LEGISLATIVE HEARING ON DISCUSSION DRAFT CONCERNING ALTERNATIVE FUELS, INFRASTRUCTURE, AND VEHICLES

HEARING
BEFORE THE
SUBCOMMITTEE ON ENERGY AND AIR QUALITY
OF THE
COMMITTEE ON ENERGY AND COMMERCE
HOUSE OF REPRESENTATIVES
ONE HUNDRED TENTH CONGRESS
FIRST SESSION
JUNE 7, 2007
Serial No. 110–53
SUBCOMMITTEE ON ENERGY AND AIR QUALITY

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LEGISLATIVE HEARING ON DISCUSSION DRAFT CONCERNING ALTERNATIVE FUELS, INFRASTRUCTURE, AND VEHICLES

THURSDAY, JUNE 7, 2007

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

The subcommittee met, pursuant to call, at 10:00 a.m., in room 2123 of the Rayburn House Office Building, Hon. Rick Boucher (chairman) presiding.


Also present: Representatives Green and Stupak.

Staff present: Bruce Harris, Lorie Schmidt, Chris Treanor, Laura Vaught, Jonathan Brater, Jonathan Cordone, Alec Gerlach, Rachel Bleshman, David McCarthy, Tom Hassenboehler, and Matt Johnson.

OPENING STATEMENT OF HON. RICK BOUCHER, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF VIRGINIA

Mr. BOUCHER. The subcommittee will come to order. Before commenting on the subject matter of today’s hearing, I want to inform members of the subcommittee that we will be meeting in that markup session next Wednesday, June 13 at 10 o’clock. And during that markup session, we will consider all of the titles that this subcommittee will contribute to Speaker Pelosi’s Independence Day measure. The markup will encompass the matters relating to vehicles and fuel, which are the subject of today’s legislative hearing. And also will encompass the titles relating to energy efficiency and the other matters that were the subject of the legislative hearing we conducted in May.

I want to encourage all of the members of the subcommittee to submit their proposed amendments to the committee staff, if possible, by close of business tomorrow. That will give us time over the weekend and in the first couple of days of next week to work with the Members who are submitting the amendments and try to resolve any issues with their amendments prior to the markup taking place. So for benefit of the Members, let me repeat that we would like to have your draft amendments submitted to the subcommittee
staff by the close of business tomorrow, if at all possible, and that will give us ample time to work with you prior to the markup. The full Energy and Commerce Committee will convene a markup session the following week, that will be 2 weeks hence, for the purpose of considering the work product of the subcommittee.

And then following House passage of the Speaker’s July independence energy agenda, the subcommittee’s attention will return to our other principal topic for the year and that is global warming and greenhouse gas control. It is our intention to draft and approve in the subcommittee, and the full committee in September, a mandatory greenhouse gas control measure. Our goal is to present it to the Speaker for House debate as early as October of this year.

A number of Members participated last week in an intensive evaluation of the European emissions trading system during the visit to four European Union member countries, and the knowledge we gained during the course of that visit places us in a very strong position to draft an appropriate control program for the United States in the fall of this year.

This morning our legislative hearing focuses on vehicles and fuel. It is a comprehensive treatment. It reflects suggestions that have been made to the committee by subcommittee members following our series of hearings in the spring. It promotes alternative fuels, alternative fuels infrastructure, and motor vehicle advances. Among other major provisions, it mandates the manufacture of flexible-fuel vehicles on a stated schedule, with the requirement that by 2020, 85 percent of the motor vehicle fleet be flexible-fuel capable. Correspondingly, it mandates the installation of E–85 capable pumps at service stations when flex-fuel vehicle penetration reaches 15 percent in a given area. There are exemptions from that requirement for very small retailers and there are grants to make the cost of compliance easier for those that need the financial assistance.

These twin mandates are designed to relieve the classic chicken or egg dilemma where cars are not built because of the absence of pumps and pumps are not installed because of the absence of flexible fuel-capable cars. We also respond to the President’s call for annual consumption of 35 billion gallons of alternative fuel by 2017, but we require that volume of consumption not by 2017 but by 2025 instead. We concluded that the production of 35 billion gallons by 2017 was unlikely, given our current annual consumption of less than 6 billion gallons and the absence of any empirical support for the 2017 date supplied by the administration.

Our draft bill authorizes grants of $1 billion to accelerate the commercialization of cellulosic ethanol production; establishes a feasibility study for a pipeline that would be dedicated to the transportation of alternative fuels from point of origination to point of distribution and sale; creates an advanced battery loan guarantee program to speed the introduction of promising new high performance batteries for electric vehicles, including lithium ion batteries; creates a fund for development of a mass technology vehicle, such as hydrogen fuel and plug-in all-electric vehicles; creates a mechanism to provide public information on higher fuel efficiency; mandates an increase in the CAFE fuel efficiency requirements; creates, starting in 2013, a low-carbon fuel standard applicable to all
motor vehicle fuels, with a formula assuring that, as the alternative fuel mandate increases over time, the requirement for the usage of low-carbon fuels will also grow; and creates a biodiesel fuel standard with identification numbers sufficient for the manufacturers of vehicles to build engines compatible with biodiesel fuel.

As a step toward the greenhouse gas control measure that we will process through our committee later this year, we require the Department of Transportation to begin issuing a CAFE requirement, both in miles per gallon, which is the historic metric, and also in the equivalent grams of CO\textsuperscript{2} emitted per vehicle mile. And we require the EPA to collect data from the auto manufacturers regarding the lifecycle CO\textsuperscript{2} footprint for the vehicles that they are placing in commerce. We also respond to the regulatory confusion which exists following the Supreme Court decision conferring authority on the EPA to regulate for greenhouse gas emissions in the transportation sector, a subject which I am certain will stimulate a lively discussion this morning.

That concludes my opening statement.

Let me simply note that we anticipate a number of unanimous consent requests that will be made by various parties to insert material into the record during the course of today’s hearing. We will consider all of these requests toward the conclusion of the hearing. In the meantime, those who desire to insert material are asked to provide copies of the material to the majority and minority staff so that we can evaluate the material prior to the amount of consent requests being made and acted upon.

At this time, it is my privilege to recognize the distinguished ranking member of the Energy and Air Quality Subcommittee, the former Speaker of the House, the gentleman from Illinois, Mr. Hastert.

OPENING STATEMENT OF HON. J. DENNIS HASTERT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. Hastert. Well, I thank you, Chairman Boucher, for holding this hearing to review the draft legislation you introduced last week. I also want to thank you for the study group that you put together to look at what European standards are doing and how well they are achieving those and some of the problems that they have incurred as well. Your leadership is duly noted. Thank you for your effort in that respect. I want to reiterate my commitment to continue to work with you on commonsense energy legislation. I would also like to thank our witnesses today for being here.

Like most policy proposals, there are some things which I generally support, others that I may have some concerns with and we need to think about and talk about. I have already support increasing our supply of renewable and alternative fuels. Last Congress we had the Energy Policy Act which contained the Renewable Fuel Standard to get more alternative sources of fuel into the market. The Alternative Fuel Standard in this draft builds upon this and provides incentives to get a diverse mix of fuel into the marketplace. These alternative fuels will reduce our reliance on unstable sources of foreign oil.

Alternative fuels, however, are not effective without the infrastructure in place to distribute them. Provisions in this draft will
level the playing field to get alternative fuels like E–85 into the marketplace. It also provides grants for E–85 infrastructure and the development of cellulosic ethanol facilities. I would even go further and provide liability protection to prevent the certification of E–85 pumps today. Countries like Brazil have been using E–85 pumps for years with no problems or evidence of safety concerns. The approval from Underwriters Laboratories has been slow-walked for too long and we must speed this process along.

I have also supported efforts by this committee in the past to update and reform the CAFE standards. While I do support reforming and modernizing this program, we need to be mindful of setting an arbitrary floor or ceiling for fuel standards. The Department of Transportation is the agency with the expertise and is tasked with the determining maximum fuel savings ability. We should let them do their job.

I am also concerned about the flex-fuel mandate in the draft. This is something that I think we need to talk about, something that I think we need to negotiate. I personally believe it is largely unnecessary and overly prescriptive, the market is working on its own. But again, it is something that I think is well intentioned and we need to work through it. Also, I want to say that I believe this draft has potential to produce good policy and it could go a long way towards improving America’s energy and security.

I look forward to hearing from our witnesses today to get their thoughts on some of the issues that I have raised, as well as any other ideas they feel might serve to strengthen the legislation. Again, I want to thank you for holding this hearing, Mr. Chairman, and I look forward to working with you on a bipartisan basis to further improve the bill as we work in markup and continuing discussion on it in the coming weeks. And I yield back the balance of my time.

Mr. BOUCHER. Thank you very much, Mr. Hastert. And I too look forward to working with you in a bipartisan mode to produce a bill that will enjoy the broad support of Members on both sides of the aisle. I would announce that, pursuant to the rules of the committee, any of the Members who desire to waive their opening statements will have the time allotted for that opening statement added to the question time they will have for the first panel of witnesses today. The gentleman from Georgia, Mr. Barrow, is recognized.

Mr. BARROW. Thank you, Mr. Chairman. I will waive.

Mr. BOUCHER. Mr. Barrow waives his opening statement. The gentleman from Texas, Mr. Hall, is recognized for 3 minutes. I think he is no longer here. The gentleman from Michigan, Mr. Upton, is recognized for 3 minutes.

OPENING STATEMENT OF HON. FRED UPTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. UPTON. Well, thank you, Mr. Chairman, and I want to say that I am convinced that legislation, as we look back at the 110th Congress in December 2008, I am convinced that legislation that moves through this subcommittee will indeed be viewed as probably the most significant legislation enacted in the 110th Congress. I appreciate your leadership, Mr. Chairman, and your commitment to work on a bipartisan basis to work on legislation that is going
to be helpful to not only business and industry but obviously the consumers across our great land. I also appreciate the constructive work of our ranking member, Mr. Hastert, the former Speaker, and the relationship that he has with you and our staff to make sure and ensure that, in fact, it will be bipartisan legislation.

There are many very positive elements of the draft that has been produced that we are going to be discussing today. Important to that is the provision that Ms. Harman and I have been working on as it relates to light bulb efficiencies. And even as we go beyond that, as we look at the first appropriation bills on the House floor, she and I—and your colleague last night, all of our colleagues looking to see that the Federal Government, in fact, pursue that same course and to be able to purchase only Energy Star light bulbs, as we look at the next fiscal year, for all of our agencies. And I would like to think that we are going to have the support of the full committee in terms of their votes on the House floor when this will be debated as early as next week.

The bottom line is this: we need to work together for all of Americans. Your leadership, with the hearings that we have had, with the hearing today, the legislation that we are going to pursue, the fast track that we are on to be able to get this bill out the door before the end of this month and on the House floor after the 4th of July is very important and I look forward to working with you on that basis, and I yield back my time.

Mr. BOUCHER. Thank you very much, Mr. Upton. The gentleman from California, Mr. Waxman, is recognized for 3 minutes.

OPENING STATEMENT OF HON. HENRY A. WAXMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. WAXMAN. Mr. Chairman, I am not going to talk about the importance of energy independence or the crisis of global warming in the few minutes I have this morning. We should all know that already. The question facing the Congress is whether we are going to step up to that urgent challenge. In a recent Tom Friedman column about energy legislation and Congress, he wrote, “you can very comfortably drive a Hummer to the gap between our words and deeds.” And that was before he read this subcommittee’s draft proposal. This discussion draft doesn’t step up to the urgent challenge facing us. It blinks and then steps back.

Last November, voters elected a new Congress and demanded change. They wanted an end to politics as usual and legislation driven by special interests. This bill unfortunately reflects none of that. It would not only overturn the recent landmark Supreme Court ruling that the EPA has the authority to regulate greenhouse gas emissions from cars and trucks, but would also block the efforts by California and 11 other States to reduce these pollutants. And this draft has as its centerpiece promoting coal. Even worse, the draft encourages high-carbon, coal-based liquid fuel to be used for planes and jets, with little protection against the inevitable increases in greenhouse gas emissions.

Because this draft is so deeply flawed, I intend to offer a substitute bill at next week’s markup. The substitute will include commonsense vehicle efficiency and low-carbon fuel standards to re-
duce our dependence on fossil fuels and our emissions of global warming pollution. It will include a renewable electricity standard to increase the amount of clean renewable electricity used in this country. It will include an energy efficiency performance standard to reduce our Nation’s emissions of global warming pollution and to save consumers money. And instead of discouraging States from taking action, the substitute will make it the policy of the United States Government to support State programs and policies that direct global climate change.

When this committee passed the 1990 Clean Air Act, we were able to forge consensus to craft legislation that dramatically reduced pollution while still allowing our economy to grow. Many thought that was impossible, but we did it. We did it by working together. We did it by not listening to those who said we couldn’t, and we did it by rising above regionalism and special interests, and recognizing that urgent problems require innovative and strong solutions. The draft before us doesn’t come close to that standard and I look forward to working with my colleagues to develop a bill that our country can be proud of.

Mr. Boucher. Thank you very much, Mr. Waxman. The gentleman from Texas, Mr. Hall, is recognized for 3 minutes.

Mr. Hall. Mr. Chairman, thank you. You did a very good job in the opening statement. I will waive my opening statement.

I would like to take a part of my time, though, to recognize one of the panelists who is a highly recognized young lady in the south-west part of this country and she is from my district and that makes her special to me, but she has been before this committee before, as have some of her colleagues, Bill Douglass and the others who have graced us with their presence.

Sonja Hubbard is vice chairman of government relations and chief executive officer of the E-Z Mart Stores that operate in five States and she is located in Texarkana—founded by her father and still runs by her mother—operating and leading the company. But she serves her first term, though, as National Association of Convenience Stores chairman of government relations in five States. I can tell you other things about her. She is a CPA. She is a part of almost everything in the eastern part of Texas. She serves as the director of the Texas Petroleum Convenience Store Association; is chairman of the local branch of the St. Louis Federal Reserve Bank. And what she and I appreciate more than ever, and I do at my age, she loves jazz music and her favorite movie is “It’s a Wonderful Life.” And like her, I make my kids listen to that and watch it annually at Christmastime. Thank you for being before us and giving us your time. And all of you, we know it takes time to prepare to get here to give your testimony and you render a real good service to us and we appreciate all of you. I especially appreciate you, Sonja. Thank you, Mr. Chairman.

Mr. Boucher. Thank you very much.

Mr. Hall. I have campaigned enough.

Mr. Boucher. Thank you, Mr. Hall. The gentleman from Massachusetts, Mr. Markey, is recognized for 3 minutes.
OPENING STATEMENT OF HON. EDWARD J. MARKEY, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF MASSACHUSETTS

Mr. MARKEY. Thank you, Mr. Chairman. Mr. Chairman, this draft is one that I cannot support. I do not think it reflects the spirit of what this country wants to see happen, as we are challenged by 60 percent of our oil being imported as opposed to only 27 percent of our oil being imported 20 years ago. Global warming is now viewed universally as a scientific fact and one that requires urgent action. This bill does not respond to those twin challenges.

Fourteen attorneys general have all come out in opposition to this bill, but they are not going to be allowed to testify here today. This bill is cutting the legs out from under the States, just as they are starting to sprint forward on carbon pollution regulation. And it is cutting the legs out from under the EPA, just as it has begun lacing up its shoes after the decision in Massachusetts v. EPA. This bill overrides the Supreme Court decision in Massachusetts v. EPA. This bill requires the EPA to deny California in its label request, and 11 other States as well, including Massachusetts, to its use of the Clean Air Act authority to set vehicle greenhouse gas emission standards.

As I have done since 2001, initially with Sherri Boehlert from New York and now with other Members of Congress led by Congressman Platts from Pennsylvania, it will be my intention next week to once again bring an amendment that will raise the fuel economy standards for our country to 35 miles per gallon, and we will have a vote on that issue. At 35 miles per gallon, we back out all of the oil which we import from the Persian Gulf. We must send that signal to all of those OPEC nations. We have the technological capacity to do that. In 10 years we can once again reclaim our control of our own energy agenda if we take those actions. And the same thing is true for global warming. We have to ensure that we reduce dramatically the greenhouse gases that are creating this potential catastrophic condition for the planet. Sadly, this bill does not do that.

And so we have a historic debate about to break out and led by the clean coal, the coal-to-liquid issue, which is only going to worsen greenhouse gases, and the absence of meaningful fuel economy standards for our vehicles that we drive, which would help. This debate is historic and about to begin. Thank you, Mr. Chairman.

Mr. BOUCHER. Thank you, Mr. Markey. The gentleman from Illinois, Mr. Shimkus, is recognized for 3 minutes.

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

Mr. SHIMKUS. Thank you, Mr. Chairman. I agree with my colleague from Massachusetts. This will be a historic debate and I would ask people to reserve their speech because next week we start. Illinois has 250 years worth of coal in the Illinois basin. It can make a major impact on decreasing our reliance on imported crude oil and help bring security and that is going to be part of this debate. And we relish the opportunity to bring this to our colleagues and talk about energy security.
Thank you and I appreciate the chairman’s efforts in trying to replace foreign oil imports by building up a strong domestic alternative fuel supply. We must put everything on the table to increase our energy security. All alternative fuel should be considered. Coal-to-liquid fuel, biodiesel, corn-based ethanol, and also cellulosic, all hold great promise and will compliment and strengthen our domestic energy portfolio. As we all know, the recent expansion of biofuels, primarily ethanol, is happening at record rates. With consumption running at nearly 400,000 barrels per day, equivalent to an annual consumption rate of 6.1 billion gallons, this is well in excess of the current Renewable Fuel Standard established under EPAct 2005, which we passed through this committee. And I am happy to see that this effort had us on what seemed to be a progressive path for renewable fuel.

With EPA’s promulgation of the RFS credit trading and compliance system, largely viewed as a success, ethanol and biodiesel are positioned to only increase their impact on the domestic fuel supply and further reduce our use of imported foreign oil. However, there is work to be done and concerns remain. There is infrastructure limitations, conflicting environmental impact and methodologies and measures to develop. Even affects on fuel prices should be looked at as to not exceed a smooth transition to greater use of these fuels in our everyday transportation mix. All of these issues merit careful consideration before we act to further mandate the use of these fuels.

While I appreciate the chairman’s efforts to follow up with hearings and markups, I do have concerns that the timeline he has may be too fast for some of the provisions that we are trying to enact. And maybe we will hear today from our witnesses that this is the case. It may be more valuable to take a step back and that is what we are trying to do with the Alternative Fuel Standard and especially section 102, the Low-Carbon Fuel Standard. I think there is a lot of uncertainty and we are giving ourselves a very limited amount of time to deal with these broad policy issues. If we are looking to expand the use of alternative fuels, we should remain—and technology neutral. We should also expand our traditional fossil fuel expiration and protection and strengthen our domestic energy supplies. We must not underestimate our current reliance on unstable foreign sources of fossil fuels and we must be smart and responsible with further actions.

With that, I welcome our panelists and I yield back the balance of my time, Mr. Chairman.

Mr. Boucher. Thank you very much, Mr. Shimkus. The gentleman from Michigan, the chairman of full committee, Mr. Dingell, is recognized for 5 minutes.

OPENING STATEMENT OF HON. JOHN D. DINGELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. Dingell. Mr. Chairman, I will not use 5. I will take 3 and be happy. First, Mr. Chairman, thank you. This is an important hearing. It addresses a number of questions that need to be dealt with before we proceed further. I want to commend you for the way in which you are handling this matter and the extraordinary lead-
ership that you are providing to the committee and the subcommittee. At the outset, I note that the draft legislation is well balanced, and for that I commend you. It provides us a starting point for our consideration of these critical issues. With that, Mr. Chairman, I look forward to hearing the views of my colleagues on the committee.

Mr. Boucher. Thank you, Mr. Dingell. The gentleman from Michigan, Mr. Rogers, is recognized for 3 minutes.

OPENING STATEMENT OF HON. MIKE ROGERS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. Rogers. Thank you, Mr. Chairman, for holding today’s hearing. Addressing the twin problems of our dependence on foreign oil and climate change requires sensible action on transportation fuel. Developing diverse fuel sources is a goal in this committee and it has been pursued for some time. Much of this bill continues our bipartisan tradition of pursuing market-based solutions to America’s energy needs. However, several provisions in this bill can be cause for concern.

The Renewable Fuel and Alternative Fuel Standards are particularly complex and I am concerned that they may limit rather than encourage the growth of alternative fuels. Several provisions related to alternative fuel infrastructure raise serious questions about the respect for private property rights. The report on CAFE standards contemplated in this bill is immense. I am very concerned that the bill, while well intentioned, continues the system of using arbitrary numbers that distort the marketplace, limiting consumer choice and making it exceptionally difficult for the American auto industry to effectively compete in the United States.

Finally, the provisions providing assistance for battery research and alternative propulsion are laudable. However, I have serious questions regarding how this legislation will actually work in this area and the consequences, Mr. Chairman, are very, very real. Recently in Michigan, within the last year, we opened up a plant just outside Lansing, Michigan, the most high tech manufacturing automobile plant in North America that builds the Buick Enclave and the Saturn Outlook and it is a marvel of modern manufacturing technology and represents the best in cooperation between the UAW and management to build very high quality vehicles, crossover SUVs that get in the mid 20 miles per gallon. Twenty-five hundred direct manufacturing jobs and another 2,500 jobs were created in the area just in the supply chain, direct manufacturing jobs. Five thousand jobs directly, not counting all of the supply that will supply the supply chain. It is an incredible feat. It is an incredible vehicle. They are building incredible vehicles, high quality vehicles. They are making that march toward better miles per gallon. We should not punish them.

And I would just caution you, Mr. Chairman, please do not rush this legislation. The consequences if we get this wrong are very real to America’s manufacturing base, consumer choice and just jobs in our local neighborhoods that have been, I think, the backbone for our middle class for the better half of this century. And with that, Mr. Chairman, I look forward to working with you on the issues in this bill. Again, I would ask that we continue that
Mr. Boucher. Thank you very much, Mr. Rogers. The gentleman from Maryland, Mr. Wynn, is recognized for 3 minutes.

Mr. Wynn. Thank you, Mr. Chairman. I will waive.

Mr. Boucher. The gentleman waives his opening statement. The gentleman from Texas, Mr. Burgess, is recognized for 3 minutes.

OPENING STATEMENT OF HON. MICHAEL C. BURGESS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. Burgess. I thank the chairman. I also want to thank you for your willingness to work with the Republican side of the dais as we craft energy independence legislation.

I am pleased to see the language is in the discussion draft covering a provision I have been working that would help to incentivize biodiesel. The reliance on foreign energy sources undermines our economy and security. Homegrown fuels, such as biodiesel, can help move the United States towards greater energy independence. Despite the energy and security and clean air benefits, biodiesel-capable cars and trucks have been slowly hitting the market, mainly because of concerns by original equipment manufacturers for automobiles and engines. Although manufacturers are comfortable with the B–5 biodiesel blend, most of them certified their engines to run on the biodiesel B–20. Section 103 of the draft seeks to clarify the definition of biodiesel and the blends, which I think is a necessary step towards the widespread use of biodiesel. My provision, included in the draft looks at the hardware, if you will, and tries to incentivize the B–20-capable automobiles by making B–20 eligible for alternative fuel credit of the Corporate Average Fuel Economy Program.

Alternative fuels receive an additional CAFE credit because they help reduce the use of petroleum fuel and provide clean air benefit. Biodiesel, in fact, does both. An October 2005 EPA study shows diesel vehicle fuel economy improvements of between a third to almost 40 percent of the lifecycle carbon savings, and a lifecycle carbon savings of 16 to 20 percent compared with gasoline vehicles. In addition, for every unit of diesel fuel which is replaced by biodiesel, the total lifecycle greenhouse gas emissions that would have been produced from that unit of diesel fuel would be reduced by 13 percent, numbers that Kermit the Frog would love.

Mr. Chairman, I ask you and your staff to work with me and my staff on this provision and ensure that it is included in the final draft when the subcommittee comes to markup next week. I would be remiss if I forgot to say I have some concerns about the provisions in the discussion draft, particularly with regard to the wisdom of adopting a low-carbon fuel standard without first doing some analysis to determine its effect on the prices paid by the consumer at the pump. I am hopeful that the bipartisan spirit set forth by Chairman Dingell and you, Chairman Boucher, will prevail and that we will be able to work through some of these issues. I thank the chairman for today’s hearing and I look forward to working with you to keep the B–20 provisions in the final draft of the bill, and I will yield back the final 25 seconds.
Mr. Boucher. Thank you very much, Mr. Burgess, and thank you for recommending the biodiesel provision to us. That was a substantial contribution to our work and we do look forward to continuing our discussions with you about that provision. The gentleman from Pennsylvania, Mr. Doyle, is recognized for 3 minutes.

OPENING STATEMENT OF HON. MIKE DOYLE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF PENNSYLVANIA

Mr. Doyle. Thank you, Mr. Chairman. Let me begin by showing my appreciation to you for putting this discussion draft together. While I know it is not been easy and that there are members on this committee with legitimate concerns with this draft, you should be commended for your efforts as we continue this process.

As we all know, the short deadline for completion of this legislation was a deadline imposed by the Speaker. This was not your choice nor was it the choice of Chairman Dingell, and there are many on this committee who would like more time to address some of these important matters. And while I understand this concern, I just hope we can all move forward together to build the best package we can. I want to remind all of the members of this committee that the vast majority of us in both parties share the same goal. We all want to reduce carbon emissions by 80 percent by the year 2050. What we are essentially arguing about is how we are going to reach this goal. I would like to challenge everyone here to keep their eyes on the prize, so to speak, and not get bogged down in one path towards its achievement versus another. It doesn’t matter to me if the line of progress is perfectly straight with mandated reductions annually, or if the line of progress is one that is gradual over the early years and explodes upwards in future years as technology is developed. We arrive either way at an 80 percent reduction in greenhouse gas emissions and that is no small accomplishment.

In the end, this committee is going to pass a bill that will, for the first time, put our Nation on a path towards energy independence. We are going to do this in a bipartisan and bicameral way. This process will allow us to investigate multiple paths towards the same goal and I think it is critical that we explore all of these options. After all, Mr. Chairman, this is not the first time you have heard me say that all options are on the table. But what I think is critical is that we don’t let ourselves be swayed by some of the rhetoric that we have heard here today. We should instead keep our focus on our mutually shared goal and work together in a manner and with a dignity befitting this great body in which we serve.

So Mr. Chairman, I will again express my sincere desire to continue working closely with you, and all of the members of this committee, to produce an energy bill that makes our country more independent, expands development of new technologies, and protects the American economy as it transitions to a carbon-constrained world. It is our challenge to blend our political parties’ goals with those of the American people and those who fuel our economy. They don’t have to be mutually exclusive anymore. This is a unique time in our history and a time that presents us with this tremendous but extremely beneficial challenge. I am ready to, in good faith and in an open forum, do my part and I hope that
is the case with everyone on this committee. Mr. Chairman, I yield back the balance of my time.

Mr. BOUCHER. Thank you very much, Mr. Doyle, and thank you for your very substantial contributions to the work which is before us. The gentleman from Oklahoma, Mr. Sullivan, is recognized for 3 minutes.

Mr. SULLIVAN. I waive, Mr. Chairman.

Mr. BOUCHER. The gentleman waives his opening statement. Are there other Members on the Republican side who have not been called on? The gentle lady from California, Ms. Harman, is recognized for 3 minutes, with the Chair's thanks for her contributions to the light bulb provision and to other matters.

OPENING STATEMENT OF HON. JANE HARMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Ms. HARMAN. Thank you, Mr. Chairman, very much. Mr. Chairman, the luckiest members of this committee hail from California. Among other things, our State is an active revolutionary low-carbon fuel standard and tailpipe emissions standard that throw into sharp relief the Federal Government's failure, at least up until this point, to act adequately on climate change. Having said that, however, I commend you, as well as Chairman Dingell, for this draft legislation.

While I favor a number of changes to it, as I have mentioned to you, I urge that our consideration of climate change legislation in the House follow the regular order. The product of this committee's labor should be the basis for what the House will pass this summer and fall. There should not be end runs around this committee. But I think our bill should leave room for States to maneuver. States, Justice Louis Brandeis said, are America's laboratories of democracy.

California has been this Nation's principal laboratory for climate change policy and the legislation we are considering today, in my view, is due in no small part to the effort to my home State over the past decade. As I have told you, I cannot vote to strip away California's authority to exceed Federal greenhouse gas standards and I will plan to offer an amendment, hopefully a bipartisan amendment, since Governor Arnold Schwarzenegger agrees with this position, to strike the preemption section.

Again, I applaud your instinct to be open to improvements in the draft. I really know we can produce a smart bill that both reduces our reliance on oil, reduces our carbon emissions and with Mr. Upton, provides the perfect light bulb provision. Let me finally say that I would like to ask unanimous consent to insert in the record a three-page color spread in this week's Time magazine on our chairman, Mr. Dingell, entitled “A Mastodon Takes On Global Warming.” I am not sure I agree with the animal choice, but I do agree with the very positive tone of the article, and I yield back.

Mr. BOUCHER. Thank you very much, Ms. Harman. I think most of us are familiar enough with that article to agree at this time to the unanimous consent request. So thank you for making it and let me say that the portrait of our chairman portrayed in that article is interesting. I think largely accurate and it is a salute to his many years of strong leadership in the Congress and the continu-
ing role that he has played in leading this committee, and I want to congratulate the chairman on that depiction of the wonderful things that he has done for energy and other policies over the years. So without objection, it is inserted within the record.

The gentleman from Maine, Mr. Allen, is recognized for 3 minutes.

OPENING STATEMENT OF HON. TOM ALLEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MAINE

Mr. Allen. Thank you. Mr. Chairman, I regret that I am disappointed by the draft legislation before us. It rolls back recent progress made by the courts on climate change, preempts the States' abilities to control greenhouse gas emissions, and doesn't do enough, in my opinion, to reduce carbon emissions and halt global climate change. The bill overturns Massachusetts v. EPA, a landmark Supreme Court decision that confirmed that the EPA has authority under the Clean Air Act to regulate carbon dioxide as a pollutant. The Supreme Court decision is spurring the administration to action, changing the dynamic on climate change and making it more likely we can pass meaningful legislation this year. Overturning Massachusetts v. EPA takes us in the wrong direction. We should preserve the power of the EPA to regulate air pollutants under the Clean Air Act.

Further, this bill prevents California and 12 other States, including Maine, from enacting strict automobile greenhouse gas emission standards. Today, many people have lost confidence that the Federal Government will effectively respond to air pollution and global warming. Therefore, we should not block States from developing their own measures, especially on the basis of a promise that later on we will do more on greenhouse gas emissions. Mr. Chairman, I would ask unanimous consent, at this point, to enter into the record a letter from David Littell, commissioner of the Maine Department of Environmental Protection, in opposition to the bill as drafted because of these two provisions.

Mr. Boucher. Thank you, Mr. Allen. Why don't you submit that to us and we will consider that along with all of the other materials we will be receiving for insertion in the record and offer unanimous consent approval at a uniform point later in the proceeding.

Mr. Allen. Thank you, I will do that. In my statement at the legislative hearing on the first part of this energy package, I expressed my hope that the final product of this subcommittee would include a strong section on plug-in hybrids combined with coal plants that employ the latest technology for carbon capture and sequestration plus state-of-the-art technology. This was not done. Further, I expressed my hope that the subcommittee would produce an energy independence package with a renewable energy standard in language similar to Mr. Markey's CAFE proposal. There is no renewable energy standard in the bill and the CAFE language, in my opinion, is weak compared to Mr. Markey's proposal.

Finally, Mr. Chairman, I believe that cleaner air and a comprehensive strategy to combat global climate change go hand-in-hand with action to achieve energy independence. I am disappointed that the bill before us today falls short of this vision, but
I certainly hope that we can work together to make it better. And with that, Mr. Chairman, I yield back.

Mr. Boucher. Thank you very much, Mr. Allen. The gentleman from Texas, Mr. Gonzalez, is recognized for 3 minutes. Mr. Gonzalez waives his opening statement. The gentleman from Washington State, Mr. Inslee. I don’t believe he is here. The gentle lady from Wisconsin, Ms. Baldwin, is recognized for 3 minutes.

OPENING STATEMENT OF HON. TAMMY BALDWIN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WISCONSIN

Ms. Baldwin. Thank you, Mr. Chairman. I want to begin by thanking you for your dedication and your efforts in crafting the discussion draft that we have before us. I recognize the very difficult task that you have and for that reason I wish I could be more excited and more supportive of its provisions. But unfortunately, I am concerned that the discussion draft, as it is currently written, fails to take significant steps toward reducing our Nation’s energy consumption and putting us on a path to energy independence.

Many times over the course of this committee’s energy independence and climate change hearings, I have said that we need to push the envelope in terms of creating efficient, effective and environmentally friendly legislation. But rather than taking bold steps, this draft appears to threaten some of the progress that we have made thus far. For instance, the language in the draft bill to overturn the Supreme Court’s important decision in Massachusetts v. EPA undermines the achievements we have made and rehashes old arguments over whether the EPA has authority under the Clean Air Act to regulate emissions of greenhouse gases for motor vehicles.

Moreover, the discussion draft preempts the progress made thus far by 12 States to regulate and reduce greenhouse gas emissions from automobiles. We should be encouraging and commending the States for not sitting idly by over the past several years while the Federal Government dragged its feet on emission standards. Instead, the bill precludes their efforts while also failing to increase our energy independence and slow the effects of global climate change.

Also, as I expressed at our last legislative hearing, I remain concerned about the coal-to-liquid projects. If we are truly going to make our Nation energy independent, we must do so in a manner that reduces our greenhouse gas emissions and we must aspire to a higher standard than do no harm. The treatment of coal-to-liquid in the draft before us has done little to alleviate my concerns. Rather than limiting its use, the bill opens up the possibility that high-level greenhouse gas emitting fuel source will supply our Nation’s aviation industry without having to meet the low-carbon fuel standard. This cuts directly against all the steps we are taking and will take to decrease our energy use and lower our greenhouse gas emissions.

Mr. Chairman, while I have concerns with this discussion draft, I believe that we still have an opportunity to perfect it and I hope that we will. There are several provisions in here that are sensible policy approaches. For instance, I am pleased to see that we will
be making significant improvements to increasing the use of E–85 and improving the E–85 infrastructure and flex-fuel vehicles. These are necessary improvements that will help spur increased development of renewable fuels and move us in the right direction on energy independence and global climate change.

In all, this bill offers us a chance to show the world that our Nation is ready to take bold action and address our Nation's energy issues. We must not let this opportunity pass us by. Thank you, Mr. Chairman.

Mr. BOUCHER. Thank you very much, Ms. Baldwin. The gentleman from Texas, Mr. Barton, the ranking member of the full Energy and Commerce Committee, is recognized for 5 minutes.

OPENING STATEMENT OF HON. JOE BARTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. BARTON. Thank you, Mr. Chairman. I once again want to commend you for a process that you and Chairman Dingell have engaged in on this emerging package of energy items. It is an open process and it has been a fair process and I am sincere in saying that I am very appreciative of it. Because of that, myself and Mr. Hastert and the Republicans are really looking for ways to work with you and Mr. Dingell to craft an energy package that is good for the American people.

Having said that, your timetable is, to say the least, ambitious. In previous Congresses, energy packages of similar scope took years of discussion, dozens of hearings, numerous markups at subcommittee and full committee, false starts and working with the other body before they became law. Your discussion draft, for example, on the fuels and vehicles part alone is one of the biggest changes, would be one of the biggest changes in the history of the Clean Air Act. It is also very complicated. I spent 2 hours yesterday with some very smart people discussing it and trying to figure out exactly what it means and how it would work in practice and what the implications of it are.

I am certainly not the smartest guy on energy policy, but I know a little bit about it and I am having trouble just adjusting to the thesis of some of those time frames. I have got numerous questions that I want to ask later today in this hearing and I know that other Members on both sides do too.

The discussion draft would require monumental changes in the automotive and refining industries. We need to know what the cost and the benefit of those changes might be. Although the provisions to expand the renewable fuel standard can set the market to include other types of alternative fuel such as natural gas and coal-to-liquid have real merit, no one yet knows how these fuels would actually be used when they also need and if and when they would have to be assimilated into some sort of a carbon cap under the low carbon fuel standard as proposed in section 102. We simply have to understand the practical effects of these proposals. How much are they going to add to the cost of transportation fuels for American drivers? Gasoline prices are high enough already and it would appear to me that on the first glance that if this proposal were to become law, gasoline prices would easily go up to at least a dollar, perhaps $1.50 a gallon. I hope I am wrong about that.
Your section 301 does grant the authority to set CAFE standards, similar to a bill that this committee reported last year, but, it is unclear whether it would allow the fuel economy standards to be greater than 36 miles per gallon by 2021. At the same time, it sets an aggressive carbon cap on refineries and fuel providers and those come on top of the many other environmental requirements that are already mandated under the Clean Air Act to control the existing criteria pollutants.

I had difficulty trying to understand what kind of a CO\textsuperscript{2} baseline the bill would envision. I also had trouble understanding the totality of CO\textsuperscript{2} that the bill would attempt to regulate or monitor. There is just a lot of these types of technical questions that I am having trouble with. In several places the bill authorizes new Federal spending, including “such sums as are necessary.” I think I speak for most Republicans when I say that we are opposed to “such sums as are necessary.” That is basically a blank check. I don’t even know how the CBO would score such a phrase.

I also don’t know whether it would square with the current House rules against unfunded mandates. I also don’t know how it would square against the new rule on PAYGO that the new majority has instigated in this Congress. There are many, many possible unintended consequences of these kinds of provisions. I think it would normally take a lot of weeks to tease these out and to understand them. Apparently, we are going to have to get it done in the next 2 or 4 weeks. That seems to me to be a little bit ambitious.

Mr. Chairman, I apologize for giving you so many questions, but I think that shows you how seriously we are taking your discussion draft. We are not just saying we are against it or rubberstamping it. I think there is room here for a bipartisan compromise and Mr. Hastert and myself, we met on this yesterday; both decided that we want to be a part of that compromise, if it is possible. So take my questions or take my comments on the opening statement in the spirit of which they are given, which is intense seriousness.

I have sat in the chair that you are sitting, I have sat in the chair that Mr. Dingell is sitting in. It is not an easy job. It is a very important job. I will promise you this, if you are open and fair and work with the minority, we will be open and fair and work with you and Mr. Dingell. We will try to put together a bill that everybody on both sides of the aisle can be proud of. With that, I yield back, Mr. Chairman.

Mr. BOUCHER. Well, thank you very much, Mr. Barton, and I appreciate the gentleman’s candor. His careful attention to the measure that we have forward in draft form, and I will say that I also appreciate his willingness to work with us in a bipartisan mode to arrive at a measure that we can all support and that is a willingness that we will express back to you. We will do our best to provide the answers we have for the questions that you have raised now and those that you raise later and I thank the gentleman for his interest and attention to this.

The gentleman from Washington State, Mr. Inslee, is recognized for 3 minutes.
OPENING STATEMENT OF HON. JAY INSLEE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WASHINGTON

Mr. INSLEE. Thank you. First, I want to thank the Chair on how he has handled this incredibly challenging effort. It has just been remarkable to try to give everyone a say in this.

I want to put in the record, and circulate to my colleagues, an article about a NASA report that came out last week and the reason I want to circulate it is that timing is an issue here and I want to make it clear that we need to work on global warming this July, as well as energy independence and this article will make it clear why. Our scientists at NASA, the group that put a man on the moon, in this article basically told us that we have got about 10 years, not 50 years, not 40 years.

We have got about 10 years to make significant changes in our CO\textsubscript{2} emissions or the world is bound for a tipping point where we melt the tundra and the methane, which is 16 times more powerful than CO\textsubscript{2}, tips the climatic system in the world into places we don't want it to go. I point this out and I am going to circulate this article because this July, I believe we have to take action with significance on CO\textsubscript{2} in addition to energy independence and I am looking forward to achieving that.

A couple of things that I will be working on I am very appreciative of the Chair putting in a provision on low-carbon fuels. It is absolutely imperative that we work towards an effort for advanced forms of biofuels and electricity for our cars and a whole host of advanced non-CO\textsubscript{2} emitting fuels. And this is a first step. I will be suggesting some additions that will make the low-carbon fuel provision much stronger so that it will apply particularly with a long-term fixed, enforceable guarantee to our kids that we are going to have low-carbon fuel.

One of the things we have learned is that we have to give certainty to the investment community so that decisions in investment can be made to make investments in these low-carbon fuels. And this is one way we need to do it, not by giving too much flexibility or alternatives, but in fact, a guarantee to get that done.

Second, we will have some suggestions to try to advance the plug-in hybrid technology, which I believe will be here, could be here, in fairly short order if we take the right strong measures to perfect the lithium battery technology that is so promising, to run our cars on 1 cent a mile for pure electricity, zero CO\textsubscript{2}, 150 miles a gallon of low-carbon advanced fuels after that. That is quite a deal and if we play our cards right, we can do that in that regard.

With that, I look forward to moving, not just on energy independence on July 4, pretty good theme, but independence of the world to continue to have a climate for our grandkids. Thanks.

Mr. BOUCHER. Thank you very much, Mr. Inslee. The gentleman from New York, Mr. Weiner, is recognized for 3 minutes.

OPENING STATEMENT OF HON. ANTHONY D. WEINER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. WEINER. Thank you, Mr. Chairman. I won't use the full 3 minutes. First, I want to honor you and Mr. Dingell for tapping what is an extraordinarily difficult task. It is a difficult issue that
is wrapped up in regional conflicts and here in Congress, it is wrapped up in different views of the future and it is wrapped up in trying to envision a technological future that obviously none of us can say with certitude we can predict.

There are two elements to the bill that I think are two abiding ethos that as we should keep in mind. One has been mentioned earlier, this notion of first do no harm. New York is among the States that has taken the opening provided by Massachusetts v. EPA to push the envelope on trying to figure out ways to reduce CO$^2$ emissions for residents of New York, to try to figure out ways to be innovative.

In the recent campaign that we had for Governor, there was a great deal of conversation about what would the State legislature do, what will the governor do if given the opportunity and New York was one of the parties to the suit—so we should be very cautious about doing anything that slows down innovation at the State level. I know you are sensitive to that, Mr. Chairman. You have expressed that to me and I think that we need to keep that in mind as we go forward.

The second is going to be a question that is going to hover above a lot of our deliberations about how far to push, how bold to be. There is going to be discussion on whether or not pushing the outer limits of innovation will push too far and create job loss and put us in a competitively disadvantaged place. Well, I think that when you look at the innovation going on in the energy sector, the innovation going on in the transportation sector, the quality of the automobiles being made, the fact that hybrid automobiles are among the fastest growing sector of the economy—I think that we have to be setting up a goal line here that is variable.

I think we should be as bold as possible. This is an opportunity for us to say we are not going to be halfway where other jurisdictions are, we are going to push all out. And I think there are indications that in Europe, for example, they are going to be setting standards that are much higher than ours which are going to force our technology providers, our transportation sector, to compete at a higher level, anyway. I would like very much for us to be bouncing our grandkids on our knee and talking about 2007 as the year that we crafted perhaps the single most important legislation ever passed out of Congress to deal with the issues of global warming and energy independence.

I am confident this committee, on both sides of the aisle, is up that. I am confident that you are, Mr. Chairman. So long as we keep in mind those sheer values of trying not to harm things that are out there that are working and also trying to be as absolutely bold as we can be. And I yield back my time.

Mr. Boucher. Thank you very much, Mr. Weiner. The gentleman from North Carolina, Mr. Butterfield, is recognized for 3 minutes.

OPENING STATEMENT OF HON. G.K. BUTTERFIELD, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NORTH CAROLINA

Mr. Butterfield. Thank you very much, Mr. Chairman. I don't have a lengthy opening statement except to thank you for your
leadership and your boldness in taking on this issue. Certainly, it is going to be debated on both sides of the aisle and within our own respective caucuses, but I want to thank you and the chairman of the full committee for your leadership and I look forward to this debate. At the end of the day, I am confident that we can reconcile our differences and have a good piece of legislation to take to the floor and to the American people. Thank you. I yield back.

Mr. BOUCHER. Thank you, Mr. Butterfield. The gentleman from Arkansas, Mr. Ross, is recognized for 3 minutes.

OPENING STATEMENT OF HON. MIKE ROSS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARKANSAS

Mr. ROSS. Thank you, Mr. Chairman, for holding today's hearing and all the witnesses who have come before the subcommittee to testify. I especially want to recognize and thank Ms. Sonja Hubbard, who is testifying today on behalf of the National Association of Convenience Stores. Like Congressman Hall, I claim Ms. Hubbard. If you are not familiar with the geography of Texarkana, it is a twin city. There is Texarkana, Arkansas and Texarkana, Texas and the only thing that separates them is State Line Avenue.

As you drive south down State Line Avenue, the right hand side of the road or the west side, if you will, you can vote for or against Congressman Hall and buy lottery tickets, and on the left hand side or east side of the road, you can vote for or against me and buy whiskey. But you can't do either one on the other side of the road. So we are all pleased. Congressman Hall and I both are pleased to claim Ms. Hubbard and as he indicated, she is the CEO of E-Z Mart Stores, which supply gasoline to many of my constituents in Arkansas and I welcome her here today. I look forward to hearing her testimony.

I also want to thank Chairman Boucher and the committee staff for all their work on this legislation. I am particularly pleased to see provisions regarding specifications for biodiesel and an increase in the authorized amount of cellulosic ethanol production grants. Mr. Chairman, you have heard me state before that we talk a lot about alternative and renewable fuels in this Congress and yet, we will spend more money in Iraq in the next 8 hours than we will spend in the next 365 days on research and development for alternative and renewable fuels. I hope this is one step toward changing that.

Increasing funding for cellulosic ethanol projects would help to achieve the increased levels of alternative fuels outlined in this legislation. In addition, these alternative and renewable fuels provide an incredible opportunity to provide new markets for our farm families and trigger what I believe could be an economic revival in the Delta region of this country, much of which I represent. I am also pleased to see that the draft legislation encourages the development of the alternative fuels infrastructure in this country for the grant program to assist retailers with the installation and conversion of E–85 infrastructure.

I know a number of people in Arkansas that are trying to do the right thing and they bought flex-fuel vehicles, but they have no place to fill them up. Expanding the number of alternative fuel pumps at the station is crucial to the future of alternative fuels in
this country and key to lessening our dependence on foreign oil. However, like Ms. Hubbard, before the committee today, I want to ensure that the supply and cross-implications of the proposed mandate to install an alternative fuel infrastructure are thoroughly analyzed in order to ensure that the demand for alternative fuels supports this transition.

Finally, I am glad to see provisions that increase the number of flex-fuel vehicles on the road and the supply of alternative fuels in this country, including biodiesel, ethanol, coal-to-liquid, hydrogen and natural gas. Once again, thank you, Chairman Boucher, for your work on this legislation. I look forward to today's hearing and testimony of the benefits of this bill as well as possible ways to improve upon this draft. And with that, I yield back the negative 32 seconds that I remain.

Mr. BOUCHER. Thank you very much, Mr. Ross. The gentleman from Utah, Mr. Matheson, is recognized for 3 minutes.

OPENING STATEMENT OF HON. TIM MATHESON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF UTAH

Mr. MATHESON. Thank you, Mr. Chairman. As all of these opening statements have helped illustrate, this is a complicated piece of legislation and as Mr. Doyle indicated earlier, we are working on a timeframe that is not necessarily the first choice of folks on this committee, but I applaud you for taking on this task in terms of trying to move a complex piece of legislation forward. When you are working with complex legislation, often there are nuances to the legislation that sometimes get glossed over when people start talking about it. And I think if people really dive into this discussion draft, they will see that some of these issues that they have been praising here, as a group, are not quite as simple as they are made out to be.

For example, it is not clear to me that the discussion draft necessarily overturns the Supreme Court's decision. To me, the portion of the Supreme Court decision it affects is in relation to a subject that is already regulated by the Federal Government and that is motor fuel, the current motor vehicle fuel economy. The discussion draft preserves the ability of States to regulate criteria pollutants, such as from motor vehicles, under the Clean Air Act. The discussion draft preserves the ability of States to regulate the carbon content of fuels under the Clean Air Act. The discussion requires EPA to establish a first every Federal low-carbon fuel standard.

The discussion draft, for the first time, requires automakers to report the lifetime carbon footprint of their vehicles to the EPA. And while it is not more vehicles, the discussion draft preserves the preserves the ability of States and EPA to regulate CO₂ emissions from stationary sources. I think it is important that that information be put out for people to understand what this draft does accomplish. I think we have heard some statements that don't indicate those factors are actually part of this discussion draft and I think we all have acknowledged that.

Second thing I think we ought to acknowledge is that our automobile industry—let me take a step back. Any industry in this country appreciates a predictable transparent policy environment in which they make decisions. And when you are a capital inten-
sive industry, like the auto industry, that is all the more important. And so the fact that this discussion draft makes an attempt to try to clarify where right now we may have two different Federal agencies setting standards and possibly States setting standards, as well, I applaud you, Mr. Chairman, for trying to create a greater sense of clarity so people can work in a transparent predictable environment.

I think that makes sense in terms of good policy. I think it is good for our economy, as well. Thank you for all your work on this discussion draft and I look forward to participating in the hearing. I will yield back.

Mr. Boucher. Thank you very much, Mr. Matheson. The gentleman from Louisiana, Mr. Melancon, is recognized for 3 minutes.

OPENING STATEMENT OF HON. CHARLIE MELANCON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF LOUISIANA

Mr. Melancon. Thank you, Mr. Chairman. First, I would like to commend you and Chairman Dingell for the work that you have done, particularly for the common sense to attempt to bring together what is a very complex issue for this Nation. I feel very honored to be in the Congress at a time when we are taking on something that probably—I shouldn't even say probably—that we know should have been addressed in the past. I realize that we have people in the Congress that believe that tomorrow everything should happen and as Mr. Doyle said yesterday, instead of having things go like this, maybe they need to go like that so that we don’t damage our economy, lose the jobs and at the same time, we do want to set an example to the people of the world that America is ready to face the problems of global warming.

I have always said that a good deal is one where both parties walk away happy. A bad deal is when one party walks away mad and the other party walks away happy. I have seen that here in this Congress and I hope, with this legislation, we will see the makings of a good deal as we bipartisanly work towards achieving the issues that are involved in the energy policy that we are addressing right now. I would like to thank you, Mr. Chairman, for the inclusion of two items that I requested or we had talked about. One was to include natural gas in the definition section of alternative fuels and also, the second one was the investment of cellulosic ethanol technology.

I thank the chairman, also, for addressing regulatory uncertainty arising from the recent Supreme Court ruling in Massachusetts v. EPA and as noticed by opening statements, this will be a contentious issue. However, I feel that we can’t have multiple jurisdictions trying to address gas mileage and manufacturing of automobiles State by State, the blending of fuel in the manufacturing of cars will just add to the additional cost to the consuming public.

I believe that to remove uncertainty from markets, particularly from capital intensive industries like automobile manufacturing, we must have a common regulatory authority and because of the recent Supreme Court interpretation, I think that we are moving in the right direction. I believe that the authority to regulate fuel economy should rest with the Department of Transportation and I
hope that our final draft arrives at a solution that reinforces this point.

I would also hope that we can reach agreement on the pace of increasing fuel economy standards. The discussion draft contains a thoughtful substantive approach that addresses the issue more responsibly than the proposal offered by the administration. I want to thank the chairman again for his thoughtful work on the issues and Mr. Dingell, also, and I work forward to working with the people on both sides of the aisle to try and bring to America and to the world a common sense legislation that will move this country forward. Thank you. I yield back the rest of my time.

Mr. Boucher. Thank you very much, Mr. Melancon. All of the Members now having delivered their opening statements, I am pleased to welcome today's witnesses and I want to thank each of you very much for taking the time to prepare and deliver your comments to us this morning.

Our first panel of witnesses contains people highly knowledgeable about individual sectors of our economy that will be affected by the legislation pending before us. And we want to welcome Mr. Bob Dinneen, the president and chief executive officer of the Renewable Fuels Association; Mr. Charlie Drevna, the executive vice president of the National Petrochemical and Refiners Association; Mr. Phillip Lampert, the executive director of the National Ethanol Vehicle Coalition; Ms. Sonja Hubbard, the chief executive officer of E-Z Mart Stores, testifying on behalf of the National Association of Convenience Stores and the Society of Independent Gasoline Marketers of America; Mr. John DeCicco, the senior automotive fellow for Environmental Defense; Mr. Alan Reuther, the legislative director for the International Union of United Automobile, Aerospace and Agricultural Implement Workers of America; and Mr. Dave McCurdy, president and chief executive officer of the Alliance of Automobile Manufacturers and a former colleague of this committee who we welcome back.

Thanks to each of our witnesses for sharing your comments with us. Without objection, your prepared written statements will be made a part of our record. We would welcome your five-minute oral summaries and Mr. Dinneen, we will be pleased to begin with you.

STATEMENT OF BOB DINNEEN, PRESIDENT AND CHIEF EXECUTIVE OFFICER, RENEWABLE FUels association, Washington, DC

Mr. Dinneen. Thank you very much, Mr. Chairman. Thank you, Congressman Hastert, members of the committee, for holding this very important hearing. The work that you are doing is going to be critically important, as you well know, to the Nation's energy, economic and environmental future and I applaud the hard work that has gone into the discussion draft. As you all know, the ethanol industry is a result of the Energy Policy Act of 2005 that this committee got passed, has been growing at an unprecedented rate. There are now 120 ethanol plants in operation across the country capable of producing more than 6 billion gallons of ethanol a year. Ethanol is blended in almost half of the Nation's fuel today.

But because of the signal that that bill sent to the marketplace, there are also 77 ethanol plants that are currently under construc-
tion that will add another 6 billion gallons of ethanol across the country and will allow ethanol virtually to be blended in every single gallon of gasoline that this country sells every year. As I look across the panel today, there is ethanol expansion, new construction or development in every single one of the States that you represent; in Louisiana, in Georgia, in North Carolina, in Maryland, in California, in Washington and Congressman Barton, you will probably be pleased to know that there are more ethanol plants under construction in Texas today than in Congressman Shimkus’ home State of Illinois because of the bill that you passed.

But if ethanol is going to be more than just a gasoline additive, if we are going to be able to produce ethanol from cellulosic feedstocks and commercialize that very promising new technology; if we are going to motivate the marketplace to put more FFEs on the road, to have more E–85 being used across this country, that more obviously needs to be done. EPAct has shown what an inspired marketplace can do. This Congress proposed a 7.5 million gallon RFS and everybody at the time thought that that was going to be way too much and that we would never be able to do it. Well, we have got 12 million gallons of ethanol that will be in production within the next 18 months, far in advance of the 2012 deadline and certainly far more than was required by EPAct.

If you set the old agenda, the marketplace will absolutely respond and I think that is what this bill is trying to do and I commend the chairman and the members of the committee for putting together a discussion draft that is very thoughtful, is very comprehensive, it is very proficient and it will move the date about where we need to be in terms of energy policy far down the field.

We do have issues. We, for example, do not believe that an alternative fuel program, as outlined in the discussion draft, as opposed to the more specific renewable fuel program, provides the market with adequate certainty for any of the available alternative fuels to attract sufficient investment to grow with the confidence the RFS has provided ethanol and biodiesel. There is no question that America’s energy needs demands that we utilize all of our energy resources, renewable and alternative. But our assessment is that we ought to be trying to do that with independent programs to assure that other alternatives are able to grow at the same pace that our industry has.

I understand the motivation about wanting to pick winners. But if you don’t ensure that all of these emerging technologies can be winners, we all might lose. The discussion draft maintains and expands the compliance items included in EPA’s rulemaking implementing the RFS. While this is an appropriate mechanism for rationalized AFS market, it magnifies our concerns about an equitable approach to fuel policy. These compliance values have the effect of creating a significant but as yet unknown number of paper credits that actually work to reduce the volume of petroleum potentially displaced by this program.

For example, if there is a billion gallons of renewable diesel that is used in this program under EPA’s compliance guides, that means that 700 million gallons of petroleum is not displaced by this program. If the committee determines that an alternative fuel program, as opposed to a renewable fuel program is preferred, the
RFA would suggest either increasing the volume required or modifying the compliance values to be paid to gasoline as opposed to ethanol to preserve the petroleum to strengthen potential of this program.

We support, generally, the low-carbon fuel standard. We believe that there are a number of questions with respect to that. We look forward to working with the committee to answer some of those questions so that there is more clarity with respect to the criteria that would go into a full fuel cycle analysis, but we believe the discussion draft that you have put forward, again, is a very thoughtful, comprehensive draft and I thank you, Mr. Chairman, and look forward to working with you on it.

[The prepared statement of Mr. Dinneen follows:]
Good morning, Chairman Boucher and Members of the Subcommittee. My name is Bob Dinneen and I am president and CEO of the Renewable Fuels Association (RFA), the national trade association representing the U.S. ethanol industry.

This is an important and timely hearing, and I am pleased to be here to discuss the future of our nation’s ethanol industry and how the “Discussion Draft on Alternative Fuels, Infrastructure, and Vehicles” can help our country achieve its energy security goals.

Background

Today’s ethanol industry consists of 120 biorefineries located in 19 different states with the capacity to process more than 2 billion bushels of grain into 6.2 billion gallons of high octane, low carbon, clean burning motor fuel, and more than 12 million metric tons of livestock and poultry feed. It is a dynamic and growing industry that is revitalizing rural America, reducing emissions in our nation’s cities, and lowering our dependence on imported petroleum.

Ethanol has become an essential component of the U.S. motor fuel market. Today, ethanol is blended in 50 percent of the nation’s fuel, and is sold virtually from coast to coast and border to border. The almost 5 billion gallons of ethanol produced and sold in the U.S. last year contributed significantly to the nation’s economic, environmental and energy security.
According to an analysis completed for the RFA\(^1\), the approximately 5 billion gallons of ethanol produced in 2006 resulted in the following impacts:

- Added $41.9 billion to gross output;
- Created 163,034 jobs in all sectors of the economy;
- Increased economic activity and new jobs from ethanol increased household income by $6.7 billion, money that flows directly into consumers’ pockets;
- Contributed $2.7 billion of tax revenue for the Federal government and $2.2 billion for State and Local governments; and,
- Reduced oil imports by 206 million barrels of oil, valued at $11.2 billion.

There are currently 77 biorefineries under construction. With eight existing biorefineries expanding, the industry expects more than 6.4 billion gallons of new production capacity to be in operation by the end of 2009.

**Title I – Fuels**

*Alternative Fuels Program:* The RFA applauds the Subcommittee for its comprehensive approach to policies that will lead to the increased production and use of renewable fuels such as ethanol, and also recognizes the need to reduce greenhouse gas (GHG) emissions. The Subcommittee’s Discussion Draft moves the debate regarding renewable fuels forward and sets a bold target for renewable and other alternative fuels. The Alternative Fuel Standard (AFS) included in the Discussion Draft closely follows the structure of the existing Renewable Fuels Standard (RFS) program diligently implemented by the U.S. Environmental Protection Agency (EPA).

However, the RFA does not believe that an ecumenical alternative fuels program as outlined in the Discussion Draft provides the market with adequate certainty for any of the available alternative fuels to attract sufficient investment to grow with the confidence the RFS has provided ethanol and biodiesel. There is no question that our nation’s pressing energy needs demand the increased use of all alternative fuels. But we would suggest that separate and distinct programs creating certain marketplace opportunities for other alternative fuels would be a more effective means of stimulating investment in these new technologies.

The Discussion Draft maintains and extends the “compliance values” included in EPA’s rulemaking implementing the RFS. While this is an appropriate mechanism to rationalize an AFS market, it magnifies our concerns about an ecumenical approach to fuel policy. These compliance values have the effect of creating a significant but as yet unknown number of “paper credits” that actually work to reduce the volume of petroleum potentially displaced by this program. If, for example, there is a billion gallons of renewable diesel used, and indeed there could be significantly more than that produced and used in the near future, the volume of petroleum displaced would be reduced by 700 million gallons. Such a scenario seems to be working at cross purposes to the fundamental objective of the program.

\(^1\) *Contribution of the Ethanol Industry to the Economy of the United States,* Dr. John Urbanchuk, Director, LECG, LLC, December, 2006.
If the Committee determines that an “Alternative” fuel program, as opposed to a “Renewable” fuel program is preferred, the RFA would suggest either increasing the volume required or modifying the compliance values to be pegged to gasoline, as opposed to ethanol, to preserve the petroleum displacement objectives of the program.

The RFA supports the waiver language included in the Discussion Draft, which extends waiver request authority to obligated parties. As this is a program imposed on refiners, it is logical and appropriate that they have the ability to petition for a waiver in the unlikely event of inadequate supplies of alternative fuels.

Low Carbon Fuels Standard: The RFA generally supports Federal efforts to address climate change, in part because one set of uniform, national standards can be more effective than several, overlapping state and regional approaches. While we cannot speak to the climate change impacts of all new technologies and fuels, we can address the GHG emissions benefits of renewable fuels such as ethanol.

The Pew Center for Global Climate Change recently concluded that renewable fuels offer the greatest immediate term opportunity to reduce GHG emissions from the transportation sector. This is true because renewable fuels are readily available and can be used without significant infrastructural or technological advancement. The United States already uses more than 5.5 billion gallons of ethanol annually. In 2006, ethanol use in the U.S. reduced CO2-equivalent emissions by approximately 8 million tons, according to the U.S. Department of Energy. This is the equivalent of removing 1.2 million cars from the road from a climate change perspective.

The RFA supports moving U.S. fuels policy to one based on its carbon impact. A low carbon fuels standard that is a separate and distinct program from the existing renewable fuels program, as in the Discussion Draft, will provide the marketplace with a higher level of certainty. However, much greater clarity will be required with respect to the criteria to be used in determining lifecycle GHG emissions and carbon intensity standards than is currently included in the Discussion Draft for the renewable fuels industry to be able to properly evaluate the effect such programs will have on future demand for renewable fuels and investment in new technologies.

Grants for cellulosic ethanol production: To achieve the levels of ethanol production envisioned by this legislation, it will take the rapid commercialization of cellulosic ethanol. The most effective way to speed the commercialization of cellulosic ethanol is to fully fund the programs enacted in the Energy Policy Act of 2005 for research and development of cellulosic ethanol, and increase funding where necessary. Energy crops and agricultural waste products such as switch grass, miscanthus, wood chips and corn stover all must be researched, developed and commercialized as additional ethanol feedstocks to realize annual production levels included in the AFS. New biorefineries are being built in new regions of the country everyday – the East Coast, the Gulf Coast, the Pacific Northwest and even Hawaii. The increased funding available in the grant program that promotes geographical dispersion included in the Discussion Draft will help to commercialize cellulosic ethanol quickly and continue the trend just beginning to expand ethanol production beyond the traditional corn belt.
Title II – Alternative Fuel Infrastructure

*Alternative Fuels Infrastructure Development:* Today, ethanol is a high octane component in motor fuel, currently blended in roughly 50 percent of the nation’s gasoline. But because existing EPA regulations and automotive warranty language restricts ethanol to no more than 10 percent by volume, the blend market for ethanol will be saturated shortly and certainly well below the targets for renewable and alternative fuels required by the Discussion Draft. Therefore, expanding ethanol use more rapidly into a growing flexible fuel vehicle (FFV) market where up to 85 percent ethanol can be used will be essential to meeting the petroleum displacement objectives of this bill.

A key to the expanded use of E-85 will be a significant increase in E-85 refueling infrastructure. Today, there are more than 1,200 E-85 pumps at service stations across the country, more than doubling in number since the passage of the Energy Policy Act of 2005. However, that number remains insignificant considering the 170,000 service stations nationwide. Recently, regional chains like Kroger and Meijer Inc. have taken the initiative to install E-85 pumps at their stores in Ohio and Texas, and Michigan and Indiana, respectively. National chains, like Wal-Mart, have also shown an interest in installing E-85 pumps at their 388 company-owned stations across the country.

The RFA strongly supports the Discussion Draft’s grant program to assist with the installation, replacement and conversion of E-85 refueling infrastructure. Expanding grants and other incentive programs to encourage alternative fuel infrastructure will encourage FFV production and new markets for E-85 and other alternative fuels will open.

*Prohibition of Franchisor Restrictions of Alternative Fuel Infrastructure:* The need for opening up the gasoline supply infrastructure to E-85, to allow convenient refueling of the millions of FFVs that the auto companies have manufactured over the last several years and will manufacture in increased numbers over the years to come, is critical to achieving our national goals of greater energy security and economic development. It is also critical to reducing our emissions of greenhouse gases through the increased use of biofuels, like ethanol.

The RFA supports the proposed amendment to the Petroleum Marketing Practices Act included in the Discussion Draft to prohibit a franchisor from restricting a franchisee’s ability to install alternative fueling infrastructure, convert an existing pump to alternative fuel use, advertise the availability of alternative fuel, or sell alternative fuel in any specified area of the marketing premises.

This provision is necessary because existing law intended to prevent companies from discouraging investment in alternative fuels has proven to be ineffective. The Gasohol Competition Act, enacted in the early 1980’s to prevent oil companies from interfering with the expansion of ethanol infrastructure, is hampered by the fact that it requires a demonstration of “anti-trust injuries.” That is an extremely high burden to prove against one’s supplier. For a marketer, that would mean that he could not sue unless his contract with the supplier has been terminated. Short of that, the marketer would be unable to demonstrate antitrust injury, and so
there would be no remedy available for the wrongful conduct of the supplier. Moreover, such litigation would be extremely costly.

The Discussion Draft represents a giant step in the right direction to stop such interference by the oil companies. However, the Discussion draft, as written, would still require a marketer to sue his supplier. The RFA recommends the Subcommittee consider the creation of a regulatory enforcement regime. Assigning responsibility to an appropriate regulatory agency to ensure that marketers eager to give their customers the option of using alternative fuels have the realistic opportunity to do so would make a major contribution to opening up the market for E-85 and other alternative fuels.

**Alternative Fuel Dispenser Requirements:** The Discussion Draft imposes a requirement on gasoline marketers to invest in alternative fuel infrastructure after a finding by the Secretary of Transportation that 15 percent of the vehicles in a given area are FFVs. If the marketplace responds correctly, however, and E-85 refueling infrastructure expands as rapidly as the FFV market appears it will, there may not be a need for mandates to further compel the production of FFVs and the installation of alternative fuel pumps. Thus, the RFA would recommend that the study of FFV availability in an area include a concurrent analysis of FFV refueling infrastructure, and that the mandate for alternative fuel pumps be contingent upon a finding of inadequate refueling infrastructure.

In addition, the RFA would suggest lowering the percentage trigger from 15 percent to 10 percent. Today’s premium grade gasoline is only 10 percent of the market, and yet the infrastructure is in place nationwide to accommodate that level of demand for the product. Alternative fuels should have similar market share standards.

**Pipeline Feasibility Study:** Over the past several years, the ethanol industry has worked to expand a “Virtual Pipeline” through aggressive use of the rail system, barge and truck traffic. As a result, we can move product quickly to those areas where it is needed. Many ethanol plants have the capability to load unit trains of ethanol for shipment to ethanol terminals in key markets. Unit trains are quickly becoming the norm, not the exception, which was not the case just a few years ago. Railroad companies are working with our industry to develop infrastructure to meet future demand for ethanol. We are also working closely with terminal operators and refiners to identify ethanol storage facilities and install blending equipment. We will continue to grow the necessary infrastructure to make sure that in any market we need to ship ethanol there is rail access at gasoline terminals, and that those terminals are able to take unit trains.

That said, many stakeholders in the biofuels industry are beginning to look at the practical issues involved with shipping ethanol via a dedicated pipeline. Shipping ethanol in pipelines is done today in Brazil, and it has been done at times in the U.S., as well, in dedicated pipelines. If the marketplace demands it, as it does in Brazil, and there is enough ethanol demand to warrant the investment in the infrastructure for dedicated pipelines, such a system will develop in the U.S. Studying the feasibility of transporting ethanol by pipeline from the Midwest to the East and West coasts, as proposed in the Discussion Draft, will be very helpful.
Title III – Vehicles

Flexible Fuel Vehicle Production: Today there are more than 230 million cars on American roads today capable of running on an up to 10 percent blend of ethanol. Of these, only 6 million are FFVs, capable of using up to an 85 percent blend of ethanol. America’s automakers have realized the benefits of ethanol, particularly E-85, and have joined with the ethanol industry to aggressively develop the infrastructure and provide the vehicle fleet necessary to grow the E-85 market. Ford, General Motors and DaimlerChrysler pledged to increase production of FFVs to half of all new vehicles by 2012, or about 4 million new FFVs a year. General Motors has been a leader in promoting the use of ethanol. Its campaign, “Live Green, Go Yellow,” which focuses on the yellow gas caps that now come standard with all GM FFVs, has helped to raise public awareness of ethanol and especially E-85.

The Discussion Draft includes a specific timetable for FFV production across all models, unless exempted by the Secretary of Transportation. While the schedule for FFV production included in the Discussion Draft is largely consistent with the announced FFV commitments of U.S. automakers, the important factor is the signal such a requirement sends to the marketplace, providing certainty that a market for E-85 will exist. The RFA supports this effort.

Consumer Awareness: The RFA enthusiastically supports the establishment of a public education campaign to make American consumers more aware of the benefits and availability of FFVs and the locations of alternative fueling stations. Clearly, U.S. auto manufacturers have made a significant commitment to increase FFV production. Now is the time to embark on a significant campaign to increase consumer awareness of the vehicles choices available to them.

Conclusion

The continued commitment of the 110th Congress, this Subcommittee, and the careful drafting of legislation that will expand the use of renewable fuels will all contribute to ensuring America’s future energy security. The RFA looks forward to working with you to further develop this important legislation.

Thank you.
Mr. BOUCHER. Thank you very much, Mr. Dinneen. For the benefit of Members, let me note that we have recorded votes pending on the floor in a series of two votes. We will continue receiving testimony for as long as we can. We will certainly get through Mr. Drevna's testimony. And at that point, I think it will be necessary to declare a brief recess in the committee while we cast these votes, so Members should be apprised that we will recess in order to respond to these roll calls. Mr. Drevna, we will be happy to hear from you.

STATEMENT OF CHARLES DREVNA, EXECUTIVE VICE PRESIDENT, NATIONAL PETROCHEMICAL AND REFINERS ASSOCIATION, WASHINGTON, DC

Mr. DREVNA. Chairman Boucher, Congressman Hastert and members of the subcommittee, I am Charlie Drevna, executive vice president of NPRA, the National Petrochemical and Refiners Association. We thank you for the opportunity to provide our perspective on the proposed fuels title. We understand and appreciate the challenges the subcommittee faces in satisfying the energy needs of the American consumers and the various industries and entities invited to testify today. We share the subcommittee's objective, to provide clean, affordable fuels to the American consumer as well as other energy products that meet their needs. As you will hear today, however, we believe that elements of the alternative fuels discussion draft, as currently constructed, will not fully achieve those objectives and may ultimately be counterproductive.

While there is universal agreement that alternative fuels will continue to be a strong and growing component of the Nation's transportation fuel mix, NPRA's longstanding position opposes the mandated use of alternative fuels and supports the integration of these alternative fuels into the marketplace based on market principles and demands. That being said, however, I would like to address several provisions of the draft and share some general thoughts on a stable fuels policy.

To begin, the requirements of the Alternative Fuels Program, the AFP, and the Low-Carbon Fuel Standard, the LCFS, are large and ambition. NPRA appreciates that compared to similar legislation in the Senate and the administration's alternative fuel proposal. The implementation timeline for the AFP reflects a relatively measured and gradual progression. We would note, however, that by placing an overlapping carbon limit on alternative fuels, the aperture through which industry must travel may be much too narrow. The tension, we believe, between the increasing AFP and the decreasing LCFS could potentially interfere with the implementation of both programs. While the AFP allows for a wide variety of fuels to meet its mandated volume, the strict limitations of the LCFS may disqualify use of these same alternative fuels to meet the standard after a very finite number of years.

Now, to the extent that there is some misunderstanding between what the draft intends and what our calculations show in our written statement—we believe the arithmetic to be correct—but if there is some misunderstanding between the intent and how we developed those calculations, we, naturally, would want to continue working with the committee and the staff to make sure that it is
not the intent that we have somewhere of a 22 to 30 percent reduction in carbon, as opposed to California’s 10 percent. Again, if there is some misunderstanding there, we definitely want to work with you on that.

Turning to the draft fuel waiver provision, we are concerned that the language should result in restricting or undermining capital investment. A preferable approach to this “off-ramp labor” would be the development of, perhaps, an on-ramp trigger. By this, I mean under this system, the EPA administrator would be required to certify that certain positions necessary for successful implementation and compliance are in place at least 2 years before the AFP commences. Those conditions would include projection for an adequate supply of alternative fuels at competitive prices, based upon commercially proven technology. The AFP allows for use of an expanded fuel base, thereby providing incentives for a wider array of fuels and thereby promoting flexibility, allowing for the development of a myriad of alternatives.

State biofuel mandates, however, could frustrate and undermine this purpose by limiting refiners’ choices in specific geographic areas. Further, these mandates create cumbersome boutique markets requiring special fuel formulation in transportation logistics, thereby vulcanizing the national fuel market. If Congress wishes to allow for as diversifiable alternative fuels as possible and to promote flexibility in the system, State and local biofuel mandates should be preempted.

We also have concerns related to the overall supply of natural gas. One unintended, but nevertheless a likely consequence of the AFP could be additional pressures on the natural gas marketplace. The production of ethanol requires significant volumes of natural gas throughout its production cycle, converting corn into potentially cellulosic material into useful fuel requires energy and natural gas currently provides much of that necessary energy. In addition to the magnified natural gas demand cause by increased production of biofuels, the natural gas demand would also, likely, rise, as obligated parties attempt to comply with the LCFS. In order to meet the significant carbon reductions outline in the discussion draft, the technology to require on natural gas would have to be added to the transportation section.

Turning to the alternative fuels dispensing requirement in the draft, and while NPRA does not speak comprehensibly to fuel marketers, our members, nevertheless, oppose mandates that require installation of dispensers for products which we do not make or for which we cannot vouch. As companies are required to install these pumps and potentially distribute E–85, the company should be indemnified for claims related to product quality arising from the sale of unbranded E–85 or other alternative fuels.

Finally, but not least importantly, legislation requires regulations within 2 years and begins that gradual climb to 35 billion gallons. NPRA believes that energy security, public health and environment infrastructure, job creation and economic development are topic most relevant today and should not be relegated to a review of 13 to 18 years from now. We therefore suggest that the study provision be pushed forward.
Thank you very much, Congressman. I will be happy to answer any questions you may have.

[The prepared statement of Mr. Drevna follows:]
Written Statement of the
National Petrochemical & Refiners Association

delivered by
Charlie Drevna
Executive Vice-President, NPRA

before the
Subcommittee on Energy and Air Quality
Committee on Energy and Commerce Committee

concerning
Legislative Hearing on Discussion Draft Concerning Alternative Fuels, Infrastructure, and Vehicles

June 7, 2007
Washington, DC
Chairman Boucher, Congressman Hastert, and members of the subcommittee, I am Charles T. Drevna, Executive Vice President of NPRA, the National Petrochemical & Refiners Association.

Thank you for the opportunity today to provide with you with our perspective on the proposed Fuels Title. NPRA is a national trade association with 450 members, including those who own or operate virtually all U.S. refining capacity, as well as most of the nation’s petrochemical manufacturers with processes similar to those of refiners.

The House Subcommittee on Energy and Air Quality released a Discussion Draft of alternative fuels legislation on June 1, which includes an increase in the RFS for 2009-2012, the replacement of the RFS with an Alternative Fuels Program that starts at 14 billion gallons in 2013 and increases slowly to 35 billion gallons in 2025, and implements a Low Carbon Fuel Standard beginning in 2013. In addition, it would require EPA to establish uniform standard specifications for biodiesel, establish a DOE grant program for alternative fuels infrastructure, prohibit a franchise agreement from restricting the expansion of alternative fuels infrastructure, require DOE to mandate the installation of E-85 compatible retail pumps when FFV market penetration reaches 15% in a geographic region, require an increase in corporate average fuel economy standards (36 mpg after MY2021 for passenger automobiles, 30 mpg after MY2024 for non-passenger automobiles), prohibit EPA from granting state waivers for state automobile emissions standards to reduce greenhouse gas emissions, and require automakers to increase production of FFVs.

While there is universal agreement that alternative fuels will continue to be a strong and growing component of the nation’s transportation fuel mix, NPRA’s long-standing position opposes the mandated use of alternative fuels and supports the sensible and workable integration of alternative fuels into the marketplace based on market principles and demands. Having said that, I will address specific provisions of the alternative fuels discussion draft. Then, I will provide you with some general thoughts on a stable fuels policy.
Overall, NPRA is concerned that the proposed Fuels Title establishes requirements that may be inconsistent and do not work together to form a stable fuels program, which is critical to national energy policy. Leadership on this Committee and elsewhere in Congress has stressed the need to maximize refining capacity in the United States, and our members have risen to the challenge, principally by adding hundreds of thousands of barrels of capacity at existing refineries. In fact, on the aggregate over the last 14 years, our companies have essentially built the equivalent of one new world-class refinery each year. But continued success in this area requires the kind of legislative and regulatory certainty that attracts capital investment to refining. We know the Subcommittee recognizes the need for such certainty. We request that the proposed legislation, while attempting to integrate renewable fuels into the transportation fuel mix and, at the same time, lower the total carbon content of fuels, not simply add additional layers of regulation to the refining sector in ways that undermine certainty.

I. Section 101 - Alternative Fuels Program; and Section 102 - Low Carbon Fuel Standard

A. The Requirements of the Alternative Fuels Program and the Low Carbon Fuels Standard Are Large and Ambitious.

The proposed alternative fuels program (AFP) would require the use of 35 billion gallons of alternative fuel by 2025 and begin in 2013. Also in 2013, the low carbon fuels standard (LCFS) would take effect and grow increasingly stringent every year. Under the LCFS, 12 billion gallons per year of the new AFP would have 80% of the carbon intensity (CI) of gasoline in 2004. Our understanding of the proposed language is that half of remainder (e.g., 2013 Alternative Fuel = 14; remainder = 14-12=2; half=1 in 2013) would have 50% of the CI of gasoline in 2004. The other half of the remainder would have 25% of the CI of gasoline in 2004. Therefore, the average CI of the total AFP would decline annually.
By our calculation, the average CI would start at 0.7393\(^{1}\) in 2013 and decline quickly each year thereafter. Therefore, a 26\% reduction would be required in the first year and increasing annually to a 38\% reduction in 2020.

This proposed Low Carbon Fuel Standard is much more stringent than California’s proposed Low Carbon Fuel Standard, a 10\% reduction by 2020.

B. The Requirements of the Alternative Fuels Program and the Low Carbon Fuels Standard Are in Tension with One Another.

The proposed legislation seems to embrace the enthusiasm for a 35 billion gallon program shared by the Administration and the Senate, although the draft does provide a longer, less front-loaded timeframe. However, by placing an overlapping carbon limit on alternative fuels, the aperture through which industry must travel to comply may be much too narrow. As a result, there is a fundamental tension between the yearly expansion of the alternative fuels mandate in the AFP and the restraints placed on qualifying fuels under the LCFS.

It would be very confusing and difficult for industry to comply simultaneously with an increasing AFP and a decreasing LCFS. The impact on obligated parties would be compliance strategies that could change frequently because the LCFS changes every year. An obligated party would have to adjust compliance strategies annually. Therefore, interest in particular alternative fuels may quickly wane, since formulations may qualify under LCFS for only a few years. Thus, the obligated party would seek a different mix of alternative fuels for later years. This lack of stability would hinder the commercialization of some alternative fuels.

To the extent that the Environmental Protection Agency (EPA) exercises its authority to regulate some fuels based on lifecycle greenhouse gas emissions, it alters the economics of these fuels. To reconcile these provisions, EPA should be able to decrease the AFP mandate requirements by the

\[1^{1}(12 \times 0.8) + (1 \times 0.5) + (1 \times 0.25))/14 = 0.7393\]
same volume of fuel rendered ineligible for satisfying the LCFS. Without this ability, the LCFS could unwittingly disrupt fuel supply to consumers.

C. The Waiver Provision May Undermine Capital Investment.

In order to comply with the AFP the industry will have to make significant capital investment. The problem with the waiver provision is that it requires significant economic hardship to occur prior to reducing or eliminating the AFP. As a result, the waiver provision could have the perverse effect of stranding investment in alternative fuels production no longer required. Further, the Committee has encouraged industry to make capital investment available for refinery capacity expansion. Diverting capital to potentially-stranded investments works at cross purposes to this well-established congressional objective.

A preferable approach to an “off-ramp” waiver would be to develop an “on-ramp” trigger. Under this system, the EPA Administrator would have to certify that certain conditions necessary for implementation are in place at least two years before the AFP commences. Those conditions would include projections for adequate supply of alternative fuels at reasonable prices. Should the Committee conclude that a waiver approach makes greater sense, it must then take into account the potential for undermining capital investment already pledged to alternative fuels. A waiver program therefore would need to be of a shorter period than a year, even if waivers were still subject to periodic renewal.

II. Section 203. Alternative Fuel Dispenser Requirements

While NPRA does not speak comprehensively for fuel marketers, our members nevertheless oppose mandates that require us to install dispensers for products that we do not make or for which we cannot vouch. While the bill recognizes at Section 103 that some alternative fuels are still in need of uniform specifications – in some cases because of performance problems – the bill’s requirements for alternative dispensers could be interpreted as a tacit approval of certain formulations.
As companies are required to install these pumps, and potentially distribute E-85, a company should be indemnified from any claims related to product quality arising from a dealer's sale of unbranded E85 or other alternative fuels that are not the company’s products. Additionally, the mandate would be implemented once flex-fuel vehicle penetration reaches 15% within a region. However, the bill does not define what geographic area constitutes a “region.” NPRA believes that a “region” should cover a large geographic area as well as a significant number of consumers. Without a clear definition, a “region” could constitute an area of such small size, that 15% market penetration could be achieved, yet viable demand for E-85 may not exist.

III. Sec. 204. Pipeline Feasibility Study

The logistical challenges associated with an expanded mandate for ethanol use are many. One primary challenge is its transportation, since ethanol is not distributed through pipelines because of problems with water contamination and corrosion. Due to its water solubility, ethanol drops out of fuel during shipment through pipelines and results in noncompliant or substandard fuel. Ethanol’s corrosive properties degrade the strength of pipeline valves and joints. For these reasons, ethanol must be blended with gasoline or the appropriate blendstock at the terminal. This makes the delivery and distribution of ethanol expensive because it requires more expensive transportation modes, like truck, rail car, barge or ship. Therefore, any significant increase in the production of ethanol will result in more stress on the distribution system. Because ethanol is blended with gasoline at terminals, these facilities must either invest in new ethanol storage tank and blending equipment or dedicate existing storage tanks, thereby reducing the quantity and diversity of on-hand inventory.

While NPRA supports the undertaking of a pipeline feasibility study by the Department of Energy, as set forth in Section 204, we do not think the Section addresses a key question: What if the Secretary determines that dedicated ethanol pipelines are not feasible? A preferable approach would be to make certification of feasibility a condition precedent to proceeding with the full AFP mandate.
Under this system, the Secretary would have to certify that cost-effective infrastructure is available in order to transport the volume of ethanol necessary to meet the requirements of the AFP.

Failure to certify pipeline feasibility should result in a diminishment of the mandate by the quantity of ethanol Congress determined would be needed to fulfill the mandate.

IV. General Thoughts on Maintaining a Stable Fuels Policy

A. The Issue of Energy Security

In addition to the Fuels Title we are discussing today, the administration and many in Congress have rolled out other policy initiatives that would substantially expand the use of ethanol and other renewable fuels for the U.S. transportation sector. These actions are a direct reply, and viewed by its proponents as an effective policy response, to a domestic transportation fuel market that has experienced much volatility and uncertainty in recent years. Although the Fuels Title differs from the administration’s proposal, which increases the annual U.S. consumption of ethanol and related biofuels to 35 billion gallons by 2017, it is important to consider the impact of a greatly expanded alternative fuels mandate.

According to the Energy Policy Research Foundation, the administration’s proposal, when fully implemented and under a best-case scenario, would reduce petroleum imports by 1.5 million barrels per day. This number reflects the metric that if the 35 billion gallon per year goal were to be attained, it would by volume alone replace 2.25 million barrels of imported oil with domestically manufactured fuel. However, since ethanol contains only two-thirds the energy content of petroleum, the oil import savings would be a little as 1.5 million barrels per day. This would not appreciably alter the nation’s dependence on foreign oil, which the Department of Energy forecasts to be nearly 13 million barrels per day in 2017. A similar analysis would apply to the Fuels Title.

For the U.S. gasoline pool, it is estimated that about 6 billion gallons of ethanol is both essential and complimentary to the domestic production of gasoline. Without these volumes of ethanol
available for blending with gasoline, the domestic refining industry would likely have difficulty meeting consumer demands.

B. Refinery Capacity Expansion Projects

It should be clearly understood that requirements to substantially increase the volume of ethanol and other renewables could essentially supplant a significant portion of the need and desire for additional domestic refining capacity. Refiners must make investments today on what they believe to be the longer-term (10-15 years or more) outlook. The domestic refining industry is likely to look upon rapidly rising ethanol and other bio-fuels requirements in the coming years as adding significantly more risk to investments in capacity expansions. As recently as 2006, the Department of Energy forecast that domestic refiners were likely to add 1.5 million barrels per day of capacity between 2006 – 2010. Based upon perceptions of renewable market developments – developments being stoked by administration and congressional actions – current estimates suggest that expansion in the domestic refining is likely to be constrained well below 1 million barrels per day. These decisions are being re-visited in boardrooms across the refining sector as the anticipated surge in ethanol requirements and mandates in the coming years will pressure domestic, and undoubtedly some foreign refiners currently supply the U.S. market to postpone or cancel new investments in petroleum refining capability.

To illustrate the point further, the President’s proposal which calls for use of 35 billion gallons per year of renewable fuels, primarily ethanol, also requires a 20 percent reduction in the use of gasoline by the same time. The Energy Information Administration projects that gasoline demand in 2017 will be 161 billion gallons. A 20 percent reduction of this figure would result in 129 billion gallons of gasoline. In 2006, U.S. production of gasoline was 136 billion gallons and net imports of finished gasoline equaled 7 billion gallons. Therefore, the target for gasoline use in 2017 is below today’s U.S. production levels.
C. NPRA supports a level playing field for all types of biodiesel.

The Energy Policy Act of 2005 and the Energy Policy Act of 1992 define two types of biodiesel: biodiesel (mono alkyl esters) and non-ester renewable diesel fuel. Recent developments in technology make it possible and/or likely that non-ester renewable diesel fuel may enter the U.S. fuel supply. Several processes have been developed that use thermal depolymerization coupled with hydrotreating to convert vegetable oils and/or animal fats to paraffinic hydrocarbons. NPRA supports an even playing field for all types of biodiesel fuels, including non-ester renewable diesel fuels. Congress should not promote biodiesel (mono alkyl esters) and provide disincentives for other types (i.e., non-ester renewable diesel). In short, all technologies, feedstocks and processes should be treated equally.

D. Natural Gas Supply Concerns

One possible unintended consequence of the AFP is the potential increase in the price of natural gas. The production of ethanol requires significant volumes of natural gas throughout its production cycle. Natural gas is used in ethanol plants themselves during the production process. Converting corn and, potentially, cellulosic material into a usable fuel requires energy, and natural gas currently provides much of that necessary energy. Additionally, as farmers convert crops, or fallow land, into land for corn or soybean production to be used as biofuel feedstocks, significant additional quantities of fertilizer will be needed. Natural gas serves as the key feedstock fertilizer production. As natural gas demand rises due to demand from ethanol and fertilizer production, the already tight domestic market will be pressured further.

In addition to the natural gas demand caused by biofuels, natural gas demand could potentially rise as obligated parties comply with the Low Carbon Fuel Standard. In order to meet the significant carbon reductions outlined in the discussion draft, technologies that rely on natural gas would have to
be added to the transportation sector. Electric vehicles using electricity from natural gas, hydrogen vehicles or compressed natural gas powered vehicles would all increase demand significantly.

Domestic petrochemical producers as well as a host of other industries rely on natural gas as an indispensable part of production. Already, manufacturers in the United States suffer under some of the world’s highest natural gas prices. The AFP and the LCFS in the discussion draft have the potentially to significantly worsen this problem.

E. State Biofuels Mandates

The present enthusiasm for renewable fuels has resulted in several states and even municipalities adopting local mandates. Local mandates will impose additional strain on the ethanol distribution system and increase costs for shipping and storage. The existing federal renewable fuels standard mandate with its credit-trading provisions contains a degree of freedom that allows the distribution system to operate at a low-cost optimum by avoiding infrastructure bottlenecks (such as lack of storage or rail capacity). Mandating biodiesel usage in specific areas forces a distribution pattern that is less flexible, and therefore has less capability to minimize costs. These additional costs will be borne by consumers.

The AFP allows for the use of an expanded fuel base, thereby provider incentives for a wider array of fuels, thereby promoting flexibility and allowing for the development of myriad alternatives. State biofuels mandates, however, could frustrate and undermine this purpose by limiting refiners’ choices in specific geographic areas. Further, these mandates create boutique markets requiring special fuel formulations and transportation logistics, thereby balkanizing the national fuel market. If Congress wishes to allow for as diverse a supply of alternative fuels as possible, and to promote as much flexibility in the system as possible, state and local biofuels mandates should be preempted.

F. Studies should inform Congress before new mandates are imposed.

This is the classic “cart before the horse” scenario. This draft legislation requires regulations within two years and begins the not-so-gradual climb to reach 35 billion gallons by 2025. Congress
should consider moving the language on page 25 on studies that would apply for Calendar Year 2026 forward in time to inform Congress on appropriate alternative fuels targets after 2009. Energy security, public health and environment, infrastructure, job creation, and rural economic development are topics relevant today and should not be relegated to a review during 2020 through 2025.

This draft legislation should not promote an extensive expansion of renewables without giving any consideration to the environmental or economic consequences to the U.S. An alternative is to examine a graduated series of steps for increases in the use of alternative fuels that are each predicated on a showing that the expanded standard will not have a net negative impact on the U.S. economy and consumers as specified in Section 101.

V. Conclusion

NPRA members share the goals of the U.S. Congress for a stable and effective fuels policy that utilizes a diversity of fuel sources to maximize security. We also recognize the great difficulty of striking a careful balance that offers helpful direction from the government while preserving effective and necessary market forces. While we certainly commend the Subcommittee for the careful attention it has paid to energy policy, NPRA cannot support more expansion of fuels mandates at a time when the economy is just implementing the RFS program in the Energy Policy Act of 2005. In light of this general misgiving we have with mandates, NPRA looks forward to working together with members of the Subcommittee to improve the legislation. Thank you.
Mr. Boucher. Thank you very much, Mr. Drevna. The subcommittee will stand in recess, pending completion of the last vote. [Recess]

Mr. Boucher. The subcommittee will come to order. Mr. Drevna had completed his testimony. Mr. Lampert, we will be pleased to hear from you.

STATEMENT OF PHILLIP LAMPERT, EXECUTIVE DIRECTOR, NATIONAL ETHANOL VEHICLE COALITION, JEFFERSON CITY, MO

Mr. Lampert. Thank you very much, Mr. Chairman. My name is Phil Lampert. I appreciate the opportunity to be here today. Thank you Mr. Hastert and all of the members of the committee. I want to also thank your staff, Mr. Chairman. They have done and outstanding job and been very communicative with all of us, and we thank them.

Mr. Chairman, I was here April 18 and provided testimony, so I will not be duplicative in that sense. I want to make a couple very quick comments. In regard to the establishment of an alternative fuel infrastructure development grant program, the National Ethanol Vehicle Coalition strongly supports that. We believe that incentives continue to be the proper mechanism to promote E-85 installation. We would continue to issue our opposition to mandatory alternative fuel installation. And if you would allow me just to make a very simplest analogy, we like to consider ourselves the bottled water salesmen of 20 years ago, and I go to the store and suggest that let us take out 5 feet of refrigerator space that is being sold for Bud Lite or Michelob or what have you to put in bottled water, and we think it should, frankly, be the decision of that convenience store operator whether or not to sell bottled water. And 20 years ago, a lot of convenience stores did not have bottled water. Today, that is the number-on profit center in that refrigerator case. We think the same will be occurring in the market place for E-85 infrastructure. That is as more people demand it, as more vehicles are out there, as there are incentives available to put in that E-85 infrastructure that the marketplace will continue to promote it, and should they not, then they will lose the tremendously profitable profit center for the future.

In respect to proposed language that prohibits franchise agreement restrictions on placing the E-85, we strongly support the inclusion of that language. I have, as I mentioned, participated in several hearing and watched other that you have very diligently reviewed in this testimony and as you crafted this legislation, and some members of the petroleum industry have indicated that there are no restrictions on the placement of E-85 under canopies. Well, if that is the case, then I don’t think there will be any objection to including this statement, and we would encourage you to do so.

The dispenser requirements, I again would encourage you to look very closely at those, the provision of a $200 million grant program, also the proposal of a grant program to the Department of Energy to provide technical assistance and support is going to be very important, and we applaud the committee for including that. Yesterday, the Superintendent of the Capitol grounds received a phone call from the Speaker’s office and was directed to place an E-85
fueling system in operation here in the Capitol. Many Members are driving E–85 vehicles, and law enforcement officials and others can use E–85. It is easy to talk about putting in an E–85 station, but because of the lack of experience in that, the superintendent of the Capitol calls my office, and because I am in DC this week, I will be meeting with him this afternoon. But the provision of technical support to continue to develop the program is, again, very key, and we very much applaud the provision of that title.

I would like to simply close by bring to the committee’s attention a recent statement by Rick Wagner, chief executive officer of the General Motors Corporation, and one of our members, and I will quote Mr. Wagner: “It is increasing clear that of anything we can do over the next decade, ethanol has, by far, the greatest potential to actually reduced U.S. oil consumption, reduce oil imports, and reduce carbon-gas emissions.” And we applaud what the committee has done regarding the alternative fuels and renewable fuel standards and stand available to provide any support. Thank you, Mr. Chairman.

[The prepared statement of Mr. Lampert follows:]

TESTIMONY OF PHILLIP J. LAMPERT

Good morning, Chairman Boucher, Ranking Member Hastert, and distinguished members of the committee, my name is Phillip Lampert and I serve as the executive director of the National Ethanol Vehicle Coalition. On behalf of the NEVC, I would like to thank you for the opportunity to appear before you this morning.

As I mentioned during my April 18, 2007 testimony to the committee, the NEVC is the nation’s primary advocate of the use of 85 percent ethanol as a form of alternative transportation fuel. Our members include automakers; state and national corn grower associations; ethanol producers; equipment manufacturers and suppliers; ethanol marketers; the 37 States that comprise the Governors’ Ethanol Coalition; farmer cooperatives; chemical and seed companies; petroleum marketers; and individuals.

Our written and verbal comments this morning will be focused on the June 1, 2007 Discussion Draft that the Committee has provided for comment, specifically title I-Fuels, title II-Alternative Fuels Infrastructure, title III-Vehicles.

In regard to title I-Fuels, the NEVC strongly supports an increase in the Renewable Fuel Standard. The ethanol industry is clearly proving that it can meet the levels of the RFS established in the 2005 Energy Policy Act and that an aggressive expansion is feasible. In terms of national security, energy independence, and domestic economic growth, and increased RFS is positive for the nation.

With respect to the volume levels, the relative amounts of each form of fuel, and the potential multiplier associated with each form of fuel, we encourage further discussions with each of the stakeholders. It is important to note that the NEVC is strongly supportive of policies that promote the future production of alternative fuels such as ethanol from cellulosic materials. That being said, the maintenance of a strong system of ethanol production based on corn as a feedstock remains critical to the strength of the entire industry.

Title II-Section 201 deals with the establishment of an alternative fuel “infrastructure development grant” program and a “retail technical and marketing assistance” effort.

The NEVC strongly supports the provision of Federal financial incentives, both through the provision of grants and an increase in the Federal income tax credit, to support the establishment of alternative fueling infrastructure. We believe that entrepreneurs in the fueling industry who wish to take advantage of such programs will do so and as restrictions are lifted which may be preventing branded stations from selling alternative fuels, the market penetration of E–85 fueling sites will increase to meet the related demand presented by the FFVs being produced.

The proposed establishment of a “retail technical and marketing assistance” effort will be key to ensuring that new vendors are able to market and offer E–85 at a price on a gasoline equivalent basis to regular unleaded, that equipment standards are being maintained, that promotional materials are available, and that a central clearinghouse is available to respond to questions from consumers. The addition of
such a sub-program to the basic DOE grant effort is critical and we applaud the Committee for including this new subsection.

We also believe the Committee has been wise to outline the selection criteria that would be used to make such infrastructure grants. Basing the allocation of funds on the numbers of FFVs, opportunities to establish fueling corridors, displacement of petroleum, and commitment on the part of the applicant are all criteria that will assist with maximizing the wise use of scarce taxpayer resources.

The NEVC also appreciates the Committee language which requires that all such infrastructure grant recipients prepare a marketing plan, provide information to consumers, and report on sales and pricing of alternative fuels. As we have mentioned, it is easy to establish an E–85 fueling station. However, it is much more difficult to establish a successful E–85 fueling facility. These obligatory marketing and outreach provisions for all grant recipients will make this program exceedingly stronger.

In regard to the proposed language that “prohibits franchise agreement restrictions related to alternative fuel infrastructure”, over the past several weeks, testimony has been provided by representatives of the petroleum industry to this Subcommittee by saying that there are no restrictions on the sale of alternative fuels by so called “branded” operations. While not wishing to debate that matter, this language will serve to clarify the previous statements made by those representatives and address this issue. An owner/operator of a fueling station should have the right to sell any form of alternative transportation fuel. This new section will simply clarify such right.

Regarding the section of the draft language that establishes “alternative fuel dispenser requirements,” it has been the position of the National Ethanol Vehicle Coalition that there is little benefit in the promulgation of Federal law which requires the installation of alternative fueling infrastructure. As we have often noted, the key to successfully selling E–85 and any other form of alternative fuel is proper pricing, marketing, and the provision of educational resources. While the Committee's goals in regard to the mandatory establishment of E–85 infrastructure based on market penetration of FFVs are admirable, we continue to believe that the marketplace is the mechanism most appropriate to ensure such E–85 fueling sites are installed.

It is our observation that mandating E–85 fueling facilities may result in placement of the sites in poor locations, setting high prices for E–85, and lack of customer outreach and marketing. While unlikely, it would be possible that opponents of alternative fuels could use high pricing of fuel at sites they were forced to establish to confirm a lack of demand and establish an “I told you so” prophecy of failure of the site. The Committee draft includes a general grant program that, complementary to the existing tax credit program, could be used to offset the cost of new E–85 fueling equipment. In the future, vendors choosing not to sell E–85 will be facing the loss of a significant new revenue stream and potential profit center. As in the sale of other commodities, vendors who do not rapidly respond to market demands, are those that rapidly exit the marketplace. We believe that this will also be true in the sale of alternative fuel. The NEVC supports the market in this endeavor and continues to resist embracing such mandatory programs. It may be necessary to reevaluate this position in the future, but presently, we oppose such mandates.

In regard to the production requirements of Flexible Fuel Vehicles as outlined in section 302 of the draft, the Chief Executive Officers of General Motors, DaimlerChrysler, and Ford have each stated their company's commitment to the production of 50 percent of their entire fleet as FFVs by model year 2012. Selected imports are also producing FFVs and it is our understanding that additional models may be forthcoming this fall.

Unlike most motors vehicles manufactured today that are only warranted to operate on up to 10 percent ethanol, a flexible fuel vehicle can operate on any level of ethanol from 0 percent up to 85 percent. As the Congress begins to consider Renewable Fuel Standards exceeding 35 billion gallons, it is important to note that with today's vehicles, the maximum amount of ethanol that can legally be consumed approaches 14 billion gallons nationally in a 10 percent blend. While the potential use of E12 and E15 in existing vehicles is being debated, we know that a flexible fuel vehicle can operate on E15, E30, or E–85 absent adjustments or modifications.

The impetus for today's production of alternative fuel vehicle was provided by the 2nd Session of the 100th Congress via passage of the Alternative Motor Fuels Act (AMFA) of 1988, extended by the Automotive Fuel Economy Manufacturing Incentive for Alternative Fueled Vehicles Rule of 2004. These laws encourage the production of motor vehicles capable of operating on any form of alternative fuel. This incentive has been tremendously valuable in that prior to 1988 there were zero alternative fuel vehicles on the nation’s highways. As a result of AMFA, today, there are
more than 6 million E–85 vehicles and a number of electric, CNG, and LPG cars and trucks across the nation.

The provision of new incentives to further grow the production of flexible fuel vehicles, especially by foreign manufacturers, may be an appropriate mechanism to ensure the wide scale and massive integration of such vehicles into our nation’s fleet of passenger autos and light duty trucks.

In summary, to advance the use of E–85 as a form of alternative transportation fuel, we believe the following are needed:

• Federal financial incentives to assist with offsetting the cost of new or converted infrastructure. These may be provided in the form of grants as recommended by the discussion draft or as an increase in the existing Federal income tax credit.
• A much stronger emphasis being placed on the provision of technical support, marketing support, and promotional assistance to new and existing E–85 vendors.
• The massive introduction of flexible fuel vehicles into the nation’s auto and light duty truck sectors, and;
• Finally, while outside the jurisdiction of this Committee, an increase in the existing incentive that is available for ethanol to reflect the lower BTU value of the product.

Mr. Chairman and Members of the committee, we appreciate the work that you are doing on behalf of the American people to address our nation’s growing dependence on imported petroleum. The National Ethanol Vehicle Coalition thanks you for the opportunity to provide these comments and we are available to respond to questions at your convenience.

The National Ethanol Vehicle Coalition is a non-profit organization located in Jefferson City, MO.

Mr. Boucher. Thank you very much, Mr. Lampert. Ms. Hubbard.

STATEMENT OF SONJA HUBBARD, CHIEF EXECUTIVE OFFICER, E-Z MART STORES, ON BEHALF OF THE NATIONAL ASSOCIATION OF CONVENIENCE STORES AND THE SOCIETY OF INDEPENDENT GASOLINE MARKETERS OF AMERICA, TEXARKANA, TX

Ms. Hubbard. Thank you very much. Good morning, Mr. Chairman and members of the subcommittee, my name is Sonja Hubbard. I am CEO of E-Z Mart stores, based in Texarkana Texas, and our company owns and operates over 300 stores in Texas and the surrounding States of Arkansas, Oklahoma, Louisiana and Missouri. Today, I appear on behalf of the National Association of Convenience Store and the Society of Independent Gasoline Markets of America. Together NACS and SIGMA members account for approximately 80 percent of all motor fuels sold in the United States, annually.

Before I begin, let me make it perfectly clear that retailers are agnostic about which motor fuels we sell, with one caveat: we do want to sell motor fuels that are available and that consumers want.

With that, let me begin with a comment regarding the proposed alternative fuel program. The discussion draft before this committee appears to be a more conservative approach than others because it provides additional time to implement the increase. NACS and SIGMA believe it can be further improved by conditioning any inquiries beyond existing programs upon the finding that there be both sufficient supplies of renewable fuels and sufficient distribution infrastructure to deliver the product to retail without placing and undue financial burden on consumers. Regarding the proposed E–85 mandate, let me state clearly and unconditionally, NACS and
SIGMA strongly oppose the provision. It is anti-free market, and it will put retailers in significant financial jeopardy. NACS and SIGMA appreciate the committee's efforts to address some of our itemized concerns. These are positive provisions that do help mitigate the negative consequences of the mandate. However, the only provision that could earn our endorsement would be to eliminate the mandate, all together. The fundamental problem is that if a retailer is forced to install E–85 equipment against its will, nothing will ensure that consumers will actually purchase the fuel. In other words, the proposal proposes extensive mandates without any promise that that forced investment will make a return. This problem explains why many have been slow to make the investment on their own accord. It is not due to animosity towards an alternative fuel, and it is not due to limitations imposed by our suppliers. Rather, it is because consumer demand for the product is insufficient to justify the cost of the investment.

To illustrate the basis of our concerns, let me start by explaining the costs associated with the E–85 system. In preparation for this hearing today, I inquired of my equipment suppliers and industry colleagues to establish what it would cost to convert a station to sell E–85. I found the cost range from a low of $11,000, part-only, no installation cost, to convert my most modern facility, the most up-to-date current one I have, and also to a high of $200,000 in California. In addition, many of my colleagues who have installed E–85 report that it has not been beneficial. The fundament fact is that most drivers with flexible-fuel vehicles do not want to buy E–85 unless it is offered at substantial discounts compared to gasoline. That is in part due to the mileage benefit. Unfortunately, it is not always possible for retailers to obtain product at a price that enables them to sell it at this discount. This lack of consumer acceptance is a major problem. Fuel sales, which generate incredibly low margins, drive traffic to our store where the margins are much stronger. Many retailers now lament their decisions to install E–85 systems, because they have been unable to generate enough sales to support the overall business model.

Our opposition to the proposed mandate is not necessarily a just-say-no position, and the need for retailers to protect the financial stability of their very own businesses and preserve for themselves the right to make any decisions that could affect that stability.

This brings me to my final mission, the ability of franchise retailers to install the E–85 equipment. NACS and SIGMA are not opposed to Congress clarifying the retailer's right to convert its own equipment and land for the sale of E–85. However, NACS and SIGMA strongly oppose granting someone who does not own the equipment and land on which it operates the right to expose the landowner to substantial and long-term liability. Congress must amend the discussion draft to ensure that only the owner of the land, who also owns that liability, should be empowered to make that decision.

In conclusion, NACS and SIGMA urge the committee to, one, condition any increase in renewable and alternative-fuels mandates upon the finding that there is sufficient supply and distribution infrastructure to accommodate this increase. Two, do not expose those of us who lease outlets to dealers to a potentially huge liabil-
ity resulting from a third-party decision to convert or install such equipment. Three, please do not mandate the installation of E–85 systems. And four, consider carefully the supply and price implications of policies under your jurisdiction. Our customers, your constituents, deserve no less.

Thank you again for the opportunity to share our thoughts regarding this discussion.

[The prepared statement of Ms. Hubbard follows:]

STATEMENT OF SONJA HUBBARD

Good morning. My name is Sonja Hubbard. I am the chief executive officer of E-Z Mart Stores, Inc., headquartered in Texarkana, Texas. My company owns and operates over 300 motor fuel outlets in five states—Texas, Oklahoma, Louisiana, Arkansas, and Missouri. Our company sells nearly 200 million gallons of gasoline and diesel fuel each year and we employ over 2,200 clerks, managers, and other personnel in these five states. We sell gasoline under our own brand and, at some locations, under the brand of our refiner suppliers.

I appear today on behalf of the National Association of Convenience Stores (NACS) for whom I currently serve as Vice Chairman of the Board. NACS is a non-profit trade association representing the convenience and petroleum retailing industry. Our industry operates more than 145,000 retail locations and, in 2006, sold $405.8 billion worth of motor fuels.

I also appear on behalf of the Society of Independent Gasoline Marketers of America (SIGMA), of which I am a member. SIGMA is an association of more than 250 independent motor fuel marketers operating in all 50 states. SIGMA members sell more than 30 percent of all motor fuels sold in the United States and supply more than 35,000 retail outlets across the Nation.

Together, NACS and SIGMA members account for approximately 80 percent of all motor fuels sold at retail in the United States every year.

Thank you for providing me with the opportunity to share our industry’s perspective on the Committee’s discussion draft legislation regarding alternative and renewable fuels. Before I begin, let me make it perfectly clear that retailers are agnostic about which motor fuels we sell, with a single caveat: We want to sell motor fuels that are available and that our customers want to buy.

Today, I will focus my comments on those provisions of this discussion draft that most directly affect the motor fuels retail industry.

ALTERNATIVE FUELS PROGRAM

Let me begin with a couple of comments regarding the proposed Alternative Fuels Program. Two years ago, the Energy Policy Act of 2005 established a renewable fuels standard (RFS), mandating that at least 7.5 billion gallons of renewable fuels be sold in the United States by the year 2012. As everybody should by now be well aware, the industry is implementing the program ahead of schedule and is on pace to exceed the 2008 requirement to blend 5.4 billion gallons.

Now, however, it seems there is widespread interest on the part of political leaders to accelerate and expand upon this accomplishment. The discussion draft before us proposes to increase the mandate to 35 billion gallons by the year 2025, beginning with 14 billion gallons in the year 2013. Another proposal calls for the program to expand to 36 billion gallons by 2022, beginning with 8.5 billion gallons in 2008. Still another requires 35 billion gallons by 2017, starting with 10 billion gallons in 2010.

In light of these competing proposals, one can say that the discussion draft before this Committee appears to be a more conservative approach because it provides additional time to implement the increase. Regardless, each of these proposals contains very ambitious goals, and we must ask if they are the best course of action. The market is proceeding to offer renewable fuels ahead of the federally mandated schedule. There is no reason to believe that this will not continue in the absence of an increased mandate. However, as we have testified before, if Congress feels compelled to accelerate this transition through a revised Federal mandate, NACS and SIGMA call upon Congress to construct the revised program with the interests of consumers in mind.

Any increase beyond the existing RFS should be predicated upon a finding by the Secretaries of Energy and Agriculture that there will be both sufficient supplies of renewable fuels and sufficient distribution infrastructure to deliver that product to
retail without placing an undue financial burden on consumers. If these assurances cannot be made, then the proposed increase should be delayed until conditions are sufficient to support its implementation. Further, such a decision should be made with enough lead time to enable the petroleum industry to make necessary arrangements to accommodate the requirements.

If such consumer protections based upon market analysis are not provided, we will be concerned about potential market disruptions and the impact these could have on our customers. Last year, the disruptions we experienced in this area due to the transition from MTBE to ethanol were primarily the result of inadequate distribution infrastructure and insufficient supply in appropriate markets. It is critical that this program protects against a repeat of that experience.

ALTERNATIVE FUELS INFRASTRUCTURE

I would like to direct the rest of my testimony toward the provisions in the discussion draft focusing on alternative fuels infrastructure.

The proposal before the Committee implements a mandate for retailers to install E-85 compatible equipment. Let me state clearly and unconditionally: NACS and SIGMA are strongly opposed to this provision. It is anti-free market; it will put retailers in significant economic jeopardy; it is an extreme overreaching by the Federal Government into private enterprise; and, it is unsupported by existing or anticipated market conditions.

Further there seems to be little support for the mandate within any segment of the motor fuels industry. For example, the National Ethanol Vehicle Coalition, the primary advocate for the use of E-85 fuel, testified on April 18 that it “opposes the mandatory establishment of E-85 fueling locations.” The Coalition’s Executive Director, Phil Lampert, said, “Mandated establishment of E-85 fueling locations is counterproductive and will lead to poor pricing, disinterested marketing, lackadaisical vendor performance, undesirable locations and general dissatisfaction by the consumer.”

Given the apparent lack of support, we are at a loss as to why the Committee would propose implementing this retailer mandate.

CONSIDERATIONS FOR MANDATE IMPLEMENTATION

To be fair, the discussion draft before us perhaps represents the best effort to date by Congress to reflect market factors when imposing an E-85 retailer mandate. NACS and SIGMA appreciate the Committee’s efforts to address some of our itemized concerns centered around such a program. Specifically, we appreciate that the draft directs the Secretary of Energy to determine an appropriate schedule and plan for implementation, contingent upon the promulgation of a rule. Further, we appreciate that Congress directs the Secretary to consider: (1) the availability of E-85 within a region and number of competing E-85 wholesale suppliers; (2) the level of financial assistance available to retailers within a region; (3) the potential inability of retailers to install E-85 due to property restrictions; (4) the economic burden the mandate will impose on a business; and, (5) the time it will take a retailer to comply with the mandate.

These are positive provisions that do help mitigate the negative consequences of the mandate. However, they do not explain how the Secretary will select, from a list eligible retailers in a market, which will be required to make the mandatory investment and which will not. The legislation does not give the Secretary any direction as to how to determine the winners and losers in this system.

I cannot think of any provision or combination of provisions that would be sufficient to secure the support of the retail community other than elimination of this mandate.

The fundamental problem is that if a retailer is forced to install E-85 against its will, the bill before the Committee fails to ensure that consumers will actually purchase E-85. In other words, the proposal imposes an expensive mandate on us without any promise that our forced investment will provide any return.

This is the critical question for retailers and explains why many have been slow to make the conversion investment on their own accord. It is not due to animosity towards an alternative fuel and it is not due to limitations imposed by our suppliers. Rather, it is because consumer demand for the product is insufficient to justify the cost of the investment. Trust me, my fellow NACS and SIGMA members and I will make E-85 pumps available when the market calls for it. But to illustrate the basis of our concerns, let me start by explaining the costs associated with E-85 systems.
COST TO CONVERT E-Z MART STORE TO SELL E-85

The primary impediment to retailers converting a dispenser to E-85 is equipment compatibility. Because E-85 is more corrosive than regular gasoline or E-10, it requires equipment that is certified compatible with the fuel.

In preparation for this hearing, I inquired of my equipment supplier to determine what would be required to convert one of my newer stations to sell E-85. These stations have the newest equipment and, therefore, hold the best chance for existing equipment compatibility. I learned that my new steel tanks and my fiberglass tanks were certified compatible with E-85. Our automatic tank gauges were listed compatible as were our fiberglass piping systems. However, we would have to replace several of the ancillary fittings, including the submersible turbine pump, the overfill drop tube and others like flexible hoses, spill buckets, ball valves, etc. In addition, our hanging hardware, which includes conventional nozzles, swivels, breakaways and curb hoses would have to be replaced with nickel plated units at an increased cost. For all of these conversions, including tank cleaning, we estimated the cost to be between $6,000 and $7,000.

However, this does not include the dispenser itself. The two dispenser manufacturers each charge an additional fee for a new E-85 compatible dispenser—$8,000 for Dresser-Wayne and $7,300 for Gilbarco. Thus, a typical E-85 dispenser can cost upwards of $17,000 per unit. And this cost is for equipment that has not yet been certified compatible with E-85 by Underwriters Laboratories.

While it is conceivable to convert an existing dispenser, this would require at a minimum replacing the meters, internal piping, filter inlets, compression fitting, control valves and seals, and any non-ethanol compatible sealants. Consequently, converting an existing dispenser would cost in excess of $5,000.

In short, to convert one of my newer stores to sell E-85, I would face an expense of at least $11,000, not including labor expenses. For older locations, the cost would be considerably higher than this. According to colleagues in the industry who have installed E-85 systems, such an investment would be considered a bargain. One reported spending upwards of $55,000 on a new system, while another in California reports the cost of installing a basic diesel system at more than $200,000—not including the up-charge associated with compatible equipment.

CONSUMERS ARE NOT BUYING THE FUEL

As we have testified repeatedly, fuel retailers are not picky. We will sell whatever products our customers want to buy. As an industry, we have been watching the development of E-85 and flexible fuel vehicles quite closely, and many of my colleagues have taken the initiative to convert a dispenser to sell E-85. The results have not been overwhelmingly positive.

The fundamental fact is that most drivers of FFVs (Flex Fuel Vehicles) do not want to buy E-85 unless it is offered at a substantial discount compared to gasoline. Because these drivers can purchase either E-85 or gasoline, they make economic decisions when at the pump.

Clearly, consumers have made the economic calculation regarding the decreased fuel economy associated with E-85 (approximately 25 percent fewer miles per gallon than gasoline) and they are demanding a benefit in price. Absent that benefit, they will follow their economic interests and purchase gasoline.

NACS and SIGMA have spoken with retailers throughout the Nation who sell E-85, and we have learned that sales of E-85 fall off dramatically when the price is not significantly lower (at least 20 cents per gallon) than gasoline. Some retailers report that the price differential to maintain volumes is actually closer to 40 cents per gallon.

Unfortunately, it is not always possible for retailers to obtain supplies of E-85 at a price that enables them to sell it at such a discount. The provision in the proposal requiring consideration of the number of E-85 wholesale suppliers is important, because without adequate competition in the E-85 supply market, retailers will have little to no chance to obtain competitively priced product. However, there are no guarantees that even a competitive market will produce E-85 supplies that can be priced well below gasoline.

The lack of consumer acceptance of E-85 is a major problem. Fuel sales, which generate incredibly low margins, drive traffic to the store, where margins are much stronger. We have spoken with several retailers who lament their decision to install E-85 equipment because they have been unable to generate sufficient sales from these fueling positions to support their overall business model.

Our opposition to the proposed mandate is not necessarily a “just say no” position. Rather, it is reflective of actual market conditions and the need for retailers, who, on average, generated less than $34,000 in pre-tax profit per outlet in 2006, to pro-
tect the financial stability of their business and to preserve for themselves the right to make any decisions which might affect that very stability.

The government has no responsibility to generate sales sufficient to pay my employees. By the same token, it should not make decisions affecting my ability to sell a marketable commodity.

Franchise Agreements

Let me address one final provision of the discussion draft. There is some confusion about whether retailers are not voluntarily installing E–85 because they are prohibited from doing so by their franchise agreements. Neither NACS nor SIGMA have heard from any of our members complaining that their suppliers were preventing them from installing E–85 dispensers. Rather, we believe this is a red herring being used to cover the fact that consumer demand for the product is not strong to make such investment a viable option for most retailers.

Regardless, neither NACS nor SIGMA are opposed to Congress enacting legislation that will clarify a retailer’s right to convert their own equipment for the sale of E–85. The proposal in this discussion draft, however, does require some modification to ensure that only the entity which owns the fueling equipment, and assumes the liability for that equipment and the land on which it sits, shall be empowered to make the decision to convert and install an E–85 compatible system.

There are instances where the operator of a retail outlet does not own the land or equipment which it operates. Rather, that individual may lease the land and equipment from his franchisor, which could be a refiner but is more likely an independent wholesale distributor. In these circumstances, the individual operator who does not own the equipment should not be permitted to make conversion decisions about that equipment. Converting existing equipment, much less installing a new storage and piping system, has significant potential liability implications for the owner of the real estate. I submit that none of you would permit another the unilateral right to create this kind of long-term liability for you. It is simply not fair. It is simply not right. We encourage this Committee to amend the proposed language to reflect this reality.

NACS and SIGMA are not antagonistic to the expanded market availability of alternative and renewable fuels, provided our customers want to buy them. Expanding the mandate for these fuels as provided in this proposal can be dramatically improved by requiring the executive branch to find that sufficient supplies and distribution infrastructure exist to support the specific increase. Absent such a finding, a pending increase should be suspended. This will protect consumers from market disruptions associated with insufficient supplies.

The effort to eliminate any potential for a supplier to prevent an independent retailer from installing E–85 infrastructure must not endanger the legitimate interests of the owner of the land or the equipment, even if that be the supplier, to make decisions concerning the conversion or installation of such equipment.

While we appreciate the efforts made by the Committee to address itemized retailer concerns regarding an E–85 retail mandate, NACS and SIGMA consider such proposals completely unnecessary. NACS and SIGMA will oppose legislation like the discussion draft unless and until it offers the petroleum marketplace a chance to work in the best interest of consumers.

Finally, NACS and SIGMA members are extremely sensitive to our customers’ concerns about motor fuel prices. Our businesses compete with each other on the basis of pennies per gallon as we seek to attract the increasingly price conscious consumer. Consequently, we become very concerned regarding any proposals that could potentially affect supplies or distributing efficiencies or otherwise put upward pressure on prices. Therefore, we urge this Committee to consider carefully the supply and price implications of policies under your jurisdiction. Our customers, your constituents, deserve no less.

Thank you again for the opportunity to share our thoughts regarding the discussion draft pending before the Committee.

Mr. Boucher. Thank you very much, Ms. Hubbard. Mr. DeCicco.

Statement of John DeCicco, Senior Automotive Fellow, Environmental Defense, Washington, DC

Mr. DeCicco. Thank you, both to the chairman and ranking member for the opportunity to testify today. On behalf of Environmental Defense and our 500,000 members, I want to express appro-
ciation for the thoughtful process through which this subcommittee has approached the issues of energy and climate.

We appreciate your statements, Mr. Chairman, but the legislation before you is about energy security and not a solution to the climate challenge. It is critically important for the public to understand that this bill cannot substitute for a cap on greenhouse gas emissions. I think we agree that the efforts to enhance energy security should not interfere with that goal or come at the expense of climate protection. Unfortunately, this discussion draft contains provisions specific to climate change and in very troubling ways puts climate at risk. That is why Environmental Defense must unfortunately, but vigorously, oppose this draft in its current form. Most damaging are the draft’s provisions that nullify California, and now 11 other States’ actions to address greenhouse gas emissions for cars. Also troubling is its evisceration of EPA’s authority to do the same. It is simply unacceptable to undermine State leadership to combat global warming.

That being said, we appreciate your efforts to look for new ways to address transportation sector greenhouse gas emissions. A low carbon fuel standard and a requirement that automakers report their product’s lifetime emissions are useful building blocks for a policy that could ultimately drive deep emissions cuts. But the draft falls short in limiting emissions to the levels that leading U.S. businesses have called for and that scientists say are necessary to avoid catastrophic climate change. The U.S. Climate Action Partnership recommends a specific path of emissions reductions for the United States. Environmental Defense supports the stricter end of the U.S. CAP range.

The graph I displayed compares what the discussion draft might achieve, which is the blue curve, against climate-protective auto emission levels proportional to the economy-wide cap recommended by U.S. CAP. Those are the green lines. It is clear that this draft does not go nearly far enough, and that brings me to another concern. Such weak targets risk creating expectations among other industries that they too can get by with little need to limit emissions. Alternatively, other industries might come to fear that they would be unfairly saddled with a disproportionate burden. Either way, the politics of building consensus for a truly comprehensive climate policy will be that much more challenging.

Mr. Chairman, as you and Mr. Dingell have said, all industries and sectors will need to chip in their fair share. We can’t let some parties leave the table early and stick everyone else with the bill.

To sum up, Environmental Defense believes the current draft would make it much more difficult to mitigate the dangers of climate change. We oppose it based on four concerns. It destroys California’s ability to lead other States in the Nation in climate protection through its path-breaking greenhouse gas standards for cars. It restricts the Environmental Protection Agency’s authority to regulate automotive greenhouse gases as air pollutants under the Clean Air Act as recently clarified by the U.S. Supreme Court in Massachusetts v. EPA. It sets stringency levels for fuels and vehicle regulation that fall far short of what is needed to ensure an appropriate sector contribution to climate protection. And fourth, it may
undermine the development of climate legislation that is truly comprehensive and effective.

We are happy to do whatever we can, Mr. Chairman, to help you improve this bill as it moves forward. In the meantime, Environmental Defense will continue to emphasize that the most effective solution to both energy security and climate change is a comprehensive carbon cap, one that cuts emissions as much as the scientific community tells us they must be cut, allows permit trading to keep costs low and to spur innovation. We look forward to working with you as you bring such a bill to the floor in October as you have indicated that you intend to do.

Thank you for the chance to share our views.

[The prepared statement of Mr. DeCicco follows:]
John DeCicco • Environmental Defense

Testimony regarding the
Discussion Draft on Alternative Fuels, Infrastructure, and Vehicles
Subcommittee on Energy and Air Quality • Committee on Energy and Commerce
U.S. House of Representatives
June 7, 2007

SUMMARY

Thank you, Mr. Chairman and members of the committee, for this opportunity to provide comments on your committee's Discussion Draft on Alternative Fuels, Infrastructure, and Vehicles as released on June 1. My name is John DeCicco and I am a senior fellow specializing in automotive issues with Environmental Defense's National Climate Campaign. Environmental Defense is a national nonprofit organization founded in 1967 that today represents more than 400,000 members. We link science, economics and law to create innovative, equitable and durable solutions to society’s most urgent environmental problems.

Global warming is the most urgent environmental problem of our time. The goal of our National Climate Campaign is comprehensive climate legislation that places a mandatory, declining cap on greenhouse gas (GHG) emissions economy-wide, enacted during this Congress. We have previously praised this Committee's commitment to leadership in enacting such legislation. We detailed our vision for it in our March 19, 2007 submission in response to the Committee’s solicitation of input. And we have appreciated your pledge to "do no harm" to the Earth's climate as Congress develops legislation under the mantle of energy security.

Contact: John DeCicco, Senior Fellow, Automotive Strategies, National Climate Campaign
Environmental Defense, 1875 Connecticut Avenue NW, Washington, DC 20009 www.environmentaldefense.org
Therefore, it is with deep regret that we state our staunch opposition to the discussion draft that is the subject of today's hearing. Its fatal flaws include:

- Destructive provisions that remove California's ability to lead other states and the nation in climate protection through its pathbreaking GHG standards for vehicles and fuels, and

- A regressive restriction of Environmental Protection Agency's authority to regulate greenhouse gases as air pollutants under the Clean Air Act (CAA), as recently clarified by the U.S. Supreme Court in *Massachusetts v. EPA*.

- Stringency levels for fuels and vehicles regulation that fall far short of what is needed to ensure an appropriate sector contribution to climate protection.

- Setting up weak and poorly enforceable programs for vehicles and fuels that will undermine the development of climate legislation that is truly comprehensive and effective.

The draft does offer helpful steps toward a new paradigm for managing carbon from vehicles and fuels; its low-carbon fuel standard and vehicle lifetime carbon emissions metric can be building blocks for integrating the sector into a comprehensive climate policy. Nevertheless, its overwhelming problems mean that Environmental Defense will vigorously oppose the draft in its current form.
GUIDING PRINCIPLES

To help the committee understand our comments on the discussion draft, we will first briefly lay out some principles that guide our analysis. The basis for these principles and more in-depth explanations of Environmental Defense’s recommendations for climate policy are given in our March 19, 2007 submission to the Committee.¹

Strong Climate Policy Equals Strong Energy Security Policy

One overarching principle pertains to the fact that strong, carbon-based vehicle and fuels policies will deliver substantial oil savings. In fact, we believe that clear carbon targets will result in more robust oil savings than policies justified solely under the banner of energy security and lacking a rigorous framework for evaluating progress and keeping the policy on track. Carbon is an ideal metric -- indeed, perhaps the most reliable and unambiguous measure -- for defining policies that will yield large benefits for both the environment and energy security.

For the reasons elaborated below, this discussion draft risks harming the climate under a rationale of improving energy security. Moreover, its weak framework and lack of market-based measures cast doubt on how much it will actually enhance energy security. No harm will be done to energy security -- in fact, energy security is likely to be far better achieved -- if this draft is set aside and the committee turns its attention to developing comprehensive climate legislation following the principles articulated here. That is the course of action we at Environmental Defense heartily recommend.
Principles for Effective Climate Policy

Environmental Defense is a member of the U.S. Climate Action Partnership (USCAP), a coalition of leading corporations and environmental groups that is advocating prompt enactment of national legislation for mandatory, market-based reduction of U.S. GHG emissions over the shortest period of time reasonably achievable. The USCAP Call For Action articulates a set of principles that Environmental Defense fully endorses.

We highlight here the principle of environmental effectiveness: that climate protection requires immediate action with policies stringent enough to achieve the necessary reductions within timeframes that prevent an unacceptable level of GHG concentrations. USCAP recommends a mandatory emissions reduction pathway, specifying the levels at which an economy-wide GHG cap should be set with a range of short- to long-term targets. We advocate the more stringent end of this range, with the targets shown in Table 1.

Another key principle is that of fairness. As full committee Chairman John Dingell has stated, all sectors and industries must contribute to emissions reduction. Numerous considerations go into assessing fairness, including the relative contributions of emitting sectors, equity and environmental justice, cost-effectiveness, economic wherewithal, competitiveness and the

<table>
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<tr>
<th>Table 1. The More Stringent Levels for an Economy-Wide Cap, from USCAP Call For Action</th>
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<tr>
<td><strong>Year:</strong></td>
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<tr>
<td>5 years from enactment</td>
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<td>10 years from enactment</td>
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<tr>
<td>15 years from enactment</td>
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<td>2050</td>
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co-benefits of reductions from a given sector (such as the substantial national security co-benefits of transportation sector GHG reductions).

Environmental Defense believes that a useful starting point for defining an auto sector contribution to meeting an economy-wide carbon cap is given by the Climate Protection Targets developed below in Table 2, although we take care to point out that we in no way wish to pre-judge Congress’s ultimate role in deciding fair allocations. According to EPA’s latest GHG inventory report, transportation contributes 28% to total U.S. emissions on a direct basis. The automobile sector (including cars and light trucks) is responsible for 60% of transportation emissions, or roughly 17% of the economy-wide total. The actual impact of motor fuel use on GHG emissions is greater, however, because upstream emissions add an additional 20% - 30% to the direct emissions as given in the inventory. For that reason, fuel-fuel-cycle (FFC) accounting -- as the discussion draft proposes for its low-carbon fuel standard -- is an appropriate way for estimating sector targets. On a FFC basis, the U.S. auto sector emitted 434 million metric tons of carbon (MMToC) in 2005, compared to direct emissions of 327 MMToC as given in EPA’s inventory.

Although we have not done an analysis for all transportation fuels, we analyzed the auto sector, for which the discussion draft also provides the most specific regulatory targets. Using an average emissions factor based on the GREET model, Table 2 gives limits for the auto sector proportional to the more stringent USCAP targets from Table 1, along with the reductions necessary to achieve these limits relative to a business-as-usual (BAU) projection through 2050. We refer to these targets, given in the second to last row of Table 2, as our “Climate Protection Targets” for the sector.
<table>
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<tr>
<th>Table 2. U.S. auto sector carbon emissions: business-as-usual (BAU) projection and Climate Protection Targets proportional to the more stringent USCAP targets</th>
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<td><em>(emissions values in MMTC)</em></td>
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<td>---------------------------------</td>
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<tr>
<td>BAU projection</td>
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<tr>
<td>USCAP percentage limits (stringent – lenient)</td>
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<tr>
<td>Auto sector Climate Protection Targets</td>
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*Million metric tons of carbon-equivalent greenhouse gases, evaluated here on a full fuel cycle basis.*

A key point, as elaborated later in our comments, is that such targets could be applied to derive vehicles and fuels regulations. These regulations could take the form of conventional miles-per-gallon or GHG-per-mile emissions standards, or use the draft’s concept of vehicle lifetime carbon emissions, in conjunction with a strengthened low-carbon fuel standard.

Also pursuant to the broader principles of fairness and cost-effectiveness, **it is important for transportation policies to engage all actors in the sector**: the vehicles industry, the fuels industries and consumers. We believe that practical considerations mean that the auto and fuels industries are the appropriate points of regulation for a sector policy. This leads to the concept of **treating the vehicle and fuel as a system**. Such an approach has served the country well in its success with control of conventional air pollution. The committee’s discussion draft takes a useful step in this direction with its proposed carbon-based metrics for both vehicles and fuels.

Another critical lesson from the nation’s successes on air quality -- which this committee has been instrumental in leading through its development of the original Clean Air Act (CAA) and the 1990 Amendments -- is the importance of California’s leadership. Preserving such state leadership is another bedrock principle that guides our assessment of proposed climate legislation. This principle is shared by all leading environmental organizations in the United States, and as we detail below, it represents the foremost reason that we staunchly oppose this draft.
WHY WE OPPOSE THIS DRAFT

Our opposition to the discussion draft is based on four serious concerns:

• its destructive provision to undermine California’s leadership by taking away the state’s ability to adopt GHG standards for vehicles and fuels;

• its limitation of EPA’s authority to regulate GHGs as an air pollutant covered under the CAA as recently clarified by the U.S. Supreme Court in Massachusetts v. EPA.

• stringency levels for fuels and vehicles regulation that fall far short of what is needed and, in particular, fail to approach our recommended Climate Protection Targets.

• that by setting out a weak and poorly enforceable program for vehicles and fuels, the draft undermines the development of comprehensive and truly effective climate legislation such as this committee has professed it wishes to pursue.

Existing law, as confirmed by the Supreme Court, gives EPA substantial authority to control GHGs from new vehicles and engines. Since 1970, the combination of EPA’s federal authority to clean up vehicles for conventional pollution and California’s special authority to press for more rapid advances has produced huge health and environmental benefits. Simply maintaining existing law would allow EPA, California, and states adopting California standards the ability to achieve similar great strides in reducing global warming pollution from vehicles and fuels.

Yet this discussion draft proposes to overturn the Supreme Court’s ruling and strip EPA and the states of their ability to act under the Clean Air Act. Instead, the draft would restrict future control authority to the Department of Transportation under a statute that does not even
provide for consideration of the need to reduce GHG emissions in determining "maximum feasible fuel economy" levels. We elaborate below on these most damaging provisions of the draft.

This Discussion Draft Unacceptably Destroys State Leadership on Climate Protection and Restrict EPA's Authority to Regulate Greenhouse Gases

Our first critical concern is that this draft proposes to eviscerate California's special authority under section 209(b) of the Clean Air Act to adopt emission standards that qualify for a waiver where those emission standards concern greenhouse gases. In other words, this would foreclose EPA granting a waiver to California for its AB 1493 (Pavley) motor vehicle GHG emission regulations that the California Air Resources Board (CARB) initially adopted in September 2004 and formally adopted in 2005.

This discussion draft would also propose to limit EPA's authority as specified in the U.S. Supreme Court's Commonwealth of Massachusetts v. EPA decision of April 2, 2007 to promulgate motor vehicle GHG emission standards under section 202(a) of the CAA. Since these provisions would devastate key public health and welfare provisions of the CAA, we strenuously oppose this proposal.

Since the 1970's, the Clean Air Act has recognized the special status that California as the state that pioneered state motor vehicle emission regulations in the 1960's. The California Air Resources Board (CARB) has a reputation, indeed world-wide, reputation, as a highly professional agency that has advanced the development of technologies and strategies for reducing all major air pollutants. California's emission standards have set the pace for the United States and many other countries. Further, CARB has been a leader in the development of motor vehicle emission standards with periodic amendments that the federal government gradually has adopted.
In September 2004, CARB adopted motor vehicle GHG emission standards under state statutory authority AB 1493 (Pavley). Under the federal CAA, other states have the option of adopting the California standards. To date, eleven other states have adopted the California criteria pollutant and GHG standards, and several others are considering adoption. This GHG regulation is an important part of California’s comprehensive initiative under AB 32, its Global Warming Solutions Act of 2006, to reduce GHG emissions from all State sources. Pursuant to AB 32 and an Executive Order of Governor Schwarzenegger, CARB is now in the process of developing a low carbon fuel standard, embarking on an essential extension of its proven vehicle and fuel pollution control strategies to address the new challenge of climate protection.

Under its motor vehicle GHG emission regulations, auto manufacturers can come into compliance with the regulation’s GHG standards not only by improving powertrain efficiency, but also by producing vehicles that use low-carbon fuels. Thus, biofuels, for example, that are produced with low or negative net carbon emissions due to plant growth absorption of atmospheric carbon, or electricity that is generated with low carbon inputs, such as wind and solar power, provide alternative compliance strategies for auto makers.

That these California initiatives are powerful tools in encouraging automaker and fuel provider innovations should be evident. Indeed, a perusal of the committee’s discussion draft indicates how much we have all learned from the actions that California has been taking under AB 1493 and 32 over the last five years. Certainly, it is essential to have national legislation that promotes low carbon fuel research, fosters production and use of low carbon fuels where carbon intensity is assessed on a full fuel cycle basis and removes obstacles to expansion of low carbon fuel infrastructure. However, such legislation can and should move forward without eviscerating
the authority of the nation’s premier state vehicle emission reduction laboratory that has done so much historically to foster development of low emission technologies and is now doing so much to reduce motor vehicle GHG emissions on a full fuel cycle basis.

Further, by eliminating California’s authority under section 209(b) to adopt motor vehicle GHG emission standards, the draft would constrain California’s ability to provide leadership, not only for that state, but for other states that then have the option of adopting that program as well as for other countries that look to CARB for regulatory wisdom, and not only today, but tomorrow and in future decades. Preserving California’s leadership in this regard is an important way that U.S. policy can account for the global dimension’s of climate change.

Section 209(b) of the CAA establishes California as a unique state laboratory in our federalist system to devise technologically advanced motor vehicle emission programs that will benefit public health and the environment. California is now serving the country well as it moves forward with its GHG regulations for vehicles and fuels. Federal agencies responsible for developing motor vehicle standards relating to GHG emissions can only benefit from the California experience. Auto makers have challenged the California GHG regulations in federal court in California and Vermont, one of the states that has adopted the California program. A federal court trial of the GHG regulations in Vermont has just been completed with post-trial briefs now in preparation. Auto manufacturers are having their day in court to contest these regulations. They are also aggressively urging EPA not to grant California a section 209(b) waiver. This is their right. However, the Congress should not eviscerate California’s authority to move forward with a state-based motor vehicle GHG emissions reduction program just as it is engaged in a crucial undertaking to address the country’s status as the largest emitter of GHGs in the world at a time
when the International Panel on Climate Change has achieved a scientific consensus on the increasing role of anthropogenic GHG emissions in global warming.

This Draft Falls Short of What Is Needed to Limit GHG Emissions from Vehicles and Fuels

As given above in Table 2, a concerted effort must be made to limit GHG emissions from vehicles and fuels in order for the sector to make an appropriate contribution to climate protection. We have examined the discussion draft’s proposed regulations for Alternative Fuels Standards (AFS), its Low-Carbon Fuel Standards (LCFS), its Corporate Average Fuel Economy (CAFE) standards, and its Vehicle Lifecycle Carbon Emissions (VLCE) reporting requirements. These critical components of the draft do provide measurable results for reducing GHG emissions. However, as we elaborate in this section, the draft falls far short of the Climate Protection Targets we articulate above.

Analysis of the draft’s LCFS

The LCFS is a crucial building block for effective climate policy, and we welcome inclusion of an LCFS in the discussion draft even though its levels need to be stronger. Similarly, the VLCE metric can serve as a useful building block for a stronger policy framework that could regulate vehicles and fuels together as a system, with stringency levels derived so as to ensure sector targets consistent with a strong economy-wide climate protection program.

The draft develops its LCFS, specified as an annual average fuel carbon intensity standard, based on its AFS requirements for increasing volumes of qualifying alternative fuels, ramping up to 35 billion gallons by 2025 [§211(t)(3)(A)], plus assumptions about the carbon intensity of the alternative fuel pool [§712(b)(2)]. The results of our preliminary analysis of how these requirements translate to net carbon intensity of the motor fuel pool are given here in Table 3.
Table 3. Preliminary estimates of overall motor fuel pool carbon intensity implied by the Discussion Draft*

<table>
<thead>
<tr>
<th>Year</th>
<th>Gasoline demand (billion gal/yr)</th>
<th>AFS requirement (billion gal/yr)</th>
<th>Alternative fuel carbon intensity (vs. gasoline)</th>
<th>Residual gasoline demand (billion gal/yr)</th>
<th>Overall carbon intensity reduction</th>
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<tbody>
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<td>221.7</td>
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<td>0.74</td>
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<tr>
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<td>0.72</td>
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<td>2019</td>
<td>243.0</td>
<td>20</td>
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<td>223</td>
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<tr>
<td>2020</td>
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*Derived from EIA Annual Energy Outlook 2007 projections for light vehicle fuel only, assuming light vehicle fuel accounts for 69% of all motor vehicle and non-road fuel. Because these preliminary calculations assume volumetric (rather than energy-equivalent) substitution, net carbon intensity reductions will be lower if significant portions of the alternative fuel are ethanol (as opposed to, say, renewable diesel, which has greater rather than lower energy density vs. gasoline).

These estimates show that the draft will result in a 3.3% reduction in average fuel carbon intensity by 2020. This is but one-third of the level targeted by California’s proposed LCFS for that year. By 2025, this draft’s LCFS implies a 6.3% reduction in average fuel carbon intensity, and an extrapolation of its requirements (without additional carbon-based stringency requirements) suggests little additional reduction in average fuel carbon intensity by 2050. A much greater degree of fuel decarbonization in both near- and long-term is needed to meet sector Climate Protection Targets such as those we identify above in Table 2. Moreover, although we emphasize the need to protect the climate, we believe the draft’s targets also fall far short of what can be done to enhance energy security, the ostensible goal of this draft.

In addition to the weakness of the draft’s proposed LCFS levels, we raise a deeper question about how the levels are determined. The draft misses an important opportunity to ensure that the level of carbon intensity reductions sought from transportation fuels reflect what society
actually needs. Instead of tying the LCFS to today’s necessarily limited determinations of feasibility, as driven in turn by the AFS provisions, the standards should be established based on the need to reduce emissions from the sector overall reflecting an appropriate balance of obligation between the fuels and vehicles industries.

*Analysis of the draft’s CAFE standards plus LCFS*

The draft specifies CAFE standards reaching 36 mpg for cars by 2022 and 30 mpg for light trucks by 2025. These targets represent rough extensions, with application to cars, of the very limited degrees of fuel economy improvement recently required by the Bush Administration’s recent light truck CAFE rules. Giving NHTSA the authority to restructure automobile standards based on attributes is helpful for improving the competitive fairness of the standards among automakers. Such a structure, however, along with the draft’s provisions that would enable setting standards lower than the draft’s targets, result in little confidence that even these weak levels will be attained.

Figure 1 (at end of this document) illustrates our estimates of the draft’s impact on auto sector carbon emissions, shown in comparison to a business-as-usual (BAU) projection and the range of sector emissions limits proportional to the USCAP economy-wide targets given in Table 1. In this analysis, we assume that no further increases in LCFS or CAFE stringency are made after the latest targets given by the draft. As shown in the figure, the targets given in the discussion draft slow the growth in auto sector GHG emissions, with a temporary pause in growth over roughly 2020-25 at a level 12% higher than the current level. But these reductions amount to less than 40% of the reductions needed to be on track to meet the USCAP-based
Climate Protection Target for the sector in 2025. And they clearly fall far short of what is needed to put the sector on a path to deep reductions by mid-century.

Figure 2 shows the overall full-fuel-cycle GHG reductions we estimate for the discussion draft. It breaks down reductions by contribution from higher CAFE standards and contribution from the LCFS over the auto sector (light duty vehicle) motor fuels, and shows the additional reductions from the LCFS over other vehicles (non-light-duty and non-road). In 2015, about 60% of the total auto sector reduction of 18 MMTc is attributable to the LCFS. As the vehicle stock turns over and more efficient vehicles replace older ones, the portion attributable to the CAFE standards increases, and from 2030-2050 represents about 75% of the reductions, which reach 135 MMTc by 2030 and 200 MMTc by 2050. Because the discussion draft does not specify efficiency improvement requirements for non-light-duty vehicles, this latter portion of reductions is relatively small, reaching just under 14 MMTc by 2050.

This Draft Risks Undermining the Development of Comprehensive Climate Legislation

This draft could make it harder to build consensus later for an effective economy-wide carbon cap because it might set up expectations among other industries that they too should bear little of the burden of reducing emissions. Alternatively, other industries might come to fear that they would be saddled with a greater proportion of the burden, making the politics of building consensus that much harder. Thus, if this draft were to go into law, it could make it more difficult for Congress to enact the kind of comprehensive climate legislation that the committee’s leadership has stated that it wishes to pursue.

Moreover, because its key provisions would lock in weak measures for a critical, nearly twenty-year period -- a period when strong and clear policy is absolutely essential for putting the
United States on a path to avoiding dangerous climate change -- enactment of the draft's proposals would make it much more difficult to manage the dangers of global warming. This is another way the discussion draft appears to fail the "do no harm" test with respect to climate policy.

Enforceability Considerations

Existing vehicle and fuels standards under the CAA are backed by strong certification, auditing and enforcement procedures. This draft's enforcement procedures are lacking by comparison. Of course, without a clearly defined environmental outcome metric (such as carbon), it is difficult to specify robust procedures for ensuring that a policy achieves its stated goals.

Certification, auditing and enforcement procedures of comparable quality to those that now cover fuels under the CAA will need to be developed for the LCFS. The evaluations, however, must go beyond fuel properties, since lifecycle assessment is needed to fully characterize a fuel's GHG impact. Fuels must have certified lifecycle GHG impact numbers for detailed, verifiable, tracking of fuel carbon intensity. This can be accomplished with an enhanced Identification Number system that builds upon what EPA is developing for the renewable fuel standard.

Any LCFS needs to take into account the environmental implications of the full life cycle of fuel production and be implemented in a way that avoids increasing conventional air pollution. Our current judgment is that in addition to climate change, issues related to land conversion, land management, and water impacts can, and should, be addressed through the metric of carbon.

The discussion draft does not cover aviation fuels. Air travel is rapidly growing and while aircraft efficiency has been increasing steadily, it does not come close to offsetting growth in GHG emissions, let alone limiting aviation emissions to appropriately safe levels. Although broader issues need to be addressed for incorporating aviation into under economy-wide carbon...
cap, there is no doubt that the carbon intensity of aviation fuel will need to be reduced, and so the LCFS should be expanded to cover it.

Finally, fuel certifications under an LCFS must be based on actual operations, not modeling assumptions or plans regarding fuel production, and must be subject to high standards of monitoring and evaluation. Further analysis and development is needed for appropriate authorizing provisions to ensure that EPA has the requirements and authority it needs to administer an effective LCFS. Environmental Defense will be happy to provide additional advice to the committee in this regard.

**Constructive Elements of the Discussion Draft**

Although, for the reasons stated, Environmental Defense will vigorously oppose this discussion draft in its current form, the draft does have constructive elements that can become building blocks for handling vehicles and fuels as part of comprehensive climate policy. The Low Carbon Fuel Standard (LCFS) combined with the Vehicle Lifetime Carbon Emissions (VLCE) metric can be combined to establish a carbon management framework that, properly administered, could guide the sector toward achieving deep GHG reductions. Moreover, using such a carbon-based framework to transform the sector will yield far greater reductions in petroleum dependence, and thereby do much more to enhance America’s energy security, than the weak and poorly enforceable vehicles and fuels standards proposed in the discussion draft.

**The LCFS is a Crucial Tool for Decarbonizing Transportation Fuels**

There is no doubt that “decarbonization” -- progressively reducing the full-fuel-cycle GHG emissions impact -- of motor fuels is essential for climate stabilization. For example, look-
ing at the likely doubling of VMT growth expected by mid-century along with even aggressive vehicle efficiency and advanced powertrain improvements, we estimate that it will be necessary to have nationwide average motor fuel carbon intensity of roughly 25% of what it is today.

Performance-based policy is a market-based approach that sets enforceable, fuel-neutral milestones for both the near- and long-term, ensuring steady progress toward quantifiable targets that are needed to meet a carbon cap. The LCFS provisions in the discussion draft are therefore a step in the right direction. A LCFS is now under development in California, and Congress should follow that state's leadership in extending this essential policy tool nationwide, while at the same time preserving California's ability to lead with standards that are promulgated earlier and more stringently than corresponding Federal standards.

**VLCE is a Valuable Metric for Ensuring Progress**

The Vehicle Lifetime Carbon Emissions (VLCE) metric proposed in the draft, if properly designed and applied, could become another building block for effective climate policy. This metric integrates vehicle efficiency and alternative fuel use capability with the LCFS, thereby creating a mechanism for treating the vehicle and fuel as a system. Thus, the VLCE can be used to derive regulatory targets for both vehicles and fuels consistent with a necessary Climate Protection Target for the sector such as that which we give in Table 2.

The discussion draft specifies VLCE as only a reporting requirement. The concept, however, is potentially much more powerful than that, and can be developed into as a tool for administering performance-based regulatory policies for vehicles and fuels.
Administering Vehicles and Fuels Standards under an Economy-Wide Carbon Cap

As drafted, this draft hints at a future paradigm for handling both climate and energy impacts of America's transportation system more effectively than they have been handled to date. Unfortunately, the draft's core provisions retain existing energy policy paradigms which fail to create a long-term market signal under which promising new fuels can thrive. It is time to move beyond conventional approaches based on alternative fuels mandates and subsidies, and beyond setting standards based on technical considerations without regard to environmental need.

The LCFS is an ideal tool for moving forward in this regard if its levels were to be in line with transportation fuels sector carbon targets that are in turn derived from an economy-wide carbon cap. Such a standard would do much more to build a long-term business case and stimulate investments in low-carbon renewable fuels than arbitrary targets such as the 35 billion gallon AFS targeted for 2017 in the President’s “20 in 10” proposal or targeted for 2025 by this draft. An LCFS, set to tighten in line with a declining economy-wide carbon cap and appropriate allocations of reduction requirements to the sector, would create a durable value basis for new fuels that fosters a robust market and transcends the price volatility of oil.

Performance-based regulation, evaluated using a carbon metric, can similarly be used to spur a transformation to more efficient, low-carbon vehicle technologies. Taken together -- that is, treating the vehicle and fuel as a system -- and administering the sector policy so as to meet a fair allocation under a declining economy-wide cap, the result would be a robust carbon management framework for vehicles and fuels that both protects the climate and enhances energy security.
Figure 1. U.S. auto sector GHG emissions with Discussion Draft targets, in comparison to business-as-usual (BAU) projection and targets proportional to USCAP

Figure 2. Total GHG emissions reductions implied by Discussion Draft standards

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ENDNOTES


2 See www.aiaa.org.


4 Note that we are using carbon (C) rather than CO₂ mass basis numbers here; the corresponding CO₂-equivalent numbers would be higher by a factor of 44/12 (3.667).

5 GREET is the DOE-sponsored fuel cycle analysis model developed at Argonne National Laboratory; see http://www.transportation.ornl.gov/software/GREET/index.html.

6 The business-as-usual projection is based on DOE’s 2007 Annual Energy Outlook, extended through 2030 by applying VMT growth rates from DOE's VISION model. This BAU projection assumes little change in vehicles and fuels and so is mainly driven by growth in VMT, which is expected to increase at an average rate of 1.8% / yr 2005-2030 and 1.6% / yr 2030-2050. In other words, without new policies to restrain growth in automobile travel demand, VMT in 2050 is projected to be 2.1 times the 2005 level.

7 For "aggressive vehicle efficiency and powertrain improvements," we assume steady progress toward reducing average vehicle energy use per mile by a factor of three, corresponding to achievement by mid-century of fleetwide vehicle technologies similar to those demonstrated by the PNGV program’s goal of tripled fuel economy.
Mr. BOUCHER. Thank you, Mr. DeCicco. Mr. Reuther.

STATEMENT OF ALAN REUTHER, LEGISLATIVE DIRECTOR, INTERNATIONAL UNION OF UNITED AUTOMOBILE, AEROSPACE AND AGRICULTURAL IMPLEMENT WORKERS OF AMERICA, WASHINGTON, DC

Mr. REUTHER. Thank you, Mr. Chairman. My name is Alan Reuther. I am the legislative director for the UAW. We appreciate the opportunity to testify before this subcommittee on the discussion draft.

The UAW strongly supports this draft legislation. We believe it would achieve significant reductions in oil consumption and greenhouse gas emissions. At the same time, this legislation would help to protect and expand jobs for American workers. We believe the draft legislation contains a number of very positive provisions relating to vehicle fuel economy and carbon efficiency. First, it would amend the CAFE program to mandate that all vehicle manufacturers must meet a 36 MPG standard for passenger cars by 2022 and a 30 MPG standard for light trucks by 2025. This would represent a 31 percent improvement in fuel economy for passenger cars and a 35 percent improvement for light trucks. The UAW supports this mandate because we believe it is technologically and economically feasible for the auto manufacturers.

Second, the UAW supports the provision that would authorize DOT to adopt an attribute-based CAFE system for passenger cars. This would enable DOT to reform the CAFE structure for passenger cars so it does not discriminate against particular manufacturers based on their product mix.

Third, the UAW is particularly pleased the draft legislation maintains the existing domestic-foreign fleet distinction for passenger cars and also requires companies to meet an anti-backsliding requirement. This critically important provision will provide a strong incentive for companies to continue small car production in the United States, thereby protecting the jobs of 67,000 American workers who assemble or make parts for these vehicles.

Fourth, the UAW applauds the provision that would require DOT to publish the new CAFE standards both in a miles-per-gallon format and a grams-of-CO2-per mile format as well as the provision requiring auto manufacturers to report the projected lifetime carbon emissions of their vehicles. We hope these two provisions will facilitate the integration of the CAFE program with an economy-wide cap and trade program that may ultimately be developed to reduce greenhouse gas emissions.

Fifth, the UAW supports the provision in the draft legislation reinforcing the longstanding policy that DOT has the exclusive authority to regulate the fuel economy and carbon efficiency of motor vehicles through the CAFE program. In order for vehicle manufacturers to be able to retool factories and redesign vehicles to meet the challenging new fuel economy requirements, it is essential that they have the security of knowing that they will only have to comply with a single national standard and not be pulled in a variety of directions by a multitude of State standards. We recognize that some groups may advocate for much more stringent fuel economy
standards or for provisions giving States the ability to establish such standards. However, the UAW is deeply concerned that extreme fuel economy standards such as the CAFE proposal in H.R. 1506 or the vehicle CO₂ standard approved by California are not economically feasible and could seriously threaten the jobs and benefits of active and retired workers in the auto industry.

The UAW believes the goals of reducing oil consumption and greenhouse gas emissions can best be achieved by addressing the fuels that go into vehicles as well as the efficiency of the vehicles themselves. Thus, we support the provision in the draft legislation that would require vehicle manufacturers to make certain percentages of their fleets flex fuel capable by specified dates. The technology needed to do this is readily available and relatively inexpensive. All companies easily should be able to meet this mandate. The UAW also supports the provisions establishing an alternative-fuel standard and a low-carbon-fuel standard. These provisions will assure that we continue to expand the amount of alternative fuels that are produced in our Nation while at the same time requiring movement towards fuels that produce lower carbon emissions. The UAW applauds the provision requiring DOE to mandate the installation of alternative-fuel dispensers when the market penetration of flex fuel vehicles reaches a certain level. Expanding the distribution network for alternative fuels is critically important if we are to make substantial progress in increasing the actual use of alternative fuels by consumers.

To meet the challenge of higher fuel economy standards, vehicle manufacturers will have to rapidly accelerate the introduction of advanced technology vehicles including hybrids and clean diesels. We therefore strongly support the provision in the discussion draft that would create a grant program to encourage domestic production of these advanced technology vehicles and their key components. This will help to ensure that these vehicles of the future and their key components are built in this country, thereby creating jobs for tens of thousands of American workers. As this draft legislation moves forward, we would like to work with the subcommittee and House leaders to refine and expand these provisions so there is a reliable and substantial source of funds provided to support this critically important program.

In conclusion, we appreciate the opportunity to testify on the discussion draft and look forward to working with the subcommittee as we move forward in considering it.

[The prepared statement of Mr. Reuther follows:]

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TESTIMONY OF

ALAN REUTHER
LEGISLATIVE DIRECTOR

INTERNATIONAL UNION, UNITED AUTOMOBILE, AEROSPACE & AGRICULTURAL IMPLEMENT WORKERS OF AMERICA (UAW)

on the subject of

LEGISLATIVE HEARING ON DISCUSSION DRAFT CONCERNING ALTERNATIVE FUELS, INFRASTRUCTURE, AND VEHICLES

before the

SUBCOMMITTEE ON ENERGY AND AIR QUALITY COMMITTEE ON ENERGY AND COMMERCE

UNITED STATES HOUSE OF REPRESENTATIVES

June 7, 2007
Mr. Chairman. My name is Alan Reuther. I am the Legislative Director for the International Union, United Automobile, Aerospace & Agricultural Implement Workers of America (UAW). The UAW represents over one million active and retired employees, many of whom work for or receive retirement benefits from vehicle manufacturers and auto parts companies. We appreciate the opportunity to testify before this Subcommittee on this legislative hearing on the discussion draft concerning alternative fuels, infrastructure, and vehicles.

The UAW strongly supports this draft legislation. We believe it would achieve significant reductions in oil consumption and greenhouse gas emissions. This would promote our nation’s energy security, while addressing the pressing problem of climate change. At the same time, this legislation would help to protect and expand jobs for American workers.

**Vehicle Fuel Economy/Carbon Efficiency**

The UAW believes the draft legislation contains a number of very positive provisions relating to vehicle fuel economy and carbon efficiency. First, it would amend the Corporate Average Fuel Economy (CAFE) program to mandate that all vehicle manufacturers must improve significantly the fuel economy of their passenger car and light truck fleets. Specifically, it would require passenger cars to meet a 36 mpg average standard by 2022, and light trucks to meet a 30 mpg average standard by 2025. This would represent a 31 percent improvement in fuel economy for passenger cars, and a 35 percent improvement for light trucks. The UAW supports this mandate because we believe it is technologically and economically feasible for the auto manufacturers.

Second, the UAW supports the provision that would authorize the Department of Transportation (DOT) to adopt an attribute-based CAFE system for passenger cars, similar to the system that has already been implemented for light trucks. The UAW believes this authority, which the Bush administration has requested, would enable DOT to reform the CAFE structure for passenger cars so it does not discriminate against particular manufacturers based on their product mix. All companies still will be required to improve the fuel economy of their passenger car fleet, but in a manner that recognizes differences in product mix between different companies.

Third, the UAW is particularly pleased that the draft legislation also maintains the existing domestic/foreign fleet distinction for passenger cars, and also requires companies to meet an “anti-backsliding” requirement. This critically important provision will provide a strong incentive for companies to continue small car production in the United States, thereby protecting the jobs of 67,000 American workers who assemble or make parts for these vehicles. It also will ensure that the companies cannot game any new attribute-based system by “upsizing” their passenger cars, resulting in worse overall fuel economy.
Fourth, the UAW applauds the provision that would require DOT to publish the new CAFE standards both in a miles per gallon format and a grams of CO2 per mile format. Consumers will still get the miles per gallon information they are accustomed to receiving. At the same time, translating this into grams of CO2 per mile will help make it clear that the CAFE program limits carbon emissions from motor vehicles. We also welcome the provision requiring the auto manufacturers to report the projected lifetime carbon emissions of their vehicles. We hope these two provisions will facilitate the integration of the CAFE program with any economy wide cap-and-trade program that may ultimately be developed to reduce greenhouse gas emissions.

Fifth, the UAW supports the provision in the draft legislation reinforcing the long standing policy that DOT has the exclusive authority to regulate the fuel economy and carbon efficiency of motor vehicles through the CAFE program. In order for vehicle manufacturers to be able to retool factories and redesign vehicles to meet the challenging new fuel economy requirements, it is essential that they have the security of knowing that they will only have to comply with a single national standard, and not be pulled in a variety of directions by a multitude of state standards.

We recognize that some groups may advocate for much more stringent fuel economy standards, or for provisions giving states the ability to establish such standards. However, the UAW is deeply concerned that extreme fuel economy standards, such as the CAFE proposal in H.R. 1506 or the vehicle CO2 standard approved by California, are not economically feasible and could seriously threaten the jobs and benefits of active and retired workers in the auto industry.

GM, Ford and Chrysler are already experiencing serious economic problems. They have closed numerous facilities and downsized their workforces by 90,000 employees. At the same time, they are struggling with enormous retiree health care legacy costs for 525,000 retired workers and their families. In contrast, major competitors are making large profits and have no retiree health care legacy costs.

The Bush Administration has estimated that it would cost $114 billion for the auto companies to achieve fuel economy targets similar to those contained in H.R. 1506 by 2017, and that three quarters of these costs would be imposed on GM, Ford and Chrysler. The UAW is concerned that the magnitude of these costs, and their disparate impact on the Detroit-based auto companies, would lead to calamitous results.

In our judgment, GM, Ford and Chrysler cannot afford to shoulder these enormous retooling costs. This was underscored by the recent report released by Standard and Poor’s Rating Services on May 7, 2007, which stated that stringent fuel economy and vehicle emissions legislation would “pose a real risk
to global automakers’ financial performance, particularly as some are already under pressure from razor-thin margins."

If these burdens are imposed on the Detroit-based auto companies, the UAW is very concerned that this will lead to more plant closings and the loss of tens of thousands of jobs. It also could lead to cutbacks in or the elimination of health insurance coverage for 525,000 retired workers and their families. We believe that this economic and human toll is unacceptable. The UAW strongly urges that this Subcommittee reject such extreme CAFE proposals. Instead, we urge you to favorably report the more balanced proposal set forth in the discussion draft, which will achieve substantial improvements in vehicle fuel economy, without threatening jobs and benefits for active and retired workers in the auto industry.

Alternative Fuels

The UAW also is very pleased that the discussion draft includes numerous provisions that would promote the use of alternative fuels. This recognizes the important truth that the goals of reducing oil consumption and greenhouse gas emissions can best be achieved by addressing the fuels that go into vehicles, as well as the efficiency of the vehicles themselves.

The UAW supports the provision that would require vehicle manufacturers to make certain percentages of their fleets flex fuel capable by specified dates. The technology needed to do this is readily available and relatively inexpensive. All companies easily should be able to meet this mandate.

The UAW also supports the provision establishing an alternative fuels standard and a low carbon fuels standard. These provisions will assure that we continue to expand the amount of alternative fuels that are produced in our nation, while at the same time requiring movement towards fuels that produce lower carbon emissions.

The UAW applauds the provision requiring the Department of Energy (DOE) to mandate the installation of alternative fuel dispensers and tanks when the market penetration of flex fuel vehicles reaches a certain level. Expanding the distribution network for alternative fuels is critically important if we are to make substantial progress in increasing the actual use of alternative fuels by consumers. The UAW also welcomes the provision establishing a program to increase public awareness of alternative fuels.

The UAW urges the Subcommittee to add a provision extending the FFV credit in the CAFE program for flex fuel vehicles that are produced by a manufacturer in excess of the levels mandated by the bill. This would provide an incentive for companies to make even more rapid progress in this area. We would also note that the FFV credit could be allowed to sunset prior to 2022, so it would not
reduce the overall stringency of the fuel economy standards mandated by the discussion draft.

**Advanced Technology Vehicles**

To meet the challenge of higher fuel economy standards, vehicle manufacturers will have to rapidly accelerate the introduction of advanced technology vehicles, including hybrids, clean diesels and fuel cell vehicles. The UAW supports the provision in the discussion draft that would establish an advanced battery loan guarantee program to speed the development of this key technology.

Even more importantly, the UAW strongly supports the provision that would create a grant program to encourage the domestic production of these advanced technology vehicles and their key components. This will help to accelerate the introduction of these vehicles, thereby furthering the goals of reducing oil consumption and greenhouse gas emissions. At the same time, this will help to ensure that these vehicles of the future and their key components are built in this country, thereby creating jobs for tens of thousands of American workers.

Currently, most of the advanced technology vehicles are assembled overseas and almost all of their key components are built in other countries. A 2003 study by the University of Michigan showed that federal incentives to encourage domestic production of advanced technology vehicles and their components would generate thousands of jobs. The increased federal and state tax revenues flowing from these jobs would pay for the incentives.

The UAW recognizes the jurisdictional and other constraints on this Subcommittee in dealing with this issue. As this draft legislation moves forward, we would like to work with the Subcommittee and House leaders to refine and expand these provisions. We believe it is critically important that a reliable and substantial source of funds be provided to support this critically important program.

**Need for Economy Wide Cap and Trade Program To Reduce Greenhouse Gas Emissions**

The UAW does not consider the discussion draft to be the last word on measures to address the pressing problem of global warming. We continue to believe that all sectors of the economy should be asked to participate in reducing greenhouse gas emissions through an economy wide cap-and-trade program. We understand that this Subcommittee is currently working to develop such a proposal for consideration later this year. The UAW looks forward to working with this Subcommittee in developing this proposal, and ensuring that the CAFE program is integrated with it in an appropriate manner.
The UAW wishes to underscore that we do not view the development of an economy wide cap-and-trade program as a means for the vehicle manufacturers to evade their responsibility to meet the tougher fuel economy standards mandated by this discussion draft. Indeed, properly designed, this type of program can lead to even greater reductions in the carbon emissions from both vehicles and fuels. At the same time, we believe it is abundantly clear that the only way to truly combat global warming is to establish a cap-and-trade program that requires all sectors of the economy, not just the auto and fuels sectors, to step forward and do their part to limit greenhouse gas emissions.

Conclusion

The UAW appreciates the opportunity to testify at this legislative hearing on the discussion draft concerning alternative fuels, infrastructure, and vehicles. We strongly support the provisions in this draft legislation. In our judgment, it is a balanced package that will achieve significant reductions in oil consumption and greenhouse gas emissions, while at the same time protecting and expanding jobs for American workers. We urge the Subcommittee to move forward expeditiously to refine and approve this discussion draft. We look forward to working with you Mr. Chairman, and the Members of this Subcommittee, as you consider these vital issues. Thank you.
Mr. BOUCHER. Thank you very much, Mr. Reuther.
Mr. McCurdy.

STATEMENT OF HON. DAVE MCCURDY, PRESIDENT AND CHIEF EXECUTIVE OFFICER, ALLIANCE OF AUTOMOBILE MANUFACTURERS, WASHINGTON, DC

Mr. McCurdy. Thank you, Mr. Chairman. I want to commend the chairman and Speaker Hastert for the spirit in which you are working together to develop this landmark legislation. Having been on that side of the table, I can assure you I understand it is no small task.

The Alliance joins all Americans and the Congress in considering the matters of increasing vehicle fuel economy and reducing carbon dioxide emissions as among the most important issues our country faces. A certain chairman that was alluded to earlier in the hearing has recently said: “Either work with me and I will do everything I can to get you a bill that you probably won’t like but with which you can live, and if you don’t, you will have a bill that you won’t like and you can’t live with.” Well, Chairman Boucher, we are here to work with you, and Chairman Dingell is right: this discussion draft is a bill that the industry as a whole really doesn’t like but recognizes it is probably going to be forced to live with, and as Mr. Melancon so aptly said, a good deal is when both parties either walk away happy or probably not so happy, and a bad deal is when one seems overjoyed. I can assure that we will be nursing a very bruised arm when we walk through this process.

In simple terms, this proposal presents the largest technology challenge automakers have ever encountered. Although we remain committed to CAFE reform and support the increases in CAFE, we do so with a great deal of pain and angst. You must also understand that these changes would require unprecedented levels of financial resources and engineering commitment, and in the end we do not know the answer to the most fundamental question in all of this: Will consumers respond? Our experience has taught us that we cannot turn a blind eye to the factors that must be considered if we are to produce automobiles that consume less fuel but still appeal to the American consumers, who demand a wide variety of features.

The Alliance supports preserving the car and light truck distinction, and I think everyone on the panel currently understands that distinction well. While Americans value fuel economy, their buying habits have shown that they also want room for passengers and cargo. They want performance. They want towing ability and much more. In fact, in 2006, for the fifth straight year, light trucks including pickups, minivans, vans and SUVs outsold passenger cars. More than 53 percent of last year’s new vehicle purchases were light trucks. Mr. Hall, in Texas that is 60 percent of the new registrations. Mr. Melancon, in Louisiana it is 63 percent of new registrations. In Utah, Mr. Matheson, who was here earlier, it was 59 percent. Even in Massachusetts and California, it is 50/50, light trucks versus passenger cars. The properties in light trucks that business owners, trades people, farmers, families, sports enthusiasts and others value are the very properties that differentiate
them from cars. These qualities make it impossible to put all vehicles in a single category.

Alliance members also recognize the importance of establishing a comprehensive and nationwide energy policy. It needs to be done on the Federal level. A patchwork of conflicting State fuel economy and carbon dioxide mandates would surely create marketplace chaos for our consumers and manufacturers who would have to sort problems, products and parts based on complex systems of inconsistent standards and regulations. A single comprehensive Federal policy must preempt State laws because this is a national issue.

We support the National Highway Traffic Safety Administration being granted authority to reform passenger car standards using an attribute-based approach. This approach is essential to preserving the diverse range of vehicles currently on the market.

The Alliance also supports legislation funding the advancement of promising technologies. More research and development is needed for plug-in hybrids, fuel cells and hydrogen internal combustion engines to truly provide us with their full potential. We also value efforts to improve the support technologies we have already brought to the market such as alternative-fuel automobiles. Legislation should increase alternative-fuel availability to keep pace with the alternative-fuel autos we are working hard to build and sell. Likewise, we support increasing consumer education and making the public fully aware of the ever-increasing amount of alternative-fuel options. We have increased the number of alternative-fuel automobile models 500 percent in just the past 7 years. Just this week we were pleased to announce that 2007's first quarter alternative-fuel automobile sales were our best ever, a 27 percent increase over the same period last year.

Automakers understand that what our Nation truly requires to address our energy needs is wider focus. Carbon reduction depends on three intertwined factors: consumers, fuels and vehicle technology. Focusing only on one component while ignoring the others will not move our Nation closer to its energy goals. Now, having said that, the Alliance is concerned with the flexible-fuel mandates under consideration in section 302 of the bill. The ones under discussion today include an unachievable target and a time frame that is just too aggressive. Furthermore, the legislation allows no alternatives should the E−85 fuel fail to make it to the market on time or not be found in as many locations as needed. The Alliance must also express concern over the doubling of the CAFE penalty. This proposal discriminates against smaller manufacturers and those with limited product lines. Ultimately, this provision will cause consumers to pay more for certain vehicles while similar and possibly less efficient vehicles will have not had the same cost hike simply because the manufacturers of these vehicles produce a wider product range.

Finally, Mr. Chairman, a complex change of massive technical changes that must be repeatedly tested and fine-tuned is required to adjust a car's fuel economy by just one tenth of a mile.

Mr. BOUCHER. Mr. McCurdy, we are running a little bit over on time, so if you could conclude, that would be great.

Mr. McCurdy. I will conclude with this, Mr. Chairman. The targets we are talking about today would require that we do that 900
fold. The proposed standards of 36 miles per gallon for passenger cars and 30 for trucks represent a 30 or 31 percent increase and 35 percent increase in fuel efficiency. That is an unprecedented reformulation that will again create the largest challenge this industry has ever seen. Mr. Chairman, it is a big challenge. We do have angst and concern whether the American consumers will choose to buy these products so we will continue to work with the subcommittee and the full committee to try to move the bill forward.

[The prepared statement of Mr. McCurdy follows:]

STATEMENT OF HON. DAVE MCCURDY

Mr. Chairman, good morning. My name is Dave McCurdy and I am the president and CEO of the Alliance of Automobile Manufacturers. The Alliance is the auto industry’s leading trade association representing nine manufacturers including BMW, DaimlerChrysler, Ford Motor Company, General Motors, Mazda, Mitsubishi, Porsche, Toyota and Volkswagen.

On behalf of our members, I’d like to thank you for giving me an opportunity to be here today to comment on the draft legislation before the Committee. Alliance members share the interests and concerns of our customers, the Congress and the American public about increasing vehicle fuel economy and reducing carbon dioxide emissions.

At a March 14, House Energy Subcommittee hearing, CEOs from DaimlerChrysler, Ford Motor Company, General Motors and Toyota all committed to working with Congress to find ways to address these issues. That is our focus today. Let me summarize my main points:

• First, the Alliance of Automobile Manufacturers supports several of the provisions in the proposed legislation, and we want to work with policymakers to create a bill that is effective, achievable and inclusive.

• That said, we urge the Congress to recognize that automakers are investing significantly in advanced technology vehicles powered by electricity, biofuels, clean diesel, hydrogen and compressed natural gas.

• While many fuel-efficient and advanced technologies are on sale today, more technology is being developed for future introduction.

• Promising technologies, such as plug-in hybrids and hydrogen-powered autos, need significant research and development before they will be commercially available on an even larger scale.

• Through the Corporate Average Fuel Economy (CAFE) program, the light duty vehicle segment has been carbon-constrained for more than 30 years. We recognize that fuel economy requirements will continue to increase for our products, but these regulations need to recognize the competitive conditions of the automotive market, the vehicle needs of American consumers, and the resource and economic challenges involved in achieving future fuel economy levels.

INCREASING FUEL EFFICIENCY, DECREASING CARBON DIOXIDE

Auto engineers are working hard to include a diverse range of highly fuel-efficient technologies in new vehicles, because in the short term, this is the only feasible way to reduce the amount of carbon-based fuel used by automobiles. At the same time, it is equally important to start now to reduce the carbon intensity of our fuel infrastructure.

I must stress one key point here:

Alliance members support the goal of improving fuel economy to the maximum feasible level. Improving fuel economy is a consumer issue, an economic issue, a climate change issue, an energy security issue, and a high priority.

Automakers pursue the goal of increasing fuel economy as they develop vehicles that meet the various needs of American families in every segment. But while consumers value fuel economy, they also want many other attributes in today’s vehicles, such as safety, passenger and cargo room, performance, and towing and hauling capacity. In 2006, for the fifth year in a row, light trucks, including pickups, minivans, vans and SUVs, outsold passenger cars. More than 53 percent of all new vehicles purchased last year were light trucks. Our challenge is to develop automobiles that combine all the vehicle attributes demanded by Americans’ with improved fuel efficiency—and at an affordable price.
Automakers are competing to bring these vehicles to market as soon as the technology is feasible, affordable and meets consumer expectations. We have made the investments, and we are beginning to see results.

Alliance members are working now to offer more alternative fuel and advanced technology autos, including vehicles that run on hybrid-electric technology, clean diesel, and alternative fuels like E-85 ethanol and hydrogen, because these autos will help our country address the growing concerns about U.S. gasoline consumption and oil imports, as well as carbon dioxide emissions.

Just this week, the Alliance reported that sales of alternative fuel autos continue to grow. According to R.L. Polk & Company, the first quarter of 2007 showed record sales for alternative fuel autos. In the first three months of this year, more than 430,000 alternative fuel autos were sold nationwide, an increase of more than 27 percent over the same period last year.

Last October, government, auto industry and fuel suppliers partnered to introduce the ultra-low-sulfur diesel needed for clean diesel engines. Since the year 2000, sales of light-duty diesel vehicles have almost doubled.

Today, more than 11 million alternative fuel autos that run on hybrid technology or fuels like clean diesel, ethanol, hydrogen and others are already on the road. Automakers are offering 60 models of alternative fuel autos on sale today, up from 12 in 2000, and many more models are planned for future production. Guiding Principles

Automakers understand the desire of Congress to reduce carbon dioxide, and we support that goal. Reducing carbon is dependent on three intertwined factors: consumers, fuels, and vehicle technology. Attempts to address concerns about energy security and carbon dioxide emissions cannot succeed by focusing only on one component.

There are many provisions in the proposed legislation that treat fuels and autos as a system. In 1999, EPA finalized its landmark regulations called Tier 2, which for the first time regulated autos and fuels as a system. Future legislation needs to consider fuels and autos together.

Today, I will limit my testimony to provisions that affect autos, but I would like to recite several principles that have guided automakers in responding to this legislative proposal.

A consumer-sensitive approach is needed. Many segments of our economy depend on cars and light trucks. Farmers, tradesmen, small businesses and others need vehicles, especially larger cars and light trucks, for their livelihoods. Any program that reduces the availability of these work vehicles or significantly raises their costs represents a burden on the U.S. economy, and especially a burden on independent and small businesses.

A market-driven, market-responsive approach is needed. Any effective program needs to consider the realities of the marketplace. For example, incentives in place for the renewable fuels program enable competitive pricing of ethanol, which is resulting in increased consumer demand for this alternative fuel.

Incentives are needed to encourage real reductions in carbon dioxide. Incentives can encourage consumers to purchase advanced technology autos on sale today and encourage energy providers to increase availability of alternative fuels and to reduce the overall carbon intensity of the fuels that power them.

Consideration of effects on competitiveness is needed. Any effective program to reduce carbon dioxide needs to allow for companies to grow and thrive, without imposing provisions that would result in job loss. Sufficient lead time is critical in this industry, since auto manufacturing requires five years to develop and introduce a new model, and seven years to make significant changes to powertrains.

Finally, any effective approach needs to be comprehensive and nationwide. The United States needs a consistent national policy that avoids the marketplace chaos that would surely arise from a patchwork of conflicting state fuel economy/carbon dioxide mandates. Therefore, it is crucial that there be Federal pre-emption of State laws.

Provisions in the Proposed Legislation

With these principles as a guide, let me address several of the specific provisions in the proposed legislation.

The Alliance Supports Granting NHTSA Authority to Reform Passenger Car CAFE Standards.

The Alliance supports providing authority to NHTSA to reform the way it sets fuel economy requirements for passenger cars. A rulemaking process that maximizes consumer choice and avoids safety trade-offs, without injuring competition or—any individual automaker is clearly desirable. Attribute-based approaches, when prop-
erly designed, can help achieve these objectives. But ultimately, success in meeting these objectives depends on the—provisions of the program, such as the specific attributes or set of attributes that are chosen, the level at which standards are set, and the adequate provision of lead-time. Whatever attributes are considered for cars must preserve the diverse types of passenger cars.

The Alliance supports authorizing NHTSA to reform the CAFE standard for cars into an attribute-based system, but NHTSA should not prejudge the issue by assuming that the footprint-based system used in the light truck reform rulemaking makes the most sense for cars. When reforming light truck CAFE standards, NHTSA used an attribute-based approach that acknowledged consumers require different sized vehicles for their business and family needs. NHTSA's attribute-based approach addressed some of the previous concerns about safety and about inequitable effects on different manufacturers arising from the previous "one size fits all" standards.

THE ALLIANCE SUPPORTS PRESERVING THE DISTINCTION BETWEEN CARS AND LIGHT TRUCKS.

The proposed legislation preserves consumer choice by maintaining the 30-year-old statutory distinction between cars and light trucks. Americans value fuel economy, but they also want passenger and cargo room, performance, towing ability and more. The fuel economy of light trucks can and should increase, but we need to acknowledge that light trucks and cars need separate fuel economy standards. Existing Federal law rightfully separates cars and light trucks in the CAFE program by setting different fuel economy standards for each.

THE ALLIANCE SUPPORTS SETTING CAFE AT THE MAXIMUM FEASIBLE LEVEL.

The Energy Policy and Conservation Act directed NHTSA to set national fuel economy standards at the "maximum feasible" level taking into account key elements such as the need of the U.S. to reduce energy use, as well as technological feasibility, safety, emissions controls, consumer choice, disparate impacts on manufacturers and effects on American jobs. This approach balances petroleum conservation needs with technological feasibility, safety, affordability, jobs and consumer choice.

By directing NHTSA to continue to set annual standards at the maximum feasible level, this legislation acknowledges that progress may be faster some years than others. While the draft bill includes targets that must be ultimately achieved, this approach acknowledges that progress and breakthroughs are not always governed by the calendar. Fuel economy varies depending on the introduction of models and technologies, along with consumer purchases. For example, a new model may sell well in its first few years, but then decline in popularity.

The dual approach of ultimate targets and standard-setting year-by-year allows NHTSA to make adjustments based on available technologies and manufacturers' product plans to fine-tune progress toward the legislation's ultimate fuel economy targets. The ultimate fuel economy targets, however, remain extremely ambitious and challenging to our member companies.

THE ALLIANCE SUPPORTS FUNDING THE DEVELOPMENT OF PROMISING TECHNOLOGIES.

While fuel-efficient technologies are on sale today, more technology is being developed for future introduction. Thousands of automotive engineers are working on innovative technologies every day, but many emerging technologies, such as plug-in hybrids, fuel cells and hydrogen internal combustion engines, still need significant research and development before they will be commercially ready. Moreover, the hydrogen fueling infrastructure needs to be developed.

Setting aside funds collected from the automakers under the CAFE program to speed up commercialization and production of advanced technology vehicles and vehicle components in the U.S. makes sense. Added to the billions of dollars automakers are already investing in research and development each year, this money can assist in getting more fuel efficient vehicles to market less expensively and faster. Similarly, the advanced battery loan guarantee program in Section 305 will help make leap-ahead technology a reality.
Autos and the alternative fuels to power them must be developed in harmony. Automakers are putting millions of alternative fuel autos on U.S. roads, but many consumers are still searching for the alternative fuels to power them. Today, there are 6 million E85 ethanol-capable vehicles on our roads. In the first quarter of 2007, sales of E85 autos were up 40 percent over the same period last year. But only about 1,200 of the 170,000 gas stations in the U.S. offer E85 and even fewer offer alternative fuels like hydrogen and biodiesel. As a general matter, the Alliance does not support mandates, but we do support incentives that can help speed up the introduction of biofuels and other fuels to the marketplace.

The Alliance supports increasing consumer information.

This proposed legislation would seek to raise consumer awareness in three important areas.

First, a public campaign would be undertaken to inform consumers of the availability of both Flexible Fuel Vehicles and where alternative fuels can be purchased. Automakers have been advertising their vehicles, and we support groups like the National Ethanol Vehicle Coalition and the Clean Diesel Fuel Alliance that provides a consumer Web site on fuels availability at www.E85.com and www.clean-diesel.org.

Second, a Fuel Conservation Education Program would be created to ensure consumers are given more information on how to conserve fuel through proper use and maintenance of their vehicles. The Alliance has already initiated this effort, working with EPA through the Web site, www.MileageWillVary.com. On this site, consumers can test their knowledge of fuel savings practices. We have been advertising the Web site on consumer sites like www.Edmunds.com, and certainly we support further education.

Third, this legislation proposes to educate consumers on replacement tire fuel efficiency. The Alliance currently educates the public about the influence that tires have on vehicle fuel economy through its Web site, www.CheckMyTires.com. According to the National Academy of Sciences, a 10 percent reduction in average rolling resistance, if achieved for the population of passenger vehicles using replacement tires, promises a 1 to 2 percent increase in the fuel economy of these vehicles. About 80 percent of passenger cars and light trucks are equipped with replacement tires. Assuming that the number of miles traveled does not change, a 1 to 2 percent increase in the fuel economy of these vehicles would save about 1 billion to 2 billion gallons of fuel per year. This fuel savings is equivalent to the fuel saved by taking 2 million to 4 million cars and light trucks off the road.

We support the tire manufacturers’ providing additional information about the contribution of tires to vehicle fuel consumption, either at the point of sale or through other means like advertising.

The Alliance supports the focus on carbon emissions.

For more than 30 years, corporate average fuel economy has been focused on reducing oil consumption, but CAFE alone cannot address the broader problem of climate change. To affect climate change, the Congress must address carbon dioxide emissions through a comprehensive program that touches fuel producers, vehicle manufacturers and consumers.

This proposed legislation expands the policy focus to carbon dioxide (CO2) emissions in several ways. For example, the Department of Transportation would be required to issue fuel economy standards in both “grams per mile of CO2” and miles per gallon. In addition, EPA would be directed to develop a Low Carbon Fuels Standard.

These are good initial efforts that focus on carbon dioxide and climate change while maintaining the options to develop a broader climate change policy.

Provisions for further discussion

The CAFE Targets Are Very Aggressive and Will Be Difficult for Manufacturers to Achieve.

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Under the proposed legislation, car CAFE standards would increase by more than 30 percent while light truck standards would increase by 35 percent. The legislation’s proposed standards of 36 mpg for passenger cars by 2022 and 30 mpg for light trucks by 2025 represent significant increases over the current standards. Indeed, the proposed increases in fuel economy requirements would present major technology challenges for automakers, requiring tremendous investments over a sustained period of time. An automaker can spend well over $1 billion to develop a brand new engine or transmission or a new vehicle that is not based on an existing platform. If passed into law, this legislation would result in the largest increase in CAFE standards to cars and light trucks. Automakers traditionally have supported standard-setting by NHTSA, the expert agency with long experience with CAFE. The NHTSA notice and comment rulemaking process is based on thorough development of a factual record regarding technical feasibility, affordability, effects on safety or jobs, and environmental benefits, that is built with input from all interested parties. While the 2002 NAS Committee on CAFE 2

Automakers are deeply committed to working with Congress and NHTSA to develop standards that achieve the fuel savings and CO2 reductions desired, while at the same time maintaining jobs, a sound economy and a vibrant automotive industry.

In May, Standard and Poor's issued a report stating that stringent fuel economy and vehicle emissions legislation would “pose a real risk to global automakers” financial performance, particularly as some are already under pressure from razor-thin margins.”

As a result, overly aggressive fuel economy standards could undermine the economic health and stability of automakers, and they could raise costs to consumers and result in restrictions on certain models.

The Flexible Fuel Mandates Offer No Flexibility if Circumstances Change.

As a general matter, the Alliance does not support technology mandates, and we are extremely concerned about the technology mandate for flex fuel vehicles proposed in the discussion draft. This mandate proposes targets that may be unachievable, as well as a time frame that is very aggressive, and it allows no alternatives should E85 fail to make it to the market in the anticipated volumes and needed locations. Company product plans for 2012 are firming-up now and legislating a 45 percent mandate by that date would impose an enormous resource burden on some companies. This mandate would compete with engineering resources needed to improve vehicle fuel economy. Moreover, 2012 provides insufficient lead time for small-to intermediate-size automakers that are not already producing those types of vehicles.

Doubling the CAFE Penalty Unfairly Hurts Small-Line Manufacturers.

The Alliance does not support the doubling of the CAFE penalty. This proposal discriminates against smaller manufacturers and those with limited product lines. Ultimately, it will cause consumers to pay more for certain vehicles, while similar, possibly less efficient, vehicles from manufacturers with a wider product range will not carry the additional costs.

Extending Flex Fuel Credits Will Incentivize Production and Reduce the Cost of Compliance.

The Alliance does support two provisions that are not currently in the proposed legislation. First, the Alliance supports extending CAFE credits for flexible fuel vehicles. An incentive-based approach such as this will continue the growth in numbers of Flexible Fuel Vehicles without harming manufacturers. Second, the Alliance supports extending the carry-forward, carry-back credits to five years from three years for additional flexibility in adjusting to constantly varying market conditions. There are also many provisions in the proposed legislation that require further review and analysis, and we want to continue constructive discussions with policymakers to move this bill forward.

Again, thank you for the opportunity to comment on this legislation. We look forward to working with you and all members of the House of Representatives as this legislation moves forward. We want to ensure that the important priorities of climate change and energy security are addressed in a meaningful way without disproportionately harming consumers or an industry that provides jobs to millions of Americans.

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2 Effectiveness and Impact of Corporate Average Fuel Economy (CAFE) Standards, Transportation Research Board, National Academy of Sciences, Washington, DC, 2002, believes that the identification of trade-offs should reside with elected officials, the consideration of these trade-offs in the selection of fuel economy targets and levels is appropriate for the expert Federal Government agency to set.
I welcome any questions you may have regarding the Alliance’s positions on improving fuel economy and reducing carbon dioxide.
Fuel Economy Regulations

Energy Policy And Conservation Act (EPCA) ↓
CAFE ↓
NHTSA ↓
Currently responsible for setting fuel economy standards at the maximum feasible level for heavy trucks.

Clean Air Act (CAA) ↓
MASS v. EPA ↓
EPA ↓
President issued E.O. on May 14 directing EPA to work with NHTSA to set CO2 reduction standards

Passenger car standard 27.5 mpg

CA, OR, WA, PA, MD, NY, NJ, RI, VT, MA, ME, CT ↓

Creates two new classes of vehicles combining passenger cars and small trucks into one category and creating a separate category for all other vehicles up to 10,000 pounds.

<table>
<thead>
<tr>
<th>Passenger Car</th>
<th>LDT1 (&lt;5,750 GVWR)</th>
<th>LDT2 (5,750 – 8,500 GVWR)</th>
<th>MDPV (8,500 – 10,000 GVWR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All cars (Lincoln Town Car, Toyota Prius, etc.)</td>
<td>Smaller pickups (Ford Ranger 2WD, Toyota Tacoma 2WD)</td>
<td>Suv's (Ford F-150, Chevy Tahoe)</td>
<td>Very Large SUV's that held less than 15 passengers (GMC Suburban, Ford Excursion)</td>
</tr>
</tbody>
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ANPRM expected later this year

2016 standard = 43.7 mpg

2016 Standard = 26.8 mpg
Autos in Europe vs. United States

Fuel
- US: 99.8% Gasoline, 0.2% Diesel
- EU: 49% Gasoline, 51% Diesel

Transmissions
- US: 92% Automatic, 8% Manual
- EU: 51% Automatic, 49% Manual

Cylinder Count
- Avg. 3.5L: 28% 4-Cyl., 23% 8-Cyl.
- Avg. 1.7L: 84% 4-Cyl., 47% 6-Cyl.

Source: http://www.epa.gov/cert/mpg/ftrends/42000601.pdf
Mr. Boucher. Thank you very much, Mr. McCurdy, and the Chair thanks all of the witnesses for your extremely helpful testimony here today.

Mr. Lampert, let me begin my questioning with you. And first, I want to compliment something that you have done. I was just handed a compelling graph. This is about my congressional district. I represent a very rural area, 27 counties and cities, literally hundreds of very small municipalities, and you have prepared for my district, and I understand for the districts of every member of this subcommittee on both sides of the aisle, a similar graph. And what this graph shows in the case of my congressional district is that we have, in our area, 10,583 flexible fueled vehicles, by your estimate, and in my district, across these 27 counties and cities, and hundreds of small municipalities, we have zero service stations with a flexible fuel pump.

Mr. Lampert. That is correct.

Mr. Boucher. So, not a single E-85 pump in 27 counties or cities, that potentially could be servicing, even today, more than 10,000 flexible fuel vehicles. Do I read that correctly?

Mr. Lampert. That is exactly right, Mr. Chairman. What we tried to do here is designate by ZIP Code the concentration of flexible fuel vehicles, as is registered and reported to the automakers, and that is a matter of public record.

Mr. Boucher. Well, it is certainly a compelling chart. It is startling in what it demonstrates. It says to me that we have got to do something to stimulate the introduction of flexible fuel pumps at service stations, and I want to thank you for preparing this.

Let me ask if you would make available to the committee the chart you have prepared for all of the members of the subcommittee. I would personally like to make sure that each of them gets the chart that is designed for their particular district.

Mr. Lampert. That has been made available to staff already, Mr. Chairman.

Mr. Boucher. Thank you. Thank you very much, Mr. Lampert.

Mr. Lampert. You are very welcome.

Mr. Boucher. For Mr. Reuther and Mr. McCurdy, I want to say first, thank you for your support of the discussion draft, which you have announced in your testimony here today.

It is designed, as I think I indicated in my statement, and Chairman Dingell has indicated in his other statements, to be a down payment on the later action that this committee will take in October, and at that time, in the September-October timeframe, we intend to construct a mandatory greenhouse gas control program. And what we are doing in this draft is a bridge to that, the first step in that direction.

I appreciate the support you have expressed for the discussion draft. My question to both of you is should our discussion draft, in major part, be adopted into law? Will you continue to work with us in fashioning a mandatory greenhouse gas control measure that we can present to the House in October? Mr. McCurdy.

Mr. McCurdy. Mr. Chairman, on March 14 in this very room, four CEOs from the Alliance of Automobile Manufacturers said yes, they would continue to work with the subcommittee. We under-
stand this is a bridge. It is a difficult bridge, but it is a bridge, and we will continue to try to work to reach that ultimate goal.

Mr. BOUCHER. Thank you very much, Mr. McCurdy. Mr. Reuther.

Mr. REUTHER. At that same hearing, the president of the UAW indicated that we strongly support an economy-wide cap and trade program, and we look forward very much to working with you to help develop that.

Mr. BOUCHER. Thank you very much, Mr. Reuther.

Mr. Drevna, in your testimony, you indicated that there might have been some miscalculation in the numbers that you used in the testimony you provided regarding the percentage reductions that would be required under our Low Carbon Fuel Standard. You have acknowledged that perhaps that was in error. I also think that your numbers are.

I am going to ask Mr. DeCicco, who I think has some information with regard to what the actual effect of that Low Carbon Fuel Standard to be is, and would you, Mr. DeCicco, care to respond? What Mr. Drevna said in his written testimony is that if our Low Carbon Fuel Standard were adopted, that it would require a 26 percent reduction in the carbon content of automotive fuels the first year, and that would lead eventually to a 38 percent reduction by 2020, and that if those numbers are accurate, that we would actually have a far more stringent Low Carbon Fuel Standard than what California has proposed, which is a 10 percent reduction in the carbon content by 2020.

So, Mr. DeCicco, how do you interpret our Low Carbon Fuel Standard, in terms of the percentage reductions that in fact it would require?

Mr. DECICCO. Mr. Chairman, we do interpret it differently than Mr. Drevna's calculations. In our written submission, we have a table, table 3 on page 12, in which we provide preliminary estimates of the overall covered motor fuel pool carbon intensity reduction implied by the discussion draft. Our estimate, and we emphasize that these are preliminary, we have not done a full calculation in the short term, but we estimate that by 2020, the implied reduction is 3.3 percent, and again, as you pointed out, that is actually much less, a third of what has been proposed in California's Low Carbon Fuel Standard.

Mr. BOUCHER. Thank you very much, Mr. DeCicco. Mr. Drevna, would you concede that perhaps his calculations are accurate?

Mr. DREVNA. Mr. Chairman, based upon how we read the draft, and I think there is a lot of confusion about as to exactly what is and what isn't covered under the calculations, and to be quite candid, in very recent conversations we had with staff, they tried to explain to us what the intent was, our numbers are based upon what we thought the draft had said and does say, so I think that is the confusion with the draft that we want to work with staff and you on, to make sure we are at least speaking from the same hymnal here.

Mr. BOUCHER. Well, thank you, Mr. Drevna, and we will all endeavor to come to a common understanding about precisely what the effect is. I personally think Mr. DeCicco has it right.

My time has expired. The gentleman from Illinois, Mr. Hastert, for 5 minutes.
Mr. HASTERT. I thank the chairman. Just to follow up on the comment. I have some questions, too, about what goes into these things. I come from a stretch of about 120 miles that is all cornfields and beanfields, it starts on the very western edge of the Chicago suburbs, and goes all the way to the Mississippi River. Those fields are going to be producing soybeans and corn, regardless of those, if it is going to be soy diesel or if it is going to be ethanol.

And so, if you are going to start to add in what the cost of corn is, and the fuels that go to produce corn, and the dry corn, and those things, and add them into the cost of fuel, I don't know if you are also going to add that into the cost of bacon when it gets to the market. Because there are two ways that that corn can go. It can go to be making fuels that reduce our emissions, or we could be making bacon. So, there are two cost dispersions out there, and I am not sure how we add all these things in.

That being said, Mr. Lampert, I appreciate that map, because it does show my district, that has got the I–80 corridor there, with most of those stations, because there is a lot of traffic down there, and actually, I did a little calculation. I have about 7,200 square miles, and if you take out the I–80 stations that are right on the edge of my district, I have only got seven stations in there, and I bought an E–85 truck last year. That was a good thing to do; a kind of symbolism of what we are trying to do. The trouble is, I have to drive 25 miles to fill it up. If I have to drive 25 miles to find a gas station to fill it up, and then 25 miles back home, you kind of shoot all the economy and savings that are already there.

So, contrary to what Ms. Hubbard said, we need to be able to make sure that those pumps are available to people, because I am sure we have, in my district, almost 24,000 flex fuel vehicles with approximately seven stations, if you take out the I–80 stations. It just doesn’t calculate.

But one of the things that we have to think about is what really causes the problems that prohibit E–85 availability, and one of the things that really, when you talk about all the new fuels that may come along stream, whether it be cellulosic, or ethanol, or soy diesel, and when you talk about the coal to liquid, what are the mix of low emission fuels with the traditional old petroleum fuels that we have to find? What is the ideal out there where you get the maximum fuel efficiency and the least emissions. I am not sure that we have found that number yet. I am not sure if the true number is E–85 or E–45 or E–50 or E–28. I don’t know that yet. We are going to have to do, probably ought to do a couple studies, and I think maybe the private sector might be able, best thing to do that may be the Government. But I think that is something you need to think about.

But in your mind, you have been very helpful in trying to bring along and find ways to implement E–85 distributors. What has been one of the biggest prohibitions that you have found?

Mr. LAMPERT. Well, the continued prohibition that we see of placing E–85 under a canopy, testimony has been made here that if the owner of a station or a vendor did not own the facility, there may be some liability issues. I clearly understand that. I think to your question, if I would own a station, and I was a branded operator, in many cases, we could not put E–85 under the canopy. I have a
recent statement from ConocoPhillips where they are now allowing that in four States in the country. So, apparently, 46 States in the Nation, ConocoPhillips does not allow alternative fuel under the canopy.

That has certainly been an issue. We have, today, Mr. Speaker, about one gas station for every 1,500 motor vehicles in the United States. We have one E–85 station for every 5,000 flexible fuel vehicles. So, clearly, we have a long way to go. But this is a very infant industry. E–85 has only been around for 12, 15 years, where obviously, the gasoline business is 110 years old. So, we have made progress, but certainly have a long way to go.

Mr. HASTERT. I have just a short period of time left, but one of the things we are trying to do is make sure that the liability for an E–85 station isn’t any different from the liability of somebody that is doing 100 percent petroleum. I think that is fair, and that may expedite the placement of pumps. We have found that the whole issue of certification has become a slow walk through this process, and we are seeing, I don’t know how, why that has happened with Underwriters Laboratories, but we need to expedite that process as well.

And one thing, if the chairman will allow me to say, that I don’t necessarily think the mandating of pumps and stations is the right thing to do, until I heard Mrs. Hubbard’s testimony, and the stalling tactics of vertically owned retail distributors, I think has certainly been on the record, and maybe we have to mandate that part. I heard her testimony, and I think maybe she has tilted me over the other way, a tipping point, I guess is the term that we have today.

So, I appreciate your testimony, and I think we have a lot of things that we really need to mull over before we get this whole thing to move. Thank you.

Mr. BOUCHER. Thank you very much, Mr. Hastert. The gentleman from Georgia, Mr. Barrow, is recognized for 8 minutes.

Mr. BARROW. Thank you, Mr. Chairman.

At the outset, this is how I see the problem. As I see the problem, we have got a three legged stool. One leg is the infrastructure that is going to be tasked with providing us with a clean alternative fuel in the future. The second leg is an industry that is going to be tasked to provide the infrastructure to deliver that fuel to the customers. And the other leg of the tool is an industry that is going to be tasked with providing the fleet that can run on it.

And the problem is both between legs and within legs, because nobody wants to go first, and nobody can afford to go first, because anybody is going first, they are going to get whipped. If this whole industry on one leg is going to be moving forward to be reaching the goals we want in the future, it is going to be an economic train wreck for the rest of us, and we are trying to avoid, trying to get all this moving at the same time. And that is the problem, as I see it.

Mr. Dinneen, I want to begin with you. Asking, this business about the supply of the clean fuel, just how in regard to that, that one of the legs of the stool, OK. Right now, our policy is to require that a certain percentage of the fuel in this country, a certain percentage of the fuel, have a certain percent of ethanol in it, but not
requiring all the fuel in the country to have that percentage means that some areas of the country end up sucking up all the E–10 that we have got in order to meet environmental standards or constraints imposed as a result of nonattainment in certain areas.

What I want to ask you is, and apparently, the working draft is going to continue, that is going to build on that model. We are not going to require all the fuel to have a certain percentage. We are just going to require a certain percentage of the fuel to have a certain percentage. And the question I want to ask is, can your industry, does it have the capacity to provide a certain minimum percentage of alternative fuels in every gallon of gas sold in the entire country? Can we produce enough ethanol to have E–10 everywhere in the country, and still provide enough for those folks who have got to have it in order to meet their local constraints?

Mr. Dinneen. Congressman, absolutely we can. Quite frankly, we are probably going to get there even without legislation. We have got 12 million gallons of ethanol production, either in service today or under construction. We have 140 billion gallon gasoline market. So, we are already getting to the point where we are going to reach the saturation point, in terms of the existing blend market, which is why this legislation is really important, because it envisions other markets of E–85, flexible fuel vehicles, and it addresses the other two legs of that stool.

But in terms of the production, our own single leg, I would also suggest to you that while we see the opportunity to get the 10 percent blends, and I think we are going to get there, the flexible fuel market may not be developing quite as fast as our industry is building, and you may have a situation very soon, Congressman, where we have more than enough ethanol to satisfy the 10 percent market across the country.

Mr. Barrow. Will that market address the other legs of the stool, because if there was an infrastructure to deliver it, and there was a fleet to run on it, I think you all’s problem would be solved.

Let me turn to Ms. Hubbard with that thought in mind. Ms. Hubbard, you and your colleagues, and your associates probably, the folks I represent depend on you all for a whole lot more than they get from this Congress, it seems to me from time to time, so I want to turn to you with a great deal of concern and interest, because you all are going to be tasked with trying to deliver this, and I share your concerns about not being forced to do something you can’t do, and meet a demand that ain’t there.

The question I want to ask you is what can we do to help you all do that? If we get these other two legs of the stool moving, so you get the supply of the fuel coming, we get the fleet ramping up more or less, what can we do to help facilitate it? First of all, to make sure that your entire leg of the stool ain’t out of line with everybody else, but also to make sure that folks within that leg, folks who are competing with the, for the business that is done by you and your colleagues and your competitors, that nobody is put at a disproportionate disadvantage in trying to get on board.

What can we do to help you all?

Ms. Hubbard. Obviously, if the demand exists, our industry has historically been early adopters of new products, and we also are pretty significant risk-takers. So, as the demand was there, we
have talked about some of these vehicles within the marketplace, 10,000 or 7,500 vehicles in a widespread area could not be serviced by one or two locations, and if we don’t have the volume, the rate of return would take decades.

Mr. BARROW. How do you evaluate the working draft’s approach to this problem, by trying to make sure that mandates don’t kick in until you have got a 15 percent penetration in the market? I am not sure if I can get the 15 percent, but how do you all assess that?

Ms. HUBBARD. Well, the problem even with the 15 percent, if that was determined to be a justifiable amount, how do you determine, then, who becomes that either sacrificial lamb or the risk-taker? How do these retailers pick out in their force to, as kind of the Field of Dreams, build it and they will come, but it is almost a nightmare, because we don’t know that they will come, and we don’t know how do you choose which is the retailer that unfortunately has to take that risk?

Mr. BARROW. Let me turn to the other leg. So, Mr. McCurdy, in terms of the ability to deliver the fleet of vehicles that can run on this, provided we get this supply, and we get the infrastructure to deliver it, I got to tell you, in my part of the country, the folks depend upon their vehicles to work. I just completed an 11 city town hall tour of the rural areas of my district, and the truck, the pickup truck is the all-purpose vehicle, and a pickup’s got to have pickup. We just can’t afford to have little itty-bitty pickup trucks that may look big on the outside, but they can’t carry any load, or they can’t pull off from a dead stop. We have got to have pickups that can really pick up and go.

What is the future? What can you tell us is coming, in terms of strike a balance, because we don’t want to sacrifice, we want to get fuel economy, and we want to get low emissions, but we have got to have working trucks that can do real work. They have got to be, and we have to have lots of them. So, what is the future on that? What can you all tell us?

Mr. MCCURDY. Congressman, it is a great question, and you are exactly right, as far as the consumer demand and need for the types of vehicles that provide work throughout most of the country. And there is a chicken and egg problem here, but from a technology standpoint, we already manufacture over 60 different models that are alternative fuel available, or capable.

Mr. BARROW. I think we got the fuel. I think you have got the economy standards that I am concerned about.

Mr. MCCURDY. We have talked some about E–85, we have talked about other types, but there is also diesel, biodiesel, and other things that are there, as well. We see in Europe and other places that diesel provides a lot of torque.

Mr. BARROW. Indeed.

Mr. MCCURDY. And diesels, I think, are quite capable for large vehicles, including trucks. And flex fuel vehicles can, again, have internal combustion engines that use other forms of fuel. So, as I said, there are 10.5 million of those vehicles out there. The challenge is there isn’t the infrastructure, there is not the fuel available, and that is exactly what the committee is attempting to address.
So, we can produce it, and it really does address one of the major concerns of this committee, and I think the Congress, and that is energy dependence, dependence on foreign oil, and there can be major reduction there. On the flip side of that the movement towards a lower carbon intense society. And you don't have to have a complete tradeoff of lower carbon for, as you said, itty-bitty trucks or small vehicles.

Mr. Bарrow. Well, big trucks with itty-bitty engines.

Mr. McCurdy. That is right. Well, you can have workhorse vehicles with high technology, provided the infrastructure is there and the fuel is there.

Mr. Barrow. Well, you are right. That describes a chicken and egg problem of the hearing. I said this is not just a chicken and egg problem, it is a chicken, chickenfeed, chicken coop, and rooster problem, not to mention the chickenhawks that are out there.

Thank you, Mr. Chairman. Yield back.

Mr. Boucher. Thank you very much, Mr. Barrow. The gentleman from Illinois, Mr. Shimkus, is recognized for 5 minutes.

Mr. Shimkus. Thank you, Mr. Chairman. And I appreciate the map. Of course, my district is doing well, I think. In my district line, there are about 22 E–85 stations. I think in the ZIP Code area, you have got 36. I have 30 counties. They say here, in the ZIP Code calculations, 22,000, so comparable, we have done well.

And, but I know 4 years ago, we had zero. So, this promotion of flexible fuel retail locations has come about based upon our work here, and I can guarantee my colleagues that their districts will—I do not have a single ethanol refinery in my district. So, it is not because I have one in my district. It is because the public demanded it, and I like Mr. Barrow's comments, too. I have 30 counties in southern Illinois. We want working trucks. Now, I have a little itty-bitty truck. I am a politician, I really don't work, but a lot of my folks do. I had the bean producers in. We have got the pork producers. We have got farmers. We have got to have trucks that work, and they got to be big trucks, and that is part of this debate.

Mr. DeCicco, has the Earth climate ever, in the history—I am a creationist—in the world’s history, has it ever been in balance?

Mr. DeCicco. Balance is a question of time, and it has changed slowly through time. What we are seeing now are changes of an unprecedented nature, in terms of their danger and rapidity.

Mr. Shimkus. Thank you. I would submit to you that the Earth has never been in balance, and to assume that human beings can balance the climate is very arrogant on our part. And it is interesting how this has now taken a worldwide application based upon one election in which I would guess not a single congressional election was won on climate change, and now we are going to affect manufacturing and the world environment, the whole economy of our country, and maybe the world, based upon this debate, and it is very frustrating for those of us who do believe, of the arrogance of the human being thinking that we will control the world’s climate.

Mr. Dinneen, where is the ethanol industry on a Low Carbon Fuel Standard?
Mr. DINNEEN. We generally support the effort to try to use carbon emissions, and we are supportive of the effort in the discussion draft, that moves us forward.

Mr. SHIMKUS. I am going to get to my question, because my time is running pretty quick, would this Low Carbon Fuel Standard limit the use of certain renewable fuels?

Mr. DINNEEN. They may limit it. I think there are a lot of questions about how it would be imposed, because how you do the lifecycle analysis.

Mr. SHIMKUS. And that is the point I want to highlight to the chairman is the lifecycle debate on this, is where we need to, I need to move quicker. What about compliance values in this bill?

Mr. DINNEEN. As I said in my testimony, I think it does undermine the potential petroleum displacement in the act, in the program.

Mr. SHIMKUS. Would it be helpful, on the Alternative Fuel Standard, if we apportion percentages and goals to be achieved by the different fuel mixes? Would that be helpful? Because the issue is, we have got the corn ethanol debate, and then we have the cellulosic debate. We are putting great hope in cellulosic. We had great testimony here in this committee, but that is still further down the line for permitting and application than the coal-to-liquid debate, since we know we can do it, all we have to do is start building them. Does a percentage debate help or hurt in this discussion?

Mr. DINNEEN. I haven’t really given a great deal of thought to it. I would want to analyze it a little bit better. I do think that there are ways to make the program more effective, though.

Mr. SHIMKUS. And if I could, Mr. McCurdy, let us talk about this other blend. The reality is, in my district, when we have E-85 pumps, there are folks, they self-mix, when gas prices are high. So they are doing that experimentation, of course, the retailers have a little concern on the debate, but I do want to highlight, all these 22 stations, maybe 20 of them now are all independent retailers, and I have great, Ms. Hubbard, I have great relations with the folks in my district. They are the ones who took the risk, and they are getting the benefit now.

But Mr. McCurdy, can you talk about this whole E-15, E-20 debate, and where we should head?

Mr. McCurdy. Well, that is a good question, and one that we have had internally as well. E-10, obviously, is the current plan. E-85 is a standard, that I think the industry supports. There is a debate about what happens when you start blending in between. The key here is to have harmonization of those standards, and I think that the committee is going the right direction to look at those, too, and at least develop that standard.

Mr. SHIMKUS. Thank you, Mr. Chairman, and I think I have found one issue that I think the autoworkers might rally in support behind Congressman Shimkus on this bill, and I look forward to working with you all.

Mr. BOUCHER. Thank you very much, Mr. Shimkus. The gentleman from Massachusetts, Mr. Markey, is recognized for 5 minutes.

Mr. MARKEY. Thank you, Mr. Chairman, very much.
We have a huge national security issue that is looming in our country, and that is this dramatic increase in our dependence upon imported oil, from 27 percent in 1986 to 60 percent of our oil imported last year, and it is all. And much of it is related to the fact that, the doubling of our fuel economy standards from 1975 to 1986 reduced dramatically our dependence upon foreign oil, and once that standard was allowed to erode, we now see this dramatic increase.

The consequences, of course, are that we wind up as Americans more dependent upon Middle Eastern oil, and we also wind up funding countries and, unfortunately, radical elements in those countries, that have come back to haunt our country, in the form of al-Qaeda. And it is critical for us to reduce dramatically our dependence upon oil from these countries.

Now, in Europe, I just returned from a visit to Europe with the Speaker, we found that Europe is going to increase, by 2012, their CAFE standards to 43.4 miles per gallon. That is by 2012. And in its reflection of this critical issue, not only of climate change, but of national security interests. They already meet a 35 mile per gallon standard, but they are saying over the next 5 years, they want to dramatically increase it.

That is my feeling as well. This is a national security crisis for our country, and we cannot allow this to continue, not with 170,000 young men and women over there, and 1.6 million young men and women who have already gone over there to the Middle East for Iraq. The higher that goes is the more likely other young men and women will have to go over there.

So, Mr. McCurdy, it is very difficult for me to understand why General Motors, Ford, for example, can meet a standard of 43.4 miles per gallon by 2012. They are already meeting the 35 mile per gallon standard. Ford and General Motors are the top of the list of European auto sellers right now. They outsell Toyota and Honda in Europe. My question is, the laws of physics are the same in the EU and here in the United States. I am asking that 10 years from now, in my amendment that I will be making next week, that the United States meet a standard which the EU meets today.

Can you tell me why that is unreasonable, given one, what is going on in Europe, and how the American automotive industry is going to meet that challenge in 2012, and this incredible threat to our national security, which is represented by the importation of oil, and how much of that oil money is used to then come back to haunt our country?

Mr. McCurdy. I thank my friend of 27 years for asking the question, and since I was in your office recently, and you showed me that chart, I thought I would bring you a chart as well.

And with regard to the question of autos in Europe, I think it is actually pretty clear, Mr. Chairman, and when you look at the difference, the first one as being fuel, in the United States, we are 99.8 percent gasoline fueled or driven automobiles. In Europe, it is 51 percent diesel and 49 percent gasoline. That is a huge difference.

Second, look at the issue of transmissions. Mr. Barrow mentioned he likes trucks, and Mr. Shimkus said they need trucks that work. In the United States, 92 percent of our vehicles are automatic. In
Europe, they are 80 percent stick shift, all right? Let us look at the real question here. In the United States, 23 percent are 8 cylinders, 47 percent are 6 cylinders, while only 28 percent are 4 cylinders. In Europe, 84 percent of the vehicles are 4 cylinder engines, and only 1 percent is an 8 cylinder. So, there is a difference. You are right, this is a big change, but when you are looking at the size of the cars, the weight of the cars, the classification, the requirements of the automobiles, they are not as heavily penetrated with pickups.

Mr. Markey. My time is going to run out. All I am saying to you is you are telling us that it can be done, and that it is being done already, and let me add this, a Ford Escape hybrid SUV today gets 36 miles per gallon, and a Ford Escape does not with equal safety, so Ford is already doing it in the United States today. It is being done in Europe, it is being done in the United States for SUVs or these light trucks by Ford.

We are saying 10 years from now.

Mr. McCurdy. You are mixing apples and oranges.

Mr. Markey. Not at all.

Mr. McCurdy. Yes, it can be done, Mr. Markey, if you want smaller vehicles, if you want 4 cylinder engines, if you want stick shifts.

Mr. Markey. No, I am talking about a Ford Escape SUV hybrid getting—I am talking a large——

Mr. McCurdy. The Ford Escape is a great hybrid. They are hybrid technologies, it is an important technology. It is being introduced. I have a hybrid. There are hybrids, and we want to see that expand, but that is not the only answer to this question.

Mr. Markey. But you don't have to do it the same way, my only point is that Ford is already doing it with their Ford Escape hybrid. It can be done. It must be done. The national security of our country remains in jeopardy.

Mr. McCurdy [continuing]. hybrids, but I think it is last, because of the penetration in Europe is diesel. And why have they had more diesel penetration? Because there is almost a $4 gasoline tax, and there is a dollar cheaper tax for diesel.

Mr. Markey. They are mandating this 43.4. This is not a gasoline tax increase. It is an absolute mandate.

Mr. McCurdy. They don't have a CAFE requirement. They have not had a CAFE requirement.

Mr. Markey. They are going to—they are mandating——

Mr. McCurdy. We are going to see——

Mr. Boucher. Mr. Markey, some of us are actually interested in hearing the answers to these questions. They are such good questions, but the gentleman’s time is expired, in any event.

The gentleman from Oregon, Mr. Walden, is recognized for 5 minutes.

Mr. Walden. Thank you very much, Mr. Chairman. I would like to follow up on this line of questioning. Mr. McCurdy, do the European countries have the same clean air standards as the United States?

Mr. McCurdy. No. Actually, on particulates and oxides of nitrogen, NOx, we have a three times more stringent standard on diesel than there currently is in Europe, and that is the challenge for the
introduction of diesel and biodiesel, clean diesel in the United States. Now, that is the bad news. The good news is that we are making improvements there. There is new technology available. There is branded technology, such as BlueTech and others, that will now be capable of meeting the stringent U.S. requirements on diesel for the NOx.

Mr. WALDEN. And my understanding is, and I was over in Europe last week with Mr. Boucher and Mr. Hastert, and others, that in Europe, there are 370,000 premature deaths in Europe due to poor air quality, a lot of which is coming out of the tailpipes of diesel burning, dirty burning cars. In the United States, it is about 20,000 premature deaths due to air quality problems.

So, there is a tradeoff here that has occurred in Europe where people just die earlier, but they get better gas mileage. Isn’t that almost what is being said? Now, what we are doing, and what you are going to push you to do, as your industry, is give us other fuel alternatives under our clean air standards, so that we can have both, clean emissions or reduced emissions, or as minimal emissions as possible, cleanest air as possible, and get us better gas mileage, or diesel mileage.

And my understanding is there are automakers who are going to come out with diesels in the next year that will do both. Do you know what kind of mileage they are going to achieve?

Mr. MCCURDY. Generally, the diesels get 20 to 25, maybe 30 percent more efficiency than the gasoline equivalent.

Mr. WALDEN. So, what will that get them to? Because we are going to argue here about this notion of trying to increase the fuel economy standards.

Mr. MCCURDY. Right. Well, Congressman, that is one of the challenges that this committee and the Congress and the public faces. What is the improvement in gas mileage? It depends on the vehicle, it depends on how the vehicle is used. But there are percentage improvements. But many of the diesels, again, can be applied to trucks, to pickups, and you will see significant increases in fuel efficiency.

Mr. WALDEN. All right.

Mr. MCCURDY. And as you said, cleaner.

Mr. WALDEN. I am going to have to cut you off, just because I only have about 2 minutes here.

Mr. Karsner, is he still—no. Sorry?

Mr. BOUCHER. Next panel.

Mr. WALDEN. Next panel, I should leave these on when I read. All right. Well, then, I want to go to who can talk to me about ethanol and the renewable fuels? Now, I come from the West, and when I was out touring around my district, we actually have a couple ethanol plants that are under construction or in the design phase, and yet, the concern I consistently hear is that we are driving up the cost of corn, which we don’t raise a lot of out on the west coast. In fact, these ethanol plants are going to have to truck it in, hopefully, from Mr. Hastert’s district. That is the only place I would really like to see it come from. That is important to his economy and mine.

But I get cattle ranchers and dairy lots that are saying this is driving us to the drink here with higher finishing costs. Now, I
Mr. Walden. All right. And I know my time has expired. Thank you all for your testimony and your answers.

Mr. Boucher. Thank you very much, Mr. Walden. The gentleman from Pennsylvania, Mr. Doyle, is recognized for 5 minutes.

Mr. Doyle. Thank you, Mr. Chairman.

I got this graph. I am just curious. Is three stations for 11,000 flex fuel vehicles enough, too little?

Mr. Lampert. Well, as I had mentioned earlier, on a national average, there is approximately one gasoline outlet per 1,500 vehicles. So, to answer your question, there is approximately one E-85 outlet in your district for every 3,500 or 4,000 vehicles. So, obviously, that is not meeting the national average of gasoline outlets.

Mr. Doyle. And Ms. Hubbard, you said your industry is quick responders and risk-takers, so why aren’t there more——

Ms. Hubbard. Well, the problem, of course, is the concentration of those vehicles, and if there are enough of those vehicles within a serviceable market area, as you know, probably within your own community, you don’t drive the whole city to shop at a convenience store. It is close to where either you live or you work. And so, the demand, if there were 20 gallons per vehicle every single week,
that still doesn’t put the volume of fuel that goes through there. It doesn’t make it adequate to justify the investment.

Mr. Doyle. Thank you.

Mr. DeCicco, you said that one of the things that concerned you about the bill is that the levels that are set for the vehicles fall far short of what is needed, and when you look at the draft, section 301 that starts on page 41, as I understand it, the draft directs NHTSA Administrator to set CAFE standards at the maximum feasible level every year, beginning in model year 2012, with the express requirement that under no circumstances are CAFE standards to be lower than 36 miles per gallon for cars in model year 2022, and 30 miles per gallon for trucks in model year 2025.

So, I would like to ask you some questions. Is there any language in the draft, as you read it, that would prohibit NHTSA, provided the agency deems it feasible, from setting the CAFE standards for model year 2025 at 40 miles per gallon?

Mr. DeCicco. No.

Mr. Doyle. 50 miles per gallon?

Mr. DeCicco. No.

Mr. Doyle. 150 miles per gallon?

Mr. DeCicco. No.

Mr. Doyle. So, the draft would, in effect, give future administrations the ability to meet or exceed the CAFE targets set out by this proposal or any others, regardless of the specific number in the draft, and I think that is an important point to keep in mind. These are floors, not ceilings.

Mr. Reuther or Mr. McCurdy, perhaps you both might respond, too. Given what you are seeing in the technology in hybrid vehicles and other types of vehicles that are being developed, is it reasonable to expect that by the year 2025, that there is a high probability that we could probably exceed what this floor is?

Mr. McCurdy. Alan is punting here.

Well, first of all, the targets that are in the bill are extremely aggressive. And the average efficiency in cars are far more efficient today than they were in the ‘70’s. There has been roughly 1 percent a year. To get that level of advancement takes incredible investment of time, money, and engineering, and some potential breakthroughs.

I am not discounting the potential for breakthroughs. If we have breakthroughs in plug-in hybrids, if we have breakthroughs in hydrogen, and some of the other capabilities, fuel cells, then in fact you might be able to see miles per gallon achievement in excess of those targets that you see. But the other critical factor here is availability of fuels, and the third and most important is whether or not the consumer supports it.

I don’t know if you saw the announcement this week, that Honda announced it was canceling, terminating its hybrid Accord. That is a decision they make based on the model. That doesn’t mean it is a technology failure. That was, perhaps, a model failure that didn’t catch on with the public. That is always the risk that manufacturers face, is that we can build it, but if they don’t buy it, then we haven’t accomplished their goals, and we——

Mr. Doyle. Isn’t that basically the argument you were making with Mr. Markey about European culture and American culture,
that basically, that it isn’t a technology issue. You are obviously making cars in Europe that meet these fuel economy standards. It is just that Americans, from the chart that I saw, they don’t drive stick shift, diesel, four cylinder cars, or they do, but in much smaller percentages than the Europeans do. So, it is not that you don’t know how to make the car, it is that, will Americans start to drive those kinds of cars that get that kind of mileage, and that is a culture change that has to take place in the country, too.

I have a Ford Escape hybrid. I want to tell you, it is a great vehicle. I just by choice buy American cars only, and I have been railing at Detroit for years about you know, why doesn’t an American car manufacturer make a hybrid. I have never had a lick of trouble with that car. It says it gets 36 miles to a gallon. I am getting more like about 29, but I am very happy that when I fill the tank up, it is still under $30, even with the price of gasoline now.

And I don’t know what it would take to wake up Detroit that Americans want these kinds of cars, and they should be gearing up for it. This CAFE standard battle really shouldn’t be a battle much longer, once Detroit starts to get it, and once technology helps us to get there.

Mr. McCurdy. Well, Congressman, if I could respond just quickly.

Mr. Boucher. Well, Mr. McCurdy, I am afraid the time for that questioning has expired.

Mr. Doyle. Thank you, Mr. Chairman. I am sorry for taking so much time.

Mr. Boucher. Thank you very much, Mr. Doyle. The gentleman from California, Mr. Waxman, is recognized for 5 minutes.

Mr. Waxman. Thank you, Mr. Chairman.

I would like to start by seeking unanimous consent to put in the record a letter from a dozen members of this committee to you and Chairman Dingell, expressing our concerns about and opposition to this discussion draft. We are also going to release this letter to the public.

Mr. Boucher. Without objection.

Mr. Waxman. And second, I would like to request unanimous consent to put six additional letters in the record. These letters express the concerns and opposition of eight Governors, 15 members of the National Association of Attorneys General, the National Association of Clean Air Agencies, the Clean Air Association of the Northeast States, and leading environmental and consumer groups.

Mr. Boucher. Mr. Waxman, we have agreed that unanimous consent requests for submitting materials for the record will be granted as a group at the end of the hearing, and we would ask that the material be submitted to the staff on both sides, so we can evaluate it in advance of that.

Mr. Waxman. That is fine, if you will put them all together.

Mr. Boucher. Thank you.

Mr. Waxman. We will certainly make them available.

Mr. DeCicco, the subcommittee has developed the legislation we are discussing today to address two of the Nation’s most important issues, the Nation’s threatened energy security and global climate change. If we are careful, we can address both issues simulta-
neously, and leave a planet for our children and grandchildren, that is clean, sustainable, and more secure.

I am concerned, however, that the draft before us will lead the Nation in a dangerous and wrong direction. Earlier this year, the Supreme Court issued a landmark ruling on global warming. This case came to the Supreme Court when EPA rejected a petition from the States and others for EPA to regulate greenhouse gas emissions from automobiles. Is that right?

Mr. Decicco. That is right.

Mr. Waxman. And the States had petitioned EPA, because global warming is a critically important issue, and they read the Clean Air Act to provide EPA with the necessary authority to regulate automobile emissions.

EPA argued they didn’t have that authority, and denied the State petition. The Court found that EPA was wrong. Congress had given EPA authority to regulate motor vehicles under the Clean Air Act, and EPA must do so unless greenhouse gases don’t contribute to climate change. Is that an accurate description of the case?

Mr. Decicco. That is my best understanding of it.

Mr. Waxman. The legislation we are examining today addresses this precise issue. It amends the Clean Air Act to rescind EPA’s authority to regulate greenhouse gas emissions from motor vehicles. Am I correct in that reading?

Mr. Decicco. Yes.

Mr. Waxman. It seems like we are heading in exactly the wrong direction. Is there anything you would add to that? It just seems to me that we are removing EPA’s ability to regulate in this area, and we are also denying the States the ability to regulate in this area.

Mr. Decicco. That is right, Mr. Waxman, and those are very serious concerns, as we pointed out in our testimony. Just when the Nation needs to act quickly on climate change, just as California and now 11 other States, with others pending, have stepped up to the plate with some breakthrough proposals to lead in that direction, and just as the Supreme Court has found that greenhouse gases can be considered pollutants under the Clean Air Act, to take that leadership away, to take that authority away from EPA is a huge step backward, in our view.

Mr. Waxman. It seems to me we have a global problem, and we ought to have a global solution to it. If we can’t do that, we ought to at least have a national one. If we can’t get a good national one, we ought to at least let the States do what they want, even the cities, because oftentimes, whoever takes action will become the leader, and I have always regretted the fact that we are becoming less of a leader in some of the technology that would be developed if we actually got started to do the regulations as necessary.

EPA has regulated pollution from motor vehicles for almost 40 years. Vehicles today are dramatically cleaner than they were in 1970, thanks to EPA and State efforts, and we all breathe cleaner air as a result. EPA has the authority and the responsibility to produce the same strong results for global warming pollution. In my view, the last thing that the Congress should be doing is to stop EPA from beginning to address this problem.
I thank you for your testimony, and yield back the time, Mr. Chairman.

Mr. Doyle [presiding]. Thank you, Mr. Waxman. The Chair now recognizes the gentleman from Utah, Mr. Matheson, for 5 minutes.

Mr. Matheson. Thank you, Mr. Chairman. As I mentioned in my opening statement, I would like to just flesh out this issue a little bit.

When it comes to the automobile industry, and the nature of how you develop new product lines, and the timeframes and the capital required to do that, I would like to get a sense if my concern is valid or not, about uncertainty created by the potential of two different Federal agencies offering different standards, plus potentially various States also offering different standards, and how does, how will our auto industry respond to that level of uncertainty?

Mr. McCurry, maybe you could start.

Mr. McCurdy. Thank you, Congressman. It is a shame Mr. Waxman has to leave, because I wanted to respond to his point, but I think we can build on it with your question.

The industry would like to——

Mr. Matheson. I don’t want to be in the position of opposing Mr.—

Mr. McCurdy. No, no, that is all right. I think it is important. One thing that manufacturing needs is some transparency and certainty and predictability.

Mr. Matheson. Right.

Mr. McCurdy. And the challenge is that NHTSA today has 30 years of experience in addressing the technology for primary information, having the models to actually develop fuel efficiency requirements for the auto industry. That is an experience base that States do not have. That is an experience base in technology that EPA currently does not have.

And as I understand Massachusetts v. EPA, the Court did not say EPA, you must go regulate that. They have to do a determination of whether or not it is a pollutant, but they also can work, it encouraged, the Supreme Court actually encouraged the agencies to work together, the Department of Transportation, and the EPA, and probably, in the future, the Department of Energy.

So California can still provide leadership. It is just that they can’t, they should not, in our opinion, be able to develop regulation that is contrary to what NHTSA and the expertise existing within that agency, and create different standards. This industry cannot survive with 50 different standards, or a dozen different standards, or five different standards.

Congressman, you are exactly right. It is a global problem. It is a national problem. There is a potential for a national solution. You are now in the majority. Let us have a national resolution. Let us not have local. One of the keys, again, even with California or other States, they can continue to provide significant leadership on this front. Look at the incentives for HOV lanes. Look at dealing with congestion. There are a number of things they can do to incentivize, alert, educate consumers about the alternatives out there, and the technology available.
But please don’t strap an industry that is already highly competitive with additional regulation, and if you look at the testimony of some of the cases, the experts even at CARB, which is the Air Resources Board in California, did not take into consideration the very important questions of technology, cost, economic feasibility, impact on jobs and the economy, and those are all critical for having reasonable, balanced, livable regulation.

Mr. Matheson. It seems to me that there are two issues we ought to be talking about here. One is what is the appropriate set of standards we want to meet, in terms of fuel economy. And the second issue is should we have one set of standards, or should we have a basket of standards of 2, 3, 10, whatever. And as I said, I have expressed concern about that second issue, about what it should—

Mr. Waxman. Will the gentleman yield?

Mr. Matheson. May I get one more question here?

Mr. Waxman. Sure.

Mr. Matheson. In terms of what this committee has indicated it is going to be looking at in the fall, and ideally, maybe, we would have not bifurcated this process, because these are related issues, and we are kind of dealing with them on different schedules. In the fall, the chairman of our subcommittee, the chairman of the full committee has indicated that we are going to pursue a mandatory economy-wide greenhouse gas control regimen. Is this the circumstance under which, when we do that in the fall, where we are going to create, if you will, the standards that are really going to drive where this industry goes, how do those play with each other? I guess that is what I am trying to ascertain, is how do you see those two dynamics working with each other?

Mr. McCurdy. Well, CAFE is a 1970’s regulation, and it is a challenge. Our industry has stepped up to the plate, and said it will work with this committee to explore climate change legislation, and do so in a constructive way. A number of our companies have joined groups, such as USCAP and others, that are considering this. It is a challenge, but if, we agreed that using industry terms, there is a key sequencing problem with the schedule. I realize this committee didn’t dictate the schedule, and so, you have to move the legislation. I think the preferable approach would be to take more time within this Congress, and we want it to be done in this Congress, and develop more comprehensive legislation, and a solution that addresses the national issue.

Our industry is prepared to be part of the solution. We are part of the challenge. We have a responsibility. But it needs to be a shared responsibility, and it should include all sectors of the economy, not just the one that has been—the only carbon constrained sector of the economy for the last 30 years has been the automotive industry. Let us expand it.

Mr. Doyle. The gentleman’s time has expired.

Mr. Matheson. Thank you.

Mr. Doyle. The Chair now recognizes the gentleman from Texas, Mr. Green, for 5 minutes.

Mr. Green. Thank you, Mr. Chairman, for the opportunity to participate in the subcommittee’s legislative hearing, and on the discussion draft on alternative fuels infrastructure. While I am not
a member of the Energy and Air Quality Subcommittee, this draft is of great importance in the district I represent in Texas, and where refineries, chemical plants, and pipelines play an important role in our economy. And I have just a few questions within the 5-minute timeframe.

Mr. Drevna, you state that it would be difficult to be obligated party to comply with simultaneous with an increasing Alternative Fuel Program, AFP, and a decrease in low carbon standard, the LCF, because the compliance strategies would have to change frequently. The LCF would change every year, potentially.

Can you further elaborate on your statement that, how could this hinder actually being able to sell alternative fuels?

Mr. DREVNA. Well, Congressman, it is a problem that, again, there is tension, as we see it, in the draft, between the Alternative Fuel Standard and the Low Carbon Fuel Standard. There may be, at times, it may be year 1, 2, how man you want to assign, that a particular fuel may meet the standard, but once, as Mr. Dinneen has spoken earlier, once the lifecycle question gets thrown into these fuels, and the amount of carbon intensity that it is allowed, it may eliminate those particular fuels from being used.

So we are stuck with the dilemma of what kind of investments do we make, what kind of fuels do we make, on a going forward basis? We can't, we don't want to be switching fuels every other year.

Mr. GREEN. Well, and I know there is concern now, because of the price run-up in fuels, because of the number of fuels we have in different markets that if you don't have a refinery in Texas, for example, our product typically doesn't go to California, because the pipeline system, but also, but if they have to produce a fuel for California, then it continues to limit it. The supply issue would be even more of a problem on a basis it seems like.

If the EPA on a yearly basis were to issue an LCFS that reduces the average carbon intensity allowed for fuels, how does that affect the economics of the fuels used in the FEP, and how would it affect the FEP mandates?

Mr. DREVNA. Well, Congressman, one of the concerns we have with the draft as of right now, is we are getting mixed signals. We are getting the signal that we want, we want capacity expansion to go forward, on a refinery by refinery basis, but yet, we are trying to add more and more renewables.

Now, and we understand renewables are going to play a very vital role on a going forward basis, in the Nation's transportation fuel mix. Again, one of the concerns, we have, is that, and in our written testimony, we did say we are putting the cart before the horse on this one, we are assuming the advent of technology, and we are hopeful that the appropriate technology, especially for cellulosic, will be forthcoming.

Our concern is, and the way the bill is written now, the waiver process, it is not the same as a waiver, as if we had a pipeline outage or a refinery outage, where a certain area can't get the fuel. We are talking a waiver where we would have already put the capital in to make a certain kind of fuel, with the renewable, that may or may not exist at the time we have to deliver that product.
What we are suggesting is that the staff, the draft legislation, allow the EPA Administrator to actually say within a given timeframe, say, 2 years, there will be the quantity of fuels needed on a commercial basis.

Mr. GREEN. OK. So, you don't think the EPA Administrator has the ability, under this draft, to adjust either AFP or the LCFS mandates if necessary?

Mr. DREVNA. We don't see it under this draft. We see that those numbers have to be implemented, and the waiver would take place after the fact, whether or not they are available.

Mr. GREEN. Would you feel more comfortable, for a certainty of investment, if the LCFS reductions, instead of using it on a yearly basis, would be over a group of years, so that there would be time to recoup investments, or even tool up to do?

Mr. DREVNA. Well, Congressman, what we are suggesting is that before these, what I think, whatever you would consider these huge volumes of renewables be implemented, that the Administrator make a determination that they actually are commercially available. That is what we are asking for.

Mr. GREEN. Thank you, Mr. Chairman. As a guest, I won't wear out my welcome.

Mr. DOYLE. Thank you, Mr. Green.

We have two votes coming up on the House floor, but we still have about 13 minutes, so I am going to recognize the chairman of the full committee, Mr. Dingell, for his questions.

Mr. DINGELL. Mr. Chairman, you are most gracious. Thank you.

These questions are for Mr. DeCicco. Would the staff please see to it that the flow sheet on fuel economy regulations is put up on the screen, so that we can all have an understanding of what it does. It is a delightful piece of work.

Mr. DeCicco, I hope that you and the rest of the panel will take a look at this. Now, let us take a look, and I ask unanimous consent, Mr. Chairman, that this be put in the record of the committee.

Mr. DOYLE. Without objection.

Mr. DINGELL. Now, Mr. DeCicco, these questions will require only a yes or no answer. When we started out on this business, we had the Federal Government regulating fuel efficiency through CAFE at Department of Transportation, and we had the air pollution questions regulated by the Federal EPA.

Then, because of the California experience, they asked for and got authority to have their own regulation of air pollution, and that went on for a long time, until the recent decision by the Supreme Court. Now, we have the potential, is my statement that correct?

Mr. DE Cicco. Yes.

Mr. DINGELL. All right. Now, I want you to look at this flow sheet. It tells you what a wonderful experience that we are going to have, in terms of getting regulation under the situation as we are looking at it, with the most recent Supreme Court decision. And in that, you now have the Federal EPA regulating air pollution. You have California and 10 other States regulating air pollution. You have the Department of Transportation regulating fuel efficiency. You will then have the States regulating fuel efficiency by regulating carbon dioxide emissions. Is that a fair statement?
Mr. DeCicco. I would like to check with counsel.

Mr. Dingell. No, no, yes or no. Is that a fair statement? We are going to have all these wonderful folks regulating all these things, and I am trying to figure out how we are going to sort out this confusion, and whether you folks at EDF favor that or not?

Now, please answer the question, because the clock is running, and we have a vote coming up. Is the answer to that question yes or no?

Mr. DeCicco. Yes, we favor this approach.

Mr. Dingell. OK. So, you favor it. Do you agree with me that factually, the statement that I have made, with regard to all these goodhearted folks regulating different things, is a factual statement?

Mr. DeCicco. No.

Mr. Dingell. You don't. What is wrong with my statement? Tell me in just a brief bit.

Mr. DeCicco. Under the Clean Air Act——

Mr. Dingell. No. Please tell me who regulates what, under this, and what is wrong with the statement that I have made. Let me give it to you again. DOT regulates fuel efficiency under CAFE, and EPA regulates air pollutants. California and 10 States regulate air pollutants under their law. Now, under the new change that the Supreme Court has brought forward, the EPA will continue to do what it is doing, the States will continue doing what they are doing, and DOT will continue doing what it is doing. But the States and EPA will now get in and regulate fuel efficiency, too, by regulating CO2, which is essentially a substitute regulatory program for CAFE. Isn't that a true statement? Yes or no.

Mr. DeCicco. No.

Mr. Dingell. Why is that statement not true?

Mr. DeCicco. Greenhouse gases are a much broader category——

Mr. Dingell. Is my statement about who is going to regulate true or false? I hope you were listening. If you were not, please tell us so.

Mr. DeCicco. In terms of the regulatory pathways, yes.

Mr. Dingell. Regulatory structure, I am not going by who is going to, what is right or wrong. Is my statement factual?

Mr. DeCicco. Yes.

Mr. Dingell. I don't know how many regulators are getting in there to regulate, but you have got a lot of people regulating.

Now, please tell me how this regulatory system is going to give expedited, sensible, balanced regulation that will consider the whole problem of fuel efficiency, pollutants, global warming, in an intelligent way? How do we set up a structure which does that? I will ask you to submit that for the record.

Mr. DeCicco. We will do that.

Mr. Dingell. I had hoped for better answers from you, Mr. DeCicco. Maybe if you get a chance to submit in writing something, we will have something we can deal with.

Mr. DeCicco. We will do that.

Mr. Dingell. Mr. McCurdy, what are your comments on this matter?
Mr. McCurdy. Well, Mr. Chairman, there is no one in this room, or probably in this building, that knows more about the Clean Air Act and EPCA than you do, and you were there in 1963.

Mr. Dingell. Though is my statement with regard to all these regulatory——

Mr. McCurdy. The structure is correct.

Mr. Dingell. Now the law, as it is interpreted by the Supreme Court, going to be diligently administered?

Mr. McCurdy. Absolutely. There is going to be multiple——

Mr. Dingell. Dealing with all of this wonderful confusion this is going to create, because you are going to have EPA coming forward with one set of regulations, you are going to have DOT coming forward with one set of regulations. You are going to have the States coming forward with one set of regulations. Each State is going to regulate both fuel efficiency, and they are going to also regulate pollutants.

Now, with how many different regulators are we going to be confronted with, and what is industry, and what are the environmentalists going to do to get some kind of a rational decision, where everybody isn’t standing there quarreling with everybody else about what is going to happen?

What we are going to have is going to be a magnificent situation where nothing is going to happen, we are going to have vast gridlock, and an enormous mess on our hands. Isn’t that right?

Mr. McCurdy. Yes, sir. This could be marketplace chaos, and certainly, a lack of predictability for the industry, which takes 3 years to develop a model, and 7 to 8 years to develop a power train. How in the world can they develop these technologies with all these multiplicity of regulatory agencies involved?

Mr. Dingell. I would like to welcome my old friend, Mr. Reuther. Mr. Reuther, you are a dear friend, tell us what this says to you, please.

Mr. Reuther. What it says to us is that the industry will have a much more difficult time economically trying to meet the challenges of the new fuel economy standards.

Mr. Dingell. It will also afflict, will it not, the environmentalists, who are going to have the same problems that the industry has?

Mr. Reuther. That is true, and our concern, though, is that if the industry has these difficulties economically, that is going to translate into more job loss, more benefit loss, for the workers and retirees in the industry.

Mr. Dingell. This regimen is going to create a tremendous number of jobs. It is going to be in the legal profession, because we are going to have a magnificent proliferation of litigation.

Mr. Chairman, you have been very patient. Thank you.

Mr. Doyle. Thank you, Mr. Dingell.

We want to thank the first panel for your participation today, and we are going to take a recess while we do these two votes. We will come back and start the second panel.

Thank you very much.

[Recess.]

Mr. Matheson [presiding]. For our second panel for the day, we have Mr. Alexander Karsner, who is the Assistant Secretary for
Energy Efficiency and Renewable Energy with the U.S. Department of Energy, and we have Mr. Robert Meyers. He is the Acting Assistant Administrator with the Office of Air and Radiation, with the Environmental Protection Agency.

And gentlemen, we welcome you both. If you could summarize your testimony in about 5 minutes, we would appreciate that, and Mr. Karsner, we will start with you.

STATEMENT OF ALEXANDER A. KARSNER, ASSISTANT SECRETARY, ENERGY EFFICIENCY AND RENEWABLE ENERGY, U.S. DEPARTMENT OF ENERGY, WASHINGTON, DC

Mr. Karsner. Thank you, sir. I would like to thank you, Mr. Chairman, and members of the committee for the opportunity to present the Department's views on the discussion draft concerning alternative fuels infrastructure and vehicles.

While the administration has not had sufficient time to evaluate or coordinate our agency views on the discussion draft, I am happy to provide some preliminary comments.

This subcommittee conducted an oversight hearing on alternative fuels on May 8, in which I testified on the President's 20 in 10 plan. The President has called for a very robust Alternative Fuel Standard, requiring the equivalent of 35 billion gallons of renewable and alternative fuel in 2017. Many of the provisions of the discussion draft appear consistent with the administration's policies, and may also benefit from further review and discussion.

First, the discussion draft expands on the Renewable Fuels Standard established by the Energy Policy Act of 2005 to include alternative fuels, which is consistent with the President's proposal. Encouraging the broadest range of fuel technologies is critical to the type of transformational change necessary to improve our Nation's energy security. We urge the committee to adopt a more ambitious timeframe of substantially decreasing projected gasoline consumption within the next decade. The administration believes that we must have a manageable timeframe for fuels and infrastructure deployment, and that a 10-year goal is an ambitious and appropriate metric. I would also urge the committee to consider an economic safety valve, like the one included in the President's AFS proposal, to provide obligated parties additional means to comply with the Alternative Fuel Standard requirements.

Title 2 of the discussion draft, suggests a number of possible steps towards building the infrastructure necessary to support the domestic alternative fuels industry. Section 201 proposes a $200 million infrastructure development program. It is not clear that Government grants and regulation alone can sufficiently ensure the supply chain viability of the production and delivery of alternative fuels. Creating a clear major incentive to supply fuels, like the AFS, will be amongst the most important tools to stimulate the necessary investment in infrastructure.

The Federal Government's greatest contribution to energy security is the enactment of durable policy that signals to private investors in a predictable way our long-term commitment to alternative and renewable sources of energy. If we are serious about changing our Nation's energy portfolio, we must unleash and enable the vast potential of our capital markets. Government funding and regula-
tion alone will be insufficient to bring about the magnitude of change at the rate required to address our critical security, economic, and environmental concerns.

The challenge for large-scale, upfront investments in clean energy is that the potential for outstanding returns must be realized over extended period of time, or what is called the lifecycle of the technologies used. This is true in the case of alternative fuel bio-refineries, solar rooftops, large wind farms, nuclear power plants, energy efficient products, like compact fluorescent lights, or transmission linking our clean energy sources to our urban loads.

Though clean energy sources are domestically available and generate little to no greenhouse gases, uncertainty over the necessary technologies’ lifecycle risks and capital costs severely retards the amount and type of private capital being deployed. Effective capital formation requires the Federal Government to provide the necessary policy predictability and economic climate that enables massive investments at an accelerated rate.

Additionally, on the issue of infrastructure development, the Department believes that an E–85 delivery system is an important goal of an alternative fuels infrastructure, that intermediate blends may also be a necessary and important goal. Intermediate blends may provide for more rapid absorption of renewable fuels into the consumer markets, and extend our capacity to utilize alternative and renewable fuels.

As the Department begins to assess the impact of higher blends of ethanol, and study their viability and potential, we recommend that the committee consider a balanced approach for all potential higher blends of biofuels deployment, especially in any provisions related to retail, technical, and marketing assistance.

Because flexible fuel vehicles can easily consume ethanol blends up to E–85, it is important and essential to maximize the availability of options, to scale clean biofuels deployment as expeditiously as possible. This flexibility also ensures that Government does not force the economy to over-commit to a specific fuel class, given the many other potential alternative fuels and technological pathways that may become available. In addition, both the President and Secretary Bodman have emphasized their concern over any potential artificial impediments to biofuels infrastructure.

Finally, on the vehicles provisions, while the Department believes that it is important to encourage domestic manufacturing of advanced energy technologies, section 305, which establishes a new Loan Guarantee Program for advanced battery manufacturing facilities, may in fact duplicate existing authority under EPCA title 17.

Mr. Chairman, the President has called for legislation that he can sign on this issue with urgency, and there is clear consensus that legislative action is needed to substantially reduce our dependence on oil and deploy clean energy technologies into the marketplace at an unprecedented scale and rate.

The administration looks forward to working constructively with the Congress and this committee to achieve the 20 in 10 goal, and deliver legislation that the President can sign this summer.

This concludes my prepared remarks, and I would be pleased to answer any questions the committee may have.
Mr. Chairman, members of the committee, thank you for the opportunity to present the Department’s views on the Discussion Draft Concerning Alternative Fuels, Infrastructure, and Vehicles, and to discuss programs under way in the Office of Energy Efficiency and Renewable Energy (EERE) at the Department of Energy (DOE) to accelerate the development and deployment of renewable fuels and other alternative fuels that will reduce our Nation’s dependence on oil and enhance our energy security. While the administration has not had sufficient time to coordinate interagency views on the Discussion Draft, I am happy to provide some preliminary comments.

This Subcommittee conducted an oversight hearing on alternative fuels on May 8, 2007, at which I testified on the President’s “Twenty in Ten” plan. The President has called for a robust Alternative Fuel Standard (AFS), requiring the equivalent of 35 billion gallons of renewable and alternative fuel in 2017. Many of the provisions in the Discussion Draft appear consistent with the Administration’s policies, and may also benefit from further review and discussion.

First, the Discussion Draft expands on the Renewable Fuels Standard established by the Energy Policy Act of 2005 to include alternative fuels, which is consistent with the President’s proposal. Encouraging the broadest range of fuels technologies is critical to the type of transformational change necessary to improve our nation’s energy security. However, I would urge the Committee to adopt a timeframe of substantially decreasing projected gasoline use within the next decade. The Administration believes that we must have a manageable timeframe for fuels and infrastructure deployment, and that a 10-year goal is an ambitious and appropriate metric.

I would also urge the Committee to adopt an economic safety valve like the one included in the President’s AFS proposal to provide obligated parties additional means to comply with the alternative fuel standard requirements. The economic safety valve would allow obligated parties to purchase credits (priced at $1 gasoline-equivalent) from the Federal Government. This is intended to guard against “price spikes” where an insufficient supply of alternative fuel or alternative fuel credits drives up the prices.

Turning to title II, the Discussion Draft suggests a number of possible steps toward building the infrastructure necessary to support a domestic alternative fuels industry. Sec. 201 proposes a $200 million infrastructure development program. It is not clear that government grants will ensure the supply chain viability of the production and delivery of alternative fuels. Creating a clear, major incentive, like the AFS will be the most important tool to stimulate investment in infrastructure.

If we are serious about changing our Nation’s energy portfolio, we must unleash the vast potential of capital markets. The Federal Government’s greatest contribution to energy security is the enactment of durable policy that signals to private investors our long-term commitment to alternative sources of energy. Government funding alone will not be enough to bring about the magnitude of change at the rate required to address our critical security, economic, and environmental concerns. The challenge for large scale, up front investments in clean energy is that the potential for outstanding returns must be realized over an extended period of time, or the “lifecycle” of the technology’s use. This is true whether dealing with a solar rooftop, cellulosic biorefineries, large wind farms, nuclear power plants, energy efficient products like the compact fluorescent lamp, or transmission linking our clean energy sources with urban loads. Though clean energy sources are domestically available and generate little to no greenhouse gases, uncertainty over the necessary technologies’ “lifecycle” risks and costs severely retards the amount and types of private capital being deployed. Rapid commercialization of clean energy technologies requires sophisticated capital risk management to facilitate complex financial transactions. That risk assessment is what the private sector does best. Effective capital formation requires the Federal Government to provide the necessary policy predictability and economic climate that enables massive investments at an accelerated pace.

Additionally, as I have previously testified to this Committee, the Department believes that an E85 delivery system is an important goal of an alternative fuels infrastructure, but that intermediate blends may be a necessary short-term goal. Intermediate blends may provide for more rapid absorption of renewable fuels into consumer markets in the near-term. As the Department begins to assess the impact of higher blends of ethanol, and study their viability and potential, we recommend that the Committee consider a balanced approach for intermediate blends and E85
deployment, especially in provisions related to retail technical and marketing assistance. Because flexible fuel vehicles can easily consume any biofuel blend up to E85, it is important to maximize the availability of options to scale clean biofuel deployment as expeditiously as possible. This flexibility also ensures government does not force the economy to over-commit to a specific fuel class (e.g., E85) given the many other potential alternative fuels that become available (e.g., bio-butanol or other fuels that work in existing infrastructure). In addition both the President and Secretary Bodman have emphasized their concern over any potential artificial impediments to biofuels infrastructure; however, our shared interest must be balanced with a respect for freely negotiated private party arrangements.

Finally, on the vehicles provisions, while the Department believes that it is important to encourage domestic manufacturing of advanced energy technologies, Sec. 305, establishing a new loan guarantee program for advanced battery manufacturing facilities, but duplicates existing authority under EPACT Title XVII.

There is clear consensus that legislative action is needed to substantially reduce our dependence on oil and deploy new energy technologies into the marketplace at an unprecedented scale and rate. The administration looks forward to working constructively with the Congress to achieve the “Twenty in Ten” goal, and deliver legislation for the President’s signature this summer.

Supporting the “Twenty in Ten” and longer term clean energy goals is the Department’s portfolio of research, development, and commercialization activities. The Department is particularly focused on solving technical problems to overcome barriers to biofuels growth, including infrastructure, through forging strategic cost-shared partnerships with private industry, collaborating with other agencies, and working with the different regions of our country to bring the promise of biofuels to fruition. We believe that a multi-pronged effort will expand the role of alternative fuels in our Nation’s energy supply and economic future.

**BIOENERGY RESEARCH AND DEVELOPMENT**

EERE’s Biomass Program and Vehicle Technologies Program, as well as other Department programs such as those within the Office of Science, are working closely together to overcome barriers to advancing technology pathways to help support achievement of the “Twenty in Ten” goal. The Office of Science is conducting basic research for breakthroughs in understanding the systems biology of biofuel-producing organisms and bioenergy crops that could lead to cost reductions for cellulosic ethanol and other biofuels. To accelerate the transformational scientific breakthroughs necessary for cost-effective production of biofuels and bioenergy, including cellulosic ethanol, the Office of Science is investing $375 million over five years to support the establishment and operation of three Bioenergy Research Centers. These centers, selected by competitive, merit-based scientific review, will conduct comprehensive, multidisciplinary research programs on microbes and plants to develop innovative biotechnology solutions to energy production.

EERE and various U.S. Department of Agriculture (USDA) agencies conduct the applied research for advancing biomass feedstocks and conversion technologies for biorefineries. Currently, ethanol is the renewable fuel with greatest market penetration and potential for both near and long-term displacement of gasoline. EERE’s Biomass Program is focused on making cellulosic ethanol cost-competitive by 2012, a target put forth in the President’s 2006 Advanced Energy Initiative (AEI).

Recently, Secretary Bodman announced the availability of up to $200 million for cellulosic biorefineries at 10 percent of commercial scale, subject to appropriations. This effort will help enable industry to resolve remaining technical and process integration uncertainties and allow for more predictable, less costly scale up of “next generation” biorefinery process technologies. The 10 percent-scale demonstrations have the potential to help reduce the overall cost and risk to industry and contribute to the quicker commercialization of larger-scale facilities. Additionally, DOE will invest up to $385 million for as many as six commercial-scale biorefinery projects over the next four years, subject to appropriations. The EERE Biomass Program will continue in FY 2007 to support its cost-shared efforts with industry to develop and demonstrate technologies to enable cellulosic biorefineries for the production of transportation fuels and co-products.

**ETHANOL AND BIOFUELS INFRASTRUCTURE DEVELOPMENT**

The Department is working with other public and private sector partners to encourage development and deployment of a biofuels distribution infrastructure in the United States to provide for displacement of gasoline and increased consumer choice. To support this effort and help promote growth of the biofuels industry, the Department has developed a biofuels infrastructure team. This team works to pro-
mote convergence between Vehicle Technologies and the Biomass Programs to promote a biofuels industry and commercially competitive alternative fuels and vehicles. Currently, there are more than six million flexible-fuel vehicles (FFVs) on the road in this country, a significant number, but still a relatively small percentage of the approximately 225 million light duty vehicles in the U.S. One goal is to expand the use of biofuels. Another goal is to encourage all automobile manufacturers serving the U.S. market to meet and exceed state voluntary targets for increasing sales of FFVs and significantly increase production of FFVs.

In support of these goals the Department is pursuing a number of infrastructure activities, including analyses of pipelines, water issues, and advanced vehicle technologies. The biofuels infrastructure team is also assessing the impacts of higher-level intermediate blends of ethanol (e.g., E–15 and E–20), renewable fuels pipeline feasibility and materials research, and optimization of E85 alternative fuel vehicles. This work is being coordinated with the Department of Transportation, which has responsibility for setting integrity management standards for pipeline transportation and ensuring that these products can be safely handled, and with the Environmental Protection Agency, which has responsibility for testing the emissions impacts of fuels and vehicles, and registering and certifying fuels and fuel additives before they can be used in the transportation system. Such research, analysis, standards and safety regulation is an appropriate role of government in supporting infrastructure deployment.

The Vehicle Technologies Program has embarked on several new efforts to address vehicle efficiency, beyond ongoing combustion and fuels research. These new efforts include evaluation of the Biowagon produced by SAAB, a manufacturing subsidiary of GM, which is sold exclusively in Europe and has been reported to use ethanol-based fuels much more efficiently than current U.S. FFVs. Another new effort is focused specifically on optimizing engine efficiency with biofuels. These projects are aimed at mitigating the lower energy content of biofuels. The program is also evaluating other biofuels such as biodiesel that may contribute to future gasoline displacement. And, Vehicle Technologies has initiated an effort to engage international collaborations to address fuel standards, data sharing, and other common interests.

INTERAGENCY ENERGY PARTNERSHIPS

In addition to infrastructure and fuels research within the Department, there are important collaborations with other Federal agencies and entities, including the Interagency Biomass Research and Development Board, which I co-chair with USDA. The Board is the governing body that coordinates biomass R&D activities across the Federal Government. In November 2006, DOE hosted the National Biofuels Action Plan workshop in Washington DC, where representatives from multiple Federal agencies came together to identify agency roles and activities, assess gaps and synergies, and begin developing agency budgets in the area of biofuels. The Federal participants also made recommendations for improved coordination and collaboration across Federal agencies. Input from the workshop is currently being collected into the National Biofuels Action Plan workshop report. Ultimately, the goal is to improve the Board’s ability to provide coordinated Federal support for biofuels production and use.

DOE is also working with the Regional Biomass Energy Feedstock Partnerships with USDA and the Sun Grant Initiative universities, which are funded through the Department of Transportation. These partnerships will help to identify the regional biomass supply, growth, and biorefinery development opportunities. We believe that using regionally available feedstocks, produced and processed locally, promotes a “distributed” transportation fuels approach that may reduce shipping and transportation issues. These regional partnerships are designed to collect and store data on a publicly available Web site.

FINANCIAL INCENTIVES

To provide increased incentives for financing a multitude of innovative energy technologies, including biofuels, EPACT 2005 included a provision in Title XVII for a DOE Loan Guarantee Program. With its central focus on innovative technologies to avoid, reduce, or sequester air pollutants or anthropogenic greenhouse gas emissions, the Loan Guarantee Program provides broad authority for DOE to guarantee loans that support early commercial use of advanced technologies, including potentially cellulosic biorefineries that employ new or significantly improved energy technologies.

I am pleased to report that the funding contained in the FY 2007 Continuing Resolution is allowing the Department to move forward in implementing the Loan
Guarantee Program. We have published for public comment a Notice of Proposed Rulemaking to implement the program; the public comment period closes July 2. Secretary Bodman has said that our goal is to have a high-quality program, and the Department is working to do just that. As you know, the Department undertook a process in FY 2006 to solicit pre-applications for the first round of loan guarantees and those pre-applications are currently undergoing technical and financial reviews. The President’s “Twenty in Ten” goal holds the promise of accelerating penetration of cellulosic ethanol and other alternative fuels into the marketplace and bringing the benefits of a clean renewable and alternative energy source more quickly to our Nation. To meet these challenges, cutting edge research, development, deployment, and commercialization must be supported by transformational policy changes—the types of proposals that the President articulated in the State of the Union. The Administration looks forward to working with Congress to shape policies and legislation that will make this happen. This concludes my prepared statement, and I would be happy to answer any questions the committee members may have.

Mr. Matheson. OK. Thank you, Mr. Karsner. And now, Mr. Meyers, we will hear from you.

STATEMENT OF ROBERT J. MEYERS, ACTING ASSISTANT SECRETARY, OFFICE OF AIR AND RADIATION, ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC

Mr. Meyers. Mr. Chairman and members of the subcommittee, I appreciate the opportunity to appear before you today, and to provide testimony regarding your June 1 discussion draft.

As you know, the June 1 discussion draft contains many provisions affecting motor vehicle and fuel programs, alternative fuel infrastructure, and Corporate Average Fuel Economy standards for passenger vehicles and light trucks.

The discussion draft also extends and expands certain programs established by the Energy Policy Act of 2005, and imposes new requirements respecting biodiesel standards, flexible fuel vehicle production, and tire efficiency. EPA has experience and expertise in many of the areas addressed by the legislation.

As noted in my prepared testimony, there has not been sufficient time for interagency review of the legislation, and therefore, the administration does not have a statement of position. However, a few initial observations can be made.

First, the Alternative Fuel Program established in the draft is similar to the administration’s Alternative Fuel Standard legislation in several important respects. The discussion draft would expand the existing RFS definition to include many alternative fuels contained in the AFS, and in the Energy Policy Act definition of alternative fuels.

The discussion draft also incorporates many of the implementation measures specified in the AFS, including use of identification numbers and compliance values to demonstrate compliance. Some of these measures were pioneered in EPA’s recent rulemaking implementing the Renewable Fuels Standard. The draft also provides for a similar enforcement of fuel requirements, and for a transition between the current RFS credit system, and credits used in the new program.

The discussion draft, however, also differs in important respects from the AFS legislation. The legislation would not require 35 billion gallons of renewable and alternative fuel use until 8 years after the schedule provided in the AFS. As you know, setting an
aggressive schedule for alternative fuel use was an important part of the AFS and the President’s 20 in 10 initiative.

The discussion draft also incorporates a Low Carbon Fuel Standard as part of the Alternative Fuel Program, starting in 2013. The standard is additive to other requirements, and assumes or sets a standard for average carbon intensity, based on assumptions about volumes associated with three different levels of carbon intensity. The draft also does not incorporate the temporary annual waiver structures contained in the President’s proposal, or incorporate an economic safety valve, to guard against price fights for alternative fuels and alternative fuel components.

The discussion draft additionally adds a new title to the Clean Air Act for the first time in 17 years. The title contains the aforementioned Low Carbon Fuel Standard plus greenhouse gas reporting requirements for motor vehicles. It also amends sections 202 and 211 of the current Clean Air Act to effect EPA regulatory authority concerning fuel and new motor vehicle standards. It additionally adds new criteria to section 209 in the Clean Air Act concerning waivers of preemption for State standards on new motor vehicles and new motor vehicle engines.

The President provided a bold plan for decreasing our Nation’s dependence on oil in his State of the Union speech, and in his subsequent calls for action on his 20 in 10 legislation. EPA stands ready to draw upon its considerable analytical and technical expertise, and work with this subcommittee and the full committee as you move forward to consider the discussion draft or other related legislation.

Again, I appreciate the opportunity to testify, and stand ready to answer your questions.

[The prepared statement of Mr. Meyers follows:]
Mr. Chairman, and members of the Subcommittee, I appreciate the opportunity to come before you today to testify on legislation being considered by this Subcommittee concerning alternative fuels, infrastructure, and vehicles.

Introduction

In his 2007 State of the Union Address, the President challenged the nation to address our growing reliance on oil by taking several concrete actions. He called for a Twenty in Ten plan to reduce gasoline consumption by 20 percent in the next 10 years. As I outlined in my testimony of May 8th, this aggressive goal would build upon the programs established by Congress in the Energy Policy Act of 2005, in particular the renewable fuel standard (RFS) established in that legislation. The 20 in 10 plan also seeks to reform CAFE standards for passenger cars and extend the current light truck rule promulgated by the National Highway Traffic Safety Administration.

On May 14, 2007 President Bush signed an Executive Order directing EPA, together with the Departments of Energy, Transportation, and Agriculture, to take the first steps toward regulations that would cut gasoline consumption and reduce greenhouse gas emissions from
motor vehicles and transportation fuel. The President asked that we use the Twenty in Ten plan as a starting point.

This recent announcement both responds to the Supreme Court's April 2, 2007 ruling in *Massachusetts v. EPA* and provides a path forward for improving our energy security by reducing U.S. dependence on oil. However, the President also indicated that this initiative is not a substitute for effective legislation. Earlier this year, the Administration sent Congress two legislative proposals to achieve the Twenty in Ten plan.

The first proposal sent to this committee would reform and modernize Corporate Average Fuel Economy (CAFE) standards for cars; the Twenty in Ten plan also calls for further increases to CAFE standards for light trucks. The second legislative proposal is an Alternative Fuel Standard (AFS) which would increase the supply of renewable and other alternative fuels by setting a mandatory fuels standard to require the equivalent of 35 billion gallons of renewable and other alternative fuels in 2017.

As I testified before this Subcommittee last month, the AFS would build on EPA’s recently completed national Renewable Fuels Standard (RFS) -- the first milestone in increasing the amount of domestically-produced renewable fuels used in motor vehicles. The AFS would include all fuels that are currently part of the RFS and would include fuels currently classified as "alternative fuels" under the Energy Policy Act. It would also allow other types of fuels to qualify as alternatives for compliance, adding competition in the alternative fuel marketplace. The AFS includes fuels or fuel components such as ethanol (derived from a variety of sources,
including corn and cellulosic feedstock), biodiesel, butanol, as well as other alternatives to crude oil-based fuels such as natural gas, hydrogen, and coal-to-liquids. The AFS would also include the use of electricity to power advanced vehicles, including “plug-in” hybrid vehicles.

As proposed by the Administration, the AFS would replace the RFS in the year 2010, but would retain the flexible credit, banking and trading mechanisms contained in the RFS. The legislation provides an accelerating schedule for AFS requirements in the years 2010 to 2017. After 2017, similar to the RFS, the level of the AFS would be set administratively based on several factors including the impact of alternative fuels on energy security and diversification, costs to consumers, job creation and the environment.

The AFS also includes “safety valves” to protect economic and environmental interests. For example, the Administration would be required to review the impact of the AFS annually and may adjust the annual requirement if short or long term conditions exist that adversely affect the production or importation of alternative fuels. Under certain circumstances, the Administration could issue a temporary waiver of any or all the requirements of the AFS. The AFS also includes an automatic “safety valve” that would serve as an “economic backstop” to ensure that mandating 35 billion gallons of alternative fuel does not excessively increase the cost of gasoline and diesel to American consumers, or exclusively distort other markets. By allowing the sale of credits at $1 per gallon of gasoline equivalent (or about $0.67 per gallon of ethanol), the “safety valve” would guard against unforeseen increases in the prices of alternative fuels or their feedstocks, protecting other markets from being adversely impacted.
and minimizing costs to consumers. This feature provides some market certainty—businesses can calculate their maximum cost of compliance.

**Executive Order**

While we are hopeful that Congress is able to act on these legislative proposals, the President has directed EPA, DOE, DOT and USDA to use the regulatory process to start working toward these goals now. The steps called for in the May 14th Executive Order will ensure coordinated efforts on regulatory actions aimed at protecting the environment with respect to greenhouse gas emissions from new motor vehicles that proceed in a manner consistent with sound science, analysis of benefits and costs, public safety and economic growth. The President additionally directed Administration officials to listen to public input before any decisions are reached and carefully consider available technology.

In his announcement accompanying the Executive Order, the President directed EPA and the other federal departments and agencies to complete the regulatory process on greenhouse gas emissions from motor vehicles by the end of 2008. This is an aggressive timeframe, but one that I am confident that EPA staff, working with our federal partners -- the Departments of Transportation, Energy, and Agriculture -- can achieve.

**Committee Legislation**

Mr. Chairman, on June 1, the Agency received a discussion draft of legislation concerning alternative fuels, infrastructure, and vehicles. We conducted an initial review of the draft but we will need additional time to fully understand and carefully consider its meaning and
potential implications. Following are some preliminary comments I would like to share with the Subcommittee.

The discussion draft includes an alternative fuel standard program, a low carbon fuel standard, and revised fuel economy standards for cars and light trucks. Several elements of this discussion draft are similar to the Administration’s proposals, and importantly, share a common recognition of the need for greater alternative fuel volumes and increased fuel efficiency. The Alternative Fuel Program in the discussion draft provides much of the same framework that exists in the Administration’s draft, including a common list of alternative fuels and the ability for obligated parties to trade alternative fuel credits. There also are some key differences in the two approaches—the discussion draft includes a longer timeframe to reach the 35 billion gallon target and has different compliance values in the initial years of the program. Also, the Administration’s proposal includes a provision for safety valves, which we believe provides important safeguards and critical flexibility to the regulated industry.

The low carbon fuel program proposed in this draft would require EPA to set a carbon intensity target which is tied to the volumes set by the alternative fuel standard. It also requires EPA to use the kind of identification numbers created as part of the Renewable Fuel Standard to determine compliance with this section and to establish methods for calculating the average carbon intensity of fuels. Another section of the draft would limit EPA’s existing authority under the Clean Air Act to regulate greenhouse gas emissions from motor vehicles. However, EPA is asked to require motor vehicle manufacturers to report the projected lifetime carbon emissions from new motor vehicles.
Conclusion

Those are a few of EPA’s initial observations on the discussion draft. While we are not able to take a position on the draft legislation at this time, we would be pleased to provide technical advice on the relevant issues to the Subcommittee as the legislation moves forward.

Thank you, Mr. Chairman, and the members of the Subcommittee for this opportunity. This concludes my prepared statement. I would be pleased to answer any questions that you may have.
Mr. Matheson. Well, thank you, Mr. Meyers. We will start with our questions. I guess the Chair will recognize himself for 5 minutes.

Both of you mention the 20 in 10 proposal that the President made. I believe in the State of the Union address when we first heard about it. The discussion draft that we are talking about today pursues a comparable amount of gallon savings, I believe, over a longer period of time.

Is there, can you help me out, what was the data, or is there an analysis that shows how to achieve the 20 in 10, and that that is the right timeframe for doing that, or can you share with us how that number was arrived at, and that timeframe?

Mr. Karsner. Well, sir, it is not a central plan, in the sense that the Government is going to plan out how 20 in 10 will happen. What we do is actually assess the state of the technology—and our most recent data validating that technology—and in terms of when we believe it will be available to enter into the marketplace. Then, the question is, if the technology is available, and capital is not a constraint, what will be the policies necessary to enable the outcome?

And so, 20 in 10 does not say well, here is 16 percent electricity, and 23 percent biofuels, and everything else. We basically look at all the tools that we have in the tool chest to displace gasoline consumption, including efficiency, and then make a calculated guess. If the President were to get a mandate for alternative fuels, what would be the most aggressive and ambitious timeframe that could be pursued? That was the task.

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Mr. Matheson. Recognizing you haven’t had a lot of time to review the discussion draft, does the administration have a position on the fact that this discussion draft has a longer period of time to achieve the 20 percent savings, if you will?

Mr. Karsner. I think in general, as I say, we commend the spirit and intent, that we are happy to see in both chambers, that legislation is moving. But the administration’s position generally is that a sense of urgency requires more and faster.

Mr. Matheson. To the extent that there was an analysis of the existing technology in your projection of where the technology is going to be, I think it would be helpful to have that provided to the committee, because that was an open item, if you will, as I understand it, at discussions among members of the committee about the data that was the basis for the 20 in 10 proposal.

And I think this committee discussion draft made a decision, based on its estimate of where technology was going to go. That is why it is the longer period. So, it would be good to have that discussion, and figure out the data to help us find what is a good, aggressive, but also achievable goal.

Next question. In terms of the provisions in the discussion draft about trying to roll out an ethanol or E–85 infrastructure, we have had a lot of discussion we did with the first panel about it. It is the chicken and egg challenge that we have to face. Are you comfortable with the approach the discussion draft has taken? Do you have suggestions for amendments for that, or additions that we ought to be looking at? What are your thoughts on that issue?
Mr. KARSNER. We really don't have any sort of formal policy position, because of the short timeframe to look over the precise texts in the discussion draft, but knowing what that issue is, dealing with the regularity, thematically, our thoughts are chronically the same, that we need as much as possible as early as possible. I know, and of course, we would be happy to offer technical assistance—but the truth is, when you talk about incrementalism, and year by year buildups, when you tend to think of these things, as well, we are taking the whole fleet, so that if we get 70 percent in year X of flex fuel vehicles, we have taken care of 70 percent of the fleet. But in the meantime, doing it incrementally, we are still putting out many more cars that are non-flex fuel. In effect, we are foreclosing on the options for vehicles when in fact, the flex-fuel that option is available at a very incremental and marginal cost.

Mr. MATHESON. Do you think, in terms of, since you are involved in the renewable energy side of things, in terms of the development of cellulosic ethanol, and creating an infrastructure where we actually produce that, are there policy issues we have not addressed in this legislation? Is there a research and development component we ought to be looking at? What public policy decisions should we be making to help encourage that industry to become actually viable in this country?

Mr. KARSNER. I think you all, I think the Congress discussed right now, in real time, the most important issues. How does that market have some degree of predictability and foresight, as to allow people to invest in it? As I said, the technology, there is no need for a super technology breakthrough. It is process integration. It is standing up a commercial facility that is replicable. The Department has now funded at least six that are meant to be commercial scale and operable by 2012, and so, to replicate that, to proliferate that, to have confidence in the capital markets to continue into biofuels and other technologies, Congress needs to act on this durable timeframe.

Mr. MATHESON. OK. I appreciate your response. My time has expired. We will recognize Mr. Walden now for 5 minutes.

Mr. WALDEN. Thank you, Mr. Chairman.

Mr. Karsner, I would like to know, one of the issues that we are dealing with is this dispute over whether we are doing anything on global greenhouse emissions in the United States versus other countries, and whether we are lagging or not.

Can you talk to me a little bit, having just gotten back from Europe, it seems like when it comes to air quality, certainly, we are ahead of the Europeans by a long measure, and when it comes to us lagging versus them, what are the sorts of things we have done, what do we need to do to deal with this?

Mr. KARSNER. Well, with all due respect, sir, I don't accept the predicate of the question, which is that we are lagging at all when it comes to greenhouse gas emissions. I know rhetorically that seems to be the discussion at hand, but if you measure this country's progress, not by the rhetoric, but by the reality of the record, we are doing those things that are necessary to reduce greenhouse gas emissions in practice faster. That is to say, we are deploying low emission and zero emission generating sources faster and more
Mr. WALDEN. The President announced last week a plan to bring together the biggest emitters in the world, including China and India, and some of the other countries that are not part of the G8. Can you tell us how that proposal may work to actually get everybody in the same room, that are not now under Kyoto, in the Kyoto Accords?

Mr. KARSNER. Right. Well, I think that is quite important, because some of those people that haven't been in the same room that you have just named, China and India, for example, are amongst the fastest growing economies on Earth. It is predicted that next year, China will have more greenhouse gases than this country, be the largest greenhouse gas emitter on Earth, and so, it is very difficult to have a substantive discussion without all the parties, the serious emitters, if you are serious about the end goal. We have been doing that through the Presidential Initiative, the Asia Pacific Partnership, which accounts for about 53 percent of the greenhouse gas emissions, including India and China. We are now wanting to expand that, to include our European allies and friends in the other industrialized nations of the world, to have a much more practical bottom up approach about deploying the technologies that will make a difference.

Mr. WALDEN. And isn't that really the issue, is getting the technologies that work, and then making them available to the developing world?

Mr. KARSNER. To my knowledge, sir, there are only three means to deal with greenhouse gas emissions. There is an increase in efficiency, there is an increase in alternative carbon displacing sources of supply, and there is curtailment of economic growth. This country prefers doing the former and not the latter, and so, we are seeing continued robust growth at the same time that we are, in fact, deploying technologies very fast.

Mr. WALDEN. Now, are either of you familiar with the various attempts to get at carbon sequestration in coal plants, for example? We went out to visit one, in theory, to watch, in Germany, the sequestration of the carbon dioxide of the coal plant. We never quite got, we got to the plant, we never quite saw the technology at work. They are still under construction.

Can you speak to me about where technology stands when it comes to reducing carbon emissions from coal plants?

Mr. KARSNER. Regrettably, the fossil fuel is actually outside of my domain, but what I can say from the experience I have had with carbon-based fuels and in the Department, is that the entire program, the Federal program that the Department of Energy dedicated to coal, is dedicated to clean coal technology and deployment, including carbon capture and storage. And so, this Nation invests substantially in that, and I think is working collaboratively with the Europeans to that end.

Mr. WALDEN. And Mr. Meyers.

Mr. MEYERS. Yes and EPA has also been working in this area. One they are working with regard to is the underground injection standards that, and guidance at this point in time. And then, also,
Mr. WALDEN. I would really like to get that, because as we try to put standards in place, we need to know the technology is there. It was there when we put the cap and trade provisions in place to get sulfur dioxide emissions out of coal plants. It was a known technology, the scrubbers you could put on, and I am not sure we have the same technology available to us, so that would be helpful.

Additionally, there are issues that were raised to us about legal implications. Apparently, in Europe, carbon is treated as a waste, and it is illegal to dispose of a waste underground. And I am wondering about those sort of legal issues that may accompany any activity here, to put what would be a waste underground.

Mr. MEYERS. There could be legal issues. Again, we will provide more for the record. There could be issues under statutory law, both, and common to——

Mr. WALDEN. I would appreciate some followup on that. That would be helpful. And also, what happens if it comes back up after you inject it and all of that.

Finally, there are those who have said that this legislation would overturn the recent Supreme Court decision, Massachusetts v. EPA. Do either of you, in your reading of this bill, believe that to be the case?

Mr. MEYERS. The bill does have provisions with respect to amending parts of the Clean Air Act. The effect of these provisions is really to say that the authority in the new title 7 regarding motor vehicles and fuels, regarding greenhouse gas emissions from motor vehicles and fuels, is limited to the authority in the new title 7. So, it is sort of, it is not a legal term, but it is a sort of a dependency clause, is that within the Clean Air Act, we will put a new title, and here is where we will locate EPA's authority for greenhouse gas and motor vehicles.

The Supreme Court decision had a number of holdings. One of them, which was that EPA had the authority under the Clean Air Act to regulate greenhouse gas emissions from new motor vehicles. So, certainly, the legislation could be read to effect that opinion. I would be happy to provide more for the record, in terms of whether, from our general counsel's perspective, et cetera, we thought it would overturn the decision.

Mr. WALDEN. All right. I appreciate that. Thank you, Mr. Chairman.

Mr. MATHESON. Thank you. The Chair would now like to recognize the ranking member of the full committee, Mr. Barton, if he has questions.

Mr. BARTON. I thought it was the Democrats turn.

Mr. MATHESON. Well, we are going to let you go now.

Mr. BARTON. OK. Walk in the room, get recognized. OK. Good deal.

Well, let me preface what I am about to say. The question is that I am really trying to find a way to be supportive of the process and of the draft, but I have some really tough concerns about it.

My first question, I guess, would be to the gentleman from the EPA, Mr. Meyers. The current ethanol mandate that we have in
law, that we put in the Energy Policy Act 2 years ago, is, I want to say about 7?

Mr. KARSNER. 7.5 in 2012.

Mr. BARTON. And we are already past that, right?

Mr. KARSNER. We are not past it actual use. We project that we will pass it well before 2012.

Mr. BARTON. OK.

Mr. MEYERS. The actual use, I think, in the last year was somewhere around 5, but we would project, and EIA does project that we will far exceed 7.5 by the—

Mr. BARTON. Now, the discussion draft sets, increases that mandate for corn, I think for corn-based ethanol, to 12 billion gallons. Is that correct?

Mr. MEYERS. Well, the discussion draft is a little complex in the way it addresses these issues. It creates a new mandate, like the AFs, and it is ramped up to 35 billion gallons by the year 2022 or 2025. But then, it also has a Low Carbon Fuel Standard. If you read the provision in the Low Carbon Fuel Standard added to the requirement, and it effectively says the levels would be 12 billion gallons from carbon fuels of 80 percent or less. What that means, sort of, in translation is our current estimate of GHG offset for a fuel like ethanol is a little bit over 20 percent, so fuels would seem, it would seem to be 12 percent, or 12 billion gallons for corn-based ethanol and there are other fuels that are in that range.

Mr. BARTON. Well, let me ask a little bit different question a little bit different way. Would it be possible to fence off the current ethanol mandate for corn-based ethanol, then create a new mandate for cellulosic ethanol, and then a different mandate for other alternative fuels that are not corn-based or cellulosic ethanol? Is that technically possible?

Mr. MEYERS. It is technically possible. I would just say that the current mandate is for renewable fuel, and not specifically for corn-based ethanol, so there are a number of fuels which qualify for the current Renewable Fuels Standard.

Mr. BARTON. Well, I am told that we are about to max out the amount of ethanol we can get from corn grown in the United States. So I don't see a lot of sense, and this is as much for Mr. Dingell and Mr. Boucher as it is for the witnesses, I don't see a lot of sense in increasing a mandate on something that the market is going to take care of and max out.

Now, I will buy the approach that for the cellulosic ethanol, we may need to create a mandate to jumpstart that. In the discussion draft, it says they get, cellulosic ethanol gets, each gallon is worth, I think, 2.5 gallons, so I understand that. So, what I am trying to begin to think about is let us fence off the current mandate, let us create, perhaps, some new mandates, and then grow those.

If we were to do that, and I haven't talked to either Boucher or Dingell, is that something the administration might want to look at, too?

Mr. MEYERS. We would be happy to work with the ranking minority member, and we would be happy to work with the committee on any ideas that the committee would want to put forward. We haven't taken a position on the discussion draft, and we have our
Mr. Barton. OK. Let me ask Mr. Karsner, are you aware of how much gasoline is currently consumed in the United States today on an annual basis?

Mr. Karsner. I believe it is approximately 140 billion gallons.

Mr. Barton. Our number is 160, but if you say 140, we will——

Mr. Karsner. We will check with EIA.

Mr. Barton. That is only 20 billion off. That is pretty good.

Mr. Karsner. Well, thank you. It is a billion here and there.

EIA's monthly supply surveys indicate that the total U.S. gasoline consumption in 2006 was approximately 141.5 billion gallons.

Mr. Barton. Do you know how much ethanol it will take to make E–10 penetrate the gasoline market as it exists today?

Mr. Karsner. We thank that is going to be in the neighborhood, because you probably won't have a 10 percent displacement all across the country, Texas in the summers, and Florida, et cetera, probably going to be closer to the neighborhood of 12 to 13 billion gallons.

Mr. Barton. So, if you use 140, 10 percent of 140 is 14, if it is 160, 10 percent of 160 is 16.

Mr. Karsner. Certainly.

Mr. Barton. Do you agree or disagree that the ability to create ethanol from corn is about 12 billion gallons?

Mr. Karsner. That comports with current estimates from Department of Agriculture.

Mr. Barton. From corn. Now, what if we repeal the current ethanol tariffs? How much ethanol could we import, if we didn't have the tariffs and the quotas?

Mr. Karsner. We are not seeing anything that suggests that there is a surplus of ethanol on global markets that would make a substantial difference right now. There is a potential for that growth, particularly in Brazil and in the Western hemisphere, but——

Mr. Barton. So, we can't really import much. We can't grow much. So, this new mandate in the discussion draft is really a cellulosic ethanol mandate, logically.

Mr. Meyers. Well, Mr. Chairman, I would say there are provisions in the bill, with regard to the Low Carbon Fuel Standard, that require that 50 percent of the remaining volume of AFS have a carbon intensity equal to 25 percent of the carbon intensity of gasoline. Right now, according to our figures, I think the only fuel that would qualify would be cellulosic, under that figure of 25 percent.

Mr. Barton. And again, I haven't had a detailed conversation with Mr. Boucher or Mr. Dingell, but this, and my time expired a minute and 28 seconds ago, but it really looks like the discussion draft is more about creating a new mandate for cellulosic ethanol.

Mr. Meyers. It would depend on how you read the language of the bill. We are in the process of doing that. The bill says that one should assume the Alternative Fuel Standard is met as follows,
and then, indicates that the 25 percent carbon intensity figure, which as I indicated, at this point in time, cellulosic.

Mr. Barton. Now, I got those answers when you used to sit behind me. I yield back, Mr. Chairman, and I hope I am given another 5 minutes after everybody else is given their first 5 minutes. Thank you, sir.

Mr. Matheson. OK. Thank you. The Chair recognizes Mr. Stupak from Michigan for 5 minutes.

Mr. Stupak. Well, thank you, Mr. Chairman.

Mr. Meyers, if I may, I have a number of questions I would like to ask you about the court case Massachusetts v. EPA. Congress clearly intended the Department of Transportation to regulate motor vehicle fuel economy when it established the CAFE, Corporate Average Fuel Economy Program in 1975, which has really served as the only effective constraint on greenhouse gas emissions throughout the economy for over 30 years. In establishing these standards, DOT must consider economic practicability, technological feasibility, and the effect of other motor vehicle standards on fuel economy. Congress also set out many specific provisions related to these standards in statute, and exactly how rulemaking should be conducted.

When the Supreme Court interpreted the Clean Air Act to authorize the EPA, and by proxy, California, if you will, to regulate the vehicle fuel economy through tailpipe emissions of CO₂, it did not set out any specific criteria for setting these new standards, did it?

Mr. Meyers. Congressman, we are still assessing the Supreme Court case and its implications for the Clean Air Act. However, you would be correct that, or it is my review of the case, that there would be nothing that said exactly how——

Mr. Stupak. Right. The Court didn’t lay out any specifications there, or criteria, I should say. Other than one sentence, then, and I am quote now from the ruling: “The two obligations may overlap, but there is no reason to think that two agencies cannot both administer their obligations, and yet avoid inconsistency.” But yet, the Supreme Court did not explain how EPA should reconcile its new authority and resulting regulations with that of DOT’s specific statutory mandate, did it?

Mr. Meyers. I am unaware of anything in the Court opinion which would do that.

Mr. Stupak. So, the answer to that would be no, then, right? Because the Court did not explain how EPA should reconcile its authority.

Mr. Meyers. I have read the case, and I caution that it is the legal opinions that are difficult to render, but I am not aware of anything in the case that would tell, instruct that.

Mr. Stupak. Well, I agree when the Supreme Court made its decision, it is directing EPA and DOT to do certain things. In the court case, and not necessarily attorneys would be administering this, so that is why I was trying to look for some specific criteria.

Mr. Meyers. Sure.

Mr. Stupak. The Supreme Court did not instruct the EPA to reconcile its new authority under the Clean Air Act with that of the Department of Transportation, as set out by Congress, did it?
Mr. STUPAK. OK. Let me ask you this question. If EPA and California both issued different standards, without regard for the requirement Congress placed on DOT, it is possible that there could be three separate conflicting standards which vehicle manufacturers would have to comply with, then, right, DOE, EPA, and California?

Mr. MEYERS. If the California standards met the waiver criteria under 209 in the Act, and EPA essentially granted a waiver, the California standard, EPA could. We have made no decisions on how we are responding to establish a standard.

Mr. STUPAK. Right.

Mr. MEYERS. And then, my presumption is you are referring to a third standard being CAFE standards.

Mr. STUPAK. Correct.

Mr. MEYERS. Yes, that is——

Mr. STUPAK. You have three different standards.

Mr. MEYERS. Yes.

Mr. STUPAK. The conflicts that I am referring to are not really just about numbers and stringency. There could well be different standards applying to different types of vehicles, for each of these category regimes, with no requirement how they are going to be harmonized. Isn’t that correct?

Mr. MEYERS. It is at least theoretically possible, yes.

Mr. STUPAK. OK. So, for example, DOT is required to establish standards for passenger cars separately from light trucks, and manufacturers are required to comply with DOT passenger car standards for both their foreign and domestic fleet. Neither of these requirements would be placed on the EPA or California under the Supreme Court’s interpretation of the Clean Air Act, would it?

Mr. MEYERS. Those requirements are not contained in the Clean Air Act. They are only contained in the CAFE statute.

Mr. STUPAK. So, it would not apply, then, to California or EPA, underneath the Supreme Court’s interpretation?

Mr. MEYERS. The EPA would not be restricted by those provisions.

Mr. STUPAK. OK. In fact, the Clean Air Act, as interpreted by the Supreme Court, does not require the EPA or California to set standards as a fleet-wide average, and certainly, no requirement that they utilize the complex averaging system undertaken by the DOT. Isn’t that correct?

Mr. MEYERS. There is nothing in section 202 of the Clean Air Act which requires a fleet-wide standard.

Mr. STUPAK. Well, then, it is possible that even under the best of circumstances, that vehicle manufacturers would have difficulty complying with these conflicting standards, and in the worst case scenario, it could be impossible for a vehicle manufacturer to comply with these conflicting regulations, if you get three different standards put forth by three different entities. Correct?

Mr. MEYERS. I wouldn’t be able to predict how these authorities will be exercised or not exercised by DOT or EPA with any degree of certainty at this point in time, so I can’t predict the outcome. I think my responses have accurately, or to the best of my ability, provided accuracy in terms of the authority, that your question
goes to, what would the net result of exerting that authority be, and I am not in a position to be able to predict that.

Mr. STUPAK. If we have three different regimes, three different standards, depending on some cars, if it was domestic, foreign, light truck, small truck, passenger, correct?

Mr. MEYERS. These are, yes, possible, yes.

Mr. STUPAK. And the requirement that would be made, or placed on the manufacturers of vehicles in this country, correct?

Mr. MEYERS. Well, the EPA's authority goes to new motor vehicles in this country, and those vehicles and engines imported for use in this country. I am not sure about CAFE authority for DOT. You would have to let them respond.

Mr. STUPAK. Thank you.

Mr. MEYERS. Thanks.

Mr. STUPAK. Thanks for your time.

Mr. MATHESON. The Chair recognizes Mr. Hall from Texas for 5 minutes.

Mr. HALL. I thank the Chair. I really didn't intend to ask any questions. I wanted to be sure the API energy statement made it in. And in sense of my being here, will be allowed to put in the usual questions later?

Mr. MATHESON. Absolutely. Written questions, absolutely.

Mr. HALL. Questions later.

Mr. MATHESON. Right.

Mr. HALL. Then I will ask just one question, for fear that Sonja Hubbard did get into it, and I will ask, I guess, Mr. Karsner.

Section 203 would require retailers to install very expensive E–85 facilities to serve customers that they say may or may not exist. Does DOE agree that the 15 percent threshold is appropriate?

Mr. KARSNER. Well, sir, I would begin by saying the customer exists in every citizen. The question is whether the value proposition for the customer to buy it is the right value proposition, and so then, the question becomes if you have the right value proposition, how much is enough? And what we would like to do is have as much as possible as early as possible, priced correctly for the market. So, we are more ambitious in the amount than 15 percent.

Mr. HALL. What is appropriate?

Mr. KARSNER. You are asking——

Mr. HALL. Just give me your best educated guess or your——

Mr. KARSNER. Well, we think there is a minimum threshold to begin with, that about a third of the stations need to have infrastructure for E–85 to become viable, so that is already 50,000 to 70,000 stations, and that is a third. There are reports and laboratory analysis that would say it would have to be much higher in order to reduce the amount of drive time and search time by your average user, to know that they could reliably go to the gas station and use it. So, it shouldn't have to be a chore to go find a station, and we think that at a minimum, that is about a third of the stations out there.

Mr. HALL. Should the Federal Government be making these decisions?

Mr. KARSNER. Well, the President's policy is certainly that we should be putting in place a mandate that guarantees a sufficient amount of supply for the market to allocate that through retail out-
lets appropriately. I think the challenge for Congress right now is to try to understand what the state of the markets, can we extrapolate whether the market will, in fact, take those actions. We have incremental Government programs that do this today, both through tax credits, tax policies, and through our Clean Cities Programs for deploying infrastructure, but clearly, those are insufficient to get to the numbers you are inquiring about.

Mr. HALL. Well, I really thank you, and I may have some follow-up questions on that, but if I do, I will submit them.

Mr. KARSNER. Yes, sir.

Mr. HALL. And I thank both of you. Good to see Mr. Meyers again.

Mr. KARSNER. Thank you, sir.

Mr. MATHESON. Thank you, Mr. Hall. The Chair recognizes the chairman of the full committee, Mr. Dingell, for 5 minutes.

Chairman DINGELL. Mr. Chairman, I thank you for that courtesy.

I would like to welcome our panel here. Mr. Karsner, welcome.

Mr. KARSNER. Thank you, sir.

Chairman DINGELL. Mr. Meyers, welcome back. We have seen you on the other side of that table on many occasions, and delighted to see you back. I hope you are doing well in your new appointment.

Mr. MEYERS. Thank you, Mr. Chairman.

Chairman DINGELL. Gentlemen, I am going to ask that the staff show on the screen again that wonderful flow sheet which we had. And I am going to ask the staff to make a copy available for each of you. I would appreciate your comments, gentlemen, as to whether you find that to be a factual representation of the situation as it is with regard to enforcement by the different agencies, Federal and State, that will have to take place for fuel efficiency, carbon dioxide releases, and also, releases of the different statutory pollutants covered under the Federal Clean Air Act.

And I don’t want you to feel that we are taking advantage of you. If you want to comment later, I will be happy to have additional comments from you. But just quick and dirty, looking at that, do you find that to be a factual statement of how it will work under current law, or rather under the law as set forth by the Supreme Court in the recent case?

Mr. MEYERS. Similar to the questions asked by Congressman Stupak, I think it is clear, and we will provide further detail for the record, that EPAct is one stream of authority, the Clean Air Act is a second stream of authority, and the third column, my assumption here is that we are talking about California’s unique status in the Clean Air Act, and California’s ability under the Clean Air Act to set separate standards, subject to EPA review.

Chairman DINGELL. So now, let us try and look and see what happens. We have 11 States which have decided that they want to have a separate standard fixed by the State of California. Under old law, that could only relate to the requirements of meeting the Clean Air Act, is that correct?

Mr. MEYERS. By old law, if you mean pre Massachusetts v. EPA, correct.

Chairman DINGELL. OK.
Mr. MEYERS. It is still the case that that——
Chairman DINGELL. Under the law as it was, EPA fixed standards under Clean Air, the Department of Transportation fixed the standards on fuel efficiency. Is that right?
Mr. MEYERS. Yes.
Chairman DINGELL. Now, under the new law, we find, or rather, under the Supreme Court case, we find now that the States will fix standards along with the State of California, under the California exemption, for both clean air requirements and carbon dioxide emissions. Is that correct?
Mr. MEYERS. Well, the Supreme Court case went to greenhouse gas emissions generally, not specifically carbon dioxide. We are looking at how that impacts our authority. California has already established the greenhouse gas emission requirements under its State law, and we are currently looking at that.
Chairman DINGELL. Right. I don't want to overcomplicate this.
Mr. MEYERS. Sure.
Chairman DINGELL. I am just trying to understand, and you will help me mightily if we stay to it, so I can get this picture understood. So, now, let us say under the old law, when a company wanted to market an automobile, they had to go in and get either approval from the State under the clean air requirements, or under EPA, if the EPA had not given the State authority to act on its own, and also, then, they had to go to DOT to get the OK with regard to meeting the CAFE standards. Is that right? Yes or no.
Mr. MEYERS. Yes.
Chairman DINGELL. OK. Now, let us go to the next step, if you please. Under new law, if the State chooses to be a part of what, of the California exemption, they go to the State of California, and the State of California is able to regulate, first of all, the clean air emissions requirements, and also to address CO₂ emissions. Is that correct?
Mr. MEYERS. The State of California has issued regulations on greenhouse gas emissions from motor vehicles.
Chairman DINGELL. OK. Now, those greenhouse gas emissions are not only CO₂. They can be releases also from the air conditioner, and things of that kind.
Mr. MEYERS. That is correct.
Chairman DINGELL. Now, that leaves us, then, in this wonderful position where they have two agencies that they have to choose from, where they are going to go to the Federal agencies or the States. Now, there is a strong possibility of having conflict between DOT and EPA with regard to the levels that are going to be committed, and we are going to have a major problem of coordinating between them, are we not?
Mr. MEYERS. We have not decided our reaction on——
Chairman DINGELL. No, but there is a potential here. Let us not complicate our business here. There is a potential for significant conflict between two agencies at the Federal level.
Mr. MEYERS. There is a potential, if EPA acted under the Clean Air Act.
Chairman DINGELL. All right. Now, we have also the problem that there will be conflicts between the Federal Government and the States, and inside the States, there is the possibility of conflict.
between at least two State agencies, the State Clean Air Agency and the State Energy Agency. Is that not so? Yes or no.

Mr. Meyers. I would have to get back for the record. I am not sure a State Clean Air——

Chairman Dingell. It is not illogical to expect that, though, is it? Just yes or no.

Mr. Meyers. I would like to submit that for the record. I am not sure I fully understand the question.

Chairman Dingell. All right. Well, apparently, you are having as much trouble understanding this as I am, perhaps even a little more. I am happy I am on this side of the witness table.

Now, having said that, so we have a potential, then, for as many as 36 agencies regulating the levels of emissions of pollutants and CO$_2$, and we have also the fuel efficiency requirements that would have to be met. Can either of you good gentlemen tell me how your agencies, EPA, or the Department of Transportation, or the Department of Energy, are going to address this problem?

Would you like to submit a monograph on that for the record?

Mr. Meyers. Sir, I think——

Chairman Dingell. My time is expired 2 minutes ago. Gentlemen, please submit to us, for the record, a statement about how you folks are going to do the job of administering this wonderful array of conflicts that this Supreme Court decision has placed in your lap.

And I will ask, Mr. Chairman, also that the Department of Transportation be requested to make a similar submission. I ask that they be included in the record, and I thank you, Mr. Chairman.

Mr. Matheson. Thank you. We have gone through a round of questioning for everyone. I ask unanimous consent that the ranking member, Mr. Barton, be recognized for another 4 minutes.

Mr. Barton. And I will try to be very quick. And I want you to give quick answers, if you can. I am going to follow up in a similar vein of what Chairman Dingell just asked about, this Supreme Court decision in *Massachusetts v. EPA*.

What that decision said was, is that the Court ruled 5–4 that the EPA does have the authority to regulate CO$_2$ in automobile tailpipe emissions, where previously, EPA had said that they weren’t sure they had the authority. Isn’t that correct?

Mr. Meyers. Yes, sir. Our legal position prior to the case was we did not have the authority.

Mr. Barton. So, now we know, on a 5–4 decision, that the EPA does have the authority. It could decide not to do anything, but it definitely has the authority to do something if it chooses to do so. Is that correct?

Mr. Meyers. I think you have accurately said the holding of the case, yes.

Mr. Barton. All right. Now, if we are going to regulate CO$_2$ out of tailpipes, and I am not sold that that needs to be done, but if we are going to do it, surely, we should agree with Mr. Dingell and Mr. Boucher and the discussion draft that it ought to be done at the Federal level, so that you have one standard. Isn’t that correct? We don’t want 50 standards. We want, if we are going to do it, let
us have one standard. That is the whole purpose of the Clean Air Act. We preempt State law.

Mr. MEYERS. Well——

Mr. BARTON. Now, don’t tell me the Bush administration wants 50 State standards.

Mr. MEYERS. We are currently assessing that question in an interagency process.

Mr. BARTON. Bullcorn. I sat in on some of those meetings. Unless the Bush administration has changed its position, we want one—if we decide to set a standard, Congress has the ability to do it, and it should be one standard. We don’t want to give the great State of California, as great as it is, or the great State of Massachusetts, the Commonwealth of Massachusetts, as great as it is, or Vermont, or even Texas the right to unilaterally set different standards. Almost everybody who testifies at that panel routinely says if you are going to regulate us, do it with one uniform standard.

Now, if you all need to go through your interagency process, God bless you, but I would hope before we move to markup that we can get an administration position, you don’t have to take the position on whether there should be a standard, but if it is going to be one, let us let there be one national standard.

With that, I yield back, Mr. Chairman.

Mr. MATHESON. Thank you. A number of unanimous consent requests were made during the course of the hearing for items to be included in the record.

All of those will be included in the record.

With that, we thank the witnesses for their participation today, and this hearing is adjourned.

[Whereupon, at 3:15 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]
Mr. Charles T. Drevna  
Executive Vice President  
National Petrochemical and Refiners Association  
1899 L Street, N.W.  
Washington, D.C. 20036

Dear Mr. Drevna:

Thank you for appearing before the Subcommittee on Energy and Air Quality on Thursday, June 7, 2007, at the hearing entitled "Legislative Hearing on Discussion Draft Concerning Alternative Fuels, Infrastructure, and Vehicles." We appreciate the time and effort you gave as a witness before the Subcommittee.

Under the Rules of the Committee on Energy and Commerce, the hearing record remains open to permit Members to submit additional questions to the witnesses. Attached are questions directed to you from certain Members of the Committee. In preparing your answers to these questions, please address your response to the Member who has submitted the questions and include the text of the Member's question along with your response.

To facilitate the printing of the hearing record, your responses to these questions should be received no later than the close of business on Wednesday, August 8, 2007. Your written responses should be delivered to 2125 Rayburn House Office Building and faxed to (202) 225-2899 to the attention of Linda Good. An electronic version of your response should also be sent by e-mail to Ms. Good, at Linda.good@mail.house.gov. Please send your response in a single Word formatted document.
Mr. Charles T. Drevna
Page 2

Thank you for your prompt attention to this request. If you need additional information or have other questions, please contact Linda Good at (202) 225-2927.

Sincerely,

JOHN D. DINGELL
CHAIRMAN

Attachment

cc: The Honorable Joe Barton, Ranking Member
    Committee on Energy and Commerce

    The Honorable Rick Boucher, Chairman
    Subcommittee on Energy and Air Quality

    The Honorable J. Dennis Hastert, Ranking Member
    Subcommittee on Energy and Air Quality

    The Honorable Michael C. Burgess, Member
    Subcommittee on Energy and Air Quality
August 7, 2007

The Honorable Michael C. Burgess, Member
Subcommittee on Energy and Air Quality
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, D.C. 20515-6115

Dear Representative Burgess:

I testified before the Subcommittee on Energy and Air Quality on June 7, 2007 at the hearing titled “Legislative Hearing on Discussion Draft Concerning Alternative Fuels, Infrastructure, and Vehicles.” I am pleased to respond to your question sent on July 25.

The question from Rep. Burgess:

“You state that waiver language contained in the bill has the potential to undermine capital investment and a preferable approach to an “off ramp” waiver would be to develop an “on ramp” trigger. Can you elaborate on how an “on ramp” would still work to establish the market certainty for alternative fuels being discussed in this legislation?”

NPRA’s reply:

The June 1 Discussion Draft included a regulatory Alternative Fuels Program with annual values increasing to 35 billion gallons in 2025. It is very difficult to project the volumes of production and use of renewable and alternative fuels for 10 or 20 years. Any long-term forecast is speculative, and reaching such massive volumes may well be problematic.

Currently, the only viable alternative that exists is corn-based ethanol, whose production should perhaps be constrained in order to limit the impact on other commodity prices. Further, it is generally agreed that corn-based ethanol can not begin to meet the volumes being discussed. While cellulosic-based ethanol and other forms of alternatives show promise, they have yet to overcome technologic problems that prevent them being economic or environmentally acceptable on a commercial scale.

To address this potential, the Discussion Draft included an “off ramp” provision that would, in theory, reduce the legislative requirements until such time as the alternative fuels are available. This off ramp approach appears to be based on the current EPA waiver program.
that is designed solely for temporary and usually geographically limited fuel supply disruptions—an approach wholly inapplicable in this discussion.

NPRA believes that refiners should not be required to make the substantial financial commitments necessary to meet these obligations until alternatives actually exist in the marketplace in the volumes necessary for compliance. Otherwise, the program would not only result in considerable stranded investment for the refiner, but also in the very real potential of significant marketplace disruptions.

Rather, NPRA suggests that any legislation include “on ramps,” where the Administrator, in consultation with the Secretary of Energy, promulgates a short-term regulatory obligation with a high degree of confidence based upon actual production forecasts. As commercial production increases, the Administrator can then promulgate additional obligations, again with a high degree of confidence. In this case, the Administrator will not be forced to reduce the regulatory targets with an “off ramp,” alternative fuels are still being promoted wisely, and the market remains as stable as possible.

NPRA and its members look forward to working further with the Committee on this issue.

Sincerely,

Charles T. Drevna
Executive Vice President

cc: The Honorable John Dingell, Chairman
Committee on Energy and Commerce

The Honorable Joe Barton, Ranking Member
Committee on Energy and Commerce

The Honorable Rick Boucher, Chairman
Subcommittee on Energy and Air Quality

The Honorable J. Dennis Hastert, Ranking Member
Subcommittee on Energy and Air Quality
Ms. Susja Hubbard
Chief Executive Officer
E-Z Mart Stores, Inc.
602 W. Faivay Avenue
Texarkana, TX 75504-1426

Dear Ms. Hubbard:

Thank you for appearing before the Subcommittee on Energy and Air Quality on Thursday, June 7, 2007, at the hearing entitled "Legislative Hearing on Discussion Draft Concerning Alternative Fuels, Infrastructure, and Vehicles." We appreciate the time and effort you gave as a witness before the Subcommittee.

Under the Rules of the Committee on Energy and Commerce, the hearing record remains open to permit Members to submit additional questions to the witnesses. Attached are questions directed to you from certain Members of the Committee. In preparing your answers to these questions, please address your response to the Member who has submitted the questions and include the text of the Member's question along with your response.

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Ms. Sonja Hubbard
Page 2

Thank you for your prompt attention to this request. If you need additional information or have other questions, please contact Linda Good at (202) 225-2927.

Sincerely,

John D. Dingell
Chairman

Attachment

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    Committee on Energy and Commerce

    The Honorable Rick Boucher, Chairman
    Subcommittee on Energy and Air Quality

    The Honorable J. Dennis Hastert, Ranking Member
    Subcommittee on Energy and Air Quality

    The Honorable Michael C. Burgess, Member
    Subcommittee on Energy and Air Quality
August 1, 2007

The Honorable Michael Burgess
U.S. House of Representatives
1224 Longworth House Office Building
Washington, DC 20515

Dear Representative Burgess:

Thank you for the opportunity to provide additional input following the June 7 hearing, “Legislative Hearing on Discussion Draft Concerning Alternative Fuels, Infrastructure and Vehicles.” In a July 25 letter I received from the House Energy and Commerce Committee, you asked for my response to the following question:

What do you think the Low Carbon Fuel Standards in Section 102 will do to the price of fuel for consumers? Do you think it will cause prices of fuels to go down? Do you think it will cause prices to go up? How much do you think it could go up? Could you rule out a doubling within a few years? I’m told that fuel in Denmark is $10.00 a gallon, in part because of their carbon constraints. Is $10.00 for a gallon of gas a possible price in the U.S. if we price the carbon in fuel?

NACS represents the convenience and petroleum retailing industry, which sells approximately 80 percent of the nation’s gasoline through more than 114,000 retail locations. As the primary conduit between the petroleum industry and the consumer, our members are extremely sensitive to any legislative proposals which could ultimately affect the price of motor fuel.

You should know that retailers are essentially price takers—our retail prices are determined by retail competition for the consumer and the cost of product we purchase at wholesale. These costs are largely influenced by the relationship between supply and demand. Consequently, we are extremely concerned with any policies that may result in a reduction in supply.

That said, it would not be constructive for me to speculate regarding the specific effect the proposed Low Carbon Fuel Standards may have on supplies and prices because we are not responsible for the manufacture of the products we sell. Therefore, we must rely upon the analysis of others who have greater expertise in the operations of the refining industry.

However, we must caution Congress not to proceed with any motor fuels policy without fully understanding how such policies will affect the market. Whether the proposed policy is a Low Carbon Fuel Standard or a dramatic increase in the Renewable Fuels Standard, the consequences of these policies must be fully analyzed and appropriate safeguards put in place to ensure that the policies do not negatively affect the economic well-being of consumers.
For every action taken by Congress, there is a reaction within the market. As a retailer, I must ask Congress what will be the effects of a Low Carbon Fuel Standard on domestic refinery production and the availability of compliant motor fuel imports? If the answer to this question is a reduction in overall supplies, then one could realistically assume that consumers will be faced with additional expense to fuel their vehicles. To what level prices could rise would depend upon the degree to which supplies will be affected.

We do not know what would be the overall effect of the proposed Low Carbon Fuel Standards. From our experience, it is difficult to believe that the enactment of such a policy would do anything to increase supply in the marketplace, or improve prices for consumers. We therefore urge Congress to answer this question of supply and determine if the anticipated effects will benefit the consumer before moving forward with such a proposal.

Thank you for the opportunity to provide these additional comments. If you have any additional questions regarding retailer operations, please do not hesitate to contact either myself or the staff at NACS.

Sincerely,

Sonja Hubbard
CEO, E-Z Mart Stores.
Vice Chairman of Government Relations, NACS

CC: The Honorable John Dingell, Chairman
Committee on Energy and Commerce

The Honorable Joe Barton, Ranking Member
Committee on Energy and Commerce

The Honorable Rick Boucher, Chairman
Subcommittee on Energy and Air Quality

The Honorable Dennis Hastert, Ranking Member
Subcommittee on Energy and Air Quality
The Honorable David McCurdy  
President  
Alliance of Automobile Manufacturers  
1401 Eye Street, N.W., Suite 900  
Washington, D.C. 20005  

Dear Mr. McCurdy:

Thank you for appearing before the Subcommittee on Energy and Air Quality on Thursday, June 7, 2007, at the hearing entitled “Legislative Hearing on Discussion Draft Concerning Alternative Fuels, Infrastructure, and Vehicles.” We appreciate the time and effort you gave as a witness before the Subcommittee.

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The Honorable David McCurdy
Page 2

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Sincerely,

JOHN D. DINGELL
CHAIRMAN

Attachment

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Committee on Energy and Commerce

The Honorable Rick Boucher, Chairman
Subcommittee on Energy and Air Quality

The Honorable J. Dennis Hastert, Ranking Member
Subcommittee on Energy and Air Quality

The Honorable Michael C. Burgess, Member
Subcommittee on Energy and Air Quality
Follow-up Question from the Honorable Michael C. Burgess
“Do the autos have a way to measure their entire lifecycle greenhouse gas emissions as the refining and fuel community would be required to do? What would that entail?”

Answer from the Honorable David McCurdy of the Alliance of Automobile Manufacturers

Burning gasoline in cars and trucks creates carbon dioxide. Thus, the fuel economy of a car or truck is equivalent to a measurement of the vehicle’s carbon output.

However, a variety of important factors impact the mileage that you get on a daily basis. These factors include the amount of highway versus city driving, the condition of the vehicle, driving style (always accelerating hard or gentle?), and weight that the vehicle is carrying or towing. These variables can lead to very different outcomes.

Some cars and trucks on the road today are equipped with onboard technology that measures fuel economy. These systems can often measure fuel economy either instantaneously or over time and distance.

Comprehensive, exact measurements of greenhouse gas emissions from all cars and trucks in the U.S. are more difficult. However, EPA estimates that 20% of all carbon dioxide emissions in the U.S. are from passenger cars and light trucks.

Manufacturers currently offer more than 60 models of alternative fuel automobiles powered by biofuels such as ethanol, diesel and hybrid electric technology. These vehicles reduce carbon dioxide by burning less or no gasoline. Currently there are more than 11 million of these vehicles on US roads and highways.
June 14, 2007

Chairman Rick Boucher
Subcommittee on Energy and Air Quality
U.S. House of Representatives
Washington, DC 20515

Chairman Boucher:

Thank you very much for inviting the NPRA, National Petrochemical & Refiners Association to testify for a legislative hearing regarding alternative fuels, infrastructure and vehicles before the Subcommittee on Energy and Air Quality on June 7, 2007. We greatly appreciate the opportunity to participate in the Subcommittee's deliberations on this important energy issue.

We understand that certain statements in NPRA’s written testimony may require clarification. NPRA’s analysis of the low carbon fuel standard (LCFS) proposed in the discussion draft may lead some to believe that the program would require a 26% reduction in the carbon intensity of the entire fuel supply. NPRA’s statement that, “a 26% reduction would be required in the first year and increasing annually to a 38% reduction in 2020” does not reflect carbon intensity reductions in the overall fuel supply. NPRA’s calculations apply only to carbon intensity reductions for the Alternative Fuels Program. Applied to the entire fuel supply, NPRA estimates that by 2013, the LCFS would require a 1.8% carbon intensity reduction and a 3.5% carbon intensity reduction by 2020.

Once again, NPRA appreciates the opportunity to clarify its written testimony from the June 7, 2007 legislative hearing. Furthermore, we understand the great difficulties the Subcommittee faces in crafting a comprehensive fuel policy that balances the alternative fuel goals of public policy makers with the needs of the American driving public. We commend you for your efforts to seek input from all affected parties and carefully consider all of the facts surrounding this important issue.

Sincerely,

Charles T. Drevna
Research Finds That Earth’s Climate is Approaching ‘Dangerous’ Point

May 30, 2007

NASA and Columbia University Earth Institute research finds that human-made greenhouse gases have brought the Earth’s climate close to critical tipping points, with potentially dangerous consequences for the planet.

Image right: Antarctica lost much more ice to the sea than it gained from snowfall according to a NASA survey done between 1992 and 2002. It also had a corresponding rise in sea level. The survey documented for the first time extensive thinning of the West Antarctic ice shelves. Credit: NASA/SVS

From a combination of climate models, satellite data, and paleoclimate records the scientists conclude that the West Antarctic ice sheet, Arctic ice cover, and regions providing fresh water sources and species habitat are under threat from continued global warming. The research appears in the current issue of Atmospheric Chemistry and Physics.

Tipping points can occur during climate change when the climate reaches a state such that strong amplifying feedbacks are activated by only moderate additional warming. This study finds that global warming of 0.6°C in the past 30 years has been driven mainly by increasing greenhouse gases, and only moderate additional climate forcing is likely to set in motion disintegration of the West Antarctic ice sheet and Arctic sea ice. Amplifying feedbacks include increased absorption of sunlight as melting exposes darker surfaces and speedup of iceberg discharge as the warming ocean melts ice shelves that otherwise inhibit ice flow.

The researchers used data on earlier warm periods in Earth’s history to estimate climate impacts as a function of global temperature, climate models to simulate global warming, and satellite data to verify ongoing changes. Lead author James Hansen, NASA Goddard Institute for Space Studies, New York, concludes: “If global emissions of carbon dioxide continue to rise at the rate of the past decade, this research shows that there will be disastrous effects, including increasingly rapid sea level rise, increased frequency of droughts and floods, and increased stress on wildlife and plants due to rapidly shifting climate zones.”

Image above: CO₂ (carbon dioxide) is a critical component of the Earth’s atmosphere. Since the beginning of the industrial age, the concentration of CO₂ has increased by about 26%, from about 260 parts per million to over 370 parts per million. Scientific studies indicate that CO₂ is one of several gases that trap heat near the surface of the Earth. These gases are known as greenhouse gases. Credit: NASA/JPL

The researchers also investigate what would be needed to avert large climate change, thus helping define practical implications of the United Nations Framework Convention on Climate Change. That treaty, signed in 1992 by the
United States and almost all nations of the world, has the goal to stabilize atmospheric greenhouse gases "at a level that prevents dangerous human-made interference with the climate system."

Based on climate model studies and the history of the Earth the authors conclude that additional global warming of about 1°C (1.8°F) or more, above global temperature in 2000, is likely to be dangerous. In turn, the temperature limits have implications for atmospheric carbon dioxide (CO₂), which has already increased from the pre-industrial level of 280 parts per million (ppm) to 385 ppm today and is rising by about 2 ppm per year. According to study co-author Makiko Sato of Columbia's Earth Institute, "the temperature limit implies that CO₂ exceeding 450 ppm is almost surely dangerous, and the ceiling may be even lower."

The study also shows that the reduction of non-carbon dioxide forcings such as methane and black soot can offset some CO₂ increase, but only to a limited extent. Hansen notes that "we probably need a full court press on both CO₂ emission rates and non-CO₂ forcings, to avoid tipping points and save Arctic sea ice and the West Antarctic ice sheet."

A computer model developed by the Goddard Institute was used to simulate climate from 1880 through today. The model included a more comprehensive set of natural and human-made climate forcings than previous studies, including changes in solar radiation, volcanic particles, human-made greenhouse gases, fire particles such as soot, the effect of the particles on clouds and land use. Extensive evaluation of the model's ability to simulate climate change is contained in a companion paper to be published in Climate Dynamics.

Image right: Author Dr. James Hansen, of NASA's Goddard Institute for Space Studies, New York. Credit: NASA

The authors use the model for climate simulations of the 21st century using both "business-as-usual" growth of greenhouse gas emissions and an "alternative scenario" in which emissions decrease slowly in the next few decades and then rapidly to achieve stabilization of atmospheric CO₂ amount by the end of the century. Climate changes are so large with "business-as-usual," with additional global warming of 2.3°C (4.1°F) that Hansen concludes "business-as-usual" would be a guarantee of global and regional disasters.

However, the study finds much less severe climate change — one-quarter to one-third of that of the "business-as-usual" scenario — when greenhouse gas emissions follow the alternative scenario. "Climate effects may still be substantial in the 'alternative scenario', but there is a better chance to adapt to the changes and find other ways to further reduce the climate change," said Sato.

While the researchers say it is still possible to achieve the "alternative scenario", they note that significant actions will be required to do so. Emissions must begin to slow soon. "With another decade of "business-as-usual" it becomes impractical to achieve the 'alternative scenario' because of the energy infrastructure that would be in place," says Hansen.

References


Media Contacts

Leslie McCarthy, NASA Goddard Institute for Space Studies, 212-678-5507

http://www.giss.nasa.gov/research/news/20070530/
There are millions of reasons to think Congress won’t do much about global warming, all stockpiled in the lobbying budgets of the U.S.’s mightiest interest groups—automakers and other manufacturers, environmentalists, labor unions, farmers, oil companies, coal companies, utilities, the military, antitaxers and so on. A Washington axiom holds that it’s always easier to do nothing than to do something. By that standard, tackling climate change, which would affect every industry and every private life, looks almost impossible.

On the other hand, there’s John Dingell. Michigan’s eternal Congressman, defender of Detroit’s carbon-spewing gas hogs, would seem an unlikely cause for optimism. After all, his wife Deborah is a General Motors Foundation trustee, leading his critics to assert that Dingell is literally in bed with the auto industry.

But just as it took anticommunist Richard Nixon to open the door to China, and hip-hop mogul Russell Simmons to denounce misogyny in rap, so Dingell, Democrat from Dearborn and friend of factories, may be the insider able to drive change. At 80, restored to his wide-ranging dominion over the House Committee on Energy and Commerce, “John Dingell is one of the few people with the capacity to manage complex pieces of legislation when there are high stakes,” says former House colleague Philip Sharp.

He’s smart enough, strong enough, mean enough. Sharp saw Dingell up close the last time Big John reluctantly tackled air pollution—the 1990 amendments to the Clean Air Act that successfully dealt with acid rain. Now Dingell has awakened to global warming, holding more than two dozen hearings on the issue since February and extricating on-the-record promises of cooperation from heads of industry more accustomed to obstruction.

He’s not the most famous member of Congress, but he’s among the most feared. “A trade-association leader recently told me that his group was going to shift from being against mandatory caps on carbon emissions to being for them,” Sharp recounts. “When I asked why, he said, ‘There’s no way we can go meet with Dingell and just say no.’ He didn’t mention any other leader of the House or Senate, just Dingell.”
He is the last link to a vanished era. Seeing Dingell hobbling along the halls of Congress on his cane or cupping his half-good ear to hear a colleague is like spotting an elderly mammoth alive in the natural-history museum. As long as he's not extinct, he's formidable. Dingell comes from a time when Congress did big things, like Medicare and the Voting Rights Act, as a matter of course. Key Congressmen were known as "bulls," and they didn't look to the White House for permission slips or marching orders. Dingell's first oath of office, in 1956, was administered by Sam Rayburn, whose power is memorialized in the congressional office building bearing his name.

"I am a legislator," said the last woolly mammoth in a recent interview with TIME. By which Dingell means he is in Congress to pass laws, not to wage ideological warfare or get his mug on television. He has never wanted anything beyond life in the House.

The art of moving a major bill is an elusive mix of endurance, persuasion, negotiation, intimidation—and timing. The field is sown with favors large and small over many years and watered with occasional menace. (Ask Dingell how he feels about being called "the meanest s.o.b. in Congress," and he quietly answers, "It's very useful.") With luck, the seeds bear fruit when the votes are finally counted. The process is so slow and cumulative that few people ever become masters. "I've been doing it for years, and I learned from the best," Dingell said. "Rayburn, John McCormack [Rayburn's successor as Speaker], my dad."

John Dingell Sr. (born Dziegielewicz) first won the Dearborn seat in 1932 and held it for more than two decades before his son took over. Together, the Dingell dynasty covers nearly a third of the nation's history. "He was a skinny little shrimp," Dingell said of his dad. "Never drew a decent breath of air. Supposed to have died of tuberculosis in 1911. When the doctor told him that he had six months to live, Pop looked at him and said, 'Doc, I'll pass on your grave.' And Dr. Conway, whom Dad loved, died in '35. Pop died in '35.""

His son practically grew up in the House. Dingell recalls hunting rats "as big as cats" with an air rifle in the Capitol basement, and Franklin D. Roosevelt inscribed a photograph to him—"my friend"—around the time that Dingell was a 12-year-old congressional page. He insists that he never planned to occupy his father's seat, but the senior Dingell's death in office left a humungous political machine leaderless and important goals unmet.

Dingell's victory in a special election was the first of 27 consecutive blowouts (some, he insists, harder than others). Unlike his father, Big John was physically imposing, and he filled his office walls with hunting trophies; visitors plead their cases under the cold gaze of Dingell kills. He honored his father by pushing for national health insurance and was chosen in 1969 to wield the gavel when the House passed Medicare.

Then, as now, many members of Congress coveted seats on Ways and Means or Armed Services, but Dingell preferred to master the process outside the spotlight. "No one paid any attention" to his subcommittee on fisheries, "so we were able to get a lot done," he explained. Between 1964 and 1974, Dingell was a driving force behind the National Wilderness Act, the Water Quality Act, the National Environmental Policy Act, the Endangered Species Act, wetlands preservation and bans on ocean dumping and the hunting of sea mammals.

http://www.time.com/time/printout/0,8816,1627016,00.html

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In fact, Dingell would merit a bust on a pedestal at the Sierra Club, except that environmentalists cannot forget that his love for the outdoors is matched only by his love for heavy manufacturing. It was he who amended the Clean Air Act to guarantee that the U.S. auto industry must never be harmed by pollution regulations. And he has stoutly resisted increases in the gas-mileage requirements for sport-utility vehicles and minivans. "I've been looking after American manufacturing and American industry for years—it isn't just autos," Dingell acknowledged proudly. Besides, he added, neither he nor Detroit is to blame for the fact that overall mileage of the U.S. auto fleet hasn't improved. Americans simply prefer high-performance, four-wheel-drive towing machines, even for the preschool car pool. And in this free country, "if the people want something," he said, "they get it."

And now the people want to fight global warming. According to Dingell, his shift from skeptic to activist has two explanations. "The scientific evidence is now generally accepted as being clear," he said. "The other thing that has transpired is that there's a public acceptance that something has to be done. And you'll remember that we work for the people."

Those aren't the motives that have Capitol Hill buzzing, however. Insiders wonder if Dingell has been riled up by Speaker of the House Nancy Pelosi, with whom he has a long-running feud. Over the years, Dingell has opposed her rise to party leadership. She, in turn, backed another member of Congress, Lynn Rivers, when Rivers was forced by redistricting to run for Dingell's seat. That was in 2002, but Dingell still savor.s the drubbing he gave Pelosi's friend. So bad blood was pulsing when the Democrats took the reins of Congress this year and Pelosi appointed a select committee to remove global warming from Dingell's grasp.

No protégé of Rayburn's would ever willingly give up jurisdiction over a lunch menu—let alone the biggest bill in decades. Dingell flexed the muscle of a half-century and rallied his fellow committee chairs against this infringement of prerogatives. The select committee was promptly neutered. "John is the quintessential congressional chairman, protecting his jurisdiction while often reaching to grab someone else's," according to Leon Panetta, who chaired the Budget Committee before serving as White House chief of staff. "The last thing he wants is to lose jurisdiction."

Dingell scoffs at the idea that intramural combat is the root of his new attitude. "I think the select committee is going to be as useless as feathers on a fish, and they're either going to be in my hair or at my feet," he grumbled. But he insisted that he isn't motivated by mere annoyances.

In fact, he was moving even before Pelosi acted, he said. Within days of the Democratic victory in November, he had summoned a former member of his committee to return and testify on global warming. "Albert!" he barked sternly when former Vice President Al Gore came on the line. "I'd like you to come in."

The Gore hearing was quickly followed by sessions with leading scientists, auto manufacturers, power-company executives, economists and others. Energy and Commerce Committee chief of staff Dennis Fitzgibbons—bared back to Dingell's side after a lucrative stint as an auto-industry lobbyist—describes the "steep learning curve" for members of Congress, who have arrived, one by one, at "their holy [expletive] moment, when they say, 'Wow! This..."
is bigger than I thought.”

Behind the scenes, Dingell has delivered offer-you-can’t-refuse messages to industry. “I’ve said, ‘Fellas, the factual issue appears to be resolving itself. Work with me, I will do everything I can to get you a bill that you probably won’t like—but with which you can live. And if you don’t, you will have a bill that you won’t like and can’t live with. When the CEOs of General Motors, Ford and DaimlerChrysler testified in March, Big John demanded yes or no answers to a series of questions that boiled down to just one: Are you working with us or against us? With varying degrees of pain on their faces, each one promised to cooperate.

But the devil’s in the details. And any serious climate-change legislation will be a forest of details. The key feature of any Dingell bill will be a mandatory cap-and-trade system modeled on Dingell’s 1990 acid-rain legislation. Industries would be allowed to emit fixed amounts of greenhouse gases according to their share of the overall problem. If a power plant or factory reduces its emissions, the saving can be sold to plants that fail to adhere to the cap. In this way, reductions become valuable and pollution costly.

Easy to say but fiendishly difficult to execute in a world where carbon emitters range from coal-fired power plants to the backyard grill. “How many sources of carbon dioxide are we talking about?” mused Fitzgibbons. “How do you allocate the amounts? It’s a geometrically complex arrangement.”

Europe’s carbon cap-and-trade system is off to a poor start because too many permits were issued by governments trying to protect their own industries. On the other hand, too few permits could cripple the American economy.

Many economists and environmentalists prefer a straightforward tax on carbon emissions, with proceeds going to fund research and development of alternative energy. It’s much simpler—but economists don’t run for re-election. House Democrats with long memories recall the whipping they took for backing a similar tax in the Clinton era. The so-called BTU tax was one reason the party lost control of Congress in 1994, and they don’t intend to repeat the experience. As Dingell dryly noted in a recent speech, “Many members of Congress remember only too clearly the letters B, T and U.”

Even tougher is the one perplexing area in which the fight against global warming conflicts with the U.S.’s goal of greater energy independence: coal. “The U.S. is the Saudi Arabia of coal,” Dingell recently declared. We have seemingly endless tons of the stuff, which can be converted into liquid fuel for cars. Coal boosters are pushing legislation through Congress to subsidize the use of coal instead of oil. The only problem: coal is the dirtiest source of greenhouse gases. Representative Rick Boucher, from Virginia’s mining country, chairs the subcommittee on energy, but coal’s influence goes further than that. Twenty-seven House Democrats hail from coal regions—a deeply meaningful number when Democrats control the chamber by just 16 votes.

The problem is so big, tangled and fraught that some House members prefer to let the Senate take the lead. After all, if Senate Republicans could be lured into a filibuster against a climate-change bill, they might hand the

Democrats a strong issue for the upcoming presidential campaign. Dingell, who calls the Senate "a constitutional mistake," wants nothing to do with that strategy. Nor does he have any sympathy for environmentalists who believe the best thing to do is delay action until a Democrat wins the White House.

When both right and left, big business and the ultragreens are worried about what he's up to, call it a Dingell moment. He doesn't like ideologues. Extreme purity annoys him. "I write legislation from the middle," he explained. "I want to build a bill that will have broad bipartisan support that will have the public's confidence." And finally, "a bill that can be signed by the President."

His bipartisanship wears none of the lacy finery of a civics-class lecture. It is a strategy perfected in the bygone era of Democratic dominance of Congress. Dingell knows a purist in his own party can slow him down more than a pragmatist across the aisle. So he likes to get started on a big initiative by cutting a deal with a ranking Republican. Only then does he turn to battle his fellow Democrats.

When this works, it can be impressive. The Clean Air Act amendments of 1990 were 13 years in the making (eight of them fairly quiet years as a result of the Reagan Administration's opposition to the bill). When Dingell at last brought the legislation to a vote, however, the amendments passed almost unanimously. But can the strategy work in today's more evenly--and bitterly--divided House?

One advantage Dingell will have in crossing party lines is his record in defending the U.S.'s industrial interests. He stands squarely on the only common ground Congress has found concerning global warming. In 1997 the Senate voted unanimously to condemn Kyoto treaty provisions that would exempt China and other developing nations from mandatory carbon reductions.

Dingell is bulletproof in this area. "I do not propose that my country be the only country that pays the costs of addressing [global warming]," he said. "China is only an example. You've got India, you've got the former Soviet countries, you've got the Europeans. Everybody is trying to give fine speeches, get a lot of credit--and then stick somebody else with the bill."

Where Dingell's influence is most vulnerable, by contrast--his Achilles' heel--is Detroit. He risks losing credibility if he becomes the last man standing between the auto industry and increased-mileage requirements. Momentum is building in the Senate--encouraged by President George W. Bush in his State of the Union speech early this year--for a 4% per-year increase in corporate average fuel economy (CAFE) standards.

Dingell would prefer to do away with the existing CAFE system for measuring fuel efficiency and replace it with a system that measures tailpipe emissions. After all, a car that runs 25 miles on a gallon of clean biodiesel might be preferable environmentally to a car that runs 35 miles on gasoline or liquid coal.

Maintaining his influence on global warming may mean swallowing the 4% pill--washed down, knowing Dingell,

http://www.time.com/time/printout/0,8816,1627016,00.html

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by a fountain of federal subsidies for the retooling of American auto plants. Some friends of the chairman believe that Dingell has chosen the toughest bill of his career to cap his historic tenure. If he survives this Congress and wins one more election, he will pass Mississippi's Jamie Whitten as the nation's longest-serving Congressman.

But Dingell is superstitious about the luck-changing power of grandiose statements, according to a longtime associate. So instead of a grand finale, he quietly but insistently drummed his cane on the floor of his Capitol hideaway office as punctuation for the long list of his legislative achievements.

"Look," he closed understatedly, "this is going to be one of the hardest tasks I've ever addressed." That said, "I intend to try and move this. If the problem is as big as everyone says—and it's an enormous problem—then we have a duty to move it.

"Don't we?"

Find this article at:
http://www.time.com/time/magazine/article/0,2880,1627016,00.html
June 6, 2007

The Honorable John D. Dingell, Chair
House Energy & Commerce Committee
2328 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Joe Barton, Ranking Member
House Energy & Commerce Committee
2109 Rayburn House Office Building
Washington, D.C. 20515

Re: June 1, 2007 Discussion Draft of Motor Vehicle Bill

Dear Chairman Dingell & Ranking Member Barton:

We write today to state our strong opposition to a legislative proposal that Congressman Rick Boucher, Chairman of the Energy & Air Quality Subcommittee, unveiled on June 1, 2007, regarding the regulation of motor vehicle emissions. See attached discussion draft. We understand that this proposed bill is going to be the subject of a hearing scheduled for tomorrow before Chairman Boucher’s Subcommittee.

While requiring only incremental increases in federal motor vehicle fuel economy standards, the proposed bill would amend the Clean Air Act in two fundamentally short-sighted ways. First, the bill would eliminate the authority that the Clean Air Act has provided EPA for decades to regulate greenhouse gas emissions, as the U.S. Supreme Court recently recognized. We acknowledge that Congress is, of course, free to amend the underlying statutory framework that the Court reviewed in Massachusetts v. EPA. Nevertheless, now is the time for aggressive action to combat the harmful emissions that cause climate change, and we urge Congress not to turn the clock backwards in the proposed manner.

Second, the bill would eliminate EPA’s ability to grant a waiver of preemption for California state motor vehicle emission standards for greenhouse gases. As you are aware, other states are currently free to adopt those standards pursuant to Section 177 of the Clean Air Act. A total of twelve of our states have adopted the California standards, with others currently considering them. The bill
would eliminate the statutory right of states to do so, thereby upsetting the longstanding cooperative federalism established by the Act. The current system of allowing two, but only two, sets of motor vehicle emission standards has worked well over the last four decades. Indeed, most of the technological innovations needed to reduce air pollutant emissions have been because of California’s standards.

We urge you to not support this proposal.

Sincerely,

Martha Coakley
Attorney General of Massachusetts

Edmund G. Brown, Jr.
Attorney General of California

Richard Blumenthal
Attorney General of Connecticut

Joseph R. Biden, III
Attorney General of Delaware

Thomas J. Miller
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G. Steven Rowe
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Douglas F. Gansler  
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Gary K. King  
Attorney General of New Mexico

Andrew M. Cuomo  
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Hardy Myers  
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Patrick C. Lynch  
Attorney General of Rhode Island

William H. Sorrell  
Attorney General of Vermont

Lori Swanson  
Attorney General of Minnesota
Michael A. Cardozo
Corporation Counsel
City of New York

cc. Committee Members
June 5, 2007

Dear Representative,

At a time when Americans are paying record prices at the gas pump, global warming is accelerating, and our national security is held hostage by our dependence on oil, it is incumbent upon this Congress to enact legislation that leads America forward with smart energy solutions. The draft legislation that was introduced on June 1st fails to provide these solutions. Instead, it takes America backwards by repealing and preempting federal and state environmental authorities, ignoring rising energy prices, promoting highly polluting fuel sources, requiring a large biofuels production increase without necessary public health and environmental safeguards, and failing to set strong standards to improve fuel economy and promote clean sources of energy. On behalf of our millions of members and supporters nationwide, we urge you to oppose this legislation and support efforts, both in committee and on the floor, to promote the kind of clean energy policy Americans deserve.

A sound energy policy for America would move the country forward by aggressively pursuing energy-saving efficiency measures, boosting fuel economy standards, establishing a national Renewable Electricity Standard, and developing a market for clean, sustainable, low-carbon fuels. Taking these steps would save consumers billions of dollars on their energy bills, cut our dependence on oil and other dangerous energy sources, curb global warming, and create hundreds of thousands of new good jobs across the country.

We object strongly to the following provisions in the draft legislation:

1. **Repeals Federal Clean Air Act Authority and Pre-empts State Laws:** The draft legislation would repeal the Environmental Protection Agency’s Clean Air Act authority to regulate global warming pollution from vehicles and substantially limit its authority for cleaner fuels by legislatively overturning the Supreme Court ruling in Massachusetts v. EPA. Moreover, the draft would block at least 12 states from going forward with adopted clean car standards that limit global warming emissions from vehicles. Under the Clean Air Act, California has always been authorized to go beyond federal minimum air pollution standards, and other states may adopt the California standards - in their entirety. California’s newest emissions standard - for greenhouse gases - is currently waiting for a waiver from EPA to proceed; EPA has routinely granted over 40 similar waivers over the past 30 years. This bill, if passed, would prevent EPA from granting California the necessary waiver to implement its program, as well as the eleven
other states around the country that follow California’s standards. Preserving EPA and state authority to control global warming pollution will not lead to a ‘patchwork’ of state standards, as some have argued. Since the early 1990s, the Clean Air Act has recognized two vehicle emissions standards in the United States - Federal and California standards. This system has worked smoothly and will not be altered when global warming pollutants are controlled. The draft provisions are a blatant attempt to undermine states’ rights and prevent states from moving forward with policies to protect their citizens from the impacts of global warming. (Title VII, Sec. 122)

**Solution:** Protect state and federal authority under the Clean Air Act by striking these provisions and affirmatively defending the rights of EPA and the states to regulate greenhouse gas emissions from both stationary and mobile sources.

2. **Fuel Economy Targets Are Too Little, Too Late, and May be Nothing at All:**
   The technology exists today to make all new vehicles – from sedans to pickups to SUVs – go farther on a gallon of gas. Since these vehicles consume over 9 million barrels of oil per day and are the source of 20% of the nation’s heat-trapping pollution that causes global warming, any serious effort to cut oil consumption and reduce global warming emissions must include efforts to increase the fuel economy of new vehicles. The draft legislation sets fuel economy targets of 36 miles per gallon for passenger cars by 2021 and 30 miles per gallon for light trucks by 2024. These targets are woefully inadequate and dramatically underestimate the ability of existing fuel-saving technology to increase the fuel economy of all new vehicles. Not only are these targets weaker and effective at a later date than what the National Academy of Sciences reported in 2002, they are also dramatically weaker than the plan articulated by President Bush in this year’s State of the Union to raise fuel economy standards 4 percent per year for the next ten years. Adding insult to injury, as drafted, the bill sets a fuel economy goal but then allows NHTSA to set significantly lower standards based on current faulty agency practices. (Title III, Sec. 301)

**Solution:** Raise fuel economy standards 4% per year for new vehicles as called for by H.R. 1506, the Markey–Platts Fuel Economy Reform Act. When fully phased-in, this policy would reduce America’s oil consumption by 3.1 million barrels per day – more than we currently import from the entire Persian Gulf. At the same time, it would save consumers over $31 billion per year at the gas pump and prevent over 500 million tons of heat-trapping global warming emissions.

3. **Liquid Coal is Not a Clean Energy Solution:**
   The Alternative Fuel Standard opens the door to liquid coal fuels and other nonrenewable alternatives, and fails to include safeguards to ensure that these fuels produce substantially less global warming pollution than the fuels we use today. Together with the liquid coal incentives in the broader bill, which lack clear limits on emissions, the bill would propel the development of a liquid coal fuels industry, with only a plan in place, but no guarantee of global warming
emissions reductions. While the Low-Carbon Fuel Standard is a step in the right direction, but it is too weak and its benefits could be undermined by the failure to include jet fuel. Furthermore, the use of high-emission fuels under the Alternative Fuels Standard could force EPA to weaken the presumptive Low Carbon Fuel Standard. (Title I, Sec. 101)

Solution: Reject any provisions of the bill that would encourage the development and expansion of dirty liquid coal; require every alternative fuel to produce at least 20% less global warming lifecycle pollution than conventional fuels; and include jet fuel in the low carbon fuel standard. Overall, these Low Carbon Fuel Standards must be strengthened so that the standards are consistent with an 80% reduction in global warming emissions below 1990 levels by 2050.

4. Alternative Fuels Standard and Low Carbon Fuels Standard Lacks Necessary Environmental and Public Health Safeguards: These standards would dramatically increase biofuels and other alternative fuels production in the U.S. without also establishing the necessary safeguards to ensure this increase does not cause substantial harm to the environment and public health. Done right, biofuels hold great potential to help reduce pollution and America’s dangerous dependence on oil. The draft legislation, however, fails to include necessary environmental safeguards to protect air, land, and water quality as we dramatically expand biofuels and other alternative fuels production. Forests, conservation lands, wildlife habitat, agricultural lands, and waterways here and abroad would be badly threatened by pressures from the major increase in biofuels production required by the bill.

Solution: To protect public health and the environment, the standards should include safeguards that 1) require that fuel feedstocks are not extracted from environmentally sensitive areas, 2) ensure that the standards not increase any air pollutant over the amounts currently attributable to gasoline, and 3) direct EPA, in consultation with appropriate other agencies to conduct a study and report to Congress on the impacts of the standards, and give EPA authority to waive the Alternative Fuels Standard, if necessary, until the impacts can be mitigated.

5. Lacks a Strong Renewable Electricity Standard: The draft legislation fails to increase production of clean, renewable energy by setting a national Renewable Electricity Standard (RES). This standard would boost production of clean, renewable energy sources like wind, biomass, geothermal and solar power. Already, over twenty states across the country have adopted RES policies. Similar proposals have also passed the Senate on three separate occasions. This is a proven policy which must be included in any energy legislation.

Solution: Establish a national Renewable Energy Standard requiring utilities to produce 20 percent of electricity from renewable energy sources by 2020 as required by H.R. 969, the Udall-Platts legislation. Adopting this standard would create over 355,000 new jobs, save over $12.6 billion on energy bills, and provide
over $70 billion in new capital investments across the country. At the same time, it would reduce global warming emissions by over 500 million tons.

When Americans voted for a change in Congress, they made it clear that business as usual was no longer acceptable and they demanded real solutions to the problems facing our country. The draft legislation before the House Energy and Commerce committee betrays their trust. It does not guarantee relief for consumers at the pump or real reductions in oil consumption and global warming pollution. We urge Congress to reject this draft legislation and support new legislation that would solve America’s energy and global warming crisis by relying on American ingenuity, 21st century technology, and proven standards and safeguards.

Sincerely,

Betsy Loyless
Senior Vice President Public Policy
National Audubon Society

Robert Dewey
Vice President
Government Relations & External Affairs
Defenders of Wildlife

Erich Pica
Director
Domestic Campaigns
Friends of the Earth

John Passacantando
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Greenpeace USA

Tierman Sittenfeld
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League of Conservation Voters

Karen Steuer
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Government Affairs
National Environmental Trust

Karen Wayland
Legislative Director
Natural Resources Defense Council

Joan Claybrook
President
Public Citizen

Debbie Sease
National Campaign Director
Sierra Club

Alden Meyer
Director of Strategy and Policy
Union of Concerned Scientists

Anna Aurilio
Director
Washington DC Office
U.S. Public Interest Research Group (PIRG)

Linda Lance
Vice President for Public Policy
The Wilderness Society
June 6, 2007

The Honorable Thomas H. Allen
1127 Longworth House Office Building
Washington, D.C. 20515

Re: June 1, 2007 Discussion Draft on Alternative Fuels, Infrastructure, and Vehicles

Dear Congressman Allen:

As Commissioner, I am writing to voice strong opposition to specific sections of the "Discussion Draft of Energy Legislation" circulated by Chairman Boucher on June 1, 2007. As proposed, they would significantly restrict state and federal authority regarding regulation of greenhouse gas emissions from motor vehicles and fuels.

Specifically, the legislation would amend Section 202 of the Clean Air Act to eliminate EPA’s authority to regulate vehicle greenhouse gas emissions, thus legislatively overriding the Supreme Court’s recent decision in Massachusetts v. EPA. In addition, by amending Section 209(b) of the Clean Air Act, the legislation would prevent EPA from granting California the necessary waiver to implement its program to reduce greenhouse gas pollution from motor vehicles. If California is denied a waiver, Maine, along with seven states in the northeast and four other states that have adopted the California motor vehicle greenhouse gas emission standards, would also be permanently prevented from limiting greenhouse pollution from vehicles. The legislation would also restrict EPA’s current authority to regulate greenhouse gases produced by fuels under Section 211.

Maine and the other northeast states have a vital interest in reducing global warming emissions from vehicle and fuels. In the region, cars and trucks emit 35 percent of total human-related greenhouse gas emissions. Control of motor vehicle and fuel-related greenhouse gas emissions is of utmost importance to Maine citizens and businesses.
The Clean Air Act has a long and successful track record in which the states serve as laboratories for new and innovative measures to reduce air pollution. The proposals I have referenced run counter to that successful strategy. With such demonstrated success, we find it inconceivable that, at precisely the time that the need for aggressive action to combat harmful global warming pollution has become so undeniably apparent, some in Congress would even consider abandoning a proven course of action.

I ask that you work with your colleagues to remove these provisions, and provisions in any other energy legislation, that attempt to upset the balanced state and federal authorities to address air pollution, including greenhouse gases, that now exist in the Clean Air Act.

Sincerely,

[Signature]

David P. Littell
Commissioner

Cc: Congressman Michael H. Michaud
    Senator Olympia J. Snow
    Senator Susan M. Collins
    James Bradley, Congressman Tom Allen's Office
    Karin Tilberg, Governor John Baldacci’s Office
    John Kerry, Maine Office of Energy Independence
Dear Chairman Boucher and Ranking Member Hastert:

The National Association of Clean Air Agencies (NACAA) – which represents the air pollution control agencies in 54 states and territories and more than 165 metropolitan areas across the country – strongly urges you to strike language from draft energy legislation that would inappropriately strip states and EPA of their authorities to regulate motor vehicle-related greenhouse gas emissions. The provisions to which we vigorously object are contained in Subtitle B of a Discussion Draft on Alternative Fuels, Infrastructure, and Vehicles, released last Friday, June 1, 2007, by the House Energy and Commerce Subcommittee on Energy and Air Quality.

First, the draft legislative language would prohibit state enforcement of motor vehicle emission standards designed to reduce greenhouse gas emissions, undercutting the ability of states to combat global warming. In 2005, the State of California adopted greenhouse gas emission standards for motor vehicles. Since that time, 11 additional states have exercised their statutory authority under Section 177 of the Clean Air Act (CAA) to “opt in” to California’s greenhouse gas emission standards, and several others are considering such action. However, neither California nor any of the opt-in states may enforce these standards until EPA grants a waiver of federal preemption to California under Section 209(b)(1) of the CAA. California submitted its request for a waiver to EPA in December 2005; the agency is
currently accepting public comment on this request. However, the Discussion Draft would bar EPA from granting waivers for such programs. NACAA urges that the provisions of the Discussion Draft at Section 722(d) be struck in their entirety; to enact them into law would be an inappropriate revocation of states’ rights.

Second, the draft legislative language would also revoke EPA’s statutory authority to promulgate regulations to control transportation-related greenhouse gas emissions, thus overriding the recent decision of the United States Supreme Court in Massachusetts v. EPA, in which the Court affirmed this Clean Air Act authority. NACAA urges that the Discussion Draft provisions affecting these changes be struck as well.

The Discussion Draft on Alternative Fuels, Infrastructure, and Vehicles will be the subject of an Energy and Air Quality Subcommittee hearing tomorrow, with markup to follow shortly thereafter. NACAA urges that you not only remove the aforementioned provisions from this Discussion Draft, but that you also work to ensure that any energy bill that proceeds through Congress be free of language that would limit state or federal authority to address global warming.

Sincerely,

S. William Becker

cc: The Honorable John D. Dingell, Chairman, House Committee on Energy and Commerce
The Honorable Joe Barton, Ranking Member, House Committee on Energy and Commerce
Members, House Committee on Energy and Commerce
June 6, 2007

The Honorable Rick Boucher, Chair
House Energy & Air Quality Subcommittee
2187 Rayburn House Office Building
Washington, D.C. 20515

The Honorable J. Dennis Hastert, Ranking Member
House Energy & Air Quality Subcommittee
2304 Rayburn House Office Building
Washington, D.C. 20515

Re: June 1, 2007 Discussion Draft on Alternative Fuels, Infrastructure, and Vehicles

Dear Chairman Boucher & Ranking Member Hastert:

The Northeast States for Coordinated Air Use Management (NESCAUM) is writing to voice strong opposition to a legislative proposal circulated last week for consideration by the Energy and Air Quality Subcommittee. NESCAUM is an association of the air pollution control programs in Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont. The legislation proposed by Representative Boucher would significantly restrict state and federal authority to regulate greenhouse gas emissions from motor vehicles and fuels.

Specifically, the legislation would amend Section 202 of the Clean Air Act to eliminate EPA’s authority to regulate vehicle greenhouse gas emissions, thus legislatively overriding the Supreme Court’s recent decision in Massachusetts v. EPA. In addition, the legislation would prevent EPA from approving the waiver necessary for California to implement its program to reduce greenhouse gas pollution from motor vehicles. Section 209(b) of the Clean Air Act would be amended to specifically require EPA to deny a waiver for any standards that “are designed to reduce greenhouse gas emissions.” If California is denied a waiver, seven states in the NESCAUM region, along with four other states that have adopted the California motor vehicle greenhouse gas emission standards, would also be permanently prevented from limiting greenhouse pollution from vehicles, as would any other state that may wish to adopt California’s greenhouse gas standards in the future. The legislation would also restrict EPA’s current authority to regulate greenhouse gases produced by fuels under Section 211.

1 The discussion draft is posted at http://energycommerce.house.gov/energy_110/TitleIV/2011-20-
%2011d00%2006107_viol.pdf (accessed June 5, 2007).
2 The potentially affected seven NESCAUM states are Connecticut, Maine, Massachusetts, New Jersey, New York, Rhode Island, and Vermont. The additional four states are Maryland, Oregon, Pennsylvania, and Washington.
The Northeast states have a vital interest in reducing global warming emissions from vehicular and other sources in the region. The need for action is no longer in dispute, as was confirmed by the world’s leading climate scientists in the latest Intergovernmental Panel on Climate Change (IPCC) report on climate change impacts, adaptation, and vulnerability. In the Northeast, motor vehicles (cars and trucks) emit approximately 35 percent of total human-related greenhouse gas emissions in the region. Therefore, the control of motor vehicle and fuel-related greenhouse gas emissions is of utmost importance to Northeast state air quality regulators.

The Clean Air Act provides California with the authority to set emission control standards for motor vehicles and for states outside of California to choose between the federal and California motor vehicle emission control standards. Use of this statutory authority has a long and successful track record and its success is demonstrated by the decreasing trends in air pollution observed across the country. The draft legislation under consideration here would walk away from this successful track record. The bill would eliminate the statutory right of California to establish vehicle greenhouse gas standards, and for other states to adopt the California standards – a profound alteration to the respectful approach for state rights embodied in the current Clean Air Act. The balanced system of allowing two, but only two, sets of motor vehicle emission standards has worked well over the last four decades. Indeed, most of the technological innovations needed to reduce motor vehicle air pollution have been driven by California’s standards. With this demonstrated success, we find it inconceivable that, at precisely the time that the need for aggressive action to combat harmful global warming pollution has become so undeniably apparent, some in Congress would even consider turning the clock backwards in the proposed manner.

We ask that you remove these provisions, and provisions in any other energy legislation, that attempt to restrict existing state and federal authority to address air pollution, including greenhouse gases.

Sincerely,

[Signature]

Arthur N. Marin
Executive Director

cc: NESCAUM Directors
The Honorable John D. Dingell, Chairman, House Committee on Energy and Commerce
The Honorable Joe Barton, Ranking Member, House Committee on Energy and Commerce
June 7, 2007

The Honorable Rick Boucher  
Chairman, Subcommittee on Energy and Air Quality  
Committee on Energy and Commerce  
2125 Rayburn House Office Building  
Washington, D.C. 20515

RE: Discussion Draft -- Alternative Fuels, Infrastructure and Vehicles

Dear Representative Boucher:

We are writing to express our strong opposition to the June 1, 2007, discussion draft of Alternative Fuels, Infrastructure and Vehicles. This legislation preempts our states' critical efforts to combat climate change by enacting regulations that reduce greenhouse gas emissions. While federal action is necessary and long overdue on climate change, Congress must not deny states the right to pursue solutions in the absence of federal policy.

Specifically, this bill will preempt California's passenger vehicles and light duty truck emission standards, which will reduce greenhouse emissions by 30 percent. Our states, which collectively represent over one-third of the automobile market, have either adopted or will adopt California's standards. Not only does this bill deny our right to adopt California's vehicle emissions standards—a right granted by the federal Clean Air Act—it eliminates the Environmental Protection Agency's regulatory authority over greenhouse gasses as a pollutant. This amounts to an about-face reversal of the Supreme Court decision identifying CO2 as a pollutant within the scope of the Clean Air Act (Massachusetts v. EPA). Finally, we are opposed to the bill's delegation of regulatory authority to the National Highway Traffic Safety Administration.

Our states are at the forefront of the effort to reduce greenhouse gas emissions and our nation's dependency on carbon-based fuels. Climate change is real and it impacts the public health and welfare of every American. Congress must preserve states' ability to fight greenhouse gas emissions now. Going forward, states and the federal government must collaborate to take even stronger actions against the continuing threat of climate change.
We urge you to pursue legislation that instead enhances and complements the efforts already underway in our states.

Sincerely,

Governor Arnold Schwarzenegger  
California

Governor Christine O. Gregoire  
Washington

Governor Theodore R. Kulongoski  
Oregon

Governor Janet Napolitano  
Arizona

Governor Deval Patrick  
Massachusetts

Governor Bill Richardson  
New Mexico

Governor Edward G. Rendell  
Pennsylvania

Governor Eliot Spitzer  
New York
The Honorable John D. Dingell  
Chairman  
Committee on Energy and Commerce  
2125 Rayburn House Office Building  
Washington, DC 20515

The Honorable Rick Boucher  
Chairman  
Subcommittee on Energy and Air Quality  
Committee on Energy and Commerce  
2125 Rayburn House Office Building  
Washington, DC 20515

Dear Chairman Dingell and Chairman Boucher:

Addressing our nation’s energy challenges is one of the most important goals we could achieve as members of the House Energy and Commerce Committee. Our country is burdened by its dependence on oil and our economy, national security, and environment are threatened by impending consequences of unchecked global climate change.

One guiding principle should be that any energy policy Congress enacts recognizes and addresses global warming. We must work to reduce our nation’s emissions of greenhouse gases at the same time that we move toward greater energy independence. We need to shift from lagging behind the international community to leading the way.

This is why we are so disappointed by the discussion draft circulated last Friday. Although the Subcommittee has done commendable work at holding hearings and building a record for action, the discussion draft would lead the nation in the wrong direction.

This legislation, if enacted, would overturn the recent Supreme Court decision *Massachusetts v. EPA*. As you know, this landmark decision ruled that greenhouse gases are air pollutants and that EPA has the authority under the Clean Air Act to regulate emissions of greenhouse gases from motor vehicles to protect the public health and welfare. The discussion draft would rescind this authority.

Moreover, the discussion draft would block the efforts by 12 states to regulate and reduce global warming pollution from automobiles. While the federal government has failed to act in
The Honorable John D. Dingell  
The Honorable Rick Boucher  
June 7, 2007  
Page 2

recent years, the states have moved forward. The last thing we should do is attempt to stop important progress being made by the states. The draft’s preemption provision has no place in either this draft or any subsequent global warming legislation the Committee will consider.

The discussion draft fails to recognize the importance of reducing the nation’s dependence on oil. Rather than immediately increasing the fuel efficiency of the nation’s automobile fleet, the draft postpones the first tangible goal for efficiency improvement until 2022, and even then adopts comparatively weak fuel economy targets.

The draft also creates a dangerous risk of coal-based liquid fuels becoming a significant element of our nation’s aviation fuel stream. In combination with the discussion draft released last month, this proposal would provide taxpayer subsidies to promote the use of these fuels, which have the potential to be vastly more polluting than traditional petroleum-based fuels.

We have serious concerns about the direction in which the Committee is currently heading and must strongly oppose the draft legislation that has been circulated. We urge you to rethink your approach and produce a bill that will help address the serious threat of global warming and reduce the nation’s dependence on oil.

Specifically, we urge you to include the following policies in our Committee’s bill:

• Mandatory federal policies can significantly increase the efficiency of the transportation sector. Passenger cars and trucks are not nearly as efficient as current technology allows. Increasing the efficiency of these fleets will pay dividends for years to come by reducing both our dependence on oil and our greenhouse gas emissions. We can’t wait 15 years to get started.

• Renewable sources of electricity should be an essential part of our energy future. Renewable electricity technology is ready for mass deployment, but without the proper federal requirements they could languish under-utilized. If we attempt to rely upon carbon controls alone to promote renewable energy, we are likely to face unintended consequences, such as overdependence on natural gas.

• One of the least expensive and most readily available sources of energy is the electricity that is currently wasted. While a discussion draft does include some energy efficiency measures, the Committee should establish national, aggressive efficiency targets to reinvigorate electric utility demand-side reduction programs and capitalize on this valuable resource.

• The recent discussion draft contains language to promote alternative fuels and provide assurances about the carbon content of these fuels. However, the Committee
The Honorable John D. Dingell
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should adopt policies to more comprehensively reduce our reliance on high carbon fuels and ensure that biofuels are sustainably produced. Plug-in hybrids and advanced cellulosic ethanol would not only achieve this purpose, but would also allow us to decrease our dependence on foreign sources of energy.

We urge you to abandon the harmful policies that have recently been proposed and carefully consider the policies we suggest above. The Committee has an opportunity to take a bold step to address global warming. We urge you to make it a step in the right direction.

Sincerely,

Henry A. Waxman  Edward J. Markey
Anna G. Eshoo  Eliot L. Engel
Lois Capps  Tom Harkin
Pence D. Schakowsky  Hilda L. Solis
Jay Inslee  Anthony D. Weiner
Tammy Baldwin  Albert R. Wynn
[DISCUSSION DRAFT]
JUNE 1, 2007

TITLE I—FUELS

SEC. 101. ALTERNATIVE FUELS PROGRAM.

(a) In General.—Section 211 of the Clean Air Act (42 U.S.C. 4575) is amended by adding the following new subsection at the end thereof:

"(t) Alternative Fuel Program.—

"(1) Definitions.—In this section—

"(A) Alternative fuel.—

"(i) In general.—The term ‘alternative fuel’ means the portion of any motor vehicle or nonroad fuel, as measured by volume, that consists of—

"(I) renewable fuel;

"(II) methanol, denatured ethanol, butanol, and other alcohols;

"(III) natural gas, including liquid fuels domestically produced from natural gas;

"(IV) liquefied petroleum gas;

"(V) hydrogen;

"(VI) qualifying coal-derived liquid fuel;
“(VII) fuels (not including a fuel that consists of alcohol) derived from biological materials (including biodiesel);

“(VIII) electricity provided from the electric power transmission and distribution system; and

“(IX) any other fuel that the Administrator determines, by rule, is not derived from crude oil and would yield energy security benefits or environmental benefits.

“(ii) Qualifying Coal-Derived Liquid Fuel.—The term ‘qualifying coal-derived liquid fuel’ means liquid fuel produced by a project that—

“(I) converts coal to one or more liquid or gaseous transportation fuels;

“(II) demonstrates the capture, and sequestration or disposal or use of, the carbon dioxide produced in the conversion process; and

“(III) on the basis of a carbon dioxide sequestration plan prepared by the applicant, is certified by the Ad-
ministrator, in consultation with the
Secretary of Energy, as producing
fuel with life cycle carbon dioxide
emissions at or below the average life
cycle carbon dioxide emissions for the
same type of fuel produced at tradi-
tional petroleum based facilities with
similar annual capacities.

“(iii) BLENDING COMPONENTS.—The
term ‘alternative fuel’ includes any portion
of a blending component that is derived
from an alternative fuel.

“(B) NONROAD FUEL.—The term ‘nonroad
fuel’ means fuel that is used, intended for use,
or made available for use as a fuel in a nonroad
engine or a nonroad vehicle.

“(C) OBLIGATED PARTY.—The term ‘obli-
gated party’ means any refiner, blender, or im-
porter of motor vehicle, or nonroad, gasoline or
diesel fuel, that is designated an obligated party
under regulations issued by the Administrator
for purposes of this subsection.

“(D) OTHER TERMS.—The terms used in
this subsection have the same meaning as when
used in subsection (o).
“(2) ALTERNATIVE FUEL REGULATIONS.—

“(A) STANDARD.—Not later than 2 years after the date of enactment of this subsection, and from time to time thereafter, the Administrator shall promulgate regulations to ensure that motor vehicle and nonroad fuel sold or introduced into commerce in the United States, on an annual average basis, contains the applicable volume of alternative fuel determined in accordance with this subsection.

“(B) PROVISIONS OF REGULATIONS.—Regardless of the date of promulgation, the regulations promulgated under subparagraph (A)

“(i) shall contain compliance provisions applicable to refiners, blenders, distributors, and importers, as appropriate, to ensure that the requirements of this paragraph are met; but

“(ii) shall not—

“(I) restrict geographic areas in which alternative fuel may be used; or

“(II) impose any per-gallon obligation for the use of alternative fuel.

“(3) APPLICABLE VOLUME.—For the purpose of the regulations under this subsection, the applica-
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1. The applicable volume (in billions of gallons) shall be determined under this paragraph.

2. "(A) Calendar years 2013 through 2025.—The applicable volume (in billions of gallons) for the calendar years 2013 through 2025 shall be as provided in the following table:

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Applicable Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>14</td>
</tr>
<tr>
<td>2014</td>
<td>15</td>
</tr>
<tr>
<td>2015</td>
<td>16</td>
</tr>
<tr>
<td>2016</td>
<td>17</td>
</tr>
<tr>
<td>2017</td>
<td>18</td>
</tr>
<tr>
<td>2018</td>
<td>19</td>
</tr>
<tr>
<td>2019</td>
<td>20</td>
</tr>
<tr>
<td>2020</td>
<td>21</td>
</tr>
<tr>
<td>2021</td>
<td>22</td>
</tr>
<tr>
<td>2022</td>
<td>23</td>
</tr>
<tr>
<td>2023</td>
<td>24</td>
</tr>
<tr>
<td>2024</td>
<td>25</td>
</tr>
<tr>
<td>2025</td>
<td>26</td>
</tr>
</tbody>
</table>

3. "(B) Calendar year 2026 and thereafter.—Except as otherwise provided in this paragraph, the applicable volume for calendar year 2026 and each calendar year thereafter shall be determined by rule by the Administrator, in coordination with the Secretary of Agriculture and the Secretary of Energy, based on a review of the implementation of the program under this subsection during calendar years 2020 through 2025, including a review of each of the following:

...
(i) The impact of the use of alternative fuels on the energy security of the United States.

(ii) The impact of the use of alternative fuels on public health and the environment, including air and water quality.

(iii) The expected annual rate of future production of alternative fuels.

(iv) The impact of alternative fuels on the infrastructure of the United States, including the deliverability of materials, goods, and products other than alternative fuels, and the sufficiency of the infrastructure to deliver alternative fuel.

(v) The impact of the use of alternative fuels on job creation, the price and supply of agricultural commodities, and rural economic development.

(C) MINIMUM APPLICABLE VOLUME FOR CALENDAR YEAR 2026 AND THEREAFTER.—For the purpose of subparagraph (B), the minimum applicable volume for calendar year 2026 and each calendar year thereafter shall be equal to the product obtained by multiplying the number
obtained under clause (i) by the ratio obtained under clause (ii).

“(i) The number of gallons of motor vehicle and nonroad fuel that the Administrator estimates will be sold or introduced into commerce in the calendar year.

“(ii) The ratio that—

“(I) 35,000,000,000 gallons of alternative fuel bears to

“(II) the number of gallons of motor vehicle and nonroad fuel sold or introduced into commerce in calendar year 2025.

“(4) ALTERNATIVE FUEL PERCENTAGES.—

“(A) PROVISION OF ESTIMATE OF VOLUMES OF MOTOR VEHICLE AND NONROAD FUEL SALES.—Not later than October 31, 2012, and annually thereafter, the Administrator of the Energy Information Administration shall provide to the Administrator of the Environmental Protection Agency an estimate, with respect to the following calendar year, of the volumes of motor vehicle and nonroad fuel projected to be sold or introduced into commerce in the United States during the following calendar year.
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(B) Determination of percentages.—Not later than November 30 of each
calendar year after 2012, based on the estimate
provided under subparagraph (A), the Adminis-
trator shall determine and publish in the Fed-
eral Register, with respect to the following cal-
endar year, the percentage of the projected vol-
ume of motor vehicle and nonroad fuel that
must be alternative fuel in order to ensure that
the applicable volume requirements of para-
graph (3) are met.

(C) Required elements.—The alternative fuel obligation determined for a calendar
year under subparagraph (B) shall—

(i) be applicable to refiners, blenders,
and importers of motor vehicle and
nonroad gasoline and diesel fuel, as appro-
priate;

(ii) be expressed in terms of a vol-
ume percentage of motor vehicle and
nonroad fuel sold or introduced into com-
merce in the United States; and

(iii) subject to clause (i), consist of a
single applicable percentage that applies to
all categories of persons specified in clause (i).

“(D) ADJUSTMENTS.—In determining the alternative fuel percentage for a calendar year, the Administrator shall make adjustments to prevent the imposition of redundant obligations on any obligated party.

“(5) COMPLIANCE VALUES.—

“(A) TABLE.—The Administrator shall assign a compliance value for each alternative fuel in accordance with the following table to be used as a multiplier to determine the extent to which each gallon or other specified unit of the alternative fuel will satisfy the alternative fuel volume obligation under this subsection:

<table>
<thead>
<tr>
<th>Fuel type</th>
<th>Compliance Values, Years 2013-2015</th>
<th>Compliance Values, Years 2016-2020</th>
<th>Compliance Values, Years After 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol (non-Cellulosic)</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Ethanol (Cellulosic)</td>
<td>2.5</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Biodiesel</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>Gas-to-Liquid Diesel Fuel</td>
<td>1.5</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Coal-to-Liquid Diesel Fuel</td>
<td>1.5</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Compressed Natural Gas (78 standard cubic feet)</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Fuel type</td>
<td>Compliance Values, Years 2013-2015</td>
<td>Compliance Values, Years 2016-2020</td>
<td>Compliance Values, Years After 2020</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------------------------------</td>
<td>-----------------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Liquefied Natural Gas</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Liquefied Petroleum Gas</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Electricity (6.4 kilowatt-hours)</td>
<td>2.5</td>
<td>2.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Gaseous Hydrogen (132 standard cubic feet)</td>
<td>2.5</td>
<td>2.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Liquid Hydrogen</td>
<td>2.3</td>
<td>2.3</td>
<td>0.8</td>
</tr>
<tr>
<td>Methanol</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Butanol</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Bio-Butanol</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
</tr>
</tbody>
</table>

All values are expressed in terms of gallons unless otherwise specified.

"(B) Authority of the Administrator.—

"(i) In general.—In accordance with the requirements described in clause (ii), the Administrator may by rule—

"(I) add fuel types to the table contained in subparagraph (A);

"(II) revise any fuel type or compliance value referred to in the table contained in subparagraph (A); and

"(III) assign each new or revised category or subcategory of an alter-
native fuel type an appropriate compliance value.

(ii) Calculation of compliance values.—When the Administrator assigns or revises the compliance value for an alternative fuel type, the Administrator shall establish that compliance value equal to the ratio of the energy content of the alternative fuel to the energy content of ethanol. No compliance value for the years 2013 through 2020 may be revised by the Administrator under this subparagraph for electricity, gaseous hydrogen, or liquid hydrogen or for the years 2013 through 2015 for cellulosic ethanol.

(6) Compliance with standard; use of identification numbers.—

(A) Generation and assignment.—
Regulations promulgated under this subsection shall provide that the producer or importer of any alternative fuel shall generate and assign to each batch or other quantifiable unit (as determined by the Administrator) a unique identification number (except as provided in subparagraph (B)).
“(B) ELECTRICITY.—The regulations of the Administrator under this subsection shall establish a process for generating and assigning identification numbers for the amount of electricity from the electric power transmission and distribution system expected to be used as a motor vehicle or nonroad fuel. For vehicles manufactured prior to 2020 or such later time as the Administrator finds that the producers of the electricity used as a motor vehicle or nonroad vehicle fuel can be determined, the regulations shall provide that the identification numbers for electricity shall be assigned to the manufacturer or importer of motor vehicles or nonroad vehicles fueled by electricity from the electric power transmission and distribution system.

“(C) BASIS.—The identification numbers referred to in this paragraph shall be based on the volume of the alternative fuel and the compliance values established under paragraph (5).

“(D) COMPLIANCE WITH THE STANDARD.—Obligated parties shall demonstrate compliance with the standard under this subsection
by surrendering identification numbers in an appropriate quantity to the Administrator.

“(E) DURATION.—An identification number generated under this subsection shall be valid to show compliance for the 12 months as of the date of generation. The Administrator shall interpret this subparagraph the same way as section 211(o)(5)(C) of this Act is interpreted.

“(F) TRADING.—Identification numbers may be held by any individual or entity and transferred by any individual or entity to any other individual or entity.

“(G) INABILITY TO GENERATE OR PURCHASE.—The regulations promulgated under this paragraph shall include provisions allowing any obligated party that is unable to generate or purchase sufficient identification numbers to meet the standard under paragraph (2) to carry forward an alternative fuel deficit on condition that the obligated party in the calendar year following the year in which the deficit is created—

“(i) achieves compliance with the standard under paragraph (2); and
“(ii) generates or purchases additional alternative fuel identification numbers to offset the alternative fuel deficit of the previous year.

“(H) PROPERTY.—An identification number generated under this subsection does not constitute a property right. Nothing in this subsection or in any other provision of law shall be construed to limit the authority of the United States to terminate or limit such an identification number.

“(I) IDENTIFICATION NUMBERS FROM RFS PROGRAM.—To demonstrate compliance for the year 2013, the Administrator shall permit the use of identification numbers generated and assigned under the regulations under subsection (o) to the same extent that subsection (o) would have allowed their use in 2013. Deficits under subsection (o) for the year 2012 may be carried forward to the year 2013 if the requirements of subsection (o)(5)(D) of this section and sub-paragraph (G) of this paragraph are met.

“(7) WAIVERS.—

“(A) IN GENERAL.—Based on a petition by a State, an obligated party, or on the Ad-
ministrator's own motion, the Administrator, in
consultation with the Secretary of Agriculture
and the Secretary of Energy, may waive the re-
quirements of paragraph (2) in whole or in part
by reducing the national quantity of alternative
fuel required under paragraph (3) if the Admin-
istrator, after public notice and opportunity for
comment, determines that—

“(i) implementation of the require-
ments would severely harm the economy or
environment of a State, a region, or the
United States; or

“(ii) there is an inadequate domestic
supply.

“(B) PETITIONS.—The Administrator shall
approve or disapprove a petition for a waiver
within 90 days after the date on which the peti-
tion is received by the Administrator.

“(C) TERMINATION OF WAIVERS.—A waiv-
er granted under subparagraph (A) shall termi-
nate after 1 year, but may be renewed by the
Administrator after consultation with the Sec-

etary of Agriculture and the Secretary of En-
ergy.”
(b) **Penalties and Enforcement.**—Section 211(d) of the Clean Air Act (42 U.S.C. 7545(d)) is amended as follows:

(1) In paragraph (1),

(A) in the first sentence, by striking “or (o)” each place it appears and inserting “(o), or (u)”;

(B) in the second sentence, by striking “or (o)” and inserting “(o), or (u)”;

(2) in the first sentence of paragraph (2), by striking “and (o)” each place it appears and inserting “(o), and (u)”.

(c) **Renewable Fuel Program.**—

(1) **Termination.**—Subparagraph (B) of section 211(o)(2) of the Clean Air Act (42 U.S.C. 4575(o)(2)(B)) is amended by striking all after clause (i).

(2) **2009 Through 2012 Requirements.**—The items relating to the years 2009 through 2012 in the table in clause (i) of such subparagraph (B) are amended as follows:

(A) Strike “6.1” and insert “10”.

(B) Strike “6.8” and insert “11”.

(C) Strike “7.4” and insert “12”.

(D) Strike “7.5” and insert “13”.
SEC. 102. LOW CARBON FUEL STANDARD AND MOTOR VEHICLE CARBON REPORTING.

(a) REQUIREMENTS FOR CONTROL OF GREENHOUSE GASES.—The Clean Air Act (42 U.S.C. 7401 and following) is amended by adding the following new title at the end thereof:

“TITLE VII—CONTROL OF GREENHOUSE GAS EMISSIONS FROM MOBILE SOURCES

“SEC. 701. DEFINITIONS.

“As used in this title:

“(1) GREENHOUSE GAS.—The term ‘greenhouse gas’ means any of carbon dioxide, hydrofluorocarbons, methane, nitrous oxide, perfluorocarbons, and sulfur hexafluoride.

“(2) CARBON DIOXIDE EQUIVALENT.—With respect to each greenhouse gas, the term ‘carbon dioxide equivalent’ means the amount of the greenhouse gas that traps the same amount of heat as one metric ton of carbon dioxide, as determined by the Administrator.
“Subtitle A—Control of Greenhouse Gas Emissions From Motor Vehicle and Nonroad Fuels

“SEC. 711. DEFINITIONS.

“(a) In General.—The terms ‘nonroad engine’, ‘nonroad fuel’, ‘nonroad vehicle’ and other terms used in this subtitle have the same meaning as when used in title II of this Act, except as otherwise provided in this subtitle.

“(b) Other Terms.—As used in this subtitle:

“(1) Obligated party.—The term ‘obligated party’ means those parties designated as obligated parties by the Administrator under regulations promulgated under this subtitle.

“(2) Lifecycle greenhouse gas emissions.—The term ‘lifecycle greenhouse gas emissions’ means, with respect to a motor vehicle or nonroad fuel, greenhouse gases emitted (directly or indirectly, including from land use changes) during the production, feedstock production or extraction, distribution, marketing, and use of the fuel.

“(3) Carbon intensity.—The term ‘carbon intensity’ means, with respect to any fuel, the lifecycle greenhouse gas emissions produced by that fuel divided by a unit of energy produced by that fuel.
“(4) AVERAGE CARBON INTENSITY.—The term ‘average carbon intensity’ means, with respect to any fuel or group of fuels, the total lifecycle greenhouse gas emissions produced by that fuel or group of fuels divided by the total amount of energy produced by that fuel or group of fuels.

“(5) BASELINE AVERAGE CARBON INTENSITY.—The ‘baseline average carbon intensity’ means, with respect to any fuel or group of fuels, the average carbon intensity that fuel or group of fuels had in calendar year 2004.

“SEC. 712. LOW CARBON FUEL PROGRAM.

“(a) REGULATIONS.—Not later than 24 months after the date of enactment of this subtitle, the Administrator shall promulgate, and from time to time thereafter modify, regulations under section 211(e) requiring that the average carbon intensity of all motor vehicle and nonroad fuel sold or introduced into commerce in the United States be reduced beginning in the calendar year 2013. The regulations under this subtitle shall contain standards and compliance provisions applicable to obligated parties and to distributors of motor vehicle or nonroad fuel, as well as to such other persons as the Administrator identifies as appropriate to ensure compliance with this subtitle. Such
regulations shall not impose geographic or per-gallon car-
bon constraints on any fuel.

“(b) ANNUAL AVERAGE CARBON INTENSITY STAND-
ARDS.—

“(1) IN GENERAL.—The regulations under sec-
tion 211(c) and this subtitle shall require that the
average carbon intensity of all motor vehicle and
nonroad fuel sold or distributed in the contiguous
United States in each calendar year after 2012 shall
not exceed the average carbon intensity standard es-
tablished by the Administrator for the calendar year
concerned. The average carbon intensity standard
for the calendar year 2013 may not be greater than
the baseline average carbon intensity.

“(2) AVERAGE CARBON INTENSITY STAND-
ARD.— For each year after 2012, the average car-
bon intensity standard established by the Adminis-
trator under this subsection shall be equal to the av-
verage carbon intensity of all motor vehicle and
nonroad fuel projected to be sold or distributed in
that calendar year assuming that gasoline and diesel
fuel have the same average carbon intensity as in
2004 and assuming that the alternative fuel stand-
ard under section 211(t) is met as follows:
“(A) 12,000,000,000 gallons of the alternative fuel required by that standard will have a carbon intensity equal to 80 percent of the carbon intensity of gasoline.

“(B) Of the remainder of the alternative fuel required by that standard for that year,

“(i) 50 percent will have a carbon intensity equal to 50 percent of the carbon intensity of gasoline; and

“(ii) 50 percent will have a carbon intensity equal to 25 percent of the carbon intensity of gasoline.

“(3) ADJUSTMENT BY ADMINISTRATOR.—The Administrator may adjust the average carbon intensity standard to a level other than that prescribed by paragraph (2) based on a consideration of energy, environmental, economic, and safety factors; the time necessary for the development and application of the requisite technology, giving appropriate consideration to the cost of compliance and the cost to consumers; and the extent to which the average carbon intensity standard will assist motor vehicle manufacturers in complying with fuel or carbon efficiency standards established by the Secretary of Transportation. The Administrator may not lower
the average carbon intensity standard below that
prescribed by paragraph (2) unless he finds that a
lower average carbon intensity is technologically fea-
sible. The Administrator may not raise the average
carbon intensity standard above that prescribed by
paragraph (2) unless he finds that the average car-on intensity calculated under paragraph (2) is tech-
nologically infeasible.

"SEC. 713. ADDITIONAL REQUIREMENTS FOR REGULA-
TIONS.

"(a) IN GENERAL.—The regulations under section
211(c) and this subtitle shall_

"(1) define ‘obligated party’ to include any re-
finer, importer, or blender of gasoline or diesel fuel;
any fuel producer that produces fuel with an average
carbon intensity greater than the average carbon in-
tensity standard established by the Administrator;
and such other fuel producers as the Administrator
determines appropriate to aid in the implementation,
and assure the enforceability, of the standards estab-
lished under this subtitle;

"(2) require each obligated party to meet the
average carbon intensity standard established under
section 712;
“(3) modify the identification number system established under section 211(a) so that identification numbers can be used to track greenhouse gas emissions or carbon intensity and to determine compliance with the standards established under this subtitle;

“(4) establish a trading system for identification numbers;

“(5) allow each obligated party to comply with the standard established under section 712 through the use of identification numbers described in section 714;

“(6) establish methods for calculating the average carbon intensity of an obligated party’s fuel;

“(7) establish default values for the carbon intensity of different fuels using different production and extraction processes, feedstocks, and fuel type combinations; and

“(8) establish procedures pursuant to which a fuel provider may seek the Administrator’s approval to use a carbon intensity value other than a default value.

“(b) LIMITATIONS.—The regulations promulgated under this subtitle shall not—
“(1) restrict geographic areas in which low carbon fuel may be used, or

“(2) impose any per-gallon carbon intensity requirement.

“SEC. 714. COMPLIANCE WITH STANDARD; USE OF IDENTIFICATION NUMBERS.

“(a) GENERATION AND ASSIGNMENT.—To the extent that the Administrator determines appropriate to ensure compliance with this subtitle, regulations promulgated under section 211(c) and this subtitle shall provide that the producer of any motor vehicle or nonroad fuel at any facility and the importer of any fuel imported into the United States shall generate and assign to each batch or other quantifiable unit of fuel (as determined by the Administrator) a unique identification number, except as provided in subsection (b).

“(b) ELECTRICITY.—The regulations of the Administrator under this subsection shall establish a process for generating and assigning identification numbers for electricity from the electric power transmission and distribution system expected to be used as a motor vehicle or nonroad fuel. For vehicles manufactured prior to 2020 or such later time as the Administrator finds that the producers of the electricity used as motor vehicle or nonroad vehicle fuel can be determined, the regulations shall pro-
vide that the identification numbers for electricity shall be
assigned to the manufacturer or importer of motor vehi-
cles or nonroad vehicles fueled by electricity from the elec-
tric power transmission and distribution system.

"(e) BASIS.—The identification numbers referred to
in this section shall contain information reflecting the car-on intensity of the batch or other quantifiable unit of
fuel concerned and such other information as the Adminis-
trator deems appropriate.

"(d) COMPLIANCE WITH STANDARD.—No later than
April 30 of each year, the Administrator shall require each
obligated party to demonstrate compliance with the stand-
ard established under section 712 for the previous cal-
endar year. Identification numbers used to demonstrate
compliance shall be surrendered to the Administrator.

"(e) DURATION OF IDENTIFICATION NUMBERS.—
The identification numbers generated under this subtitle
in any calendar year after 2012 may be used by obligated
parties to demonstrate compliance with the average carbon
intensity standard under this subsection for that calendar
year or any calendar year thereafter, subject to record-
keeping requirements, regardless of the calendar year in
which the fuel is used. The Administrator shall limit the
duration of identification numbers as necessary to ensure
the integrity of the program. The time period for which
identification numbers may be used shall be limited to the

time period for which reliable records are kept.

“(f) Trading.—Identification numbers may be held
by any individual or entity and transferred to any other
individual or entity.

“(g) Inability to Generate of Purchase Sufficient
Identification Numbers.—The regulations promulgated under this section shall include provisions allowing
any person that is unable to generate or purchase sufficient identification numbers to meet the standard under
this subtitle to carry forward a carbon deficit on condition
that the person, in the calendar year following the year
in which the carbon deficit is created—

“(1) achieves compliance with the standard;

and

“(2) generates or purchases additional identification numbers to offset the deficit of the previous
year.

“(h) Property.—An identification number generated under this subsection does not constitute a property
right. Nothing in this subsection or in any other provision
of law shall be construed to limit the authority of the
United States to terminate or limit such an identification
number.
“Subtitle B—Greenhouse Gases
From Motor Vehicles

“SEC. 721. DEFINITIONS.

“As used in this subtitle:

“(1) TITLE II TERMS.—The terms used in this subtitle have the same meaning as when used in title II of this Act, except as otherwise provided in this subtitle.

“(2) The term ‘lifetime carbon emissions’ means the total projected greenhouse gas emissions from operation of a motor vehicle over the vehicle’s useful life.

“SEC. 722. REPORTS ON FULL USEFUL LIFE CARBON EMISSIONS.

“(a) REGULATIONS.—Effective with respect to model year 2013 and thereafter, the regulations under section 202(a) of title II with respect to greenhouse gas emissions shall contain provisions requiring each motor vehicle manufacturer to report on the lifetime carbon emissions of each model of new motor vehicle it sells in the United States, as well as the total lifetime carbon emissions for the entire new motor vehicle fleet it sells.

“(b) REPORTING FOR VEHICLES SUBJECT TO TIER 2.—The Administrator shall issue regulations no later than 18 months after the enactment of this subtitle, and
from time to time thereafter, requiring motor vehicle manufacturers to report the projected lifetime carbon emissions from new motor vehicles subject to the Tier 2 motor vehicle standards promulgated under title II of this Act. The regulations shall require that each manufacturer report emissions for each vehicle model and for the manufacturer’s fleet. These regulations shall take into account lifecycle greenhouse gas emissions of motor vehicle fuel, and shall assume that fuel providers meet alternative fuel and low carbon fuel standards set under this Act.

“(c) REPORTING FOR VEHICLES NOT SUBJECT TO TIER 2.—No later than 36 months after the date of the enactment of this subtitle, and from time to time thereafter, the Administrator shall issue regulations requiring manufacturers of motor vehicles and motor vehicle engines not covered under subsection (a) to report the lifetime carbon emissions from each vehicle or engine model and from the manufacturer’s fleet or shall issue a final action explaining why it is impracticable to require such reports.”.

(b) EPA FUEL REGULATIONS.—Section 211(c) of the Clean Air Act (42 U.S.C. 7545) is amended by adding the following at the end thereof:

“(5) The authority of the Administrator to promulgate regulations under this Act regarding green-
(c) EPA VEHICLE REGULATIONS.—Section 202 of the Clean Air Act (42 U.S.C. 7521) is amended by adding the following new subsection at the end thereof:

“(m) CONTROL OF GREENHOUSE GAS EMISSIONS.—The authority of the Administrator to promulgate regulations under this Act regarding greenhouse gas emissions from new motor vehicles is limited to the authority under title VII.”.

(d) STATE WAIVERS.—Section 209(b)(1) of the Clean Air Act (42 U.S.C. 7543) is amended—

(1) in subparagraph (B), by striking “or” at the end;

(2) in subparagraph (C), by striking the period and inserting “, or”; and

(3) by adding at the end the following subparagraph:

“(D) such State standards are designed to reduce greenhouse gas emissions.”

SEC. 103. STANDARD SPECIFICATIONS FOR BIODIESEL.

Section 211 of the Clean Air Act is amended by adding the following new subsection after subsection (t) (as added by this Act):
“(u) Standard Specifications for Biodiesel.—
Not later than 270 days after the date of enactment of
this subsection, the Administrator shall promulgate regu-
lations establishing a series of uniform per gallon fuel
standards for categories of biodiesel fuel and designate an
identification number for fuel meeting each standard in
each such category so that vehicle manufacturers are able
to design engines to use biodiesel fuel meeting one or more
of such standards.”.

SEC. 104. GRANTS FOR CELLULOSIC ETHANOL PRODUC-
TION.
Subsection (r) of section 211 of the Clean Air Act
(as added by section 1512 of the Energy Policy Act of
2005), relating to conversion assistance for cellulosic bio-
mass, waste-derived ethanol, and approved renewable
fuels, is redesignated as subsection (p) and amended as
follows:

(1) By adding the following new subparagraphs
at the end of paragraph (3):

“(D) $500,000,000 for fiscal year 2009.
“(E) $500,000,000 for fiscal year 2010.”.

(2) By adding the following new paragraph at
the end thereof:

“(5) Criteria.—In awarding grants under this
section, the Secretary shall give priority to applica-
tions that promote feedstock diversity and the geographic dispersion of production facilities.”

**TITLE II—ALTERNATIVE FUELS INFRASTRUCTURE**

**SEC. 201. ALTERNATIVE FUELS INFRASTRUCTURE DEVELOPMENT.**

(a) **DEFINITION.**—For purposes of this section, the term “alternative fuel” has the meaning given that term in section 211(t)(1)(A) of the Clean Air Act, and includes E-85 gasoline.

(b) **INFRASTRUCTURE DEVELOPMENT GRANTS.**—The Secretary of Energy shall establish a program for making grants for providing assistance to retail and wholesale motor fuel dealers or other entities for the installation, replacement, or conversion of motor fuel storage and dispensing infrastructure to be used exclusively to store and dispense alternative fuel. Such infrastructure may include equipment used in the blending, distribution, and transport of such fuels.

(c) **RETAIL TECHNICAL AND MARKETING ASSISTANCE.**—The Secretary of Energy shall enter into contracts with entities with demonstrated experience in assisting retail fueling stations in installing refueling systems and marketing alternative fuels nationally, for the provision of
technical and marketing assistance to recipients of grants under this section. Such assistance shall include—

(1) technical advice for compliance with applicable Federal and State environmental requirements;

(2) help in identifying supply sources and securing long-term contracts; and

(3) provision of public outreach, education, and labeling materials.

(d) ALLOCATION.—The Secretary of Energy may reserve funds appropriated for carrying out this section to support alternative fuels infrastructure development projects with a cost of greater than $1,000,000, that are of national significance. The Secretary shall reserve funds appropriated for the alternative fuels infrastructure development grant program for technical and marketing assistance described in subsection (c).

(e) SELECTION CRITERIA.—Not later than 12 months after the date of enactment of this Act, the Secretary shall establish criteria for evaluating applications for grants under this section that will maximize the availability and use of the alternative fuel, and that will ensure that alternative fuels are available across the country. Such criteria shall provide for—

(1) consideration of the public demand for each alternative fuel in a particular geographic area based
on State registration records showing the number of
automobiles that can be operated with alternative
fuel;

(2) consideration of the opportunity to create or
expand corridors of alternative fuel stations along
interstate or State highways;

(3) consideration of the experience of each ap-
licant with previous, similar projects;

(4) consideration of population, number of vehi-
cles that can operate on E–85, number of diesel
powered vehicles, number of retail fuel outlets, and
saturation of vehicles capable of operating on alter-
native fuels; and

(5) priority consideration to applications that—

(A) are most likely to maximize displace-
ment of petroleum consumption, measured as a
total quantity and a percentage;

(B) are best able to incorporate existing
infrastructure while maximizing, to the extent
practicable, the use of alternative fuels; and

(C) demonstrate the greatest commitment
on the part of the applicant to ensure funding
for the proposed project and the greatest likeli-
hood that the project will be maintained or ex-
panded after Federal assistance under this section is completed.

(f) COMBINED APPLICATIONS.—States and local government entities and nonprofit entities may apply for assistance under this section on behalf of a group of retailers within a certain geographic area, or to carry out regional or multistate deployment projects. Any such application shall certify the availability and details of a program to match the Federal grant as required under subsection (g) and list the retail locations that would receive the funds.

(g) LIMITATIONS.—Assistance provided under this section shall not exceed—

(1) 33 percent of the estimated cost of the installation, replacement, or conversion of motor fuel storage and dispensing infrastructure; or

(2) $180,000 for a combination of equipment at any one retail outlet location.

(h) OPERATION OF ALTERNATIVE FUEL STATIONS.—The Secretary shall establish rules that set forth requirements for grant recipients under this section that include providing to the public the alternative fuel, establishing a marketing plan that informs consumers of the price and availability of the alternative fuel, clearly labeling the dispensers and related equipment, and providing periodic reports on the status of the alternative fuel sales,
the type and amount of the alternative fuel dispensed at each location, and the average price of such fuel.

(i) Notification Requirements.—Not later than the date on which each alternative fuel station begins to offer alternative fuel to the public, the grant recipient that used grant funds to construct or upgrade such station shall notify the Secretary of Energy of such opening. The Secretary of Energy shall add each new alternative fuel station to the alternative fuel station locator on its Website when it receives notification under this subsection.

(j) Ineligibility.—No person may receive assistance under this section and receive a credit under section 30C of the Internal Revenue Code of 1986.

(k) Authorization of Appropriations.—There are authorized to be appropriated to the Secretary of Energy for carrying out this section $200,000,000 for each of the fiscal years 2008 through 2014, and such sums as may be necessary thereafter.

SEC. 202. PROHIBITION ON FRANCHISE AGREEMENT RESTRICTIONS RELATED TO ALTERNATIVE FUEL INFRASTRUCTURE.

(a) In General.—Title I of the Petroleum Marketing Practices Act (15 U.S.C. 2801 et seq.) is amended by adding at the end the following:
"SEC. 107. PROHIBITION ON RESTRICTION OF INSTALLATION OF ALTERNATIVE FUEL PUMPS.

(a) DEFINITION.—In this section:

(1) ALTERNATIVE FUEL.—The term ‘alternative fuel’ means any fuel—

(A) at least 85 percent of the volume of which consists of ethanol, natural gas, compressed natural gas, liquefied natural gas, liquefied petroleum gas, hydrogen, or any combination of those fuels; or

(B) any mixture of biodiesel (as defined in section 40A(d)(1) of the Internal Revenue Code of 1986) and diesel fuel (as defined in section 4083(a)(3) of the Internal Revenue Code of 1986), determined without regard to any use of kerosene and containing at least 20 percent biodiesel.

(2) FRANCHISE-RELATED DOCUMENT.—The term ‘franchise-related document’ means—

(A) a franchise under this Act; and

(B) any other contract or directive of a franchisor relating to terms or conditions of the sale of fuel by a franchisee.

(b) PROHIBITIONS.—

(1) IN GENERAL.—Notwithstanding any provision of a franchise-related document in effect on the
date of enactment of this section, no franchisee or
affiliate of a franchisee shall be restricted from—

“(A) installing on the marketing premises
of the franchisee an alternative fuel pump;

“(B) converting an existing tank and
pump on the marketing premises of the
franchisee for alternative fuel use;

“(C) advertising (including through the
use of signage or logos) the sale of any alter-
native fuel; or

“(D) selling alternative fuel in any speci-
ified area on the marketing premises of the
franchisee (including any area in which a name
or logo of a franchisor or any other entity ap-
ppears).

“(2) **ENFORCEMENT.**—Any restriction de-
scribed in paragraph (1) that is contained in a fran-
chise-related document and in effect on the date of
enactment of this section—

“(A) shall be considered to be null and
void as of that date; and

“(B) shall not be enforced under section

105.

“(c) **EXCEPTION TO 3-GRADE REQUIREMENT.**—No
franchise-related document that requires that 3 grades of
gasoline be sold by the applicable franchisee shall prevent
the franchisee from selling an alternative fuel in lieu of
1 grade of gasoline.”.

(b) CONFORMING AMENDMENTS.—

(1) IN GENERAL.—Section 101(13) of the Pe-
2801(13)) is amended by adjusting the indentation
of subparagraph (C) appropriately.

(2) TABLE OF CONTENTS.—The table of con-
tents of the Petroleum Marketing Practices Act (15
U.S.C. 2801 note) is amended—

(A) by inserting after the item relating to
section 106 the following:

“Sec. 107. Prohibition on restriction of installation of alternative fuel pumps.”;
and

(B) by striking the item relating to section
202 and inserting the following:

“Sec. 202. Automotive fuel rating testing and disclosure requirements.”.

SEC. 203. ALTERNATIVE FUEL DISPENSER REQUIREMENTS.

(a) MARKET PENETRATION REPORTS.—The Sec-
retary of Energy, in consultation with the Secretary of
Transportation, shall determine and report to Congress
annually on the market penetration for flexible-fuel vehi-
cles in use within geographic regions to be established by
the Secretary of Energy.
(b) REQUIREMENT.—Not later than 18 months after
the date of enactment of this Act, the Secretary of Energy
shall issue regulations requiring motor fuel retailers in a
region where flexible-fuel vehicle market penetration
reaches 15 percent of light-duty motor vehicles, as deter-
mined under subsection (a), to install an E-85 compatible
dispenser and related systems at their retail fuel facilities
on a schedule and priority to be determined by the Sec-
retary. In establishing the schedule and priority for the
installation of such systems, the Secretary shall—

(1) require E-85 fuel compatible dispenser in-
stallation consistent with flexible-fuel vehicle market
penetration in that region;

(2) consider the commercial availability of E-85
fuel and the number of competing E-85 wholesale
suppliers in the region;

(3) consider the level of financial assistance
provided on an annual basis by the Federal Govern-
ment, State governments, and nonprofit entities for
the installation of E-85 compatible infrastructure;

(4) exempt retailers who operate only 2 under-
ground storage tank dispensers and whose retail lo-
cations are unable to support an additional system;

(5) provide for waivers for retailers who can
demonstrate economic hardship; and
(6) provide sufficient time for retailers to make necessary arrangements to comply with the requirement, including securing necessary funding.

c) CIVIL PENALTY.—A person who violates this section or the requirements established by the Secretary of Energy under this section shall be liable to the Secretary for a civil penalty to be determined by the Secretary but not to exceed $500 for each day of such violation.

(d) STUDY AND REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary of Energy shall conduct a study and report to Congress on the feasibility and expense of converting existing motor fuel infrastructure to transport and dispense E-85 fuel.

SEC. 204. PIPELINE FEASIBILITY STUDY.

(a) IN GENERAL.—The Secretary of Energy, in consultation with the Secretary of Transportation, shall conduct a study of the feasibility of the construction of dedicated ethanol pipelines.

(b) FACTORS.—In conducting the study, the Secretary shall consider—

(1) the quantity of ethanol production that would make dedicated pipelines economically viable;

(2) existing or potential barriers to dedicated ethanol pipelines, including technical, siting, financing, and regulatory barriers;
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(3) market risk (including throughput risk) and means of mitigating the risk;

(4) regulatory, financing, and siting options that would mitigate risk in those areas and help ensure the construction of 1 or more dedicated ethanol pipelines;

(5) financial incentives that may be necessary for the construction of dedicated ethanol pipelines, including the return on equity that sponsors of the initial dedicated ethanol pipelines will require to invest in the pipelines;

(6) technical factors that may compromise the safe transportation of ethanol in pipelines, identifying remedial and preventative measures to ensure pipeline integrity; and

(7) such other factors as the Secretary considers appropriate.

(c) REPORT.—Not later than 15 months after the date of enactment of this Act, the Secretary shall submit to Congress a report describing the results of the study conducted under this section.

**TITLE III—VEHICLES**

**SEC. 301. AVERAGE FUEL ECONOMY STANDARDS.**

(a) INCREASED FUEL ECONOMY STANDARDS.—Section 32902 of title 49, United States Code, is amended—
(1) in subsection (a)—

(A) in the subsection heading, by inserting “MANUFACTURED BEFORE MODEL YEAR 2012” after “NON-PASSENGER AUTOMOBILES”;

and

(B) by adding at the end the following:

“This subsection shall not apply to automobiles manufactured after model year 2012.”;

(2) in subsection (b)—

(A) in the subsection heading, by inserting “MANUFACTURED BEFORE MODEL YEAR 2012” after “PASSENGER AUTOMOBILES”;

(B) by striking “Except as provided for in this section, the” and inserting “The”; and

(C) by inserting “and before model year 2012” after “1984”;

(3) by amending subsection (c) to read as follows:

“(c) AUTOMOBILES MANUFACTURED AFTER MODEL YEAR 2011.—

“(1) PASSENGER AUTOMOBILES.—(A) Not later than 18 months before the beginning of each model year after model year 2011, the Secretary of Transportation shall prescribe, by regulation, average fuel
economy standards for passenger automobiles manufactured by a manufacturer in that model year.

“(B) Each standard shall be at the maximum feasible average fuel economy level that the Secretary decides the manufacturers can achieve in that model year. Each standard shall be expressed in terms of average miles per gallon of fuel and in terms of average grams per mile of carbon dioxide emissions, such that the specified average grams per mile of carbon dioxide emissions is equivalent in stringency to the average miles per gallon of fuel specified in the standard for that model year.

“(C) Except as provided in this section, the average standard for passenger automobiles manufactured by a manufacturer in a model year after model year 2021 shall be no less than 36 miles per gallon.

“(2) NON-PASSenger AUTOMOBILES.—(A) Not less than 18 months before the beginning of each model year after model year 2011, the Secretary of Transportation shall prescribe, by regulation, average fuel economy standards for non-passenger automobiles manufactured by a manufacturer in that model year.

“(B) Each standard shall be at the maximum feasible average fuel economy level that the Sec-
retary decides the manufacturers can achieve in that
model year. Each standard shall be expressed in
terms of average miles per gallon of fuel and in
terms of average grams per mile of carbon dioxide
emissions, such that the specified average grams per
mile of carbon dioxide emissions is equivalent in
stringency to the average miles per gallon of fuel
specified in the standard for that model year.

“(C) Except as provided in this section, the av-
average standard for non-passenger automobiles manu-
factured by a manufacturer in a model year after
model year 2024 shall be no less than 30 miles per
gallon.

“(3) AUTHORITY OF THE SECRETARY.—(A) In
prescribing standards under this subsection, the Sec-
retary may prescribe standards based on one or
more vehicle attributes that relate to fuel economy,
which includes carbon efficiency for purposes of this
chapter.

“(B) Notwithstanding the maximum feasible
average fuel economy level established by regulations
prescribed under this subsection, for any model year
in which the Secretary prescribes attribute-based
standards for passenger automobiles, the minimum
fleetwide average fuel economy standard for pas-
senger automobiles manufactured by a manufacturer
in that model year for that manufacturer’s domestic
fleet and foreign fleet, as calculated under section
32904 of this chapter as in effect before the enact-
ment of this section, shall be the greater of:

“(i) 27.5 miles per gallon; or

“(ii) 92 percent of the average fuel econ-
yomy projected by the Secretary for the com-
bined domestic and foreign fleets manufactured
by all manufacturers in that model year, which
projection shall be published in the Federal
Register not later than 18 months before the
beginning of that model year.”; and

(4) in subsection (g)(1), by striking “subsection
(a) or (d)” each place it appears and inserting “sub-
section (a), (b), (c), or (d)”.

(b) CIVIL PENALTIES.—Section 32912 of title 49,
United States Code, is amended—

(1) in subsection (b), by striking “$5” and in-
serting “$10”;

(2) by adding a new subsection at the end
thereof:

“(e) FUND FOR DOMESTIC COMMERCIALIZATION
AND PRODUCTION OF ADVANCED TECHNOLOGY VEH-
CLES AND COMPONENTS.—(1) There shall be established
in the Treasury of the United States a separate account
to fund domestic commercialization and production of ad-
vanced technology vehicles and vehicle components. Civil
penalties obtained under this section from any manufac-
turer that violates a standard prescribed for a model year
under section 32902 of this chapter shall be credited to
the separate account.

“(2) Amounts in the separate account shall be avail-
able, subject to annual appropriation, without regard to
fiscal year limitation. Additional amounts may be appro-
priated to the account.

“(3) The Secretary is authorized to make grants from
the separate account to automobile manufacturers and
component suppliers to pay a portion of the cost to reequip
or expand an existing manufacturing facility in the United
States to produce advanced technology vehicles or compo-
nents.

“(4) The Secretary shall deposit at the end of each
fiscal year, in the United States Treasury as miscellaneous
receipts, amounts in the separate account that the Sec-
retary decides are in excess of the needs of the account.
The Secretary may carry over funds to the following fiscal
year, if the Secretary decides that the continued avail-
ability of the funds will be necessary to carry out the pur-
poses of this subsection.
"(5) The Secretary shall promulgate regulations implementing this subsection in consultation with the Secretary of Energy and the Administrator of the Environmental Protection Agency.".

**SEC. 302. FLEXIBLE FUEL VEHICLE PRODUCTION.**

(a) **Production Requirements.**—Chapter 329 of title 49, United States Code, is amended by inserting after section 32904 the following new section:

"§32904A. Flexible fuel vehicle production requirements

"(a) **Production Requirements.**—Beginning in model year 2012, each manufacturer of new motor vehicles (as defined under section 30(e)(2) of the Internal Revenue Code of 1986) shall ensure that the percentage of such vehicles manufactured in a particular model year that are dual fueled automobiles shall not be less than the percentage set forth in the following table:

<table>
<thead>
<tr>
<th>&quot;For model year: &quot;</th>
<th>The percentage of dual fueled automobiles shall be</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>45</td>
</tr>
<tr>
<td>2013</td>
<td>50</td>
</tr>
<tr>
<td>2014</td>
<td>55</td>
</tr>
<tr>
<td>2015</td>
<td>60</td>
</tr>
<tr>
<td>2016</td>
<td>65</td>
</tr>
<tr>
<td>2017</td>
<td>70</td>
</tr>
<tr>
<td>2018</td>
<td>75</td>
</tr>
<tr>
<td>2019</td>
<td>80</td>
</tr>
<tr>
<td>2020</td>
<td>85</td>
</tr>
</tbody>
</table>
“(b) Exception.—The Secretary of Transportation may temporarily exclude certain automobiles with certain engine types from the production requirements in subsection (a) if the Secretary determines, in consultation with the Administrator of the Environmental Protection Agency and the Secretary of Energy, that it is technologically infeasible for the engines to have dual fuel capability.”.

(b) B20 Biodiesel as Alternative Fuel for Purposes of Dual Fueled Automobiles.—Section 32901(a) of title 49, United States Code, is amended—

(1) in paragraph (1), by redesignating subparagraphs (J) and (K) as subparagraphs (K) and (L), respectively, and inserting after subparagraph (I) the following:

“(J) B20 biodiesel blend;”; and

(2) by redesignating paragraphs (7) through (16) as paragraphs (9) through (18), respectively, and insert after paragraph (6) the following:

“(7) ‘biodiesel’ means the monoalkyl esters of long chain fatty acids derived from plant or animal matter which meet—

“(A) the registration requirements for fuels and fuel additives established by the Envi-
rnonmental Protection Agency under section 211
of the Clean Air Act (42 U.S.C. 7545); and
“(B) the requirements of the American So-
icety of Testing and Materials D6751.
“(8) ‘B20 biodiesel blend’ means a mixture of
biodiesel and diesel fuel meeting any standards es-
tablished under section 211(u) of the Clean Air Act
approximately 20 percent of the content of which is
biodiesel, and commonly known as ‘B20’.”

SEC. 303. CONSUMER AWARENESS.
(a) CONSUMER EDUCATION CAMPAIGN RELATING TO
DUAL FUELED AUTOMOBILES.—The Secretary of Trans-
portation, in consultation with the Secretary of Energy,
shall carry out an education program to inform people
about which automobiles are dual fueled automobiles (as
defined in section 32901(a)(8) of title 49, United States
Code) and how to exercise their opportunity to choose al-
ternative fuels. The Secretary is authorized to obtain from
the automobile manufacturers the list of first purchasers
of each dual fueled automobile it produced under section
30117(b) of title 49, United States Code, and other appro-
priate databases maintained by automobile manufacturers
for the purpose of identifying the owners of dual fueled
automobiles for purposes of notifying them of where alter-
native fuels are sold in their area.
(b) FUEL CONSERVATION EDUCATION PROGRAM.—

(1) PARTNERSHIP.—The Secretary of Trans-
portation shall enter into a partnership with inter-
ested industry groups, including groups from the
automotive, gasoline refining, and oil industries, and
groups representing the public interest and con-
sumers to establish a public education campaign
that provides information to United States drivers
about immediate measures that may be taken to
conservé transportation fuel.

(2) ACCESSIBILITY.—The public information
campaign under this section shall be targeted to
reach the widest audience possible. The education
campaign may include television, print, Internet
website, or any other method designed to maximize
the dissemination of transportation fuel savings in-
formation to drivers.

(3) COST SHARING.—The Secretary shall pro-
vide no more than 50 percent of the cost of the cam-
paign created under this section. The Secretary is
authorized to accept private funds to augment funds
made available under this paragraph.

(4) AUTHORIZATION OF APPROPRIATIONS.—
There are authorized to be appropriated to the Sec-
51
retary of Transportation such sums as may be neces-

sary to carry out this subsection.

3 SEC. 304. TIRE FUEL EFFICIENCY CONSUMER INFORMA-
TION.

(a) IN GENERAL.—Chapter 323 of title 49, United
States Code, is amended by inserting after section 32304
the following new section:

“§32304A. Tire Fuel Efficiency Consumer Informa-
tion

“(a) RULEMAKING.—(1) Not later than 18 months
after the date of enactment of this section, the Secretary
of Transportation shall, after notice and opportunity for
comment, promulgate rules establishing a national tire
fuel efficiency consumer information program for replace-
ment tires designed for use on motor vehicles to educate
consumers about the effect of replacement tires on auto-
mobile fuel efficiency.

“(2) ITEMS INCLUDED IN RULE.—The rulemaking
shall include each of the following:

“(A) A national tire fuel efficiency rating sys-
tem for motor vehicle replacement tires to assist
consumers in making more educated tire purchasing
decisions.

“(B) Requirements for providing information to
consumers, including information at the point of sale
of replacement tires and other potential information
dissemination methods, including the internet.

“(C) Specifications for test methods for tire
manufacturers to use in assessing and rating re-
placement tires to avoid variation among test equip-
ment and manufacturers.

“(D) A national tire maintenance consumer
education program including, information on tire in-
flation pressure, alignment, rotation, and tread wear
to maximize fuel efficiency.

“(3) APPLICABILITY.—This section shall not apply to
tires excluded from coverage under section 575.104(c)(2)
of title 49, Code of Federal Regulations, as in effect on
date of enactment of this section.

“(b) CONSULTATION.—The Secretary shall consult
with the Secretary of Energy and the Administrator of
the Environmental Protection Agency on the means of
conveying tire fuel efficiency consumer information.

“(c) REPORT TO CONGRESS.—The Secretary shall
conduct periodic assessments of the rules promulgated
under this section to determine the utility of such rules
to consumers, the level of cooperation by industry, and the
contribution to national goals pertaining to energy con-
sumption. The Secretary shall transmit periodic reports
detailing the findings of such assessments to the Com-

“(d) Tire Marking.—The Secretary shall not require permanent labeling of any kind on a tire for the purpose of tire fuel efficiency information.

“(e) Preemption.—When a requirement under this section is in effect, a State or political subdivision of a State may adopt or enforce a law or regulation on tire fuel efficiency consumer information only if the law or regulation is identical to that requirement. Nothing in this section shall be construed to preempt a State or political subdivision of a State from regulating the fuel efficiency of tires not otherwise preempted under this chapter.”.

(b) Enforcement.—Section 32308 of such chapter is amended by adding at the end the following:

“(e) Section 32304A.—Any person who fails to comply with the national tire fuel efficiency consumer information program under section 32304A is liable to the United States Government for a civil penalty of not more than $50,000 for each violation.”.

(c) Table of Contents.—The table of contents for chapter 301 of title 49 is amended by adding the following new item after the item relating to section 32304:

“32304A. Tire fuel efficiency consumer information.”.
SEC. 305. ADVANCED BATTERY LOAN GUARANTEE PROGRAM.

(a) Establishment of Program.—The Secretary of Energy shall establish a program to provide guarantees of loans by private institutions for the construction of facilities for the manufacture of advanced vehicle batteries that are developed and produced in the United States, including advanced lithium ion batteries.

(b) Requirements.—The Secretary may provide a loan guarantee under subsection (a) to an applicant if—

(1) without a loan guarantee, credit is not available to the applicant under reasonable terms or conditions sufficient to finance the construction of a facility described in subsection (a);

(2) the prospective earning power of the applicant and the character and value of the security pledged provide a reasonable assurance of repayment of the loan to be guaranteed in accordance with the terms of the loan; and

(3) the loan bears interest at a rate determined by the Secretary to be reasonable, taking into account the current average yield on outstanding obligations of the United States with remaining periods of maturity comparable to the maturity of the loan.
(c) CRITERIA.—In selecting recipients of loan guarantees from among applicants, the Secretary shall give preference to proposals that—

(1) meet all applicable Federal and State permitting requirements;

(2) are most likely to be successful; and

(3) are located in local markets that have the greatest need for the facility.

(d) MATURITY.—A loan guaranteed under subsection (a) shall have a maturity of not more than 20 years.

(e) TERMS AND CONDITIONS.—The loan agreement for a loan guaranteed under subsection (a) shall provide that no provision of the loan agreement may be amended or waived without the consent of the Secretary.

(f) ASSURANCE OF REPAYMENT.—The Secretary shall require that an applicant for a loan guarantee under subsection (a) provide an assurance of repayment in the form of a performance bond, insurance, collateral, or other means acceptable to the Secretary in an amount equal to not less than 20 percent of the amount of the loan.

(g) GUARANTEE FEE.—The recipient of a loan guarantee under subsection (a) shall pay the Secretary an amount determined by the Secretary to be sufficient to cover the administrative costs of the Secretary relating to the loan guarantee.
(h) FULL FAITH AND CREDIT.—The full faith and credit of the United States is pledged to the payment of all guarantees made under this section. Any such guarantee made by the Secretary shall be conclusive evidence of the eligibility of the loan for the guarantee with respect to principal and interest. The validity of the guarantee shall be incontestable in the hands of a holder of the guaranteed loan.

(i) REPORTS.—Until each guaranteed loan under this section has been repaid in full, the Secretary shall annually submit to Congress a report on the activities of the Secretary under this section.

(j) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as are necessary to carry out this section.

(k) TERMINATION OF AUTHORITY.—The authority of the Secretary to issue a loan guarantee under subsection (a) terminates on the date that is 10 years after the date of enactment of this Act.

SEC. 306. DOMESTIC MANUFACTURING CONVERSION GRANT PROGRAM.

Section 712 of the Energy Policy Act of 2005 (42 U.S.C. 16062) is amended—

(1) in subsection (a)—
(A) by inserting "and components thereof"
   after "sales of efficient hybrid and advanced
diesel vehicles";

   (B) by inserting ", plug-in electric hybrid,
flexible-fuel," after "production of efficient hy-
brid"; and

   (C) by adding at the end the following:
   "Priority shall be given to the refurbishment or
retooling of manufacturing facilities that have
recently ceased operation or will cease operation
in the near future."; and

   (2) by striking subsection (b) and inserting the
   following:

   "(b) COORDINATION WITH STATE AND LOCAL PRO-
   GRAMS.—The Secretary may coordinate implementation of
this section with State and local programs designed to ac-
complish similar goals, including the retention and retrain-
ing of skilled workers from the such manufacturing facili-
ties, including by establishing matching grant arrange-
ments.

   "(c) AUTHORIZATION OF APPROPRIATIONS.—There
are authorized to be appropriated to the Secretary such
sums as may be necessary to carry out this section".
National Low Carbon Fuels Standard
Scenario Analysis

Brian Turner
National Commission on Energy Policy
International Council on Clean Transportation
June 7, 2007

This paper, developed jointly by the National Commission on Energy Policy and the International Council on Clean Transportation, presents potential strategies that could be used to meet the goals of a National Low Carbon Fuels Standard (NLCFS). A NLCFS is assumed to be a program to measure and reduce the total lifecycle greenhouse gas (GHG) intensity of transportation fuels.²

Each of the components listed below can be used to achieve between 1 and 15 such GHG-intensity reduction points.⁴ Putting these components together creates a 'scenario' of NLCFS compliance. Three such scenarios, 'conservative', 'moderate', and 'aggressive', are presented. The conservative scenario uses existing technologies to reduce overall carbon intensity by 3% in 2020. The moderate technology scenario relies on near-term technologies to achieve a 10% overall transportation carbon intensity reduction by 2020, while the technologically aggressive scenario demonstrates that with ambitious deployment of near-term technologies, fuel carbon intensity reductions of 25% could be achieved in a similar timeframe.

These scenarios rely on different quantities and types of biofuels.⁵ Pages 6 and 7 present a discussion of how these overall quantities of average GHG-intensity could be produced from specific quantities of specific biofuel types. The conclusion is that under an LCFS there will be tremendous demand for all kinds of biofuels, including all the biofuels currently being produced and planned in the United States, as well as a strong new wave of technologically advanced biofuels.

Finally, the interaction of low carbon fuels policy with a fuel economy increase is illustrated. These policies are strongly synergistic. Together, these two policies could reduce petroleum consumption and greenhouse gas emissions nearly 15% by 2020.

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¹ Lifecycle emissions are those associated with the feedstock production, refining, and use of fuels.
² An intensity standard measures the emissions per unit of fuel, in this case grams of GHGs per btu of energy. The standard would apply as an average intensity across all transportation fuels in commerce.
³ Which transportation fuels are covered is a variable in policy design. This paper assumes the program covers all transportation fuels.
⁴ A note on methods: the analysis in this paper is based on energy demand projections from the Energy Information Administration’s Annual Energy Outlook, with scenarios analyzed using the VISION Model from Argonne National Lab and the NEMS model from the EIA. Biofuel carbon intensities are taken from the recent California Alternative Fuels Plan (AB1057 report), in turn based on an update of the GREET model from Argonne Lab. These analyses should be considered approximate and preliminary.
⁵ For simplicity, the scenarios distinguish biofuels as either Low-, Mid-, or Hi-GHG. "Hi-GHG" biofuels are those with 75% the carbon intensity of gasoline, "Mid-GHG" and "Low-GHG" biofuels have 50% and 25% relative carbon intensity, respectively. Actual biofuels, with carbon intensities ranging from 81% to 3%, are described on page 6 and 7.
Compliance strategies:

Upstream operations:
Improving operations and efficiencies at individual oil production and refining facilities can reduce these 'upstream' GHG emissions by as much as 10%. Because upstream emissions are roughly 20% of lifecycle GHGs of gasoline and diesel, this could reduce total GHG-intensity by 2 percentage points.

10% nationwide ethanol blend
A 10% by volume (6.7% by energy) nationwide ethanol blend could be implemented with little change to existing vehicles or infrastructure. It would require 16 billion gallons of ethanol in 2020 (in the absence of improved fuel economy or other fuels). Depending on the average GHG-intensity of the ethanol, this could reduce fuel GHG-intensity by 1 to 3 percentage points.

<table>
<thead>
<tr>
<th>GHG-intensity reduction points</th>
<th>Ethanol required (billion gallons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-GHG ethanol</td>
<td>Mid-GHG ethanol</td>
</tr>
</tbody>
</table>

Renewable diesel
Renewable diesel can be blended with petro-diesel in blends up to 20% with low to moderate change to existing vehicles and infrastructure. ‘Renewable diesel’ is a general term to include the currently produced soy- or canola-based biodiesel, or next-generation ‘biomass-to-liquids’ (BTL) diesel. Most biodiesel today (except imported palm oil biodiesel) is easily less than 50% as GHG-intensive as gasoline, while BTL could be as low as 100-110% lower. Here, Mid-GHG means 50% and Low-GHG means 25% of gasoline.

<table>
<thead>
<tr>
<th>Renewable diesel blend level</th>
<th>GHG-intensity reduction points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mid-GHG renewable diesel</td>
</tr>
<tr>
<td>10%</td>
<td>1</td>
</tr>
<tr>
<td>20%</td>
<td>2</td>
</tr>
</tbody>
</table>

Flex-fuel vehicles and E85 use
In order to achieve high levels of high-blend ethanol (E85) use, flex-fuel vehicles (FFVs) are necessary. And because of the time necessary for existing vehicle stock to ‘turn-over’ there is considerable lag between FFV sales and high FFV ownership. For instance, even assuming a moderately aggressive policy to require 50% of new gasoline vehicle sales to be flex-fuel capable by 2020, FFVs would constitute just 22% of vehicles in 2020.

In addition to the number of FFVs, the rate at which they use E85 affects total ethanol use. Because FFVs can use either gasoline or E85, owners only use E85 a portion of the time. For instance, Minnesota has one of the most successful E85 markets in the country, but drivers of FFVs fill up on E85 just 20% of the time. In addition to new vehicles,

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6 Actions include: carbon sequestration in enhanced oil recovery, reduced gas flaring, improved catalysts and renewable hydrogen use at refineries. According to Kevin Ball, Director of Low Carbon Business Policy at BP International, operations and refinery efficiency improvements at BP saved “$1 billion on $170 million on investments” and achieved 10% reduction in emissions.
increasing E85 use will require substantial new infrastructure in fuel railcars and trucks, blending depots, and fuel pumps.

<table>
<thead>
<tr>
<th>FFV as % of new gasoline vehicle sales in 2020</th>
<th>FFV as % of all vehicles in 2020</th>
<th>E85 use rate by FFVs</th>
<th>Billion gallons ethanol</th>
<th>GHG-intensity reduction points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mid-GHG ethanol</td>
</tr>
<tr>
<td>50%</td>
<td>22%</td>
<td>20%</td>
<td>27</td>
<td>2</td>
</tr>
<tr>
<td>75%</td>
<td>36%</td>
<td>50%</td>
<td>48</td>
<td>6</td>
</tr>
<tr>
<td>86%</td>
<td>48%</td>
<td>75%</td>
<td>91</td>
<td>10</td>
</tr>
</tbody>
</table>

**Plug-in hybrid electric vehicles (PHEVs)**

First of all, electricity is only carbon-saving as a fuel if a) it is from a renewable source or b) it is given an efficiency adjustment to account for the much greater efficiency of electric drive vehicles. These are regulatory questions that can be left to the agency to decide — in this memo it is assumed that one or both of these conditions hold and so electricity in an electric vehicle or PHEV has a GHG-intensity 25% of gasoline.

Like flex-fuel vehicles, there is a substantial lag between the time PHEVs are introduced and the time that a significant portion of existing stock is PHEVs. Because PHEVs are less commercially developed than FFVs, even the most aggressive program is not likely to see PHEVs above 35% of new vehicle sales by 2020. With this introduction rate, existing PHEVs would not be more than 16% of existing light-duty vehicle stock in 2020.

Also like FFVs, PHEVs can run on either of two fuels. The amount of time the vehicle is running on electricity is determined by battery technology and consumer behavior. A conservative assumption is that PHEVs in 2020\(^7\) will use electricity for 30% of the miles they travel. If battery technology advances, a 50% electricity rate may be achievable.

Like FFVs, the full benefits of introducing PHEVs only really becomes apparent in out-years, when they are more common. At 50% of vehicle stock, PHEV40s would reduce carbon emission intensity of all transportation by at least 15%.

<table>
<thead>
<tr>
<th>PHEVs as % of new vehicles sales in 2020</th>
<th>PHEVs as % of all vehicles in 2020</th>
<th>Electricity use rate by FFVs (% of miles traveled)</th>
<th>GHG-intensity reduction points</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td>8%</td>
<td>30%</td>
<td>1.5</td>
</tr>
<tr>
<td>25%</td>
<td>16%</td>
<td>30%</td>
<td>3</td>
</tr>
<tr>
<td>35%</td>
<td>16%</td>
<td>50%</td>
<td>5</td>
</tr>
</tbody>
</table>

\(^7\) PHEV20s operate on electricity for the first 20 miles of any trip. PHEV40s have a 40-mile all-electric range. Because most trips are short, these ranges add up to 30-50% of miles driven on electricity.
Compliance Scenarios

Conservative near term technology strategy
This scenario relies on the expanded deployment of current strategies, each of which is relatively low-risk. Petroleum extraction and refining improvements can yield GHG reductions at low cost. Gasoline and diesel can be (and regularly are) mixed with ethanol and biodiesel at a 10% blend level with very little cost or risk to existing infrastructure and engines. 16 billion gallons of high-GHG ethanol and 5 billion gallons of biodiesel are at the upper end of what could be produced from traditional domestic corn and soy, or nontraditional crops or imported resources could help supply this demand.

<table>
<thead>
<tr>
<th>Compliance strategy component</th>
<th>Total renewable fuels (Billion gallons/year)</th>
<th>GHG-intensity reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refinery efficiency</td>
<td>n/a</td>
<td>1</td>
</tr>
<tr>
<td>10% Hi-GHG ethanol blend</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>10% Mid-GHG renewable diesel</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Total reduction</td>
<td></td>
<td>3%</td>
</tr>
</tbody>
</table>

Technologically moderate strategy
This scenario deploys a mix of strategies, each of which is relies on currently available technologies. Producing or obtaining nearly 50 billion gallons of biofuels, much of which are low-GHG, would require high levels of capital investment but is within reach in this timeframe. The FFV/E85 and PHEV20 strategies similarly rely on commercially available but not widely deployed technologies and infrastructure, and would also require investment. The deployment of anticipated near-term technologies would make these goals easier to reach.

<table>
<thead>
<tr>
<th>Compliance strategy component</th>
<th>Total renewable fuels (Billion gallons/year)</th>
<th>GHG-intensity reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upstream improvements and efficiency</td>
<td>n/a</td>
<td>2</td>
</tr>
<tr>
<td>10% Mid-GHG ethanol blend</td>
<td>16</td>
<td>2.5</td>
</tr>
<tr>
<td>10% Mid-GHG renewable diesel</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Conservative FFV/E85 strategy with Low-GHG ethanol</td>
<td>27</td>
<td>3.5</td>
</tr>
<tr>
<td>Moderate PHEV</td>
<td>n/a</td>
<td>1.5</td>
</tr>
<tr>
<td>Total reduction</td>
<td></td>
<td>10.5%</td>
</tr>
</tbody>
</table>

Technologically aggressive strategy
This strategy assumes that several of the technologies (low-GHG biofuels and PHEV40s) now in active development (pilot scale or better) prove technologically, logistically, and commercially viable. This strategy is aggressive, as producing 100 billion gallons of low-GHG biofuel would require a substantial amount of the maximum sustainable domestic resources\(^8\) and/or substantial imports, while "PHEV40s" would likely require improved battery technology. Further, the development of associated production and

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\(^8\) "The Billion-Ton Vision: Biomass as feedstock for a bioenergy and bioproducts industry," a joint study by USDA and DOE, April 2005.
manufacturing facilities and distribution infrastructure would require substantial investment. However, this investment could well prove economic in the event of rising carbon costs and cost reductions when alternative technologies are brought to scale.

<table>
<thead>
<tr>
<th>Compliance strategy component</th>
<th>Total renewable fuels (Billion gallons/year)</th>
<th>GHG-intensity reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upstream efficiency and improvements</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>10% Mid-GHG ethanol blend</td>
<td>16</td>
<td>2.5</td>
</tr>
<tr>
<td>20% Low-GHG renewable diesel</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Aggressive FFV/E85 strategy with Low-GHG ethanol</td>
<td>91</td>
<td>15</td>
</tr>
<tr>
<td>Aggressive advanced PHEV</td>
<td>n/a</td>
<td>5</td>
</tr>
<tr>
<td>Total reduction</td>
<td></td>
<td>26.5%</td>
</tr>
</tbody>
</table>
### Biofuel Production Scenarios

The strategies and scenarios above identified large quantities of biofuels with generic GHG-intensity of “low,” “medium,” and “high.” In reality, these quantities will be made of specific amounts of fuel made in specific ways with specific GHG-intensities. The following table illustrates some of the specific biofuel process technologies that produce different GHG-intensities.

<table>
<thead>
<tr>
<th>Process name</th>
<th>Description</th>
<th>GHG-intensity relative to gasoline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Today’s average corn ethanol</td>
<td>The average GHG-intensity of all corn ethanol in the US circa 2005</td>
<td>81%</td>
</tr>
<tr>
<td>New corn</td>
<td>Average new natural-gas fired corn ethanol plants being built today</td>
<td>75%</td>
</tr>
<tr>
<td>Advanced corn</td>
<td>The most advanced corn currently in production or construction. Uses some renewable energy and / or recycles byproduct grain directly to cattle</td>
<td>50%</td>
</tr>
<tr>
<td>Most advanced corn</td>
<td>Using all state-of-the-art features, including all renewable energy and full integration with feed lot</td>
<td>25%</td>
</tr>
<tr>
<td>Sugarcane ethanol</td>
<td>Ethanol produced from sugarcane, such as in Brazil</td>
<td>25%</td>
</tr>
<tr>
<td>Switchgrass cellulose</td>
<td>Ethanol produced from Midwestern-grown prairie grass in advanced “cellulosic ethanol” process</td>
<td>7%</td>
</tr>
<tr>
<td>Stover cellulose</td>
<td>Ethanol produced from corn stalk and cob in cellulose process.</td>
<td>4%</td>
</tr>
<tr>
<td>“Net negative” BTL</td>
<td>A “biomass-to-liquid” (BTL) gasoline or diesel produced from a perennial crop grown on former agricultural land. The crop sequesters carbon in the degraded soil, and the BTL process generates electricity as well as fuel, leading to a net-negative carbon balance process</td>
<td>-3%</td>
</tr>
</tbody>
</table>
Fuel scenarios

The following table illustrates how the large quantities of generic GHG-intensity fuels could be met with combinations of real-world fuel production as described above:

<table>
<thead>
<tr>
<th>Quantity / intensity goal</th>
<th>Combinations of fuels that could meet goal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(B = Billion gallons per year)</td>
</tr>
<tr>
<td>15 B &quot;Mid-GHG&quot; 5 B Today’s Average corn</td>
<td>10 B Most Advanced corn</td>
</tr>
<tr>
<td>15 B &quot;Mid-GHG&quot; 5 B Today’s Average corn</td>
<td>5 B New Corn 5 B Sugarcane</td>
</tr>
<tr>
<td>15 B &quot;Mid-GHG&quot; 10 B New Corn 5 B Stover Cellulosic</td>
<td>10 B Advanced 5 B Stover Cellulosic 5 B Switchgrass Cellulosic</td>
</tr>
<tr>
<td>50 B &quot;Mid-GHG&quot; 10 B Today’s Average corn</td>
<td>10 B New Corn 10 B Advanced 15 B Stover Cellulosic 5 B Switchgrass Cellulosic</td>
</tr>
<tr>
<td>50 B &quot;Low-GHG&quot; 10 B Today’s Average corn</td>
<td>5 B Stover Cellulosic 25 B Switchgrass Cellulosic 10 B Sugarcane</td>
</tr>
<tr>
<td>50 B &quot;Low-GHG&quot; 15 B New Corn 15 B Stover Cellulosic</td>
<td>10 B Switchgrass Cellulosic 10 B “Net-negative” 5 B Sugarcane</td>
</tr>
<tr>
<td>50 B &quot;0-GHG&quot; 20 B Stover Cellulosic</td>
<td>10 B Switchgrass Cellulosic 20 B “Net negative”</td>
</tr>
</tbody>
</table>

Summary

These compliance scenarios illustrate that:
- There are multiple compliance strategies for NLCS compliance; this paper mentions some of the strongest near term potential
- Conservative goals of up to 5% reduction in fuel carbon intensity in the near term are feasible and involve relatively low risk and cost
- Moderate goals of around 10% by 2020 could be accomplished with accelerated deployment of currently available technologies
- Significant, ambitious reductions (>25%) are available in the longer term
- At almost any level of a role for biofuels, the production targets are immense
  - US-produced biofuels can easily be absorbed into this market, with tremendous room left for expansion by domestic firms, especially those willing to invest in low-GHG technologies.
  - Non-US sources of biofuels (or raw biomass, for domestic conversion) will likely be an important source for market stabilization.
- Early action now allows for greater room for action in the future as capital investment, vehicle technologies, and infrastructure require time for deployment
Interaction of Fuel Economy and Low Carbon Fuels Policies

The interaction of increased fuel economy and low carbon fuel standard has the potential to substantially reduce petroleum consumption by and greenhouse gas emissions from transportation. This memo looks at the interaction of a 4% by year fuel economy improvement (beginning in 2009 for passenger vehicles and 2012 for light trucks) (based on the President’s proposal and that embodied in the Fuel Economy Reform Act – FERA) and a low carbon fuel goal of 10% below 2005 levels by 2020 and 20% below by 2030.

These policies are strongly synergistic in reducing petroleum and GHG emissions – FERA alone would reduce petroleum consumption by 6% in 2020 and by 21% in 2030, and LCFS reduces GHG emissions by 10% and 20%, but FERA and LCFS combined reduce petroleum consumption by 15% and 38% respectively. This is slightly less than the sum of the two programs’ effects because as FERA reduces overall fuel consumption, the LCFS percentage decrease in GHG-intensity results in less absolute GHG reductions than it does without FERA.

The interaction with FERA also increases the technical feasibility of meeting LCFS goals. Without FERA, meeting LCFS goals through biofuels alone could require as much as 35 to 90 billion gallons of ethanol in 2020 and 2030, respectively. With FERA, these volumes could be reduced to 28 and 50 billion gallons, respectively.

These estimates of consumption and emissions “savings” are in comparison to the level of consumption and emissions that would have occurred in 2020 and 2030, according to projections by the Energy Information Administration. These estimates also rely on assumptions about the “average vehicle” and are based on a different model (NEMS vs VISION) than the LCFS compliance scenarios above, and so the results may not match up perfectly and should be considered very approximate.

<table>
<thead>
<tr>
<th>FERA alone</th>
<th>LCFS alone</th>
<th>FERA and LCFS combined</th>
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<tr>
<td>MBPD</td>
<td>MMT CO2e</td>
<td>M Ave Veh</td>
</tr>
<tr>
<td>2020</td>
<td>1.3</td>
<td>250</td>
</tr>
<tr>
<td>2030</td>
<td>4.1</td>
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</tbody>
</table>

MBPD = Million barrels per day;
MMTCO2e = Million metric tonnes CO2-equivalent GHG emissions
M Ave Vehicles = Millions of average vehicles' petroleum consumption or GHG emissions

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STATEMENT OF THE OUTDOOR POWER EQUIPMENT INSTITUTE (OPEI) TO THE HOUSE COMMITTEE ON ENERGY AND COMMERCE: SUBCOMMITTEE ON ENERGY AND AIR QUALITY

DISCUSSION DRAFT ON ALTERNATIVE FUELS, INFRASTRUCTURE AND VEHICLES

Through this statement, we urge the Subcommittee to carefully consider and respond to the following concerns of over 200 million Americans that own and operate over 300 million products, including recreational boats and marine engines, chainsaws, lawnmowers, motorcycles, ATVs, snowmobiles, motor vehicles, generators, and related vehicles and equipment. Mid-level ethanol blends (over 10% ethanol) may cause substantial damage to these consumers' engines, equipment and vehicles and may increase emissions of pollutants from these products.

For the reasons set forth below, any alternative fuels legislation should require the Environmental Protection Agency (EPA) and the Department of Energy to study the impact of mid-level ethanol blends on consumers, manufacturers and the environment.

We also urge you to modify Section 211(f)(4) of the Clean Air Act to assure that if EPA receives a petition to approve the sale of entirely new mid-level ethanol fuel blends, the Agency be required to subject such a petition to public notice and comment.

II. Statutory Background

Section 211(f) of the Clean Air Act prohibits the introduction into commerce of a fuel or fuel additive unless that fuel or fuel additive is "substantially similar" (referred to as "sub sim") to pre-existing fuels or fuel additives in use in the 1975 vehicle model year. EPA, which is charged with implementing Section 211(f), periodically has issued a series of "sub sim" rulings since the mid-1970s interpreting the subsection, as well as providing waivers from the subsection's prohibitions under authority granted under Section 211(f)(4).
In order to grant a "sub sim" waiver under Section 211(f)(4), EPA must determine that the fuel or fuel additive will not: (1) cause or contribute to the failure of any emission control device or system over the life of a vehicle; or, (2) cause or contribute to the failure of a vehicle to meet the emissions standards for which the vehicle has been certified. However, Section 211(f)(4) currently states that if EPA does not act on a petition for a sub sim waiver within 180 days of its submission, the petition is deemed granted, even in the absence of EPA action or consideration of the petition's merits.

III. Public Policy Concerns with Mid-Level Ethanol Blends

There are significant national policy concerns with the mid-level ethanol fuels above E10.

We estimate there are more than 300 million pieces of existing on-road and off-road vehicles and equipment powered by gasoline engines. These products are valued at over 2 trillion dollars. We are principally concerned about the degradation of these existing and new products as a result of the increased heat and the increased corrosion that may result from mid-level ethanol fuels when used in on-road and off-road engines and vehicles. We will submit into the record in this proceeding a new technical evaluation of all the potential adverse impacts and risks of mid-level ethanol fuel blends that require comprehensive study. This new evaluation has been prepared by Dr. Ron Sahu, who is a national expert on various fuel impacts on engines, equipment, and vehicles.

Dr. Sahu's technical evaluation summarizes the following potential problems and concerns.

- **Engine Operation and Consumer Safety:** An Australian EPA study of mid-level ethanol blends indicated the following potential concerns with using mid-level ethanol blends in on- and off-road engines not designed for this fuel: *failure of exhaust components* (e.g., catalyst) *due to heat/durability; engine damage and seizure; engine stalling and stopping; failure of engine cut-off switches; unexpected engagement of cutting blades/chains; and, fuel leaks and blockage of fuel lines.*

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June 07, 2007
Page Three

- **Emissions Increases:**
  - Potential increases in evaporation/permeation emissions from mid-level ethanol blends may undermine the benefits of EPA's emission regulations.
  - Potential increases in emissions of air toxics (e.g., aldehydes) from mid-level ethanol blends.

In addition to these concerns with engines and vehicles, the Subcommittee should also evaluate the following separate problem:

- The proliferation of a patchwork quilt of different conflicting State fuel requirements with different ethanol mandates will exacerbate the current boutique fuels problem, leading to supply shortages and wholesale and retail price volatility.

IV. **The Solution**

The solution to these public policy concerns is not to ban or undermine the increased use of ethanol fuels. In fact, all the stakeholders want to avoid consumer rejection of all ethanol blends (including E85) that will occur if mid-level ethanol blends damage consumers and their machinery.

The solution is to: (1) require and fund a joint EPA/DOE study of the operability, emissions and consumer-safety issues associated with mid-level ethanol blends; (2) require EPA to subject all Section 211(f)(4) petitions, including those for mid-level ethanol blends, to a well-informed decision-making process that includes public notice and comment; and, (3) require EPA make new fuel waivers a high priority and to approve or deny these petitions within 270 days.

* * *

Thank you for providing the opportunity to make this statement. We look forward to working with the Subcommittee to improve our understanding all of the impacts of ethanol fuels on consumers, manufacturers, and the environment before we undertake any action that would result in these mid-level ethanol fuels being introduced into commerce. Please call Greg Scott at 202-342-8646 with any questions.
API Statement on  
The House Energy and Commerce Committee's Fuels Title Discussion Draft

June 7, 2007

API supports a realistic and workable alternative fuels standard (AFS). Our industry is the nation’s largest user of ethanol and is increasing the volume of renewable fuels in America’s transportation fuel portfolio. The industry significantly exceeded the 2006 renewable fuel requirement of 4 billion gallons of renewables, and according to Energy Information Administration (EIA) estimates, should exceed the 2007 requirement as well.

The House Energy and Commerce Committee’s Fuels Title Discussion Draft includes a low carbon fuel requirement. Those requirements would work alongside the alternative fuel manufacturing requirements but may be at cross purposes. The interaction of these very different mandates needs to be clarified.

Looking ahead, we need to develop all economically viable energy sources including fossil and renewable fuel sources. By relying, to the greatest extent possible, on market forces, understanding consumer impact and preferences, encouraging development of new technologies, and addressing secondary impacts of expanded renewable fuel usage, our industry and the nation will meet the energy challenges in the years ahead.

The most economical and practical use of ethanol is as a 10 percent blend in gasoline, which should be maximized before considering more broadly higher ethanol blends. It requires no modifications to vehicles, no major changes to service station pumps and storage tanks, and has a long history of successful fuel use by consumers.

Widespread use of E-85, however, would require that the major technological and economic hurdles of cellulosic ethanol conversion first be overcome. The timing of such technological breakthroughs is highly speculative. Even with breakthroughs in cellulosic ethanol production technology, significant logistical hurdles will need to be addressed. Gathering the feedstock (biomass such as forestry waste and switch grass), processing it, disposing of “waste” products, and delivering ethanol to markets at a cost comparable to gasoline has yet to be demonstrated on a commercial scale.

E-85, a transportation fuel containing 85 percent ethanol and 15 percent gasoline, is an alternative fuel that faces significant technological and economic hurdles. Corn-based ethanol is not sustainable at levels that would support widespread use of E-85. Moreover, E-85 requires flexible-fuel vehicles which currently comprise only 3 percent of the existing vehicle fleet. Even if the FFV mandates contained in the discussion draft bill are implemented, new owners of FFVs, like many of the current owners, might fill up with E-10 rather than E-85.
According to EPA, FFVs get about 30 percent fewer miles per gallon when fueled with E-85 as compared to gasoline. Consumers will likely be unhappy with the mileage penalty of E-85.

E-85 also requires special service station pumps and storage tanks, which represent a significant expenditure by the nation's independent service station dealers. More than 90 percent of the 169,000 retail gasoline stations nationwide are owned or operated by independent entrepreneurs – typically small businessmen and women. They are in the best position to evaluate consumer demand for E-85 at their retail stations. They will have to determine whether to offer E-85, balancing customer demand with per-station investment and conversion costs that can range from $20,000 to over $200,000.

Currently, there are just over 1,000 retail outlets nationwide, located principally in the upper Midwest, that are equipped to distribute E-85. The number appears to be growing rapidly on its own, without any government mandate. Contrary to the false claims by some industry critics, oil companies are not preventing the installation and use of E-85 pumps and storage tanks. Therefore, the proposed legislative restrictions to franchise agreements are not warranted and could have unintended negative consequences.

API offers these specific comments concerning possible biofuels legislation that may be considered by the Subcommittee, including proposals to expand the Renewable Fuels Standard:

Remove the E85 pump mandates. Market forces are responding to consumer demand without a mandate.

Restrictions on federal requirements in EPACT should continue. A federal alternative or renewable fuels mandate should not have a per-gallon requirement; require any particular alternative fuel to be used to meet a mandate; require an alternative fuel to be used in any particular geographic area; or require an alternative fuel to be made from particular feedstocks or restrict the use of any feedstock or processing scheme.

States (and their political subdivisions) should be preempted from setting state alternative or renewable fuel mandates. In addition, EPA should be provided with additional authority to grant temporary waivers during supply emergencies.

Lastly, any mandates for increased alternative or renewable fuel usage should be accompanied by periodic technology/feasibility reviews that would allow for appropriate adjustments to ensure that energy companies and consumers are not penalized due to the economic and technical hurdles that might prevent reaching alternative or biofuels usage targets or goals.
June 6, 2007

Honorable Representatives from Clean Car States
U.S. House of Representatives
Washington, DC 20515

Dear Representative:

We are writing you today to alert you to provisions in draft energy legislation circulated by Energy and Air Quality Subcommittee Chairman Rick Boucher that would repeal the Environmental Protection Agency’s Clean Air Act authority to regulate global warming pollution from vehicles and substantially limit its authority to regulate fuels, block at least 12 states from going forward with adopted clean car standards that limit global warming emissions from vehicles, and effectively overturn the Supreme Court ruling in Massachusetts v. EPA. We have other serious objections, expressed in an additional letter to Energy and Commerce Committee members, that the draft legislation would subsidize highly costly and polluting liquid coal fuels while setting unacceptably weak vehicle mileage and fuel standards that do not guarantee meaningful reductions in global warming pollution and do not safeguard the health of our lands, air, and water. However, in this letter we would like to bring your attention to the bill’s egregious attack on the Clean Air Act and your state’s efforts to curb global warming pollution, and urge your opposition to the draft energy legislation.

The draft Boucher bill, which was circulated June 1 to Energy and Commerce Committee members in anticipation of a markup later this month, is intended for inclusion in the energy independence and global warming legislation that Speaker Pelosi called for at the beginning of this Congress. However, this proposal runs counter to those goals by explicitly blocking your state’s existing global warming standards for new vehicles and overriding a recent landmark Supreme Court ruling affirming EPA’s authority to curb global warming pollution.

The Boucher draft preempts state and federal Clean Air Act authority in the following three provisions of Title VII, Section 722:

- State Waivers – The Administrator shall not grant states the necessary Clean Air Act waiver to exceed federal motor vehicle pollution standards if “such standards are designed to reduce greenhouse gas emissions.”
greenhouse gas emissions from new motor vehicles is limited to the authority under Title VII [regarding emissions reporting only].”

- EPA Fuel Regulations: “The authority of the Administrator to promulgate regulations under this Act regarding greenhouse gas emissions from motor vehicle and nonroad fuel is limited to the authority under Title VII [the Low Carbon Fuel Program].”

These preemptions would legislatively override the Supreme Court’s recent decision in Massachusetts v. EPA, which reaffirmed the Clean Air Act’s definition of air pollution to include greenhouse gases, and confirmed EPA’s authority to promulgate motor vehicle greenhouse gas standards under the Act. The draft legislation also would block the nation’s first global warming emissions standards for new cars and light trucks, which were adopted by California in 2002 and have subsequently been adopted by eleven other states1. Not only would this draft legislation block current state action, it also closes the door to the growing number of states around the country that are considering adopting these standards and would prevent even federal controls under the Clean Air Act.

Under the Clean Air Act, California is granted special status to exceed federal minimum air pollution standards, and other states with air quality concerns may adopt the California standards. California’s newest emissions standard – for greenhouse gases – is currently waiting for a waiver from EPA to proceed; EPA has routinely granted more than 40 similar waivers over the past 30 years. This bill, if passed, would prevent EPA from granting California the necessary waiver to implement its new program. If California is denied a waiver, your state and other states would also be permanently prevented from limiting greenhouse pollution from vehicles and fuels, thereby endangering public health and welfare.

We ask that you work with your colleagues to remove these provisions and provisions in any other energy legislation that attempt to limit state or federal authority to address global warming. At a time when the United States and other nations must urgently work to stabilize climate, each piece of legislation we consider can have dramatic ramifications for our future. At a minimum, no new harm should be done to our environment and public health as Congress debates meaningful, comprehensive, and lasting solutions to the climate challenge.

Thank you for your attention.

Sincerely,

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William Prindle
Deputy Director
American Council for an Energy Efficient Economy

Georgia Murray
Staff Scientist
Appalachian Mountain Club

John Hanger
President and CEO
Citizens for Pennsylvania’s Future (PennFuture)

Frank O’Donnell
President
Clean Air Watch

Lynn Thorp
National Campaigns Coordinator
Clean Water Action

KC Golden
Policy Director
Climate Solutions

Marty Hayden
Legislative Director
Earthjustice

Jason Barbose
Environment California

Chris Phelps
Environment Connecticut

Matthew Davis
Environment Maine

Brad Heavner
Environment Maryland

Frank Gorke
Environment Massachusetts

Suzanne Leta Liou
Environment New Jersey
Jeremiah Baumann  
Environment Oregon

Matt Auten  
Environment Rhode Island

Bill LaBorde  
Environment Washington

J. Drake Hamilton  
Science Policy Director  
Fresh Energy

Danielle Fugere  
Region Policy Director, West Coast Office  
Friends of the Earth

John Coequyt  
Energy Policy Specialist  
Greenpeace

Susan Frank  
Vice President, Public Policy  
Steven and Michele Kirsch Foundation

Karen Steuer  
Vice President, Government Affairs  
National Environmental Trust

Karen Wayland  
Legislative Director  
Natural Resources Defense Council

Sallie Schollinger-Krause  
Program Director  
Oregon Environmental Council

Nathan Willcox  
PennEnvironment

Michele Boyd  
Legislative Director, Energy Program  
Public Citizen

Debbie Sease
National Campaign Director
Sierra Club

Stephen Smith
Executive Director
Southern Alliance for Clean Energy

Michelle Robinson
Director, Clean Vehicles Program
Union of Concerned Scientists

Emily Figdor
Director, Federal Global Warming Program
U.S. Public Interest Research Group (U.S. PIRG)

James Moore
Vermont Public Interest Group (VPIRG)

cc: Members of the House Energy and Commerce Committee