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THE RENEWABLE FUEL STANDARD -

IMPLEMENTATION ISSUES

WEDNESDAY, JUNE 22, 2016

House of Representatives,

Subcommittee on Energy and Power,

Committee on Energy and Commerce,

Washington, D.C.

The subcommittee met, pursuant to call, at 10:00 a.m., in Room 2123 Rayburn House Office Building, Hon. Ed Whitfield [chairman of the subcommittee] presiding.

Members present: Representatives Whitfield, Olson, Barton, Shimkus, Pitts, Latta, Harper, McKinley, Pompeo, Kinzinger, Griffith, Johnson, Long, Flores, Mullin, Hudson, Rush, Tonko, Welch, Loebsack, and Pallone (ex officio).

Also present: Representative King.

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Staff present: Will Batson, Legislative Clerk, Energy and Power, Environment and the Economy; Allison Busbee, Policy Coordinator, Energy and Power; Rebecca Card, Assistant Press Secretary; Tom Hassenboehler, Chief Counsel, Energy and Power; A.T. Johnston, Senior Policy Advisor; Ben Lieberman, Counsel, Energy and Power; Brandon Mooney, Professional Staff Member, Energy and Power; Annelise Rickert, Legislative Associate; Chris Sarley, Policy Coordinator, Environment and the Economy; Dan Schneider, Press Secretary; Jean Fruci, Minority Energy and Environment Policy Advisor; Caitlin Haberman, Minority Professional Staff Member; John Marshall, Minority Policy Coordinator; Jessica Martinez, Minority Outreach and Member Services Coordinator; Dan Miller, Minority Staff Assistant; and Alexander Ratner, Minority Policy Analyst.

Mr. Whitfield. I would like to call the hearing to order this morning, and I would like to recognize myself for a five-minute opening statement.

This morning we are going to revisit the Renewable Fuel Standard, the EPA program to add agriculturally based fuels like ethanol and biodiesel to the nation's transportation fuel supply. It has been nearly a decade since the RFS was last revised by Congress in 2007 and a great deal has changed in the interim. Energy markets have evolved in ways that were not predicted back then, and RFS implementation has taken many unexpected turns.

For these reasons we are conducting this hearing to assess the status of the RFS and I welcome both the government and stakeholder witnesses who will provide us with many perspectives on this multifaceted issue. And we will have two panels of witnesses this morning representing all sides of the issue, and I really look forward to the hearing.

[The statement of Mr. Whitfield follows:]

Mr. Whitfield. At this time, I would like to yield the balance of my time to the gentleman from Illinois, Mr. Shimkus.

Mr. Shimkus. Thank you, Mr. Chairman. First, I want to apologize. As Assistant Administrator McCabe knows, I am probably headed down to the White House for a bill signing so I am going to miss some of the -- well-timed maybe, but I am going to miss some of the testimony and the questions.

But just to weave the story, it was in 1992 where the auction and debate came into the fuel market, Clean Air Act of '92. I am reminded when I see my friend Kenny Hulshof in the background it was in 1998 when I really passed my first bill that changed EPAC on biodiesel to get real credits for fleets for fuel use, and that was just Karen McCarthy from Kansas City, Missouri, have a long part in this debate. 2005, under the leadership of Chairman Barton we changed the debate again. We changed it from the clean air portions to energy security and that is what brought 2005 into the market. Then under the leadership of Chairman Waxman under Democrat controls we expanded the RFS and really started pushing next generation cellulosic issues.

And we kind of find ourselves, this is kind of where we find ourselves now, but the world has changed also with fracking and so the energy independence issue is in front of us. You ask yourself why are we exporting and importing either ethanol,

exporting or importing ethanol. You ask yourself why are we importing and exporting biodiesel when if we need it we ought to maybe just be selling it to ourselves instead of having to ship it overseas. All this will require, you know, changes in laws.

And I would ask our panelists to not only give us their best case story but also to listen to each other, because as we move forward we are going to have to move towards compromise because a lot of people have raised capital, assumed risk, created jobs, great tax bases for our communities, and we will be better when we work together than when we work apart and I know we can do that.

And with that Mr. Chairman, again I apologize for having to leave, probably well timed. I wish I could take credit for the President's decision to have this now, but with that I yield back the balance of my time.

[The statement of Mr. Shimkus follows:]

\*\*\*\*\*\*\*\*COMMITTEE INSERT 2\*\*\*\*\*\*

Mr. Whitfield. The gentleman yields back.

And before I introduce Mr. Rush, I do want to recognize Mr. Tom Bliley, former chairman of the Energy and Commerce Committee, the distinguished gentleman from Richmond. And when I first came to Congress in 1995 he was our chairman and did a fantastic job. And Tom, welcome back to the Energy and Commerce Committee.

At this time I would like to recognize the gentleman from Illinois, Mr. Rush, for a 5-minute opening statement.

Mr. Rush. I want to thank you, Mr. Chairman. Mr. Chairman, this is a very important hearing on the implementation of the Renewable Fuel Standard. As you can imagine, Mr. Chairman, my office has taken dozens of meetings on this important topic for both proponents who support the RFS as it is and as well as from the opponents who would like to see the RFS either modified or repealed altogether.

From its inception I strongly supported this policy and the goals in that it was first enacted to do. Some of the objectives including helping to reduce U.S. dependence on foreign oil, enhancing energy security, bolstering the agricultural sector, and addressing the challenges of climate change by reducing greenhouse gas emissions from the transportation sector, Mr. Chairman, are some of the things that I have strongly supported.

Since that time, Mr. Chairman, the energy landscape has

changed significantly in our nation, and at meeting after meeting in my office we have received a host of competing and in many cases contrasting information on the impact of the RFS.

Today I am most interested, Mr. Chairman, in hearing about the impact of the RFS on food and agricultural prices as well as the issues surrounding the gasoline ethanol blend wall.

Additionally, Mr. Chairman, with more frequent record-breaking temperatures and history making extreme weather events, it is imperative that we also examine the impact of the RFS in regards to climate change for those who are concerned about this very, very critical issue.

It is my hope that today we will be able to shed light on the current status of the program and find more clarity on the effectiveness it has had in meeting its original goals. I am pleased with the diversity of the panelists and the different industry sectors that they represent, as I believe this will lead to a more robust and comprehensive debate.

Hopefully, Mr. Chairman, today's discussion will provide clarity and a better understanding of this issue for members on both sides of the aisle. I think it is important to hear from the various stakeholders on some of these important issues surrounding the RFS in a public and transparent setting, where they will have the opportunity to respond and rebut other

witnesses so that members may gain a better idea of what indeed is fact and what is fiction in regards to this debate.

So Mr. Chairman, it goes without saying that I look forward to learning more about most of the opportunities and the challenges to implementing the RFS as currently drafted, and it is my hope that we can work to find an excellent common ground on this issue moving forward. With that Mr. Chairman, I yield back.

[The statement of Mr. Rush follows:]

Mr. Whitfield. The gentleman yields --

Mr. Rush. No, I yield a minute to Mr. Welch.

Mr. Whitfield. The gentleman yields to Mr. -- okay.

Mr. Welch. Thank you, Bobby. I thank the gentleman. Thank you, Mr. Chairman, for this hearing.

The RFS mandate has been a well-intended flop. It has not helped the environment, it has hurt it. It has not reduced fuel -- it has increased food costs in this country and in foreign countries, and it has done an immense amount of engine damage to everyday folks who want to use chainsaws; want to use boats, boat motors; want to use motorcycles.

And I have here a photograph from the Burlington Free Press which shows a carburetor that was clean, it used regular gas, and this was one that was brought in that has been damaged by ethanol. And I have a carburetor here. It will be a little tougher to see, but this is from a Suzuki motorcycle owned by a veteran. And one side is what would be the condition of the carburetor with regular gas. This is the dirty, filthy side that is the carburetor from the use of ethanol, and the veteran who owned that motorcycle had to pay a bill of \$786 just to fix that up from the damage done by ethanol.

So we have got this situation here where in addition to the food costs, in addition to the environmental damage, everyday

folks who are out there riding their motorcycles, veterans, everybody using a small engine, using their chainsaw are finding that when they leave it there suddenly it is wrecked. And in fact my chainsaw got wrecked as a result of ethanol, so I have got a chainsaw grievance along with a lot of my constituents.

This was a plan that had bipartisan support, RFS. It had the best of intentions, it had the worst of outcomes. It is time for us to change it, and I am delighted to be working with Mr. Flores of Texas in a strange partnership of the Lone Star State and the Green Mountain State. Thank you very much. I yield back.

[The statement of Mr. Welch follows:]

Mr. Whitfield. The gentleman yields back and the gentleman's time has expired. Mr. Upton is not going to take the time for an opening statement. Is there anyone on our side of the aisle that would like to claim time for an opening statement? Mr. Barton. Mr. Barton is recognized for 5 minutes.

Mr. Barton. Oh, I am not going to use 5 minutes, Mr. Chairman. I do want to thank the chairman and Mr. Rush for holding this hearing, and I want to thank Mr. Welch and Mr. Flores for introducing their bill.

I was chairman of the full committee when we put the original Renewable Fuel Standard in place in the Energy Policy Act of 2005. I supported it then. I was ranking member when they passed the 2007 Energy Bill that greatly expanded it, and I have vehemently opposed the expansion in committee and on the floor. And so I have been for it and I have been against it.

I today think, Mr. Chairman that you could actually repeal it and market conditions would still provide a robust market for ethanol and all other alternative fuels. There is no question that the oxygenate ability of ethanol is a positive. There is also no question that this is not a struggling industry that needs the various protections and mandates that we have put into the law, and there is also no question that you can't meet the requirement, the market cannot meet the requirement that the

current law requires.

So I think this is an excellent hearing. I am going to listen with an open mind. Again I want to thank the chairman and the ranking member and our two bipartisan cosponsors for this legislation. I am not sure we can legislate this year, but I think it is something that needs to be looked at in the near future.

And I will be happy to yield to Mr. Flores. It looks like he wants some time. I yield the balance of my time to Mr. Flores.

[The statement of Mr. Barton follows:]

\*\*\*\*\*\*\*\*\*\*COMMITTEE INSERT 5\*\*\*\*\*\*

Mr. Flores. I thank Mr. Barton for his comments and for yielding the time. I also thank Mr. Welch for working with me to introduce a common sense, market-driven, bipartisan solution to deal with the well-intended law that just hasn't worked out the way it should.

I also want to thank the chairman for holding today's hearing. It has been almost 9 years since the RFS was expanded under the Energy Independence and Security Act of 2007, and I am very pleased that we are revisiting the important role of this committee and the Congress to exercise oversight through today's hearing.

One of the biggest concerns that will be discussed today is that the 2007 era assumptions of increasing gasoline demand turned out to be far too optimistic. And the volumes that were set forth in the statute do not come close to recognizing today's market reality with respect to gasoline demand. Consumers are now faced with a law, actually they are adversely impacted with the law that continues to increase a mandate in ethanol at a time when they are using less gasoline.

Last month, Mr. Welch and I introduced the Food and Fuel Consumer Protection Act and again this is a market-driven, common sense, bipartisan solution. It is a simple one. It prevents the RFS mandate from forcing more ethanol into the market than is

technically and commercially feasible. And with that I yield back the balance of my time. Thank you.

[The statement of Mr. Flores follows:]

Mr. Whitfield. The gentleman yields back. At this time the chair recognizes the gentleman from New Jersey, Mr. Pallone, for 5 minutes.

Mr. Pallone. Thank you, Chairman Whitfield and Ranking Member Rush for this opportunity to hear from the Administration and many of the key stakeholders on the Renewable Fuel Standard program.

The transportation sector is our country's largest consumer of oil and the second largest emitter of carbon pollution, so the development of low carbon renewable fuels is certainly critical. The RFS program that Congress established in 2005 and amended significantly in 2007 has helped extend our domestic fuel supply and it has spurred investment in alternative fuel production. The RFS has also supported farm incomes and rural economy in a number of states.

In recent years, domestic production of fuel overall increased due to expanded domestic production of oil and gas, and the production of ethanol has also provided us with a stable supply of domestic fuel. And the availability of ethanol provided an alternative to MTBE as an octane enhancer and oxygenate when MTBE proved to be a problem in water systems across the country.

Despite these successes, there have also been a number of challenges. For example, the annual obligation for the EPA to

set RFS targets has been more controversial and challenging than Congress originally anticipated. Moreover, the increase in renewable fuel production targets Congress passed in 2007 anticipated faster and broader based development of cellulosic ethanol and other advanced biofuels.

There are also a number of constituencies, particularly equipment manufacturers and their customers including small boaters, who still have concerns about increasing the percentage of ethanol beyond the ten percent fraction that is commonly sold throughout the country. And there are others who question whether increasing biofuel production will achieve the program's important environmental goals, particularly the goal of reducing greenhouse gas emissions from the transportation sector.

I want to thank Assistant Administrator McCabe for coming today to discuss the EPA's implementation of the RFS. This is a challenging assignment. Every year, EPA must balance many different factors with the needs and desires of many assorted players throughout the fuel supply chain from production to distribution to use. And to some degree, this has been made more difficult by the fact that the targets we set in 2007 assumed that the demand for transportation fuels would continue to grow. However, we have actually seen reduced demand nationally for transportation fuel due to a combination of historically higher

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fuel prices, increased vehicle fuel efficiency, slower growth in vehicle miles traveled, and of course the recession.

So I look forward to hearing more about the implications for the fuel market from Mr. Gruenspecht from the Energy Information Agency, as well as from witnesses on our second panel. During today's hearing we should consider how the RFS contributes to the deployment of the low carbon transportation system of the future that benefits both our environment and our economy, but we should also consider how this program could work better to help us meet our climate goals. Fortunately, we have an excellent panel of witnesses here today who can speak to these matters, so I look forward to hearing their perspectives on the RFS program.

I yield the remainder of my time to Representative Loebsack.

[The statement of Mr. Pallone follows:]

\*\*\*\*\*\*\*\*\*\*COMMITTEE INSERT 7\*\*\*\*\*\*\*

Mr. Loebsack. Thank you, Mr. Pallone, and thank you, Mr. Chair, for having this hearing. It is very important. I only came to Congress in 2007 so I was able to vote on at least the 2007 bill. Assistant Administrator McCabe, Deputy Gruenspecht, thank you for taking the time to come here today to discuss the RFS.

And harnessing the power of our renewable resources is an absolutely critical part of our energy portfolio here in America. I think we can all agree on that. The RFS, I believe, has proven that it works. It has created jobs, it has supported our agricultural communities, and it has decreased our dependence on foreign oil.

The RFS has helped bring competition, something that was intended, and consumer choice, another thing that was intended, to the retail transportation fuel marketplace while reducing at least to some degree our dependence on foreign oil imports. In addition, the industry supports over 400,000 U.S. jobs that can't be outsourced and has contributed some \$45 billion to the U.S. economy, while in fact reducing the emissions of greenhouse gases.

As you also all know my state is a leader in biofuels, and before we get too carried away with ethanol that also includes biodiesel by the way. That is very important as far as the RFS is concerned and it has positively impacted of course our domestic

energy sources. To help advance greater choice at the pump I have also introduced legislation to establish a grant program through the USDA to invest in renewable and alternative fuel infrastructure. My bill, the Renewable Fuel Utilization, Expansion, and Leadership Act, or REFUEL, will create a new and retrofit existing infrastructure including pumps for biofuels and hydrogen tanks, piping, and electric vehicle chargers so that we have not just ethanol and biodiesel.

Too often, infrastructure constraints are cited as the reason for not giving consumers the choices they deserve and this is about choices -- keep that in mind -- and for holding back the development of our renewable and alternative energy sources that create jobs in Iowa and across the country. The REFUEL Act will help bridge that divide by making important investments in the infrastructure needed to provide consumers with the choices that they want at the pump.

We must do more to decrease our dependence on foreign oil and expand our use of renewable energy sources that boost economic development in our rural areas and at the same time promote homegrown fuel sources such as biofuels and wind power.

Administrator McCarthy stated in February of 2016, and I quote, we need to get the program RFS back on track. Every gallon of ethanol you take out you can only replace with more fossil fuels,

so we must continue to fight to ensure that our rural communities are part of to put our nation back on a sustainable path so that those rural communities can do that and create good jobs in our rural areas.

And I don't have any visual aids with me, but one of them I could think of might be a corncob although not necessarily that. Also I think if we had a soldier or a Marine here who has gone to fight in the Middle East, I think that would be important because this is also about making sure that we reduce our dependence on foreign oil, and I think we lose sight of that sometimes when we talk about the RFS. It is about choices. Yes, it is about jobs, but it is also creating a situation where we are not so dependent on other countries for oil.

So thank you for yielding, Mr. Pallone. And thank you, Mr. Chair, for having this hearing today and look forward to the testimony. Thank you.

[The statement of Mr. Loebsack follows:]

Mr. Whitfield. The gentleman yields back. And that concludes the opening statements, so we are now ready for our first panel of witnesses and I am delighted that both of you joined us this morning. Our first witness is Ms. Janet McCabe who is the acting assistant administrator at the U.S. Environmental Protection Agency.

Ms. McCabe, thanks for being with us. You are recognized for 5 minutes for your opening statement. Just make sure the microphone is on and you know the drill.

Ms. McCabe. I know the drill.

Mr. Whitfield. Thank you.

Ms. McCabe. Been here before.

STATEMENT OF JANET McCABE, ACTING ADMINISTRATOR, U.S.

ENVIRONMENTAL PROTECTION AGENCY; AND HOWARD GRUENSPECHT, DEPUTY

ADMINISTRATOR, U.S. ENERGY INFORMATION ADMINISTRATION

## STATEMENT OF JANET McCABE

Ms. McCabe. Thank you, Chairman Whitfield, Ranking Member Rush, and other members of the subcommittee. I very much appreciate the opportunity to testify on the RFS program today and EPA's current proposed rule setting the annual volume standards for 2017 and biomass-based diesel volume requirement for 2018.

As has been noted, the RFS program began in 2006 under the Energy Policy Act of 2005, and the program was then modified by the Energy Independence and Security Act of 2007. The goals of that law include moving the United States towards greater energy independence and security and increasing production of clean, renewable fuels. The law established new annual volume targets for renewable fuel that increase every year to reach a total of 36 billion gallons by 2022, including 21 billion gallons of advanced biofuels.

Congress included tools known as waiver provisions for EPA to use to adjust the statutory targets in specified circumstances, including where the statutorily prescribed volumes could not be

met. After an extensive notice and comment process including working closely with our federal partners at the USDA and the DOE, EPA finalized regulations to implement those requirements and those became effective in July of 2010.

The Clean Air Act requires EPA to issue annual standards for four different categories of renewable fuels: total, advanced, biomass-based diesel, and cellulosic. These standards designate the percentage of each biofuel category that producers and importers of gasoline and diesel must blend into transportation fuel, heating oil or jet fuel, and those must be issued by November 30th of each year for the following year, and 14 months in advance for the biomass-based diesel category.

On November 30th, 2015, we finalized standards for 2014 through 2016, and a biomass-based diesel volume for 2017. In that final rule, we used the waiver authorities provided by Congress to lower the volume requirements for total, advanced, and cellulosic below the statutory targets, but only to the extent necessary and appropriate in light of supply limitations and to levels that will drive ambitious, achievable growth.

On May 16th of this year, we issued a proposed rule to establish the annual percentage standards for cellulosic, advanced, and total renewable fuel that will apply in 2017, and also the volume requirement for biomass-based diesel for 2018.

In this proposal, we are proposing to take the same approach to setting standards and volume requirements as in last year's rule.

This Administration is committed to supporting continued growth and renewable fuels, especially advanced biofuels, through this proposed rulemaking. We are proposing volumes that once again would require significant growth in renewable fuel production and use over historical levels directionally consistent with congressional intent. The proposed volumes represent increases across the board, and while they are not as high as the statutory volumes they are intended to drive increased production and use of renewable fuel.

As proposed, total renewable fuel volumes would grow by nearly 700 million gallons between 2016 and 2017. Advanced renewable fuel which requires a minimum 50 percent lifecycle greenhouse gas emissions reduction would grow by nearly 400 million gallons. The conventional or non-advanced portion of the renewable fuels would increase by 300 million gallons which is 99 percent of the congressional target of 15 billion gallons.

Biodiesel which must also achieve at least 50 percent lifecycle emission reductions would grow by 100 million gallons between 2017 and 2018, which is more than double the congressionally mandated minimum level of one billion gallons. And cellulosic biofuel which is the most advanced requires 60

percent lifecycle reductions, would grow by 82 million gallons which is 35 percent increase between 2016 and 2017. We believe that these proposed volumes are achievable and consistent with Congress' clear intent to drive renewable fuel use even as we propose to use the waiver authorities that Congress also provided so that we can manage the program responsibly.

We had a public hearing in Kansas City, Missouri, on June 9th. There were more than 125 people who spoke there representing a broad range of interests. The public comment period for our proposed rule will remain open through July 11th, 2016, and we look forward to reviewing everybody's comments and continuing to engage with the stakeholders as we do as we work towards a final rule. We also look forward to any additional information and data that will come our way that will inform our final standards. We are committed to issuing those standards on the statutory time frame which would be by November 30th of this year.

We continue to encourage and support production and blending of renewable fuels to maximize reductions in greenhouse gases. This has and will continue to be a high priority for my office and the EPA. We are continually monitoring developments in the industry as a result of both the RFS program and other programs run by USDA and DOE that support biofuels and biofuel infrastructure such as USDA's Biofuel Infrastructure Partnership

program. And we will continue to work closely with our federal partners as we implement this statute.

Again I thank you for an opportunity to be here this morning, and I look forward to your questions and to the discussion.

[The prepared statement of Janet McCabe follows:]

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Mr. Whitfield. Thank you, Ms. McCabe. And our next witness is Mr. Howard Gruenspecht who is the deputy administrator of the U.S. Energy Information Administration. Mr. Gruenspecht, you are recognized for 5 minutes for an opening statement.

STATEMENT OF HOWARD GRUENSPECHT

Mr. Gruenspecht. Chairman Whitfield, Ranking Member Rush, members of the committee, I appreciate the opportunity to appear before you today. The Energy Information Administration is a statistical and analytical agency within the Department of Energy. By law our data analyses and projections are independent, so my views should not be construed as representing those of the Department or any other federal agency.

My testimony has eight main points. First, the RFS program is not expected to come close to the legislated target of 36 billion gallons of renewable motor fuels use by 2022. All of EIA's referenced case projections since enactment of the present RFS targets in 2007 reflect a shortfall that continues to grow through 2022. Virtually all of the shortfall involves cellulosic biofuels.

Second, substantial increase in biofuels use would require moving beyond the low percentage blends that account for nearly all current biofuels consumption. Third, the hope that large volumes of liquid cellulosic biofuels would be available within the decade following adoption of the 2007 RFS targets has not been realized. The actual supply of liquid cellulosic fuels was less than one-tenth of one percent of the legislated RFS target for

cellulosic biofuels in 2015.

In mid-2014, EPA began issuing cellulosic RFS credits for compressed natural gas and liquid natural gas derived from landfills and other biogas recovery facilities that exist independently of the RFS program. Cellulosic biogas, which unlike liquid cellulosic fuels does not displace petroleum use, provided more than 97 percent of total cellulosic biofuels credits in 2015.

A fourth point, ethanol faces demand, distribution system, and regulatory challenges that pose barriers to increasing its use as a motor fuel. As some of the members have indicated, ethanol has three distinct roles in motor fuels markets: providing octane, adding to fuel volume, and providing energy content. Ethanol has achieved great success in the first two roles where it is supported by factors independent of the RFS. While these two uses also provide some energy content, additional use of ethanol as an energy content source faces significantly higher economic hurdles, as shown in Figure 1 of my written testimony, and therefore depends more directly on the RFS.

Fifth, while gasoline demand has been very robust over the last 18 months, longer term EIA projections shown in Figure 2 show a declining trend in motor gasoline use, significant change from projections made prior to 2010. Even these updated projections

do not reflect the recently proposed fuel economy standards for heavy-duty trucks because our projections are based on current laws and regulations, and those proposed regulations if finalized would significantly reduce projected diesel fuel use.

Reductions in the long term projections for gasoline use mainly reflect higher fuel economy standards actually also enacted in 2007 at the same time the RFS targets were changed, slower economic growth, possible changes in consumer behavior, and until recently higher gasoline prices. So we think that some of these adjustments in gasoline demand have likely affected the timing of some current RFS compliance challenges, but unlike the other factors addressed in my testimony it is not a major cause of the persistent past and projected shortfalls in biofuels use relative to the legislative targets.

Sixth, and I think this has also been mentioned in the opening statements, actual and projected reliance on oil imports is significantly lower than it was when the expanded RFS program was enacted in 2007. Figure 3 of my testimony shows that reflecting the combined effects of more robust domestic petroleum production and lower petroleum demand. Biofuels volumes added in response to the RFS program have played only a smaller part in reducing net import dependence taking account of the fact that ethanol would continue to be used as an octane and volume source

independent of the RFS, and I think that was also made a comment by one of the opening statements.

Seventh, the near and long term costs of the RFS depend on the price of oil, the price of agricultural commodities used to produce biofuels, future implementation decisions, and all else equal lower oil prices tend to raise the cost of RFS compliance.

And then I just want to close by pointing out that EIA remains actively engaged in matters related to the RFS -- of course we don't get involved in policy matters -- including data on biodiesel and ethanol production and ethanol blending. We provide EPA with short term forecasts for motor fuels use and cellulosic biofuels production as required by statute and also develop longer term projections. Thank you again for the opportunity to testify.

[The prepared statement of Howard Gruenspecht follows:]

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Mr. Whitfield. Well, thank you, Mr. Gruenspecht, and thank both of you for your testimony. At this time I would like to recognize the gentleman from Texas, Mr. Olson, for 5 minutes of questions.

Mr. Olson. I thank the chair.

Mr. Whitfield. Sorry, Mr. Barton.

Mr. Barton. If Mr. Olson is fired up, I will let him go first. I am going to be here a while.

Mr. Olson. The chairman knows we Texans are always fired up.

Mr. Barton. I will yield to Mr. Olson, and then I will go on the next Republican, because he is ready.

Mr. Whitfield. All right, Mr. Olson.

Mr. Olson. I thank both the gentlemen. Welcome, Mr. Gruenspecht, and a special welcome to Ms. McCabe. Every time we ask you to show up, you show up, and I appreciate that.

Together we have seen huge changes in the American energy sector. Together we have changed outdated policies to reflect our current situation. Together we ended the ban on American crude oil exports, a 40-year law that we ended together. Together we started shipping American liquefied natural gas overseas striking blows to Russia, OPEC, and ISIS. Together we have said out with the old, in with the new. Our RFS policy is old and I

hope together we can make it new.

Here is an idea for you to consider, Ms. McCabe. As you know the obligation to comply with the RFS is currently on the refiner. Not all refiners, but some independent refiners. They get hit hard by this fact. These refiners don't control the ethanol. They generally don't even see it, but yet they are on the hook for the mandate.

What are your thoughts, ma'am, about changing the point of obligation or other like issues important to major refiners?

Ms. McCabe. Well, thank you for that question, Congressman, and I indeed am always happy to come here and speak with you about these interesting issues and important issues. The point of obligation issue which you raise is one that is very much on our minds right at the moment and it has been for some months because there is a great deal of interest in it from a variety of perspectives.

When the original RFS rule was done in 2010, this was our discussion, you know, where would the obligation land. And there was a robust and public process, and the final rule with the support of many in the industry was that the right place to put it was on the refiners. And in recent years we have been hearing people question that and say wouldn't it be better to put it somewhere else.

We now actually have several petitions pending in front of us to ask us to undertake a rulemaking to look at that issue. So we are looking at that. We are talking to people across the board. Not everybody is of that view as you might expect. So we need to be collecting that information, talking to people. We will respond to the petitions. I don't have a time frame to give you this morning, but we are looking at them very closely and know this is an important issue to look at.

Mr. Olson. Thank you, good news.

Mr. Gruenspecht, a question for you, my friend. EPA's final rule for the RFS has yet another increase in the renewable fuel mandates. To up this work and avoid hitting the blend wall, EPA assumes that the use of higher blends of ethanol will increase and that demand for EO, fuel without any corn ethanol, will remain low.

EPA's estimated projections that demand for EO will only be 200 million gallons going forward per year, yet boat owners and chainsaw owners and small engine owners still buy plenty of EO to avoid damaging their engines. In fact, in a "Today in Energy" piece EIA put out this May, you all said that Americans used 5.3 billion gallons of EO in 2015. EO is really hard to find, yet somehow motivated Americans have found a way to buy over five billion gallons of it.

EPA projects that EO use will be, again 20 million gallons in the future. You guys are about five billion gallons apart going forward. As they say in Texas, that is a big EO enchilada to swallow. My question is, how likely is it that E15 use will explode to by five billion gallons or that if that is not going to happen, how likely is it that E0 will sink by 96 percent and get down to 200 million gallons per year?

Your thoughts with that, sir?

Mr. Gruenspecht. I guess so. So the -- well, what -- so yes, EIA does data work and analysis work. And what we have put out in our data is data. We know how much EO is produced. We know how much is exported. You know, there is some, a little bit of ethanol that we can't account for and so we kind of assume that that was used to blend some of the EO down and then we came up with that number.

That is not a statement about what should happen or might happen. You know that is a statement looking back with the data we have available as what has been happening. I don't think that necessarily there are differences -- well, EPA should speak obviously for itself. But our statement is not about what should happen or how much EO is needed for certain uses, it is just a statement that we know, we think we know how much of this is being absorbed by domestic consumers. Now people want something --

Mr. Olson. Ms. McCabe, do you coordinate at all with the EIA? Do you coordinate with them and get their input? Because he said it is five billion gallons per year. You guys are down to 200 million. I mean, five billion, 200, it is way off. So do you listen to them at all?

Ms. McCabe. No, we certainly coordinate with them very closely. This is a very recent report and as soon as it came out our staff was on the phone with Howard's staff very quickly to make sure that we understand what is behind those numbers. Every time we go to a proposal we have got a set of information in front of us. We do our best to project into the future, which is what our job is about is projecting into the future. And then between proposal and final not only do we get information from the stakeholders but we get further updates from the EIA, and those are absolutely informative to us as we finalize our rule.

Mr. Olson. But you shouldn't be surprised. You should work together. I yield back.

Mr. Gruenspecht. And I would also say that in that article again just factually that over the last 3 years the calculated use of E0 to final consumers, you know, has been dropping. So again, but you correctly cite what was in the article.

Mr. Whitfield. The gentleman's time has expired. At this time the chair recognizes the gentleman from Illinois, Mr. Rush,

for 5 minutes.

Mr. Rush. Thank you, Mr. Chairman. Administrator McCabe, the issue of RFS seems to have morphed into an all or nothing scenario where there is no room for common ground or compromise. Almost immediately after the EPA finalized the RFS volumes for 2017, your agency was attacked from both sides of the debate. Supporters believed the volumes were too low while opponents thought they were too high, and both sides are bringing lawsuits against the agency.

How do you respond to these charges and did the agency really foresee being sued by both sides?

Ms. McCabe. We were not surprised to be sued by both sides, Congressman. And there is some important issues here and I think once the courts speak to those issues there will be more clarity going forward.

Our job is to try to implement the statute, and as you say we haven't pleased everybody entirely. This statute is, and this program is about choice, it is about diversity, it is about providing incentives and opportunity for cleaner fuels to compete in the marketplace, so you are going to have people from different vantage points having very strong views about it.

But we think that we are doing what we are supposed to do which is to look at the information, to talk to everybody, to

understand the industry as well as we can, and to do our very best to implement what we understand the intent of Congress to be which is to have more renewable fuels in our transportation supply.

Mr. Rush. On the issues that surround the RFS, the issues that have been discussed today, and there are some issues that we haven't talked about today, but is it your opinion that the EPA has the tools and the authority to deal with the challenges as they arise or is there some more that the Congress should be doing?

Ms. McCabe. Well, I believe that Congress gave us the tools in the statute that we need in order to implement it. And as has been recognized today, the world changes and certainly over the last decade the world has changed considerably. The world will change. We will come back here in 2 years and it will be different again, and 5 years and 10 years.

And Congress had a long vision for this program, and I think that is one of the challenges that people are seeing is that it takes a while to introduce this kind of change into a market system. But Congress gave us clear goals, they gave us clear criteria that we are supposed to consider, and they gave us the waiver authority to use in situations where in our judgment regulating the statutory volumes was just not feasible. So we are comfortable moving forward with the tools that Congress has

given us.

Mr. Rush. I would like to switch lanes if I could. What is the EPA's views on the so-called blend wall? Does the agency have concerns surrounding this issue, and if so how are these issues and these concerns being addressed by the agency?

Ms. McCabe. So the blend wall is a term that people use to refer to the amount of ethanol that is generally blended into E10 which is ten percent, and if you go above that amount it is referred to as exceeding the blend wall. In order to reach Congress' statutory volumes there needs to be more ethanol in the system than can be absorbed just through E10 and we think that that is doable through blends like E15 and E85, and of course there are other types of renewable fuels that are being developed and can get into the system as well.

So this is one of the key issues of debate. This proposal that we put out would call for ethanol above that ten percent ceiling, but we think in a responsible and a doable way that will help encourage the higher ethanol blends into the system.

Mr. Whitfield. The gentleman yields back. This time the chair recognizes the gentleman from Texas, Mr. Barton, for 5 minutes.

Mr. Barton. Thank you. Thank you, Mr. Chairman. Mr. Gruenspecht -- is that correct, Gruenspecht? Your Figure 2 that

in your testimony -- I want to make sure I understand this. In the estimate, the original estimate back in 2007, if I read it correctly your agency estimated that we would be using about ten million gallons of gasoline a day; is that correct? The little blue line on --

Mr. Gruenspecht. Yes, that is approximately ten million.

Mr. Barton. And diesel was about four million a day; is that right?

Mr. Gruenspecht. Yes.

Mr. Barton. Okay. How many gallons of gasoline are we using a day right now?

Mr. Gruenspecht. I believe that this year we actually expect gasoline demand to about 9.3 million barrels a day.

Mr. Barton. Nine, so a million less.

Mr. Gruenspecht. Yes.

Mr. Barton. And what is it on diesel?

Mr. Whitfield. Use your mike.

Mr. Gruenspecht. I am sorry. Right, so this year, gasoline about 9.3 million barrels a day.

Mr. Barton. And on diesel it is --

Mr. Gruenspecht. Diesel I am not quite sure.

Mr. Barton. But is it safe to say it is less than you estimated?

Mr. Gruenspecht. I think it may be a little bit less.

Mr. Barton. Okay.

Mr. Gruenspecht. You know, on the gasoline it has mostly to do, frankly, so the same legislation that enacted the RFS also enacted fuel economy standards, and this AEO 2007 line, again these reference cases use current laws and regulations.

Mr. Barton. Well, the point I am trying to make is the estimates that were used when we passed the expanded RFS in 2007 were gasoline volumes and diesel volumes going up, and in fact they are not. But the volume of ethanol that is required to be used is growing substantially. Is that not true?

So we have created a situation, I mean, if you give the best of intentions to the Congress 9 years ago, those estimates that the volumes were based on haven't happened.

Mr. Gruenspecht. I would agree with that.

Mr. Barton. Well, you have to because that is a fact. I mean --

Mr. Gruenspecht. Right. Well, on the other hand, I mean, so far be it from me to criticize Congress, but in the very same piece of legislation --

Mr. Barton. You are the only person in America that doesn't
if you don't, so --

Mr. Gruenspecht. Well, maybe I will cross over to the other

side then and join the majority. But the -- not the majority here.

But actually, remember, in the same piece of legislation, you know, you raised the fuel economy standards. So the notion of using that projection and saying that is what we thought, you know, I realize that different groups probably were working on the RFS provision --

Mr. Barton. Well, my point, it would be one thing if we had projections from 9 or 10 years ago that have happened so that all these volume increases could be absorbed because gasoline usage has increased, but that is not happening.

Mr. Gruenspecht. Right. I would agree with that.

Mr. Barton. And it is not expected to happen.

Mr. Gruenspecht. Right. And it is something, I agree, it is a factor, but the notion of 36 billion gallons of renewable fuels, you know that kind of --

Mr. Barton. It is fantasy, and my word fantasy. That is fantasy.

Mr. Gruenspecht. Well, I am not going to say that.

Mr. Barton. I know. You can't say it but I can. So I am going to ask the EPA representative now. How long does EPA keep insisting that you can make the law work? At what point in time do you agree with the majority of this panel that as currently written it is simply not workable?

Ms. McCabe. Congressman, it is our job to implement the laws that you all have --

Mr. Barton. I didn't ask you what your job was. I am asking you for a policy statement. You are the highest ranking EPA official here.

Ms. McCabe. Yes. Well, it is really not up to me to speak to the legislation itself or any changes that Congress may be thinking about, although we are happy to work with you on it.

Mr. Barton. Let me ask you a different question. I am not going to let you stall me for the next 40 seconds. What would happen if we just repealed the RFS, just repealed it?

Ms. McCabe. Well, the --

Mr. Barton. Would we still use ethanol?

Ms. McCabe. Oh, yes.

Mr. Barton. Wouldn't we still use a lot of ethanol?

Ms. McCabe. There would be ethanol put into the gasoline, to E10 gasoline. There is a lot of investment already in higher blends of E10, or ethanol. I don't think I am in a position to speak to what might happen to that if the law were repealed though.

Mr. Barton. But there would still -- the ethanol market wouldn't disappear if we repealed the RFS?

Ms. McCabe. I don't expect that it would.

Mr. Barton. The market would require that we use ethanol.

Ms. McCabe. As Howard mentioned, there are a number of values that ethanol adds to the system.

Mr. Barton. I agree. Unfortunately my time is expired, Mr. Chairman.

Mr. Whitfield. The gentleman's time has expired. At this time we will recognize the gentleman from Vermont, Mr. Welch, for 5 minutes.

Mr. Welch. Thank you very much. I want to ask

Administrator McCabe a few questions, and by the way Mr. Barton, it is our job to pass a law and yours to implement it. Thank you for understanding that. But it is your job to do the reports that Congress has asked for. And there was an EPA triennial report to Congress in 2011, and in that report it indicated that the most plausible land use changes and production practices from the ethanol mandate will likely be neutral or slightly negative. It also concluded that the majority of negative impacts of the RFS to date have been associated with corn ethanol. That report now is supposed to be done, updated, and it is really 5 years overdue and there has been no indication from EPA as to when Congress can expect to receive it. So my question is when does the EPA plan to send the next Triennial Report on the environmental impacts of RFS to Congress as required by law?

Ms. McCabe. Thank you, Congressman. We don't like missing

deadlines and we realize that there are deadlines in the statute that we have not made. I will tell you that our emphasis over the last several years has been on doing the annual volume standards which is what we felt the absolute priority in order to keep the program going.

Mr. Welch. So when do you think we might get that?

Ms. McCabe. I don't have a date to give you. We are always looking at this information. We work with our Office of Research and Development on it.

Mr. Welch. All right, I will go on to the next question. It is helpful for us to have that because this data is really important in assessing whether the hopes and aspirations of the Congress about the original law are actually working or they are not. A second area of concern is the use of land. The USDA's Farm Service Agency data shows that about 400,000 acres of previously uncultivated land was converted to cropland just between 2011 and 2012. And a University of Wisconsin-Madison study found that biofuel crops expanded onto seven million acres of new land between '08 and 2012, including millions of acres of native grasslands. How many acres of native grasslands and wetlands have been torn up or drained, respectively, since the RFS was passed in 2007, and does this land use change total more than a de minimis amount of acres that the EPA predicted in the

2010 RFS2 rule?

Ms. McCabe. I don't have the exact numbers with me, Congressman, although we will be glad to provide them and follow up. But I will say that in each annual volume rule we look at the net use of land and whether in a net sense it has grown or gone down.

Mr. Whitfield. Yes, and that is very much in dispute as a methodology because there is an immense of loss of wildlife habitat where because of the incentives that Congress has passed, not just our RFS but we used to have the tax credit and we used to have the tariff barrier, it really promoted the over-cultivation of land. Then finally, there is a hope, there was a hope that the greenhouse gas emissions would be reduced by using ethanol, and it has turned out that most of the evidence indicates that is not the case. The corn ethanol's net emissions over 30 years are expected to be about 28 percent higher than emissions that would result from the use of gasoline over that same period. And in 2011, the National Academy of Sciences' study on RFS also questioned the greenhouse gas emission reduction potential of corn ethanol. Given that the majority of RFS gallons produced to date have been corn ethanol, what has the overall impact of the RFS been on the climate?

Ms. McCabe. Well, again we would be glad to follow up with

more specifics, but I will say that the statute focuses on developing these advanced biofuels and moving those into a larger portion --

Mr. Whitfield. Right. This gets us back to Mr. Barton's question. I mean, we have to answer it. We created the policy so we have to change it. But what is extremely helpful to us is to get real-time information about the climate impacts, the habitat impacts, the greenhouse gas emissions, so I thank you for your appearance here and I yield back the balance of my time.

Mr. Whitfield. The gentleman yields back. At this time I recognize the gentleman from Ohio, Mr. Latta, for 5 minutes.

Mr. Latta. Well, thanks, Mr. Chairman, for the hearing today and for our first and second panel of witnesses for being with us today. We appreciate your testimony and the information you are giving us today. Administrator, if I could ask you the first question, on your second page of your testimony you speak of the waiver authority in setting recent standards and the proposed standard. Would you elaborate on the waiver authority and how EPA uses this authority on the waiver?

Ms. McCabe. Sure, I would be happy to. The statute provides two types of waiver authority -- the cellulosic waiver and the general waiver. When we project the amount of cellulosic fuel that we think will be available in the year that we are setting

the standard for, if it is below the statutorily prescribed amount then we are to lower it. And we have the ability to then lower the amounts of advanced and total fuel by the same amount. We are not required to, but we can. That is the cellulosic waiver authority. The general waiver authority, Congress provided that under two circumstances can we waive down or lower the statutory volumes on advanced and total, and one of those is when we find that there is an inadequate domestic supply. And so we have proposed in this rule, as we did in the rule we did last year, to use both of those waiver authorities to set expected standards that are lower than what the statute would require.

Mr. Welch. Thank you.

Mr. Gruenspecht, in your testimony on your point 6, and I know we have had some discussion already about this, you discussed the calculations for net imports for overall U.S. petroleum consumption and EIA's determination of what has led to the decline. Would you comment on this data and the conclusions again that you have come up with on that?

Mr. Whitfield. Is your microphone on?

Mr. Gruenspecht. I expected Ms. McCabe to get most of the questions, so -- U.S. crude oil production has risen rather dramatically, as I am sure other hearings here have explored, from about five million barrels a day to over nine million barrels a

day and then have since fallen a bit with the lower oil prices.

And that was clearly a major contributor.

The other major contributor to reduced dependence, on net dependence on oil imports, were I think greater fuel economy, which many people, I think, would view as a very positive thing. There have been some economic problems in the country that people might not view as a very positive thing, but those certainly have also affected fuel consumption. And then I think the increased use of biofuels has also had some contribution.

But when you look at the -- the question is how much have biofuels increased because of the RFS? As much of the conversation has pointed out, there is a lot of biofuels that would be used with or without the RFS, a lot of ethanol. So in looking at how much biofuels have increased because of the RFS, if you would convert back those gallons into million barrels per day that is actually sort of a much smaller number than the increase in crude oil production, or I think the reduction in consumption due to greater fuel efficiency. I think that is what the testimony says.

Mr. Latta. Well, let me ask you. Also in your testimony, because you also mentioned point 5, you also discussed the projected decline in the motor gasoline use and you say that it is not a cause of past or projected shortfalls. Could you explain

that?

Mr. Gruenspecht. Sure. That really goes back to Mr. Barton's --

Mr. Latta. Mr. Barton's question, right.

Mr. Gruenspecht. -- question. So sure, if -- remember that the program calls for getting to 36 billion gallons by 2022. And yes, clearly you could, if fuel consumption was somewhat higher as in those 2007 projections, you could put more ethanol into E10 with more gasoline consumption, but that would get you nowhere near the 36 billion gallons. So clearly the statute was not envisioning getting to 36 billion gallons based on E10 type blending into the gasoline pool. The statute was envisioning something completely beyond that in terms of transformation of the fuel system and that has very little to do with, you know, exactly whether we are consuming ten million barrels a day of gasoline or 9.3. And that is what I think that statement meant.

Yes, it has had an effect. But no, it is not the, you know, that everything would be great with this program in terms of meeting the legislative targets if those AEO 2007 demand projections for gasoline had been realized.

Mr. Latta. Thank you. Mr. Chairman, my time is expired and I yield back.

Mr. Whitfield. The gentleman yields back. At this time I

will recognize the gentleman from Iowa, Mr. Loebsack, for 5 minutes.

Mr. Loebsack. Thank you, Mr. Chair. Thank you again for having this hearing. I think that while we debate, you know, this whole RFS issue it is really important that we get the facts on the table, and that is hopefully what we are doing today. No matter which side of the issue you are on, I just think that often in Congress we have anything but a fact-based discussion. So this is important for you folks to be here and I do appreciate both sides of the issue and the questions that are being asked.

It is clear, Madam Administrator, that you are asking farmers and our rural communities, I think, to shoulder the consequences of the so-called blend wall. I think it is also clear that there are other logical and common sense ways around the blend wall.

If the concern of the blend wall is the price of RINs, for example, it seems economical to think that if oil companies were indeed concerned about RIN prices they would invest in more biofuel infrastructure to keep RIN prices down.

Can you tell me what is being done by the EPA to look into the big oil companies' control of the market and lack of choice for consumers and why these aren't being addressed as part of the blend wall concern?

Ms. McCabe. Well, our process of setting the annual RVO

target each year, requirement each year, is all about setting that expectation for the producers because they are the obligated parties. And the RIN mechanism and the RIN prices you have identified is a mechanism to create incentives for the refiners to actually make sure that there is more alternative fuel in the system.

There are also programs such as the ones at USDA that help provide encouragement and funding to increase infrastructure and investment and those that will continue to make this more attractive in the market. And as you say, you know, it is about consumers and about choice, and if people want the fuel it will be there for them. The RIN system provides that extra incentive and the requirement, the obligation, does as well.

Mr. Loebsack. Okay. I have a question about in the proposed rule where you state, and I quote, to date we have seen no compelling evidence that the nationwide average ethanol concentration in gasoline cannot exceed ten percent, unquote.

So with that statement in mind, why do you feel the need to roll back this policy based on demand and the so-called blend wall when you readily admit that we as a nation can go beyond ten percent ethanol in the fuel supply?

Ms. McCabe. Well, we haven't rolled back the requirement at all, and in fact our proposed rule would require ethanol above

ten percent in the system. I think it is about 10.4 percent. And so that is exactly what we do in considering the waiver where the statutory volumes would go significantly beyond that ten percent.

Our evaluation is that those are not realistic or feasible, our job then as we see it is to set a volume that is as close to that statutory volume as we think is appropriate. And this proposal will require more ethanol or more renewable fuel. It will be served by whatever fuel is competitive and makes it into the system. But it accommodates certainly more ethanol than ten percent.

Mr. Loebsack. Well, the third thing I want to address is, it was brought up by Mr. Welch -- and by the way I think it is a good thing that Democrats disagree with Democrats and Republicans disagree with Republicans and not just Democrats and Republicans disagreeing. We don't hear too much about that out there, you know, in the rest of the country.

But at any rate, the intent of the RFS was to help the U.S. become more energy independent and secure while also reducing greenhouse gas emissions. And I take Mr. Welch's point about sort of evaluating that on the part of the EPA. Each gallon of renewable fuel taken away can only currently be replaced by a gallon of gasoline and it doesn't seem to help address our climate concerns and has a potential to greatly reduce investments in the

next generation of biofuels which promise even more greenhouse emissions, I would argue, greenhouse gas reductions, excuse me.

Can you tell me how the potential RVOs contribute to the EPA and Administration's goal of greenhouse gas reduction now and into the future and how we might be able to measure that to address Mr. Welch's question as well?

Ms. McCabe. Well, Congressman, I think it was you that said earlier that every gallon of renewable fuel that replaces a gallon of petroleum is bringing the benefits of that fuel. And especially with advanced biofuels, the greenhouse gas advantages of that are considerable.

I will also say in answer to your question that as I have said already, this program has a long trajectory and we are still in the early days in terms of the system is really gearing up to produce the kinds of fuels that Congress was looking for. So I think that people will agree that as this continues to be implemented people will be able to see more and more actual impact. But even today when you use those renewable fuels you are replacing petroleum and moving towards that goal that Congress set.

Mr. Loebsack. Thank you. Thank you. Thank you, Mr. Chair.

Mr. Whitfield. The gentleman's time has expired. At this time I recognize the gentleman from Pennsylvania, Mr. Pitts.

Okay. At this time we will recognize the gentleman from West Virginia, Mr. McKinley.

Mr. McKinley. Thank you, Mr. Chairman. Two quick questions if I could, Ms. McCabe, and again welcome back. It is my understanding that you can't blend ethanol with diesel fuel and the market will not accept more than two to five percent of the biodiesel blend in diesel; is that correct?

Ms. McCabe. Well, I am not an expert on this issue. I would be glad to get you specific answers. But there is a blend concept relative to diesel as there is --

Mr. McKinley. Under biodiesel we might be able to do that two to five percent, but the EPA imposes the same proportional RIN obligation on all refiners, even some that produce significantly more diesel than gasoline. From what I understand, these diesel-rich refiners can't separate enough RINs to meet their obligation and so they are forced to buy RINs to offset that. And one in my district it is going to cost him millions of dollars and they are just a small boutique-type refinery that is being hurt with this.

So I am curious, can't we develop or would you be willing to develop a refiner's obligation for corn at one level, excuse me, ethanol on one for gas and a separate one for diesel fuel? Would that not make sense that we separate the two rather than

treat them as equal because they are not? Would that make any sense to you?

Ms. McCabe. Well, I don't think that is the way that the statute was set up, and through the way the statute was set up and then the rules that EPA set up -- and I wasn't there at that time so I wasn't personally involved, but the notion that the RIN market as a big open and flexible and liquid market was the best tool for the refiners to be able to meet their obligations under --

Mr. McKinley. Okay. But would it make sense to have two separate obligations, one for diesel and one for gasoline?

Ms. McCabe. You know, we would be glad to talk with you about that further.

Mr. McKinley. Let us pursue that a little bit because I think we have a unique situation with a small refinery that is being penalized because they are producing far more diesel than they are gasoline but yet they have this problem.

Let me go to another question. Does the EPA assume that their RIN bank will increase or decrease once the obligated parties begin reporting their RIN compliance for 2014, 2015, and 2016? Do you think it is going to increase or decrease?

Ms. McCabe. I don't know that I have an opinion right now. We watch these numbers on an ongoing basis and I think the RIN

bank has been relatively stable. You know, people can, they have these credits, they can use them the next year and so they roll over.

Mr. McKinley. Okay. But if perhaps the RIN bank is depleted, if it is depleted which apparently that is what a lot of refiners are expecting that to happen on it, would the EPA consider adjusting their proposal to account for the shortage of RINs in the market?

Ms. McCabe. Well, we think that the RIN bank is a really important feature of the program because it provides that cushion for manufacturers and they accumulate RINs in a RIN bank to provide them with that kind of security. So in the proposal that we put out, we designed it in a way that did not have an expectation that the RIN bank would be used to satisfy these obligations.

Mr. McKinley. Okay. I yield back the balance of my time. I hope that maybe we can sit down and talk about how we might be able to treat the small refinery different than someone else. Thank you very much. I yield back.

Mr. Whitfield. The gentleman yields back. At this time the chair recognizes the gentleman from New York, Mr. Tonko, for 5 minutes.

Mr. Tonko. Thank you, Mr. Chair.

Ms. McCabe, what are the greenhouse gas emission benefits

of advanced biofuels, and just how much cleaner are they required to be?

Ms. McCabe. Per Congress, advanced biofuels have to be 50 percent cleaner and cellulosic have to be 60 percent cleaner.

Mr. Tonko. And can you give your perspective on the state of the advanced biofuels industry in terms of perhaps domestic production how much has been added, and into the future what is the expected growth rate in the coming years?

Ms. McCabe. Yes. That is the question, Congressman, so we stay in very close touch with the domestic industry. There is the biodiesel industry which has had a very optimistic and good growth and continues to and has invested and is producing increasing amounts of volume.

On the cellulosic side that has been a little bit harder for those firms to get going. There are, however, a handful of firms in the country that are now starting to produce actual volumes and generate RINs. That is very encouraging. It is still at a pretty small level and certainly way below what Congress would have expected by now or was hoping for by now. But we see it on an upward trend. That is why it has been our focus to get these volume standards back on track, get them out on time so that there is more certainty in the market for those to develop.

We have done some, working on some other things, improved

our pathway approval process which is ways for people to come in with new production processes to get those approved to be able to generate RINs. We are now processing those very, very quickly so that those can move through and we have I would say a study stream of those. So I think it is on the upturn for sure.

Mr. Tonko. And you certainly see some of those barriers being lowered now from --

Ms. McCabe. I think with certainty in the market, with greater consumer acceptance and desire for a variety of fuels that we will see those penetrating more.

Mr. Tonko. Thank you. And Mr. Gruenspecht, I believe for the first time since the 1970s there are higher levels of carbon dioxide emissions from the transportation sector than from the electricity generation sector. Is that accurate?

Mr. Gruenspecht. I think that may be coming to be the case mostly because of the drop in the electricity sector carbon dioxide emissions.

Mr. Tonko. And what factors, are there factors that would enable the transportation numbers to overcome the electricity numbers?

Mr. Gruenspecht. I am not sure I understand the question, sir.

Mr. Tonko. Well, if there is now this overwhelming or this

bypassing of the electricity carbon emission numbers by the transportation sector, how would you explain that phenomenon from having happened?

Mr. Gruenspecht. Well, again, primarily driven by the drop in the electricity sector with less coal fire generation, more renewable generation, more natural gas generation which is much lower in carbon emissions than coal-based generation.

On the transportation side, I think we have significant fuel economy standards that are being phased in over, you know, through for light duty vehicles through 2025. In the present environment right now, I think we have rising gasoline consumption. There is interesting questions as to why that is the case, so there may be obviously lower gasoline prices, a lot of job creations in recent years, so when people get jobs they drive to work often. So lower gasoline prices, drive to work more, and also the vehicles that people are buying are changing.

So yes, present each year the fuel economy standards are getting tougher, but remember there are separate ones for depending on the footprints of the vehicles. So if the mix between larger and smaller light duty vehicles, let's say, you know, what are called light trucks and cars, if the balance is shifting more toward light trucks you will find even with the standards getting tougher for each of them maybe the fuel economy

of new vehicles, let's say over the last couple of years, has actually not decreased.

Of course those new vehicles only get added to the fleet stock of vehicles, but I think the rate of change in fleet fuel economy has not declined as much because of some of these changes as some people might have thought.

Mr. Tonko. Okay. Well, thank you for that. And with that Mr. Chair, I yield back.

Mr. Whitfield. The gentleman yields back. At this time the chair recognizes the gentleman from Kansas, Mr. Pompeo, for 5 minutes.

Mr. Pompeo. Thank you, Mr. Chairman.

Ms. McCabe, in your opening testimony you said we believe these proposed volumes are achievable. You listed a series of volumes for that. Do you really think they are all achievable? Do you think that without RINs do you think those volumes will be reached?

Ms. McCabe. The ones that we have proposed?

Mr. Pompeo. Yes.

Ms. McCabe. We do think that those are reasonably achievable.

Mr. Pompeo. Great. We will come back in a year and see how you score against that. Your track record is pretty poor in

achieving that whether those proposals have exceeded, so this would be a first. That would be great. I hope you are right. Now let me just keep going.

Ms. McCabe. All right.

Mr. Pompeo. We talked about the obligated party with Mr. Olson for a moment. You are convinced you have the authority without statutory change to change the obligated party. That is, it is an administrative task. You have the authority if he has the authority to change who the obligated party is; is that correct?

Ms. McCabe. I believe that is right. We did it by regulation to begin with.

Mr. Pompeo. I agree. And in 2010 when RFS2 came out, you said that if the RIN market went -- I want to summarize because it is long. If there were problems in the RIN market you would revisit this, and you said now in light of the petitions you have received you are in fact revisiting who the appropriate obligated party might be.

Ms. McCabe. We are looking at those issues, yes.

Mr. Pompeo. But you are not willing to give us any timeline for when you might tell us what it is, your ultimate judgment comes to be?

Ms. McCabe. I don't have a timeline right now.

Mr. Pompeo. Great, thank you. You said where at the beginning of the program a little bit earlier it ends in 2022 in one sense. That is, the requirements end. The program, however, continues forever. Tell me what restrictions there are on what volume levels will be set by the EPA after 2022.

Ms. McCabe. This is what I understand from the statute. The statutory volumes end in 2022 as you said, the EPA is then directed to set those thereafter. We are to do it based on our review of the implementation of the program on the list of criteria considerations that Congress put in. And I believe there are two minimum expectations, one relates to biodiesel and one relates to advanced and that we are to have minimum volumes at least as great as the last ones we set.

Mr. Pompeo. For those two items?

Ms. McCabe. Yes, I believe that is right.

Mr. Pompeo. I think that is right as well. So it is the case that you could completely eliminate the corn based requirement. That would be within your statutory authority to completely eliminate the corn-based requirement post-2022 volumes that are set forth in the statute.

Ms. McCabe. I haven't looked at that question explicitly, but I don't believe there is an expectation in the statute itself with respect to what is not advanced. There is no corn-based or

conventional mandate in the statute. It is what fills up the space between advanced and total.

Mr. Pompeo. I think that is right. The statute specifically lists environmental impact as one of the criteria that you should use including climate change as criteria for setting those volumes. Do you think that corn-based ethanol has a negative environmental impact?

Ms. McCabe. I think that this is a challenging question with many considerations, and I think in --

Mr. Pompeo. But what do you think? You have been looking at this for an awfully long time.

Ms. McCabe. So in some respects there are greenhouse gas benefits. A lot of it depends on the feedstock and the particular lifecycle elements of any particular feedstock including corn. There are some advanced fuels that can be made with corn materials as well as conventional corn ethanol.

Corn ethanol has differing impacts on other environmental features such as air quality. In some cases it reduces air pollution, in other cases it may increase air emissions. So it is a very mixed picture.

Mr. Pompeo. The Administration entered into what they commonly called the Paris Agreement. Assuming that the United States is still party to the Paris Agreement in 2022, would the

EPA consider that as a factor as it is evaluating America's attempt to comply with its commitments under the Paris Agreement? Would the EPA consider that as it is deciding what the appropriate level should be from 2022 and beyond?

Ms. McCabe. I can't speak to what the EPA might do in 2022.

I think its first priority would be to implement the statute.

Mr. Pompeo. Right. But I am asking would it be appropriate to consider an agreement, a climate change agreement that the Administration entered into as a criteria as it is evaluating whether or not its levels that it sets post-2022 would comply with the statute?

Ms. McCabe. Well, I think that the RFS and other programs that are climate focused provide the support for the United States' commitment internationally, not the other way around. But I can't speak for a future EPA.

Mr. Pompeo. Do you believe you would have in 2023 the statutory authority to restructure the RFS to mirror the California Low Carbon Fuel Standard Program? Could you do that, would have the authority to do that?

Ms. McCabe. I don't know, Congressman, but would be happy to follow up with conversation on that point.

Mr. Pompeo. Thank you. I yield back.

Mr. Whitfield. The gentleman yields back. At this time the

chair recognizes the gentleman from Virginia, Mr. Griffith, for 5 minutes.

Mr. Griffith. Thank you very much, Mr. Chairman. I do appreciate that. Thank you all for being here today.

I am trying to sort some of these things out. I am concerned about the comments about the wildlife habitat that has been destroyed as a part of this that Mr. Welch brought up earlier. And I thought it was really nice that one of my colleagues mentioned that sometimes Republicans don't agree with Republicans and the Democrats don't agree with Democrats and the issues get a little blurred particularly in this area. But I am concerned about that.

I am also concerned, Mr. Gruenspecht, you indicated in your testimony that the greenhouse gas standards for heavy duty trucks might impact RFS. Could you explain a little bit more on that?

Mr. Gruenspecht. Well, the reason I mentioned that in the testimony or the reason that was included, you know, we have heard a lot about what was expected, you know, in 2007. And again, in 2007, you know, there was an increase in more stringent fuel economy standards for light duty vehicles which wasn't reflected in that outlook that apparently people relied on even though they were changing the fuel economy standards.

So all I am saying here is, you know, we have present outlooks

and they are based on current laws and regulations. Right now those Phase 2, so-called Phase 2 standards are not part of that although we are going to do a side case that looks at the proposed Phase 2 standards because they have already been proposed.

But in that projection there would be significantly less diesel consumption than in the baseline projection, you know, so we are not trying to guess what either the people in Congress are going to do or the people in the Administration are going to do. Since we know there is a specific proposal we feel like we can put that out there.

But I guess I put that in the testimony not as a caution but just so if someone says, gee, we looked at your outlook and it said there would be this much diesel, it is very dependent on policy. Policy matters a lot.

Mr. Griffith. And it is clear that you are trying to be very careful in your projections and so forth, but you did indicate that if the greenhouse gas standards for heavy duty trucks are finalized that would significantly reduce projected diesel fuel use --

Mr. Gruenspecht. Exactly.

Mr. Griffith. -- and these things are going on, the lower cost of gasoline has had an impact and et cetera as you have mentioned previously in your testimony.

And then it makes me wonder, Ms. McCabe, when you respond to Mr. Pompeo that you are confident that all these goals can be met, how can you be so confident when you have got all these different variable factors out there which you have already established in the past that you weren't able to meet all those goals?

Ms. McCabe. Yes, there is a really important factor to mention here. Congress set absolute numbers in the statute, but then the way the obligation is actually given to the industry is through a percent. So because there are absolute numbers in the statute we need to be guided by absolute numbers.

But then the expectation is not that any given producer will produce x number of exact gallons based on our absolute number but rather on the percentage, so we translate that to a percentage. So that means if we are wrong on we predict more gasoline use than actually happens or less gasoline use than actually happens, the refiner's obligation it will take that into account because it is a percent obligation.

Mr. Griffith. Well, I appreciate that. I will ask you to give me information later because I don't expect you to have this, although some of the answers I thought the questions that were asked I thought you might have had answers in preparation for this hearing.

But biodiesel that comes from grease as opposed to coming from plant material, if you can get me whatever it is you all are working on in that regard and how you might be increasing that or what proposals you may be making behind the scenes to increase the amount that is made from waste grease fats. I know there is some research out there and if Singapore is looking at it and other folks are looking at it to try to take our love of hamburgers and turn it into a renewable fuel source. So just give me that information later if you would. My time is running out and so I would also ask Administrator Gruenspecht, according to the U.S. Department of Energy vehicles will typically go three to four percent fewer miles per gallon on E10, four to five percent fewer on E15 than on a hundred percent gasoline. And according to the Institute of Energy Research, Americans have paid about 10 billion in additional cost for the privilege of having ethanol blended into their gasoline.

Can you verify this information, and if it is correct why should Virginians in my region of the state continue to be forced to foot the bill in order to prop up the ethanol industry?

Mr. Gruenspecht. I think the first set of information is probably correct, the lower energy content of ethanol. I am not sure the second set of information about how much it has cost is really open to a lot of interpretation. And the reason is, as

many of the members have said, ethanol contributes octane which is very important to make gasoline good and that we would be, many people I guess, Administrator McCabe, myself, some of the members believe that we would be using a lot of ethanol in gasoline even if there were no RFS requirement.

So again I am not sure how that 10 billion figure was calculated, but if it is providing other necessary parts of gasoline I don't know that you would necessarily call that a cost. So the first part yes, I think.

Mr. Griffith. All right, I appreciate that and I yield back.

Mr. Whitfield. The gentleman's time has expired. At this time the chair recognizes the gentleman from Illinois, Mr. Kinzinger, for 5 minutes.

Mr. Kinzinger. Thank you, Mr. Chairman. And before I begin my questions I am going to ask unanimous consent to insert into the record a study that shows, showing the impact of the EPA's lack of certainty on the biofuels industry titled, "Estimating Another Year of Chilled Investment in Advanced Biofuels Due to RFS Uncertainty."

Mr. Whitfield. Without objection.

[The information follows:]

\*\*\*\*\*\*\*\*\*COMMITTEE INSERT 11\*\*\*\*\*\*\*

Mr. Kinzinger. To the administrator, thank you for your service and thank you for being here. I really appreciate it. I just have a couple of questions. I am curious how the EPA determined the biodiesel targets for 2017 and the proposed targets for 2018. It is my understanding that these targets will both be below the amount of biodiesel EPA estimates will be produced this year. Can you elaborate on how they were determined?

Ms. McCabe. Sure, happy to do that and to follow up if I am not detailed enough for you. So the statute establishes an amount for biodiesel through 2012, gets up to one billion gallons and then it is up to the EPA to determine an amount after that. So what we do with biodiesel is what we do with all of the fuel categories which is we get as much information as we can about what the expectations are with respect to the industry.

But there is a difference with biodiesel because biodiesel is one of a number of advanced fuels. It fits into that advanced category and we have to set a separate amount, expected amount for the advanced category. And one of the questions is how much of that advanced category should biodiesel basically get a guarantee on? And we believe that it is important to have competition and choice and opportunity for a variety of fuels to compete.

So we consider very carefully how much biodiesel can

contribute because it is very important, right, but also leaving room for other fuels to compete. Now it is not a limit on how much biodiesel can be produced nor sold, and depending on what other fuels are out there and how they are priced it can be very competitive. But in fact it has provided a substantial amount of our advanced biofuel.

So that is the process we go through. We look at the information, but then we have this other consideration to make sure that other fuels have an opportunity to compete.

Mr. Kinzinger. Okay. And I am sure you appreciate the amount of planning that goes into this infrastructure, purchases by obligated parties or preparation made by the ag community which comes along with complying with the annual volumes. I am glad the EPA is working to get back on schedule with the 2017 rule deadlines.

What are you as an agency doing to ensure that you will remain on schedule for 2017 and beyond?

Ms. McCabe. Yes. I think we have done a good job of getting ourselves back on track. The big issue was approaching the blend wall, the use of the general waiver. We have now used it. We have proposed to use it again. It is being litigated as has been mentioned, so presumably will get some direction from a court at some point.

So some of those very difficult issues are behind us now and so we are able to do our routine work, just make sure that we are on schedule. We got this proposal out absolutely on time to get a final out by November and there is no reason we shouldn't make that.

Mr. Kinzinger. So your feeling is that basically from here out we are probably going to be on track better with timing?

Ms. McCabe. Well, that is my belief. I won't speak for future EPA leadership, but I feel confident that the program can do it.

Mr. Kinzinger. Okay, thank you. And just in closing to just remind people because there is obviously a lot of talk and it is important, and I have a lot of, a hugely agricultural district and I remember back in the '90s there was a lot of talk about whether the family farmer would be able to survive. And, you know, is this just going to become, you know, in essence major corporations taking over these farms to do it?

And I think ethanol has been a big part of the survival of the family farmer and obviously very important going forward, especially when we see corn prices today and knowing that the importance of producing food not just for ourselves but for frankly the world and the importance of it. So again, thank you for your service and thank you both for being here, and I will

happily yield back.

Mr. Whitfield. The gentleman yields back. At this time the chair recognizes the gentleman from Texas, Mr. Flores, for 5 minutes.

Mr. Flores. Thank you, Mr. Chairman. I thank the witnesses for joining us today.

Mr. Gruenspecht, do you believe that the market can absorb 14-1/2 billion gallons of renewable fuels in the 2016 RVO? I am talking gasoline only for all of my conversation.

Mr. Gruenspecht. Yes, I am an economist and I tend to believe in markets. And I think if, you know, that there is certainly conditions I could imagine that the market can absorb that.

Mr. Flores. Okay.

Mr. Gruenspecht. I mean, I don't know what the RIN prices would be. At some point, you know, the higher ethanol blends get very attractive to the people who can use them, so I would not rule out anything.

Mr. Flores. Okay. How about the 14.8 billion gallons for the 2017 RVO?

Mr. Gruenspecht. Again it is a market-based issue.

Mr. Flores. Okay, but it could generate a higher RIN cost which would generate higher gasoline costs?

Mr. Gruenspecht. Well, again the figuring out -- yes, it could generate higher RIN costs. Exactly who bears those costs is a very complex --

Mr. Flores. Okay. So I guess that leads to the broader question. What happens to the market if either the 2007 statute and/or the EPA continue to push higher and higher volumes of ethanol into a fuel market, a gasoline market where volumes have flattened and are actually you are predicting to decline? What happens to the market?

Mr. Gruenspecht. If I knew the answer to that question I guess I wouldn't be a government official.

Mr. Flores. There you go.

Mr. Gruenspecht. But seriously, there are actually, you know, I did try in the written testimony, although I didn't mention it in the oral, you know, there are options, higher volume blends which has all kinds of issues related to infrastructure that I actually feel like the members here are extremely well informed on this issue, probably better informed than I am to be the truth.

But the opportunity for something like biobutanol, say, which potentially could be blended at a high -- there is no rule that says that the biofuel has to be, you know, ethanol and biodiesel. There are processes to create biobutanol using the same feedstocks, so there are a lot of different options. I am

not going to say it is a cinch. I am not going to say it is, you know, but if --

Mr. Flores. But it could cause market disruption, do you think?

Mr. Gruenspecht. It would definitely change things.

Mr. Flores. Exactly.

Mr. Gruenspecht. It might change the blendstocks that have to be used in conjunction.

Mr. Flores. Let me move on though, we have got a lot of ground to cover in a short period of time.

Ms. McCabe, you know, you and I both understand the EPA has got some waiver authority to adjust the volumes, also I think you have essentially admitted that the mandated volumes don't match the trends in consumer fuel demand. And so I believe that means that they are technically and commercially unachievable and I think that is what the 2017 proposal or the rulemaking by the EPA essentially says is that the statutes can't be achieved so we the EPA are going to do the best we can in an uncomfortable situation.

So that leads me to the next question. Congress said volumes. Would it be easier for you if Congress had just said we set percentages of renewable fuels that have to be blended based on actual gasoline demand? Wouldn't that have been a better solution?

Ms. McCabe. Well, as you might expect I am not going to opine on what Congress, whether one thing or another would have been better for Congress to do.

Mr. Flores. But you have to implement these things. Would it have been easier for you to implement if you had a percentage mandate instead of a volumetric mandate?

Ms. McCabe. Well, I think we would, Congressman, go through much of the same inquiry to make sure that whether it is expressed as a percentage to begin with or whether it is an actual volume that then is translated to a percentage, we would still be inquiring into where the industry is going and what is feasible and realistic. So, and I think we would be doing a lot of the same work.

Mr. Flores. Okay. Wouldn't though, let's put it this way. Right now every year, everybody involved in the gasoline market if you will whether it is a consumer, a refiner, a corn grower, an advanced ethanol company, goes through an extreme amount of uncertainty because they just don't know what the EPA is going to do, because they know there is a statute out there that is volumetrically driven that cannot be achieved through the current technology and current market conditions.

So wouldn't it be better and more stable for the market if there was an easily understood percentage mandate instead of a

volumetric mandate?

Ms. McCabe. Well, I think uncertainty has been a real concern of people and, you know, that is why it is so important for us to get our rules out on time. But even if we get them out on time it is an annual process, right. So people have those concerns.

Mr. Flores. Let me say this. I think the market would respond better just knowing, okay, expected gasoline demand is x and the percentage is y and therefore the outcome that the market has to be driven toward is z. I mean that is a lot simpler. There is a lot more stability and a lot more transparency to the market. Thank you. I have overstayed my welcome. I yield back.

Mr. Whitfield. The gentleman yields back. At this time the chair recognizes the gentleman from Mississippi, Mr. Harper, for 5 minutes.

Mr. Harper. Thank you, Mr. Chairman.

Ms. McCabe, at a Senate hearing earlier this year you indicated that the EPA in consultation with the DOE has continued to grant small refinery hardship waivers. For those that were denied was the denial based on their profitability, and has DOE and EPA implemented a new hardship standard by which you are denying hardship relief to refineries that remain profitable even if they have a disproportionate regulatory burden by producing

more diesel than the national average and lower refining margins?

Ms. McCabe. We do continue to look at hardship waivers and we have a pretty standard number of them every year and we coordinate closely with the DOE. We worked with the DOE and the DOE developed an evaluative process that they use to then give us a recommendation and they used a couple of different factors. As you know, DOE has recently made some adjustments in their process based on some recommendation language that they got through legislation directed to them. We continue to coordinate with the DOE, but we however feel that our job is to implement the statute and to exercise our hardship waiver authority in conjunction with the statute. So we take DOE's input but we have not made changes in our process that are consistent with the DOE changes that they have made in response to direction that they got.

Mr. Harper. Well, I am not sure I really got an answer to my question. Is profitability a factor in approving or denying a hardship petition?

Ms. McCabe. Yes, it is. There are a number of economic factors. It is one of a number of factors.

Mr. Harper. So their profitability is a factor. So you could have two entities doing the same amount of work but one is not profitable, the other one is for whatever reason it is, and

the hardship waiver may be granted to the refinery that is financially not as viable or as profitable, and the one that may be doing it right and more profitable is going to get denied under the same set of circumstances.

Ms. McCabe. These are really complicated decisions, Congressman, and they are --

Mr. Harper. Well, it is pretty complicated when you are being punished for trying to do it right and denied this in this regard.

Ms. McCabe. Well, Congressman, when somebody comes and asks for an exemption that means that they are asking to not be expected to do what the rest of the industry is asked to do. And so we look at these very, very carefully, because it matters greatly to the person coming to us but it also matters greatly to everybody else that has that burden. And that is why we think that the range of factors we have established are appropriate ones.

Mr. Harper. And I know you have mentioned it and I would, you know, maybe not agree with you that they are appropriate and maybe need to be looked at closer, and you have mentioned the language included in the Omnibus Appropriations bill last year restating congressional intent regarding small refiner hardship. Can you please tell me how the EPA intends to apply to small refiner hardship petitions going forward?

Ms. McCabe. That language was directed towards DOE's process and how they would make their recommendations to the EPA. And so they are doing that and we are paying attention to DOE's recommendations as we always do and to the analysis that goes into their ultimate recommendations. We are making our decisions based on our understanding of what our statutory obligations are.

Mr. Harper. For hardship petitions that are submitted this year will you follow the 90-day time clock for a response?

Ms. McCabe. Yes.

Mr. Harper. Okay. Mr. Chairman, I don't believe I will have enough time to get into another question here, so I will yield back.

Mr. Whitfield. The gentleman yields back. At this time the chair recognizes the gentleman from Oklahoma, Mr. Mullin, for 5 minutes.

Mr. Mullin. Thank you, Mr. Chairman. And thank you for taking the time to be here. So I am going to focus on a couple of things real quick since you are the economist on the panel today. With the RIN's price what is the current price today on the RINs, do you know?

Mr. Gruenspecht. I probably have it written down somewhere.

Mr. Mullin. 85 cents.

Mr. Gruenspecht. Sounds right.

Mr. Mullin. Okay. And before the blend wall do you know what the RIN's price was?

Mr. Gruenspecht. I know that for a long, long time the RFS wasn't binding at all. We were using much, much more ethanol than required by the RFS and the RIN prices were --

Mr. Mullin. Right. Before the blend wall it was like trading between 2 and 4 cents. At its highest point it was costing 1.48. Do you know what the total was going to the refineries, what the refineries were spending on this?

Mr. Gruenspecht. I am not sure. I mean, they were buying, you know, the blenders were buying ethanol --

Mr. Mullin. I mean, but the refineries were forced to buy them even though --

Mr. Gruenspecht. Right.

Mr. Mullin. -- this blend was out of their control.

Mr. Gruenspecht. Right.

Mr. Mullin. Do you know how much the refineries were costing, it was costing them?

Mr. Gruenspecht. I am not sure because when they bought ethanol it had RINs attached, so the question is how much --

Mr. Mullin. How much does it -- okay, let me rephrase this then. How much is the RINs costing the consumer out there? How much is it adding to a gallon of gas?

Mr. Gruenspecht. I am actually not sure I know the answer to that question, honestly. It is a tricky question because --

Mr. Mullin. Well, it is but you are the economist.

Mr. Gruenspecht. I understand that.

Mr. Mullin. And so that is why I am asking you the question because this is part of the debate. Is this healthy for the consumer? If ethanol is a cheaper, better, smarter way to move forward we are talking today about what is the percentage of the blend, what is it required, and then the bigger picture is what is it actually costing the consumer? I mean, we already know that as a guy that has over a hundred vehicles on the road in my company and that we have multiple small engines out there -- we are in the construction business -- we know it is not healthy for our vehicles. I don't think either side is even debating that.

So if it is not healthy for our vehicles we are wanting someone to tell us, where is it good? Is it good for the economy?

Mr. Gruenspecht. I have not looked at that sir.

Mr. Mullin. So --

Mr. Gruenspecht. You know, a challenge as we discussed earlier is that the ethanol serves multiple purposes in the fuel, so it adds octane, it helps meet other kinds of requirements unrelated to the RFS.

Mr. Mullin. But are they the smarter, better way to move

forward? I mean for the economy, you are an economist.

Mr. Gruenspecht. Yes.

Mr. Mullin. Is it healthy for the economy?

Mr. Gruenspecht. I am actually not sure it is a primary consideration for the economy. It is more of a consideration for fuels policy and environmental policy. There are definitely effects.

Mr. Mullin. Well, for the environmental policy --

Mr. Gruenspecht. I think it affects the agricultural community to some extent. I mean --

Mr. Mullin. Well, sir, for the environmentalist, let's just talk about that. I think you said it was higher fuel standards; is that what you said earlier? You were answering a question and you spoke about higher fuel standards. And so let's talk about the environment. Ethanol doesn't burn better. I get less miles per gallon in my vehicles when we burn ethanol.

Mr. Gruenspecht. Absolutely. Ethanol has less energy content than gasoline.

Mr. Mullin. On our vehicles we run about 150 vehicles of one particular brand. When I run non-ethanol versus ethanol I see roughly a 12 percent increase in fuel mileage, when I run 100 percent fuel E0. And so for the environment that is not good, so I focus once again on the economy side of things. Where is

it good?

And I don't mean to be pinning you, but you are the economist and I find it funny that we can't get an answer on that; that no one has studied downstream. Because we always talk about the consumer, we always talk about the middle class, we always talk about how much better and healthier it is for them and lower fuel standards, but I am just not seeing it.

Mr. Gruenspecht. All right. Again it is something we could look at. I think there are a variety of views on it, a variety of perspectives on it.

Mr. Mullin. So the EPA has never looked at this?

Mr. Gruenspecht. Well, I can't speak for the EPA.

Mr. Mullin. Ma'am?

Mr. Gruenspecht. I mean that sounds like throwing my colleague under the bus, but --

Mr. Mullin. But you think some economists should be looking at this?

Ms. McCabe. Yes, we have economists at EPA as well who look at these issues. A couple things I will say in response to the points that you have made, there has been development in rural America as a result of the investment in not just ethanol but other renewable fuel operations, and I am sure you will hear that from the second panel to a great degree. So it has added to the economy

in that way.

Mr. Mullin. What has it added to other than higher consumer prices?

Ms. McCabe. Well, it has created jobs and --

Mr. Mullin. At the cost of who, the consumer. We have created jobs through regulation.

Ms. McCabe. Well, so another point that I want to be sure to make is that a lot of people have looked at and are looking at the dynamics of the RIN price and does it or doesn't it affect prices at the pump for the consumer. And --

Mr. Mullin. It has to, because it has cost the refineries billions of dollars and who do they pass it on to? As a business owner I have got to pass my regulation costs to someone. You can't absorb it. That is why I find it odd that we through either economists or the EPA haven't looked at this downstream on actually what it is costing the consumer at the pump.

Ms. McCabe. We actually have looked at this issue in great detail and would be glad to follow up with you and provide some more information on it.

Mr. Mullin. Please do, I would appreciate that. Thank you so much.

Mr. Whitfield. The gentleman's time has expired. At this time the chair will recognize the gentleman from Ohio, Mr.

Johnson, for 5 minutes.

Mr. Johnson. Thank you, Mr. Chairman. And I appreciate the panel for joining us today. Ms. McCabe, how might the EPA go about setting blending requirements differently after 2022, fully understanding that a different President and Administration will be in place at that time?

Ms. McCabe. Yes, sir. Well, thank you for recognizing that I won't speak for a future EPA. But we would use the guidance that Congress gave us in the statute. So our job is to look at the list of considerations and concerns that are laid out in the statute which are very explicit. We are to look at the implementation of the program through 2022 and take that into account, and we are to also make sure that we set minimum requirements for advanced fuel that are no less than the last level that we set in 2022, and likewise for biodiesel. And so those are two specific directions that Congress gave us, and beyond that we would use our consideration of the list of factors.

Mr. Johnson. Do you anticipate any immediate or significant changes to blending requirements once the EPA is not bound by these statutory requirements?

Ms. McCabe. That is something I really can't speak to. It is not only would it not be me, it is many years into the future.

Mr. Johnson. Okay. Do you believe that the agency is on

track to meet all statutory blending requirements by 2022?

Ms. McCabe. I think we have made clear that the statutory volumes that Congress put, the actual numbers that Congress put into the statute we will not be able to make, and so that is why we have used our waiver authority in this proposed rule and the last one to set standards that are less than that.

Mr. Johnson. So if you can't meet the statutory blending requirements by 2022, then how many more years might the agency need to achieve those blending requirements, any idea?

Ms. McCabe. The actual numbers in the statute?

Mr. Johnson. Yes.

Ms. McCabe. I really wouldn't know.

Mr. Johnson. I mean, if you know you are not going to meet them have you not looked at how long it would take you to meet them?

Ms. McCabe. I don't believe we have looked at that Congressman, because we know that there is a process for us to set appropriate but aggressive standards in the meantime. We know that there is a process in the statute for what happens afterwards and that would, I expect, be the intent of the agency would be to follow that process.

Mr. Johnson. I mean, it seems to me that because these are statutory requirements that the agency would be planning to meet

the statutory requirements, and if not at least inform Congress as to when they expected to be able to meet them. But you say you haven't looked at that.

Ms. McCabe. Well, if Congress asks us that specific question we would do our best to answer it. I can tell you that the expectation for 2017, which is the proposal we have out now, I believe is a total volume of 24 billion gallons and our proposal is 18. So that is the delta on the total.

Mr. Johnson. Okay. One final question, Ms. McCabe. EPA's CAFÉ and GHG standards came out after the RFS was last revised. Explain how this program changes compliance with the RFS.

Ms. McCabe. Yes, sir. That is a good question and it is actually one that has sort of been present in a lot of these questions today. I mentioned a few minutes ago that the way the statute works is it starts from absolute numbers, but then the actual obligation for the obligated party is converted into a percent. And what that means is that the obligation can be sensitive to increases or decreases in fuel use.

So you have noted that there are programs in place now that we didn't have before that require increased fuel economy that could well lead to less fuel being used overall, maybe not for some of the reasons that Howard mentioned, but whether it is higher or lower the percentage obligation for each obligated party will

be able to adjust.

Mr. Johnson. Okay, all right. Mr. Chairman, I don't have time for another question either, so I yield back.

Mr. Whitfield. The gentleman yields back. And that concludes all of the questions for the first panel. So Ms. McCabe and Mr. Gruenspecht, thank you very much for being with us and you are dismissed.

At this time I would like to call up the second panel of witnesses. And you all take a seat and we will just introduce each of the witnesses as we call on them to give their opening statement.

Okay, our first witness on the second panel will be Mr. Chet Thompson who is the president of the American Fuel and Petrochemical Manufacturers. And all of you are experienced witnesses, but I would just remind you to pull the microphone up and make sure the microphone is on. And when the red light goes on that means your time is up, but we will give you a few minutes to wind up.

So Mr. Thompson, thanks very much for being with us this morning. We look forward to your testimony, and you are recognized for 5 minutes.

STATEMENTS OF CHET THOMPSON, PRESIDENT, AMERICAN FUEL AND PETROCHEMICAL MANUFACTURERS; BOB DINNEEN, PRESIDENT AND CEO, RENEWABLE FUELS ASSOCIATION; TODD J. TESKE, CHAIRMAN, PRESIDENT, AND CEO, BRIGGS & STRATTON CORPORATION; BROOKE COLEMAN, EXECUTIVE DIRECTOR, ADVANCED BIOFUELS BUSINESS COUNCIL; COLLIN O'MARA, PRESIDENT AND CEO, NATIONAL WILDLIFE FEDERATION; ANNE STECKEL, VICE PRESIDENT OF FEDERAL AFFAIRS, NATIONAL BIODIESEL BOARD; AND TIM COLUMBUS, GENERAL COUNSEL, NATIONAL ASSOCIATION OF CONVENIENCE STORES AND SOCIETY OF INDEPENDENT GASOLINE MARKETERS OF AMERICA

## STATEMENT OF CHET THOMPSON

Mr. Thompson. Thank you, Chairman. I appreciate the opportunity to be here. To all the members of the subcommittee, again my name is Chet Thompson and I am the president of the American Fuel and Petrochemical Manufacturers. AFPM represents the domestic petroleum refining sector. Our members account for 98 percent of the capacity of the refining industry which transforms crude oil into the many fuels and products that Americans rely on for their everyday life. Unlike others on the panel, our members are obligated parties under the RFS, which means we are the ones left holding the bag if this program is not properly implemented.

I would like to use my limited time just to touch on the key points we made in our written testimony. First, the RFS is irreparably broken and needs to be repealed. After more than a decade of implementations, it is clear to almost everyone but our friends in the biofuel industry that the RFS program is not working as Congress intended, and that the two purposes cited by Congress for establishing the program — energy security and emission reductions — are either no longer an issue and are not being addressed by the program or in fact being made worse by the program.

The United States is more energy secure now than ever before, and indeed we are the world's largest producer of oil and natural gas. And according to EIA -- you heard it this morning -- the RFS has played only a small part in this transformation.

Mr. Whitfield. Mr. Thompson, would you pull the microphone a little bit closer? We are having a little bit of difficulty hearing.

Mr. Thompson. Not enough rope here, I will move closer. And so as I was saying, the RFS has played only a small part in this transformation in making us more energy secure. And the notion that the RFS program is better for the environment is at best debatable, and many including the National Academy of Sciences believe the RFS may in fact be a negative to the

environment. The time has come for Congress to repeal the RFS and let the biofuels industry stand or fall on its own like all the other industries in this country. Second and importantly, AFPM, we are not anti-biofuel. To the contrary. Several of our members are large ethanol and biofuel producers. We believe biofuels play an important role in the U.S. fuel supply and will continue to do so even when this body repeals the RFS. What we are however is anti-government mandates.

Third, as to last year's standards and this year's proposal, we support EPA's acknowledgment that the ethanol blend wall is real and that we also support their decision to use their gentle waiver authority to adjust the standards accordingly. That said, we do not believe that EPA has gone far enough to ensure the annual standards are in fact reasonably achievable.

The RFS requires increasing volumes of biofuel to be squeezed into an inadequate biofuel infrastructure and a decreasing demand for transportation fuel and also confronts a fact that consumers' demand for these programs, or these fuels -- excuse me -- are just nonexistent.

This is what gives rise to the blend wall, and as EPA has repeatedly recognized, only a tiny fraction of the fuel distribution and retail infrastructure is designed to accommodate fuels containing more than 10 percent ethanol. Moreover, the

vast majority of cars on the road today are not warrantied to handle more than E10 and nor are the small engines equipped to handle these blended fuels. Demand is much lower -- again we heard this from EIA -- today than Congress thought when they enacted the program. Projections for 2007 are down by more than 10 percent and projections for 2022 use has dropped by more than 23 percent.

To overcome this and meet its aggressive 2017 proposals, EPA would eliminate in 1 year starting 6 months from now their proposal would eliminate 96 percent of the ethanol-free gasoline or EO, taking it from 5.3 billion gallons down to just 200 million. It would also require consumers to purchase record-breaking volumes of E85, E15, and biodiesel, ignoring the very obstacles they acknowledge in the rulemaking still exist today. If biofuel production so far this year is any indication, EPA's proposed standards are indeed unachievable.

As the former deputy general counsel of EPA, I would be remiss not to mention that the Clean Air Act clearly provides EPA with the authority to adjust annual standards to account for the E10 blend wall. The biofuel industry's challenge to this authority is simply without merit.

Finally, AFPM strongly supports H.R. 5180, the Food and Fuel Consumer Protection Act of 2016. While certainly we would prefer

full repeal of this program, the Association fully supports H.R. 5180 introduced by Congressman Flores and Welch and cosponsored now by ten members of the subcommittee. This legislation would prevent EPA from forcing more ethanol into the fuel market than it can handle, which in turn would provide at least some stability in the RIN market and preserve some consumer choice for ethanol-free gasoline. This legislation importantly represents a good faith compromise on our part that deserves the support of every member of Congress. Thank you, and I look forward to answering your questions.

[The prepared statement of Chet Thompson follows:]

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Mr. Whitfield. And thank you, Mr. Thompson. And our next witness is Mr. Bob Dinneen who is the president and CEO of the Renewable Fuels Association. Welcome, Mr. Dinneen, and you are recognized for 5 minutes.

STATEMENT OF BOB DINNEEN

Mr. Dinneen. Thank you, Mr. Chairman. Good afternoon, members of the committee. I must confess I am feeling a little bit nostalgic this morning reflecting on the many times I have testified in this room on this very subject going back to 2002, as the committee wrestled with how best to accommodate oil companies looking to eliminate the requirement to use MTBE, a petroleum-based additive contaminating drinking water across the country. The result was the first RFS supported by the oil industry and a bipartisan majority here.

The success of that bill gave rise to the expanded RFS in 2007, creating the very first carbon metric for liquid fuels. RFS2 was transformative legislation and it is accomplishing everything it was asked to do. It was intended to stimulate investment and expansion of conventional ethanol -- done. U.S. ethanol producers met the challenge and we now have the capacity to produce more than 15-1/2 billion gallons annually. It was intended to create a value-added market for farmers -- done. Ethanol has created a robust ag economy that importantly allowed Congress to reduce farm program costs saving taxpayers money.

It was intended to provide competition at the pump -- done. Ethanol is the lowest cost octane on the planet and because it

is cheaper than gasoline has reduced petroleum demand and extended the barrel. It has significantly reduced consumer prices. It was intended to enhance energy security -- done. U.S. oil dependence has plummeted in part because of fracking, but most certainly also because of ethanol. Indeed, gasoline imports have virtually been eliminated in direct response to the RFS.

It was intended to reduce carbon -- done. Ethanol produced today reduces greenhouse gas emissions 34 percent relative to gasoline, and ethanol from tomorrow's cellulosic feedstocks will do even better making the RFS the single most effective transportation related carbon policy in the world. It was intended to stimulate investment in advanced biofuels -- doing. While the inexorable march towards cellulosic ethanol was interrupted by the worldwide recession and banking crisis precipitated by \$140 a barrel oil in 2008, these technologies are now rolling out and the promise of advanced biofuel technology is being realized.

So what has changed from when the RFS passed with such broad enthusiasm? Some have said, well, the RFS is driving up food costs. No, the price of corn today is about where it was in 2007. Retail food price inflation has actually been demonstrably lower since the RFS2 was passed, and as the World Bank reported again just last week, demand for ethanol has not had a meaningful impact

on world food prices. Rather, the price of food is far more related to the price of oil.

Refiners will say we are producing more crude oil domestically and the RFS is just an anachronism of our energy scarcity past. Well, we have been reminded lately of the boom and bust cycle that is oil extraction as the rig count has plummeted. 80,000 workers were laid off and fracking operations in the Bakken have shuttered, leaving communities holding the lost hope of economic opportunity. Faced with the same falling oil prices, U.S. ethanol producers added 2,000 jobs last year, invested in new technologies, and worked to build new markets here and abroad. Tell me what has been better for America.

Some, including EPA, have said we have hit a blend wall. We can't blend any more than 9.7 percent of the gasoline market. There aren't enough cars that can run on more than ten percent, and boats and small engines will be harmed if forced to use the higher ethanol blends. Hogwash. There is nothing magical about 9.7 percent. Twenty seven states today already use more, 23 states use more than ten percent, and Minnesota uses 12.2 percent all because of the increasing demand for E15 and E85.

Today, more than 25 percent of the vehicles on the road are fully warrantied for E15 or higher. Eighty percent of the new cars produced last year were warrantied for E15. For comparison,

just 11 percent of the cars on the road today require premium. You can find premium every place, so what is the big challenge about providing that E15 fuel for those consumers that want it and can use it?

That said, there is no mandate for E15. Even API says E0 is on the rise and E10 will remain the ubiquitous fuel option. The pumps selling E15 will be clearly labeled. There is no reason to believe folks needing E10 or less for their small engines, boats, or motorcycles will be unable to find it.

Now the only thing that has changed is the incumbent industry is fiercely trying to relitigate the legislative battle it lost a decade ago. But the policy objectives, energy, economic, and environmental security have not subsided. Indeed, they have become even more critical as the planet warms, consumers struggle, and OPEC flexes its muscle. This committee wrote a great law in 2005. You gave EPA very clear quidance on how to implement the program and the flexibility to deal with issues. nothing wrong with the RFS that cannot be fixed with what is right with the RFS. There is no need to legislate changes to a program that is working. EPA needs to implement the program as you wrote it, and the full potential of the program will be realized. Don't be bullied by an incumbent industry intent on recapturing lost market share and preventing a more sustainable energy future.

Celebrate as I do the success of this program. Thank you, Mr. Chairman.

[The prepared statement of Bob Dinneen follows:]

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Mr. Whitfield. Thank you, Mr. Dinneen. And our next witness is Mr. Todd Teske who is the chairman, president, and CEO of Briggs & Stratton Corporation. Welcome, Mr. Teske, and you are recognized for 5 minutes.

WASHINGTON, D.C. 20005-3701

STATEMENT OF TODD J. TESKE

Mr. Teske. Chairman Whitfield, Vice Chairman Olson,
Ranking Member Rush, and distinguished members of the committee,
thank you again for inviting me to offer Briggs & Stratton's
perspective on the EPA's implementation of the Renewable Fuel
Standard. I have been extremely impressed by the committee's
workman-like approach to educate itself and the public on the
challenges of the RFS that it presents to manufacturers,
consumers, and the environment.

The Outdoor Power Equipment Institute on which I currently serve as a board member has previously submitted formal comments in response to the committee's white papers issued in 2013. My statement today which is submitted strictly in my capacity as chairman, president, and CEO of Briggs & Stratton will attempt to define the RFS challenges as they pertain to small engine manufacturers, and offer suggestions on how to protect consumers from significant economic and environmental damage.

Briggs & Stratton headquartered in Milwaukee, Wisconsin, is the world's largest producer of gasoline engines for outdoor power equipment. We are a leading designer, manufacturer, and marketer of power generation, lawn and garden, turf care, and job site products through its Briggs & Stratton, Simplicity, Snapper,

Snapper Pro, Ferris, PowerBoss, Allmand, Billy Goat, Murray, Branco, and Victa brands.

Briggs & Stratton products are designed, manufactured, marketed, and serviced in over a hundred countries on six continents by 6,200 employees. Approximately 5,300 of those employees work here in the U.S. As a U.S.-based manufacturer, our company is proud to be celebrating its 108th anniversary this year, and continues to manufacture over 85 percent of its products in America.

Let me first state that Briggs & Stratton has tremendous respect for EPA's career employees. Our engineers and their engineers collaborate on complex emission standard-setting rulemakings, and we have found them to be fair and objective in their effort to reach the right balance between environmental protection and economic reality.

Achieving that balance is essential to Briggs & Stratton's over 5,000 employees in our Kentucky, Georgia, New York, Wisconsin, Alabama, Nebraska, and Missouri manufacturing facilities and the communities whose economies depend on the revenue generated from those plants.

As is the case with manufacturers of every internal combustion engine, our facilities are carefully designed to produce small engines and outdoor power equipment that is

designed, warranted, and EPA approved and certified to operate on gasoline containing not more than ten percent ethanol.

It is for this reason that we are so deeply concerned about EPA's conditional certification of E15, a fuel which would produce severe engine damage if used in our small engine powered products. The partial certification of E15 is not satisfying the industry's current RFS targets. This ensuing process of revising ethanol fuel standards has and will continue to create uncertainty in the marketplace for manufacturers and increased misfueling risk to Misfueling will result in economic harm to all consumers. parties as engine's failures are met with voided product warranties and changes in brand loyalties. These changing targets will result in inefficient use of manufacturing resources and more expensive products. Following are five factors why we believe that the EPA should revisit the conditional certification of E15. One, research has shown and EPA has agreed that use of E15 in small non-road engines can have harmful and costly consequences on small engines and outdoor power equipment. Two, research on warning label effectiveness suggest that an E15 warning label will do very little to mitigate misfueling. behavioral studies of customers at the gas pump conclude that consumers overwhelmingly favor the lowest price option regardless of the consequences. Four, misfueling due to a lack of education

of consumers regarding the proper use of E15 will be significant.

And five, the use of biofuels or, quote, drop-in fuels, has been tested and could prevent misfueling.

If public policy requires that the federal government drive the market for alternative fuels, Briggs & Stratton urges that the policy be amended to more fully support the development and use of biofuels for many feedstock which are intended to be used as drop-in fuels. Drop-in fuels by definition meet existing gasoline specifications and are ready to drop in to infrastructure minimizing compatibility issues. These fuels are capable of satisfying the additional growth of biofuel use while also providing a safe and highly performing general fuel for both legacy and newly manufactured small engines and outdoor power equipment.

At our expense we conducted extensive testing with a drop-in isobutanol blended gasoline which demonstrated evidence that such fuels can provide the performance and operational criteria necessary to remain in compliance with EPA's emission standards without demonstrating any negative effects. It is unfortunate that the production of RFS-compliant drop-in fuels has struggled to reach commercial scale. I suspect that this is a factor in EPA's decision to grant the partial waiver to meet the statutory requirements using ethanol.

In closing, I would like to note that for the past several years we have worked closely with our Congressman, Jim Sensenbrenner, in an effort to rescind the recertification of E15 until such time as the National Academy of Sciences can convene a peer review panel to evaluate EPA's action and recommend alternative approaches which protect consumers and the environment.

This bill along with several others, including the bill introduced by Congressman Flores and Congressman Welch, serve to offer a variety of options for this committee to work with. I wanted to publicly thank these members of Congress for their work and for their dedication to finding creative, common sense solutions to the problems with the RFS. Briggs & Stratton urges this committee to work in a bipartisan bicameral manner to pass reform legislation through revisions to the RFS which will align domestic goals for biofuel use with the market's ability to produce, distribute, and consume such fuels.

At a minimum we recommend that the reform legislation rescind the partial waiver for E15 and establish gasoline blended with up to ten percent ethanol as the general purpose domestic fuel. The legislation should also require that all considerations to increase domestic biofuel levels in the future be subject to a formal EPA rulemaking whereby the market's ability to safely

distribute, retail, and consume such fuel is provided.

Thank you once again for holding a hearing on this important issue and for allowing me the opportunity to testify before this distinguished committee. I would be happy to answer any questions you and your colleagues may have.

[The prepared statement of Todd J. Teske follows:]

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Mr. Whitfield. Thank you, Mr. Teske. And our next witness is Mr. Brooke Coleman who is the executive director for the Advanced Biofuels Business Council, and you are recognized for 5 minutes.

STATEMENT OF BROOKE COLEMAN

Mr. Coleman. Thank you. Good afternoon, Chairman
Whitfield, members of the committee. My name is Brooke Coleman.
I am the executive director of the Advanced Biofuels Business
Council. Thank you for the opportunity to testify today. We
represent worldwide leaders in the effort to develop and
commercialize the next generation of advanced and cellulosic
biofuels.

I want to start with a general observation about the Renewable Fuel Standard. I think it is safe to say that the RFS is lightning rod of sorts; the question is why. There are those who say it is because the RFS doesn't work. But I think if you look at the success rate of innovation and deployment in the renewable fuels industry and the historic positioning of the oil industry when it comes to trying to avoid competition at the pump you will have your answer.

In just 10 years, the biofuel industry has emerged to create hundreds of thousands of jobs and displace the need for billions of gallons of petroleum imports annually. If you look at perhaps the most criticized biofuel, ethanol, you will find that it also happens to be the most disruptive to the status quo. The ethanol industry supports hundreds of thousands of U.S. jobs alone in more

than two dozen states and now threatens to bring new blends and real consumer choice to the pump. The ethanol industry is a target for a reason.

And now we are innovating. The United States is home to the largest commercial cellulosic ethanol plant in the world,

DuPont's facility in Nevada, Iowa. POET-DSM cellulosic facility in Emmetsburg, Iowa, produces enough renewable electricity as a co-product to power itself and the grain ethanol facility next door. Quad County's first generation ethanol plant in Galva,

Iowa, now produces cellulosic ethanol from corn fiber using a technology called Cellerate that also reduces energy inputs.

Quad County's fuel is 126 percent better than gasoline on carbon.

It is a carbon sink.

But disrupting the status quo does not come easily. Our adversaries have enough money to fill the airways with allegations about the RFS, but are any of these allegations actually true? We have heard about corn ethanol and food prices, but corn prices are about the same today as when the RFS was passed, and food industry profits -- an important part of this -- are soaring.

Higher ethanol blends like E15 could damage cars, they say, except the Department of Energy found no problems with 15 percent ethanol blends or 20 percent ethanol blends in 86 cars tested for up to 120,000 miles each. Some small engine producers including

Briggs say they are concerned about ethanol, but they sell their engines to Brazil where gasoline contains more than two times as much ethanol as we have in the United States today.

Oil even ran a commercial during the World Series last year claiming that ethanol is worse for the climate than gasoline and we heard Congressman Welch say it today, except that USEPA, the California Resources Board, and the national labs like Argonne and National Research Energy Laboratory all say they are wrong.

On the issue of pump prices don't take my word for it. Former Shell Oil president John Hofmeister recently stated, quote, we need a competitor for oil. We need to open the market to replacement fuels. Competition will drive transportation fuel prices down structurally and sustainably, unquote.

This is exactly what is happening with the RFS. Energy economist Phil Verleger, he used to advise Presidents Ford and Carter and the oil industry itself, recently said, quote, the renewable fuels program translates to consumers paying between 50 cents and 1.50 per gallon less for gasoline, when gasoline prices were high, by adding the equivalent of Ecuador to extremely tight world liquid fuel markets.

If there is one thing that we should all agree on it is this. Having only one option to power cars and trucks runs contrary to the fundamental premise of competition that underpins our

economic system, and if we do not control that resource, as we have seen, it leaves us vulnerable to foreign cartels often working against us.

And that is where I want to close. There are those who want policymakers to believe that quote, things have changed; that we don't need the RFS anymore because the U.S. oil boom and low gas prices. But really, nothing has changed. When we got hit with record high oil prices in 2008, Americans transferred nearly \$1 trillion to OPEC members in just 6 to 8 months paying for motor fuel, a predicament that helped throw the United States into deep recession.

Now Saudi Arabia is hitting us with the other end of the stick by intentionally making oil so cheap that U.S. shale and deepwater drillers cannot compete, and it is working. U.S. tight oil and deepwater drilling operations are going belly up putting

Americans out of work. It is nice to pay \$1.50 for gasoline, but what is actually happening is foreign oil cartels are using their market position to snuff out competition and repossess the U.S. fuel energy sector. Ironically that is exactly what the oil industry hates about the RFS here in the United States, that it threatens their chokehold over the American consumer at the pump.

If I could leave you with one thought it is this. Congress made a commitment and investors have spent billions in private

capital to answer the call to create these biorefineries and create these fuels. The RFS doesn't distort a free market, it corrects a noncompetitive one by forcing choice at the pump. It also happens to be the best advanced low carbon biofuel policy in the world.

What we do not need is for Congress to change a good law. What we do need is help convincing the Obama administration to block out the noise and administer the program as designed. Thank you for the privilege of speaking today and I look forward to your questions.

[The prepared statement of Brooke Coleman follows:]

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Mr. Whitfield. Thank you very much, Mr. Coleman. And our next witness is Mr. Collin O'Mara who is the president and CEO of the National Wildlife Federation. Thanks for being with us. You are recognized for 5 minutes.

WASHINGTON, D.C. 20005-3701

STATEMENT OF COLLIN O'MARA

Mr. O'Mara. Thank you, Mr. Chairman, Vice Chairman Olson, and Mr. Tonko. Thank you for having a wildlife voice on this panel and a sportsman voice on this panel. When this law was debated in 2007 there wasn't much conversation about land use, and as I travel the country I keep having that Toby Keith song in my head, "I wish I didn't know now what I didn't know then." There is a lot that we didn't know in 2007 about land use.

There is a study by the United States Department of Agriculture that said that more than eight million acres that were not in production that were in some kind of habitat are now in production, and a big chunk of that is because of the RFS. There is just a study from the University of Wisconsin that said that 7.4 million acres of habitat has gone into production.

Sixty seven percent of that land is marginal. I mean, these are things like grassland prairies. These are things like, you know, some wetlands and some forest land. And there are a lot of factors for this, but one of the big reasons is this massive drive towards ethanol. Ethanol production in terms of the total kind of all of the supply of corn that is being produced went from nine percent going towards ethanol before the RFS to 40 percent today. So you are seeing a big demand.

And farmers are rational. I mean, I grew up in a farming community in Upstate New York. If there is a profit there they should go there, but it is an artificial one that is being created by government and once again wildlife and sportsmen are the ones that lose.

Seventy seven percent of these eight million acres that both USDA and University of Wisconsin have identified are grasslands. And these are incredibly important lands. I mean, you have had conversations before this committee and others around the imperiled sage grouse, around the meadowlark. I mean, things that you are hearing are having kind of precipitous declines. We are losing habitat at a pretty alarming rate.

I mean, pheasant numbers right now in a whole lot of states are down. They had a million, a million birds were shot in Iowa before the RFS. There are about 100,000 now. Again there is many factors, but the drive for more and more corn on the ground is a big one of those and again wildlife and sportsmen end up losing.

I mean, if you only take one thing away from my testimony today it is that we have to better understand these land use impacts and the water implications. You know, if you look at, if you look right now we have lost more than a million acres, 1.6 million acres of native grasslands from 2008 until today, and that is bigger than my home state of Delaware. I mean that is a lot

of land. And when you start thinking about those uses it gets kind of scary when these volumes continue to go up.

There was a commitment that this Congress made when we were debating this policy originally that there would be no, kind of no lands that weren't in production before 2007 would be affected by this policy, and unfortunately though EPA has never upheld their end of the bargain.

They use something that they call aggregate compliance and so they basically look at all the acres across the entire country including those that are in the Conservation Reserve Program. They look at all these acres and they see whether or not there is any kind of impact. They don't know whether there is forest being lost in Wisconsin or Minnesota. They don't know whether there is wetlands being lost in the Prairie Potholes. They don't know whether there is kind of impacts in Nebraska or Iowa and the grasslands. And again wildlife loses over and over again.

I would also like to talk about water, because one of the things that happens when you put more and more corn in production you have folks switching from other crops to corn, corn is pretty hard on soils. You need a lot of fertilizer to grow corn. And what ends up happening is as you have more and more precipitation you have that water then wash those nutrients into the waterways and all of sudden then you get these big algal blooms.

Again you have seen record algal blooms. I was with Mr. Latta in his district up on Lake Erie. You know, you had algal bloom in the state of Ohio, in Toledo that had a half a million people not able to drink water for 3 days. Now when you put more and more kind of corn on the landscape and you take these acres of grasses or wetlands or forest out of habitat into production, you lose that value for them to bring up those nutrients. so this wasn't supposed to happen. I mean there is very clear language that EPA is supposed to take action if there is any kind of economic or environmental harm. They haven't been doing this because of this compliance approach. And so we have three recommendations that we hope the committee will consider. first one is that -- Mr. Welch brought this up earlier, we really need to demand the Triennial Report. Now there was a report in 2011 that said that the impacts would be very inconsequential on the landscape, it is just not true. We have verified from academic institutions -- and I have no economic stake in this. I just want good hunting. I just want good fishing, good birding. I mean, I want to make sure that we have enough wildlife to pass on to our kids. So the first thing, we need that report because what it is going to show is that we have lost a lot of acres of habitat.

The second thing is that we have to have EPA follow the law.

And you heard today when folks talk about the environmental consequences they only talk about air. You have heard it from EPA today, you have heard it from other people on this panel. don't talk about the land use and the water implications. We need to look at all of those. And frankly we need to get that right now, because as you have billions of gallons of advanced biofuels coming onto the landscape we need to make sure that is also not taking more and more land away from hunters, anglers, and wildlife. And then the third thing is that we need to make the RFS as a statute much more wildlife friendly. You know, we need to make sure we get rid of this aggregate compliance mechanism where they look at the total land instead of looking at the individual lands that are being converted for crops. We need to accurately assess the impacts on wildlife. We need to make sure that we are moving the number below the blend wall because we see when we are above that we are losing too much land for wildlife.

And also there is other policies, things like the Conservation Reserve Program that has been cut, things like the North American Wetlands Conservation Act, other subsidies, other conservation programs that we cut that now some folks say is a good thing. The problem is when you cut those things all of a sudden farmers want to put their land into production instead of keeping it for habitat.

So again we have kind of met the enemy and he is us in this case. This was a government-created crisis in many ways. Thank you.

[The prepared statement of Collin O'Mara follows:]

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Mr. Whitfield. Thank you, Mr. O'Mara.

And now our next witness is Ms. Anne Steckel who is vice president of Federal Affairs for the National Biodiesel Board, and you are recognized for 5 minutes.

WASHINGTON, D.C. 20005-3701

STATEMENT OF ANNE STECKEL

Ms. Steckel. Chairman Whitfield, members of the committee, thank you so much for the opportunity today to testify on behalf of the thousands of employees working across the country in the biodiesel and renewable diesel industries.

My name is Anne Steckel, and I am vice president of Federal Affairs for the National Biodiesel Board. I am proud to represent the most successful advanced biofuel in America. biodiesel and renewable diesel are the unsung heroes of the RFS Advanced Biofuel Program. If you take away one thing from my testimony today I hope it is the following. While there are certainly areas that could be improved, the RFS has made a tremendous progress in developing advanced biofuels and delivering them to American consumers. Biodiesel and renewable diesel have made up the vast majority of the advanced biofuels in the RFS including filling more than 90 percent in the category in the last 2 years. Last year alone, American consumers used nearly 2.1 billion gallons of biodiesel and renewable diesel. That is 2.1 with a B, out of an overall diesel market of about 60 billion gallons. As a result of the RFS many truck stops around the country today are selling biodiesel blends of 10 to 20 percent. In fact, with help from a state program the majority of diesel

fuel in Illinois, also my home state, is sold with at least 11 percent biodiesel.

Biodiesel is a clean, renewable diesel alternative made from a wide variety of fats and oils including recycled cooking oil, soybean oil, and animal fats. Our industry has plants in nearly every state in the country, in big cities and rural communities along the east and west coasts and throughout the heartland. Every 100 million gallons of biodiesel production supports some 3,200 jobs.

According to the lifecycle analysis conducted by the EPA, biodiesel reduces greenhouse gas emissions by at least 57 percent and up to 86 percent. The California Air Resources Board and other institutions have made similar or even stronger findings.

Greenhouse gas emissions reductions, however, are just one of biodiesel's many environmental benefits. It also reduces waste in landfills, keeps oil and sludge out of sewer infrastructure, maximizes the efficient use of agricultural byproducts, and significantly cuts emissions of other air pollutants particularly air toxins.

Building new energy industries is no small endeavor. Taking a biodiesel industry that barely existed a decade ago and building it into a commercial scale enterprise is something we should all be proud of. U.S. biodiesel producers have made tremendous

investments diversifying their feedstocks and increasing efficiency. There remains significant untapped production capacity on the ground today, and biodiesel producers across the country will tell you they stand ready to invest and expand and hire with strong, stable policy.

I would be remiss if I did not thank the EPA for getting this program back on track from a timing perspective. The stability provided by timely standards is very important. However, we continue to believe the agency is underestimating the volume of biodiesel that can be delivered.

First, it is important to remember that biomass-based diesel volumes are currently established under a different process than the other RFS categories. The law requires the EPA to set a minimum applicable volume for biomass-based diesel 14 months in advance. So the most recent RFS proposal covers biodiesel volumes 2 years from now in 2018, while covering 2017 volume for other fuel categories.

Under the pending proposal, the EPA would set a biomass-based diesel volume of 2.1 billion gallons for 2018. The industry looks on pace to exceed the volume this year and the EPA itself projects that we will see 2.5 billion gallons of biodiesel and renewable diesel in 2016 and 2.7 billion gallons in 2017.

The RFS is not a status quo policy. It was designed to drive

investment and innovation. We believe EPA can and must implement the program to provide aggressive growth. Specifically, we are calling for the EPA to finalize a volume of at least 2.5 billion gallons for biomass-based diesel and set more aggressive goals for advanced biofuels.

I believe the reasons the RFS were initially created are as compelling today as they were then and that biodiesel is leading the nation in the transition to clean advanced biofuels. Strong biomass-based diesel and advanced biofuels programs in the RFS are critical to ensure that this success continues. Again I appreciate the opportunity to speak with you all today and would be happy to answer any questions you may have. Thank you.

[The prepared statement of Anne Steckel follows:]

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Mr. Whitfield. Thank you, Ms. Steckel.

And our next witness is Mr. Tim Columbus who is the general counsel for the National Association of Convenience Stores and Society of Independent Gasoline Marketers of America. So Mr. Columbus, welcome, and you are recognized for 5 minutes.

STATEMENT OF TIM COLUMBUS

Mr. Columbus. Mr. Chairman, members of the committee, thank My name is Tim Columbus. I am a partner at Steptoe & Johnson you. and I am here today on behalf of our clients, the National Association of Convenience Stores and the Society of Independent Gasoline Marketers of America. From what you have heard so far there seems to be some diversity of view as to the pros and cons of the Renewable Fuel Standard. My clients are the guys They are caught in the middle between two caught in the middle. major sources of supply for what they sell, and consumers and I think it is important for the committee to manufacturers. understand that retailers of motor fuels are for the most part absolutely unconcerned -- unconcerned, sorry -- agnostic about what liquid motor fuels we sell. Our objective is to sell legal fuels in a lawful way to people who want to buy them. I will tell you that for the most part, not uniformly but for the most part, the retail segment of the marketplace has been served well by the RFS because it has in fact achieved one of the statutory objectives which was to broaden and diversify the fuel pool from which my clients purchase the products they sell to consumers. Now having said that let me move on to the proposal that EPA has put before you.

At the outset my market segment along with others is deeply grateful to EPA for putting this out on time this year. We are very grateful for the recognition by EPA of the existence of a "blend wall." And I have heard some people talk about an ethanol blend wall. The way I would define blend wall is there is a lack of RINs. There is an inadequate number of RINs to satisfy the demand of the obligated parties for RINs.

And because of the characteristics of this program where an advanced biofuel RIN can be used to retire more than one renewable volume obligation, the fact that biodiesel RINs can be used not only for advanced biofuel but also to retire other such as corn ethanol obligations is an important thing for you all to keep in mind when you are talking about a blend wall. So the fact that the RVO for gasoline this year has something more than ten percent doesn't mean that will all be satisfied by ethanol.

For those who want bigger RVOs, I have to tell you that achievement of those numbers is going to be tough and we face as retailers two very significant problems. Number one is an infrastructure problem. As most of you know, under four percent of the retail outlets in the United States are owned or operated by integrated refining companies. That means our folks own those and invest in them. More than half of the retail outlets in the United States have changed hands in terms of ownership in the last

15 years.

The impediment to going on for higher blends of renewables is the fact that we have an affirmative obligation under any number of regulatory regimes, whether that be a fire code at the state level or the Office of Underground Storage Tanks at EPA, to regulations to make sure on an affirmative basis that the retailer can demonstrate that the equipment in which he is storing and through which he is dispensing these fuels is compatible with those fuels. That is really hard.

Now as to demand for new products, retailers live to satisfy demand. But retailers sell products only because customers want them. Customers don't buy products because retailers offer them. If that were true we would offer a lot shabbier stuff and we would make more money. The reality is that there are markets in which E15 and E85 demand has risen, and in those markets retailers are in fact offering the products that the market demands. That is not true as broadly as some would have you think.

Having said all those things, I think we would sum up with EPA has done a commendable job from our perspective of doing exactly what this committee and Congress in general asked it to do several years ago, which was to administer the program as if it were under adult supervision and to avoid a blend wall breach which would generate truly unpleasant consequences for the

marketplace. And with that I thank you for your time and I offer to answer any questions you have that I can.

[The prepared statement of Tim Columbus follows:]

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Mr. Whitfield. Thank you, Mr. Columbus, and thank all of you for your testimony. At this time, Mr. Olson, I will recognize you 5 minutes for questions.

Mr. Olson. I thank the chairman and welcome to our second panel. I have to correct oversight from the first panel. I want to enter a statement for the record from Commander Kirk Lippold. Kirk was a navy commander in charge at the USS Cole when she was blown up in Aden, Oman, and he submitted a statement for me about the effects of RFS on national security. He thinks it hurts it, so without objection, sir, I would like to enter that for the record.

Mr. Whitfield. Without objection.

[The information follows:]

Mr. Olson. Thank you. My first question is for you, Mr. Columbus. First of all, I have to say thank you, thank you, thank you. Your organization got me out to see a convenience store, the Stripes Store at 12091 Westpark Drive in Houston, Texas. There I learned a couple of things. First of all, members of Congress should never roll flour tortillas. They get all messed up.

I also learned that most of your members are not opposed to ethanol as a fuel. They just want to give customers the fuels they want and they need. At the same time, some folks point to E85 and E15 as our way forward on ethanol. Are most consumers at your member stores asking, begging for E15, and could you easily roll out the infrastructure for E15 if necessary?

Mr. Columbus. Mr. Olson, what I have to tell you is it depends on the market you are in. You know, all markets are local in demand. If you are in Minnesota or Iowa there are people saying they want E15. If you are in Oklahoma there are people who want E0. And therefore what you are going to see is retailers across this country do what they have been doing for decades and that is responding to what the customers who walk into their establishments demand.

And, you know, while retailers are always appreciative of any money Congress will offer them to upgrade their facilities

-- I assure you that is true -- if there is substantial demand for E15 in a marketplace you are not going to have to give people grants to upgrade their tanks. They will make that because it is in their pecuniary interest to do so. That is how markets work. We have not seen the overwhelming demand that I think many people, particularly because of flex-fuel vehicles treatment, had anticipated for E85 anywhere.

Mr. Olson. Thank you.

Questions for you, Mr. O'Mara. There is an article today in the Houston Chronicle, a study at LS University, Louisiana State, about a growing dead zone in the Gulf of Mexico. They say this year it will be one-third larger than it was last year primarily due to chemical fertilizers running down the watershed from all over the Mississippi River Water Basin. That is corn country.

You said that increased demand for corn ethanol has driven the creation of new acreage in some unusual places. Your written testimony talked about the Texas Panhandle, also a fact that 67 percent of new cropland like the Panhandle is marginal or unsuited for planting. Can you talk about what this means for Texans at the pump, at the grocery store, and at our Whataburgers?

Mr. O'Mara. Sure. Thank you, Mr. Olson. What you are seeing as folks are trying to meet the market demand because they

are rational, they are trying to make money -- we respect that -- they are planting in more and more places that don't really make sense. And so when you are planting in the Panhandle as you know as well as anybody, the amount of irrigation you are going to need to try to make that land have any level of production is pretty high. Now you have had some water shortages in that part of the country too, and so that is water that ends up hitting in other places so then you see, you know, higher costs of water, other price impacts, and other increasing, both increasing price and also decreasing the amount of flow for fish and other wildlife.

And so it is kind of bad on all fronts when you are growing in these places that we have never grown historically because it just doesn't make sense unless there is an artificial government price support.

Mr. Olson. Okay, yes. Final question for Mr. Thompson. As you know, I have long said the RFS is a mandate designed for a world that no longer exists. One of ever higher gasoline demand and ever lower oil capacity that world is gone. The terms peak oil and peak natural gas are not used anymore. And now both Congress and the EPA are left trying to cobble together a way forward trying to put a round peg in a square hole.

I know that you believe that EPA has done some good work in using its waiver authority to a degree, but do you believe that

we are on a path that is realistic for your members to comply with long term?

Mr. Thompson. Certainly not, and that is why we believe full repeal is due. As I have pointed out in my testimony both written and oral, you know, the problem is EPA is for next year's proposal, again just 6 months from now, they are asking to increase the RFS by 700 million gallons. It is not feasible particularly when you tick down -- a lot of folks on this panel talked about creating choice, it is really doing the opposite and it is eliminating choice. EPA's proposal will eliminate EO, something that we know the American consumer wants. It would take it from 5.3 billion gallons down to 200.

And also Mr. Columbus talks about whether people want E15. Well, the truth is it is virtually zero right now and what EPA is suggesting will happen in 6 months it will go from zero to 600 million gallons. It is not going to happen. E15 is only sold at 312 stores today. And then the same with E85. EPA argues that in 6 months the volume is going to go from 87 million gallons up to approximately 400 million gallons. Consumers don't want these products. This program is no longer serving the purpose that this body created the RFS to tackle. It is time for it to be repealed.

Mr. Olson. Thank you. My time -- well, I raise one final point. At the highest levels there could be confusion at the

pump. President Obama went to Israel a couple years ago. He took his limousines there. Guess what, one was broken down by Secret Service guys because guess what they did, they put gasoline in a diesel engine.

Mr. Dinneen. Congressman, just real quick. With the discussion about what consumers want in fuel I will guarantee you there is no consumer that wants benzene or xylene or any other toxic aromatics in their fuel either. And so the discussion about what consumers want is interesting, but I assure you, you ask consumers they would want a domestic clean-burning fuel additive.

Mr. Whitfield. Thank you. Thank you.

Mr. Olson. I yield back.

Mr. Whitfield. The gentleman's time has expired. At this time I recognize the gentleman from Vermont, Mr. Welch, for 5 minutes.

Mr. Welch. Thank you very much, Mr. Chairman. I think you are right consumers want clean-burning fuel, but Mr. Teske, I will ask you. Has the ethanol had any impact on engines? I had a carburetor from a motorcycle that was just gunked up with ethanol according to the mechanic. Tell us your history with that.

Mr. Teske. Thank you for the question. Ethanol certainly does have an impact on an engine. It really does two different things. When you have higher levels of ethanol, say E15 that you

would put into a small engine, it will run at higher temperatures. These engines are really tuned, if you will, for emissions regulations to last for a long time and what happens is the higher temperatures will distort the material and thereby defeat some of the emissions requirements that are out there.

The other thing that ethanol does because it is alcohol related is it attracts water. And so when you have a fair amount of water that comes in to an engine it will corrode the engine, you will have scoring on the bore. You will have a number of different things. Your props, if you will, I am not surprised by. I didn't see them or examine them, but that is very consistent with what we generally see when you introduce higher levels of ethanol.

Mr. Welch. You know, it is interesting. I found out about -- I didn't know about this issue, but I was up at a county fair and a bunch of Vermonters surrounded me. This was years ago after I was first elected, and I was clueless about ethanol as I was clueless about a lot of other things. But they were insistent that their motorboat engines, their chainsaws, and their snowmobiles to some extent were really having been damaged by ethanol, so that is all consistent with your experience.

Mr. Teske. Yes.

Mr. Welch. And my chainsaw got wrecked, and I guess I was

stupid to leave the ethanol in there a little bit longer than it should have been, but my mechanic told -- I was pretty blue because I love this chainsaw and ethanol does that to chainsaws?

Mr. Teske. Yes. So from our perspective obviously our engines will run up to E10 and so it is plus or minus five percent, right, on each side we can design an engine. So we are not against ethanol, but ethanol does have negative impacts.

Mr. Welch. Right.

Mr. Teske. The higher the blends the more difficult it is for these engines to sustain --

Mr. Welch. Thank you.

Mr. O'Mara -- thank you. You know, we all so want to have our fertile land in productive work feeding the United States, feeding other countries. But we had a situation here with ethanol where it was a trifecta of governmental policies to encourage this production of ethanol. There was the 54 cent a gallon tax incentive, it was the 45 cent a gallon tariff barrier, and then it was the requirement, the mandate that you or I purchase ethanol. And I literally know of no other industry that has ever received that trifecta of governmental support. A lot of industries might like it, but it is as far away as you can get from a free market.

Now one of the concerns I have had you have talked about, and that is that incentive worked. Folks who were in the corn

belt saw that there was an opportunity and -- I don't have any problem with it. Why wouldn't you if you are a corn farmer? But what happened to the overplanting? What happened to the conservation land program that was really being quite successful and with the tradeoff where if you put your fragile land out of production you would get some help making it with soil conservation and with drainage and other things?

Mr. O'Mara. Thank you, Congressman. Thank you to you and Mr. Griffith for raising the wildlife and the land piece. That actually had a fourth and fifth point to your three. We saw massive reductions in the Conservation Reserve Program as you mentioned, and you have pretty generous insurance programs as well. And so you put that all together and it is again just wildlife bears the brunt of that.

And so we have seen the number of acres in Conservation Reserve go from little, 35-36 million before the RFS; you are around 25 million right now. Those ten million acres, a lot of which were providing very important habitat, is roughly equivalent to the same number that Wisconsin and USDA are saying went into production. And so, you know, we are losing habitat at again at the expense -- because of government policy we are doing it ourselves. This isn't market driven. This is government driven.

Mr. Welch. You know, I really appreciate it. What has been tremendous about my being involved in this issue was seeing folks who never thought they would probably be sitting at the same table. You know, you are here, you are here, you guys actually get along, you know. Let's take this model and put it in other places as well. But it is in the farm community it is a benefit. If you are a corn farmer it is tremendous.

And I am from a dairy state and I love our farmers. They are literally the hardest working people in Vermont. Nobody works harder than our farmers, whatever it is. But if you are a corn farmer it has been helpful, but if you are a feed-using farmer it has really been a hammer. The margins for our dairy farmers are really tight, and the grain costs which I absolutely believe have been affected by 40 percent of corn going into ethanol has increased their costs and decreased their security. So I want to thank all the panelists for being here.

Mr. Coleman. Congressman, could I provide a response on land or is --

Mr. Welch. I think I am out of time. I am sorry.

Mr. Whitfield. That is okay. Go ahead.

Mr. Coleman. Thank you, Chairman. So there is another side of this, and as an advocate for advanced biofuels we want to grow responsibly. And I want to just add for the record a couple of

different things that my colleague to my left and my colleague a couple seats down has not mentioned. With regard to the land and the agricultural footprint, one of the reasons that EPA has not gone through an acute analysis of this is because the agricultural footprint in this country continues to decline from an acreage perspective. So I want to correct the record. That doesn't mean there is not acute problems in different places, but Mr. O'Mara has suggested that the RFS is driving the land up and actually the agricultural footprint. And they have done that analysis. EPA has done that analysis.

The other thing that needs to be mentioned here is there is a correlation-causation issue here. It is true that Conservation Reserve acres have gone down since 2008 when the RFS went in. What is also true is the Conservation Reserve Program which pays farmers to keep those acres out of production has been cut from a funding perspective and the correlation between those acres in existence and being paid to make sure they are existence is a heck of a lot stronger than the RFS as the cause for that problem.

Third and final point, my more fundamental issue with folks who are blaming the RFS for all these land-based problems is that farmers, which Mr. O'Mara did mention, plant a price. If you are getting \$8 a bushel for corn versus 4, you want to plant corn. That is not for biofuels. That is I can get \$8 for corn. What

drove up the price of corn and all these other agricultural commodities, if you look at the correlation it is the increasing price of oil. Why does the price of oil go up? It is because we don't have alternatives.

And so from a boogeyman perspective, I think with respect that the biofuels industry is being blamed for things that are largely the response of markets to higher oil prices that happened over the last 5 years. Thank you for the opportunity to provide that.

Mr. Whitfield. So you said overall farmland has not decreased?

Mr. Coleman. Yes. From year to year USDA with EPA does an analysis of the U.S. agricultural footprint, and generally for the last 50 years it has been trending down because agriculture has gotten more efficient per acre and it continues to trend down. So there is not an explosion nationally that is happening. Now if we want to start talking about the seven million acres I would be happy to converse with my colleague on that as well.

Mr. Whitfield. Mr. O'Mara, what were you going to say?

Mr. O'Mara. Well, I mean, the concern that we have is the virginal habitat. Again, the habitat that has gone into production the last few years. I mean, we have lost 1.6 million acres of kind of native grasslands that is incredibly important

habitat for pheasant hunters and everything else. And so I don't disagree that the overall that -- I do disagree. I mean, the USDA data shows the acres that we are losing for production is actually increasing. Now there are some acres that are taken out of production. Since the RFS the acres taken out of production are less than the acres being put into production, so most of these years so it is several million acres additional.

But at the end of the day, we are losing forests, prairies, and wetlands because folks are trying to meet this higher price most of which is supported by government. This isn't a global commodity price that we are creating. The market here is fundamentally different than other places because of these price supports and the points that Mr. Welch made.

Mr. Whitfield. The gentleman's time has expired. Mr. Griffith, you are recognized for 5 minutes.

Mr. Griffith. Well, I am enjoying this discussion immensely. I have to tell you it is exciting when you have environmentalists, people who are environmentalists disagreeing with each other. We heard comment earlier we have Democrats agreeing with Republicans and Republicans disagreeing with Republicans and Democrats disagreeing with Democrats. So it is an interesting discussion. Surely we must be able to find a balance in there somewhere.

I have to tell you, in my area some of that land is going out of production. And I can't say it is the only factor, but one of the factors might be the fact that it is hard to guarantee from year to year for my cattle farmers and my dairy farmers that their corn price isn't going to spike, and a big part of the concern when it does spike is ethanol. And so I can't say that that is not a legitimate concern.

I also have folks as Ms. Steckel pointed out -- nice job -- in her written stuff to my district that my district does produce some biodiesel. I also had a project that has not been successful that was taking hamburger grease, or had the plants take hamburger grease and turn that into biodiesel. I think that is exciting stuff. So the technology may eventually get there.

But I am very concerned, Mr. O'Mara, as you may recall from our previous conversations, I am very concerned that we are creating problems in the environment and I wish in some ways that the EPA would play fair, and let me explain.

I come from a coal producing district. They had a guideline at one point, which was later ruled invalid by the courts, on water based on a study in a handful of counties in central Appalachia with about seven or eight, nine species of mayflies in which one was significantly impacted by runoff water from the coal mines. If they did the same thing to ethanol, I think based on what you

have told me today, Mr. O'Mara, the EPA might be up in arms but they haven't done that report. And I believe your written testimony tells us they are 4-1/2 years on a 3-year program and no plans to get it done.

What can we do to help push them along to get that report done, because I want the data. I want to see a balance and I want to see the renewable fuels succeed. I would like to see more of it come from non-ethanol biodiesel, but at the same time we are going to have some ethanol out there. I don't think we should shut it down.

But Mr. O'Mara, what can we do to get the EPA to get us the data that we need so that we are able as Congress to make intelligent, appropriate decisions in trying to balance out the concerns?

Mr. O'Mara. And I thank you for that question and for everything you do for wildlife. I think this committee has to demand the report. I think Mr. Welch did, I think you did as well. I mean, I think there is data. And also we have to send a very clear signal that when we are asking them to evaluate the environmental impacts we are not just talking about air. You know, you have the air administrator here, she is talking about it. And I am here defending her a lot of times. I have testified before you several times defending EPA on different issues.

This is indefensible, and I think there is two issues. One is that they are not looking at the land and water impacts, and the second is that they are not -- this aggregate compliance approach, we know where coffee comes from. We know where our trees come from, our paper products come from. We source these things in every other industry. The idea that we can't know where the corn is coming from and whether it is from a virgin prairie or a native prairie or it is coming from land that has been farmed for 200 years is crazy to me.

We can do a better -- because we know that we are fine by having, you know, if we actually did a good job as long as we are not taking additional habitat, but wildlife shouldn't have to lose so a couple of industries can win. I mean that is for me the bottom line.

Mr. Griffith. Well, I think that is important and I hope that we can take a look at the effect on the species that you listed in your report. And I think it is important to underline again, because it is not just those of us that might like to watch wildlife, it is also the hunters that are affected. And you said in your opening statement, and I would like for you to repeat that if you would just because we don't know what insomniac might be watching this hearing sometime late at night. But you gave a number on the ring-necked pheasant hunt in Iowa.

Mr. O'Mara. Yes.

Mr. Griffith. They are not usually in my area unless there is a stray. But give those numbers again if you would.

Mr. O'Mara. Yes. So I mean if you went out flushing in Iowa in 2004, 2005, the bag limit was more than a million; 100,000, the last couple years. Again there are many factors, but we are losing a lot of their habitat.

Mr. Griffith. Right.

Mr. O'Mara. No habitat, no birds.

Mr. Griffith. Now do you have any data on the fish species that might also be impacted? I know Mr. Olson mentioned the dead zones that might be impacted in part by this expanse of the cornfields.

Mr. O'Mara. Yes, so I mean on the freshwater side when you have these algal blooms in places like Lake Erie -- walleye, perch -- I mean, you are going to see, you know, you are going to see an impact on bass, and basically they will go somewhere else.

And so the problem is that if you had another panel and you invited some of the tour boat captains, the folks that are taking folks out on Lake Erie, it is a death knell for them, because if you have that amount of runoff coming in and there is more rain so more is being washed off, they lose their livelihood.

And so I mean, we have been working with folks in, you know,

the Great Lakes that are basically saying, look, like we shouldn't be the ones that bear the brunt of this because the walleye are gone because they are going further inland which we can't get to.

Mr. Dinneen. Congressman, can you indulge me just for a moment of actual agreement?

Mr. Griffith. All right, let us hear it. I have got agreement here.

Mr. Dinneen. I absolutely agree that it would be a good idea for EPA to update much of this analysis. We have been living for years with a carbon analysis that the agency did on ethanol in 2007 that is just flat out wrong. The science has demonstrably changed and we would love for the agency to update that so that we can demonstrate again the significant carbon benefits.

And I would agree that they ought to do the Triennial Report as well and look at all the environmental impacts because we are quite frankly pretty confident that it is going to show tremendous benefits. I mean, we have talked about what the impacts might be on water. Indeed, throughout the RFS the size of the dead zone in the Gulf has been shrinking. I don't know about Lake Erie, but the one they usually talk about is in the Gulf and that has been shrinking. Farmers have been getting far more efficient.

So I agree, let's get the agency to get some of these analyses updated.

Mr. Griffith. Well, and if I might, Mr. Chairman, if you would indulge me, I might say that I agree and it might be nice if the EPA would concentrate on these things that they are mandatorily supposed to be doing under the code sections instead of going into areas they are not supposed to be going into.

I note that there was a court case came out yesterday where the court said they don't have authority to do what they were doing regarding fracking. You know, okay, people, do what you are supposed to do and let us decide where you are supposed to go do something different. And I would appreciate it if they would get that done. And I am glad that I was able to bring the various parties into agreement this morning on that issue if nothing else, and I appreciate it and yield back.

Mr. Dinneen. Well, the other place I think we would probably see some agreement is that the agency ought to be looking at the whole marketplace, because if ethanol as an oxygenate and octane enhancer goes away where is our next gallon of fuel going to come from? It is going to come from fracking, it is going to come from tar sands which also has their own environmental and land use issues. And so you have got to look at all of this.

Mr. Whitfield. The gentleman's time has expired. I might also mention that the Inspector General has initiated an investigation over at EPA regarding the RFS which I think looks

like all sides are anxious for them to do what they are supposed to be doing over there. So I think that is probably a good development.

And I will recognize myself for 5 minutes of questions and then -- Mr. Thompson, some of your member companies are merchant refiners that have no blending capacity. So can you describe just the unique challenges those companies face in complying with the RFS?

Mr. Thompson. Well, certainly their biggest challenge is that they are subject to the whims of the RIN market and as RIN prices go up their cost of compliance goes up. And so for a merchant refiner this is the number one compliance obstacle.

Mr. Whitfield. Okay. And Mr. Teske, Briggs & Stratton has a nice facility down in Murray, Kentucky, and provides a lot of jobs as so do our corn growers in Kentucky. And on this small engine issue of using fuel above E10 of ethanol content, you say that above E10 it does create damage to these small engines and primarily because of a heat issue; is that what you were saying?

Mr. Teske. That is correct. So what happens, Chairman, is essentially we design engines that are plus or minus a standard and so where we design them is E5, five percent ethanol. They can operate from E0 to E10. We can design to whatever plus or minus five percent would be. The problem is a moving target. Our

concern really comes back to the tens of millions of engines that are out there. In fact, there is hundreds of millions of engines that you include all small engines that are out there. They are not designed to run on anything above E10.

And so it is these consumers who have bought, paid good money for a piece of equipment and now, you know, they are not going to get the value and the benefit that they need. So it is the moving target that is the issue, but to your point, yes. For the legacy equipment that is out there and everything that is being produced today, anything above E10 will cause issues because of heat distorting the components, the materials that are in the engine, as well as the ethanol attracting water which causes then ultimately corrosion and bore scoring and things like that as it relates to the effects of corrosion on an engine.

Mr. Whitfield. So do you frequently hear from owners of small engines? I mean do they come back to you as the manufacturer?

Mr. Teske. They do. And to Congressman Welch's point when he went to the state fair, you know, people don't know about the effects of ethanol. And we have done an awful lot of work. We have done here studies on do people understand what is happening to their engine, and they don't. They don't understand. They just look for the cheapest thing or they go for whatever they think

they have been putting in for years. They have an issue. We see more fuel related issues. And ultimately they come back and they say, well, you know, this must be a problem, Briggs isn't what they used to be, and in fact that is not the case. We are making arguably higher quality engines today than we ever have. In fact I think we do, we have the evidence. And ultimately we want to make sure they are getting the value that they paid for, and it is going to come back at us and they are going to blame us if there are issues when in fact it is a misfueling problem.

Mr. Whitfield. Mr. Dinneen.

Mr. Dinneen. I would just like Mr. Teske maybe to clarify something for me if nobody else. These problems you are seeing, is this with E10 or E15?

Mr. Teske. The problems that we -- if I may, Chairman?

Mr. Whitfield. Sure.

Mr. Teske. The problems we see is with ethanol. And so basically we design the engines to operate on E10, we warrant to E10. There are more and more fuel related --

Mr. Whitfield. So anything --

Mr. Dinneen. That is my point. If you warrant to E10 you should not expect an issue with 10 percent ethanol blended gasoline used in your engines. And if there is there has to be some other problem. Either they didn't store it and care for it

properly or something else. But you would not expect I would assume that you would see a problem with E10 if everything was done properly.

Mr. Teske. May I?

Mr. Whitfield. Yes.

Mr. Teske. This isn't an issue of E10 or caring for the unit properly. This is we know that when you put higher blends of ethanol in up to E15 it will destroy the engine. So people who take care of their products, no question. This isn't a question of whether they can use E10 or E15. E15 will harm the engine no matter how well you take care of it. When you go to E10, E0 to E10, it will operate. You take care of it, it will operate. We do see more fuel related issues as ethanol continues, but the fact is, is that our testing shows that E15 will damage an engine.

Mr. Dinneen. And I was not disputing the fact that E15 should not be used in a small engine. I think the question is, is E15 being used in small engines today, and I think the overwhelming evidence would be no. As Mr. Thompson pointed out, E15 is only being sold at 322 stations across the country. So I just don't see that as driving the kind of problems that he is talking about. And if --

Mr. Teske. And Chairman Whitfield, if I may?

Mr. Whitfield. Yes.

Mr. Teske. In my written testimony I talk about the fact that we see E15 in our area simply because we live in Wisconsin and there is a lot of corn. If you go back and look into the '70s and the '80s when leaded gasoline transitioned to unleaded gasoline, there are a lot of issues, a lot of misfueling problems along the way.

We are trying to avoid that from happening again, and that is why as we go down in our recommendations to this is ultimately better education, make sure people understand, and make sure that there is E10 that is widely available so that these tens of millions of our engines and hundreds of millions of engines that are out there can work.

Mr. Whitfield. Mr. Columbus, if I own a small minute market and I want to put in E85, what would that equipment cost me roughly?

Mr. Columbus. Mr. Chairman, it will depend on where you are putting it and where that market is.

Mr. Whitfield. Yes.

Mr. Columbus. If it is in a rural area you are probably looking -- and remember size of the outlet. If you are putting in a Sheetz or a Wawa it is going to be a couple, \$300,000 anywhere. If you are going to have four to six fueling locations you are probably looking between 50 and \$100,000. But if you are looking at an outlet that small 50 to \$100,000 is all the money on earth.

Mr. Whitfield. That has -- yes.

Mr. Columbus. So unless and until somebody demonstrates that they can get a return on investment on that money it is not going to happen.

Mr. Whitfield. Okay.

Bobby, do you have any questions?

Mr. Rush. I think I have one question, Mr. Chairman.

Mr. Whitfield. The gentleman from Illinois is recognized for 5 minutes.

Mr. Rush. Mr. Dinneen, in your testimony earlier you cited the successes of the RFS program especially when it comes to the issues of jobs. And would you elaborate on how this policy has helped spur the creation of jobs and what impact would amending or ending this program have on employment?

Mr. Thompson, you can jump in on this if you would. But Mr. Dinneen, I really want you to -- jobs are critical to my constituents.

Mr. Dinneen. Certainly, Congressman. The U.S. ethanol industry is responsible for about 380,000 direct and indirect jobs. Many of those jobs are in agriculture as farmers grow and deliver the corn. There are certainly high paying jobs, high tech jobs at the plants themselves.

But what we have seen is that when an ethanol plant is

introduced to a community it revitalizes that rural community with high paying jobs. I have been to ethanol plant openings all across the country and, you know, rural America was losing population. There was no economic development. An ethanol plant in these areas is an economic engine that revitalizes those areas in demonstrable ways.

Mr. Rush. Mr. Thompson, do you have anything you want to add to that?

Mr. Thompson. Well, this shouldn't be about whether we support jobs. Certainly we all support jobs. My industry supports over two million jobs. The issue is whether this should be congressionally mandated, right. As Mr. Dinneen says he has a thriving industry and that industry should be able to thrive on its own. It shouldn't have to rely on this, you know, congressional mandate. So we support the jobs.

Mr. Rush. Thank you, Mr. Chairman. I yield back.

Mr. Whitfield. The gentleman yields back, and that would conclude today's hearing. And I want to thank the witnesses for being with us today. As I said in the beginning, this was kind of a status hearing to let everybody air it out and talk about it from their perspective, and I think we accomplished that. So I want to thank you very much for your time and effort.

Also I want to enter into the record a letter from the

Advanced Biofuels Association; a letter for the record from Growth Energy; the National Farmers Union; the National Council of Chain Restaurants; a statement from Representative Steve King of Iowa.

[The information follows:]

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Mr. Whitfield. And we will keep the record open for 10 days.

Mr. Rush. Mr. Chairman.

Mr. Whitfield. Yes.

Mr. Rush. I have a report that I would like to enter into the record. It is the Biotechnology Innovation Organization's study on greenhouse gas reductions from the RFS.

Mr. Whitfield. Yes. Without objection, we will enter that into the record as well.

[The information follows:]

Mr. Whitfield. Anything else? Okay.

Okay. Well, thank you all once again. We look forward to working with you as we move forward and appreciate your time very much. Thank you.

[Whereupon, at 1:11 p.m., the Subcommittee was adjourned.]

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