions requirements are going to work, and how the RFS is going to work.

So that's option A. Option B is let's come up with a statutory solution to fix this. So which do you prefer, Mr. Zimmer? Option A or option B?

Mr. ZIMMER. B.

Mr. FLORES. Mr. Columbus.

Mr. COLUMBUS. There are things in this bill that my clients support. There are things in this bill that my clients do not support. So I can't really choose today. I got to see that final product.

Mr. FLORES. I understand that. But do you—in the absence of——

Mr. COLUMBUS. There are things in the fuel system that are broken, Mr. Flores. So if you say is improvement possible, the answer is yes.

Mr. FLORES. OK. Good. That's close enough.

Mr. Spurlock.

Mr. SPURLOCK. I would agree with Mr. Columbus. There are things that can be improved and need to be improved and look through all levels as we go with that direction.

Mr. FLORES. OK.

Ms. Skor.

Ms. SKOR. I would say that improvements need to be made on the administration side—the implementation of the Renewable Fuel Standard currently on the books.

Mr. FLORES. OK. Do you believe that the EPA has sufficient statutory authority to do the things that you'd like to do without litigation?

Ms. SKOR. We do, and reed vapor pressure is a very good example of something that's within the EPA's ability to make it happen.

Mr. FLORES. Mr. Cooper.

Mr. COOPER. I would agree that certainly there are things that could be improved with the current program but we agree that EPA does have the administrative authority to make those fixes.

In fact, they have the administrative authority to adopt an octane——

Mr. FLORES. So are you and Ms. Skor saying that no statutory solution is the preferred outcome? Is that what I am hearing from you?

Mr. COOPER. If the—if option B is the draft currently——

Mr. FLORES. That's not what I asked. I mean, option B is does a—is a statutory solution going to be a better solution than relying on the uncertainty that currently exists with the law and the administrative structure of that?

Mr. COOPER. I think it depends on what that statutory solution is.

Mr. FLORES. OK. All right.

Mr. Thompson.

Mr. THOMPSON. Yes. We support legislative reform of the RFS.

Mr. FLORES. OK. Well, every roundtable we've had and almost in every hearing we've had virtually every one of you has always said the statutory solution is better.

And so that's the reason we need to stay engaged on this rather than trying to run to—as you heard earlier, run to our respective foxholes and not get anything done.

Mr. Columbus, one of the things that has been claimed is that the consumer doesn't really control the cost of gasoline. I mean, can you—can you address that?

For instance, if the cost of gasoline—if the cost of liquid fuel is artificially raised doesn't the consumer have a say on what the price is going to be by lowering their demand for that product?

Mr. COLUMBUS. I think the short answer to that is absolutely.

First of all, I don't know how you artificially raise the motor fuel price. If we knew how to do that, I am telling you we would have done it a long time ago.

I always laugh about the prices signs. But this is the most transparent commodities market on the face of the earth.

Mr. FLORES. So at the end of the day, the committee——

Mr. COLUMBUS. So it drives price down every day to the lowest level, to the level the low-cost provider is prepared to sell it.

Mr. FLORES. So if we are talking about increasing octane, the consumer is going to revolt if the refining—if the suppliers elect anything other than the lowest cost solution. Would you agree with that?

Mr. COLUMBUS. Totally. I promise you they will vote with their feet.

Mr. FLORES. OK. So there's no incentive for Mr. Thompson or his constituents to suddenly come up with a nonoptimum solution that the consumers are going to revolt against.

Mr. COLUMBUS. I believe that's true and, more importantly, as those consumers vote with their feet those companies' shareholders will vote with their lawyers. So, I mean, they have an obligation to maximize profit and don't do that by selling a high-cost product in a low-price market.

Mr. FLORES. OK.

Ms. Skor, I am going to go over a few provisions of the draft legislation. Would you please answer two questions on each of these?

Number one, the ethanol industry has asked the EPA to take administrative action on and, number two, which of these provisions do you anticipate the EPA can accomplish through rulemaking without legal challenge?

The first one is can the EPA require all vehicles beginning in 2023 to use high-octane fuels. Have you—have you asked the EPA to do that?

Ms. SKOR. We have asked the EPA to certify and approve higher level ethanol blends with a specific date in mind, no, we have done that.

Mr. FLORES. And can they accomplish that without legal challenge?

Ms. SKOR. Yes. We believe EPA has the ability to set—EPA has the ability to put in place a 95 RON national standard fuel.

Mr. FLORES. I would assert that that's probably not going to be the case.

That said, I have other questions for you. I will supplementally provide those to you and ask you to supplementally answer those.

Thank you. I yield back.

Ms. SKOR. Thank you.

Mr. SHIMKUS. The gentleman yields back his time. The Chair now recognizes the gentleman from Michigan for 5 minutes.

Mr. WALBERG. Thank you, Mr. Chairman, and thank you for holding this subcommittee hearing today and for working continuously to address the issues with the RFS.

I know it's something that you and Mr. Flores have worked on for some time and you have held numerous round tables and hearings on this issue and heard from all parties involved numerous times and I, for one, would like to see this issue is finally resolved but in ways that I and my constituents would like them to be resolved.

It's no secret that I am an avid Harley rider and any vehicle with an engine between two wheels. I am also the cochair of the Congressional Motorcycle Caucus, and I have concerns there as well.

I also have the pleasure of representing the Great Lakes State of Michigan, which is surrounded by most of the 20 percent of the world's fresh water resources and filled with boating enthusiasts all around that State and connected to other States as well.

So they have obvious reasons to be concerned about fuel in their engines and motors as well. Michigan is also the birthplace of the modern auto industry and continues to be very much concerned in that area with a lot of research and development.

It's also the place that is very much given to antique and classic vehicles, one being my own, which has great concerns about continuing and not just being put on a shelf somewhere and looked at but, rather, driven, used, continue to be used.

And so, Mr. Zimmer, with those statements I would like to ask you a question and then open it up to any others who would address it, though maybe out of your purview.

This question—how will this current draft legislation impact small engine manufacturers like Harley Davidson and the boating industry—Evinrude, Mercury, et cetera—and the classic and antique vehicles as well?

Mr. ZIMMER. I can't speak to those specific industries but I do think and I think our members believe that, you know, in this collaborative approach they should be—come to the table in here and have those inputs because, you know, I understand that there are different issues in those engines and those markets than we might have in the automobile industry.

But just to reiterate, we believe the 95 RON is extremely important to the automakers will enable—improve fuel efficiency in a broad range of products.

Mr. WALBERG. Anyone else want to——

Mr. THOMPSON. Let me add that—just to be clear that under this draft legislation the 95 RON fuel would be developed, you know, to be used with a new automobile fleet.

It would add—either replace premium or add another grade of fuel to the mix. It would not impact our ability to deliver regular grade gasoline. Hopefully, you know, E0 for boaters and motorcyclists.

So we will continue to supply that very important market.

Mr. WALBERG. Certainly—certainly at a higher cost but it needs to be there.

Mr. Zimmer, you mentioned that misfueling devices beyond nozzle size are available. What are those and should they be required?

Mr. ZIMMER. It's a very, very important topic to the car makers—misfueling in this area, and historically we've addressed—when we went to unleaded we addressed misfueling with nozzle sizes and that's in the current proposal.

This is—this can be—I think it's quite complex because of the—in the retail market and I think the retailers could talk about the multiuse pumps and stuff like that. But we think there is technology out there that might be, you know, very robust in this area and we would encourage, you know, an in-depth discussion there and that's basically communications between fueling pump and the vehicle and we think that's probably something that's doable. We think it's probably a good option and we would encourage people to look at them. We'd be very happy to work with——

Mr. WALBERG. Require a lot of flexibility and then consideration of defeat devices also?

Mr. ZIMMER. Excuse me?

Mr. WALBERG. I would assume it would require a lot of flexibility and then syncing up an understanding with the defeat devices that could be a part of the problem.

Mr. COLUMBUS. Yes, sir, and the discussion draft addresses that and we would endorse that. In fact, a group of us have been working on misfueling prevention for a while and that includes the autos, retailers, to jobbers.

I think there's probably a way through this. The question is cost. The equipment manufacturers have indicated to us a cost of something under $300 per pump for a multiproduct dispenser that dispenses all three products or four products, whatever, through a single hose. That's it.

But this is addressable, I believe, and one of the things we are holding off on is—I know what Gilbarco has told us. I want to actually see it. I want to see an invoice.

Mr. WALBERG. Thank you. I yield back.

Mr. SHIMKUS. Gentleman's time has expired.

The Chair now recognizes the gentleman from Georgia, Mr. Carter, for 5 minutes.

Mr. CARTER. Thank you, Mr. Chairman, and thank all of you for being here. This is certainly an important subject, something that we've talked about before. Some of you have been here before.

Mr. Cooper, I haven't heard much from you so I wanted to start with you today and ask you a question.

First of all, full disclosure. I represent the entire coast of Georgia, over a hundred miles of coastline. Therefore, marine engines

are extremely important to us and the impact that some of these fuels have on—the negative impact that some of them can have on marine engines are certainly of interest and certainly of concern.

Biobutanol—as I understand it, it has properties that more closely align with gasoline than ethanol does and it has much less—I am sure much less of a negative impact on engines.

And, in fact, the National Marine Manufacturers Association and the American Boat and Yacht Council did a 5-year study with the Department of Energy and found out that—they studied the properties of isobutanol fuels on engines and that was very helpful for all of us.

Just wanted to ask you, if biobutanol were widely available in the market, how would it fit into the current supply? How would we be able to incorporate it?

Mr. COOPER. Well, thank you for the question, and I guess the first thing I would say is, you know, first of all, E10—10 percent ethanol blends—are approved and warrantied for all off-road engines today including outboard marine engines and motorcycles. So the fuel that is most common in the marketplace today is absolutely fine for use in outboard engines and marine applications.

In terms of biobutanol, you know, certainly, we do see some promise there. We have some member companies who are either producing or very interested in producing biobutanol along with ethanol.

So yes, I mean, I think there are other molecules, other applications, other biofuels that at higher blend levels could be suitable for today's——

Mr. CARTER. Are there any obstacles for the companies that want to market this? Are they having any barriers they're having to overcome?

Mr. COOPER. Primarily cost, today.

Mr. CARTER. Is that right?

Mr. COOPER. I mean, you can't—biobutanol just can't compete with ethanol and other components in terms of production costs.

Mr. CARTER. How much of a difference are we talking about?

Mr. COOPER. I would have to get back to you on that.

Mr. CARTER. Is it significant enough to where it's——

Mr. COOPER. I think it's significant enough that we are not seeing widespread adoption of biobutanol today.

Mr. CARTER. OK.

Mr. Thompson, I will go to you. As I understand it, 95 octane is the correct octane level. In fact, you mentioned in your testimony that the ideal level was 95 for maximizing output of vehicles.

How did you arrive at that? How did you arrive at the 95 octane being the maximum level?

Mr. THOMPSON. Thank you for the question.

You know, this is the conclusion we reached with working with several stakeholders but with—really, with USCAR and others where we got technical expertise from the refineries and from the autos and, frankly, they worked for almost 2 years exploring a lot of things and looking at the whole system cost.

If you were looking to get a three to four improvement—efficiency improvement out of the autos, what would be the cheapest way for consumers to get there, either all the improvements from

the auto side or all the improvements coming from fuel, and this is documented in my testimony before this committee in April, but we did simply a cost analysis and what we found is that the cheapest way to get that 3 to 4 percent efficiency improvement came from 95 RON.

The other part of this was one of the big factors was making sure whatever we selected, according to the autos and rightfully so, the fuel had to be available on day one and had to be available nationwide.

Anything other than 95 RON is not available nationwide. California and nine other States, you know, prohibit higher levels of octane.

Mr. CARTER. So you couldn't go to 97 in California?

Mr. THOMPSON. Under their predictive model our conclusion was no.

Mr. CARTER. OK. OK. Well, thank you for that.

One other question just to follow up. Does your organization have any specific numbers on how gas mileage would improve for customers across the U.S.?

Mr. THOMPSON. Well, again, a couple things. One, it would be a 3 to 4 percent improvement—efficiency improvement—and that translates into gas miles.

And the other thing it's for those who—it's equivalent to putting 720,000 electric vehicles on the road year after year after year. So there's a substantial improvement—efficiency improvement by doing this.

Mr. CARTER. I suspect that would—that would be hard to sell to a consumer who just concentrates on price?

Mr. THOMPSON. I would hope—I would hope we would have a good story to tell. This is—would be a high-efficiency fuel that helps make their cars more efficient, it keeps optionality. It allows them to choose an internal combustion engine that's more efficient over, say, electrified vehicle they may not want.

I mean, I think the consumer, when they fully understand the offering, will be supportive.

Mr. CARTER. Great. My time has ended and I yield.

Mr. SHIMKUS. The gentleman yields back.

Waiving on to the committee as he has in the past, Mr. Loebsack from Iowa, for 5 minutes.

Mr. LOEBSACK. Thank you, Mr. Chair. I really do appreciate you allowing me to waive on. You have been very generous, and especially knowing that we don't necessarily agree on these issues.

So I really appreciate that a lot. We don't agree on the outcome of the football game either, since I have a stepson and his wife who are Naval Academy grads. But for me—for me, the only surprise was the margin—that it wasn't greater.

But at any rate, to the panel I do appreciate your being here. In some ways, it's déja vù all over again because many of you have been here before.

Mr. Cooper, welcome. I know Bob did a great job, but you're going to do a fantastic job as well. Thank you for taking over that position.

Look, folks, we know that the RFS was created to diversify America's liquid fuel market, grow our world economy, and cut harmful emissions and it has succeeded in those efforts.

I don't think there's any question about that at all. The RFS has helped America achieve greater energy security. It's decreased our reliance on foreign oil.

My Marine kids perhaps don't have to go fight wars because of that in the future, hopefully, and that has, in turn, protected our national security.

Fuels have lower cost at the pump and in Iowa and other parts of the Midwest the RFS has clearly been an economic driver—that's indisputable—creating thousands of good-paying jobs at biofuels plants and establishing a significant market for our farmers. Very important now, especially given our trade issues that we see happening to our farmers.

We need to be looking toward growth in the future instead of taking steps backwards. This has been a very tumultuous year for biofuels producers and farmers.

We know that the EPA has granted waivers to 48 refiners that have cut more than 2 billion gallons of biofuels out of the market with no plan to reinstate those gallons, and that's unfortunate, to say the least.

This sort of action destabilizes the agricultural economy and that has implications for years to come and, again, we have to be thinking about the trade disputes, too, when we talked about these issues because that just complicates it for these farmers and others in the Midwest.

Instability has led to biofuels plants across the country being idled, in at least one case closed permanently. The USDA reported net farm income is down again over 12 percent this year and the ag economy is suffering, and we cannot afford, I believe, to take a step in the wrong direction.

And so respectfully, Mr. Chair, I do believe that this draft legislation is a step in the wrong direction for rural America and for the RFS.

It was already mentioned the EIA released a study last month that a nationwide 95 RON fuel can be achieved through petroleum products and would not guarantee the use of more biofuels.

I would like you to respond to that. You already did a little bit. Maybe expand a little bit on your answer to Mr. Thompson on that.

The fact of the matter is we have to be very thoughtful about this, going forward. We have to make sure that whatever we do does not harm the biofuels market I think here in this country.

I appreciate everyone's responses to the questions here. But I do want to start out with Ms. Skor by just basically answering the question would a 95 RON standard increase or decrease the use of biofuels.

Ms. SKOR. Made with a 10 percent ethanol blend it would most assuredly increase the price of fuel for American drivers.

Mr. LOEBSACK. Right.

And Mr. Cooper, would you like to elaborate a little bit? I don't know if you have more to say about your response to Mr. Thompson about the——

Mr. COOPER. Well, you know, I think, again, some of the key points that came out of that study for us and it was commissioned by EIA but it was conducted by Baker & O'Brien, which is a well-known consulting firm that does lots of work for the oil industry. So these guys know what they're talking about.

And a few of the key points that really rose to the surface for us was that, you know, there wouldn't be hardly any incremental increase in the cost of producing 95 RON at the existing fleet of refineries to meet a 95 RON requirement in the first year of the program, 2023, but also longer term.

You know, it just said there wouldn't really be a need to increase ethanol blending at all to meet that requirement.

Mr. LOEBSACK. Did you want to respond to the Barton Bill? Because it looked like you had some issues with that.

Mr. COOPER. Well, I mean, we supported the first Barton Bill, right—the original RFS—and I just—you know, I don't remember exactly all the points that he was making.

But, you know, we certainly see the RFS as a tremendous success, both the original program, the RFS2. We see absolutely no reason to walk away from that progress. And again, we think a high-octane fuel standard can layer very well on top of the RFS and those two programs could work in harmony.

Mr. LOEBSACK. And I do want to make sure that, you know, we hold this administration's feet to the fire too on its promise to have the EPA go ahead and write rules, obviously, that allow the 15-year round.

I think it's really important. I hope it wasn't just a campaign stop, if you will, on the part of the president at Council Bluffs, you know, for a Republican congressional candidate and a Republican gubernatorial candidate.

We've got to make sure that we—you know, that we do hold their feet to the fire on that.

So thanks, everybody, for being here. I really appreciate it, and I have lots more questions but I am sure I will have more opportunities in the future.

Thank you, Mr. Chair.

Mr. SHIMKUS. The gentleman returns the time and the Chair wants to thank the panel. You did not disappoint. Obviously, there's much more work to do and I gladly will turn this over, hopefully, to Mr. Tonko in the next Congress to accept the challenge of moving forward.

I will just say certainty is better than uncertainty. Marrying engineering technologies of engines and fuels for the greatest efficiencies is the way to go.

So I hope that that would be at least a base by which people would move forward.

With that, I want to dismiss this panel and sit the second panel.

[Pause.]

Mr. SHIMKUS. OK, folks. Let's move out of the room so we can get started.

We want to thank our witnesses for being here today and taking the time to testify before the subcommittee. As you observed, it's still a very energetic discussion, questions and answers, and we would expect no less from this panel either.

Today's witnesses will have the opportunity to give opening statements followed by a round of questions from Members, and I will introduce you as I call you to testify.

And we would like to start with Mr. Brooke Coleman, executive director at Advanced Biofuels Business Council.

Brooke, you're recognized for 5 minutes. Welcome.

STATEMENTS OF BROOKE COLEMAN, EXECUTIVE DIRECTOR, ADVANCED BIOFUELS BUSINESS COUNCIL; MICHAEL MCADAMS, PRESIDENT, ADVANCED BIOFUELS ASSOCIATION; MANNING FERACI, DIRECTOR OF FEDERAL AFFAIRS, COALITION FOR RENEWABLE NATURAL GAS; DAVID FIALKOV, VICE PRESIDENT, GOVERNMENT RELATIONS/LEGISLATIVE AND REGULATORY COUNSEL, NATIONAL ASSOCIATION OF TRUCKSTOP OWNERS; AND KURT KOVARIK, VICE PRESIDENT OF FEDERAL AFFAIRS, NATIONAL BIODIESEL BOARD

STATEMENT OF BROOKE COLEMAN

Mr. COLEMAN. Thank you. Thank you. Still good morning, I think.

Chairman Shimkus, Ranking Member Tonko, members of the subcommittee, my name is Brooke Coleman. I am the executive director of the Advanced biofuel Business Council.

We represent worldwide leaders in the effort to develop and commercialize cellulosic biofuel ranging from cellulosic ethanol made from agricultural residues to advanced biofuel made from sustainable energy crops and municipal solid waste.

Let me start by thanking the committee and staff for deliberating what we know is a tough issue—the Renewable Fuels Standard—and more generally, the need to curb or at least bring competition to the pump with regard to fossil fuels.

The RFS is a political lightning rod not because it is flawed. Rather, because it is creating competition that incumbents do not want to see and drives the growth of now the largest renewable energy sector in the country.

The RFS pertains to the industry I represent, the cellulosic biofuels industry. An underpinning of the political case against the RFS is the allegation that we have failed to deliver on the promise of cellulosic biofuels.

What has actually happened over the last 10 years as our industry has gone from the technological development phase to the commercial deployment phase, as promised.

But in order to build plants and scale the RFS must be enforced and in many recent years the RFS was not enforced at all. In other years, billions of gallons were unlawfully waived in reaching oil refiners large and small at the expense of rural America.

This level of unpredictability pushes innovators outside of the country and that's what has happened as we watch China, Brazil, Canada, even Romania and other countries now beat us to the punch on cellulosic biofuel development.

So what's the solution? I think it's a fair question. While we appreciate the committee's work in trying to find one, we cannot support this particular one as constructed.

There are two primary pieces to successful biofuels deployment. The impetus to produce the fuel on the front end and the ability for consumers to access it on the back end. The RFS does both at the same time.

It encourages production by requiring blending and it enforces a RIN system on the back that rewards those who make investment to deliver more biofuel to the consumer. It's a very simple system.

The discussion draft more explicitly requires market readiness for biofuels as it relates to vehicles, fuel dispensers, and important regulatory updates like RVP.

That's a good thing. But it offers explicit market readiness at the expense of the upstream policy that would allow more biofuels to flow through updated hoses and regulations and into vehicles.

Ideally, a free market provides the impetus to produce biofuels. But as we have seen for decades with ethanol, beating the incumbent on price does not guarantee demand because motor fuel markets are not free markets.

Replacing the cure for this problem in the RFS with an octane standard is the equivalent of an open invitation for the oil industry to use less biofuel and increase carbon emissions in the process.

Earlier this month, the EIA on a report that we have talked about already, confirmed what the oil industry has previously admitted—that a 95 RON standard could be easily met with minimal refinery upgrades.

The truth is—and we haven't talked about this—we have done this before. The oxygen standard enacted in 1990 was a so-called performance based fuel quality standard. It was supposed to drive demand for ethanol based on its superior fuel characteristics including price.

It didn't, because the oil industry prefers to control the entire motor fuel gallon by purchasing octane from themselves.

So instead of ethanol we got MTB, a fuel additive that polluted America's drinking water and had some small towns trucking drinking water into local schools.

Unfortunately, the discussion draft offers a similar dynamic as it pertains to advanced biofuels. The act would establish a more automated system when it comes to setting and enforcing advanced biofuels standards.

In theory, this system would provide more predictability for innovators. That is a good thing.

But it offers predictability by tying the volume standard to the actual production in the prior year. The problem with setting the cellulosic biofuel standard based on prior year production is it puts the growth trajectory of cellulosic biofuels into the hands of our competitors in the oil industry.

This is true, because in order to secure investment to build capacity our industry has to be able to show likelihood of demand. In the absence of a free market and within RFS phase out, we would have to show some sort of commitment form the oil industry to buy cellulosic biofuel. If the oil industry knows it can control the cellulosic biofuel to secure financing, the oil industry knows it can control cellulosic biofuel development by avoiding those commitments and that Federal law now rewards that behavior with greater market control. That's what they will do.

We continue to believe that the solution here is not legislative. There is already an administrative effort underway to address RVP. We can do many of the things to create certainty from a forecasting perspective inside of existing law.

We appreciate the opportunity to be here today.

[The prepared statement of Mr. Coleman follows:]

Written Testimony of:

Mr. Brooke Coleman
Executive Director, Advanced Biofuels Business Council

U.S. House of Representatives
House Energy and Commerce Committee
Subcommittee on Environment
"The 21st Century Transportation Fuels Act"

December 11, 2018

Good morning Chairman Shimkus, Ranking Member Tonko, and members of the Subcommittee. My name is Brooke Coleman. I am the Executive Director of the Advanced Biofuels Business Council.

The Advanced Biofuels Business Council (ABBC) represents worldwide leaders developing and commercializing next generation, advanced and cellulosic biofuels, ranging from cellulosic ethanol made from agricultural residues to advanced biofuels made from sustainable energy crops and municipal solid waste. Our members include those operating production facilities, those augmenting conventional biofuel plants with "bolt on" or efficiency technologies and those developing and deploying the technologies that make advanced biofuel production a commercial reality, including some of the largest cellulosic ethanol and advanced biofuel enzyme production facilities in the world.

Thank you for the opportunity to provide feedback on the "Discussion Draft: The 21st Century Transportation Fuels Act" released by the Committee in November. It certainly does make sense to start thinking about fuel energy issues over the next several decades. There are clear benefits of increasing the production and use of renewable fuels, optimizing fuel performance and improving market readiness for higher octane, lower carbon and cleaner fuel. In addition, we appreciate the recognition

that vehicle technology, supply chains, refueling infrastructure and fuel content must be synchronized to optimize outcomes for American consumers. While we support several provisions in the discussion draft as policy goals, other parts of the proposal undercut any potential for those provisions to promote innovation and growth in the American renewable fuels industry. Our concerns are detailed below.

1) **The Act, as currently constructed, would not grow the renewable fuels sector and could lead to renewable fuel use and air quality backsliding**

Global oil markets are (collusively) price-controlled by OPEC and are extremely consolidated and vertically integrated domestically. The absence of free market forces in the liquid fuel marketplace is a problem for the advanced biofuels industry (and other innovators) because non-competitive marketplaces do not properly facilitate and reward innovation. The absence of free market forces is also a problem for the 1st generation biofuels sector as price competitiveness does not necessarily lead to increased demand, which in turn dampens biofuel industry growth and employment.

At its core, the proposal would replace the Renewable Fuel Standard (RFS) with an octane standard. In theory, renewable fuels like ethanol are in the best position to succeed under an octane standard because ethanol is (by far) the cheapest source of octane available today. In practice, and unfortunately, it is in the oil industry's long-term financial interest to marginalize competition and buy (petroleum-based) octane enhancers from themselves, even if it means lower downstream profits in the immediate term. Replacing the RFS with an octane standard removes the legal requirement to use renewable octane while overlaying a massive new (market control) incentive for the oil industry to figure out how to add octane to gasoline *without* relying on renewable fuels.

If history is any indication, the oil industry will go to great lengths to avoid using renewable fuels. Ethanol was in the best position to benefit from the 2.0% oxygen standard required by the Clean Air Act Amendments of 1990 to reduce harmful tailpipe emissions. Instead, the oil industry chose to

reform natural gas into a new oxygen-containing additive called MTBE, which saturated 85 percent of the market for oxygenates nationwide.[1] MTBE use turned out of the be a national environmental disaster, polluting thousands of public and private drinking water aquifers in dozens of states. Oil companies knew of the drinking water risks of using MTBE but used the chemical anyway for obvious reasons: to avoid using renewable fuels.[2]

As instructive as MTBE history is, there is perhaps no better example than current market dynamics. Ethanol is trading at roughly $1.24 per gallon against a wholesale gasoline price of roughly $1.45. Ethanol sells at an even steeper discount to non-ethanol octane enhancers, as evidenced by the fact that gasoline without ethanol (E0) is at least ~40 cents per gallon more expensive than ethanol blends. And yet, the demand for ethanol has not increased in response to its price advantages.

The oil industry claims that it cannot increase ethanol use due to regulatory and infrastructural constraints. This is untrue. E15 is approved for all 2001 and newer automobiles, representing roughly 90 percent of the vehicles on the road today. E15 has fueled several billion consumer miles without any issues. It is sold in 30 states today. And yet, its volumetric share of market is increasing only where policy and ancillary programs drive it. The real issue is the oil industry does not want to facilitate more ethanol use – irrespective of price – to preserve its control over the fuel gallon and the gas pump. The 21st Century Transportation Fuels Act's proposed shift to non-renewable octane would leave the renewable fuels industry 100 percent exposed to the oil industry's desire to control the entire gallon of fuel.

The situation is more concerning when ones considers the actual octane standard – 95 RON – being proposed. The American Fuel & Petrochemical Manufacturers' (AFPM) President and CEO Chet Thompson confirmed before the U.S. House Energy and Commerce Subcommittee on the Environment earlier this year that the oil industry could meet a 95 RON standard without more ethanol using today's

[1] https://thehill.com/opinion/energy-environment/386543-repeating-history-with-octane-biofuel-standards-is-huge-mistake
[2] http://articles.latimes.com/2002/apr/17/local/me-mtbe17.

technology. A recent EIA report was even more direct, concluding that oil refiners would have "no problem" meeting a 95 RON standard without additional ethanol.[3] Specifically, the report states that making higher octane gasoline at the refinery "is well within the range of normal operations;" and, "...existing domestic refineries should have no problem meeting the (95 RON) requirements;" and, even later in the phase-in period in 2027, refiners "...appear to be able to meet the increased 2027 octane requirements with minor operational adjustments. No industry-wide capital intensive projects would be needed to meet the 2027 requirements."[4]

When the oil industry avoids using more biofuels to meet octane standards – or worse, backs out current use – it must increase aromatics content in gasoline. Independent vehicle emissions testing at UC-Riverside showed that higher concentrations of aromatics increase tailpipe emissions of particulate matter (PM) and black carbon (BC).[5] Ethanol is a direct substitute for aromatics in gasoline and keeps aromatic fractions lower. The study concluded: "[o]ur results show that reduced aromatic concentrations are associated with reduced PM mass and (more importantly) reduced BC from [direct injection] vehicles. Thus, increasing the ethanol fraction in gasoline could help to reduce climate and human health impacts attributed to particle emissions from GDI vehicles." Opening the door for oil companies to avoid aromatics displacement very clearly has serious air quality risks.

2) The Act, as currently constructed, would increase gas prices

It is difficult to quantify the gas price impacts of a hypothetical fuel scenario without access to the real refinery costs of avoiding ethanol use in part or all together. However, it is very clear that the 21st Century Transportation Fuels Act would increase gas prices.

[3] https://www.eia.gov/analysis/octanestudy/pdf/phase2.pdf.
[4] https://www.eia.gov/analysis/octanestudy/pdf/phase2.pdf.
[5] https://www.greencarcongress.com/2015/08/20150818-ucr.html

First, ethanol is ~ 20 cents per gallon cheaper than wholesale gasoline and is more than 20 cents per gallon cheaper than alternative, petroleum-based octane enhancers. The price impact of ethanol is plainly evident when you compare the current average per-gallon prices of E85 ($2.02), E15 ($2.35), E10 ($2.45) and E0 gasoline without ethanol ($2.82).[6] The reason is simple – substitutes for ethanol are significantly more expensive than ethanol. It is true that oil companies could theoretically avoid increasing pump prices by using more ethanol. But as discussed in the previous section, this outcome would require the oil industry to act against its economic self-interest, which is not occurring in the marketplace today *with the RFS* and did not occur before the RFS was enacted when the federal government enforced a very similar "performance-based" oxygen standard.

3) The Act, as currently constructed, would increase carbon emissions

The RFS is – indirectly, to date – a renewable octane/cetane requirement. The 21st Century Transportation Fuels Act would phaseout the renewability requirement *and* the greenhouse gas (GHG) requirement contained in the RFS. As discussed, oil companies will use more petroleum additives instead of biofuels, because it's in their economic self-interest.

Substituting petroleum-based additives for biofuels in current or future markets will produce GHG backsliding because independent analysis confirms that most types of first- and second-generation biofuels reduce greenhouse gas emissions, in many cases by very large amounts. This includes analysis conducted by U.S. EPA, the California Air Resources Board (CARB), the U.S. Department of Energy, the U.S. Department of Agriculture and top energy labs such as Argonne and Oak Ridge National Laboratories. For example, peer-reviewed analysis coming out of the U.S. Argonne National Laboratory shows that all types of ethanol – the type of renewable fuel usually scrutinized for its GHG emissions – have significantly lower lifecycle greenhouse gas emissions than petroleum, even with penalties for

[6] www.e85prices.com

indirect land use change. It is worth highlighting that the Argonne National Laboratory developed the GREET model, which remains the gold standard for modeling carbon lifecycle emissions from fuels (and is the analytical basis for the California Air Resources Board Low Carbon Fuel Standard as "CA-GREET"). Many of these biofuels are significantly more carbon reductive than technologies often regarded to be the most innovative (electric drive, hydrogen). Some cellulosic ethanol facilities can deliver fuel to market with more than a 90 percent greenhouse gas emissions reductions.

Well-to-Wheels Greenhouse Gas Emissions Reduction

Relative to Average Petroleum Gasoline (including indirect land use change)

WTW GHG emission reductions	Corn	Sugarcane	Corn stover	Switchgrass	Miscanthus
Including LUC emissions	19–48% (34%)	40–62% (51%)	90–103% (96%)	77–97% (88%)	101–115% (108%)
Excluding LUC emissions	29–57% (44%)	66–71% (68%)	89–102% (94%)	79–98% (89%)	88–102% (95%)

Source: Argonne National Laboratory[7]

The carbon benefits of increasing the use of renewable fuels are even greater when you consider real world conditions – i.e. the fact that renewable fuels replace higher carbon marginal (rather than average) gallons of petroleum. To illustrate, Petrobras chief Jose Sergio Gabrielli has declared that "the era of cheap oil is over." This means that oil companies have shifted to an increasing reliance on more expensive and riskier "unconventional" fuels – including tight oil (e.g. the Bakken), deep water (e.g. Gulf of Mexico, Deep Water Horizon) and Canadian tar sands (e.g. Keystone) – to meet the global demand for fuel energy.[8] Unconventional oil is harder to find and can result in serious ecological problems (earthquakes, drinking water contamination, ecosystem destruction in the case of the Gulf). These fuels are also more carbon intensive than the "average petroleum" often used to compare the carbon value of renewable fuels. There are many recent studies that have looked at the real world

[7] See http://iopscience.iop.org/1748-9326/7/4/045905/pdf/1748-9326_7_4_045905.pdf
[8] See http://www.eia.gov/forecasts/aeo/MT_liquidfuels.cfm#crude_oil

"marginal" impact of increasing the use of renewable fuels. One of the more extensive is a 2014 analysis conducted by Life Cycle Associates in California, which concluded that first-generation ethanol – assessed by EPA in 2010 to be 21 percent better than 2005 petroleum with regard to lifecycle GHG emissions – is 32 percent better than 2012 average petroleum and 37-40 percent better than petroleum derived from tar sands and fracking. The report recognizes that using less renewable fuel, as would be the case with the current proposal, will increase the use of these unconventional types of oil:

> The majority of unconventional fuel sources emit significantly more GHG emissions than both biofuels and conventional fossil fuel sources ... [t]he biggest future impacts on the U.S. oil slate are expected to come from oil sands and fracking production ... significant quantities of marginal oil would be fed into U.S. refineries, generating corresponding emissions penalties that would be further aggravated in the absence of renewable fuel alternatives." *Source: Life Cycle Associates, January 2014*

These findings are consistent with recent (lower resolution) assessments by federal agencies. For example, a recent report released by the Congressional Research Service (CRS) found that Canadian oil sands are 14-20 percent more carbon intensive than the 2005 EPA baseline.[9] As such, it is an inescapable reality that any proposal to increase renewable fuel blending is a proposal to reduce U.S. consumption of high carbon intensity, unconventional oil. If the high-carbon-intensity marginal gallon of oil is displaced by cellulosic ethanol, the carbon benefits are enormous.

4) **The advanced biofuel provisions in the discussion draft would provide some level of improved certainty but have a fatal flaw that would undercut investment and market growth**

The 21st Century Transportation Fuels Act does provide some level of predictability for advanced biofuels producers when it comes to setting volumetric standards and feedstock. Unfortunately, the volumetric predictability comes in the form of a provision long advocated by the oil industry; namely,

[9] See http://www.fas.org/sgp/crs/misc/R42537.pdf

the setting of cellulosic biofuel standards based on prior year actual production. We strongly oppose the adoption of this provision under current and any future renewable fuel regimes.

The problem with setting the cellulosic biofuel standard based on prior year production is it puts the growth trajectory of cellulosic biofuels largely in the hands of the oil industry.

In order to secure investment to build advanced biofuel plants and build capacity, interested parties must be able to demonstrate likely demand for the biofuel product. In a free market, the demand case would center around beating the incumbent on quality and price. But, as discussed, fuel markets are not free markets. The RFS – by virtue of its forward-looking forecasting – endeavors to correct this market flaw and sends a signal to the marketplace that RFS-eligible production coming online will be built into the program.

Even with the RFS, prospective plant developers must often also present an off-take agreement or other commitment from the oil industry to buy the biofuel if produced. If the RFS is phasing out, there will be more weight put on off-take agreements with the oil industry. If the oil industry knows it can control cellulosic biofuel development by avoiding commitments to buy cellulosic biofuel, and that the federal cellulosic biofuel blending requirement will be curtailed based on this behavior, the 21st Century Transportation Fuels Act would be modifying a key (forward-looking) aspect of current renewable fuel policy to create a further disincentive for the oil industry to enter into agreements with advanced biofuel innovators. Essentially, it hands the keys of the car to the oil industry. This is why the American Petroleum Institute (API) has long-supported this RFS modification. Even with exceptions to the rule in isolated cases in which the oil industry is not the off-take partner, cellulosic biofuel production capacity growth would become the exception rather than the rule.

5) **The market readiness provisions – i.e. vehicle warranties for ethanol, pump infrastructure and Reid Vapor Pressure (RVP) – are good policy; however, biofuel market readiness is of diminished value to our industry if the driver to deliver renewable fuel to market is removed**

We appreciate the committee's recognition of many of the market readiness challenges we have as we try to compete with the incumbent oil industry and penetrate the supply chains dominated by oil for more than a century. Thankfully, we are starting to make progress on key aspects of consumer access. And the provisions contained in the proposal are many of the right ones.

However, our future success depends on two market facets working in concert: the incentive to produce renewable fuel and the ability for consumers to use it. The value of making progress in our ability to dispense ethanol (cellulosic ethanol included) in pumps and use it in cars is diminished – or eliminated – if the policy or market drivers critical to making the fuel available to dispense/use disappear as part of the process. The Act proposes to improve one facet but eliminate the other.

As discussed, a (competitive) price-driven market could be the production and investment driver, if it existed. The RFS properly administered cures the motor fuel marketplace of its competitive shortcomings. Replacing the RFS with an octane standard – especially one allowing the oil industry to easily replace renewable octane and control the trajectory of cellulosic biofuel growth – practically ensures that even if the biofuel market readiness requirements contained in the Act are met by the auto and oil industries on time, additional renewable fuel will not be there to be pumped and used. As such, the market readiness provisions in the proposal offer little value in their legislative context, and little balance when it comes to assessing the Act as a whole.

Conclusion

While there are clear benefits of opening motor fuel markets to mid-level ethanol blends and providing more certainty for cellulosic biofuel innovators, the 21st Century Transportation Fuels Act does

so in a way that would: (a) create a perverse incentive and allowance for oil companies to avoid using renewable fuels; (b) allow the oil industry to control the trajectory of the cellulosic biofuels industry; and, (c) result in many deleterious impacts for consumers, including worsened air quality, increased carbon emissions and higher prices at the pump.

While it is clear why the oil industry supports replacing the RFS with an octane standard, it is unclear why certain automobile companies agree. Improving octane as an additive measure – on top of the RFS – would give the auto industry the cleaner fuel it seeks to facilitate more efficient engines while ensuring that the carbon and air quality benefits of the RFS are maintained. The RFS additive approach would also protect billions of dollars of investments already made to facilitate the RFS and the manufacturing jobs in more than 30 states directly tied to the enaction and enforcement of the RFS.

The RFS is indispensable because it makes the renewable content requirement in motor fuel explicit for an incumbent industry disinclined to use renewable fuels. It makes competition possible in an otherwise non-competitive market. While it is true that success for our industry under the current RFS regime is tied to key decision-making by regulators and legislators in a challenging political environment – year after year – it would be a huge mistake to ease that burden by shifting it to our competitors in the oil industry via octane standards they can already hit and modifications to the cellulosic biofuel standards they can control. We do not need a change in legislative approach that would still fail to ensure good administration. We need better administration of current (good) law.

Thank you for the opportunity to speak with you today, and I look forward to your questions.

See: Addendum A

Addendum B

Addendum A:

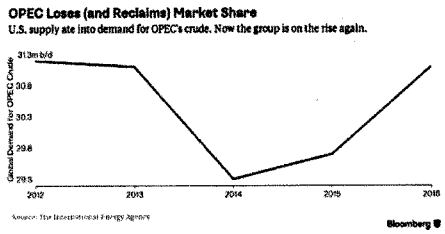
How the RFS Cracks Open a Non-Competitive Market for Biofuels

Non-competitive and non-price driven markets are almost impossible to predict regarding future demand opportunity, because the market does not behave based on free market fundamentals and the creation of a better product does not necessarily translate into market demand. This lack of predictability increases investment risk – or makes risk difficult to assess precisely – which in turn drives investment and potential strategic partners to other sectors.

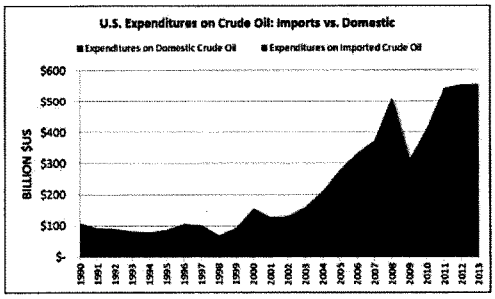
Recent trends are a case in point for why proper RFS implementation is so important to the development of advanced biofuels. Certain members of OPEC decided in late 2014 to allow global crude oil prices to slip in part to stop competition from emerging U.S. domestic tight oil production and reclaim market control. In simple terms, colluding to lower the price of oil changes the economics on U.S. oil (and other fuel) production, which struggled to compete with collusively depressed oil prices in the 2014-16 timeframe.

A recent Bloomberg report entitled "OPEC Is About to Crush the U.S. Oil Boom" notes that the strategy worked during that period.[10] And an OPEC September 2015 report openly acknowledged the effort and its effects: "In North America there are signs that US production has started to respond to reduced investment and activity. Indeed, all eyes are on how quickly US production falls."[11] As U.S. domestic oil production slowed, dependence on OPEC oil turned directionally and increased again through 2016. The figure below shows how quickly Saudi Arabia recovered market share in the wake of artificially depressed oil prices.

[10] See: http://www.bloomberg.com/news/articles/2015-10-20/after-year-of-pain-opec-close-to-halting-u-s-oil-in-its-tracks.
[11] See: http://www.opec.org/opec_web/static_files_project/media/downloads/publications/MOMR_September_2015.pdf



Even with "new" U.S. oil production, the vulnerability of the U.S. economy to foreign oil dependence is all about price. OPEC will inevitably reduce output at some point, and crude oil prices will increase sharply. If the U.S. continues to consume far more oil than it produces (inevitable) and oil prices increase (inevitable), consumers will continue to spend enormous sums of money on foreign oil and the U.S. economy will continue to suffer at the hands of its dependence on foreign oil. The magnitude of the economic drain can be staggering. Americans transferred nearly $1 trillion to OPEC members during the oil price spike of 2008, in just 6-8 months. The figure below demonstrates how increasing U.S. oil production does not necessarily protect the U.S. economy and consumers from unsustainable and dangerous levels of spending on foreign oil.

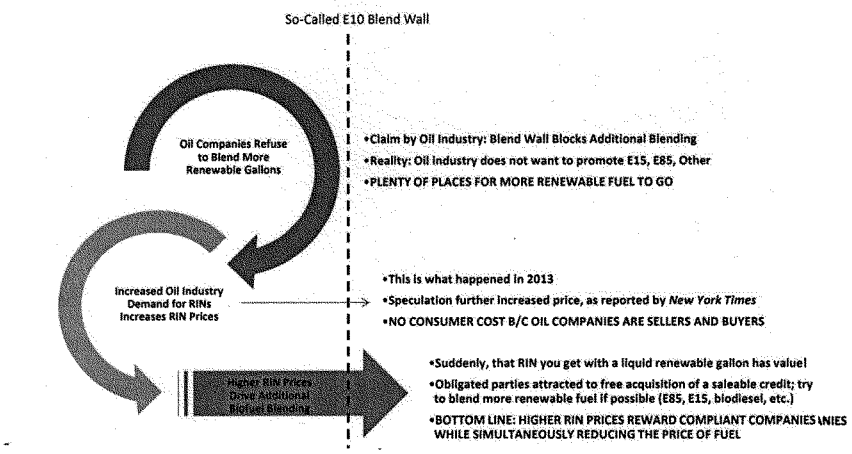


With the RFS, Congress sought to bolster energy independence and security by increasing the amount of clean, renewable fuel used in the domestic transportation fuel pool. The RFS is an aggressive

but flexible program that requires obligated parties to blend increasing volumes of various types of renewable fuel over time. The RFS does what a free market would do on its own: reward innovation.

The effectiveness of the program essentially boils down to how EPA manages market demand for Renewable Identification Numbers (RINs). The primary value of the RIN program, other than facilitating compliance and some level of compliance flexibility, is its ability to increase market access for renewable fuels. That is, when an oil company refuses to blend more liquid biofuel, they can buy a RIN on the open market instead. If a significant number of oil companies refuse to blend liquid gallons and seek RINs on the open market, RIN trading and values increase because of this affirmative non-compliance. Higher RIN prices then provide an extra incentive for other obligated parties to blend physical quantities of (liquid) renewable fuel, because they acquire a (now more) valuable and salable RIN with each gallon of renewable fuel purchased.

How RINs Work to Facilitate Objectives of RFS



Source: ABBC Presentation, Third Way Briefing, U.S. Senate Briefing

Addendum B:

If RFS administration improves, cellulosic biofuels have significant growth opportunities

When the RFS is properly administered, there is enormous growth opportunity for advanced and cellulosic biofuels.

First and foremost, gasoline demand is increasing, not decreasing. We saw the highest gasoline consumption rate ever recorded in the United States in 2018.[12] Gasoline consumption also reached a record high in 2016, breaking the previous record from 2007. Consumption is consistently matching that level and expected to reach another record high in 2019.[13] Advanced and cellulosic biofuels cut emissions in every gallon and insulate U.S. consumers from the price impacts of the global oil market.

The potential upside for cellulosic biofuels – from a production capacity perspective – is enormous. According to the Sandia National Laboratory, the U.S. could produce 75 billion gallons per year of cellulosic biofuels (one subset of the advanced biofuel industry) without displacing food and feed crops.[14] This would be enough cellulosic biofuel alone to displace more than half of gasoline demand. A Bloomberg analysis looked at select regions in the world to assess the potential for next generation ethanol production.[15] The study found that eight regions – Argentina, Australia, Brazil, China, EU-27, India, Mexico and the United States – could displace up to 50 percent of their demand for gasoline by 2030 making cellulosic ethanol from a very small percentage of its each region's agricultural residue supply alone.

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[12] See https://www.eia.gov/petroleum/weekly/gasoline.php, June 20, 2018

[13] See https://www.eia.gov/outlooks/steo/marketreview/petproducts.php; June 20, 2018.

[14] See https://share.sandia.gov/news/resources/news_releases/biofuels-can-provide-viable-sustainable-solution-to-reducing-petroleum-dependence-say-sandia-researchers/.

[15] See http://www.novozymes.com/en/sustainability/benefits-for-the-world/biobased-economy/white-papers-on-biofuels/Documents/Next-Generation%20Ethanol%20Economy_Executive%20Summary.pdf

It is both an exciting and challenging time for the cellulosic biofuels industry and the advanced biofuel industry as a whole. The technology is commercially ready, and the industry is deploying at commercial scale. We are embarking on the process of securing efficiencies that can only be achieved via commercialization (i.e. the "experience curve") and economies of scale. When the corn ethanol industry started building plants, their production costs exceeded their feedstock costs by a large margin. However, corn ethanol producers have reduced their production costs by roughly 60 percent since the first commercial plants were built in the 1980s. Likewise, some solar companies have seen a similar 60-70% production cost reduction in just the last ten years, as capacity has increased significantly.

The U.S. is in position to lead the world when it comes to the development of advanced, low carbon biofuels. And yet, we face as much policy uncertainty as we ever have before, almost always generated by fabricated claims about renewable fuels and the RFS. Incumbents in the fuel energy space are going after our tax provisions, our farm bill programs, and of course, the RFS. It is important to understand that this is happening because of the effectiveness, rather than ineffectiveness, of these programs to drive consumer choice at the pump.

While cellulosic biofuel deployment continues to make steady progress against strong headwinds created by oil politics, the central point of impedance for our industry is not the law itself but administration of the law. It is common for cellulosic biofuel critics to point to the fact that development of the fuel has been years in the making and the industry has not yet achieved large-scale commercial success. However, a closer look at the development timeline tells a different story:

- Cellulosic biofuel included in RFS2, signed by President Bush in December 2007
- The "rules of the road" are not established until 2010 via the RFS2 final rule

- The Obama Administration stops enforcing the law – i.e. does not publish or enforce blending requirements – from 2014-2016; in the immediate aftermath and recovery from a 100-year recession

- In the immediate aftermath of getting the RFS back on track in 2016, it is uncovered that former EPA Administrator Pruitt had issued dozens of small refinery exemptions to refiners, some of which are not small or experiencing hardship.[16] These actions marked a massive expansion of EPA's previous use of its waiver authority. The improperly granted waivers destroyed biofuel demand across all biofuel types and rolled back the amount of renewable fuel blended into our transportation fuel ~2 billion gallons to 2013 levels. EPA has also granted several retroactive waivers, further destroying biofuel demand and forgave 500 million gallons of a single refiner's obligation as part of a bankruptcy proceeding.[17] To make matters worse, EPA has still failed to act on a 2017 Court remand to add 500 million gallons back into the 2016 RVO.[18]

- In 2016-2017, EPA staff identified ethanol made from corn fiber as a cellulosic biofuel exceeding expectations and forecasts. And yet, registrations for the individual corn fiber companies seeking to be eligible for D3 RINs are still held up in the regulatory process at EPA, creating a self-fulfilling prophecy in which cellulosic biofuels are held out of the marketplace due to regulatory delay. The 2018 RVO and the 2019 RVO include very low targets for corn fiber ethanol in part because the registrations have not been awarded.

[16] See https://www.reuters.com/article/us-usa-biofuels-epa-refineries-exclusive/exclusive-epa-gives-giant-refiner-a-hardship-waiver-from-regulation-idUSKCN1HA21P.
[17] See https://www.reuters.com/article/us-usa-biofuels-waivers-exclusive/exclusive-epa-grants-refiners-biofuel-credits-to-remedy-obama-era-waiver-denials-idUSKCN1IW1DW.
[18] See https://www.cadc.uscourts.gov/internet/opinions.nsf/5F1D8BC9815C4C698525816B00543925/$file/16-1005-1686284.pdf.

There are signs of improvement.

EPA is now moving to permit year-round sales of E15. E15 adoption – as essentially a 3-season fuel – has helped cellulosic ethanol makers demonstrate growing ethanol demand, which can be a challenge for investors to internalize in a complex, regulated market. However, the unavailability of E15 in the summer has dampened retailer interest in making the arrangements to offer the fuel at all. Permitting year-round E15 use would open markets to cellulosic ethanol, reduce harmful emissions and create economic growth.

Some have argued that the cellulosic ethanol industry does not need a growing overall ethanol marketplace to succeed since second-generation ethanol can theoretically displace first-generation ethanol in a constrained marketplace. This is a well-meaning, but illogical, argument for two primary reasons. First, the biofuel industry is inherently linked together. As shown in a Third Way report, most cellulosic ethanol first movers are also first-generation ethanol producers.[19] As such, any policy that requires second-generation ethanol production to displace first-generation ethanol essentially requires cellulosic ethanol first movers to cannibalize their current business model. Ethanol companies are not going to innovate to undercut their own existing technology any more than solar and wind companies would invest hundreds of millions of dollars in better panel and turbine technology if they were only allowed to displace existing solar panels and wind turbines. Notably, it is the revenue from first generation technology that is often being used to develop second generation technology advanced biofuel technology. And project investors – many of which have existing stakes in these companies – are not going to undercut current assets either. Second, the primary objective of U.S. biofuel policy – embodied in part by EISA 2007 – is to curb foreign oil dependence (i.e. energy independence/security rather than independence from U.S. production of conventional biofuels).

[19] See http://www.thirdway.org/report/cellulosic-ethanol-is-getting-a-big-boost-from-corn-for-now

EPA is cleaning up its waiver process. While it is too early to predict outcomes, it has been reported that EPA is reviewing and will structure a more transparent Small Refinery Exemption (SRE) review process. Increased scrutiny over the waiver process, which must continue, should improve outcomes for the biofuels industry given the clear intent of the statute.

Mr. FLORES [presiding]. Mr. McAdams, you're recognized for 5 minutes.

STATEMENT OF MICHAEL MCADAMS

Mr. MCADAMS. Chairman Flores, Ranking Member Tonko, Congressman Olson, Chairman Shimkus, I am delighted to once again appear before you to testify on the importance of Federal policy in furthering the development of next generation sustainable renewable fuels.

On behalf of the membership of the Advanced Biofuels Association, I want to personally thank Chairman Shimkus and Congressman Flores for your courage and leadership in providing an RFS draft reform package.

The countless hours that Members on both sides of the aisle have spent attempting to craft a middle ground to update and revise the focus of the delivery of second generation advanced fuels is long overdue.

In spite of the best intentions, it is clear that the current statute needs updating if we are to enable the technologies to move forward and produce the volume of fuels which were envisioned by the original authors of the law.

That renewed focus is particularly relevant, given the recent release by the administration's warning on the impacts of climate change and the containment of the most destructive wildfire in California's history.

In addition to continued growth in aviation, which is currently doubling every 15 years, along with the new global carbon targets for international airlines, will drive the need for these fuels, moving forward.

These advanced fuels will provide an alternative to higher carbon fuels in our future, as noted by the Government's recent climate report. However, as I've testified before, there are numerous barriers to entry under the current RFS program that specifically disadvantage advanced biofuels.

My written testimony goes into specific recommendations in more detail. Previously, I provided you 21 of them. But I would like to highlight a few potential reforms as well as some—offer some comments on the recent draft bill introduced by Congressman Shimkus and Congressman Flores.

First and foremost, if you consider making changes to the RFS, we would urge Congress to take the politics out of the equation as much as possible by making the RFS a rules-based system.

Therefore, we support the provision in this bill that would base the annual RVO on the previous year's actual production, queuing up midyear and end-year volumes, which would set the RVO for the future and that would thereby set a mandate for the obligated parties.

This would reduce volatility in the RIN market, diminish the need for cellulosic waivers for fuels which do not exist, and encourage obligated parties to buy available produced gallons for the RINs.

Any reform to the RFS should also expand the definition for what constitutes renewable biomass and allow feedstocks to comply

on a mass balance basis rather than imposing burdensome mapping restrictions on those feedstocks.

Naturally regenerative trees under sustainable forest management practices should be available for use under this program. Currently, they are not.

We are long past due to have a plant-a-tree pathway promised by EPA years ago. The Shimkus-Flores bill takes an important step in this direction by redefining renewable biomass to include trees and tree residues, paving the way for increased deployment of pyrolysis and other technologies.

By the way, the three current cellulosic plants being in the United States, which we represent, are all pyrolysis technologies.

We support the bill's efforts to pivot the focus on the development of fuels of the future by providing some regulatory certainty for the advanced and cellulosic biofuels and biodiesel through 2032 or longer. We recommend you look at the length of the average debt financing, which is 20 years, in lieu of 2032.

This time frame is consistent with the standard of the debt term. The steps which you have taken in your draft bill at a minimum will send a strong signal to the financial institutions that the Federal Government supports the development of these fuels in the future by guaranteeing the rent over a longer time frame.

We also suggest you encourage EPA to address the biointermediate issue in the upcoming reset rules proposed this year. Currently, three of our members who are building plants would not get a rent unless this problem is resolved.

I attached a list of other specific recommendations for your consideration, which I believe would all fall under the title of common sense, which will require statutory changes in order to allow EPA to make this program more economically and administratively efficient.

Again, on behalf of all of our members, we want to thank you for your leadership and urge the members of this committee to seriously consider making the reform of this program a priority in the coming year.

Thank you, and I look forward to answering your questions.

[The prepared statement of Mr. McAdams follows:]

Testimony, Michael McAdams
President, Advanced Biofuels Association
House Energy & Commerce Committee, Environment Subcommittee
"Hearing on Discussion Draft: the 21st Century Transportation Fuels Act"

Tuesday, December 11, 2018

Executive Summary

The members of the Advanced Biofuels Association strongly support efforts by the House Energy and Commerce Committee to update and reform the RFS program. Specifically, we appreciate Chairman Shimkus and Representative Flores leadership in providing a draft package to accomplish RFS reform.

Ten years have passed since this program was originally designed and a great deal has been learned about the strengths and weaknesses of the RFS. Since 2007, EPA has been forced to grapple with challenges applying the statute to a wide range of circumstances that could not be considered when the law was first passed. Today, there are far broader technology options than the first-generation ethanol or biodiesel processes available at the program's inception. This must be kept in mind in order to produce the advanced and cellulosic fuels of the future. On the success front, biodiesel production is three times what was originally anticipated. If a rules-based system is used as the basis for the annual RVO and the small refinery exemptions are used appropriately, biodiesel will continue to be the largest source of high GHG-reduction fuels in the short and medium term. Not to mention that these fuels have created good competition in the marketplace and reduced fuel costs for millions of truck drivers across the country.

ABFA believes that comprehensive reform will actualize the vision for advanced renewable fuels that this Committee and Congress as a whole overwhelmingly supported when it passed the RFS2 in 2007.

ABFA members support top-line provisions including:

1. **A rules-based process for setting the annual RVO mandates** that bases the RVO on actual gallons produced in the previous compliance year. Mid-year and end-of-year adjustments would account for increases or decreases in production.

2. **Expanding the definition of renewable biomass**, replicating the approach allowed for first generation biofuels by allowing feedstocks to comply on a mass balance basis rather than imposing burdensome mapping restrictions on those feedstocks. Naturally re-regenerated trees, as long as they are under sustainable forest management practices, should be available for use under the program. We support the discussion draft's effort to pivot and focus on the development of the fuels of the future by providing some regulatory certainty for advanced and cellulosic biofuels and biodiesel through 2032.

3. **Encourage EPA to address the bio-intermediate issue** in the upcoming reset rules being proposed this year. Currently, three of ABFA's members are building plants and would not qualify for a RIN under the program unless the bio-intermediate issue is resolved. These steps at a minimum will send a strong signal to the financial institutions that the federal government supports the development of these fuels of the future by guaranteeing the RIN over a longer time frame.

WRITTEN TESTIMONY OF MICHAEL MCADAMS
PRESIDENT, ADVANCED BIOFUELS ASSOCIATION

HOUSE COMMITTEE ON ENERGY AND COMMERCE
SUBCOMMITTEE ON ENVIRONMENT

HEARING ON "DISCUSSION DRAFT: THE 21ST CENTURY TRANSPORTATION FUELS ACT."

TUESDAY, DECEMBER 11, 2018

Mr. Chairman, Mr. Ranking Member, and Members of the Subcommittee:

My name is Michael McAdams and I am the President of the Advanced Biofuels Association. I appreciate the opportunity to be with you this morning to testify on the importance of federal policy in furthering the development of the next-generation, renewable fuels that can provide a more sustainable path for our future.

ABFA represents over 35 companies across the entire biofuels supply chain who produce, distribute, and market advanced biofuels under the RFS program. Our member companies currently produce over 4 billion gallons a year of advanced and cellulosic fuels that achieve a minimum of a 50% greenhouse gas reductions. While the RFS has fostered the development of alternatives to petroleum-based fuels, we acknowledge it has not always worked as Congress originally intended, and we support your comprehensive reform efforts to maximize future volumes of advanced and cellulosic fuels.

To that end, on behalf of our membership, we want to personally thank you, Chairman Shimkus and Congressman Flores, for your courage and leadership in providing an RFS draft reform package. The countless hours that all of the members on both sides of the aisle have spent attempting to craft a middle ground to update and revise the focus of delivery in the future of this program is long overdue. The focus on advanced and cellulosic fuels is well founded, given the volume of gallons currently available under the program. This conversation on the future of advanced and cellulosic fuels is particularly timely, less than two weeks after the Trump administration published a grave warning on the impacts of climate change, and the containment

of the most destructive wildfire in California's history. With the transportation sector now the greatest contributor to U.S. greenhouse gas emissions, and with the volume of air traffic doubling every 15 years, we need to ensure that we have a sufficient supply of alternative, low-carbon fuels.

Unfortunately, there are still numerous barriers to entry under the current RFS program that specifically disadvantage these innovative fuels of the future. My written testimony goes into more detail, but I would like to highlight a few potential reforms, as well as offer some comments on the recent draft bill introduced by Congressmen Shimkus and Flores.

First and foremost, as you consider making changes to the RFS, we would urge Congress to take politics out of the equation as much as possible, by making the RFS a rules-based system. For example, we support legislative provisions that would base the annual RVO on the previous year's actual production, queuing up mid-year and end-of-year adjustments to account for increases or decreases in production. This would reduce volatility in the RIN market, and diminish the need for waivers for fuels which do not exist. We should be encouraging the obligated parties to buy available gallons and produced RIN's on a quarterly basis, instead of requesting waivers and undercutting new production facilities by reducing the demand for their fuels.

Any reforms to the RFS should also expand the definition for what constitutes renewable biomass, and replicate the approach that was allowed for first generation biofuels, by allowing feedstocks to comply on a mass balance basis. Imposing unnecessary and counterproductive restrictions on qualifying feedstocks has essentially eliminated most of the biomass available in the U.S. from consideration under the RFS, and taken untold billions of gallons of renewable biofuels off the table.

The Shimkus-Flores bill takes an important step in this direction by redefining renewable biomass to include trees and tree residue, paving the way for increased research, development, and deployment of pyrolysis technologies. We support the bill's effort to pivot and focus on the development of the fuels of the future by providing some regulatory certainty for advanced and cellulosic biofuels and biodiesel through 2032. At a minimum, this would send a strong signal to financial institutions that the federal government continues to support the development of these fuels by guaranteeing the RIN over a longer time frame.

I appreciate the hard work that went into crafting this bill, and I would ask this committee to ensure that any and all RFS reform legislation you consider going forward gives advanced and cellulosic biofuels the chance to compete on a truly level playing field.

On a more general note, I have attached a list of suggestions to address issues with the existing statute that ABFA members believe need to be resolved legislatively. We believe these changes will enhance our collective opportunity to deliver the next generation of advanced biofuels. (See Appendix A.)

ABFA strongly supports this committee's efforts to reform the RFS. We believe that comprehensive reform will actualize the vision for advanced renewable fuels that this Committee and Congress as a whole overwhelmingly supported when it passed the RFS2 in 2007. These fuels will extend our hydrocarbon resources, allowing us to incorporate into our fuel supply renewable resources developed both sustainably and affordably on a standalone economic basis. Proper reform of the RFS will distribute biofuels to all regions of our great country. It will also utilize a far more diverse set of feedstocks and technologies while creating jobs across the entire U.S. It is to that end that we look forward to working with you on your efforts to strengthen the RFS and make the industry even more efficient, economically competitive, and sustainable.

Advanced Biofuels Successes Under the RFS

First, I'll turn to what is without a doubt the overwhelming success story in the advanced biofuels space under the RFS program: biodiesel and renewable diesel. The program originally called for 1 billion gallons of biomass-based diesel; in the last two years, over 2.7 billion gallons has been used annually in the U.S. This year, the market should again approach 3 billion gallons of biomass-based diesel. (See Appendix B for RINs and gallons generated in 2016 and 2017 according to EPA EMTS data.)

For those of you interested in climate change, advanced biofuels deliver the most significant GHG emissions reductions of all the fuels manufactured in the United States. By law, the environmental performance of these gallons deliver reductions of at least 50%, and many of them deliver reductions of 80%. These fuels count toward meeting the biomass-based diesel category, referred to in the program compliance world as the D4 diesel pool, though many of these processes also

produce at least 10% renewable gasoline components that qualify for the general advanced category, referred to as the D5 advanced biofuels pool.

This achievement has been accomplished since 2010 in spite of the uncertainty surrounding the biodiesel blenders tax credit. The on-again, off-again implementation of the credit limits the future investment in the market that is a key driver for growth. This year, the diesel market is unfortunately once again forced to operate without knowing whether the credit will be retroactively renewed for 2018. We strongly support a long-term extension and phase-down of the tax credit to provide the industry the certainty it needs to make investment decisions that will create jobs and increase production of the fuels of the future.

Suggestions for RFS Reform

I'll turn now to improvements that can be made to the RFS program. The biogas industry has helped deliver the majority of the existing volume in the cellulosic biofuel space, which reached over 250 million gallons last year. However, we still have a long way to go to achieve the targets originally envisioned for the cellulosic sector in the RFS2. As ABFA suggested in last year's stakeholder meetings, the changes needed to make the program function as intended for the advanced and cellulosic sectors fall into three categories. One, simple statutory adjustments to timeframes, definitions, and other items found in our attached list; two, addressing major, debilitating ambiguities in the statute; and three, adjusting EPA's regulatory framework using a common-sense approach. As much as possible, we urge Congress to take politics out of the equation by adjusting the RFS toward being a rules-based system.

A. Statutory adjustments

In this and future bills, the Committee should consider adjusting how the annual RVO is set. ABFA supports proposals that would shift the compliance period for the RFS, releasing the annual RVO on March 1 with the mandates for each pool set at previous year's levels according to data from EPA's EMTS system. Mid-year and end-of-year adjustments would then account for increases or decreases in production. This rules-based system would remove the uncertainty and speculation surrounding the RVO and therefore reduce volatility in the program and RIN market.

The second key statutory issue is the cellulosic waiver credit. EPA currently grants as many cellulosic waiver credits as gallons projected for the forthcoming year under the RVO process. This allows obligated parties to purchase waivers in lieu of purchasing cellulosic fuel actually produced. This undermines the potential of the very fuels the RFS2 sought to encourage. EPA should only grant waiver credits to cover any shortfall in actual production relative to the RVO mandates. The RVO process fix I previously outlined would eliminate this issue.

Third, to finance the production of the advanced liquid transportation fuels of the future, investors must have certainty in the value of the RIN well beyond 2022. The Committee must designate a minimum number of years for which these fuels will be able to generate a RIN under the program. While we appreciate this draft bill's attention to this issue by extending requirements for advanced and cellulosic biofuels through 2032, to best facilitate investment, we suggest a minimum 20-year timeframe for the life of the advanced biofuel program as that is the general term of debt for most capital loans.

B. Addressing statutory ambiguity

EPA's treatment of one-cell organisms is a prime example of the ambiguity in the statute and its negative impact on advanced biofuels development. Currently, we allow one-cell organism pathways for algae, but not bacteria. Another example: the statute includes "waste" as a permissible feedstock, but it is unclear what is meant by this term. Is tall oil a "waste," given that it is only 2% of the residue from a tree?

I know of a company that hoped to build a plant in Maine, but because of EPA's interpretation of the language in the law, the Agency could not definitively determine that tall oil could count under the definition for use in the capacity it was requested. Ultimately, the company sited this plant in Sweden to use tall oil and make renewable diesel. I also know of a one-cell organism technology which was forced to site its plant in China instead of the U.S. because the law specifically cites fuels produced from algae as acceptable and not fuels produced from bacteria under the definitions for RFS-compliant fuel. Again and again, because of this statutory ambiguity, EPA has been forced to make subjective judgments that have rendered the U.S. market less attractive for advanced renewable fuel producers.

C. Regulatory changes

The RFS's regulatory framework has created barriers to the advanced and cellulosic sector unintended by Congress.

A prime example of this issue is the RFS's treatment of biointermediates which are approved feedstocks that are only partially processed at one facility and then finished into a compliant renewable fuel at another. EPA has taken the stance that plants generating biointermediates and the final fuel must be co-located in order to generate a RFS-compliant fuel. Additionally, a refiner engaging in co-processing and upgrading to processing fuels from a renewable oil must currently use carbon-14 dating to prove its conversion rate for compliance with the RFS. This is unrealistic for most refineries, as carbon-14 dating is prohibitively expensive, especially when renewable oils usually comprise less than 10% of the slipstreams being co-processed at these facilities.

Such regulatory requirements have missed the forest for the trees, driving up the cost of compliance and making renewably-produced fuels uncompetitive compared to incumbent hydrocarbon fuels.

Another example of a devastating regulatory issue with the RFS program is the treatment of wood. EPA's regulations currently require producers to segregate wood so as to track whether the wood residues come from approved sources for RFS-compliant fuel. However, the wood products industry has long-established operational processes that make it nearly impossible to know where each and every stick of wood used in biofuel production comes from. This has blocked industry from moving forward with many new technologies that would transform wood into renewable fuels, including jet and diesel fuel. EPA's regulations need revision to allow for an aggregated, mass-balance approach to compliance in lieu of segregation, lowering the cost of production to competitive levels.

Furthermore, as it stands, landowners in many states may cut down a naturally regenerating tree to create pellets that are shipped to Germany, but they cannot use even the thinnings and cuttings from such wood to make an RFS-compliant fuel. This is not just a regulatory issue but a direct result of the legal interpretation of the statutory language. This is simply foolish.

Small Refinery Exemptions

In addition to these longstanding issues, the EPA under this administration has chosen to unilaterally lower the threshold that EPA utilizes to grant RFS compliance exemptions to small refineries. According to EPA's own May 14 presentation to OMB, this alteration and these exemptions will create over 1.2 billion additional carry-over RINs for use in the 2018 compliance year. EPA documentation also predicts 2.8 carry-over RINs for 2019 – which leads one to believe that the Agency may be intending to follow a similar approach next year for granting exemptions.

The significantly higher number of these small refinery exemptions stand to reduce the demand for renewable fuel by flooding the market with RINs that do not reflect current production and available physical supply of product, despite a growing annual RVO. This process must be halted, as it is undermining the very RVO process in and of itself.

EPA is misusing this provision, stretching the definition of "disproportionate economic hardship" in order to lower RIN prices for the benefit of a small number of merchant refiners that have refused to invest in RFS compliance over the last ten years. As RFS compliance costs were already passed along to consumers through the crack spread, EPA's actions allow a small number of companies to profit off of American consumers – not to mention endangering renewable fuel blending in 2018 and 2019 because of the new carry-over RINs. (See Appendices C, D, and E).

Congress must make explicit its intent to protect only those small, independent refineries experiencing verifiable, disproportionate, and significant economic hardship, and not to further augment the results of highly profitable refiners.

Conclusion

Again, thank you for the opportunity to testify today and for your work in putting together a thoughtful proposal to reform the RFS. Many of our suggestions today are obvious now as we have had an additional ten years of development in the advanced industry since the RFS2 was passed. When the program was drafted, Congress and the nation understood biodiesel and ethanol. But, newer technologies using new feedstocks have developed, and, in many instances, they utilize two-step processes. The original statute was simply not drafted to allow for this, and the oversight

that this Committee has done should point you in new directions compared to what we could understand and achieve in 2007. ABFA looks forward to working with Members of the Subcommittee to continue to build upon the successes of the RFS to further develop the advanced and cellulosic sectors.

Appendix A. RFS Reform Proposals

1. Amend cellulosic RVO fulfillment to require RINs generated in the current year to be purchased ratably, and allow Obligated Parties to purchase waiver credits *only in the event of RVO shortfall* after the close of the compliance year.

The current manner in which EPA issues cellulosic waiver credits is to issue waiver credits in an amount equal to the cellulosic RVO. This eliminates any need for Obligated Parties to buy actual cellulosic RINs generated by fuels production. Additionally, it lowers the RIN value for the pool we want to grow the most, as there are plenty of RINs for purchase. At a minimum, the volume of waiver credits issued should only be that which makes up for the shortfall between actual gallons produced and those mandated.

2. Permit renewable fuels to be used to fuel ocean-going vessels and obtain RINs under the RFS.

If fuel is sold for use in a cruise ship, the seller of the fuel must retire the RIN as this fuel is not considered a "Transportation Fuel" under the RFS. This would expand a target market for the use of environmentally sustainable fuels.

3. Remove the strict limitations on wood-related feedstocks to allow for regenerative species grown on private lands to be utilized.

Loblolly pine is abundant and harvested on private lands, but the tree is not usable to make a renewable fuel. This species alone would provide a tremendous feedstock base of wood for the industry to utilize in making drop-in cellulosic fuels. These and other privately owned/harvested trees should be allowed as renewable fuel feedstock, as the wood is currently used to produce pellets anyway—and a large portion of these pellets are exported out of the U.S. This could also be fixed via EPA's approval of a planted tree pathway.

This fix would enable a number of additional states such as Oregon, Maine and the Southeast to be able to build and manufacture advanced drop-in biofuels.

4. Clarify the definition of "waste."

The current definition of "wastes" is an abstraction concerning coproducts such as tall oil from trees, biogenic oils, and other compounds which can be used to produce fuels, but also to make other products such as chemicals, candles, etc. Producers who use these feedstocks to make non-fuel products argue that these materials are not "waste" under the RFS and should be reserved for the other uses—not fuels. This has eliminated some of the highest market-value materials and reduced the number of cheap feedstocks available to produce RFS-compliant fuel.

5. The Feedstock Energy equations should also be eliminated in favor of simple mass balancing.

EPA's latest regulatory proposal for co-processing would require a very expensive carbon-14 dating for refineries to prove that renewable oils were used. Since those oils are less than 10% of what is being processed, this is administrative overkill and not likely to be effective according to the National Renewable Energy Labs. We would once again urge simple mass balancing techniques in lieu of carbon dating, and recommend the elimination of the existing feedstock energy equations.

6. Eliminate pump labeling requirements for drop-in renewable diesel.

We currently produce almost 400 million gallons per year of renewable diesel. It is identical to ultra-low sulfur diesel fuel made from petroleum at a refinery. We should amend the outdated pump labeling requirements for this fuel and fuels like it when dispensed at retail outlets.

7. Address one pound waiver for biobutanol when comingled.

Isobutanol is an energy-dense alcohol that can be blended at B-16 due to its low RVP. It is also not water soluble, and is therefore preferred by boaters and small engine manufactures. Blending E10 and gasoline blended with butanol

does not cause the RVP of the resulting gasoline blend to increase, meaning that such commingling has no negative impact on VOC emissions and thus no negative environmental impact. The commingling prohibition was in fact implemented to prevent the blending of E10 with gasoline blended with MTBE (an oxygenate additive no longer used in gasoline in the United States) due at least in part to the increased RVP that resulted from blending two batches of gasoline with these additives. By definition, a fuel with lower RVP is less volatile. The use of lower RVP fuel blends containing butanol will therefore result in lower evaporative emissions at all stages of fuel use, from service station tank loading and vehicle refueling to vehicle in-use evaporative emissions.

The commingling prohibitions as they currently exist were workable because they were put in place to manage market conditions where both ethanol-blended and clear or MTBE-blended gasolines were generally in abundant supply. Gasoline retailers, who commonly receive their supply from multiple terminals, could count on having more than one source of supply for the gasoline blend they had in their tanks. The commercialization of iso-butanol, however, creates a different challenge. By necessity, the first iso-butanol production will be in limited supply available at a very small number of terminals. Without redundant supply points for iso-butanol, the existing commingling rule is a barrier to adoption of iso-butanol with its attendant benefits. The proposed revision to the commingling rule will serve to greatly reduce this barrier without compromise to environmental quality.

Appendix B. EPA Public Data - RINs and gallons for 2016 and 2017

2016

Fuel	Total RINs Generated	Gallons Generated
Cellulosic Biofuel (D3)	192,361,795	192,361,795
Biomass-Based Diesel (D4)	4,003,479,816	2,617,187,047
Advanced Biofuel (D5)	98,103,017	85,201,935
Renewable Fuel (D6)	15,175,717,036	15,003,278,197
Cellulosic Diesel (D7)	534,429	534,429

2017

Fuel	Total RINs Generated	Gallons Generated
Cellulosic Biofuel (D3)	250,624,373	250,624,373
Biomass-Based Diesel (D4)	3,848,850,322	2,505,302,697
Advanced Biofuel (D5)	143,646,572	128,800,020
Renewable Fuel (D6)	15,107,597,002	15,006,721,963
Cellulosic Diesel (D7)	1,743,894	1,743,705

Appendix C. "Denial of Petitions for Rulemaking to Change RFS Point of Obligation," Environmental Protection Agency, EPA-420-R-17-008, November, 2016, Page 22.

"Less obviously apparent, however, is *the impact of the RFS program on the market price for the petroleum blendstocks that merchant refiners sell.* In addition... all refiners and importers of gasoline and diesel fuel incur costs to comply with RFS obligations. This is true whether the refiners and importers acquire RINs by blending renewable fuels or purchasing separated RINs – meaning no fundamental inequity exists. Moreover, because all refiners and importers have RFS obligations in proportion to the fuels they produce or import, they all have similar costs of compliance related to the RFS program, and they all seek to recover those costs through the pricing of their product. Stated another way: merchant refiners can indeed expend significant funds to purchase RINs needed to demonstrate compliance with the RFS program, but the cost is offset by a corresponding increase in the price of the fuel they sell. That market price reflects the cost of RINs. The same dynamic applies to both merchant and integrated refiners."

Available at: http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P100TBGV.TXT

Appendix D. Advanced Biofuels Association v. U.S. Environmental Protection Agency, Petition for Review.

Available at https://www.epa.gov/sites/production/files/2018-05/documents/aba_18-1115_pfr_05012018.pdf.

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA

ADVANCED BIOFUELS ASSOCIATION Petitioner, v. U.S. ENVIRONMENTAL PROTECTION AGENCY and SCOTT PRUITT, Administrator, U.S. Environmental Protection Agency, Respondent.	Case No. 18-1115

PETITION FOR REVIEW

Pursuant to section 307(b)(1) of the Clean Air Act, 42 U.S.C. § 7607(b)(1) the Advanced Biofuels Association ("ABFA") hereby petitions the United States Court of Appeals for the District of Columbia Circuit for review of the Environmental Protection Agency's ("EPA") decision to modify the criteria or lower the threshold by which the Agency determines whether to grant small refineries an exemption from the Clean Air Act's Renewable Fuel Standards ("RFS") for reasons of "disproportionate economic hardship" pursuant to 42 U.S.C. § 7545(o)(9)(B)(i). This modified criteria or lowered threshold was applied to exempt an unknown—but reportedly historically high—number of refineries from their 2016 and 2017

obligations to participate in the RFS program by either blending their share of renewable fuel or purchasing renewable fuel credits on the market.

Upon information and belief, EPA has granted exemptions to an unprecedentedly large number of refineries. However, EPA has thus far refused to provide—even upon receiving requests from members of Congress—basic information about the refineries that receive exemptions or the Agency's rationale for granting individual exemptions due to alleged protections for confidential business information.[1]

EPA's change to the threshold for demonstrating "disproportionate economic hardship" and the Agency's retroactive grant of a historically unparalleled number of exemptions has destabilized the national renewable fuels market, economically harmed ABFA's members, and has undermined Congress's goals for the RFS Program.

A change of this magnitude in the number of exemptions granted is implausible and cannot be ascribed to year-to-year changes in the renewable fuels

[1] Letter from Charles E. Grassley, United States Senator, to Scott Pruitt, Environmental Protection Agency Administrator (Apr. 12, 2018), https://www.grassley.senate.gov/sites/default/files/Pruitt%20Small%20Refinery%20Letter%204.12.18.pdf (Explaining that recent reports indicate "the EPA has already issued 25 'disproportionate economic hardship waivers'" and requesting that EPA "[p]rovide a full list of the refiners that have received a refinery waiver in 2016, 2017 or 2018, including the name, location, refining capacity, date waiver was issued, and number of gallons waived.") This letter is attached as Appendix A.

market, but can only be attributable to a decision by EPA to modify the criteria or lower the threshold by which it evaluates and grants exemptions in a manner that is arbitrary and capricious, an abuse of discretion, and otherwise not in accordance with the law.

The Corporate Disclosure Statement required by FRAP 26.1 and D.C. Circuit Rule 26.1 is attached as Appendix B. The Certificate of Service and the list of parties served with this petition are attached as Appendix C.

Date: May 1, 2018

Respectfully submitted,

/s/ Rafe Petersen
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Counsel for the Advanced Biofuels Association

United States Senate
WASHINGTON, DC 20510

April 12, 2018

The Honorable Scott Pruitt
Administrator
Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Dear Administrator Pruitt:

We are writing to you regarding the actions the Environmental Protection Agency (EPA) has taken to undermine commitments President Trump made on the Renewable Fuel Standard (RFS) to our constituents. Recent reports indicate dozens of small refiner waivers have been secretly granted to large, multi-billion-dollar companies under the guise of the small refinery hardship exemption provision in section 211(o)(9) of the Clean Air Act. This is extremely concerning to us.

During your confirmation hearing for the post of Administrator of the EPA, you said, *"Any steps that the EPA Administrator takes need to be done in such a way as to further the objectives of Congress in that statute, not undermine the objectives of Congress in that statute."* You also wrote to a number of Senators in October 2017 and said, *"I reiterate my commitment to you and your constituents to act consistent with the text and spirit of the RFS. I take seriously my responsibility to do so in an open and transparent manner that advances the full potential of this program..."*

According to recent reports, the EPA has already issued 25 "disproportionate hardship" waivers to large, multi-billion-dollar refining companies reporting billions of dollars of profits since 2016. Such action would represent a clear violation of your commitments and clearly undermine the President's long-standing support of the RFS.

These waivers fall well outside the bounds of the letter or spirit of this provision in the law, which sought to provide flexibility for the smallest of U.S. refiners, and only in cases of genuine hardship. Worse, EPA's actions are already hurting biofuel producers and farmers across the United States at a time when farm income is at the lowest levels since 2006 and retaliatory trade measures from China threaten to deepen the crisis.

In 2015, 37 Senators wrote to the EPA requesting that the agency issue a strong Renewable Volume Obligation (RVO), citing the RFS's success in driving economic development, strengthening agriculture markets, and creating hundreds of thousands of clean energy jobs in rural communities. Early reports indicate that the small refinery waivers you have granted could effectively cut biofuel demand by 1.5 billion gallons, thus effectively lowering President Trump's commitment to seeing 15 billion gallons of ethanol blended to 13.5 billion. Additionally, once these select refiners are no longer responsible for complying with these 2016 requirements, they are able to sell excess Renewable Identification Numbers (RINs) back into the market, increasing supply and lowering the price.

This further reduces incentives for blending, slashing demand for biofuels and feedstocks, and hurting farmers and biofuels companies. These waivers could cripple the market for years to come, holding back homegrown biofuels while creating a windfall profits for large oil refiners -- the exact opposite of this administration's promise to voters.

Perhaps most concerning, these lucrative waivers have reportedly been issued behind closed doors, outside of the public process, while the EPA has simultaneously been working with refineries to pressure President Trump to sign off on a RIN cap that would wreak further havoc on the RFS.

We request that you take the following actions immediately:

- Cease issuing any refinery waivers under the RFS;
- Provide a full list of the refiners that have received a refinery waiver in 2016, 2017 or 2018, including the name, location, refining capacity, date waiver was issued, and number of gallons waived;
- Provide a detailed report to Congress within two weeks of receipt of this letter that describes your justification for providing each of these waivers. Specifically, please include whether the volumes were redistributed to other obligated parties. If the volumes were not redistributed, please explain why they were not and the reason EPA decided to undercut the RVOs against the President's commitment;
- Respond in writing describing your commitment and plan to consider future small refinery waivers only during the annual RVO rulemaking process and commitment to provide full notice and opportunity for comment on any future small refinery waiver requests.

We appreciate your timely response to these matters.

Sincerely,

Charles E. Grassley
United States Senator

Amy Klobuchar
United States Senator

Joni K. Ernst
United States Senator

Debbie Stabenow
United States Senator

Deb Fischer
United States Senator

Richard J. Durbin
United States Senator

John Thune
United States Senator

Tina Smith
United States Senator

Roy Blunt
United States Senator

Claire McCaskill
United States Senator

Tammy Duckworth
United States Senator

Heidi Heitkamp
United States Senator

Joe Donnelly
United States Senator

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA

ADVANCED BIOFUELS ASSOCIATION Petitioner, v. U.S. ENVIRONMENTAL PROTECTION AGENCY and SCOTT PRUITT, Administrator, U.S. Environmental Protection Agency, Respondent.	)	Case No. _____

RULE 26.1 CERTIFICATE OF CORPORATE DISCLOSURE OF ADVANCED BIOFUELS ASSOCIATION

Pursuant to Federal Rule of Appellate Procedure 26.1, the Advanced Biofuels Association (ABFA) certifies that it is an independent 501(c)(6) non-profit trade association registered in the District of Columbia since 2009. ABFA has no parent corporation, and no publicly held company has ten percent or greater ownership in ABFA.

ABFA represents more than 35 companies in the United States and around the world engaged in the production, marketing, and distribution of advanced renewable fuels regulated under the Clean Air Act's Renewable Fuel Standard. Currently, ABFA members produce over 4.4 billion gallons of renewable fuel each

year, including billions of gallons of biodiesel and renewable diesel as well as a variety of drop-in fuels such as isobutanol, dimethyl ether, cellulosic ethanol, and cellulosic heating oil. ABFA's mission is to secure a stable regulatory environment and level playing field for advanced renewable fuels on behalf of its members.

Date: May 1, 2018

Respectfully submitted,

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IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA

ADVANCED BIOFUELS ASSOCIATION Petitioners, v. U.S. ENVIRONMENTAL PROTECTION AGENCY and SCOTT PRUITT, Administrator, U.S. Environmental Protection Agency, Respondents.	)	Case No. _____

CERTIFICATE OF SERVICE

I hereby certify that the foregoing Petition for Review and Rule 26.1 Disclosure Statement were served by placing them in the U.S. mail, first class, postage prepaid, this 1st day of May, 2018, upon each of the following:

Attn: Scott Pruitt
Administrator
Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Mail Code: 1101A
Washington, D.C. 20460

Honorable Jeff Sessions
Attorney General
U.S. Department of Justice
950 Pennsylvania Ave., N.W.
Washington, D.C. 20530

Attn: Matthew Z. Leopold
General Counsel
Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Mail Code: 2310A
Washington, D.C. 20460

Date: May 1, 2018

Respectfully submitted,

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Counsel for the Advanced Biofuels Association

Appendix E. Biomass Research & Development Technical Advisory Committee Advisory to the Biomass R&D Board, November 16, 2018, "Identification of Regulatory Barriers to Advanced Biofuels."

Source: Biomass R&D Technical Advisory Committee
Advisory To: Biomass R&D Board
Report Date: 11/16/2018 (Q4 2018)
Issue: ***Identification of Regulatory Barriers to Advanced Biofuels***

BIOMASS R&D TAC Technical Advisory Committee

The Biomass Research and Development Act of 2000, as amended, established a federal Biomass Research and Development Board, and an outside Technical Advisory Committee (TAC), in furtherance of a national initiative to produce sustainable advanced biofuels and industrial products from non-food feedstocks. Today, annual production of ethanol from corn starch exceeds 16 billion gallons and bio-diesel from oilseeds and conventional sources has grown to more than 2.7 billion gallons. While advanced and cellulosic biofuels production is growing, it remains less than 500 million gallons annually, in stark contrast to legislative intent. Several factors have contributed to the slower-than-expected growth of advanced biofuels, including legislative and regulatory barriers.

Confirming the potential economic, social, and environmental gains from expanding production and use of advanced biofuels, the TAC has focused on some of the regulatory barriers that are preventing or slowing expected growth. The TAC has particularly focused on barriers that can potentially be overcome within existing legislation, authorizations, and regulations, fully recognizing that this is a subset of a broader scope (which would include new or alternative policies or regulations). Priority was also given to addressable barriers with potential to result in sizable or scalable growth in sustainable, lower-carbon advanced biofuels that can help increase energy security and create jobs.

1 Near-Term Opportunities to Address Regulatory Barriers

There are opportunities for meaningful growth and acceleration of advanced biofuels that fit within existing statutes, regulations, rules, definitions, and programs. Many of these opportunities are tied to implementation of the Renewable Fuel Standard (RFS) program, including (i) clarifying interpretations, (ii) publishing rules that have completed the regulatory review process, (iii) applying uniformity across rules, and (iv) timeliness in conducting reviews and taking actions. The Committee highlighted several specific issues and opportunities,[1] particularly issues constraining availability and use of woody biomass.

- Co-processing & Bio-intermediates – Local supplies of cost-advantaged biomass could be aggregated and upgraded to an energy-dense intermediate (e.g., biocrude) then transported to existing/future refineries for co-processing, enabling near term large-scale advanced biofuels production. Regulatory constraints disincentivize this approach because current RIN[2] qualification requires processing at a single location and strict segregation of the final advanced fuel product.
  - ⇒ ***EPA has already proposed a Renewables Enhancement and Growth Support (REGS) Rule, awaiting final publication for 2 years now. EPA could include the already-vetted rules related to co-processing of advanced biofuels using bio-intermediates produced at another site in the upcoming RFS "Reset" proposal.***
  - ⇒ ***Even in advance of finalizing rules on co-processing and bio-intermediates, EPA should consider individual applications for co-processing (part-80, facility registration), evaluating using the same criteria proposed in the REGS Rule.***

[1] Note that several of the opportunities highlighted have been previously identified and recommended by the TAC; for example, see the Q3-2017 TAC Quarterly Report on "Biomass Integration with Existing Fossil Fuel Infrastructure".

[2] RIN refers to a Renewable Identification Number, credits used for compliance and the "currency" of the RFS program.

- Co-mingling of Biomass – There are currently two issues impacting feedstock availability: co-mingling of qualified biomass feedstocks, and co-mingling of qualified and non-qualified feedstocks.
  - ⇒ ***Establish a more equitable method for ascribing RIN values to processes that co-mingle two or more qualifying feedstock sources. A similar approach is already applied for commodity crops.***
  - ⇒ ***Allow co-mingling of qualified and non-qualified biomass, using apportioning and control methodology (e.g. mass balance paired with traceability of biomass) to determine the eligible volume of advanced biofuel or bio-intermediate.***
- Determination on Wastes – There are co-products of certain industrial processes and/or waste streams to be utilized as a feedstock that could be used to produce advanced biofuels, but opportunities are currently limited due to difficulty determining eligibility of wastes under the RFS.
  - ⇒ ***Make a final determination on waste feedstocks to allow substances that are co-products of certain industrial processes to be utilized as feedstocks in the production of advanced biofuels.***
  - ⇒ ***Clarify rules to ensure that the biogenic portion of waste streams qualifies for RINs.***

2 Intermediate-Term Opportunities

There are opportunities to address regulatory barriers that fall under existing authority, but likely require regulatory action to implement, which is more complex or takes longer. The upcoming "reset" of the RFS targets (as required by statute and triggered in 2018) is an opportunity to address.

- Pathway Approvals – Several pathway applications submitted to EPA are awaiting review and approval, where reviews are averaging nearly 3 years. There are projects that are fully developed but cannot move forward until pathways are approved.
  - ⇒ ***Accelerate the pathway approval process under the RFS program. Work through the backlog of pending pathway applications to allow qualified investment-ready projects to proceed. An example is completion of the existing tree pathways proposed in the REGS Rule.***
  - ⇒ ***Consider alternative approaches to pathway approvals: Create certainty in the pathway timeline and determination; consider using qualified, independent third-party resources to expedite the process.***
- De-risking Feedstock Production – There are other barriers outside of the RFS program limiting the expansion of energy crops. One example is the lack of crop insurance or other risk management tools that allow producers to make enterprise management decisions on equal footing (biomass vs. commodity crops).
  - ⇒ ***Enable biomass crops to participate in risk management and conservation programs alongside conventional crops and management activities.***
- Biomass to Electricity – The EPA has issued an Advance Notice of Proposed Rulemaking (ANPR) that allows for the conversion of qualified renewable biomass into electricity that is used in transportation to generate a RIN under the RFS program, but the rulemaking process has not been completed.
  - ⇒ ***Encourage EPA to evaluate and move to complete rulemaking.***

3 Long-Range Opportunities

The Committee purposely focused less on opportunities that would require statutory action or change, viewed as long-range opportunities. For perspective, a few examples are highlighted.

- Revisit equal treatment of both sustainable plantation and naturally-regenerated managed forests for qualification as allowable feedstocks under RFS. Focus more on meeting performance standards than prescription standards. This has potential to make available large quantities of sustainable biomass feedstock that are existing, available and accessible today but ineligible to qualify under existing feedstock designations.
- Establish a value for the renewable (non-petroleum) carbon in a final product, regardless of the product type (e.g., fuel vs. material vs. chemical).

4 Research Needs

In its review of opportunities to address regulatory barriers limiting advanced biofuels growth, the Committee identified research priorities that may be useful in addressing regulatory barriers.

- Identify and quantify the unintended consequences of the rules, definitions and regulations as they have been implemented over the last decade, a sort of third-party independent report card on RFS to date. We need to understand the causes-effects-impacts of the past to make improvements going forward.

Mr. FLORES. Thank you, Mr. McAdams. I think we can all agree on having commonsense titles in our bills. It's a good start.

Mr. Feraci, you're recognized for 5 minutes for your opening comments.

STATEMENT OF MANNING FERACI

Mr. FERACI. Thank you, Mr. Chairman.

Chairman Shimkus, Ranking Member Tonko, members of the subcommittee, I appreciate having the opportunity to testify today on behalf of the Coalition for Renewable Natural Gas.

Renewable natural gas, or RNG, is derived from biogas captured from organic waste streams at landfills, wastewater treatment facilities, and from anaerobic digestion of agricultural waste.

The captured biogas is refined to meet fuel quality standards that make RNG indistinguishable from natural gas. The fuel is fully fungible in our Nation's existing infrastructure and can be readily used in natural gas vehicles.

More than 25 percent of the Nation's medium and heavy duty natural gas vehicles are fuelled by RNG. RNG qualifies as a cellulosic biofuel under the Renewable Fuels Standard. It reduces life cycle greenhouse gas emissions by 80 percent or more compared to the conventional diesel fuel.

In fact, the RNG industry provides more than 95 percent of the fuel used to meet the program's cellulosic biofuel requirements today.

The production and use of RNG has grown significantly since it was included in 2014 as a cellulosic biofuel. The industry has developed over 45 production facilities and there are over 50 projects currently under construction or consideration.

RNG production for transportation fuel grew from approximately 33 million ethanol equivalent gallons in 2014 to 240 million gallons in 2017. That's more than a 620 percent increase in the 3-year period.

This growth has put the industry on track to exceed EPA's production estimate from 2018. Each RNG project averages—on average creates 173 direct or indirect jobs and attracts between $10 million and $70 million in capital investment.

In sum, the RFS has resulted in a growing vibrant domestic RNG industry that is converting waste into growing volumes of domestically produced cellulosic biofuel that is good for the environment, and that sounds like a winning policy to us.

As I mentioned earlier, the RNG Coalition is pleased to provide initial feedback on the discussion draft. The RFS is a complicated multifaceted program and statutory changes should be carefully vetted, given the impact they can have on stakeholders who have made significant capital investments.

The RNG Coalition recognizes the subcommittee's diligence in looking at this issue. The RNG industry supports the RFS program as a way to increase domestic production and use of advanced biofuels and, in turn, address the Nation's energy and environmental policy objectives.

This methodology used to set volume obligations under the RFS program should be consistent with this approach. Volume targets, going forward, should be realistic and attainable. They should also

be structured in a way to encourage steady growth of advanced biofuel production.

Under current law, the RFS program does not lapse. Beyond 2022, the EPA administrator sets the program's volumes based on six statutory factors. The discussion draft would sunset the RFS program for advanced biofuels after 2032.

RNG projects require significant capital investment and deployment in new infrastructure. They often involve a 20-year offtake agreement with feedstock providers.

A long-term RFS program provides a policy framework that attracts that capital needed to develop new RNG projects. Conversely, a premature sunset of the RFS program's advanced biofuels requirements could chill investment in new RNG projects, which could undermine the overall policy objectives of the RFS program.

The discussion draft would also modify how the volume targets for advanced biofuels are set. It would use the previous year's production levels—production data to set annual use requirements for advanced biofuels.

While the RNG Coalition recognizes the desire to provide certainty in the volume setting process, this approach could have the unintended consequence of causing advanced biofuel production to stagnate or potentially contract.

The RNG Coalition wants the RFS program structured in a way that promotes steady sustainable growth in the advanced biofuels marketplace.

Mr. Chairman, Chairman Shimkus, Ranking Member Tonko, again, I appreciate the opportunity to testify. The RNG Coalition recognizes the hard work and effort that this subcommittee had made to tackle what is admittedly a very, very difficult issue.

There are significant benefits associated with the expanded domestic production and use of RNG, and we remain willing to work constructively with you going forward to achieve the RFS program's worthwhile policy goals, and I would be happy to answer any questions you may have.

[The prepared statement of Mr. Feraci follows:]

Testimony of Manning Feraci

Director of Federal Affairs

The Coalition for Renewable Natural Gas

Before the U.S. House Committee on Energy and Commerce

Subcommittee on Environment

Legislative Hearing on Discussion Draft - The 21st Century Transportation Fuels Act

December 5, 2018

Summary of Testimony:

- Renewable natural gas (RNG) is biogas-derived biofuel. The RNG industry takes untreated biogas captured from landfills, wastewater facilities and anaerobic digesters and refines it to meet the fuel quality standards of geologic natural gas. It is fully fungible in existing pipeline infrastructure and can be used to fuel natural gas vehicles.

- RNG qualifies as cellulosic biofuel under the Renewable Fuel Standard (RFS). It represents over 95% of the fuel used to meet the RFS program's cellulosic biofuel requirement, and reduces lifecycle greenhouse gas (GHG) emissions by 80% or more compared to conventional diesel fuel.

- RNG production for transportation fuel grew from approximately 33 million ethanol-equivalent gallons in 2014 to 240 million gallons in 2017. That is more than a 620% increase in three years. For 2018, EPA estimated that RNG production would increase by approximately 21% over 2017's levels. EPA data shows that the industry has grown 29% over the last 12 months. EPA has acknowledged that the RNG industry is currently on track to exceed EPA's estimate of 274 million gallons of production for 2018.

- The RNG Coalition supports the RFS program and the notion that the increased production and use of advanced biofuels is consistent with the nation's energy security, environmental and economic policy objectives.

- Current law provides for a permanent RFS program. The *Discussion Draft – The 21st Century Transportation Fuels Act* (Discussion Draft) would sunset the advanced biofuel component of the

RFS program at the end of 2032. The current program provides more policy stability for RNG stakeholders than a program that sunsets in 2032.

- The Discussion Draft would use production data derived from the previous year's EPA Moderated Transaction System to set annual use requirements for advanced biofuels. While the RNG Coalition recognizes the desire to provide certainty in the volume setting process, this approach could have the unintended consequence of causing advanced biofuel production to stagnate or potentially contract.

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Chairman Shimkus, Ranking Member Tonko and members of the subcommittee, I am Manning Feraci. I appreciate having the opportunity to testify before you today in my capacity as the Director of Federal Affairs for the Coalition for Renewable Natural Gas (RNG Coalition).

Renewable natural gas (RNG) is derived from biogas that has been captured from organic waste streams at landfills, wastewater treatment facilities and anaerobic digestion of manure and agricultural waste. The captured biogas is subsequently refined and upgraded to fuel quality standards that make it indistinguishable from geologic natural gas. RNG is fully fungible in our nation's existing energy infrastructure and can be used to fuel natural gas vehicles. RNG currently fuels more than 25% of the nation's medium and heavy duty natural gas vehicles.

RNG qualifies as cellulosic biofuel under the Renewable Fuel Standard (RFS) and generates D3 RINs under the program. RNG represents more than 95% of the fuel used to meet the RFS program's cellulosic biofuel requirements, and is an environmentally-friendly fuel that reduces lifecycle greenhouse gas (GHG) emissions by 80% or more compared to conventional petroleum diesel.

About the Coalition for Renewable Natural Gas:

The RNG Coalition is a not-for-profit association that provides public policy advocacy and education for the RNG industry in North America. The RNG Coalition has over 160 members who represent the full value chain of cellulosic waste feedstock conversion to transportation fuel as regulated under the RFS, including producers of 90% of all the RNG in North America. The association is dedicated to the advancement and increased utilization of RNG as a sustainable domestic fuel resource.

The U.S. RNG Industry is Providing Increasing Volumes of Fuel to Meet the RFS Program's Cellulosic Biofuel Requirements:

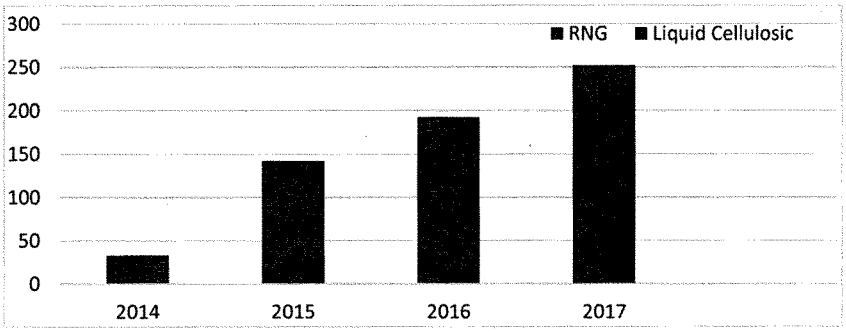
The Energy Independence and Security Act of 2007 (EISA)(P.L. 110-140) requires set annual volumes of renewable fuel, which is to increasingly include advanced biofuels, under the RFS program. The expansion of the RFS program under EISA was intended to, among other things, diversify the transportation fuel market beyond gasoline.

EISA sent the signal to the marketplace that the production of increasing volumes of advanced biofuels, including cellulosic biofuels, was a priority. RNG now represents in excess of 95% of the fuel used to meet the RFS program's cellulosic biofuel requirements.

Upon EPA's inclusion of RNG as a cellulosic biofuel under the RFS program, RNG production for transportation fuel grew from approximately 33 million ethanol-equivalent gallons in 2014 to 240 million gallons in 2017. That is more than a 620% increase in three years. For 2018, EPA previously estimated that RNG production would increase by approximately 21% over 2017's levels. EPA data shows that the industry has grown approximately 30% over the last 12 months. EPA's recently finalized standards for 2019 found 29% growth through September, acknowledging that the RNG industry is currently on track to exceed EPA's estimate of 274 million gallons of production for 2018.

RNG Production Under the RFS (D3)

EMTS Data (Million Ethanol Equivalent Gallons) (data as of May 10, 2018)



Cellulosic biofuels industry entrepreneurs, business owners, financiers, and marketers have invested over a billion dollars in response to Congress enacting the RFS program. The RNG industry has worked diligently on gathering data and industry information to assist EPA in setting the cellulosic biofuel volumes under the program. The RNG industry has developed over 45 production facilities capable of producing high-btu gas that can be used for transportation applications since 2011, with over 50 projects under construction or consideration. On average, each RNG project creates 173 direct and indirect jobs and attracts between $10 million and $70 million in capital investment.

As a result of the RFS, we have a growing, vibrant domestic industry that is converting waste into a domestically produced cellulosic biofuel that can be readily incorporated into our existing infrastructure and be utilized by natural gas vehicles. Further, this is being done in a way that reduces harmful emissions. This is a win-win scenario.

Observations on the Discussion Draft – The 21st Century Transportation Fuels Act:

The RNG Coalition appreciates the opportunity to provide initial feedback on the *Discussion Draft - The 21st Century Transportation Fuels Act* (Discussion Draft). The RFS is a complicated, multi-faceted program, and statutory changes should be carefully considered and vetted given the impact they can have on stakeholders who have made significant investments in fuel projects and infrastructure. In this regard, the RNG Coalition recognizes this subcommittee's diligence in reviewing the RFS program.

As I have mentioned earlier in my testimony, RNG is indistinguishable from geologic natural gas and is used to fuel natural gas vehicles. As such, the industry's comments will be limited to Title II of the Discussion Draft.

Current Law:

EISA provides statutory volume requirements for advanced biofuels, including cellulosic biofuel, between 2009 and 2022. The EPA Administrator (Administrator) is given various waiver authorities to modify these statutory volume requirements in certain circumstances.

Under current law, there is no sunset of the RFS program. Beyond 2022, EISA provides that the Administrator, in coordination with the Secretary of Energy and the Secretary of Agriculture, sets the RFS program's biofuels targets based on a review of the program's implementation through 2022 and an analysis of the following factors:

- The impact of the production and use of renewable fuels on the environment, including on air quality, climate change, conversion of wetlands, ecosystems, wildlife habitat, water quality, and water supply;

- The impact of renewable fuels on the energy security of the United States;

- The expected annual rate of future commercial production of renewable fuels, including advanced biofuels in each category (cellulosic biofuel and biomass-based diesel);

- The impact of renewable fuels on the infrastructure of the United States, including deliverability of materials, goods, and products other than renewable fuel, and the sufficiency of infrastructure to deliver and use renewable fuel;

- The impact of the use of renewable fuels on the cost to consumers of transportation fuel and on the cost to transport goods; and

- The impact of the use of renewable fuels on other factors, including job creation, the price and supply of agricultural commodities, rural economic development, and food prices.

Discussion Draft – The 21st Century Transportation Fuels Act:

The Discussion Draft would make several changes to current law as it applies to advanced biofuels and cellulosic biofuels. Most notably, the Discussion Draft would sunset the RFS program's requirement that advanced biofuels and cellulosic biofuels be introduced into commerce.

The Discussion Draft would also modify how the Administrator sets advanced biofuel and cellulosic biofuel volumes between 2022 and 2032 before the program sunsets. Current law requires the Administrator to consider six factors when setting volume requirements. The Discussion Draft would replace this regime with a program that requires the Administrator to set volumes based on the previous year's production levels.

Specifically, the Administrator would be required to set the volume requirement for advanced biofuel and cellulosic biofuel for the calendar year by no later than March 1st. The volume requirement would be set at the previous year's production level based on information submitted to the EPA's Moderated Transaction System that is used to track RIN generation and transactions. The Discussion Draft also provides that by no later than September 1 of the year, the Administrator shall adjust the volume requirement to reflect any increase in production.

RNG Industry Perspective:

The RNG Coalition supports the RFS program. As a general principle, the expanded domestic production and use of advanced biofuels is consistent with the nation's energy, environmental and economic interests. Since RNG was recognized as a qualifying cellulosic biofuel, there has been strong and consistent growth in RNG production and use. The RFS program has played an integral role in this growth, and as a result, our nation is capturing a potent greenhouse gas from waste and turning it into a fuel that is fully fungible with our existing infrastructure and that can be readily used to fuel natural gas vehicles. In the process, we are transforming waste into another domestic energy resource. These are worthwhile policy outcomes.

Program Sunset:

Current law provides for a permanent RFS program. The Discussion Draft would sunset the program for advanced biofuels, including cellulosic biofuels, at the end of 2032.

Program certainty is vitally important to the RNG industry. RNG projects require significant capital investment and the deployment of new infrastructure. They often involve 20-year offtake agreements with feedstock providers. A long-term RFS program is a vital component of a policy framework that attracts the investment and deployment of capital needed to increase the production and use of clean advanced biofuels like RNG. Conversely, a premature sunset of the RFS program's advanced biofuels requirements would in all likelihood chill investment in new RNG projects, which runs counter to the worthwhile energy, environmental and economic policy goals of the RFS program.

Modification to Setting Annual RFS Renewable Volume Obligations:

The Discussion Draft would use production data derived from the previous year's EPA Moderated Transaction System to set the annual renewable volume obligation (RVO) for the upcoming year. The RVO would be set by March 1 of the compliance year instead of by November 30 of the year preceding the compliance year[1] as is done currently. The Discussion Draft would also instruct the Administrator to conduct a mid-year adjustment to capture increased production of advanced biofuels in the compliance year. The RNG Coalition recognizes that this proposed change seeks to provide additional certainty to the process that is utilized to set the volume obligations under the RFS program.

[1] The RVO for biomass-based diesel is currently set 14-months prior to the compliance year.

Certainty is a goal that is shared by RNG stakeholders. We are, however, concerned that there could be unintended consequences of this approach. Setting the advanced volume targets for advanced biofuels to the previous year's production levels could have the effect of causing the production and use of advanced biofuels to stagnate on a year to year basis, even with a mid-year adjustment to the volume obligation.

The current RFS program sends a prospective market signal that the use of increasing volumes of advanced biofuels is a priority. Setting advanced biofuels based on the previous year's production levels would alter the RFS program's incentive structure and could make it more difficult to finance new project development. It could also create an unhealthy market dynamic where cellulosic biofuel producers would have to carry costs and ultimately accept uneconomic discounted prices for their product. This could lead to a stagnant or reduced advanced biofuel requirement. In addition, a looming sunset of the RFS program's advanced biofuels requirements as provided for in the Discussion Draft could have a chilling effect on advanced biofuel producers, in particular the RNG industry that accounts for over 95% cellulosic biofuels produced and consumed and used in the U.S.

The RNG Coalition supports the basic premise of the RFS program as a policy mechanism designed to increase the domestic production and use of advanced biofuels to meet the nation's energy security and environmental policy objectives. The methodology used to set the volume obligations under the RFS program should be consistent with these goals. The program's volume obligations going forward must be realistic and attainable. They should also be structured in a manner that encourages the steady growth of advanced biofuel production.

Conclusion:

Chairman Shimkus, Ranking Member Tonko and members of the subcommittee, I again thank you for the opportunity to testify today and provide the RNG industry's initial impressions of the Discussion Draft. There are significant energy, economic and environmental benefits associated with the expanded domestic production and use of RNG. The RNG Coalition recognizes the hard work and effort this subcommittee has made to tackle what is admittedly a very tough issue. We remain willing to work constructively with you going forward to achieve the RFS program's worthwhile policy objectives.

Mr. FLORES. Thank you.

Mr. Fialkov, you're recognized for 5 minutes for your opening comments.

STATEMENT OF DAVID FIALKOV

Mr. FIALKOV. Good morning, Mr. Chairman.

Chairman Shimkus, Ranking Member Tonko, thank you very much for inviting me to testify today. It's really a privilege to be here with you.

My name is David Fialkov. I am the VP of government relations at NATSO, which is a national trade association representing really off-highway fuel retailers from large multibillion-dollar travel center and truckstop chains to smaller independent single-store mom and pop type operators.

Most of our members sell gasoline. Many of them blend ethanol. My testimony this morning, however, will focus primarily on diesel markets and opportunities for Congress to incentivize diesel retailers to incorporate increasing amounts of advanced biofuels such as biodiesel into the Nation's diesel fuel supply.

The RFS, which this bill would reform, has largely been successful in doing this. Over the last decade, for example, biodiesel and grown tremendously and the reason for that is that the RFS creates a mechanism whereby diesel retailers can offer fuel to truck drivers for less money the more biodiesel that they incorporate into the their fuel supply and that's really a fundamental component to understand throughout all of this.

Retailers are not obligated to blend biofuels under the RFS. They choose to do it, and they only choose to do it if doing so allows them to sell fuel for less money.

So in this respect, retailers really function as surrogate for consumers in assessing advanced biofuels' value proposition and my views on the legislation today, which I will share, are simply designed to help you enhance advanced biofuels value proposition. In many ways the bill moves the RFS in the right direction in this respect. In other areas, it could be improved.

Taking a step back, the RFS is really an extraordinary example of Congress and the executive branch sharing authority to implement the program.

Mandating such a substantial shift in the composition of motor fuel in the United States is not an insignificant assertion of legislative authority and, obviously, to avoid unintended consequences associated with future market developments that Congress cannot be expected to predict or know, EPA has to have some flexibility to make adjustments along the way.

In my view at this time, however, EPA has too much discretion and it has led to volatility and uncertainty that undermines the program's objectives.

In reforming the RFS, the main lesson that you should have learned over the last decade is that Congress needs to reassert itself and limit the degree to which the ideological and political preferences of the executive branch can alter the program's trajectory.

Overall, I think that the bill threads this needle quite nicely. A rules-based RVO process, extending the advanced biofuels cat-

egories an extra 10 years while also allowing for midyear adjustments will undoubtedly incentivize more fuel retailers to buy and blend more advanced biofuels while baking in enough flexibility with the midyear adjustments to avoid the unintended consequences.

That being said, it was very disappointing to see that the bill was silent on the issue of small refinery exemptions. Over the past year, the EPA has been handing out small refinery exemptions like Halloween candy and they have been doing it oftentimes to some of the most successful profitable refining companies in the country.

And the fact that those agencies are doing that in this way is undermining the demand for advanced biofuels. That agency officials can say with a straight face that they're doing it consistent with the law should operate as a bright shiny red flag to you that it's time to reexamine that provision either by eliminating it entirely or by altering it so that waivers are issued far less frequently and they're issued in a way that does not so dramatically undercut demand for advanced biofuels.

I've heard Chairman Shimkus say before that in giving advice to people who testify that you're not going to hurt anyone's feelings if you don't use your full allotted 5 minutes.

So in that vein, I hope to hurt none of your feelings and I am happy to answer any questions that you have.

Thank you again for inviting me.

[The prepared statement of Mr. Fialkov follows:]

Testimony of

David Fialkov

Vice President, Government Relations / Legislative and Regulatory Counsel

National Association of Truckstop Operators (NATSO)

Before the

U.S. House Committee on Energy and Commerce

Subcommittee on Environment

December 11, 2018

Hearing on

"Discussion Draft: The 21st Century Transportation Fuels Act"

I. SUMMARY OF TESTIMONY

- The National Association of Truckstop Operators ("NATSO") is the premier national trade association representing off-highway fuel retailers, from multi-billion dollar travel center and convenience store chains to small, single-store operators. Although virtually all of NATSO's members sell gasoline – and many blend ethanol – NATSO's testimony will focus primarily on the *diesel* market and the opportunities for policymakers to incentivize diesel retailers to incorporate increasing amounts of *advanced* biofuels into the nation's diesel fuel supply.

- The Renewable Fuel Standard ("RFS" or the "Program") successfully created market incentives that have led many of NATSO's most successful members to incorporate biodiesel into their diesel fuel supply. They do this as a means of lowering prices for consumers and competing for market share. At the same time, the RFS has been undermined in a number of ways – some embedded in the Program's underlying structure and others due to decisions made by the executive branch as it implements the Program. The 21st Century Transportation Fuels Act (the "Bill" or "Legislation") would resolve many of these issues, though in other areas it could be improved to provide further market certainty and protection against counterproductive executive branch implementation decisions.

    - NATSO's approach to analyzing and responding to the Bill is simple: We support the provisions that will facilitate market opportunities for our members to lower fuel prices by buying advanced biofuels; our suggestions for improvement are designed to move the Legislation in a direction that further *enhances* those opportunities and/or eliminates unnecessary obstacles that can impede them. NATSO has not taken a formal position on the legislation as a whole.

- The Legislation appropriately maintains the RFS's framework whereby fuel marketers act as surrogates for consumers in assessing advanced biofuels' value proposition.

- The Legislation improves upon the RFS's current balance between growth-oriented certainty while maintaining flexibility to respond to unforeseen circumstances. Although the RFS was a strong assertion of legislative power, it is clear today that Congress gave too much discretion to executive branch officials' ideological and/or policy preferences. The mere existence of this discretion generates enough uncertainty that chills investment in renewable fuel infrastructure and undermines returns on investments that have been made.

    - The Legislation's rules-based RVO process would make the Program more predictable and less susceptible to executive branch interference. However, because the Legislation does not address the Program's Small Refinery Exemption Regime, it still leaves the RFS susceptible to being undermined by the executive branch.

    - In providing a longer "off-ramp" for advanced biofuel than "conventional" corn-based ethanol, the Legislation appropriately recognizes that advanced biofuels still cost more than the fuels they are designed to displace. At the

same time, by cutting off the advanced biofuels mandate and ending the RFS after 2032, the Bill sends the wrong market signal and could undermine the commercialization of advanced biofuels.

- The Bill includes a number of misfueling mitigation provisions designed to facilitate a smooth a transition to a high octane fuel performance standard. Although NATSO does not have a formal position on the wisdom of such a transition, these misfueling mitigation provisions can be improved in a number of ways to better accommodate the Legislation's objective.

II. INTRODUCTION

Chairman Shimkus, Ranking Member Tonko, and members of the Subcommittee, thank you for the opportunity to testify on the draft legislation titled the "21st Century Transportation Fuels Act." The legislation is an important step forward as Congress examines the future of transportation fuels in the United States and the regulatory framework governing them.

My name is David Fialkov; I am the Vice President of Government Affairs and the Legislative and Regulatory Counsel at the National Association of Truckstop Operators ("NATSO" or the "Association"). NATSO is the premier national trade association representing off-highway fuel retailers, travel centers and truckstops. NATSO represents both large, multi-billion dollar travel center and convenience store chains, as well as small, single-store operators. Given the breadth of its membership, NATSO represents a substantial majority of retail sales of diesel fuel in the United States.

Although virtually all of NATSO's members sell gasoline – and many blend ethanol – my testimony today will focus primarily on the diesel market and the opportunities for policymakers to incentivize diesel retailers to incorporate increasing amounts of *advanced* biofuels into the nation's diesel fuel supply. Federal policies such as the Renewable Fuel Standard ("RFS" or the "Program"), when crafted and implemented properly, can reduce vehicles' greenhouse gas ("GHG") footprints while lowering fuel prices for over-the-road truck drivers. This, in turn, lowers the prices for all goods that are moved by truck, benefitting the entire U.S. economy and enhancing our energy independence.

The RFS created market incentives that have led many of NATSO's most successful members to incorporate biodiesel into their diesel fuel supply. They do this as a means of lowering prices for consumers and competing for market share. In this

respect, the RFS has been an extraordinary success: biomass-based diesel production is more than three times what was originally anticipated, and can continue to be the largest source of high GHG-reduction fuels in the coming years.

Throughout its history, however, the RFS has been undermined in a number of ways – some embedded in the Program's underlying structure (*e.g.*, a process for setting annual Renewable Volume Obligations ("RVOs") that can be subjective and difficult to predict), and others due to decisions made by the executive branch as it implements the Program. The 21st Century Transportation Fuels Act (the "Legislation" or the "Bill") would resolve many of these issues; in other areas it could be improved to provide further market certainty and protection against counterproductive executive branch implementation decisions.

My testimony today will address how the Legislation would further incentivize the market to displace diesel fuel with renewable substitutes, as well as how the Bill could be improved to more successfully achieve this objective. NATSO has not taken a formal position on the legislation as a whole.

III. BACKGROUND ON THE TRAVEL CENTER INDUSTRY

The travel center and truckstop business is a diverse and evolving industry. Every travel center location includes multiple profit centers, from motor fuel sales and auto-repair and supply shops, to hotels, sit-down restaurants, quick-service restaurants, food courts, and convenience stores. Although the industry was once tailored solely to truck drivers, it now caters to the entire traveling public, as well as the local population that lives in close proximity to a travel center location.

NATSO members' sole objective is to sell legal products, in a lawful way, to customers who want to buy them. As new fuels enter the market, retailers want to be

able to sell those fuels lawfully and with minimal volatility and risk. We are agnostic as to which fuel we sell to satisfy consumer demand, but we do have a strong bias in that we believe it is best for the American consumer—and America's industrial position in the world marketplace—to have reasonably low- and stable-priced energy.

A. PRICE FLOW AT RETAIL

The retail fuels market is the most transparent, competitive commodities market in the United States. As every American knows, customers can see fuel retailers' price signs from blocks away, or compare prices on apps on their cell phones. These signs represent more than just pricing information – they are value propositions to potential customers, not only with respect to fuel but also food and other convenience items that we sell in our stores and restaurants.

While the gasoline market is extraordinarily competitive – consumers will often change where they buy gas to save just a few cents per gallon – the retail diesel market is even more competitive and transparent as many travel centers' customers – truck drivers and trucking fleets – are more savvy and price-conscious than typical American motorists. (Fuel generally amounts to 30-40% of a motor carrier's overall costs.) Truck drivers are often aware of retail fuel prices when they are 100 miles away from potential refueling sites, and fleet managers use this information to direct drivers to specific retail locations in order to purchase the lowest-priced fuel available. This imposes strong downward pressure on retail diesel prices.

The competitive nature of the retail diesel market compels retailers to pass through cost savings to consumers in order to maintain and increase their market share. It is in retailers' interests to increase the amount of fuel that they sell to consumers. This is

not only because those sales directly drive profit opportunity, but also because such sales drive in-store traffic, which is a source of profit for the retailer.

Given the structure of the retail fuels market, therefore, all of NATSO's members are "price takers" at retail. This means we must take the price of fuel that the market sets and compete to gain market share as the transparency of the market exerts a constant downward pressure on retail fuel prices. It is important to remember, however, that there is a long chain of supply before fuel is sold to consumers at retail – and any costs that are incurred along the fuel production and supply chain will be passed down to retailers and ultimately absorbed by consumers.

To illustrate, under the RFS, when a retailer blends biodiesel into diesel fuel, the retailer is able to separate and sell compliance credits known as Renewable Identification Numbers ("RINs"); the RIN value is then passed along to consumers in the form of more competitively priced (less expensive) diesel fuel to entice the customer to stop for fuel and come into our travel centers.

In short, travel center operators have an incentive to blend biodiesel into their diesel fuel supply under the RFS because blending enables retailers to separate and sell RINs, which lowers the cost of the goods they sell every day.

B. RETAILERS DO NOT *CREATE* DEMAND, THEY *RESPOND TO* DEMAND

Retailers cannot force consumers to buy a particular product. Offering a product for sale does not guarantee that consumers will purchase it. Rather, retailers sell what consumers demand. The number one trait of any successful retailer is an ability to identify what his or her customers want to buy, and then sell that product at a cost that enables the retailer to earn a profit.

Thus, to the extent the Subcommittee's objective is to incentivize increased penetration of advanced biofuels into America's diesel fuel supply, it must keep in mind this fundamental market reality: price-conscious motorists and truck drivers only buy advanced biofuels if those fuels are priced competitively with traditional diesel fuel. Diesel retailers, therefore, will only continue to *sell* advanced biofuels if doing so enables them to *lower* the price point at which they offer diesel fuel to motorists.

NATSO's approach to analyzing and responding to the Legislation is simple: We support the provisions that will facilitate market conditions and opportunities for our members to lower fuel prices by buying advanced biofuels such as biodiesel; at the same time, our suggestions for improvement are designed to move the Legislation in a direction that further *enhances* those opportunities and/or eliminates unnecessary obstacles that can impede them.

IV. COMMENTS ON THE 21ST CENTURY TRANSPORTATION FUELS ACT

A. THE BILL APPROPRIATELY MAINTAINS THE RFS'S STRUCTURE AND FRAMEWORK

The RFS is well designed to achieve its objectives of displacing petroleum-based fuels with renewable substitutes. The legislation has been successful because Congress, in designing the RFS, recognized that the only way to get truck drivers to buy more advanced biofuels was to make such fuels less expensive at retail than diesel. However, while the RFS creates for fuel retailers an *incentive* to blend as much advanced biofuel as we can, this incentive only exists as long as our customers view the end product as an attractive value proposition. Of the various mandates contained in the RFS, Congress did **not** include a mandate for consumers to purchase anything.

The Legislation would appropriately maintain this framework, whereby fuel marketers act as surrogates for consumers in assessing advanced biofuels' value proposition.

B. THE BILL IMPROVES UPON THE RFS'S CURRENT BALANCE BETWEEN GROWTH-ORIENTED CERTAINTY WHILE MAINTAINING FLEXIBILITY TO RESPOND TO UNFORESEEN CIRCUMSTANCES

The RFS is an extraordinary example of the policymaking relationship between the legislative and executive branches. When Congress enacted the RFS more than a decade ago, it was a strong assertion of legislative power, fundamentally altering motor fuels markets throughout the country by defining various categories of renewable fuel in accordance with GHG-reducing capabilities and specifying precise renewable fuel consumption targets over many years.

At the same time, however, Congress left to the Environmental Protection Agency ("EPA or the "Agency") a large amount of implementation responsibility and discretion. Much of this was due to the justifiable concern that rigid volume obligations could lead to negative economic consequences under certain circumstances (hence, for example, EPA's authority to waive volume obligations to avoid severe economic harm or in instances of inadequate domestic supply of renewable fuel).

While some flexibility is necessary, it is clear today that Congress gave too much discretion to executive branch officials' ideological and/or policy preferences. Throughout this decade, such discretion has generated delays in RVO announcements, less-than-optimal growth in annual RVOs, and unjustifiable bailouts of companies that chose not respond to the RFS's incentives. The mere *existence* of this flexibility generates enough uncertainty that chills investment in renewable fuel infrastructure and undermines returns on investments that are made.

In reforming the RFS, Congress should use the wisdom gained from experience over the last ten years to refine this balance of power between the branches of government—control of the RFS should move away from the executive branch and back toward Congress. In essence, Congress should remove much (though not all) of the EPA's discretion to adjust annual RVOs and instead provide a rules-based RVO process with baked in flexibilities to accommodate unforeseeable changes in circumstances.

In some ways, the Legislation succeeds in doing this, and in other ways it could be improved.

1) The Legislation's rules-based RVO process would make the Program more predictable and less susceptible to executive branch interference.

The Legislation would base annual RVOs on actual gallons produced[1] in previous compliance years, with mid-year and end of year adjustments to account for increases or decreases in production. This system would eliminate much of the uncertainty and speculation surrounding the RVOs, thereby reducing volatility in RIN markets. This provision would also incentivize biofuel producers to produce as much advanced biofuel as the market could absorb (in order to maximize the next year's RVO). Furthermore, increasing annual mandates would encourage fuel marketers and blenders to invest in the infrastructure necessary to incorporate such biofuels into their fuel supply (since buying and blending such fuels will allow them to lower their overall cost of goods sold).

[1] "Gallons produced" is somewhat of a misnomer, since the Legislation is in fact referring to gallons produced and *consumed in the United States*. By basing the production number on EPA's Moderated Transaction System ("EMTS"), the Bill is capturing gallons of advanced biofuel produced overseas and imported into the United States and consumed here, and is not capturing gallons produced in the United States and exported and consumed overseas. This is the correct approach. The RFS should be encouraging U.S. consumption of GHG-reducing fuels, and should be designed to lower fuel prices in the U.S. rather than outside our borders.

2) The Legislation does not address the Program's Small Refinery Exemption regime, leaving the RFS susceptible to being undermined by the executive branch.

The Bill's rules-based RVO system will only achieve the objectives of enhanced certainty and less volatility *if* it addresses the Program's current flawed small refinery exemption regime. The fact that the Legislation is silent on this topic is a real flaw.

In recent years, the EPA has granted small refinery "hardship" exemptions to an unprecedentedly large number of small refineries. This has dramatically lowered RIN prices and in turn lowered demand for advanced biofuels. It has also diminished the value of investments that NATSO members have made, in response to government incentives, to bring such fuels to market.

EPA has granted these waivers without providing basic information to market stakeholders. Market participants are not told when waivers are given, the volume quantity that is waived, or the refineries that have received the waivers. The waivers have undercut Congress's intent when it enacted the RFS. They have resulted in more volatility in RIN markets and lower demand for advanced biofuels. Any legislation to reform the RFS is must remedy this situation.

When these waivers are issued retroactively (*i.e.*, for compliance years for which RVOs have already been finalized), as they have been in recent months, they function as *de facto* cuts in the RVO. Refineries that have *not* received waivers continue to have their static obligation, while refineries that *do* receive waivers have their obligations cut by an amount commensurate with the waivers they have received.

This depresses the price of RINs—refineries that have their obligations waived can sell all of their RINs in an open market, and the increased supply of credits

diminishes their value.[2] This, in turn, inhibits marketers' ability to lower their costs by blending biodiesel and separating RINs, thereby diminishing overall demand for biodiesel and other advanced biofuels.

EPA's distribution of "hardship" waivers is intellectually incoherent because the price of RINs are baked into refiners' so-called "crack spreads" (*i.e.*, the difference between refiners' cost of *raw* products and the price at which they sell *refined* products). All refiners (large and small) are able to pay for the costs associated with buying RINs by simply charging more money for the fuel that they sell commensurate with RIN costs. Indeed, EPA itself has acknowledged this market fact: "[R]efiners can indeed expend significant funds to purchase RINs needed to demonstrate compliance with the RFS program, but **the cost is offset** by a corresponding increase in the market price of the fuel they sell that is attributable to the RFS obligations. The market price they receive for the gasoline and diesel fuel they sell reflects the cost of RINs." EPA further added that: "Obligated parties [are] charging more for domestic gasoline and diesel to ensure they recoup the costs associated with RIN prices. So while [an obligated party] is directly paying for RINs they buy on the market, they are passing that cost along in the form of higher wholesale gasoline and diesel prices."[3]

Perhaps most troubling, these waivers have been issued in secret. EPA has not solicited any public comment as to whether its reformulation of the waiver criteria is appropriate, nor does it inform stakeholders when waivers are given. As a practical matter, waiver recipients receive an inequitable advantage over other market participants

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[2] On multiple occasions, EPA has reportedly gone so far as to artificially generate and distribute current year RINs as restitution to refiners that have previously had waiver requests denied under a standard stricter than the one it currently has in place. This exacerbates the price-reducing effect the waivers have had on RINs.

[3] EPA (November 2017). *Denial of Petitions for Rulemaking to Change the RFS Point of Obligation.* (EPA Report No. EPA-420-R-17-008), *available at* https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100TBGV.pdf (emphasis added).

by being permitted to sell RINs based on asymmetrical information with respect to the RINs' value.

To illustrate: If the market today values biodiesel RINs at $.50/RIN, and a refinery receives a waiver at 10:00am, that means that all RINs the refinery was holding in order to demonstrate compliance to EPA will eventually enter the market (since the refinery doesn't need them anymore), thereby diluting RIN values and lowering the cost of RINs (similar to how the value of money decreases when central banks print more of it). Once the refinery receives the waiver and begins selling its RINs to other market participants, the refinery can do so at the higher $.50/RIN price because their counterparties do not know that a waiver has been granted and that the price of RINs should be lower. It is not until after the RINs are sold that stakeholders can analyze market activity and determine that waivers were given and downwardly adjust RIN values accordingly.

Throughout all of this, fuel marketers that have invested in biodiesel tanks and blending equipment are seeing the value of such investments diminish because biodiesel demand is diminishing as RIN prices go down. Those considering make such investments see what is happening and are strongly discouraged from making the investments.

The Legislation must fix this broken small refinery exemption provision. The most appropriate course of action is to simply eliminate the exemption for small refineries. This would remove the uncertainty and volatility that the exemption creates and recognize that all refiners have had at least 10 years to adjust their business operations to comport with the incentives that Congress established, and those that have not adjusted are still not subject to any disproportionate hardship relative to their competitors.

If this is not achievable, Congress can either exempt all refiners that meet certain criteria, *or* require all waiver requests be received by EPA a minimum period of days (*e.g.*, 60 days) *prior to* the Agency finalizing RVOs for a given compliance year. That way, when RVOs are finalized, the market can be confident that those numbers will not be adjusted downward after the fact. It would arguably be most consistent with the RFS's purpose if EPA were required to upwardly adjust the RVOs applicable to refiners that have not received waivers; this would allow the market to satisfy the entire RVO while at the same time alleviating any purported hardship on small refiners.

3) In providing a longer "off-ramp" for advanced biofuel than "conventional" corn-based ethanol, the Legislation appropriately recognizes that advanced biofuels still cost more than the fuels they are designed to displace.

The only reason any fuel marketer blends biodiesel into their diesel fuel supply is to make the finished product less expensive. Absent government incentives, biodiesel as a commodity is substantially more expensive than diesel fuel. Thus, advanced biofuels such as biodiesel would not be blended into diesel fuel in the absence of the RFS and other government incentives.

Ethanol, by contrast, is an economical source of octane and therefore would be blended with gasoline even if the RFS were repealed.

It makes sense, therefore, that the Committee would extend the mandates for advanced biofuels for a longer period of time than for "conventional" corn-based ethanol biofuel. Because advanced biofuels cost more money than the fuels they are trying to displace, such biofuels must continue to be subject to robust federal incentives for a period of years if there is any hope for them to be competitive. Absent such incentives, advanced biofuels will not displace petroleum-based fuels. This is not necessarily the case for conventional biofuel.

4) By cutting off the advanced biofuels mandate and ending the RFS after 2032, the Bill sends the wrong market signal and could undermine the commercialization of advanced biofuels.

Congress's objective should be to enable advanced biofuels to get to a place where they can be commercialized – *i.e.*, compete without government incentivizes – and grow on their own. It is not clear that the ten-year "extension" of the advanced categories of the RFS is sufficient to achieve this objective. It would be particularly unfortunate if advanced biofuels are able to make critical efficiency and economic improvements over the course of the next decade, only to have the "rug pulled out from under them" before they are able to make it across the finish line. NATSO urges Congress to take seriously the suggestions made by those in the advanced biofuel production community that indicate a reasonable period of years beyond 2032 is necessary in order to make those fuels fully competitive with petroleum-based diesel fuel.

IV. MISFUELING MATTERS

NATSO's primary focus in this testimony concerns the Legislation's impact on advanced biofuels markets and economics. The Bill does, however, include a number of misfueling mitigation provisions designed to facilitate a smooth a transition to a high octane fuel performance standard. Although NATSO does not have a formal position on the wisdom of such a transition, NATSO does have views as to how these misfueling mitigation provisions can be improved to better accommodate the Legislation's objective.

First, the Bill should clarify that any technological solution to prevent misfueling must be "technically and economically feasible" *for retailers* (as well as other stakeholders such as automobile manufacturers).

Second, the Legislation is too prescriptive regarding nozzle sizes for fuel pumps dispensing higher octane fuels. Such overly specific requirements can impose unnecessary costs on supply chain participants – namely automobile manufacturers – and these costs would be passed down to consumers. Although NATSO agrees that it is imperative to develop a mechanism to ensure that consumers cannot put lower octane fuels into newer vehicles that are designed to run on higher octane fuel, this mechanism should be industry-driven, and be as economically and technically feasible as possible. NATSO's understanding is that mandating a 0.77 inch diameter standard for nozzles is not the most economically and technically feasible method for achieving this objective.

Finally, the Bill should clarify that any retailer who complies with all of the applicable misfueling prevention requirements (purchasing necessary infrastructure equipment, posting appropriate signage, etc.) will not be held liable under either federal or state enforcement actions, *or* private lawsuits. Without such protection, retailers will inevitably be reluctant to invest in new fuels and this will disrupt the Legislation's objective of facilitating a smooth transition to higher octane fuels.

V. CONCLUSION

Thank you for the opportunity to present testimony before you today. I look forward to continuing to work with Congress on the issues discussed above, and I am happy to answer any questions that you may have.

Mr. FLORES. Thank you.

Mr. Kovarik, you're recognized for 5 minutes for your opening statement.

STATEMENT OF KURT KOVARIK

Mr. KOVARIK. Good morning.

Thank you, Mr. Chairman, Chairman Shimkus, Ranking Member Tonko, and members of the committee. Thank you for inviting me to testify today.

My name is Kurt Kovarik and I am vice president of Federal affairs for the National Biodiesel Board. My trade association represents 130 members with biodiesel production facilities in nearly all 50 States.

The produce clean-burning biodiesel from a variety of feedstocks including vegetable oils, animal fats, and recycled oils such as used cooking oil.

I appreciate the subcommittee's inclusion of biodiesel in today's discussion and throughout this process. I look forward to contributing to the development of any proposals to improve the Renewable Fuel Standard.

The discussion draft highlights one of our frustrations with the RFS. The biodiesel industry has proven over and over again its ability to produce higher volumes. Yet, EPA continually sets biomass based diesel volumes in the annual RFS rules well below our demonstrated capacity.

The agency continues, as demonstrated in November's final rule, to limit growth for our advanced biofuel volumes. Biodiesel achieves considerable carbon reductions, up to 86 percent compared to petroleum fuels. Higher volumes for biomass based diesel would better achieve the environmental goals of the original RFS program.

Biodiesel is the success story of the RFS. The program has been the foundation for biodiesel industry's growth over the past decade. Our industry has grown from about 400 million gallons in 2007 at the start of the program to more than 2.6 billion gallons today.

We expect the program will continue incentivizing investment and supporting our industry's growth over the decade and more.

We are pleased that the discussion draft recognizes that the biodiesel industry would not benefit from the proposed changes to the octane standard or other regulatory changes in the discussion draft.

We appreciate the committee's recognition that the biodiesel market is different from the ethanol market and that the discussion draft includes provisions to provide additional certainty for advanced biofuels.

Unfortunately, these provisions fall short. We are concerned that the discussion draft does not incentivize ongoing investments and support predictable year-over-year growth for our industry.

The discussion draft would direct EPA to set backward looking volume requirements. While this may protect existing assets in the near term, it would not drive further investments or growth.

One necessary improvement to the draft would be to add achievable predictable growth for our industry over time. With consistent and predictable growth, the biodiesel industry would have the nec-

essary incentive to make capital investments, develop additional feedstocks, and improve efficiencies.

Stagnant or decreasing volumes do not provide any of those incentives. For the biodiesel industry there is no pressing need to significantly reform or replace the RFS.

The program does not end or change drastically in 2022, despite what some have said. The EPA is required to set future volumes for all fuel categories under the same process that has been in place for biomass-based diesel since 2013.

The RFS, therefore, has the potential to support our industry's growth beyond 2032 to where the discussion draft's support would end.

The biodiesel industry continues to grow and to invest under the current RFS because the program, when stable, promises the opportunity for additional growth.

We appreciate that the discussion draft would direct EPA to set volumes according to our proven ability to produce, that the draft would be significantly improved if it provided long-term certainty and predictable growth over time.

Thank you for the opportunity to testify today on behalf of America's biodiesel renewable diesel industry.

I am happy to answer any questions.

[The prepared statement of Mr. Kovarik follows:]

Testimony of Kurt Kovarik, Vice President of Federal Affairs

National Biodiesel Board

Submitted to the Energy and Commerce Committee, Subcommittee on Environment

Hearing on Discussion Draft: The 21st Century Transportation Fuels Act.

December 11, 2018

Summary:

- We appreciate the Subcommittee's on-going interest in the Renewable Fuel Standard and the inclusion of biodiesel in the discussion. On behalf of the biodiesel industry, we are pleased to continue to engage in this important dialogue.
- The 21st Century Transportation Fuels Act acknowledges one of our industry's frustrations with the RFS, which is that EPA sets biomass-based diesel volumes well below our industry's proven ability to produce. However, improvements to today's discussion draft are needed to incentivize further investments and support predictable year-over-year growth for our industry.
- Biodiesel is a success story of the Renewable Fuel Standard. For the foreseeable future, we expect the program will continue supporting our industry's growth.
- We want to dispel the notion that the RFS program ends in 2022. The Environmental Protection Agency is required to continue to set volumes for all categories of renewable fuels, under the process that has been used for biomass-based diesel since 2013.
- We also appreciate the Subcommittee's recognition that the biodiesel market and the RFS' treatment of biodiesel are markedly different from ethanol. Changes to the octane standard do not benefit biodiesel.

Good morning, Chairman Shimkus, Ranking Member Tonko, and Members of the Committee. Thank you for inviting me to testify today. And thank you for including the biodiesel industry and National Biodiesel Board (NBB) throughout this process. We will continue to engage in this discussion and contribute to the development of any proposals to improve the RFS program. Established in 1992, NBB is the leading U.S. trade association representing the biodiesel and renewable diesel industries, with membership including producers, feedstock suppliers, and fuel distributors. Across the country the biodiesel industry supports more than 60,000 jobs.

Biodiesel is a success story of the Renewable Fuel Standard. It is the nation's first domestically produced, commercially available advanced biofuel – which means it reduces greenhouse gas emissions by at least 50 percent compared to petroleum diesel. The U.S. biodiesel industry has grown from around 400 million gallons of production in 2007 – the first year of the program – to more than 2.6 billion gallons in 2017. Biodiesel is a renewable, clean-burning diesel fuel made from a diverse mix of resources, including agricultural oils such as soybean, and canola oil, as well as recycled cooking oil and animal fats. And it is the best tool for achieving the RFS program's goals.

The 21st Century Transportation Fuels Act captures one of our industry's ongoing frustrations with EPA's implementation of the RFS. The biodiesel industry has continually proven its ability to increase production. However, the Environmental Protection Agency sets the biomass-based diesel volumes in the annual RFS rules well below our proven capacity. The agency forces us to rely on the advanced biofuel volume to drive growth; and in fact, we are regularly filling more than 90 percent of the advanced biofuel category. On top of that, EPA has destroyed demand for biodiesel by issuing an unprecedented number of small refinery exemptions, with very little evidence of the "disproportionate economic hardship" that those waivers are intended to

alleviate. Small refinery exemptions have cost our industry more than 300 million gallons of demand this year.

The discussion draft would direct EPA to support biomass-based diesel's proven production. We are concerned, however, that The 21st Century Transportation Fuels Act as currently drafted does not support continual growth. The proposal would direct EPA to set backward-looking volume requirements; it may protect existing assets but not drive investment and further growth. And it would not address several of the causes of instability in the program, such as retroactive small refinery exemptions. The Renewable Fuel Standard has been the foundation for the biodiesel industry's growth over the past decade and remains a driver of new investment.

For the biodiesel industry, there is no pressing need to significantly reform or replace the Renewable Fuel Standard. The program does not sunset or change drastically in 2022, as many believe. After 2022, EPA will use the same well-established process to set volumes for all biofuel categories that it has used to set biomass-based diesel volumes since 2013.

And Congress already provided guidance to the agency in the existing statute about how to determine those volumetric requirements for years 2023 and beyond. EPA must maintain the same proportion of annual advanced biofuel in the program as that achieved in 2022, which will continue to provide opportunity for biodiesel growth. The 21st Century Transportation Fuels Act proposes to abruptly end its support for biodiesel production in 2032, while the RFS continues beyond that.

The biodiesel industry would not benefit from the proposed change to the octane standard or other regulatory changes. Biodiesel does not require special fuel pumps or engine modifications. In fact, nearly all automobile manufacturers support biodiesel blends up to 20 percent. Biodiesel is used from coast to coast—for heavy-duty trucking, in farm equipment, and for compliance

with low-carbon fuel standards and fleets, such as emergency vehicles and buses. And there are biodiesel production plants in nearly every state.

So, what can Congress do to ensure that biodiesel and advanced biofuels continue to meet U.S. transportation fuel needs? The biodiesel industry has proven its ability to produce over and above the volumes set each year by EPA. We continue to grow and to invest under the current RFS, even in the face of policy uncertainty, because that policy promises opportunity for further growth. We appreciate that The 21st Century Transportation Fuels Act would direct EPA to set volumes according to our proven capacity to produce. We would prefer if it provided long-term certainty and predictable growth over time.

In sum, the RFS has been a tremendous success:

Jobs Are Created, Economies Grow. With biodiesel plants nationwide—from California to Texas to North Carolina—the biodiesel industry directly supports more than 60,000 jobs, $11.42 billion in economic impact, and $2.54 billion in wages paid. In many rural areas of the country, biodiesel plants are a driving force of the local economy, supporting the employment of technicians, plant operators, engineers, construction workers, truck drivers, and farmers. Producers nationwide are poised to expand production and hire new workers with steady growth under the RFS. Every 500 million gallons of increased biodiesel production directly and indirectly supports 16,000 additional jobs.

Value Is Added to Other U.S. Economic Sectors, Such as Agriculture. Biodiesel provides very strong soybean price support. Biodiesel importantly allows U.S. soybean farmers to be more competitive in the global protein market, as demand for biodiesel supports U.S. soybean processing and export opportunities. Policy certainty is one of the most important factors in making significant investment decisions in value-added businesses like biodiesel.

Consumers Get Choice at the Pump. Biodiesel is a cost-effective, renewable alternative to petroleum diesel that, with help from the RFS, is saving diesel consumers money. Each gallon of RFS-qualified biodiesel is accompanied by a RIN credit. The value of that credit, which is traded on the open market, is factored into the value of each gallon of biodiesel. This added value allows producers to sell biodiesel at a lower price to fuel distributors or fleet managers, who can then pass along savings to consumers.

Energy Security Is Enhanced. Biodiesel is diversifying our fuel supplies so that we are less dependent on global oil markets that are influenced by unstable regions of the world and global events beyond our control. Despite increased domestic oil production, consumers will remain vulnerable to volatile international oil prices without diversity and competition in the fuels market.

Environmental Benefits Are Secured. According to EPA, biodiesel reduces lifecycle greenhouse gas emissions by between 57 percent and 86 percent compared to petroleum diesel. The 15.5 billion gallons of biodiesel used through 2017 have cut greenhouse gas emissions by the same amount as removing more than 30 million passenger vehicles from America's roadways. EPA consistently cites tailpipe emissions from traditional diesel—primarily from older trucking fleets and other heavy-duty vehicles—as a major national health hazard. Substituting higher amounts of biodiesel for traditional diesel fuel is the simplest, most effective way to immediately reduce air pollution and greenhouse gas emissions.

On behalf of the biodiesel industry, I appreciate the opportunity to continue to engage in this discussion.

Mr. FLORES. Thank you for your opening comments. We appreciate each of your testimony. We are now going to move into the Q&A portion of our hearing. I want to recognize myself for 5 minutes for my questions.

Mr. Coleman, your testimony claims that the discussion draft will increase gasoline prices because ethanol will not be used by refiners. That's somewhat in conflict with what we heard in the last panel.

I think there were some folks that want to argue about the readily available octane enhancers today versus what was available 15 years ago.

But I am interested in developing a current solution. So what's your proposed legislative solution for keeping gasoline prices lower using a high-octane performance standard?

Mr. COLEMAN. So the reason that I made that allegation is that here is no alternative octane to ethanol that is even close to as cheap as ethanol is.

And so you're either creating a status quo environment or are you putting something in the fuel that is more expensive?

You don't have to look very far. If you look at zero percent ethanol blends in the market today they're 40 to 50 cents per gallon more expensive.

In terms of—and I am not going to dodge your question on what the legislative proposal is—I think the RFS should be bedrock baseline in this country because it's produced such outstanding outcomes, particularly for the middle of the country.

And if you want to get to a cleaner environment with—give the auto industry what they want, which is cleaner fuel so they can improve emissions, then you do it on top of the RFS.

Can you make tweaks to the RFS that makes sure dumping the RFS for higher octane will just remove the incentive to use renewability——

Mr. FLORES. So how do you set those levels and in a declining liquid fuels market how do you set them or you get them right and you don't somehow create disturbances in the market that harm consumers?

Mr. COLEMAN. I am not sure if I agree with the idea that it harms consumers. So if you use—if you keep—maintain certainty with the RFS and what the signal that sends to the marketplace is that we are going to keep ethanol in the fuel, which right now is not—Mr. Thompson said it was 4 cents cheaper. It's closer to 20 cents cheaper.

It says don't replace ethanol with more expensive octane enhancers and then ramp your RON the way you want to go. You don't lose ethanol, and if the oil industry wants to alkylate fuel or add more aromatics on top of that, then they can get there.

They're not going to tell you they can do that, but they can do that.

Mr. FLORES. Let's continue.

I think we heard in the last panel that the consumers ultimately are going to make the decisions as far as what the costs are, not the refiners. Not any other party.

Mr. Kovarik, your testimony states, we appreciate that the 21st Century Fuels Act would direct the EPA to set volumes according to our proven capacity to produce.

You went on to say you would prefer that it provided long-term certainty and predictable growth over time.

What does that mean from a legislative language perspective? If we wanted to incorporate your concepts in our legislation what would that look like?

Mr. KOVARIK. Thank you for the question. I appreciate the opportunity to answer that.

One of the things that has harmed our industry and really prohibited our industry from achieving its full potential is the fact that all of our Federal policies that affect our industry have been terribly uncertain since the creation of the RFS—the original RFS in 2005.

One way to improve this legislation might be to not only provide longer term period for advanced biofuels but also include some degree of statutory certainty that volumes will increase year over year to allow the industry to make the capital investments, developing additional feedstocks, and grow to an economy of scale where they may no longer need certain areas of Federal policy support.

Mr. FLORES. So you're in the weeds a little bit. How would you set those volumes? How would that be done? When you don't know what the market is going to be like, you don't know where the technology is going, how would you set the volumes?

Mr. KOVARIK. I think you could start by looking at the domestic—the market, what is currently produced, and then include a reasonable achievable levels of growth whether that be—5 percent year over year might be an example. But what would be achievable and certain for the industry so that they could respond to it.

Mr. FLORES. OK. If you have positive tax treatment for biodiesel blending if you assume that that's assured, would you need the RFS to compete?

Mr. KOVARIK. The two policies are very complementary. The RFS essentially guarantees producers that there will be a market for certain volume of product.

The tax incentive works in very different way in that is provides the incentive for our downstream partners to put in the infrastructure, the blending facilities, and the retail facilities to sell additional product to consumers.

The reason our downstream partners want to sell more of the product is because of the value proposition because of the combination of the RFS and the tax credit, and I would like to see a time and place where we no longer need those policies.

But the fact of the matter is neither have been certain enough with the longevity required to provide the industry with the certainty to grown and flourish.

Mr. FLORES. Thank you. My time has expired.

I recognize Mr. Tonko for 5 minutes for his questions.

Mr. TONKO. Thank you, Mr. Chair, and I think many Members support the RFS due to its envisioned role in promoting the development of and market for advanced biofuels.

Even the program's most ardent supporters would have to admit that the expected growth of these fuels has not come to fruition.

I know there are many reasons that that is the case. But I want to use this time to look forward.

So would anyone like to comment on why or why not this discussion draft would remedy those issues and actually result in the growth of a domestic advanced biofuels industry?

Anyone? Mr. Coleman.

Mr. COLEMAN. I am sure I will have a couple people who want to help answer this question. But we do not believe that it's going to create growth in the advanced biofuels industry because we have to partner with the oil industry one way or the other to get the job done in the advanced biofuels industry.

Sometimes it's on the front end with actual strategic investment. Valero, BP—they've been investors historically in this industry.

But inevitably it's also on the back end. You have to be able to show investors that an oil industry is interested in not taking your fuel in order to build that plant and if we have a system that automatically predicts incoming gallons based on last year's volumes, the oil industry is simply not going to participate in that process and you're going to have incremental, if any, growth, basically only when the oil industry is completely uninvolved.

And the issue that we have had with deployment over the last 10 years—and I think this is a point of agreement for all of the advanced biofuels advocacy—is not one of commercial technological development.

We are there. It's an issue of scale. And when the program is not enforced for 2 or 3 years in the wake of a 100-year recession and then we have waivers, we have nothing to look to.

So that is where our issues are and we would ask that we keep pushing on EPA to enforce the law.

Mr. TONKO. Anyone else? Mr. McAdams.

Mr. MCADAMS. I would say that the right question is, since you guys are working with the discussion draft here, what can you do to bring those fuels.

And what I gave you after the last hearing was 21 examples of specific barriers to entry, definitions in other regulatory regimes that block the future of advanced undesignated fuels and block cellulosic fuels.

What this draft does do is it speaks specifically to the wood piece in a way that has never been addressed before and that is a very positive thing.

Let me give you an example. If you, under the current biointermediate regs at EPA, if I am trying to take a pyrolysis plant which I am either Ensign, which building a plant in Georgia or I am Fulcrum, I am building a plant in Nevada or I am Red Rock, I am building a plant in Oregon, and I use the woody biomass and I make a pyrolysis oil, under the current biointermediate standard I can't colocate that to coprocess into a jet fuel or into a diesel.

And one of the things this hearing has done is it's focused way too much on gasoline and not enough on the fact that we use 55 billion gallons of diesel and it's the fastest growing commodity in terms of demand, going forward, along with jet fuel.

So if you want to make billions of gallons of jet fuel to fly the airplanes because they're not likely to be electric in my lifetime, you're going to need those diesel distillate fuels.

And all of these impediments are statutorily driven that need to be addressed in a way. Same thing with waste oil. Same thing with one-celled biological organisms.

There's a whole plethora of these things that just prohibit technologies that we never knew existed when we did the spill in '07 that blocked the entry to these volumes.

Mr. TONKO. Thank you.

Mr. Feraci.

Mr. FERACI. Thanks, Mr. Tonko.

So I think it's a great question and I want to share the experience that we've had in the RNG industry because it's a fairly new experience but I think that there's some lessons to be taken from that.

So our fuel become qualified as a cellulosic biofuel in 2014 and as I said in my statement, I mean, we've seen a 620 percent growth in the use of the fuel—the cellulosic biofuel—and what—one of the big things that has spurred that is the RFS program and it's something at the Federal—a decision at the Federal level that we are going to prioritize the introduction of advanced biofuels and that reduce greenhouse gas emissions that that's a Federal priority from an energy policy standpoint and from an environmental standpoint.

But beyond that, the way that the RFS is structured now is when you set volumes out into the future it's prospective so that it allows investors to go and get private sector capital investment to put in the projects.

And like I said, when you're doing an RNG project, you know, it's not something you just put up overnight. I mean, you're going to have to go into a 20-year offtake agreement with a feedstock provider to do this.

So, you know, as it comes back to the discussion of the discussion draft, I mean, I think that a piece of constructive criticism would be that you really want to have a formula, going forward, that does drive growth and you want it prospective looking because if it's just—if you just look back at previous production it could have—what I was careful to say is, I think, an unintended consequence of potentially having production be flatter or even contract.

Mr. MCADAMS. Mr. Chairman, could I address this RVO production?

Mr. SHIMKUS [presiding]. Well, I think I am going to be asking you that question. So——

Mr. TONKO. I will yield back.

Mr. SHIMKUS. This is our last time together, so we are milking it out.

So let me just go directly to Mr. McAdams, because I want to address this issue about how you set the RVOs.

Obviously, you're in the minority at the panel saying that we should do it based upon—and we've had this discussion about what are we actually producing now and then—and then you propose a midterm review. So talk to your fellow panellists on why you think that is successfully achieving, I think, what their goals are.

Mr. MCADAMS. OK. First of all, we need to realize that the Federal court directed EPA in 2013 that they could not put their thumb on the scale.

So all three of these guys up on this panel are suggesting that they want to play politics and put their thumb on the scale instead of having a rules-based rule.

I disagree with them. So in the case of Mr. Kovarik, if you took the approach that you have put in this bill, Mr. Kovarik would have gotten 2.7 billion gallons of an RVO for the biodiesel industry this year instead of 2.1. That's a 600-million-gallon advantage.

So I don't know what we are talking about when we are talking about taking the actual production——

Mr. SHIMKUS. OK. We can be nice.

Mr. MCADAMS. OK. Taking the actual EMTS numbers off the system which have to be put in the system five days after the fuels are produced and then every 6 months queue up the RVO in line with the actual production of those numbers, OK.

Now, the second reason we should do this is because the oil industry and the obligated parties were allowed to use the waiver credits under the cellulosic standard and EPA, under the existing statute, which is another reason why we have to change the statute, EPA has taken the position since the beginning of the program that they must issue the same number of waiver credits each year as the RVO.

So if I am Exxon Mobil, hypothetically, and I only need 300 million waiver credits for the cellulosic pool, I wait until the end of the year and I buy the waiver credits from EPA.

And all the gallons of cellulosic or biogas from my friend here don't get bought and it's not bought on a rateable take. You should consider a rateable take. That's also in my written testimony.

Mr. SHIMKUS. Follow up with the midterm review and—because I do think the intent was for us let's have achievable real numbers.

But then I do also appreciate the signals that we send about—for people who wanted growth. So talk about the midterm review and does that help incentivize that.

Mr. MCADAMS. So the way I would see it is, if you—if you're actually bringing these fuels into the market, what would happen at the 6-month review, the EMT system would already incorporate these advanced numbers. So the number would go up.

So for Mannie, at the 6-month mark instead of having to wait until the end of the year and argue that the next RVO should go into a black box at EPA and the number be lifted, the number automatically at 6 months relative to the projects he brought in would come into the RVO.

It would be added to the RVO at 6 months. It would also be queued up at the end of the year at 12 months.

So you would collect your numbers and, again, the NBB guys would collect their numbers in the actual line with what they produced and that has nothing to do with whether the oil industry is going to buy this fuel or not, because David's right—this fuel is going to get bought if the price is right.

Mr. SHIMKUS. OK. Let me give you a short chance to respond, Mr. Coleman.

Mr. COLEMAN. Very quickly, two quick things.

We are not opposed to truing up. We've been asking for true up, which is midterm review, for quite some time. So that's point one.

Point two is——

Mr. SHIMKUS. So that's a good process of our bill?

Mr. COLEMAN. Yes, that's a good—trueing up is OK as long as——

Mr. SHIMKUS. Very good. Whew, I am glad I got a good one.

Mr. COLEMAN. Although there's a comma. As long as——

Mr. SHIMKUS. OK. Keep going. Keep going, quickly.

Mr. COLEMAN. As long as—and this is the short second point—that it's forward looking and EPA—the one thing that Mr. McAdams said that wasn't true is we are not asking for a thumb on the scale.

After they lost that case, EPA went out and did a good forecasting methodology that's forward looking. They can do that, have it be completely legal, and do midterm review.

Mr. SHIMKUS. Great. Thanks. Anyone else?

Go ahead, Mr. Feraci.

Mr. FERACI. Yes, and——

Mr. SHIMKUS. Quickly.

Mr. FERACI. I am going to start, Mr. Shimkus, by—I am going to be nice. So here's my—so here's what I would say, and I really do think that Mike is probably coming at this from a good place and he's advocating for his members.

When we said that there could be—potentially being unintended consequences, let's take a very real-world example.

So the EPA just came out with the RVO for cellulosic biofuels this year. They're going to set that at 418 million gallons.

So prospectively for this year, going forward, that's what the biofuel requirement is going to be. If you were doing a look back, it would be—the numbers aren't in final but it would be around 323 million based on EPA's numbers.

So when you're talking about something of the scale that way, when you're talking about trying to drive RNG investment, it's a lot easier to go and get that investment forward looking, having a volume like that, as opposed to looking back and saying, yes, there's going to be this midterm review process and it may work out. It may not. People may time their buying different based on that midterm review.

So, again, it's just a constructive observation in terms of things to think about when you——

Mr. SHIMKUS. Yes. I've got—my time is expiring and so I think we are hashing this out that there is a way to get there and that's, again, Mr. Tonko's problem next year.

[Laughter.]

But I want to end—I want to end on this statement. Then I will go to Mr. Olson.

While the RFS does not end in 2022, as you all have highlighted in this panel, it does evolve in a scenario where EPA has enormous discretion to set levels based upon a bunch of unweighted factors.

That should scare everyone and that's part of the reason why we are trying to move to certainty versus uncertainty.

And with that, I would like to yield to the Texan, Mr. Olson, for 5 minutes.

Mr. OLSON. I thank the chair, and welcome, guys, and let's be very friendly. OK.

I am from a big oil and gas State, Texas. You all know that, but I want to say, Mr. Feraci, I've seen your product firsthand back home.

Fort Bend County, right near Needville, Texas, we have a renewable natural gas facility that's going strong for about 5 years now. It's in partnership with WCA, Morrow, Enerdyne, and Fort Bend County.

What it does is there is a municipal dump. They stack up their products at the dump. They are decomposing. They grab methane. They turn that into natural gas, get a pipeline, it goes to market.

So I believe in your product. It's working back home. I've seen it first hand. I will invite you to come out and see if you haven't.

I have a question for all five of you, just sort of around the table. One thing that has bothered me over and over that's talked about by this panel is how uncertain the RFS is.

I know DC has a role in that. There's other market factors. So can you talk about whether this bill moves in the right direction or the wrong direction for certainty and are there things that we should look at?

Mr. Coleman, you're up first, sir.

Mr. COLEMAN. So our position on the fundamentals of the bill, which is octane trade for RFS, is that that's not going to work for us because we don't know what the oil industry is going to do.

The EIA suggestion that they can do it without us we do not feel like that is a good trade for us and could actually—we could be rolling back from a renewable fuels perspective.

Mr. OLSON. Mr. McAdams, sir.

Mr. MCADAMS. Any bill that starts a discussion on reform is a good bill for us.

Mr. OLSON. There we go.

Mr. Feraci.

Mr. FERACI. I would base it on current law. So right now, admittedly, there's instability in the way that it functions post-2022. But it is permanent law, and it's something that's there for our industry as opposed to something that will sunset.

Mr. OLSON. I apologize. Mr. Feelakov? Feelakov, is that close?

Mr. FIALKOV. That's very close.

Mr. OLSON. Thank you.

Mr. FIALKOV. It's Fialkov. But I think that the bill moves in the right direction with respect to the rules-based RVO. I agree with everything that Mr. McAdams just said.

I would say that this notion that there's kind of a homogenous oil industry that will, as part of a stratagem, not buy biofuels in order to artificially lower the RVO in a given year.

It's simply not true. I mean, to the extent it would lower diesel prices by a cent a gallon I know people who would kill one another to get that cent.

So that is something I am not concerned about and I don't know where that fear comes from. But I will say that all of the progress in terms of establishing certainty and what not doesn't mean a lot if you don't address the small refinery exemption issue because that is the kind of thing that will inject uncertainty and the mere fact that it's looming out there means that there's a level of uncer-

tainty that you just can't overcome no matter how you adjust the RVO process.

Mr. OLSON. And Mr. Kovarik, your concerns.

Mr. KOVARIK. Yes, thank you, sir.

Just very quickly. I think we view the backward-looking setting the volumes as a small step towards certainty. That, coupled with no guarantee or no ensure of growth—our industry—along with the sunsetting of the program in 2032, are the failings of the bill.

Mr. OLSON. Thank you.

One final question for my good friend who controls all the power pumps there. We have professional drivers, mostly truck drivers, pros. We talked last panel about misfueling.

Now, that could be a concern, and one of the panellists on the last panel pointed out a great point that hey, I can't control a person putting diesel in a gasoline engine—that just happens.

So my question is are your customers more likely or less likely to make a misfueling mistake because they're pros and how can this bill help ensure we have no misfueling issues or as few as possible? Because that's a real big deal back home.

That's a yes or——

Mr. FIALKOV. So with respect to the—if I understand your question correctly, there's very little concern that a professional truck driver will put gasoline in a truck, if that's what you're asking. I think——

Mr. OLSON. How about most of the people you work for—it's not just truck drivers. You got a lot of people here at the pump, and that's where these mistakes are made.

Mr. FIALKOV. Yes. I mean, undoubtedly, when you have a bifurcated fuels market or automobile market where some cars can only accept certain fuels, other cars can only accept other fuels and one of those fuels is materially less expensive than another, there are going to be instances where people are going to try to put the less expensive fuel in a car that can't handle it.

So I think that all of the misfueling mitigation concerns that were addressed in the last panel by Mr. Columbus are spot on and the committee would be wise to take them.

Mr. OLSON. Thank you. I am out of time.

Have a great holiday season. I yield back.

Mr. SHIMKUS. The gentleman yields back his time.

Seeing no further Members wishing to ask questions, I would like to thank you all for being here. I think it was a very vibrant and important part of this discussion on the draft bill, and I would like thank you for being here today.

Before we conclude, I would like to ask for unanimous consent to submit the following documents for the record: a letter from the American Petroleum Institute, a letter from the Illinois Corn Growers, a letter from Briggs & Stratton, a letter from the National Farmers Union, and a letter from the Union of Concerned Scientists.

Without objection, so ordered.

[The information appears at the conclusion of the hearing.]

And pursuant to committee rules, I remind Members that they have 10 business days to submit additional questions for the

record. I ask that witnesses submit their responses within 10 business days upon receipt of the questions.

Without objection, this subcommittee is adjourned.

[Whereupon, at 12:30 p.m., the committee was adjourned.]

[Material submitted for inclusion in the record follows:]

PREPARED STATEMENT OF HON. FRANK PALLONE, JR.

Since this is likely the last Environment Subcommittee hearing of the 115th Congress, I want to commend Chairman Shimkus and Ranking Member Tonko on their record of success. We have enjoyed a level of mutual respect that I believe has benefited both sides and produced work we can all be proud of. I look forward to continuing this working relationship in the 116th Congress.

Today's hearing on the Renewable Fuel Standard (RFS) is the fifth this Congress, and a culmination of Chairman Shimkus' substantial effort to reform transportation fuel policy. I commend the chairman for his efforts.

The RFS program is far from perfect. Unfortunately, the "21st Century Transportation Fuels Act" is even less perfect than the program it supposedly is reforming.

This discussion draft does not address any of the known problems at the Environmental Protection Agency (EPA). It does not address EPA's substantial misuse of small refinery waivers to exempt refineries that are neither small nor in financial distress from biofuel blending obligations. It also does not address EPA's failure to set volumes at levels required by the law.

What the 21st Century Transportation Fuels Act does is to create a high-octane fuel standard without a biofuel mandate. It also waives misfuelling liability for vehicles manufacturers and retailers. And, it provides fuel economy credit "harmonization" to automobile manufacturers in an effort to garner their support. Ultimately, this legislation is mainly a broad compilation of diverging changes to the RFS and other vehicle programs.

For a reform effort to be fair and successful, any RFS restructuring proposal should provide long term stability and certainty for all stakeholders. It should increase transparency and consistency in the market and promote overall environmental benefits through the diminishing use of fossil fuels.

The discussion draft before us fails to meet any of those goals.

Congress enacted the RFS program to diversify the fuel supply, reduce dependence on fossil fuels, promote rural development and deliver environmental improvements of air quality and greenhouse gas reduction. Furthermore, the RFS program promotes economic development for American farmers and their families, drives long term investments in technology, and provides a critical market for home grown fuel at a time when our rural economy is hurting.

These are important things to consider in judging any reform effort. But it's also critical to ask the question of whether, in the face of intensifying climate change, a proposal improves the environmental benefits of the RFS or if it undermines them?

This question is vital, because the transportation sector is the largest contributor of U.S. greenhouse gas emissions. Let me be clear: a policy change that extends the dominance of fossil fuel use in transportation, that slows improvement in vehicle fuel economy standards, or keeps us on a path of increased carbon emissions in the transportation sector is absolutely unacceptable.

Unfortunately, I believe that will be the overall effect of this discussion draft. It will ultimately increase the use of liquid fossil fuels in inefficient cars, long into the future. Looking through a climate lens, this proposal would do nothing to address the existential problem of climate change and would likely make it worse. And, that's something I will oppose.

[DISCUSSION DRAFT]

115TH CONGRESS
2D SESSION

H. R. _____

To amend title II of the Clean Air Act and title II of the Petroleum Marketing Practices Act with respect to high-octane fuels, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

M__. _____ introduced the following bill; which was referred to the Committee on _____

A BILL

To amend title II of the Clean Air Act and title II of the Petroleum Marketing Practices Act with respect to high-octane fuels, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the "21st Century Transportation Fuels Act".

(b) TABLE OF CONTENTS.—The table of contents for this Act is as follows:

TITLE I—HIGH-OCTANE FUEL

SEC. 101. HIGH EFFICIENCY VEHICLES.

(a) REQUIREMENTS.—Part A of title II of the Clean Air Act (42 U.S.C. 7521 et seq.) is amended by adding at the end the following new section:

"SEC. 220. OCTANE SPECIFICATION.

"(a) APPLICABILITY.—This section applies with respect to any motor vehicle (other than a motorcycle) that is introduced into commerce that—

"(1) is a light-duty vehicle or light-duty truck;

"(2) is a model year 2023 or later motor vehicle; and

"(3) uses gasoline for propulsion or any other operation of the motor vehicle, including the engine thereof.

"(b) WARRANTY REQUIREMENTS.—The manufacturer of a motor vehicle described in subsection (a) shall warrant to the ultimate purchaser and each subsequent purchaser that each such motor vehicle is designed—

"(1) to operate with gasoline containing up to and including 20 percent ethanol; and

"(2) to meet the design requirements under subsection (c).

"(c) DESIGN REQUIREMENTS.—The manufacturer of a motor vehicle described in subsection (a) shall—

"(1) design each such motor vehicle—

"(A) to operate using gasoline that has a research octane number of 95 or higher; and

"(B) to improve fuel economy connected to the use of gasoline that has a research octane number of 95 or higher; and

"(2) incorporate into each such motor vehicle devices or elements of design (including physical or other barriers, devices, or technological systems) as are determined by the Administrator to be—

"(A) necessary to prevent the introduction of gasoline with a research octane number that is lower than 95 into such motor vehicle; and

"(B) technically and economically feasible.

"(d) INFRASTRUCTURE REQUIREMENTS.—Any gasoline retailer selling gasoline for dispensing into motor vehicles described in subsection (a) shall incorporate into the retailer's dispensing equipment such devices or elements of design as are determined by the Administrator to be—

"(1) necessary for compatibility with the motor vehicle design requirements under subsection (c)(2); and

"(2) technically and economically feasible.

"(e) MISFUELING.—

"(1) PROHIBITIONS AGAINST TAMPERING AND DEFEAT DEVICES FOR MOTOR VEHICLES.—In lieu of applying section 203(a)(3) with respect to this section, the following shall apply:

"(A) No person shall—

"(i) remove or render inoperative any device or element of design installed on or in a motor vehicle pursuant to subsection (c)(2) prior to its sale and delivery to the ultimate purchaser; or

"(ii) knowingly remove or render inoperative any such device or element of design after such sale and delivery to the ultimate purchaser.

"(B) No person shall manufacture or sell, or offer to sell, or install, any part or component intended for use with, or as part of, any motor vehicle, where—

"(i) a principal effect of the part or component is to bypass, defeat, or render inoperative any device or element of design installed on or in a motor vehicle pursuant to subsection (c)(2); and

"(ii) the person knows or should know that such part or component is being offered for sale or installed for such use or put to such use.

"(2) PROHIBITIONS AGAINST TAMPERING AND DEFEAT DEVICES FOR DISPENSING EQUIPMENT.—

"(A) No person shall knowingly remove or render inoperative any device or element of design incorporated into dispensing equipment pursuant to subsection (d).

"(B) No person shall manufacture or sell, or offer to sell, or incorporate into, any part or

component intended for use with, or as part of, any dispensing equipment, where—

"(i) a principal effect of the part or component is to bypass, defeat, or render inoperative any device or element of design incorporated into dispensing equipment pursuant to subsection (d); and

"(ii) the person knows or should know that such part or component is being offered for sale or incorporated for such use or put to such use.

"(3) LIMITATION ON LIABILITY.—A manufacturer of a motor vehicle, or a gasoline retailer, that is in compliance with the requirements of this section and the requirements of the Petroleum Marketing Practices Act, shall not be liable under any provision of this Act or any other Federal, State, or local law, including common law, for damages—

"(A) to or caused by a motor vehicle described in subsection (a); and

"(B) that would not have occurred but for the introduction of gasoline with a research octane number that is lower than 95 into such motor vehicle.

"(f) PREEMPTION.—

"(1) IN GENERAL.—No State or any political subdivision thereof may adopt or continue in effect any provision of law or regulation with respect to the design of motor vehicles to operate using gasoline with a certain octane content, or the corresponding design of equipment for dispensing such gasoline into such motor vehicles, unless such provision of such law or regulation is the same as the corresponding provision in this section.

"(2) INVESTIGATIVE OR ENFORCEMENT ACTIONS.—A State or political subdivision thereof may provide for any investigative or enforcement action, remedy, or penalty (including procedural actions necessary to carry out such investigative or enforcement actions, remedies, or penalties) with respect to any provision of law or regulation permitted by paragraph (1).

"(g) ENFORCEMENT.—

"(1) VIOLATIONS.—

"(A) MANUFACTURER.—Any manufacturer who violates subsection (b) or (c) shall be subject to a civil penalty of not more than $25,000. Any such violation shall constitute a separate offense with respect to each motor vehicle.

"(B) GASOLINE RETAILER.—Any gasoline retailer who violates subsection (d) shall be subject to a civil penalty of not more than $2,500. Any such violation shall constitute a separate offense with respect to each dispensing equipment.

"(C) MISFUELING.—

"(i) IN GENERAL.—Any person who violates subsection (e) shall be subject to a civil penalty of not more than $2,500.

"(ii) SEPARATE OFFENSES.—Any such violation shall constitute a separate offense with respect to—

"(I) each motor vehicle, for purposes of paragraph (1)(A) of such subsection;

"(II) each dispensing equipment, for purposes of paragraph (2)(A) of such subsection; and

"(III) each part or component, for purposes of paragraph (1)(B) or (2)(B) of such subsection.

"(2) CIVIL ACTIONS; ADMINISTRATIVE ASSESSMENT OF CERTAIN PENALTIES.—The provisions of subsections (b) and (c) of section 205 shall apply

with respect to a violation of subsection (b), (c), (d), or (e) of this section to the same extent and in the same manner as such provisions apply with respect to a violation of section 203(a)(3).

"(h) CONSULTATION.—

"(1) IN GENERAL.—In promulgating regulations to carry out this section, the Administrator shall consult with persons to be regulated under this section.

"(2) CERTAIN DESIGN REQUIREMENTS.—In promulgating regulations to carry out subsection (c)(2), the Administrator shall consult with the Secretary of Transportation in addition to the persons described in paragraph (1).

"(i) RULE OF CONSTRUCTION.—Nothing in this section shall be construed to relieve a person regulated under this section of any obligation to comply with requirements imposed by provisions of Federal law other than this section, except to the extent that such requirements are in conflict with this section.".

(b) DEFINITIONS.—Section 216 of the Clean Air Act (42 U.S.C. 7550) is amended—

(1) in paragraph (1), by striking "and 208" and inserting "208, and 220"; and

(2) by adding at the end the following:

"(12) RESEARCH OCTANE NUMBER.—The term 'research octane number' has the meaning given such term in section 201 of the Petroleum Marketing Practices Act.".

(c) REGULATIONS.—

(1) PROMULGATION.—The Administrator of the Environmental Protection Agency shall—

(A) not later than 18 months after the date of enactment of this Act, propose regulations to carry out the amendments made by this section; and

(B) not later than 36 months after such date of enactment, finalize regulations to carry out the amendments made by this section.

(2) FAILURE TO PROMULGATE.—Beginning on the deadline in paragraph (1)(B) for finalizing regulations pursuant to such paragraph, until the Administrator finalizes such regulations, the Administrator is deemed—

(A) to have determined under section 220(c)(2) of the Clean Air Act, as added by subsection (a) of this section, that each manufacturer of a motor vehicle subject to such section 220(c)(2) shall incorporate a restrictor assembly into the vehicle's fuel filler tube so as to

accept only a filling nozzle described in subparagraph (B); and

(B) to have determined under section 220(d) of such Act that the diameter of each filling nozzle used by a gasoline retailer for dispensing gasoline with a research octane number of 95 or higher into a motor vehicle subject to such section 220(c) shall not exceed 0.77 inches.

SEC. 102. OCTANE DISCLOSURE.

(a) HIGH EFFICIENCY FUELS.—Title II of the Petroleum Marketing Practices Act (15 U.S.C. 2821 et seq.) is amended by adding at the end the following:

"SEC. 206. HIGH EFFICIENCY FUEL AND VEHICLE MARKETING REQUIREMENTS.

"(a) RULE.—The Federal Trade Commission shall, by rule, and in consultation with persons to be regulated under this section, consumer advocates, and other stakeholders, as appropriate—

"(1) prescribe or revise requirements under this title relating to the certification, display, and representation of the automotive fuel rating of an automotive fuel as necessary to carry out—

"(A) the requirement under subsection (b); and

"(B) any determination made under subsection (c);

"(2) make the determination required under subsection (c); and

"(3) prescribe requirements under subsection (d).

"(b) REQUIREMENT.—The Federal Trade Commission shall require that, for purposes of this title, effective January 1, 2023, the automotive fuel rating of an automotive fuel with a research octane number of 95 or higher be determined only by the research octane number of such automotive fuel.

"(c) DETERMINATION.—The Federal Trade Commission shall determine whether, for purposes of this title, effective January 1, 2023, the automotive fuel rating of an automotive fuel with a research octane number that is lower than 95 should be determined only by the research octane number of such automotive fuel.

"(d) LABELING.—

"(1) IN GENERAL.—The Federal Trade Commission shall prescribe requirements—

"(A) as the Federal Trade Commission determines necessary with respect to a display at the point of sale to ultimate purchasers of auto-

motive fuel and a display on a motor vehicle to—

"(i) inform such ultimate purchaser of such automotive fuel and any purchaser or user of such motor vehicle, that a model year 2023 or later motor vehicle is only warrantied to use automotive fuel with a research octane number of 95 or higher; and

"(ii) provide a warning to such ultimate purchaser of such automotive fuel and any such purchaser or user of such motor vehicle, that the use of automotive fuel with a research octane number that is lower than 95 in a model year 2023 or later motor vehicle will result in reduced fuel economy, increased exhaust emissions, and possible engine damage; and

"(B) that are applicable to—

"(i) a manufacturer of a new motor vehicle (or an entity making a representation in connection with the sale of such motor vehicle) with respect to a display on such motor vehicle; and

"(ii) an automotive fuel retailer, with respect to a display at the point of sale to an ultimate purchaser of automotive fuel.

"(2) CONSIDERATIONS.—In prescribing requirements under paragraph (1), the Federal Trade Commission shall ensure that such requirements are designed to be—

"(A) understandable to—

"(i) the ultimate purchaser of automotive fuel; and

"(ii) any purchaser or user of a model year 2023 or later motor vehicle; and

"(B) cost-effective for automotive fuel retailers.

"(e) DEADLINES.—The Federal Trade Commission shall—

"(1) not later than June 1, 2020, issue a proposed rule under subsection (a); and

"(2) not later than January 1, 2022, issue a final rule under subsection (a).".

(b) ENFORCEMENT.—Section 203(e) of the Petroleum Marketing Practices Act (15 U.S.C. 2823(e)) is amended—

(1) by striking "or a rule prescribed" and inserting "a rule prescribed"; and

(2) by striking "of such section." and inserting "of section 202, or a rule prescribed under section 206.".

(c) TABLE OF CONTENTS AMENDMENT.—The table of contents for the Petroleum Marketing Practices Act (15 U.S.C. 2801 et seq.) is amended by inserting after the item relating to section 205 the following:

"Sec. 206. High efficiency fuel and vehicle marketing requirements.".

SEC. 103. 98 RON CERTIFICATION TEST FUEL.

Not later than January 1, 2025, the Administrator of the Environmental Protection Agency shall take such actions as are necessary to allow the use of a certification test fuel with a research octane number of 98 for purposes of—

(1) testing and certification under section 206(a) of the Clean Air Act (42 U.S.C. 7525(a)) of motor vehicles described in section 220(a) of the Clean Air Act (as added by section 101(a) of this Act); and

(2) testing and calculation procedures under section 32904(c) of title 49, United States Code, with respect to such motor vehicles.

SEC. 104. OCTANE SENSITIVITY STUDY.

(a) STUDY.—

(1) IN GENERAL.—The Administrator shall seek to enter into appropriate arrangements with the Academy to—

(A) conduct a comprehensive study of the octane sensitivity of automotive fuel with a research octane number of 95 or higher; and

(B) submit reports described in subsection (b).

(2) CONTENTS.—In conducting the study under paragraph (1), the Academy shall examine—

(A) the octane sensitivity of automotive fuel introduced into commerce for use in light-duty motor vehicles as of the date of enactment of this section;

(B) the economic and technological feasibility and impacts of adjusting the octane sensitivity of automotive fuel with a research octane number of 95 or higher to increase automobile and fuel efficiency performance;

(C) environmental and public health outcomes from increasing the octane sensitivity of automotive fuel with a research octane number of 95 or higher; and

(D) the acceptability of the commercial marketplace, including refiners, automotive fuel

retailers, manufacturers, and ultimate users, of increasing the octane sensitivity of automotive fuel with a research octane number of 95 or higher.

(3) INFORMATION.—The Administrator shall provide the Academy, at its request, any information which the Academy determines necessary to conduct the study under paragraph (1).

(b) REPORTS.—

(1) INTERIM REPORTS.—Not later than July 1, 2019, and every 6 months thereafter until a final report is submitted under paragraph (2), the Academy shall submit to Congress and the Administrator a report on the progress of the study conducted under subsection (a).

(2) FINAL REPORT.—Not later than December 31, 2021, the Academy shall submit to Congress and the Administrator a final report on the study conducted under subsection (a).

(c) DEFINITIONS.—In this section:

(1) ACADEMY.—The term "Academy" means the National Academy of Sciences, or if the National Academy of Sciences declines to enter into an arrangement pursuant to subsection (a), another appropriate entity.

(2) ADMINISTRATOR.—The term "Administrator" means the Administrator of the Environmental Protection Agency.

(3) OCTANE SENSITIVITY.—The term "octane sensitivity" means, with respect to automotive fuel used in an automotive spark-ignition engine, the difference between the research octane number and the motor octane number for such automotive fuel.

(4) RESEARCH OCTANE NUMBER AND MOTOR OCTANE NUMBER.—The terms "research octane number" and "motor octane number" have the meaning given such terms in section 201 of the Petroleum Marketing Practices Act (15 U.S.C. 2821).

SEC. 105. ADVERTISEMENT OF PRICE OF 95 RON AUTOMOTIVE FUEL.

(a) IN GENERAL.—It shall be unlawful for any person to sell or offer for sale, at retail, automotive fuel with a research octane number of 95 unless such person displays, in a manner specified in the rules promulgated under subsection (b), the total price per gallon of such fuel on any sign on which such person displays the price of the most-sold grade of automotive fuel of such person.

(b) RULEMAKING.—

(1) IN GENERAL.—Not later than 6 months after the date of the enactment of this Act, the Fed-

eral Trade Commission shall promulgate, in accordance with section 553 of title 5, United States Code, any rules necessary for the implementation and enforcement of this section.

(2) CONTENTS.—Such rules—

(A) shall define "retail" and "most-sold" for the purposes of this section;

(B) shall specify the manner in which the price of automotive fuel with a research octane number of 95 must be displayed in order to comply with subsection (a); and

(C) shall be consistent with the requirements for declaring unfair acts or practices in section 5(n) of the Federal Trade Commission Act (15 U.S.C. 45(n)).

(c) ENFORCEMENT.—A violation of subsection (a) shall be treated as a violation of a rule defining an unfair or deceptive act or practice prescribed under section 18(a)(1)(B) of the Federal Trade Commission Act (15 U.S.C. 57a(a)(1)(B)). The Federal Trade Commission shall enforce this section in the same manner, by the same means, and with the same jurisdiction, powers, and duties as though all applicable terms and provisions of the Federal Trade Commission Act (15 U.S.C. 41 et seq.) were incorporated into and made part of this section.

(d) SUNSET.—Effective January 1, 2029, this section is repealed.

TITLE II—RENEWABLE FUELS

Subtitle A—Renewable Fuel Program

SEC. 201. UPDATES AND REVISIONS TO REGULATIONS.

(a) REGULATIONS.—

(1) ADDITION OF CONVENTIONAL BIOFUEL.—Clause (i) of section 211(o)(2)(A) of the Clean Air Act (42 U.S.C. 7545(o)(2)(A)) is amended to read as follows:

"(i) IN GENERAL.—The Administrator shall by regulation require—

"(I) transportation fuel sold or introduced into commerce in the United States (except in noncontiguous States or territories), on an annual average basis, contains at least the applicable volume of renewable fuel, advanced biofuel, cellulosic biofuel, conventional biofuel, and biomass-based diesel, determined in accordance with subparagraph (B); and

"(II) renewable fuel produced from facilities that commenced con-

struction after December 19, 2007 (the date of enactment of the Energy Independence and Security Act of 2007) achieves at least a 20-percent reduction in lifecycle greenhouse gas emissions compared to baseline lifecycle greenhouse gas emissions.".

(2) CONFORMING AMENDMENTS.—

(A) Section 211(o)(2)(A) of the Clean Air Act (42 U.S.C. 7545(o)(2)(A)) is amended by striking clause (iv).

(B) Subparagraph (A) of section 211(o)(4) of the Clean Air Act (42 U.S.C. 7545(o)(4)(A)) is amended by striking "the last sentence of".

(C) Subparagraph (E) of section 211(o)(4) of the Clean Air Act (42 U.S.C. 7545(o)(4)(E)) is amended by striking "the last sentence of".

(b) APPLICABLE VOLUME OF CONVENTIONAL BIOFUEL.—Section 211(o)(2)(B)(i) of the Clean Air Act (42 U.S.C. 7545(o)(2)(B)(i)) is amended to by adding at the end the following:

"(V) CONVENTIONAL BIOFUEL.—

"(aa) IN GENERAL.—For the purpose of subparagraph (A), of the volume of renewable fuel

required under subclause (I), the applicable volume of conventional biofuel for the calendar years 2020 through 2022 shall be determined in accordance with the following table:

"Calendar year:	Applicable volume of conventional biofuel (in billions of gallons):
2020	15
2021	15
2022	15

"(bb) APPLICABILITY.—This subclause shall cease to apply on January 1, 2023.".

(c) OTHER CALENDAR YEARS.—

(1) IN GENERAL.—Section 211(o)(2)(B) of the Clean Air Act (42 U.S.C. 7545(o)(2)(B)) is amended by striking clauses (ii) through (v) and inserting the following:

"(ii) SUBSEQUENT CALENDAR YEARS.—For the purposes of subparagraph (A), the applicable volumes of advanced biofuel, cellulosic biofuel, and biomass-based diesel for each of calendar years 2023 through 2032 shall be—

"(I) determined by the Administrator not later than March 1 of such calendar year; and

"(II) subject to adjustment pursuant to the mid-year review under clause (iv)(II), equal to the actual volume of advanced biofuel, cellulosic biofuel, or biomass-based diesel, respectively, produced during the preceding calendar year, as determined under clause (iv)(I).

"(iii) SPECIAL RULE FOR SUBSEQUENT CALENDAR YEARS FOR BIOMASS-BASED DIESEL.—The applicable volume of biomass-based diesel for each of calendar years 2020 through 2022 shall be determined in accordance with this subparagraph, as in effect on the day before the date of enactment of the 21st Century Transportation Fuels Act.

"(iv) DETERMINATION OF ACTUAL PRODUCTION.—

"(I) IN GENERAL.—Not later than February 28 of a calendar year described in clause (ii), the Adminis-

trator shall, based on information from the Moderated Transaction System, determine—

"(aa) the actual volume produced during the preceding calendar year of advanced biofuel; and

"(bb) of such actual volume, the actual volume of each of cellulosic biofuel, biomass-based diesel, and other advanced biofuel.

"(II) MID-YEAR REVIEW.—Not later than September 1 of each calendar year described in clause (ii), the Administrator shall adjust the applicable volume requirement under clause (ii) for the calendar year for advanced biofuel, cellulosic biofuel, or biomass-based diesel to reflect any increase in production during that calendar year, based on information from the Moderated Transaction System.".

(2) CONFORMING DEFINITION.—Section 211(o)(1) of the Clean Air Act (42 U.S.C. 7545(o)(1)) is amended—

(A) by redesignating subparagraphs (I) through (L) as subparagraphs (J) through (M), respectively; and

(B) by inserting, after subparagraph (H), the following:

"(I) MODERATED TRANSACTION SYSTEM.—The term 'Moderated Transaction System' means—

"(i) the EPA Moderated Transaction System as defined in section 80.1401 of title 40, Code of Federal Regulations (or successor regulations); or

"(ii) any successor system.".

(d) DEFINITION OF RENEWABLE BIOMASS.—Subparagraph (J) of section 211(o)(1) of the Clean Air Act (42 U.S.C. 7545(o)(1)), as redesignated by subsection (c)(2) of this section, is amended—

(1) in clause (i), by striking "at any time prior to the enactment of this sentence"; and

(2) by amending clause (ii) to read as follows:

"(ii) Trees and tree residue from land, including land belonging to an Indian tribe or an Indian individual that is held in trust by the United States or subject to a

restriction against alienation imposed by the United States."; and

(3) in clause (iv), by striking "non-federal".

SEC. 202. WAIVERS.

Subject to section 203(c) of this Act, section 211(o)(7) of the Clean Air Act (42 U.S.C. 7545(o)(7)) is amended—

(1) in subparagraph (A), by striking "the national quantity of renewable fuel" and inserting "the national quantity of advanced biofuel, cellulosic biofuel, or biomass-based diesel"; and

(2) by striking subparagraphs (D), (E), and (F).

SEC. 203. APPLICABILITY.

(a) APPLICABLE CALENDAR YEARS.—Except as provided in subsections (b) through (e), the amendments made by this subtitle apply with respect to calendar year 2020 and subsequent calendar years. Section 211(o) of the Clean Air (42 U.S.C. 7545(o)), as in effect on the day before the date of enactment of this Act, shall continue to apply with respect to calendar years before calendar year 2020.

(b) REGULATIONS.—The Administrator of the Environmental Protection Agency shall—

(1) not later than 180 days after the date of enactment of this Act, shall promulgate the regulations required by paragraph (2)(A)(i) of section 211(o) of the Clean Air Act (42 U.S.C. 7545(o)), as amended by section 201 of this Act, respecting the requirements under such section 211(o) applicable for calendar years 2020, 2021, and 2022; and

(2) not later than January 1, 2021, shall promulgate the regulations required by such paragraph (2)(A)(i) respecting the requirements under such section 211(o) applicable for calendar year 2023 and subsequent calendar years.

(c) WAIVER AUTHORITY.—The amendments made by section 202 of this Act to section 211(o)(7) of the Clean Air Act (42 U.S.C. 7545(o)(7)) shall take effect on January 1, 2023.

(d) DEFINITION.—The amendment made by section 201(d) of this Act to subparagraph (J) of section 211(o)(1) of the Clean Air Act (42 U.S.C. 7545(o)(1)), as redesignated by section 201(c)(2) of this Act, shall take effect on the date of enactment of this Act.

(e) REPEALS.—Effective January 1, 2033, subsections (o), (q), and (v) of section 211 of the Clean Air Act (42 U.S.C. 7545) are repealed.

SEC. 204. STATE ETHANOL LAWS.

(a) IN GENERAL.—No State or political subdivision of a State may prohibit or require any particular blend, concentration, or percentage of ethanol in any automotive fuel.

(b) EXCEPTION.—This section does not restrict the authority of a State or political subdivision of a State to continue to enforce any such prohibition or requirement in effect prior to the date of enactment of this Act.

Subtitle B—Ethanol Waivers

SEC. 211. REID VAPOR PRESSURE.

(a) REID VAPOR PRESSURE LIMITATION.—Section 211(h) of the Clean Air Act (42 U.S.C. 7545(h)) is amended—

(1) in paragraph (4)—

(A) in the matter preceding subparagraph (A), by inserting "or more" after "10 percent"; and

(B) in subparagraph (C), by striking "additional alcohol or"; and

(2) in paragraph (5)(A), by inserting "or more" after "10 percent".

(b) EXISTING WAIVERS.—Section 211(f)(4) of the Clean Air Act (42 U.S.C. 7545(f)(4)) is amended—

(1) by striking "The Administrator, upon" and inserting "(A) The Administrator, upon"; and

(2) by adding at the end the following:

"(B) A fuel or fuel additive with respect to which a waiver has been granted in accordance with subparagraph (A) prior to January 1, 2017, and that meets all of the conditions of that waiver, other than the waiver's limits for Reid vapor pressure, may be introduced into commerce if the fuel or fuel additive meets all other applicable Reid vapor pressure requirements.".

SEC. 212. E20.

Section 211(f)(4) of the Clean Air Act (42 U.S.C. 7545(f)(4)), as amended by section 211(b) of this Act, is further amended by adding at the end the following:

"(C) The Administrator shall grant a waiver in accordance with subparagraph (A) with respect to a fuel with a concentration of ethanol that is—

"(i) not more than 20 percent; and

"(ii) more than 15 percent.".

Subtitle C—Fueling Infrastructure

SEC. 221. PERFORMANCE STANDARDS FOR NEW E20 INFRASTRUCTURE.

Section 9003 of the Solid Waste Disposal Act (42 U.S.C. 6991b) is amended by adding at the end the following:

"(k) E20 RETAIL DISPENSER SYSTEMS.—

"(1) IN GENERAL.—The Administrator shall, not later than 1 year prior to the effective date specified in paragraph (3), issue or revise, as necessary, performance standards for dispenser systems described in paragraph (2) to require that such dispenser systems be compatible with automotive fuel with a concentration of up to and including 20 percent ethanol by volume.

"(2) DISPENSER SYSTEMS.—This subsection applies with respect to dispenser systems that are—

"(A) on or after the effective date specified in paragraph (3), brought into use to dispense at retail automotive fuel from an underground storage tank; and

"(B) subject to regulation under sections 1910.106 and 1926.152 of title 29, Code of Federal Regulations (as in effect on the date of enactment of this subsection).

"(3) EFFECTIVE DATE.—Standards issued or revised pursuant to paragraph (1) shall take effect on the later of—

"(A) January 1, 2023; and

"(B) the date on which the Administrator first grants a waiver pursuant to section 211(f)(4)(C) of the Clean Air Act.

"(4) DEFINITIONS.—In this subsection:

"(A) AUTOMOTIVE FUEL.—The term 'automotive fuel' has the meaning given such term in section 201(6) of the Petroleum Marketing Practices Act (15 U.S.C. 2821(6)).

"(B) COMPATIBLE; DISPENSER SYSTEM.—The terms 'compatible' and 'dispenser system' have the meaning given such terms in section 280.12 of title 40, Code of Federal Regulations (as in effect on the date of enactment of this subsection).".

TITLE III—VEHICLE FUEL EFFICIENCY

SEC. 301. CREDITS FOR EXCEEDING AVERAGE FUEL ECONOMY STANDARDS.

Section 32903 of title 49, United States Code, is amended—

(1) in subsection (a)—

(A) by redesignating paragraphs (1) and (2) as subparagraphs (A) and (B), respectively, and moving their margins 2 ems to the right;

(B) in the matter preceding subparagraph (A), as redesignated, by striking "When" and inserting the following:

"(1) IN GENERAL.—When";

(C) in paragraph (1)(B), as redesignated, by striking "paragraph (1)" and inserting "subparagraph (A),"; and

(D) by adding at the end the following:

"(2) MODEL YEARS 2016 THROUGH 2021.—Notwithstanding paragraph (1)(B), beginning with model year 2016 and ending with model year 2021, a manufacturer may apply any credits earned after model year 2009 pursuant to paragraph (1), which have not been applied pursuant to paragraph (1)(A), to any model year beginning after the model year for which the credits are earned.";

(2) in subsection (b)(2)(B), by striking "subsection (a)(1) of this section" and inserting "subsection (a)(1)(A)"; and

(3) in subsection (g)—

(A) in paragraph (3)—

(i) in subparagraph (A), by striking "2011" and inserting "2010";

(ii) in subparagraph (B), by striking "2017, 1.5 miles per gallon; and" and inserting "2016, 1.5 miles per gallon;"; and

(iii) by striking subparagraph (C) and inserting the following:

"(C) for model years 2017 and 2018, 2.0 miles per gallon;

"(D) for model years 2019 through 2021, 4.0 miles per gallon; and

"(E) for model year 2022 and subsequent model years, 6.0 miles per gallon."; and

(B) in paragraph (5), by striking "2010" and inserting "2009".

SEC. 302. CALCULATION OF AVERAGE FUEL ECONOMY.

Section 32904(a) of title 49, United States Code, is amended by adding at the end the following:

"(3) For model years 2012 through 2025, if requested by a manufacturer, the average fuel economy calculated by the Administrator for the manufacturer's passenger and nonpassenger automobiles shall include off-cycle technology fuel economy credits equivalent to the credits calculated by the Administrator for the off-cycle technology under the Administrator's vehicle emissions standards for the same or closest model year, provided that the technology has a direct impact upon improving fuel economy performance.".

SEC. 303. RULE OF CONSTRUCTION.

Nothing in this title or the amendments made by this title may be construed to direct or grant new authority to the Secretary of Transportation to modify a maximum

feasible average fuel economy standard established under section 32902 of title 49, United States Code. The Secretary's authority to establish and amend a maximum feasible average fuel economy standard as provided in such section is unaffected by this title and the amendments made by this title.

SECTION-BY-SECTION SUMMARY --
21ST CENTURY TRANSPORTATION FUELS ACT DISCUSSION DRAFT

21ST CENTURY TRANSPORTATION FUELS ACT DISCUSSION DRAFT SECTION-BY-SECTION

Section 1. Short Title

This section provides that the Act may be cited as the "21st Century Transportation Fuels Act."

Title I – High Octane Fuel

Section 101. High Efficiency Vehicles

Section 101(a) amends Part A of Title II of the Clean Air Act (CAA) by adding a new "Section 220. Octane Specification" into it.

CAA section 220(a) specifies that the requirements of new CAA section 220 only apply to light-duty vehicles and light-duty trucks, created for model year 2023 or later, that use gasoline for propulsion.

Proposed CAA section 220(b) requires manufactures to warranty that vehicles created for model years 2023 and later are designed: (1) to operate with gasoline containing up to 20 percent ethanol and (2) to meet other vehicle design requirements under proposed CAA section 220(c).

Proposed CAA section 220(c) requires manufacturers of motor vehicles to design motor vehicles to operate using gasoline that has a research octane number (RON) of 95 or higher and to improve fuel economy connected to the use of the 95 RON or higher RON level gasoline. In addition, motor vehicle manufacturers must incorporate devices or elements of design into model year 2023 and later motor vehicles that prevent the use of gasoline with a RON level lower than 95 in these vehicles. The devises and other elements of design used for these purposes, under proposed CAA section 220(c), are ones that the Environmental Protection Agency (EPA) determines are necessary to prohibit misfuelling, but also technically and economically feasible.

Proposed CAA section 220(d) requires gasoline retailers to incorporate into their gasoline dispensing equipment those devices or elements of design identified by the EPA Administrator as: (1) necessary for compatibility with the motor vehicle design requirements under CAA section 220(c) and (2) to be technically and economically feasible.

Proposed CAA section 220(e) prohibits anyone from removing or otherwise making inoperative any misfuelling prevention device or element of design required pursuant to CAA section 220(c) and CAA section 220(d). This new section also prohibits a person from manufacturing or selling any part or component to bypass, defeat, or render inoperative any misfuelling device or element of design required pursuant to CAA section 220(c) and CAA section 220(d). Under this subsection of the Discussion Draft, a manufacturer of a motor vehicle or a gasoline retailer that is in compliance with the design and misfuelling prevention requirements of CAA section 220 and the Petroleum Marketing Practices Act, is not liable for damages to or caused by a motor vehicle that result from the unlawful introduction of gasoline with a RON of lower than 95 into a model year 2023 or later light duty motor vehicle or truck.

SECTION-BY-SECTION SUMMARY --
21ST CENTURY TRANSPORTATION FUELS ACT DISCUSSION DRAFT

Proposed CAA section 220(f) pre-empts state and local laws and regulations related to (1) the design of motor vehicles that operate using gasoline with a certain octane content and (2) the corresponding design of equipment for dispensing such gasoline into such motor vehicles. A State or government, though, may adopt or enforce a law or regulations addressing these matters if it is similar to the Federal law. Proposed CAA Section 220(f) also permits a State or local government to investigate or enforce, remedy, or penalize persons under laws or regulations permitted by proposed CAA Section 220(f).

Proposed CAA section 220(g) establishes civil penalty amounts for violations of requirements contained in CAA sections 220(b), 220(c), 220(d), and 220(e).

Proposed CAA section 220(h) requires that the EPA Administrator shall consult with persons to be regulated under this section and with the Secretary of Transportation when promulgating regulations to carry out CAA section 220.

Proposed CAA section 220(i) specifies that nothing in CAA Section 220 shall be construed to relieve a person regulated under this section of any obligation to comply with requirements imposed by provisions of Federal law other than this section, except to the extent that such requirements conflict with this section.

Section 101(b) provides a conforming amendment that establishes, as the definition for the term 'research octane number' in CAA section 216, the same definition used for that term in section 201(2) of the Petroleum Marketing Practices Act.

Section 101(c) requires the EPA Administrator to propose regulations to carry out section 101 within 18 months after the date of enactment of this Act, and to finalize such regulations not later than 36 months after the date of enactment of this Act. If the EPA Administrator fails to finalize regulations by this deadline – and until the Administrator finalizes such regulations, the Administrator is required to have (1) each model year 2023 or later motor vehicle incorporate a restrictor assembly into the vehicle's fuel filler tube that only accepts a filling nozzle with a diameter not exceeding 0.77 inches and (2) filing nozzles for 95 RON or higher gasoline used by gasoline retailers shall not exceed 0.77 inches.

Section 102. Octane Disclosure

Section 102(a) amends Title II of the Petroleum Marketing Practices Act (PMPA) by adding a new section: "Section 206. High Efficiency Fuel and Vehicle Marketing Requirements."

Proposed PMPA section 206(a) directs the Federal Trade Commission (FTC), as necessary to carry out this section, to prescribe or revise requirements under PMPA Title II relating to the certification, display, and representation of the automotive fuel rating of an automotive fuel.

Proposed PMPA section 206(b) directs the FTC to require, beginning on January 1, 2023, the automotive fuel rating of an automotive fuel with a RON of 95 or higher to be determined only by the research octane number of such automotive fuel.

Proposed PMPA section 206(c) requires the FTC to determine whether, beginning on January 1, 2023, the automotive fuel rating of an automotive fuel with a RON that is lower than 95 should be determined by the research octane number of such automotive fuel.

Proposed PMPA section 206(d) directs the FTC to prescribe requirements it determines to be necessary with respect to warning consumers, both through on-vehicle labels and retail point-of-sale displays for automotive fuel, that model year 2023 or later motor vehicles are only warrantied to use automotive fuel with a RON of 95 or higher and using automotive fuel with a RON that is lower than 95 in a model year 2023 or later motor vehicle will result in reduced fuel economy, increased exhaust emissions, and possible engine damage. This proposed subsection requires the FTC rules be designed to be understandable to automotive fuel purchasers and understandable to owners and users of model year 2023 or later motor vehicles. The FTC rules must also be cost-effective for automotive fuel retailers.

Proposed PMPA section 206(e) directs the FTC to, not later than June 1, 2020, issue a proposed rule under PMPA section 206(a) and to, not later than January 1, 2022, issue a final rule under PMPA Section 206(a).

Section 103. 98 RON Certification Test Fuel

Section 103 requires the EPA Administrator to, not later than January 1, 2025, take such action as necessary to allow the use of a certification test fuel with a RON of 98 for purposes of testing and certification under section 206(a) of the CAA and for purposes of testing and calculation procedures under section 32904(c) of title 49, United States Code.

Section 104. Octane Sensitivity Study

Section 104 directs the EPA Administrator to enter into an arrangement with the National Academy of Sciences to conduct a comprehensive study of the octane sensitivity of automotive fuel with a research octane number of 95 or higher and lists certain issue areas and topics to be examined by the study.

Section 105. Advertisement of Price of 95 RON Automotive Fuel

Section 105 specifies that it shall be unlawful for any person to sell or offer for sale, at retail, automotive fuel with a research octane number of 95 unless such person displays the total price per gallon of such fuel on any sign on which such person displays the price of the most-sold grade of fuel.

Title II – Renewable Fuels

Subtitle A – Renewable Fuel Program

Section 201. Updates and Revisions to Regulations

Under CAA section 211(o)(2)(B), the amount of conventional biofuel – corn-starch-based ethanol – is implicit in the statutory tables. Section 201(a) and section 201(b) make explicit that production of 15 billion gallons of conventional biofuel is required in each calendar

year through the end of calendar year 2022, but that this mandate ceases to apply on January 1, 2023.

Section 201(c) requires the EPA Administrator, not later than March 1 of each calendar year, to establish applicable volumes of advanced biofuel, cellulosic biofuel, and biomass-based diesel for calendar years 2023 through 2032 that are equal to the actual volume of advanced biofuel, cellulosic biofuel, or biomass-based diesel produced during the preceding calendar year. The proposed subsection requires the actual volumes be based on information from the EPA's Moderated Transaction System and that these volumes may be subject to adjustment pursuant to a mid-year review to reflect any increase in production during that calendar year. Additionally, the proposed subsection establishes the applicable volume of biomass-based diesel for each of calendar years 2020 through 2022 using this same process.

Section 201(d) amends the definition of 'renewable biomass' in section 211(o)(1) of the CAA to include trees, tree residue, slash, and pre-commercial thinnings located on federal lands.

Section 202. Waivers

Section 202 maintains the EPA Administrator's general waiver authority to reduce the national quantity of advanced biofuel, cellulosic, biofuel, or biomass-based diesel under section 211(o)(7)(A) of the CAA. Section 202 strikes paragraphs '(D) Cellulosic biofuel', '(E) Biomass-based diesel', and '(F) Modification of Applicable Volumes' of section 211(o)(7) of the CAA. These amendments take effect on January 1, 2023, as specified by section 203(c) of this Act.

Section 203. Applicability

Section 203(a) specifies that the amendments made by Subtitle A, except as provided in subsections 203(b) through 203(e), apply with respect to calendar year 2020 and subsequent calendar years. Section 211(o) of the CAA, as in effect on the day before the date of enactment of this Act, shall continue to apply with respect to calendar years before calendar year 2020.

Section 203(b) directs the EPA Administrator to, not later than 180 days after the date of enactment of this Act, to issue the regulations respecting the changes made to the conventional biofuel requirements applicable for calendar years 2020, 2021, and 2022. This section also directs the EPA Administrator to, not later than January 1, 2021, promulgate the regulations respecting the new requirements for advanced biofuel, cellulosic, biofuel, or biomass-based diesel that are applicable for calendar year 2023 and subsequent calendar years.

Section 203(c) specifies that the amendments made by section 202 of this Act shall take effect on January 1, 2023.

Section 203(d) specifies that the amendment made by section 201(d) of this Act, related to the definition of 'renewable biomass', shall take effect on the date of enactment of this Act.

Section 203(e) repeals sections (o), (q), and (v) of section 211 of the CAA effective January 1, 2033.

Section 204. State Ethanol Laws

Section 204 specifies that no state or local government may prohibit or require any particular blend, concentration, or percentage of ethanol in gasoline after date of enactment of this Act. This section does not restrict the authority of a State or local government to continue to enforce any such prohibition or requirement in effect prior to the date of enactment of this Act.

Subtitle B – Ethanol Waivers

Section 211. Reid Vapor Pressure

Section 211 expands the one-pound psi ethanol waiver to apply to all gasoline containing 10 percent or more ethanol, permitting E-15 to receive a statutory waiver

Section 212. E20

Section 212 amends section 211(f)(4) of the CAA to direct the EPA Administrator to grant a waiver with respect to fuels containing an ethanol concentration that is between 15 and 20 percent. This section is not intended to relieve EPA of making any of the findings required under CAA section 211(f)(4) for the waiver. Rather, it removes regulatory uncertainty that the EPA Administrator could avoid granting a waiver even though the statutory conditions have been met.

Subtitle C – Fueling Infrastructure

Section 221. Performance Standards for New E20 Infrastructure

Section 221 amends Subtitle I of the Solid Waste Disposal Act to require newly installed retail gasoline dispenser systems to be compatible with E-20 fuels beginning on January 1, 2023. This requirement does not require pro-active replacement of existing dispenser or underground storage tank systems.

Title III – Vehicle Fuel Efficiency

Section 301. Credits for Exceeding Average Fuel Economy Standards

Section 301 amends section 32903 of title 49, United States Code, to allow any unapplied credits earned after model year 2009 to be applied to motor vehicle model years 2016 through 2021. Section 301 also expands the maximum allowable increase in any compliance category attributable to transferred credits.

Section 302. Calculation of Average Fuel Economy

Section 302 amends section 32904(a) of title 49, United States Code, to allow, if requested by a manufacturer, the average fuel economy calculated by the EPA Administrator to include off-cycle technology fuel economy credits equivalent to the credits calculated by the EPA Administrator for the off-cycle technology under the EPA Administrator's vehicle emissions standards for the same or closest model year.

Section 303. Rule of Construction

SECTION-BY-SECTION SUMMARY --
21ST CENTURY TRANSPORTATION FUELS ACT DISCUSSION DRAFT

Section 303 specifies that nothing in title III or the amendments made by title III may be construed to direct or grant new authority to the Secretary of Transportation to modify a maximum feasible average fuel economy standard established under section 32902 of title 40, United States Code. Additionally, the Secretary's authority to establish and amend a maximum feasible average fuel economy standard is unaffected by this title and the amendments made by this title.

energy API

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December 11, 2018

The Honorable John Shimkus
Chairman
Subcommittee on Environment
2125 Rayburn House Office Building
Washington, DC 20515

The Honorable Paul Tonko
Ranking Member
Subcommittee on Environment
2322A Rayburn House Office Building
Washington, DC 20515

Re: The 21st Century Transportation Fuels Act

Dear Chairman Shimkus and Ranking Member Tonko:

The American Petroleum Institute (API) is the national trade association that represents all aspects of America's oil and natural gas industry. Our more than 625 corporate members - from fully integrated major oil and gas companies to independent companies - come from all segments of the industry. These companies are producers, refiners, suppliers, marketers, pipeline operators and marine transporters as well as service and supply companies that support all segments of the industry, and they provide most of our Nation's energy.

API appreciates your leadership and that of the members of this committee for the time and attention you and your staffs have taken to recognize the problems created by the Renewable Fuel Standard (RFS) and to examine potential remedies responsive to the concerns of market participants, especially the American consumer. API is committed to continuing to work with you and any other policymakers who seek to constructively address the problems associated with the RFS. However, we cannot support the 21st Century Transportation Fuels Act discussion draft in its current form. The following letter outlines our major concerns with key provisions of the discussion draft that serve as the basis for our opposition at this time. Significant modifications of the draft will be necessary to effectively reform current law and address the fundamental problems at the core of the RFS.

The current draft proposes a sunset of the conventional portion of the RFS at the end of 2022, but the advanced biofuel mandate continues for another decade. Any comprehensive solution must include a sunset of the entire RFS program before any potential replacement mandate, such as a high-octane standard, is considered. In the absence of biofuel mandates, we believe that the prospect of a higher-

octane gasoline is an idea worthy of consideration that should weigh the overall potential costs and benefits to market participants throughout the value chain, including the driving public.

API continues to believe that the RFS should sunset in its entirety by the end of 2022. Mandates and subsidies distort the free market and ultimately increase costs to consumers. For more than a decade already, the RFS program has mandated the use of biofuels, and fuel suppliers have responded by building out the necessary infrastructure to blend ethanol and biodiesel into our nation's fuel supply. First generation biofuel technologies matured during this time period and no longer require the support of government mandates. Further, experience demonstrates that mandates have not been effective for technologies that require additional research and development to achieve the production of commercially available quantities.

API opposes legislation that would establish a 15 billion gallon per year mandate for corn ethanol. It is not feasible for our domestic gasoline market to consume 15 billion gallons of ethanol in 2019 due to limitations with the existing vehicle fleet. It would also be infeasible and prohibitively expensive to modify the thousands of retail stations that would require new E15 compatible storage and dispensing systems. With projected decreases in gasoline demand, even less ethanol can feasibly be consumed in future years. Until the RFS program is sunset, new legislation should not put additional pressure, like the 15 billion gallon corn ethanol mandate, onto an already complicated program. The current nested structure of the mandate provides compliance flexibility by allowing advanced biofuels to substitute for conventional biofuels in meeting the total renewable fuel requirement. This structure is critical to meeting the mandate until the RFS sunset date is reached.

There are serious vehicle and infrastructure compatibility issues associated with the use of E15 in the legacy fleet. Similarly, API does not support circumventing the "substantially-similar" waiver process under the Clean Air Act for fuels blended with 20 percent ethanol. There are significant misfuelling risks with ethanol blends above 10 percent. In addition, we are concerned that the combined impact of the draft legislative provisions may lead to a de facto mandate for ethanol blends up to 20 percent. Namely, directing EPA to approve a 98 RON certification fuel, combined with a NAS study on octane sensitivity, combined with a substantially similar waiver for E20, would ultimately limit consumer choice at the pump and may leave legacy vehicle owners with few, if any, compatible fuel choices by forcing the market to adopt high level ethanol blends.

We believe that the RFS program is outdated and broken, and we support bipartisan efforts in Congress to sunset the program. The key assumptions made in 2007 when the Energy Independence and Security Act (EISA) was enacted have since proven in conflict with commercial and technical realities. Congress expected 1) continued, significant growth in fuel demand, 2) increased reliance on imported petroleum, and 3) rapid development of next-generation advanced and cellulosic biofuel technologies. None of these three expectations came true, which is why the current RFS is incongruent with today's reality. As a result of technological advances by the domestic oil and natural gas industry, U.S. energy security has

meaningfully improved, and petroleum imports have declined. Ethanol and other biofuels have only marginally contributed to these goals. According to the Department of Energy's Energy Information Administration (EIA), the RFS "played only a small part in reducing projected net import dependence." [1]

We appreciate your leadership in seeking to address the problems presented by the RFS program and look forward to continuing to work to find legislative solutions that benefit all stakeholders, especially American motorists.

Sincerely,

Frank J. Macchiarola
Vice President, Downstream & Industry Operations
American Petroleum Institute

[1] Howard Gruenspecht, Deputy Administrator, Energy Information Administration Before the Committee on Environment and Public Works. February 24, 2016

Illinois Corn Growers Association
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December 3, 2018

The Honorable John Shimkus
2217 Rayburn House Office Building
Washington, DC 20515

Dear Mr. Shimkus:

The Illinois Corn Growers Association (ICGA) has reviewed the November 21, 2018 discussion draft of your legislative proposal with the working title of the 21st Century Transportation Fuels Act. We appreciate your leadership in conjunction with Mr. Bill Flores of Texas in beginning this important conversation among stakeholders. It is a promising start that has the potential to build a route for corn-based ethanol to enter the marketplace as a high-power, environmentally friendly, low-cost octane source for the country's hundreds of millions of motorists.

I have detailed our initial thoughts on the draft below. We look forward to having conversations with your office and the members of the House Energy and Commerce Committee and other stakeholders to further refine the next version of this draft legislative proposal. The purpose of the discussion draft is to spur discussion. We are ready to engage in a productive, forward-looking conversation to achieve that purpose.

Specifically, ICGA can enthusiastically support the following points within the draft as written:

- Reid Vapor Pressure parity for all blends above E10.
- The preemption of local and state level prohibition of ethanol blends above E10.
- The assurance of the Renewable Fuel Standard Renewable Volume Obligations be 15 billion gallons per year of corn ethanol for 2020, 2021, and 2022.

We thank you for including these items. We know you've heard from our membership on these specific points and it is meaningful to see them included in your draft.

We are pleased to see the following points included. To improve them as it relates to ICGA policy, we'd like to discuss:

- Upgrading the new fuel waiver for ethanol blends to the E25 level.
- Beginning with model year 2023, adapting the requirement for automakers to provide a warranty for all vehicles to use blends up to and including E25 as it would provide more market opportunities for corn farmer profitability through 2040.
- Although we're very pleased to see our messages regarding a higher-octane certification fuel have been heard, ICGA policy has always been to establish a 98 RON certification

fuel contingent on the E25-E30 blend of ethanol by year 2022, and that detail regarding the ethanol blend is not currently provided for in the draft.

Regarding the following points, we would like the opportunity to discuss with you how they might be further refined or included:

- The draft proposal indicates a sunset of the RFS requirement for conventional biofuels beyond 2022. ICGA policy does not support this provision at this time. We need some certainty beyond 2022 and need to better understand how we can achieve that certainty along with fair and open market access for biofuels.
- The proposal is overlooking the need to ensure that ethanol is properly credited with its true efficiency and carbon reduction benefits.
- The allowance of corn-starch ethanol to be considered an advanced biofuel based on it meeting existing performance standards is not addressed.

Our willingness and interest in discussing the draft proposal is not limited to the above-mentioned points, but we wanted to get you some initial feedback on this important, forward-thinking effort.

We understand that this issue involves a diverse and committed group of stakeholders, but we are positive that the 21st Century Transportation Fuels Act can achieve strong growth and prosperity while increasing efficiency and reducing emissions at the lowest-possible cost to motorists.

We are committed to be a part of the solution to the complex challenges this conversation brings.

Sincerely,

[redacted]

Ted Mottaz
Illinois Corn Growers Association President

BRIGGS & STRATTON
CORPORATION

December 11, 2018

The Honorable John Shimkus
Chairman
U.S. House Energy and Commerce
Subcommittee on the Environment
Washington, DC 20510

The Honorable Paul Tonko
Ranking Member
U.S. House Energy and Commerce
Subcommittee on the Environment
Washington, DC 20510

Dear Chairman Shimkus and Ranking Member Tonko,

Thank you for holding today's hearing on the 21st Century Transportation Fuels Act and for allowing Briggs & Stratton to offer its perspective on the draft legislation.

There has been much discussion regarding the Renewable Fuel Standard (RFS) over the last few years and Briggs & Stratton has always tried to be a constructive participant in these stakeholder discussions. I appreciate the leadership you have shown and your willingness to hear from so many stakeholders. While I commend the Committee's work on the 21st Century Transportation Fuels Act, I am concerned that it does not do enough to protect small engine consumers or provide market certainty for small engine manufacturers like Briggs & Stratton. I would like to briefly outline several concerns and respectfully ask that you keep them in mind as the discussion on transportation fuel policy continues.

As you may know, Briggs & Stratton is the world's largest producer of small air-cooled gasoline engines for outdoor power equipment and we are a leading designer, manufacturer and marketer of power generation, pressure washer, lawn and garden, turf care and job site products. We are proudly headquartered in Milwaukee, Wisconsin and have U.S. manufacturing sites in New York, Georgia, Alabama, Missouri, Kentucky, Wisconsin and Nebraska. If you have a garage, you probably have a Briggs & Stratton product in it right now. Out of our 5,300 employees worldwide, approximately 86% of them are in the United States. We take pride in producing over 85% of our products, and 72% of our sales, here at home.

Briggs & Stratton's long-standing commitment to the environment remains a key focus for our business. We continue to manufacture our products with recycled materials that are highly efficient and with reduced emissions. Since 1995, we have reduced our emissions by 75%, and after completing the phase-in of our new product offering, achieved an additional 35% reduction in those emissions in January 2014. In 2007, we signed a pledge with the Department of Energy to reduce our energy consumption by 25% over 10 years. I am pleased to report that we met this goal. These are just a few of the many examples that demonstrate our commitment to the environment.

With that in mind, the goals underpinning the enactment of the RFS were laudable However, not only has it become apparent that the goals are unlikely to ever be met, the RFS and E15 ethanol content have resulted in significant unintended consequences for consumers

One particular concern with the octane standards contemplated in the 21st Century Transportation Fuels Act is that the amount of ethanol in the fuel blend can vary significantly and exceed 10% in order to deliver the target octane rating In order to balance performance and emissions, our carburetors (installed in both new and legacy equipment) are calibrated to handle an ethanol content of 0-10% Extensive research has shown that the use of ethanol blends above 10% in small non-road engines can have harmful and costly consequences, and the EPA has confirmed these findings Ethanol's inherent properties cause problems with small non-road engines, including higher operating temperatures, material corrosion, clogged carburetors, and reduced engine life

Small engines and outdoor power equipment are not designed, warranted, or EPA-approved to operate on gasoline containing more than 10% ethanol This is why we fully support the development of advanced biofuels as a solution. Biofuels from other feedstock are "drop-in fuels" Drop in fuels, by definition, meet existing gasoline specifications and are ready to "drop-in" to infrastructure, minimizing compatibility issues We have conducted extensive testing with a drop-in isobutanol blended gasoline which demonstrated evidence that such fuels can provide the performance and operational criteria necessary, without demonstrating any negative effects We strongly support further research into these alternative fuels that are effective and do not damage our products before introducing a new mandate in the Clean Air Act, which may make matters worse

The Department of Energy's testing of E-15 in non-road engines found that small engines experienced a variety of difficulties with higher ethanol blends More than half of the engines tested behaved "poorly" or "erratically" according to the DOE's report, which caused the EPA to exclude small engines from the E-15 waiver. However, this exclusion has not led to decreased problems due to consumer misfuelling

At Briggs & Stratton, we have partnered with other small engine manufacturers and retailers across the country to educate consumers on proper fueling We created the "Look Before You Pump" campaign to assist consumers when purchasing new small engine products While we are happy to do our part to educate the public on the negative impact high blends of ethanol can have in our products, we do not believe we should be solely responsible for this effort It is going to take a more concerted effort with industry and government to fully educate the public on the risks of misfueling To that end, we have been working with other like-minded industries, including the boating and motorcycle industries, to support H R 5855, the Consumer Protection and Fuel Transparency Act introduced by Rep Austin Scott, which would increase consumer education on ethanol fuel blends

Any policy changes to the RFS must first protect American consumers I encourage the Committee to work together in the 116th Congress in a bipartisan way to pursue policies that promote research into the next generation of renewable fuels that are proven safe on all types of engines

Sincerely,

[redacted]

Todd J. Teske
Chief Executive Officer and President
Briggs & Stratton

National Farmers Union

UNITED TO GROW FAMILY AGRICULTURE

Statement of Roger Johnson On behalf of the National Farmers Union

Hearing Before the U.S. House of Representatives Committee on Energy and Commerce
Subcommittee on Environment

"Discussion Draft: The 21st Century Transportation Fuels Act"

December 11, 2018

The National Farmers Union (NFU) appreciates the opportunity to submit this statement, as part of the Subcommittee's hearing on "Discussion Draft: The 21st Century Transportation Fuels Act," to express its strong support for continued promotion of renewable fuels. NFU believes a robust and lasting national policy would continue to provide the numerous economic, environmental and national security benefits associated with increasing biofuel production and use. More could and should be done, particularly to move this country toward high octane fuels through use of higher blends of ethanol. High octane fuels provide numerous benefits to farmers, consumers and communities across the United States. Higher blends of ethanol, such as mid-level blends of E20-E40, are readily available and the most cost-effective means to reach this widely supported goal.

NFU has nearly 200,000 family farmer, rancher, and fishermen members nationwide and organized divisions in 33 states. We have supported family agriculture and rural communities since 1902. Family farms are key to a safe, secure and stable food system. Biofuel production represents a much-needed market for farmers, particularly at a time when rural America is facing a major financial crisis in the farm sector. Domestic utilization of crops for biofuel production helps stabilize and support prices, while promoting sustainable agriculture, reducing carbon emissions, improving air quality, and enhancing the nation's energy independence and security.

NFU has participated in administrative proceedings, supporting regulatory action addressing use of ethanol as a fuel additive for gasoline formulations to enhance octane levels. NFU was pleased when EPA recently requested comments on the benefits of high-octane fuels as part of its proposal on its light-duty vehicle rule to address greenhouse gas emissions (GHG) and fuel economy (CAFE) and is encouraged by President Trump's support for year-round use of E15 in directing EPA to revise its Reid Vapor Pressure regulations. While disappointed that EPA has yet to propose any specific regulatory actions that would remove obstacles to higher ethanol blends entering the market and that would move the country toward high-octane fuels, NFU believes there are several ways EPA could do so, providing significant benefits to the rural community and beyond.

Currently, the adoption of higher ethanol blends in our transportation fuel sector is disincentivized in favor of other technologies, despite mid-level ethanol blends offering the most economical and technologically feasible path toward high-octane fuels. This is misguided, as EPA is charged with facilitating compliance with the Renewable Fuel Standard and CAFE/GHG programs, and with reducing emissions of air pollutants, especially of air toxics associated with petroleum based alternatives for enhancing octane levels. Ultimately, this also limits investments and benefits to farmers.

Research has shown the benefits of mid-level ethanol blends. The synergies between high octane fuels and more efficient, high compression engines must be recognized and supported. Ethanol has a very high octane number and has many other benefits that increase engine efficiency and reduce tailpipe air emissions, supporting these advanced engines. It provides these benefits at a lower cost than any other octane booster in gasoline. Feedstock availability and costs are not expected to be obstacles to the substantial development of a high-octane fuel market. In short, consumers would benefit from fuel cost savings, reduced price volatility, increased performance, and the energy security and environmental attributes of mid-level ethanol blends.

Regulatory actions can and should be taken to promote mid-level ethanol blends. Briefly, these include:

- Easing the Ability to Use Mid-Level Ethanol Blends as Certification Fuel Under EPA Regulations;
- Adjusting the CAFE/GHG Regulations to Better Account for Ethanol Content in Fuels, Including Providing Credits to Support Vehicles that Promote Increased Use of Renewable Fuels;
- Modifying EPA Emissions Modeling to Better Account for the Benefits of Ethanol;
- Reconsidering EPA's Reid Vapor Pressure Requirements for Mid-Level Ethanol Blends; and
- Growing and Enforcing the Renewable Fuel Standard Program.

NFU appreciates the Subcommittee's consideration and acknowledgement that high-octane fuels may be the transportation fuel for the 21st Century. NFU agrees that fuel and vehicle regulation can and should work hand-in-hand to promote clean-burning, alternative renewable fuels. High octane fuels through higher blends of ethanol should be the fuel for today and the future. Virtually all parties, including EPA, acknowledge the GHG and fuel economy benefits of high-octane fuels in more efficient engines, and the cost-effectiveness of using higher ethanol blends to meet these goals.

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December 10, 2018

Congress of the United States
House of Representatives
Committee on Energy and Commerce
2125 Rayburn House Office Building
Washington, DC 20515-6115

Members of the House Energy and Commerce Committee:

On behalf of our more than half a million supporters, the Union of Concerned Scientists (UCS) would like to express opposition to the discussion draft by Representatives John Shimkus (IL-15) and Bill Flores (TX-17), *The 21st Century Transportation Fuels Act*.

As the Committee examines the provisions of the discussion draft, we encourage Members to consider whether these policies help or hinder innovation in the transportation sector, especially given the political context of the Trump administration's efforts to undercut the Renewable Fuel Standard (RFS) and Corporate Average Fuel Economy (CAFE) and greenhouse gas (GHG) emission standards for light-duty vehicles.

Title I: High octane fuels

There are meaningful potential fuel efficiency improvements associated with higher octane gasoline, particularly for high compression turbocharged cars.[1] [2] [3] [4] Title I of this discussion draft jumpstarts the transition to high octane fuels by mandating a higher base octane for gasoline and requiring that gasoline powered vehicles starting from model year (MY) 2023 must be able to use gasoline with ethanol content up to and including 20%.

Given the studies, rulemakings, and infrastructure changes that need to be made, our expectation is that a complete transition to high-octane gasoline is not feasible by MY 2023.

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[1] Department of Energy (DOE). 2017. Co-Optimization of Fuels & Engines: FY16 Year in Review. National Renewable Energy Laboratory and Sandia National Laboratories. Online at *www.nrel.gov/docs/fy17osti/67595.pdf*.

[2] Leone, T. G., J. E. Anderson, R. S. Davis, A. Iqbal, R. A. Reese II, M. H. Shelby, and W. M. Studzinski. 2015. "The Effect of Compression Ratio, Fuel Octane Rating, and Ethanol Content on Spark-Ignition Engine Efficiency." *Environ. Sci. Technol.* 49 (18), 10778–10789. Online at: *http://pubs.acs.org/doi/abs/10.1021/acs.est.5b01420*.

[3] Speth, R. L., E. W. Chow, R. Malina, S. R. H. Barrett, J. B. Heywood, and W. H. Green. 2014. "Economic and Environmental Benefits of Higher-Octane Gasoline." *Environ. Sci. Technol.*, 48 (12), 6561– 6568. Online at: *http://pubs.acs.org/doi/abs/10.1021/es405557p*.

[4] Martin, J. 2016. The road to high octane fuels. *The Equation*. Cambridge, MA: Union of Concerned Scientists. Blog, October 5. Online at *https://blog.ucsusa.org/jeremy-martin/the-road-to-high-octane-fuels*.

It seems likely that there will be a several year gap between the availability of vehicles that can run on E20 fuel and the nationwide availability of cost-effective, higher octane fuel itself.

Though it's not explicit in the discussion draft whether automakers will get special treatment under the CAFE program for sales of these vehicles, we expect them to petition the National Highway Traffic Safety Administration (NHTSA) for multiplier credits or other incentives based on historical precedent. We strongly oppose granting fuel economy credits based on the technical potential of vehicles to operate on high-octane fuel without clear evidence that the vehicles are operating on high-octane fuel and the potential fuel economy benefits are being realized on the road.

The history of the CAFE flex-fuel vehicle (FFV) program provides clear evidence that credits given based on unrealized potential and in advance of adequate fuel distribution infrastructure are counterproductive. Recent analysis demonstrates that the FFV program actually increased gasoline consumption and emissions without substantially increasing the use of alternative fuels.[5] In its 2016 final Renewable Fuel Standard Program: Standards for 2017, EPA found that, despite the fact that 21 million FFVs on the road had the technical capacity to use up to 13 billion gallons of E85, only 275 million gallons of E85, or 2% of the potential, were likely to be used.[6]

In addition, we encourage the committee to consider stronger language requiring the vehicles manufactured after MY 2023 to be more fuel efficient than previous model years. It is important for automakers to produce more efficient vehicles year over year. Raising minimum octane standards and making vehicles compatible with E20 gasoline can enable higher efficiency, but down-sizing and down-speeding engines is required to deliver the full potential efficiency gain. Without stringent fuel economy standards there is no guarantee that higher octane gasoline will result in fuel economy benefits. Moreover, if high octane fuel increases the potential for cost-effective efficiency improvements from gasoline powered vehicles, then the stringency of fuel efficiency standards should correspondingly increase given the availability of other complementary efficiency technologies such as light-weighting, advanced transmissions and gasoline direct injection.

Title II: Renewable fuels

Renewable fuels are an important part of a broader strategy to reduce oil consumption and global warming emissions, but this discussion draft does not set the correct direction for renewable fuel policy and lacks appropriate safeguards to ensure renewable fuels are sustainable. The GHG reduction requirements of the RFS are an essential element of the policy, and the high-octane fuel requirements includes no comparable requirements to reduce the carbon intensity of transportation fuel. As discussed at some length in our report, *Fueling a Clean Transportation Future*, all transportation fuels including gasoline and ethanol can be produced with lower pollution with the appropriate policy signals.[7] By removing any

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[5] Jenn, A., I. M. L. Azevedo, J. J. Michalek 2016. "Alternative Fuel Vehicle Adoption Increases Fleet Gasoline Consumption and Greenhouse Gas Emissions under United States Corporate Average Fuel Economy Policy and Greenhouse Gas Emissions Standards." *Environ. Sci. Technol.* 50 (5), 2165–2174. Online at *http://pubs.acs.org/doi/abs/10.1021/acs.est.5b02842.*

[6] Environmental Protection Agency (EPA). 2016. *Renewable Fuel Standard Program: Standards for 2017 and Biomass- Based Diesel Volume for 2018*, December 12. Washington, DC.

[7] Martin, J. 2016. Fueling a Clean Transportation Future: Smart Fuel Choices for a Warming World. Cambridge, MA: Union of Concerned Scientists. Online at *www.ucsusa.org/fuelingacleanfuture.*

lifecycle GHG requirement from the largest source of renewable fuels, the discussion draft presents the risk that lower-carbon renewable fuel blending components could be replaced with higher carbon high octane fossil fuel blending components. High octane fuels should meet the same or higher requirements for GHG mitigation that is required within the RFS to avoid backsliding on the carbon intensity of gasoline.

Moreover, by removing the obstacles to a transition to E20 without any plan for where any associated additional ethanol would come from, the bill creates the risk of a rapid expansion of fuel ethanol use supplied primarily by corn ethanol. While such a transition is by no means certain, a rapid scale-up of corn production for ethanol use could have negative impacts on other users of corn as well as land use change impacts, water pollution and other problems, as occurred during the rapid transition to E10 between 2005 and 2010.[8] Policymakers should carefully ensure a predictable and gradual phase-in that increases blending level as efficiency increases and would allow for the parallel growth of lower carbon ethanol sources, including cellulosic ethanol, which could supply increasing quantities of ethanol without the associated negative impacts.

As for advanced and cellulosic renewable fuels – while the discussion draft directs EPA to set volumes for these fuels through 2032, it lacks policy levers to ensure the nascent industry can mature. For example, the committee should direct EPA to expedite completion of pathway applications for cellulosic fuels. EPA has been slow to turn around applications for cellulosic pathways and facilities, which is reducing potential production of these fuels. Policymakers should ensure RFS support available for all legitimate and eligible biofuel production, with a priority on cellulosic pathways to increase the availability of low carbon fuels.

In addition, the committee should scrutinize the provision in the discussion draft that repeals the RFS program after 2032. While it is an imperfect program, it should not be repealed in the absence of a successor program that will continue to foster development of low carbon biofuels as a hedge against oil consumption and climate change, with safeguards to prevent air pollution and land conversion and to encourage the use of lower carbon, non-food-based feedstocks.

Title III: Vehicle fuel efficiency

Title III of this bill is the same text as H.R.4011, the Fuel Economy Harmonization Act introduced by Reps. Fred Upton (MI-6) and Debbie Dingell (MI-12). This title will have significant detrimental impacts on the CAFE program run by NHTSA, which will increase consumer spending on gas, oil consumption and greenhouse gas emissions, and decrease industry competitiveness. Over 100 national and local organizations oppose passage of H.R. 4011 and its Senate companion, S.1273,[9] and its inclusion in this legislation will not go unnoticed.

The provisions in the title serve to: 1) extend the life of CAFE credits, some of which have already expired, which will have the effect of allowing manufacturers to make much less fuel efficient vehicles out through 2021; 2) award windfall credits for vehicles already sold by

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[8] *Ibid.*

[9] Group letter opposing S.1273 and H.R. 4011 (November 16, 2017) online at https://www.dropbox.com/s/69lkfrlvla4a3x4/Blunt%20Upton%20Opposition%20Letter%2011-16-17.pdf?dl=0

pulling forward a flexibility which regulators explicitly said they were not granting when setting the stringency of the program; and 3) allow for manufacturers to focus all their efforts on just one segment of their fleet, undermining the promise to consumers that all types of vehicles—cars, trucks, and SUVs—would become more efficient over time.

Title III will give manufacturers the green light to make vehicles that are on average 3 mpg less efficient in 2021 than agreed to under the existing CAFE program.[10] Compared to the benefits anticipated from the 2012 final rule, Title III will result in about 350 million barrels of additional oil being burned, 155 million metric tons of additional global warming emissions, and $34 billion in additional fuel costs for American drivers.[11] For example, someone who buys a car in 2021 will pay approximately $1,600 more in fuel costs than they would if the program was not changed by Congress as written in this title.[12]

It is important to note that the Trump administration is currently conducting a rulemaking to freeze fuel economy and global warming emissions standards at model year (MY) 2020 levels through MY 2026. And despite the robust technical record and legal analysis supporting the current greenhouse gas emission standards and augural CAFE standards, it seems likely that the administration will finalize the rulemaking as proposed.[13] Title III provides manufacturers a path to halting progress on fuel economy standards even in the lead-up to the detrimental administration proposal by undercutting the standards that automakers are already complying with.

The impact of Title III on the augural CAFE program would be far reaching, but the impact of Title III on CAFE standards frozen at MY2020 levels would simply be irresponsible. Under this scenario, a lack of ambitious CAFE standards would already nearly halt improvement in fuel economy for cars and trucks through MY 2025—Title III would reward precisely those manufacturers who've already begun that stagnation. Innovation would falter, auto suppliers would lose billions in investment, and the domestic auto industry would eventually find itself in a familiar crisis, unprepared for rising gas prices and international competition. Title III and the Trump administration's proposed rollback take us backwards when we should be moving forwards.

Conclusion

Unfortunately, as written the 21st Century Transportation Act discussion draft may actually keep the automotive and fuels sectors from innovating beyond the status quo.

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[10] Union of Concerned Scientists (UCS). 2017. Blunt and Upton urge rollback of fuel economy standards. December. Cambridge, MA. Online at *https://www.ucsusa.org/sites/default/files/attach/blunt-vehicle-bill.pdf.*

[11] *Ibid.*

[12] *Ibid.*

[13] Despite opposition to the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks proposed rule from scientists, automakers and the public, EPA Acting Administrator Wheeler continues to defend the proposal. See https://www.spglobal.com/platts/en/market-insights/latest-news/oil/112818-us-epa-chief-says-auto-fuel-efficiency-rollback-will-have-minuscule-climate-impact

We appreciate the committee's interest and look forward to working together on these important issues.

Thank you for your time,

[redacted]
Dr. David Cooke
Senior Vehicles Analyst, Clean Vehicles Program

[redacted]
Dr. Jeremy Martin
Senior Scientist and Fuels Lead, Clean Vehicles Program

[redacted]
Alyssa Tsuchiya
Legislative Associate, Clean Vehicles Program

Enclosed: Group letter opposing S.1273 and H.R. 4011, the Fuel Economy Harmonization Act (November 16, 2017)

November 16, 2017

Dear Member of Congress,

On behalf of our millions of members, the undersigned organizations urge you to oppose S.1273, the "Blunt Clean Cars Rollback Bill" and its House companion, H.R.4011. This bill weakens the Corporate Average Fuel Economy (CAFE) and threatens the greenhouse gas emissions standards, endangering the health, consumer savings and environment of Americans across the country.

The effects of this legislation are far reaching, resulting in 350 million barrels of additional oil being burned, 155 million metric tons of additional carbon pollution, and $34 billion in additional fuel costs for American drivers. This bill is merely another unscrupulous attempt by industry to rollback the federal clean car standards, that are not only popular with the US consumer public but that also protect the health of 24 million Americans who suffer from asthma, including 6.3 million children.

With transportation carbon pollution surpassing that of the power sector for the first time in decades, protecting the clean car and fuel economy standards is more important than ever. This bill masks industry back-tracking as additional "flexibility" in meeting the standards, but in reality, the additional credits and expansions of existing credits simply rolls back the standards, decreasing their integrity.

The Blunt bill would weaken the standards by needlessly giving automakers unwarranted windfall credits which make it possible for them to avoid using technology to make vehicles cleaner and more efficient. It would allow the companies to use expired credits through 2021. It would also award automakers new off-cycle credits that have been explicitly excluded by NHTSA. Finally, it would allow auto manufacturers to use these new credits, along with any overcompliance earned by its car fleet, to choose not to improve the efficiency of their truck fleet. So, for example, if all of the credits were used on the truck side, trucks that meet the standards today wouldn't need to improve through 2021.

These provisions give auto manufacturers a free pass to produce vehicles that are on average 3 mpg less efficient in 2021 compared to standards today, putting them on a trajectory that could miss current targets by 8-10 mpg in 2025. These provisions undermine the entire intention behind the standards, to drive our country and industry forward to realize benefits for our health, environment and economy, while providing all consumers with a choice to buy more efficient vehicles of all types.

Anything that erodes the success of the program and lets automakers game the system is unacceptable. There is ample technology available to automakers to meet the standards as they are currently constructed. There are technologies that the agencies did not even consider in their 2012 final rule that are being incorporated into vehicles today that make it easier for automakers to achieve the standards.

After the President's withdrawal from the Paris Agreement, the clean car standards are more important now than ever before. They need to be strengthened not weakened, for

our health and environment. We urge you to protect all Americans and to oppose S.1273 and H.R.4011.

Sincerely,

1000 Friends of Wisconsin
Acadia Center
AFGE Council 238
AKPIRG
Arizona Interfaith Power & Light
Arizona PIRG
Arkansas Interfaith Power & Light
Aytzim: Ecological Judaism
CALPIRG
Capital Region Advocacy Network for Environmental Sustainability
Colorado Interfaith Power & Light
Denver Catholic Network
Center for an Ecology Based Economy
Center for Auto Safety
Center for Biological Diversity
Citizens' Climate Lobby-Madison
Clean Water Action
Climate Action Round Table
Climate Hawks Vote
ConnPIRG
CoPIRG (Colorado Public Interest Research Group)
Delaware Interfaith Power & Light
Delaware Sierra Club
Earth Action, Inc.
Earth/Art Resources
Elders Climate Action
Environment America
Environment Arizona
Environment California
Environment Colorado
Environment Connecticut
Environment Florida
Environment Georgia
Environment Illinois
Environment Iowa
Environment Maine
Environment Maryland
Environment Massachusetts
Environment Michigan
Environment Minnesota
Environment Missouri
Environment Montana
Environment Nevada
Environment New Hampshire
Environment New Jersey
Environment New Mexico
Environment New York
Environment North Carolina
Environment Ohio
Environment Oregon
Environment Rhode Island
Environment Texas
Environment Virginia
Environment Washington
Environmental Law & Policy Center
Florida PIRG
Friends of Casco Bay
Friends of the Earth
Georgia Interfaith Power & Light, Inc
Georgia PIRG
Great Lakes Community Conservation Corps
GreenLatinos
High Health
Hoosier Interfaith Power & Light
Illinois PIRG
Indiana PIRG
Interfaith Earth Network Steering Committee
Interfaith Power & Light
Iowa Interfaith Power & Light
Iowa PIRG
Justice and Witness Ministries of the United Church of Christ
Kentucky Interfaith Power & Light
League of Conservation Voters

Lutheran Office for Public Policy in Wisconsin
Madison Area Bus Advocates
Maine Conservation Voters
Maine Interfaith Power & Light
Maine Public Health Association
Maryland PIRG
MASSPIRG
MontPIRG
MoPIRG
NAOMI
Natural Resources Council of Maine
Natural Resources Defense Council
NCPIRG
NextGen Climate
NHPIRG
NJPIRG
NMPIRG
Ohio Interfaith Power & Light
Ohio PIRG
Oklahoma Interfaith Power and Light
Oregon Environmental Council
OSPIRG
PennEnvironment
PennPIRG
Pennsylvania Interfaith Power & Light
Physicians for Social Responsibility-Philadelphia
PIRGIM
Plug In America
Prevent Harm
Protect Our Winters
Public Citizen
ReVision Energy
Rhode Island Interfaith Power and Light
RIPIRG
Safe Climate Campaign
Sierra Club
South Carolina Interfaith Power and Light
Tennessee Interfaith Power & Light
TexPIRG
Union of Concerned Scientists
Vermont Interfaith Power & Light
WashPIRG
Wisconsin Environment
Wisconsin Interfaith Power and Light
Wisconsin Public Interest Research Group (WISPIRG)