UNITED STATES DEPARTMENT OF AGRICULTURE

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EXPANDING RENEWABLE ENERGY AND ENERGY

EFFICIENCY OPPORTUNITIES IN RURAL AMERICA

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PUBLIC MEETING

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THURSDAY,
SEPTEMBER 4, 2008

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The public meeting convened at 8:30 a.m. in the Jefferson Auditorium in the South Building of the USDA, 1400 Independence Avenue, SW, Washington, DC, Febe Ortiz, Moderator, presiding.

PRESENT:

CHUCK CONNER, Deputy Secretary of Agriculture

THOMAS DORR, Under Secretary for Rural Development

PANEL MEMBERS:

DOUGLAS FAULKNER, Deputy Under Secretary, Rural Development

FLOYD GAIBLER, Deputy Under Secretary, Farm and Foreign Services
JOSEPH GLAUBER, Chief Economist, Office of the Chief Economist
ROB HEDBERG, Special Advisor, Research, Education and Economics
GARY MAST, Deputy Under Secretary, Natural Resources and Environment

PANEL MEMBERS: (CONT.)

JOHN MIZROCH, Principle Deputy Assistant Secretary, Office of Energy Efficiency and Renewable Energy, Department of Energy

KARL SIMON, Director of Compliance and Innovative Strategies Division, Office of Transportation and Air Quality, Environmental Protection Agency

PUBLIC COMMENTS:

GERI SIMON, Tyonek Native Corporation
RON BARMORE, Range Fuels, Inc.
ION MANEA, Flower Power USA and Heritage Farm Cooperative
BRET HEALY, Kansas Bioscience Authority
AL CHRISTOPHERSON, Minnesota Agricultural Utilization Research Institute
RICK GRANT, Boise, Inc.
KYLE SIMPSON, Rentech, LLC
CHRIS ROACH, Abengoa Bioenergy
RYAN STROSCHEIN, Air Transportation Association
RICHARD ALTMAN, Commercial Aviation Alternative Fuels Initiative

BILL IMBERGAMO, American Forest & Paper Association
ROBERT KOZAK, Atlantic Biomass Conversions
DENNY DeVOS, POET
STEVE FLICK, Show Me Energy Cooperative
MICHAEL BROWER, Mosaic Federal Affairs, LLC
BRENDA ROBINSON, Environmental Solutions, Inc.

MANNING FERACI, National Biodiesel Board
ED HEGLAND, National Biodiesel Board
GARY HAER, REG
BOB HENRY, American Soybean Association
BILL HORAN, REG
JIM CONWAY, Griffen Industries
RACE MINER, Keystone Biofuels, Inc.

J.C. BELL, Bell Bioenergy
MARK ROKALA, National Sorghum Producers
CRAIG METZ, EnSave, Inc.

PUBLIC COMENTS: (CONT.)

KAREN EDWARDS, Biobased Products Coalition

CHARLES KUBERT, Environmental Law and Policy Center

MARTHA NOBLE, Sustainable Agriculture Coalition

BOB GRAY, National Center for Appropriate Technology

ERNST CEBERT, Alabama A&M University

RITA NEZNEK, American Forest Foundation

BART RUTH, 25x25 Alliance

MAURICE HLADIK, Iogen Corporation

ANDREW BATER, Biomass Connections, LLC

JESSE CAPUTO, Environmental and Energy Study Institute

C-O-N-T-E-N-T-S

C-O-N-T-E-N-T-S

AGENDA PAGE

C-O-N-T-E-N-T-S

P-R-O-C-E-E-D-I-N-G-S

(8:34 a.m.)

WELCOME AND PLEDGE OF ALLEGIANCE

MODERATOR ORTIZ: Would you please stand and join me in reciting the Pledge of Allegiance.

(Pledge of Allegiance.)

MODERATOR ORTIZ: Please be seated.

Welcome everyone to the public meeting hosted by Rural Development Under Secretary Thomas Dorr to discuss sections of the farm bill Title IX Energy.

My name is Febe Ortiz. I am with the Natural Resources Conservation Service, and I will your moderator for the day.

I want to remind everyone attending here to make sure to register at the tables out front. This is a public meeting, and it is being videoed and audiotaped and will be archived and available later for the public at the end of the day.

The video will be available via

USDA Farm Bill website. The public may listen in to the live audio by dialing 800-857-5233 with a passcode of 7136861#. If you have any comments you will have up to 15 days following this meeting to make them to Robin Robinson. Her email is Robin Robinson at wdc.usda.gov.

We'll now have a few introductions and some opening comments. Let me bring to the podium Rural Development Under Secretary Thomas Dorr. Please help me welcome Under Secretary Dorr.

(Applause.)

INTRODUCTION OF DEPUTY SECRETARY CHUCK CONNER BY UNDER SECRETARY DORR

MR. DORR: Thank you, all. Thank you all very much. Thank you all for coming.

Before I do start I would like to make just a couple of introductions and acknowledgments. First of all putting a forum like this together and getting all the announcements out and addressing all the details requires a lot of effort, and I would

like to particularly thank Ben Anderson, our administrator for business coop services and his staff headed up by Bill Hagey. They have done yeoman's work in pulling this together.

I'd also like to thank all my colleagues on the panel, particularly John Mizroch and Karl Simon who have graciously consented to spend some of their time here today listening to your comments and receiving your input on these issues as well as all of my colleagues from across the department.

I am certain there are a number of our senior USDA staff members here who will be in and out all day. As you figure out who they are, my deputy under secretary Doug Faulkner is down here in the front. If you have any questions, any suggestions for that matter, or things that you would like to plug in perhaps a little quietly or behind the scenes, please don't hesitate to contact anyone.

And finally thank you all, each

and everyone of you, for coming. This is a terrific pleasure for me to welcome all of you to USDA, and actually to introduce someone who I'm sure needs no introduction to some of you, someone who I've had the good fortune to work with for the last 3-1/2 years and get to know, Deputy Secretary of Agriculture Chuck Conner.

You will find no more passionate advocate for agriculture than Chuck. He spent most of his professional life in the service of agriculture, as a Senate staffer, at the White House, three years at the Corn Refiners Association, and now the last 3-1/2 years as a deputy undersecretary, and for awhile, the acting secretary.

In all of these efforts Chuck has excelled. Chuck is not simply an aggie; he is a forward looking 21st century aggie, and frankly someone who I believe recognizes that both agriculture and rural America have changed; that we have new markets and as a result new opportunities; and that these

actually include substantive involvement in renewable energy as well as bio-based products.

Throughout the process of writing the farm bill Chuck has been a tireless advocate for a robust Title IX. Now this of course was clearly an objective for the president going into the farm bill debate.

It's no secret that there were some aspects of this farm bill about which the administration was less than enthusiastic. That's over, and that's past, and I'm going to leave it at that.

But the energy title that we're here to discuss today largely reflects President Bush's vision and his commitment from the very outset of this process.

And I would like to take just a moment to reiterate that when this administration came to Washington, D.C. in 2001, one of the very first policy statements it made was regarding our dependence on

imported oil, and our need to diversify into renewable and alternative resources.

So as a result that means that Title IX also reflects the tireless work done by Chuck and others when it got down to doing the heavy lifting. Chuck in fact is one of the architects of the enhanced and expanded Title IX that we are discussing today. And the bottom line is, I see no discernible difference between a pit bull and Chuck Conner - for those of you who saw the speech.

I know that Chuck shares your excitement about the potential that lies ahead, and we are delighted that his schedule permits him to join us today for a brief time. Please join me in welcoming Chuck Conner.

(Applause.)

OPENING REMARKS - DEPUTY SECRETARY CHUCK CONNER

DEPUTY SECRETARY CONNER: Tom, I think I'm going to thank you for that introduction.

I do want to welcome all of you here for an early morning gathering. I know this is by Washington standards early morning. There is a Starbucks, ladies and gentlemen, in the basement, in case you don't know that, where I frequently visit.

We've got a great gathering here today, and Tom has put together, and his folks have put together, a great program.

It really is about giving us the chance now to take farm legislation and really put it on the ground. Congress as you guys know did give us a 700-page exhaustive what they called the Food Conservation and now Energy Act of 2008. And you know you've reached a milestone when you make it to the title of the farm bill.

And we've done that - I'm probably going to continue to refer to it as the farm bill, but energy has established its place in this legislation.

This legislation does contain a

wealth of new ideas, a wealth of new approaches to agriculture, conservation, nutrition issues, and of course now energy.

But of course as well while Congress has mapped out the big picture for us they've left plenty of details, plenty of administrative details for us to sort through in order to put these programs on the ground at what we would call an operating level.

And we all know it's the details of these government programs where things can oftentimes get knocked off the track and headed to the ditch. And it's oftentimes where the best policy intentions get run aground.

And that's why, ladies and gentlemen, we have asked each and every one of you to come here today simply put to help us fill in the blanks that Congress has left for us, and to figure out the best way to apply this policy prescription out to the real world, to the operating level if you will.

We want to make sure the rubber meets the road here, and that all of the new programs created under our new Title IX, the energy chapter of the new farm bill, are indeed implemented in the most cost effective and in the most useful way possible.

We are going to need your help to do that. With your expertise, and with the knowledge that is represented at gatherings like this on renewable energy, we believe you can help us spot those pitfalls, and perhaps even avoid stepping on those pitfalls.

The exciting thing, ladies and gentlemen, about this new energy title is that it does indeed break new ground. It maps out a bold vision of the nation's energy future, and it does provide a set of policy tools to really help us turn that vision if you will to a complete reality.

It does commit more than $1 billion of federal dollars to these programs, the programs established under the bill over

the next five years. It is a big-thinking piece of legislation. And for the first time USDA will be able to help biorefineries adopt new production technologies, technologies that could be available on a commercial scale.

Under Section 9003 of the bill we will be able to provide loan guarantees of up to $250 million to support the development and construction of commercial and demonstration scale of biorefineries that will put these very technologies into service.

With this authority we believe we can help the most promising technologies make the leap from research lab into the real world, and to make that leap much more quickly, and on a larger scale, than perhaps what otherwise might be possible at this stage in the process.

The biomass crop assistance program, what we call Section 9011, will create integrated models to help a successful biomass industry to run, and to run more

efficiently and effectively. It will pull the key pieces together by giving producers incentive to grow the native grasses and the fast-growing trees as feedstocks for a nearby conversion plant, and helping them recover the cost of harvesting, collecting and transporting those feedstocks for their biomass production process.

Once these models are refined and in place and tested, we believe they can be followed and used all over the country.

Title IX will also provide new support for producers of advanced biofuels, and we will help existing biorefineries to convert their own operations into operations that are running on renewable energies as well.

As you know Congress and the administration did have our fair share of disagreements on the final shape of the farm bill, and Tom has noted this rightfully. But we have an ambitious agenda and a common

ground on Title IX that outlines from this broad agreement that we have.

The importance in this outline is to advance renewable fuels; advance our nation's renewable fuels capacity, and to do so absolutely as quickly as possible.

So we believe at USDA this is an exciting time. We are all on the ground floor of a shift - a shift in our national energy policy. And you don't have to watch the news very much, you don't have to watch the political debate very much, to know that we are indeed in a changing time.

And in the future, I do believe ladies and gentlemen that we will look back, look back at the policies laid out in the farm bill in Title IX, and realize that we had a profound affect on the future of this country.

I look forward to that. I am excited by that. I hope you are as well.

We always have to note that there is not single answer to our energy challenges

that we face, and we should not over-promise. Solving them as the president has noted will require reviving domestic exploration and production of oil; expanding our refining capacity; as well as developing other renewable energy sources, particularly energy sources like biofuels.

But the serious debate on whether biofuels are an important and sustainable part of this solution, the serious debate, is really over from our standpoint. Biofuels have clearly earned their place in the nation's portfolio, and they I believe and you believe are here to stay.

Achieving our goals will take smart science, targeted to government support, innovative business minds, and the application of plenty of energy and hard work throughout rural America to make these goals achievable.

We are going to need all the tools of Title IX, all the tools that it gives us, to lay this foundation for a new industry, and

to nourish it, and to bring it about until we see the day when these biofuels, particularly biofuels from cellulosic ethanol, can make their way into the mainstream private sector market.

We look forward to those days. It's a long road ahead, but today we believe it's one of those first steps that we must take, and if we step in the right direction we will succeed.

So ladies and gentlemen, again, please give us your best thoughts, your best comments. We are here to listen; we are here to work together with you on this very very exciting endeavor going forward.

And again, thanks for participating once again in our joint efforts.

Thank you all.

(Applause.)

OPENING REMARKS - UNDER SECRETARY DORR

MR. DORR: Thank you, Chuck, thank you for the very helpful remarks to start this

hearing off with. And again to all of you welcome to USDA.

I would like to take just a moment, though, to personally thank Joe Glauber, Gary Mast, Floyd Gaibler, Karl Simon and John Mizroch, all who are taking substantive amounts of time out of their schedule today, to also indicate that all of us, myself included, have a number of other commitments. So we are going to be floating in and out of here today, and I do hope that it isn't too disruptive.

But it shows you in my view the commitment that we have both within the Department of Agriculture and across the government on an interagency basis to building out this new industry, taking it very seriously, and trying to ramp up these opportunities as quickly as possible.

Your commitment interestingly enough, and I want to acknowledge this at the outset, is also substantive, in that we have

a full roster of speakers today that we could legitimately get in. We have every time slot filled, and it is going to press us to get this all in in the appropriate time.

One other introduction I would like to make is that I am delighted that we have some members of the senior staff of the House ag committee and Senate ag committees with us today. I believe Anne Simmons and Adam Durand are here from the House ag committee. And Eldon Bowes who is on the Senate ag committee staff have joined us as well.

I think that these comments today will also be helpful and insightful to them as well.

You know after the deputy secretary's remarks, there's perhaps little to add. We are determined if I have anything to say about it to start on time at 9:00 o'clock. This is a day for you to talk and for us to listen, so I intend to be very brief.

We are here today though because renewable energy is an extraordinary opportunity for the nation and especially for rural America. And all of us collectively involved recognize that potential.

All of us I'm sure also understand the long historical evolution that has brought us here. For national security, for economic security, and for environmental reasons, for rural development reasons, the rapid commercialization of renewable energy is a high priority, and so ultimately is exploiting the potential of bio-based products and the carbohydrate economy.

These things are now clearly within our reach, and I would even be so bold as to suggest that we are far beyond the basic research stage in this effort.

Now that said talking and doing are two completely different things. There have been many false starts before, and many of you are warriors of the last 30 years in

many of those false starts.

Today I believe that we are in a much different situation. Technologies have literally matured. Global energy demand is surging; we know that. The comparative price regimes have shifted. And growing environmental concerns constrain our options pretty much across the board.

So for all of these reasons renewable energy is clearly of age.

The good news, though, is that the United States has made tremendous progress on renewables sine the beginning of this decade, in fact due to most of your tireless efforts we lead in most renewable energy categories around the world and across the spectrum.

We are very much aware, that renewables are in fact building out from a very low base. Essentially what we have done is reach the lift off stage, and the test of our success will ultimately be our ability to sustain and accelerate the buildout over

decades, and not just months or years, or to the next farm bill.

The potential is very clear. And our intent I hope is quite clear. But the devil, as is always the case, is in the details. In the notice for this meeting, for example, we listed 59 specific questions related to those issues in Title IX that we hope to implement.

Several of those had subparts, and I'm sure that some of you will raise additional questions and concerns that have clearly not yet occurred to us.

This meeting is being held in fact to solicit your advice and your counsel, and we look forward to your presentations.

Now many of you have been down this road before. I know that; we all have. But nevertheless let me say from a USDA standpoint it is refreshing that we are in fact at a time that is not beginning from scratch. Much work has already been done by

many of you involved in this effort.

In 2002, just six years ago, Congress gave us for the very first time an energy title in the farm bill, and we have come a very long way in that short period of time. In 2002 and 2003 we had a very challenging job of literally standing up a series of new programs essentially from scratch.

Now I know that Bill Hagey is here. I don't know if Pandor Hadjy or George Schultz or Joseph Ben Israel or David Grahn are with us today, but let me acknowledge the substantive path-breaking work that they have done over just the last six years.

Let me also acknowledge that we now have a team just in rural development alone of in excess I believe of two dozen people focused entirely on a plethora of renewable energy strategies.

So we are moving on to the next stage. We have assembled another

implementation team for the 2008 farm bill from across USDA, and we are of course collaborating closely with our partners in the Department of Energy as well as EPA.

The key people here though today are really you. Our mission is to support you, you in the private sector, so that you can succeed. And if renewable energy is to achieve its potential, in the final analysis it is going to be singularly because of the work and the successes that you experience in the private sector, and frankly because of some of the failures that you experience that also reflect on things that we need to know.

And I want to make that point, and I want to make it very clear. You know we reflect a lot of this in the biotech world in the context of the technology environment that occurred in Silicon Valley over the last 30 years. Remember one thing: we at agriculture don't tend to celebrate success very well. In fact if we lose a farm we hide our tails and

we walk away in shame.

Clearly Silicon Valley learned how to celebrate success, and they also learned how to celebrate failure, because they knew it was the next point to the next success story. And I think it's important that we remember that as we go down this road.

So we are eventually going to publish a proposed regulation in a number of these program title areas, all of which you will have an additional opportunity to respond to after we have received the written comments at the end of the 15-day period following this hearing today.

We are grateful for your participation. And so with no further ado, let me turn the balance of the day over to you. I encourage you to challenge us with everything you have in your quiver, and hopefully we will all go away today much more informed as to the challenges that we have to deal with to make these various titles

successful.

Thank you all very very much. We look forward to the balance of the day.

(Applause.)

PUBLIC COMMENT

ON SECTION 9003 BIOREFINERY ASSISTANCE:

MODERATOR ORTIZ: Thank you, and as noted we have panelists here, and we also will have some alternates throughout the day as it is a very long day. Ben Anderson, Douglas Faulkner as mentioned earlier.

The panelists are here to listen to your comments as Under Secretary Tom Dorr mentioned. As we begin there are agendas available here in the Jefferson Auditorium. If you didn't receive one they are out there at the table.

There is also a media room for the press located out in the hall to the left in Room 1605. Audio capability is available there in the press room.

You also may have noticed as you

came in this morning there is an exhibit out on the left. There are a lot of fact sheets for you to pick up there as well as some USDA experts to answer any questions you might have.

A few groundrules for the presenters today. Each of you will be called up to the podium and will have up to 10 minutes to present. I will announce who will follow each presenter, and you will be timed. Your times will be monitored by Tyler O'Bourne down there. If you see him, he's waving there. He will give you a sign when you are at five minutes, and then again when you are at one.

I ask that you be mindful of the time.

The agenda will be as follows. Section 9003, 9007 will be discussed prior to noon. And then we will have lunch from 12:00 to 1:00. Lunch is on your own; the cafeteria is down the hall to the right.

After lunch Sections 9009, 9013 are open for comment. And then we will be heading for closing remarks somewhere around 4:00 o'clock.

If you need to take a break please do so quietly. As you exit the auditorium the men's restroom is out to your left at wing five, and the ladies of course will be down here in wing four.

All right, we will begin. First speaker today is Ms. Geri Simon, and then following that will be Ron Barmore.

Would you please come up, Ms. Simon?

GERI SIMON, TYONEK NATIVE CO.

MS. SIMON: Thank you. Good morning. As someone said, if you need more coffee there is a Starbucks down the hall, in the basement.

I am Geri Simon. I represent the Tyonek Native Corporation in Anchorage, Alaska.

Before I go on I'd like to introduce our board president, Danida Slawson, is here in the audience with me.

Thank you.

We appreciate this opportunity to talk about some of the projects in and around Tyonek. And after this last week most everybody is becoming familiar with Alaska I think from Governor Palin.

I'm trying to figure out how to work this. There you go.

There is the state of Alaska. And the red star there is where Anchorage is.

(Pause.)

All right, there is Anchorage. Right next to it is Tyonek across the water. This little machine is giving trouble.

There is the Cook Inlet. Again, Anchorage is about half an hour plane ride from Anchorage - or Tyonek is. There are no roads to there. And the next year we may be getting a fast ferry.

Tyonek Native Corporation has about 200,000 acres of land in the West Cook Inlet. It is the former Dena'ina reservation. It is the only Athabascan whaling community in Alaska. TNC was formed under the Alaskan Native Claims Settlement Act, of 1971, and through that act we own as I mentioned approximately 200,000 acres of surface land. The subsurface is owned by a regional corporation, Cook Inlet Region, Inc.

Tyonek itself is a gated community in the sense that you will find gated communities in Chicago and California and other places. The village itself was built up with private funds, the airstrip there is private, and the community members continue to want to keep that community private.

It is an offroad system as I mentioned. There are no roads there. The plane round trip air ticket to go into town to go shopping or make your doctor's appointments, it's about $180 roundtrip.

In the area itself there have been gas fields that have been developed over the last 40 - 50 years supplying the urban area of Anchorage. And as this next slide will show you, there are a number of developments in and around Tyonek.

The village itself is right on the water there, the native village of Tyonek. The red outlines the land, the 45,000 acres that is the former reservation. There is an industrial site and a port site, which if we had another 800 feet, would be cape class available.

Up in the far right hand, you will see the town of Nakacheba. This is land that Tyonek Native Corporation is obligated to give to the community for future expansion, and the village of Nakacheba is placed in that specific spot because it is quite far from the core of the community where it will still remain a gated community.

As you will see outlined in the

top left the Chuitna coal mine. That's about 12 miles. Also from this map you will be able to see that the native village of Tyonek is about 12 miles from the Beluga power plant. And that's the plant that provides about 375 megawatts to the rail belt.

The green area that you see there, that's the Chuitna River, and that is one of the areas that the Tyonek Native Corporation is seeking a conservation easement to protect.

The projects in and around Tyonek Native Corporation include the Chuitna coal mine, which will be about a $600 million investment. There is a coal to liquid power generation plant being discussed. The Chakachamna hydropower, and the Mt. Sputt geothermal power. All of those are within about 45 miles of Tyonek and its ports.

The Chuitna coal mine is planned to be the second largest coal strip mine in the U.S. Infrastructure permit application has been submitted. Tyonek Native Corporation has

been negotiated with the Pac Rim Coal, and along with the native village of Tyonek, to seek contracting opportunities during this project.

There are potential easements planned across TNC land. They are planning for an 180-man camp at the mine, a 10,000 foot conveyor across TNC land to the ship-loading dock. And this conveyor is much like the ski resort ski lifts that you see. The people that are producing the technology are the ones who have completed the Aleyska resort ski lift.

The planned mine life is 25 years, and as I mentioned, $600 million capital investment. The coal to liquids is another project. Again the coal mines are about 12 miles from Tyonek's dock. The TNC board of directors has set aside a 1,000 acre port site, industrial site. There already is the existing port, and as I mentioned, with 800 feet we will be able to take cape class sized

vessels.

The Fischer-Trope fuel system is being planned for 80,000 barrels a day, with 400 megawatts of waste heat power generation which can either be pumped straight into the grid or used for other development projects within Alaska.

The unique situation for Tyonek is that because of the 40 or 50 years of gas development we can sequester the CO2 right there. I know that there has been quite a bit of push over the years to have that CO2 not be a major part of any development project. But again because of the gas development in the area, we are able to use that as - to pump up more gas from the reservoirs.

This is a $12 billion project, 5,000 construction workers planned for five years, and 500 operations staff. And this will need a base camp or a community for the life of the project.

Again as you will see right there,

that is where it says the FT plant at the Tidewater, that is the Fischer-Trope system can be built as with other Fischer-Trope systems in another country; pulled right up to the Tyonek industry site; and propped right up to begin working. And again 12 miles from the Beluga power plant.

The next project is the Chakachamna hydropower. It's planned for 300 megawatts of power to the rail belt with a 5-cent per kilowatt hour estimated. The three to five years of studying and permitting; five years of construction completed in 2018; it's a $2 billion project. That's 40 miles from Tyonek.

The folks that we have been talking to have promised to use Tyonek and the native village of Tyonek whenever possible.

Approximately 2,000 construction workers and 20-plus operational staff.

The next project is the Mt. Spurr geothermal project. The bid opening is

September 10th, which is next week. There are two experienced bidders expected. The geothermal exploration will begin in 2009, with 150 megawatts for the rail belt grid. Four hundred megawatts is being planned with one of the bidders for aluminum production. It will be five to eight years for project completion; a $3 billion project with an estimated 2 cents per kilowatt hour; again, 3,000 construction workers, and 300 operational staff.

All right, thank you. Before I leave though, I would like to say that with these major projects coming on, we are also planning on protecting the natural resources in and around Tyonek with a conservation easement and with other projects, again making use of the full farm bill.

Thank you for your time.

RON BARMORE, RANGE FUELS, INC.

MR. BARMORE: Good morning.

I'm Ron Barmore. I'm the director

of project development with Range Fuels, and I appreciate the opportunity to address the panel this morning.

And Under Secretary Dorr, this is a pleasure; it's a good opportunity for us.

On November 6th, 2007, Range Fuels broke ground on our first commercial scale cellulosic ethanol plant near Soperton, Georgia. This plant will be the first in the United States to produce commercial quantities of ethanol from biomass, which include all plant and plant-derived material, such as wood, grasses and corn stover.

The state of Georgia has an abundance of sustainable and renewable forest derived biomass, and it has a long standing and broad reaching program of conservation and stewardship of its forest lands. Known as the million-pine city, the town of Soperton's proximity to feedstock supplies for the plant as well as its proximity to the region's ethanol markets make this the perfect location

for our first facility.

Utilizing this woody biomass the Soperton plant is expected to produce ethanol and other alcohols at a rate comparable to the latest and most advanced corn ethanol facilities running today.

The challenge of building the first commercial scale ethanol facility is made more daunting because of the economic conditions in the United States and around the world today. The rapid rise in commodity prices, and the significant worldwide boom in energy and other capital-intensive projects have created challenges to our efforts to build large capital projects such as the one in Soperton.

Range Fuels is very fortunate: we completed a very successful funding effort in the first quarter of 2008, reported to be one of very few that have closed in the first half of this year. We continue to advance our project, and remain encouraged by the results

we've obtained in our integrated test unit supporting all of our plans.

Despite these encouraging signs, however, the challenge remains a very large one. Our country's goals for cellulosic ethanol production as enumerated in the renewable fuel standard incorporated into the recently passed Independence and Security Act are very ambitious. Emphasizing the importance of renewable fuels to our nation's security.

Meeting these goals will require the utmost in coordination between industry and agencies and policymakers concerned with the security and economic health of our nation.

Adding to this challenge capital markets have been rocked by fallout from subprime mortgages, and related pressures on lenders make obtaining the capital resources necessary to commercialize projects such as Soperton more and more difficult.

All of this makes the swift enactment of Section 9003, the biorefinery assistance program, essential.

We have begun construction of the Soperton plant, and our construction is underway as we speak. Range Fuels encourages the USDA to enact the rules as swiftly and as broadly as the law allows to provide the essential financial assistance necessary to get these early projects to full commerciality. Time is of the essence.

The importance of loan guarantees cannot be underestimated in this market. Although Range Fuels was very successful in our Series B funding and has raised significant amounts of equity in our company, debt also will play a vital component in our company's ability to finance its operations. The tight debt markets make it virtually impossible to secure debt on a plant that is the first of its kind. The 9003 program will play a significant and meaningful role in

combining both debt and equity into a compelling fund-raising strategy.

Also we encourage the USDA to promulgate rules that judge each loan guarantee application on its merits, and maximize the amount of loan guarantee that an individual project can obtain.

For early stage projects the larger the production capacity of a project, the more likely it is that that project will benefit from economies of scale which increase its chances of commercial success. Any rules that penalize a project because of its sizes or the capital needs that it requires are going to be counterproductive to the commercial deployment of second generation biofuels.

Finally we ask that the department keep in mind that those of us who are the early entrants are participants in the creation of an entirely new industry. This is an industry whose future promise can only be

imagined. But it is also an industry that cannot be judged by the metrics currently applied to mature energy businesses.

To attempt the building of such an industry in competition with these mature businesses without the support of our policymakers will slow implementation and stymie our attempts to assist in reaching our nation's energy goals.

That's why we need the federal government's assistance now. Our programs should recognize that this is a brand new industry. These are first of a kind commercial facilities, and we are driving it forward into the teeth of a very challenging credit market.

Any analysis done on applications for loan guarantees needs to reflect not only where the technology is today but also where it can go from here and its promise in the future.

Thank you for your time.

MODERATOR ORTIZ: Thank you. Next up will be Mr. Manea. And following that will be Bret Healy.

ION MANEA, FLOWER POWER USA AND HERITAGE FARM COOPERATIVE

MR. MANEA: Good morning. My name is Ion Manea. I'm with Flower Power USA, a Heritage Fund Cooperative. And I'd like to thank you for the opportunity to make this presentation, and have some recommendations for two terms for the bill.

We grow sunflowers in Washington and Oregon State, and including the Yakima Nation reservation. And they crush these seeds, and they make a specialty type of oil that can be used directly as a diesel fuel into the farm equipment.

So I'm going first to make my recommendation, and then time permitting, I will go to do the narrative for this recommendation.

So the first recommendation is in

regards to the term biofuel. We propose the following interpretations: the term biofuel includes all fuels-solid, liquid, gases-derived from renewable biomass including vegetable oils from plants and algae. The term, advanced biofuels, includes natural vegetable oil that can be used directly or indirectly as fuel, fuel additive, or feedstock for the production of energy, regardless of energy's enriching tasks. These are jet engine or fuel cells.

And the second recommendation in regards to the definition of biorefinery. We propose a definition of biorefinery to be interpreted as: the term, biorefinery, means a facility including equipment and processes that, A, converts any organic matter that is available on a renewable or recurring basis, including agricultural communities; and to advanced fuels including vegetable oil that can be used directly or indirectly as fuel, fuel additives, or fuel feedstock for the

production of energy; and B, may produce electricity; and C, produced by oil based products including food or feed.

Now I will go ahead and time permitting to read the narrative to these two proposals.

As for this bill, original technology includes advanced biofuel and biorefinery terms. Advanced biofuel specifically includes diesel equivalence for a fuel from renewable biomass including vegetable oil.

Biorefinery means a facility that converts renewable biomass into biofuels, and bio-based products, and may produce electricity. Biofuel means a fuel derived from renewable biomass.

Renewable biomass includes any organic matter that is available on a renewable basis including renewable prime material including feed grains and other agricultural commodities, other plants and

trees and algae.

It is well established that plant and algae materials are renewable biomass. It is well established that vegetable oil is a product of plant and algae and could be derived from their deposits, not from starch deposits.

It's a well established fact that vegetable oil is a fuel that can be combusted with oxygen to generate energy close to that generated by an equal volume of fossil diesel fuel.

It follows according to the bill definition that vegetable oil as a fuel derived from renewable biomass is a biofuel, and vegetable oil as a fuel derived from renewable biomass but not from corn kernel starch is an advanced fuel.

Vegetable oil used as a feedstock is the sole reason some chemical derived diesel equivalent fuel claimed biofuel and advanced biofuel status.

Though emerging technologies for direct usage of natural vegetable oil as diesel or heating fuel equivalence are emerging, and at least potential for jet fuel formulation and fuel cell hydrogen feedstock has been documented in America. Fuel grade quality assured vegetable industries --

We propose the following interpretation. The term, biofuel, includes all fuel, solid, liquid and gasses, derived from renewable biomass including vegetable oil from plants and algae. The term, advanced biofuels, includes natural vegetable oil that can be used directly or indirectly as fuel; fuel additives; or feedstock for the production of energy regardless of the energy generation pathway. These are jet engine, fuel cells, et cetera.

And now in regards to biorefinery definition - biorefinery, excuse me. Biorefinery is a facility that converts biomass into biofuels and bio-based products

that may produce electricity. Biobased-product means a product determined by the secretary to be a commercially or industrial product other than food or feed, that is composed in whole or in significant part of biological products, or an intermediate ingredient or feedstock.

It is not clear if in addition to conversion of an equal biomass to biofuels at biorefineries mandated to produce bio-based products as well. In the production of bio-based products - if the production of bio-based products is not mandatory, then no further clarification is needed, and any facility that produces advanced biofuels includes vegetable oils meets the definition of biorefinery, regardless of production of bio-based products.

If the production of bio-based products is mandatory, then more clarification is needed. One interpretation would be that if food and feed are commercial industrial

biological products, then they can be used as an intermediate ingredient or feedstock, the secretary's determination is not needed. This interpretation is in accordance with Section 9008 that specifically includes animal feed as a commercial industrial product derived in connection with the conversion of biomass to fuel.

It's also in accordance with another specification in Section 9008 that includes animal feed as a part of the range of diversified bioproducts that potentially can include the feasibility of fuel production and fuel biorefinery.

Another interpretation would be that food and feed are not bio-based products. In this case a facility that converted biological materials to advanced biofuels and food or feed byproducts will not meet the definition of biorefinery, regardless of their high commercial or industrial value as foods or feeds, intermediate agreement or feedstock.

An example would be a facility that produced advance biofuel, and other commercial industrial byproducts, that either have a high biological content, or can be used as intermediate ingredients or feedstock.

If the byproducts are utilized in the food or feed supply chain, a value will be added to them to substantially reduce the cost of that advanced biofuel. However, the facility will not meet the requirements for the biorefinery definition, despite fulfilling the purpose and goals of Section 9003, and having the potential to increase the feasibility of fuel production in that facility. If the same products would be utilized in a nonfood or nonfuel application, thus leaving the food and feed supply chain, it is probably that their contribution to the production, cost reduction, of advanced biofuel be minimum. However, the facility will meet the requirements of biorefining definition.

And we have another issue here with definition of commercial or industrial products. If the byproduct isn't a commercial or industrial byproduct, and it is not composed in significant part of biological products, or is not an intermediate ingredient of foodstock, then it is not a biobased product. And then the facility producing it as biofuel does not meet the definition of biorefinery requirements.

IN this case even a facility with a high degree of conversion of biological material to advanced biofuels, while having a small byproduct of known commercial or industrial value will not be meeting the biorefinery requirements. An example would be a wood gassification facility that will convert most of the wood to clean combustion gas, and will have a small nonbiological ash residue of no commercial or industrial value.

We propose a definition of biorefinery to be interpreted as: the term,

biorefinery, means a facility including equipment and processes that, A, converts any organic matter that is available on a renewable recurring basis including agricultural commodities, and advanced biofuels, including vegetable oil that can be used directly as fuel, fuel additives, or feedstock for the production of energy; B, may product electricity; and C, may product bio-based products including food and/or feedstock.

Thank you very much for your attention or consideration. If you have any time for questions, I would be happy to address them.

MODERATOR ORTIZ: Thank you, Mr. Manea.

Next up is Bret Healy. He will be followed by Al Christopherson.

BRET HEALY, KANSAS BIOSCIENCE AUTHORITY

MR. HEALY: Good morning, and thanks for the opportunity to be here.

I want to applaud the leadership of Under Secretary Dorr in bringing this forum together and pushing Title IX which as he rightly noted can be one of the big levers for the renewable energy industry.

I'll help get us on time, because I'm going to be very, very brief. I've got two main recommendations I want to make from the perspective of the Kansas Bioscience Authority, which is a public entity created by the legislature and governor of Kansas to invest in the biosciences, bioenergy being one of the five main sectors of investment.

First and foremost, as the rules are developed, and the loan guarantee model that maximum amortization to the fullest extent allowed I guess by statute, by precedent, is in place.

Oftentimes renewable energy projects are faced with a more challenging capital structure and amortization schedule compared to conventional oil and gas, and

conventional coal-fired and other electrical generation capacity projects that have 30 to 50-year time periods on the amortization.

It's critically important to these projects.

Secondly, and probably a more specific to the interests of the Kansas Bioscience Authority, is that as this loan guarantee package is put together, given that there is a statutory limitation that the secretary can only do 90 percent loan guarantees, that rules if they are allowed to be developed that other entities can fill up the bucket for a 100 percent loan guarantee for that portion, particularly as another speaker mentioned the challenging debt markets that we are in, the fact that this is cutting edge technology. There are going to be hits and misses as these technology projects go forward, and that a very critical component to getting the investors, getting the banks and other

financial institutions will to underwrite those loan guarantees and put the funds in place, that they are not be a confusing 10 percent tail that's out there. So that entities like the Kansas Bioscience Authority or others can step in, fill that loan guarantee bucket up, making that a product that trades a little easier in the markets, and something that is easier to get those loan guarantees.

With that, those were the two specific recommendations we had to make today, you'll have written comments for some of the rest. And with that, get us back on track.

Thanks.

MODERATOR ORTIZ: Thank you.

Next up is Al Christopherson, and following that will be Rick Grant.

AL CHRISTOPHERSON, AGRICULTURAL UTILIZATION RESEARCH INSTITUTE

MR. CHRISTOPHERSON: My name is Al

Christopherson. I'm chairman of the board of directors of Minnesota Agricultural Utilization Research Institute, which is a nonprofit organization created by the Minnesota legislature to improve the economy of rural Minnesota through the development of new uses of our state's agricultural commodities.

A key area of value added advancement continues to be in the development and implementation of renewable energy enterprises, fueled by the agricultural products and other renewable sources.

AURI has a long history of advancing renewable energy from agricultural products. We've worked extensively on biofuels research and development of alternative energy resources, such as biodiesel, biomass, and biogas. Since 2004 we have operated the Center for Producer-Owned Energy which was created from USDA

funding, awarded through the agricultural innovation center demonstration program.

Since 2006 we have coordinated the Minnesota Renewable Energy Roundtable, which is a statewide effort involving more than 100 organizations to identify barriers and create action plans for advancement of renewable energy opportunity in the state.

It is our belief that this background and experience can help contribute to the efficiency and effectiveness of several of the energy programs outlined in this bill. It has been our experience that providing local grassroots assistance that can be applied locally offers businesses and community the greatest chance for commercial success.

Under Section 9003, biorefinery assistance, we certainly understand the importance of that program. AORI programs revolve around determining technical and economic feasibility and commercial

viability. It is important that unbiased studies are conducted, and to the extent possible results shared with other interested parties. This prevents unnecessary duplication, or as we call it, reinventing the wheel, of efforts and paves the way for future groups in the next generation of development.

It is vital that economies of scale are considered as well as plans for applying what has learned on the demonstration scale to fit commercial sized operations.

It has been our experience that a key factor in the viability of any renewable energy enterprise, particularly one involving biomass, resolves around the feedstock. Most biomass has different cost, handling, storage, and transportation considerations, other than traditional energy sources. These variables factor heavily into a project's operating costs and

overall viability.

We have found it vital that organizations venturing into this area have a network of resources to assure access to the best possible solutions and the implementation plans.

In terms of 9004, repowering assistance: for existing biorefineries, existing or energy cost greatly impact the profitability. Many are looking to offset these costs by adapting new technologies utilizing biomass or other available resources to their operations.

We have successfully assisted several Minnesota processors in their efforts to repower using biomass. These plants are using various feedstocks such as agricultural residue, wood fiber, ethanol processing co products, and other low value sources to power their operations.

Through technologies such as gassification, fluid bed reactors, and

anaerobic digesters, many of these processors have significantly reduced their need for fossil fuels.

Installing many of the current technologies requires significant capital investment, and we've talked about that here. Funding through the repowering assistance program will certainly help offset that barrier. It is vital that biorefineries that are considering repowering get unbiased information and consider all possible technology given the available feedstocks.

Seeking out and tapping into expertise is certainly vital to success, and helps opportunities to develop more rapidly.

Colocating facilities should also be considered. Currently in Minnesota, warm water from a sugar beet processing plant is being captured for an aquaculture facility, and excess heat from a refinery is being captured for greenhouses that produce food

for local markets.

This colocation can maximize the efficiency and spur development as well as wise energy use.

The biorefinery program is outlined in 9005, certainly the Mustang wasn't Henry Ford's first car. It was developed after several generations of vehicles. Similarly, efforts are underway to develop the next generation of biofuels using alternative feedstocks.

The key to success in this program will be to - the ability to foster implementation. Now here our experience has been that many technologies using biomass and forestry resources for fuel are technically feasible but aren't currently economically competitive.

It will take funding as well as a network of support to develop sustainable options.

These options will need to be

proven both technically and economically prior to implementation. And again, unbiased evaluations need to be developed, and that information shared with interested parties in an effort to spur further large scale development.

Now we have some comments regarding the rural energy self-sufficiency initiative, and into the biomass assistance program. I'm going to exclude those in the effort to remain within my time.

One of the things we have found, however, that audits of each community will reveal unique resources and circumstances with baseline information that could be universally beneficial. And all of this begs the effort to be communicative amongst the various agencies which has been a problem to say the least, and to share that information. Again, in this whole arena, we need not keep reinventing the wheel. We need to swallow our own pride and recognize

that other people may have done some of the things that we are trying to do.

In conclusion one of the most important lessons that the AORI has learned in its 20 year history is that no project should stand in isolation, but rather a broad collaborative work of experts. And that work of experts should be credited to assure success from feasibility to implementation. Whether a project is found to be viable or not, the lessons learned from each should add to a broader body of knowledge that is easily accessible and fosters wider success in the next generation of programs.

I want to thank you for the opportunity to provide these comments today. It is encouraging to see the serious attention being given to the development of long term energy solutions from renewable resources that not only work towards energy independence but also economic prosperity

for our communities, which is a keystone of the AORI.

And while we are - one final comment - while we are a state organization per se, and designed to benefit Minnesota producers, it is folly to believe that the necessary infrastructure that is required to utilize all these various forms of alternative sources of energy, it is folly to believe that all of this has to be within our state, and to develop that infrastructure we certainly have to have a nationwide effort, and so for that reason we are very happy with the inclusion of this information in this part of the farm bill.

Thank you very much.

MODERATOR ORTIZ: Thank you, Mr. Christopherson.

Next up is Mr. Rick Grant, to be followed by Kyle Simpson.

RICK GRANT, BOISE, INC.

MR. GRANT: My name is Rick Grant,

and I thank you for the opportunity to speak to you today on behalf of Boise, Inc. 4,600 employees, headquartered in Idaho.

Boise, Inc., is a paper and packaging manufacturing company that generates revenues in excess of $2 billion annually. My intention today is to draw attention to the unintended effects of government subsidization of biomass-based renewable energy initiatives may have on the national supply and demand balance of our national raw wood materials.

I request as you develop and implement regulations that you are fully aware of the consequences of companies in the forest-based industries. We are seeing new pressures on the raw wood materials supply from government subsidized bioenergy companies. Given this new competition, established industries are not only contending with higher input costs for energy, chemicals and freight, but also

stand to be unfairly disadvantaged by competing with subsidized entities for vital biomass feedstock.

Wood fiber is the key component in the production of paper and packaging materials. At Boise, we are committed to sustainability. Our integral values are working safely, using our natural resources wisely, engaging in our communities where we operate, and taking positions to improve the environment for future generations.

We have obtained chain of custody certification, the sustainable forest initiative, FSI, and the program for the endorsement of forest certification.

Our paper and manufacturing facilities have an environmental management system that is certified to meet ISO 14001. Boise has made it a priority to protect air quality. From 2000 to 2004 we reduced greenhouse gas emissions by 5 percent companywide. In 2007 we set a new goal for

further reductions of at least 10 percent by 2014.

As part of our commitment as a member of EPA's climate leadership partnership, which Boise joined in 2005, Boise is also a member of the Chicago Climate Exchange and Energy Star.

At Boise, Inc., approximately 65 percent of the energy used in our manufacturing facilities come from renewable resources, with the bulk being biomass. Given our commitment to sustainability, and the fact that we operate a de facto biorefinery already, Boise supports the movement to biomass based energy. We understand the vital role it plays in reducing our country's dependence on fossil fuels and greenhouse gas emissions.

But the government and legislature emphasis on biomass energy has significant implications for our company and our peers in the forest products industry.

For example in the state of Alabama where we operate our Jackson paper mill, we are seeing a rapidly expanding number of new and planned bioenergy facilities that will compete with us for wood biomass in that state. In Minnesota six facilities are under consideration with one to 260 miles of our International Falls mill.

All that would consume mill residuals, open market biomass, and/or round wood and woody biomass. In the Pacific Northwest where we operate two paper mills the situation is similar.

The reason for their increased activity we believe are partly global in nature, and partly the result of pressure in the U.S. to identify alternative sources of fuel given high oil and gas costs. Globally various environmental initiatives including the cap in trade, are emerging from the European Union. This has provided an impetus for member countries to look for

alternative fuels to meet their environmental objectives. The U.S. is one of their targets.

Here in the U.S. as you know there are several specific driving contributes to this trend: development of regulations for energy; the title of the farm bill by your office is a critical component to this situation.

I would like to now address specific elements of Title IX on energy in the 2008 farm bill, biorefinery assistance.

Specifically the energy title for the farm bill provides one billion to promote biomass energy, including forest based biomass energy, in several programs. Section 9003 calls for grants and loan grant guarantees to new and retrofitted commercial scale biorefineries.

The secretary must take into consideration whether the project will be a positive impact on resource conservation,

public health and the environment.

Moreover in Section 9003, the Secretary must evaluate several critical criteria including whether an applicant can establish that if adopted the biofuel production technology process in the application will have - not have any significant negative impacts on existing manufacturing plants or other facilities that use similar feedstocks, page 424.

We believe this determination is essential to avoid potential economic hardship on mills' operation already using this fiber.

In addition the legislation provides $320 million in mandatory funding for loan guarantees for commercial biorefineries; $250 million of the maximum amount is guaranteed for physical year 2009 and `10. The joint manager state that exists in facilities including wood products facilities should be eligible for this

program, page 217.

It's essential that the funds amending the Biomass Research and Development Act of 2000 be provided.

Lastly, Section 9005 of the 2008 farm bill includes $300 million for a period of four years to fund biomass growers. In this regard we urge the Agency to factor in the following managers' statement: With respect to forest biomass, the feedstock for the production of advanced biofuel is often the same feedstock used by forest products facilities, including pulp and paper mills. The managers encourage the secretary to consider competing market outlets when they establish a payment rate for such feedstocks, page 226 of the joint statement of managers.

Biomass crop assistance: we urge Section 9011 that current wood products operations be eligible for remuneration under Section D. We believe this may be the

original intent of the legislation, and we believe that the Agency taking this position, it will be a greater incentive for my company and others to expand their renewable energy supplies.

Boise's position: we appreciate the new economic development opportunities in our local area, and under the need to diversify our national energy portfolio, but we must ensure that existing wood consuming mills be given a fair opportunity for survival.

It is critical that an economic balance be focused on the agencies developing regulations. Otherwise we may damage economic equilibrium and created unintended consequences for operations and our employees.

History has shown that subsidized competitors often behave differently in a marketplace than unsubsidized competitors. A new plan bioenergy producers bolstered by

subsidies and incentives disproportionately consume and constantly run up the price of chips, round wood, local mills will be placed in a crisis situation. Ultimately jobs may move offshore.

Existing businesses have contributed to the nation's economy engine for decades, and we want this tradition to continue. This will ensure that our packaging, paper, manufacturing businesses are given a fair opportunity to prosper and thrive in the years ahead.

We appreciate the opportunity to share our viewpoint with you today. We offer any assistance that will be useful to ensure prosperity for our employees, our communities, and shareholders, while also recognizing the importance for the U.S. and the rest of the world in creating more sustainable sources of energy.

Thank you.

MR. DORR: One quick question. We

appreciate your remarks. There was nothing in them that reflected on the gains and productivity based on a number of new technologies that are occurring and creating the development of enhanced production efficiencies.

Do you have information that you could provide us that would factor in on some of these issues, too, relating your existing concerns?

MR. GRANT: Sure. We'll send that to you.

MR. DORR: Thank you.

MODERATOR ORTIZ: All right. Thank you, Mr. Grant.

Next is Mr. Kyle Simpson, and he will be followed by Mr. Chris Roach.

KYLE SIMPSON, RENTECH LLC.

MR. SIMPSON: Thank you for the opportunity to provide comments on the implementation of Title IX. My name is Kyle Simpson. I'm with the firm Brownstein, Hyatt,

Farber, Shreck, and I'm appearing here at this public meeting on behalf of Rentech, which is one of the world's leading synthetic fuels technology and development companies.

Over the last 25 years the company has developed and patented the Rentech process, an advanced version of the well established Fischer-Trope process. The Rentech process can convert a wide array of carbon-bearing material, including green resource such as biomass, into ultra-clean fuels and chemicals.

Our objective is to create value for our stakeholders by helping the world reduce its dependency on oil and to lower emissions including harmful greenhouse gases.

With these goals in mind, we strongly supported the inclusion of language in the conference report that accompanied the act that specifically encourages the secretary of agriculture and the secretary of energy to put development of renewable aviation fuels on

equal footing with other fuels by giving consideration to projects under the initiatives in Title IX that would perform innovative and beneficial research and commercial development of renewable aviation fuels.

This language in the conference report clearly shows that the Congress sought to expand the United States Department of Agriculture's efforts on renewable fuels, development to include renewable aviation fuels.

Rentech is a company that is developing a U.S.-based synthetic jet fuel production capability, and is interested in support from the federal government to meet the capital requirements that are necessary to build these very expensive facilities.

An initial customer for the renewable jet fuel will be the United States Air Force which has a goal of providing about half of its fuel in a synthetic combination

with petroleum-based fuel by 2016.

The bioenergy program for advanced biofuels authorizes initiatives that could provide funding that would help us to accelerate our ability to demonstrate the company's capacity to commercialize a facility to make renewable aviation fuel.

For example as a part of our development plan, Rentech would like to acquire a gassifier to convert renewable feedstocks to synthetic gas. Rentech has a proprietary process that can convert that syngas to jet fuel.

The current challenge is the commercialization of biomass gassification systems, which exist but are not in commercial operation in the U.S. Rentech would like to acquire and install an existing gassifier at its East Dubuque, Illinois fertilizer plant. The gassifier would provide syngas from biomass to the fertilizer plant for fertilizer production which would be a one-of-a-kind

facility. And we would also transport some of that syngas to our product demonstration unit in Colorado, where it would be used to produce jet fuel.

Just a few weeks ago we began to produce synthetic aviation fuel from natural gas at that production demonstration unit.

In addition to Section 9003, and perhaps 9005 in the act, other sections that you are taking comment on today may well be suited to advance the production of renewable aviation fuel and feedstocks for that purpose.

As intended by Congress, we encourage you to give equal consideration to projects implemented under any of these initiatives that would perform innovative and beneficial research in commercial development of renewable aviation fuels.

Thank you.

MODERATOR ORTIZ: Thank you, Mr. Simpson.

Up next is Mr. Grant - excuse me,

Mr. Chris Roach; is going to be followed by Ryan Stroschein.

CHRIS ROACH, ABENGOA BIOENERGY

MR. ROACH: Thank you. We'll wait a second for the presentation to be put up on the screen.

I'd like to thank Under Secretary Dorr and the committee for the opportunity to speak today.

My name is Chris Roach. I'm the project development manager with Abengoa Bioenergy. Today I'd like to talk about our company and our efforts to develop the first commercial scale facility employing our cellulosic ethanol technology.

Considering the time I'm going to move through the slides pretty quickly to get to our comments about the sections in Title IX.

Abengoa is a technology company that is dedicated to the development of sustainable solutions and sustainable

technologies, especially in the area of energy. Two of our business units up on this slide are our bioenergy unit and our solar unit.

Abengoa Bioenergy today, we are one of the largest producers of ethanol in North America. We are the largest producer of ethanol in Europe. We are present in all three major markets, Brazil, Europe and North America. We also are a leader in the development of new ethanol technologies, and we've got almost $500 million committed today to the development of new ethanol technologies, including biomass conversion to ethanol.

This is our facilities globally. By 2010 we'll have nearly 700 million gallons a year of ethanol production.

One of the key components of our strategic growth today is the development and commercialization of a price-competitive biomass to ethanol technology.

I skipped over a slide I'll just mention. We are also very involved with the Department of Energy in the development of these technologies. In particular we've received a $76 million grant for this commercial biorefinery that we are working on in southwest Kansas, which I'll talk a little bit about, which is Abengoa Bioenergy Hybrid of Kansas. That's the name of the project company.

First commercial facility of Abengoa Bioenergy, cellulosic energy technology. It's a $500 million project, of which we received, again, the $76 million grant from the Department of Energy. And Abengoa, our parent company, is going to supply all the required equity for this project.

Our project start of construction is anticipated in the middle of 2009, with operation by 2011. We currently have project engineering and development which has been

ongoing since 2007 with over $20 million spent to date. Our location is in Hugoton, Kansas, which is the southwest corner of Kansas, and that was based on the local grain and feed market. A significant supply of biomass - we are targeting corn stover, wheat straw and -- and then eventually dedicated energy crops, mainly switchgrass for that area. And the very strong state and local support that we received when we were doing our site selection.

The project: it's a hybrid facility. We are combining our cellulosic biomass to ethanol technology. In addition we are also implementing a biomass gassification technology. And then also a more tradition grain-to-ethanol facility, which is going to be primarily utilizing grain sorghum as available in the area.

We're looking at 150,000 dry tons per year of biomass converted to 12 million gallons per year of cellulosic ethanol;

250,000 dry tons of biomass to synthesis gas or biogas to replace any natural gas that we would normally need for this facility. And then 30 million bushels of a combination of primarily grain sorghum and then corn as necessary for 90 million gallons of ethanol.

Challenges today to the cellulosic ethanol industry: these are new technologies that have not yet hit their commercial scale, and are not yet competitive with more conventional ethanol technologies. And there is certainly a higher risk associated with these new technologies. The development of a sustainable supply of biomass is also a challenge today. We are looking to college biomass on a scale that really hasn't been done before.

So one of the key components for the future success of our industry is the development of that sustainable supply of biomass. So in essence, really, what we are looking at are challenges to be economic, to

be financial competitive, for these projects to stand alone and be financially viable. And then also the technology risk associated with them.

For our project and our company, it's not an issue of raising the necessary equity to get this project off the ground; it's a matter of getting the necessary financing which is really our biggest challenge today.

Which leads to our comments about Title IX, the main being the potential assistance in the biorefinery assistance program; the loan guarantee program really could go a long way towards our project and our company being able to secure the kind of financing needed to get this project into construction.

A guarantee could ensure a higher subscription rate during our syndication process which is where we solicit lenders to join in on the project.

As far as how to maximize the program's effectiveness, for us, because we are starting the project next year, it needs to be available to us in as early 2009 as possible, so that when we go to the financial market we've got some kind of commitment available to us.

Comments earlier about the level of guarantee are also important for us, either to get a 100 percent loan guarantee, which is not what is currently written into the bill, or to allow stripping of the non-guaranteed debt from the guaranteed debt, because having a non-guaranteed debt split off will allow us to attract more investors for the guaranteed debt piece. Having a quasi-combined debt piece is going to limit the types of financial institutions that would be willing to invest in the project.

And then also we think it's important to prioritize awards not only on probability of success technically but

financially.

I also would like to make some comments about the biomass crop assistance program, which we also think is potentially a big asset in the development of biomass supply of reliable and sustainable biomass supply, which is important for us for financing as well. I'd like to read some comments about the section.

Part (a)(7), the definition of producer with regards to payments: we would like consideration to include a producer that has partial investment or ownership by the project sponsor or project companies like ours. In many cases we are finding that to get producers to move into biomass crop production may require some outside investment, and we may be the only outlet to provide that investment.

In part (c)(5)(b) which is about the land preparation costs, these should include land preparation - leveling of land to

make it suitable for harvesting; week control during the first establishment years - we would believe the first three years is appropriate; and any nutrient supplements that might be required.

And then secondly, although the law excludes land currently enrolled in CRP, we feel it is critical for the successful establishment of energy crops that this program supports the proactive and sustainable version of CRP acres into eligible land under this program. Benefits from this would include: for acres that are coming off CRP that can't be re-enrolled due to oversubscription, which is the case near our project, those acres could be converted to producing switchgrass that would preserve the same conservation goals of CRP, and after a few years will be supported by private industry instead of the CRP program.

The alternative is, these fragile soils could be torn up and converted to

farmland once they come off CRP. For landowners who want to convert fro CRP to this program for economic reasons, potentially the same benefits that I just mentioned. CRP conservation goals could be met after these incentives expire, and the costs again would be covered by private industry.

We are also thinking about how to successfully convert from CRP to BCAP. We would propose a consideration that CRP acres that are coming up for expiration but are still in CRP be allowed to begin to establish these energy crops prior to coming off a contract, so that when they come off contract they would already be producing energy crops. Or for acres that are going to come off of contract in the near term before this program is available, consider an extension of those acres within CRP so that they could then go through this establishment period and again have these dedicated energy crops available when they come off of CRP.

MODERATOR ORTIZ: Thank you, Mr. Roach. Ten minutes has passed. Your comments will be available on the public comment site, on the website, so we will have to move on unfortunately.

MR. ROACH: Thank you. Thank you very much.

MODERATOR ORTIZ: Next is Mr. Ryan Stroschein, and will be followed by Richard Altman.

RYAN STROSCHEIN, AIR TRANSPORTATION ASSOCIATION, AVIATION

MR. STROSCHEIN: I have a presentation.

MODERATOR ORTIZ: Thank you.

MR. STROSCHEIN: Well, thank you for the opportunity to be here today. My name is Ryan Stroschein. I'm director of government affairs for the Air Transport Association.

The ATA is a group that represents all the major airlines and air carriers in the

United States: Alaska, American, Continental, Jet Blue, Midwest, and several others; and also the major cargo carriers in the U.S. including UPS and FedEx.

And my presentation today is designed to demonstrate how very interested and committed the U.S. aviation industry is to the development of renewable alternative fuel sources.

And my presentation is intended to be considered in conjunction with one that you will hear in a few minutes by Richard Altman who is the director of CAAFI, the Commercial Aviation Alternative Fuels Initiative. We are a member of CAAFI, and he will have some specific recommendations on exactly what we would like to see for the implementation of Title IX.

But I'm here today to make it clear how committed we in the U.S. aviation industry are to developing renewable aviation fuels.

As you can see from slide one, that depicts the expense that we've incurred over this decade in fuel costs. And as you can see early on in this decade we were spending well under $20 billion a year in fuel. This year we will spend in excess of $61 billion on fuel alone.

Put that in context: that's the equivalent of 267,000 full-time jobs assuming $75,000 a year in salary. So a very conservative estimate.

As you can see by the green line on this chart, that is not a function of our increasing our fuel usage. We will use less fuel in 2008 than we did in 200, but our fuel costs will have gone up more than five times, an increase of $20 billion in just one year.

So fuel has become the single largest cost center for the airline industry, and it's causing us significant economic hardship.

The reaction to that: we've been

forced to cut service. As you can see these bars indicate the contraction in service that we've undertaken over the early part of this year, and some projections about what's already been announced for service cuts toward the late part of the year. As you can see fewer planes, fewer flights, fewer seats flying around the country.

And obviously we are not in the business of getting smaller and providing less service. But that is what we've been forced to do to react to these soaring fuel costs.

And one take-away from this slide: I would suggest that you may want to book your holiday travel plans now.

This map just quickly shows, every single three digit code on this map is an airport that has completely lost service from a major air carrier in the United States, completely pulled out, lock stock and barrel. And as you can see, these are not all tiny airports: BWI, JFK in New York, Chicago

Midway, St. Louis, San Antonio, Oakland. All of these airports, dozens and dozens of them, have completely lost commercial air service just strictly due to the high cost of petroleum.

In the last chart I'll show on this impact is the impact on the U.S. workforce in the aviation industries. You can see, 2003, we were almost 470,000. And by the end of this year we expect to be under 400,000. And this is almost all due to high fuel costs.

That's why access to sustainable renewable domestically produced fuel is so important to our industry, and why we are so committed trying to see that developed.

This last slide speaks to why we are so interested in domestically produced fuel. This chart shows, the blue line is what we have historically paid for fuel here in the U.S., for jet fuel. The red line indicates what our European competitors are paying for

jet fuel. And as you notice, at the very peak in July, when prices hit their highest, we were paying $180 a barrel for jet fuel in the U.S. Our European competitors, because they were paying in Euros, were paying $115; a $65 difference, putting us at a huge disadvantage to our international competitors.

So those are some of the economic reasons why we are so excited about Title IX, and about what the prospects the farm bill has for helping us develop this industry.

And the other thing that is highly motivating us is the change that we see coming in federal and international policy as it pertains to the treatment of carbon. If we are being realistic, I think we certainly in the airline industry are anticipating operating in a carbon constrained economy in the years going forward. Because that is such a huge component of our cost structure, we are very concerned about that. The Lieberman-Warner bill we estimate would have cost our

industry $5 billion in the first year, with prices going up from there.

The European Union is in the final stages of approving an amendment to their emissions trading scheme to pull aviation into that scheme, so that U.S. air carriers that fly into Europe will have to pay a European special assessment for the carbon that they burn.

Obviously we are going to fight that, and there will be some litigation. But I think it indicates that that is the track we are going down.

So we are anticipating that, and obviously anything that we can do to swap out the fuel we are using now for lower carbon, more efficient fuel, is only going to inure to the benefit of us, and to the whole country.

So we do seriously believe that renewable fuels can be the game changer for the U.S. aviation industry in terms of supply and economics and environmental impact.

That concludes my remarks, and again, I do commend the presentation of Rich Altman in a few minutes from CAAFI, and he will give some specifics about what we and CAAFI would like to see contained or like to see for implementation steps for Title IX.

Thank you.

MODERATOR ORTIZ: Thank you, Mr. Stroschein. Next is Mr. Richard Altman, and will be followed by Mr. Bill Imbergamo.

RICHARD ALTMAN, COMMERCIAL AVIATION ALTERNATIVE FUELS INITIATIVE

MR. ALTMAN: Thank you, and thanks for the introduction, Ryan. And thanks to Under Secretary Dorr and Deputy Under Secretary Faulkner, who assisted in helping us to gain some dialogue with the community.

What I'd like to do is just go through and explain who CAAFI is. And is my picture up yet? Maybe I can get some help?

MODERATOR ORTIZ: We're working on it. If you could just go ahead and begin,

please, and we'll get it.

MR. ALTMAN: Just push arrow one? Now we have a dark screen.

MODERATOR ORTIZ: If you could go ahead - if you could just begin your presentation, we'll be looking for it here.

MR. ALTMAN: Okay, all right.

Let me just explain to you who CAAFI is specifically. What we are is a coalition of airlines represented by ATA, and Ryan's organization, airports, the Airport Council International; the aerospace industries' association, which are the manufacturers of airplanes and engines; and the FAA Office of Environment and Energy.

Shall I try again?

The - now as mentioned previously we are very pleased that we did - were able to provide provisions in the legislation, and that the agriculture department are now acting on provisions to give equal consideration to projects that would perform innovative and

beneficial research on commercial development of renewable aviation fuels.

So we appreciate that; we appreciate the aggressive action which you are taking, and the assistance of Deputy Under Secretary Faulkner's office in helping us to focus on that activity.

You've heard both from Rentech as a supplier - here I am, okay. You have heard both from Rentech as a potential supplier to our industry, and from the airline users. And I wanted to just explain why we think - we understand there is no birthright in this legislation or in your implementation of it, for aviation. But I just wanted to point out that aviation we think is a very good partner for the Department of Agriculture, and for the agricultural energy producers, as we are really dependent on hydrocarbon-based fuels. There are no windmills; there is no geothermal energy that will help airplanes.

We have a concentrated

distribution system which should not be underestimated in its importance. Eighty percent of the fuel goes to 35 locations in the aviation business, and that helps with deployment initially.

We have a single regulatory framework, governed by the Chicago Convention; it's actually international in nature, and we create a global market, and we don't have regulation by 50 different states per se.

We have accelerated our safety and worthiness certification targets, both for Fischer-Trope biomass blends similar to what Rentech is working on that you heard about earlier; and hydro-treated renewable jets, which are targeted for certification in 2010.

We have globally accepted air quality models implemented via the FAA MIT Environmental Center of Excellence that we would like to grow to fully accommodate biofuels.

We have aviation systems

engineering and R&D experience, and we have a small group of evaluators - that's what CAAFI is - and implementers that drive rapid consensus in the aviation industry. So I think we are very well suited to be an introductory party to what it is that the Department of Agriculture is attempting to do with Title IX. Oops.

We in as early as April began working with the renewable rural development area, in the partnership office, business development, on candidate tasks under the section. And we have identified five areas that we think are extremely important.

Production scale-up for engine certification: I'll go into that in a little bit more detail in the next chart.

Optimization of biomass and coal blend, co-production techniques. That's similar to what Rentech was talking about, and very important that we economically optimize how we bring biofuel to a coal-biomass blend.

And that is a lot of what will produce adequate quantities of production.

Optimize distribution to the customers, and use of sustainable biofuels in aviation. Very important with the pipeline companies that supply airports is to make sure that that works well.

Production scenario analysis: as you may know the aviation industry has a next-gen program to grow the aviation system long term in this country. Right now I'd have to say it's fuel challenged. Where is the fuel going to come from to support 2X or 3X growth in aviation?

So being able to predict with the help of Title IX what might be available to us and when will be important.

And then optimize indirect land use algorithms in the analysis. FAA is extremely well qualified to produce the output of aviation flight. But one of the key issues in well-to-wake is going to be indirect

land use. It's very much crop dependent, and we need help with some of the supply community to do that.

Next week we have a important mission. Just to go on the supply issue, specifically this chart indicates the level of supply that we need in order to fully certify a product. It's on the order of 250,000 gallons, and that's bigger than lab supplies.

So the purpose of 9003 the way I read it, could very well be a key factor in loan guarantees, to provide the activity and support the activity that we are intending via the production of pilot plants.

The airlines I know will be helpful in moving that along.

Next week we have a meeting that Bill Hagee will speak to, and we will have a combined Air Force CAAFI group, advisory group, to put together a program. It includes manufacturers; it includes biofuels producers UOP, GE, Tysons, University of North Dakota,

NESTI, all of whom have supplied adequate fuel to the Air Force research lab to begin fit-for-purpose testing with key qualification criteria.

But we will need to move toward pilot plants, so I think the USDA program fits in extremely well.

So in closing I'd just like to point out to you that we have certainly from what you've heard from Ryan a compelling supply requirement. We are extremely organized and focused on early certification and development of our program. We have a favorable distribution model, an environmental LCA focus, which will be important to acceptance as we go forward. And we have implementation aligned with the farm bill, Sections 9003 and 9005 provisions, and we would like to continue to work with the offices of rural development, and with the assistance of Bill Hagee and others, be able to join with the BRDI and have you do in with

us as we go forward.

So thank you again.

MODERATOR ORTIZ: Thank you, Mr. Altman.

Next is Mr. Bill Imbergamo, and following that will be Mr. Robert Kozak.

BILL IMBERGAMO, AMERICAN FOREST & PAPER ASSOCIATION

MR. IMBERGAMO: Thank you. Mr. Under Secretary, other panelists, thank you for the opportunity to present the statement on behalf of the American Forest and Paper Association.

AFPA is the national trade association of the forest, pulp, paper board and wood products industry. We produce essential products from renewable and recyclable resources that sustain the environment. And our industry accounts for about 6 percent of U.S. manufacturing, and we rank among the top 10 manufacturing employers in 42 states, with an estimated payroll

exceeding $50 billion.

Our industry supports policy efforts to increase our nation's energy security. As you heard from one of my members, Boise, Inc., earlier, we are major producers of renewable energy at our facilities currently. Sixty-four percent of the energy used in AFPA member paper mills, and 74 percent of the energy in our solid wood products industry is already produced by carbon-neutral biomass. We are the largest producers of renewable biomass energy in the country, accounting for 82 percent of renewable biomass energy produced by all industries.

We produce and use renewable energy while adhering to a disciplined market-based standard of accountability that ensure that the wood fiber we use is grown and harvested in a sustainable manner.

Since 1995 all AFPA members must subscribe to the Sustainable Forestry

Initiative, or SFI, which sets rigorous forestry management standards that are reviewed by external partners from conservation groups and research organizations.

With over 226 participants and 156 million acres of certified well managed forests, the SFI program ensures that America's forest and paper companies are committed to sustainable management.

Our historic commitment to renewable energy and sustainable forest management demonstrates that a balance between the two is both possible and necessary.

As has been pointed out, both the text of the farm bill and the statement of the managers indicate that the new bioenergy programs are intended to strike a similar balance between the needs of existing biomass users, and the need to develop additional sources of bioenergy.

We strongly support this goal. We

encourage USDA to make every effort to ensure that these programs are implemented to achieve it, and ensure that existing users of biomass and producers of bioenergy can participate in all of the new programs.

In particular we are concerned about three of the programs: biorefinery assistance, Section 9003; bioenergy program for advanced biofuels, 9005; and biomass crop assistance, Section 9011, which I will discuss.

As you know the biorefinery assistance program creates grants and loan guarantees for commercial scale biorefineries, both new and retrofitted. Both the grants and loan guarantees have a number of criteria that USDA has to take into consideration. For grants they will have to demonstrate that the project will have a positive impact on resource conservation, public health and the environment.

And for loan guarantees, the

Secretary has to analyze 10 factors, including whether or not the new technology will not have any significant negative impacts on existing manufacturing plants or other facilities that use similar feedstocks.

We urge USDA to evaluate product proposals under this program carefully under this criteria, and ensure that existing users are not severely harmed, and that the agricultural and civil cultural capability of the forest regions of the U.S. is not compromised.

There is widespread concern about the unintended consequences from biofuel production. Carefully reviewing proposals to ensure that they do not threaten natural resources while meeting the demands of existing biomass feedstock users will help address this concern in advance.

Ensuring that this review is meaningful and rigorous will help maintain a working balance between the resource needs of

existing biomass users, and the emerging needs of the cellulosic biofuels industry. So all produce the health, vitality and productivity of our agricultural and forest lands throughout the country as well as the economies in rural areas.

The joint statement of the managers specifically states that existing facilities, including wood product facilities, should be eligible for this program. And we would encourage you to take that into consideration as you receive proposals.

The bioenergy program for advanced biofuels similarly recognizes that with forest biomass there are competing demands. The gentleman from Boise mentioned the statement of the managers.

We urge USDA to take this caveat seriously and evaluate the impacts of this bioenergy program on other biomass users.

The potential of the farm bill programs, combined with the narrow definition

of renewable biomass in the Energy Independence and Security Act causes us great concern. It restricts eligibility for biomass based on forest types and successional stages, and disqualifies most fiber from public ownerships, which has the potential to focus all wood bioenergy demand on existing forest plantations which are a critical part of our fiber supply.

The biomass crop assistance program has already been mentioned. It is potentially a very large program that in addition to establishing project areas with sign-up for enrollment. There is up to a $45 per ton subsidy for storage, transportation and harvest of renewable biomass to a biomass conversion facility.

Again, as Mr. Grant noted, we believe that existing wood products facilities and paper mills, which as I noted are large bioenergy producers, should be eligible for payment under this program. We believe that

was the intent of the bill, and that this will encourage renewable energy production at existing facilities, and the development of bioenergy industry in harmony with the existing wood and paper products industry.

Thank you again for the opportunity to provide input on these important programs. We know that the USDA has heard a great deal about the need to balance food needs with new bioenergy production, and we believe that the model of sustainable management pioneered by America's forest products industry can be used as a guide to implement the bioenergy provisions to avoid unnecessary conflicts, and support development of new bioenergy sources in a rational manner.

Thank you very much.

MODERATOR ORTIZ: Thank you, Mr. Imbergamo.

Next is Mr. Robert Kozak, and will be followed by Mr. Denny DeVos.

ROBERT KOZAK, ATLANTIC BIOMASS CONVERSIONS

MR. KOZAK: Good morning, thanks for inviting me. My name is Bob Kozak. I'm president of Atlantic Biomass Conversions.

We produce enzymes to overcome biomass recalcitrance in hemi-cellulose, pectin and lignin biomass. And I'm also a founding board member of Advanced Biofuels, USA.

In looking forward I hope that the next administration whoever it might be will take the comments that we are making today to heart, and I hope this doesn't wind up on the floor somewhere when the next administration comes in.

I also hope that once we get past the continuing resolution in FY 2009 there actually might be money appropriated for these projects. But enough of that.

In looking at Title IX of the energy bill, the implementation of it, I think there should be two overall considerations. And the first one is that it should be used to

develop an American advanced biofuels industry that is sustainable both environmentally and economically. I think those are two key things. I know we've all talked about it, but I don't think it's a bad thing to say it again.

I think the other thing to recognize in implementation of this is that USDA and DOE must recognize that the advanced biofuels technology that are commercially available - that there are a lot that are not commercially available today in 2008.

There's lots of very good innovative ideas and conversion systems and new crops at the lab level, and I think it's important to use Title IX to get these to market as fast as possible.

In terms of Section 9003, I suggested, because the program does have limited funds, that it should be focused on only third generation advanced biofuels. And here real quickly are my definitions.

Just for clarify, first generation biofuels are the corn to ethanol and soybean biodiesel that we all know about that is commercial.

Second generation are the cellulosic ethanol conversion systems. It seems that there is a fair amount of money out there right now. DOE has funded a number of projects, and from my hearing today that there are other projects out there. Therefore I think that money in this section should be focused on third generation.

And some examples of third generation biofuels are are the advanced biojet fuels that were discussed earlier; the advanced bio-diesel fuels; gasoline substitutes, the so-called grassolines; and also advanced hemi-cell lignin conversion processes that produce intermediates.

In terms of the selection criteria, I'd like to make the following recommendations.

First off, especially for the grant programs, that when - these are high risk technologies, and USDA should not be afraid of a number of these failing. Lots of state programs that are involved in venture type efforts recognize that and I think you should do that as well. If you come up with conservative criteria that ensure a high rate of success, you get conservative technologies.

Secondly, I think that because of the limited amount of money pilot scale facilities should be focused on more bang for the buck, quite simply.

Furthermore, another issue is in biorefinery design. I hope that USDA-DOE is not limited to the integrated biorefinery concept that is out there. Some such things as decentralized or hybrid models should be considered as well.

And the reason I bring this up is, it's something we often forget in the production of biofuels is that the

transportation of the biomass is one of the largest costs, and if we can come up with biorefinery designs that limit those costs, I think that is - I think that should be a key factor.

I just have two questions on the wording in the farm bill. First, what is demonstration scale? I guess those of us in the field are used to pilot or prototype. I think that needs some clarification.

And furthermore, what is a large scale market? In transportation fuels I think all markets tend to be rather large.

Just a couple of quick comments on Section 9005. In terms of selection factors, again, I think it should be limited to third generation biofuels only. Perhaps an extra concern for national defense issues in terms of selection. This gets into the jet and turbine markets.

And also I'd hope that there is some way that the payments could not only go

to the finished producers of the final fuel, but also intermediates. And anybody who is in the jet fuel development knows this, that you have 40 to 50 components going in, that there has to be someway that the producers at that lower level should benefit from this program as well.

Those are all my comments on that. I thank you for your time. I will be submitting final written comments.

MODERATOR ORTIZ: Thank you, Mr. Kozak.

Up next is Mr. Danny DeVos, and will be followed by Mr. Steve Flick.

DANNY DeVOS, POET

MR. DeVOS: Thank you. Under Secretary Dorr and distinguished panel members, I think you for the opportunity to provide input in this very important energy title that we have before us.

As stated, I am Danny DeVos. I am the corporate finance director for POET.

POET currently has 26 ethanol facilities in the Midwest with a combined production capacity of approximately 1.5 billion gallons.

I will provide input on 9003, biorefining assistance; 9004, repowering; and then 9005, the bioenergy program for advanced biofuels.

Relating to biorefining assistance, POET believes that the biorefining assistance grant program will potentially benefit our project, BELL, which is a cellulosic pilot plant that will convert corn cobs and corn fiber into ethanol.

Project BELL is currently under construction and will be producing cellulosic ethanol before January 1st of 2009.

Research conducted at Project Bell, along with research at POET's bench and lab scale facilities, will enable POET

to begin construction of Project Liberty, a 25-million gallon cellulosic facility, in late 2009 or early 2010.

Of equal if not greater importance, under Title Section 9003 is the biorefining assistance loan guarantee program. POET believes that we will not be able to obtain loan funds to finance new or emerging technologies being adopted to produce advanced biofuels without loan guarantees.

Examples of biomass conversion facilities that would be supported by the loan guarantee program are: solid fuel boilers; cellulosic ethanol facilities; anaerobic digesters; oil extraction; and fractionation facilities.

These technologies will be adopted in both new and existing facilities. Because of this it is essential that implementation of the guarantee program includes the ability to work with facilities

that have existing debt.

I will provide a couple of scenarios, because this same issue comes up under the repowering program.

With that I will move onto my comments about repowering. The repowering assistance programs offers the opportunity for our existing ethanol production facilities to further reduce or eliminate the use of fossil fuels in our production process.

At POET we do not believe there is a single solution to eliminating the use of fossil fuels. A combination of systems such as anaerobic digestion, solid fuel boilers, land-fill biogas, and wind towers, might be employed at a single production facility.

Assuming a cost of $9 per MMBTU of natural gas, the cost of natural gas on an annual basis at a 65 million gallon ethanol production facility are

approximately $17 million. We estimate that the capital investment required to significantly reduce or eliminate the use of fossil fuels to be somewhere between $1 and $1.25 per gallon of production capacity.

At present lenders are only willing to lend approximately $1 per gallon of production capacity for the basic ethanol production facility without any repowering. Therefore there is no financing available for repowering ethanol facilities without guaranteed loans to support the new investment.

And again these technologies will be adopted in existing facilities. Therefore it is again essential for the guarantee program to be able to work with existing debt.

Possible scenarios of how this might work are, and I will provide more information in my written comments in this area, but a producer obtains a $20 million

guaranteed loan to add solid fuel boiler fueled by renewable biomass to an existing facility. The cost of the boiler project is $25 million, so there is a room there for the limited guarantee at 80 percent.

Prior to the solid fuel boiler project, there is remaining debt with first lien security on all the company assets of $35 million. The original cost of the plant was approximately $65 million.

For the guaranteed program to be utilized, the guaranteed loan would only be able to obtain a first security lien position on the new solid fuel boiler assets, or be of adequate size to refinance the existing debt.

If the existing debt is not refinanced, the guarantee could be provided a second lien on the existing company assets.

Not only will the guaranteed loans be essential to achieve repowering, at

a minimum level, the authorization is also available to provide a payment for the energy replaced or produced. POET recommends a payment of $3 per MMBTU. This payment is needed for approximately three to five years.

This is a program that we would be ready to implement today. We have a facility today where we are very close to bringing online a solid fuel boiler that is taking local wood waste from the area, and we are in the process of piping landfill gas to that facility.

And we, if we had the capital available, we would be able to implement current technologies we have available to implement this program. So we strongly urge you to implement and make this program available as soon as possible.

Now I would like to make comments on the bioenergy program for advanced biofuels, Section 9005. This program

authorizes the secretary to make payments to an eligible producer of advanced biofuels. An advanced biofuel is defined as a fuel derived from a renewable biomass other than corn kernel starch.

By definition the Secretary could enter into a contract with a producer of cellulosic ethanol or a producer of ethanol from starch, as long as the starch is not from the corn kernel.

Furthermore, renewable biomass is defined as any organic matter that is available on a renewable or reoccurring basis. Therefore the Secretary is also authorized under this program to make payments for the utilization of landfill and sewer gas, and solid fuels such as wood chips, wood waste, corn stover grasses, and manure, as sources of energy.

POET recommends that the payment be made based on gallons produced, or energy unit replaced, such as MMBTU, or kilowatt.

Since the payment is made directly to the producer of the advanced biofuel, it should not have any impact on eligibility for other tax credits that might apply.

It is strongly recommended that the duration of the contract with the Secretary match with the length of the loan obtained to finance the capital investment required to produce the advanced biofuel. This will greatly enhance the ability to obtain financing, since it provides some stability to the cash flow.

If Section 9005, the bioenergy program for advanced biofuels, were used in conjunction with Section 9004 for repowering assistance, it would not be necessary to make payments for energy replaced by repowering from funds allocated to Section 9004, the repowering assistance program.

Likewise, as long as there is a separate payment made to producers of

cellulosic ethanol, payments made under this program could exclude payments for the production of cellulosic ethanol.

This program for advanced biofuels is a great opportunity to encourage rapid deployment of capital and investment in the production of the advanced biofuels. I encourage you to move quickly not only on this program but all these programs, because the greatest inhibitor we have today is not the technologies necessarily; it is more the capital that is not available to implement the technologies we have.

I thank you for the opportunity to provide input and would be open to any questions.

MODERATOR ORTIZ: Thank you, Mr. DeVos. Following Mr. DeVos, next up is Mr. Steve Flick, and after Mr. Flick is Mr. Michael Brower. Mr. Michael Brower will be closing out the Section 9003 biorefinery assistance, and we'll be moving into Section

9005, the bioenergy program for advanced biofuels, with - beginning with Ms. Brenda Robinson after Mr. Michael Brower.

Mr. Flick, thank you.

STEVE FLICK, SHOW ME ENERGY COOPERATIVE

MR. FLICK: Under Secretary Dorr and distinguished panel members, thank you for your time.

My name is Steve Flick, and I'm chairman of the board of the first 400-member producer coop in the United States of cellulosic energy. That's Show Me Energy in Missouri.

It's designed and built on science, and operated on economics, for bio-based products.

With the advent of high fossil fuel prices, bio-based products' time is now. Several renewable ideas have been talked about, but as an organization we on the ground are operating, providing jobs, reducing CO2, and creating rural opportunities.

In the past years the coop has learned a lot about growing, collecting, harvesting, and processing biomass for fuel - miscanthus, switchgrass - and is eager and willing to assist USDA in developing programs that will launch the United States into the next cellulosic revolution and lessen our dependence on fossil non-renewable fuels.

We have put our blood, sweat and tears into making this plant a reality, and we are not asking for a handout, but a hand up.

Show Me Energy cooperative is a biorefinery, and we suggest to the USDA to use broad definitions of biofuel and biorefineries. If we as a society are moving to a renewable future, why limit the opportunities for the advancement of biofuels.

Our definition of a biofuel is straightforward: the final product of commingling cellulosic fiber or plant oil, and then chemically or physically altering the biomass the yield a fuel.

Show Me Energy is a replicable model driven by producers' input and ownership. Our biorefinery processes several different feedstocks, from switchgrass to corn stocks to wood. Our location allows us to use wood fittings from the Ozarks, along with native warm and cool season grasses, harvested within Missouri's seed producing area.

In fact, in the past we would have burned this grassy biomass as there was no market for its use now.

Our recommendation to USDA is to support processes that provide both environmental conservation benefits on the farm, and real energy applications allowing the end user to displace coal or liquid fuels.

USDA should support biofuels based on net energy ratio, BTU value, and CO2 reduction.

We also recommend the USDA that the collection of feedstocks should be limited to within 85 to 100 miles of the biorefinery,

and have strong but simple wildlife considerations.

Further, USDA should support programs that use industrial biomass sources, such as coffee, tea, grass clippings; that's what we're doing. By incorporating these inputs, the biorefinery reduces landfill space, and mitigates generation of methane.

All biorefineries should receive financial support to help this embryonic industry to get off the ground. Show Me Energy believes that a 20 to 30 percent target support of the fuel manufacturer will help facilitate this market approach.

Project proposals should be well organized, and should identify funding sources capitalized by regulatory or a non-regulatory institution.

In fact, one of the hardest accomplishments of our coop was receiving financing even though we had 70 percent equity ownership cash money in the bank. This has to

be easier, folks; and in today's market credit is key - strong private investment with cash in the bank to launch this industry.

Size has no bearing. Although Show Me believes that the biofuel industry will have a competitive economy of scale with smaller locally owned biorefineries. Also the type of fuels should not have any bearing in determining what entity will receive payment.

We would also like to comment on the participating end user size: it does not matter, from the smallest boiler in the local American Legion hall to the energy plant for this huge building. I am willing to sell you some pellets to get a boiler started. The building we are in now is the key. Utilizing the fuel today.

As a group we need to start cellulosic landscape now. With 200 bushel corn farmers from Iowa, wheat farmers from Kansas, and grass farmers from Missouri. Producers will provide feedstock right away.

But we should be thinking about reducing our reliance on crops. Instead of corn stocks, myofiber cereal straws, cool season grass stock, native grass seed-producing monocultures and newly established polycultures can be used. Let's not reinvent the wheel and tear up our existing farm resources, but complement them.

On the issue of BCAP if we make too many restrictions on the rules for producers to participate in the BCAP program we will push back the development and growth of cellulosic biomass industry many many years. Producers must be able to participate in this new industry no matter what the size of their operation, because producer or producer group participation in this new agriculture production arena is a critical element in moving the industry forward along today.

One other thing I'd like to share with you, it is going to be very important for

us to focus on giving priority to projects that provide optional benefits to the local producers even after the removal of target support occurs. We need to assure that large entities are not able to come into a local region, through the advantage of government subsidies, and be able to drive down the long term value of bioenergy crops in an area.

Now I will share with this group - I have spoke many many places about our cooperative. And just the other day a lady seen me in the airport, and she said, you are with that farmer group that partnered with the University of Missouri Columbia and the University of Missouri Rolla, making cellulite. No, ma'am, it's cellulose.

(Laughter.)

Thank you for giving your time and attention, and thank you for holding this important meeting.

MODERATOR ORTIZ: Thank you.

Next is Mr. Flick - oh, you're Mr.

Brower. Thank you. Sorry, go ahead.

MICHAEL BROWER, MOSAIC FEDERAL AFFAIRS

MR. BROWER: I have a presentation.

MODERATOR ORTIZ: Okay, thank you. If you could - are you able to start?

MR. BROWER: I'm Michael Brower from Mosaic Federal Affairs. Thanks to Deputy Secretary Faulkner, good to see you, and Mr. Dorr, and all of y'all for being here and holding this important meeting.

I'm acting for and on behalf of some open loop and closed loop woody biomass interests in New York, and the northeast. The biorefinery in New York, Catalyst Renewables Corporation, Renewables LLC, Tree Source Solutions, Lyonsdale Biomass, U.S. Salt's Woody Biomass Conversion Project, SUNY ESF, which is a college of environmental science and forestry in New York; the College of Technology at Delhi; the SUNY Center for Sustainable and Renewable Energy; Obrenegear, and SUNY College of Agriculture's controlled

environment and agriculture project.

We need the programs in Title IX that are authorized by the act deployed as soon as you can get them deployed. And we urge USDA as you move this year and next year and years forward in the budget process that you hold on to the strategy that the farm bill holds, and make sure that the Congress gets the requests as they wrote them this year, because sometimes they change. Because this was a good strategic maneuver.

We are very pleased with what you have done with the biorefinery assistance program, because we figure it's a chance for us to stand up and say, that the northeast has been excluded generally, all things being equal, in biorefinery kinds of assistances, from the federal government. And we ask that you, as you make your rules and make your decisions, to ensure regional parity for New York and for the northeast in the application of woody biomass kinds of technologies.

You know using a New York State renewable portfolio standard required sustainable forest management plan, Lyonsdale Biomass, one of the interested parties here, has been cited by New York State DEC as the healthiest forest in New York State. This can be done with forest biomass.

And there is a lot of it; there is a lot of it in the northeast; there's a lot of it in the nation. There are 368 million dry tons for the nation is one of the numbers that is kicked around.

Nationally we know that growth rates exceed removals by 50 percent, and in the northeast it's better than that, and in New York State with huge forests, there is a lot of rural New York north of the Tappan Zee Bridge, New York State biomass growth exceeds removals by 300 percent. That is because the pulp and paper industry has virtually moved out of New York State.

We weren't as pleased with

repowering assistance. We felt that it was a subsidy to corporate agriculture to existing plants, and if there is a way within the statute, and it seems like there is a way within the statute, that you can expand the eligibility we strongly suggest that.

You finally have got the right answer with advanced biofuels. Somebody has finally gotten one bill that comes and says, we can move biomass forward. So we ask that you ensure there is parity for thermal chemical and biochemical processes. WE ask you to ensure parity for advanced hydrocarbons. There are a lot of people who have been talking about jet fuel. There are other advanced hydrocarbons that are important particularly in the northeast like heating fuels and things like that. And for next generation alcohols as well.

And we ask that USDA ensure that you put these plants where the demand is, because transportation is another big cost

always. And we say the northeast has a big argument for that.

Rural energy for America: again we are only asking that you provide regional parity both in the audit programs so that you look at open and closed loop woody biomass as part of that mix on a regular basis; that you use local resources and expertise in the northeast, the northeast states research cooperative, part of the Forestry and Range Research Act of the Forestry Department; SUNY ESF circuit rider program; and that feasibility studies look at regional rural feeding districts using woody biomass.

It will solve the issues where people are coming up with legislation for wood for schools and everything else.

9006 grants in the northeast, all the applications that were made for 9006 forest utilization grants were pretty much excluded. Part of it is that MSA exclusive requirements in the northeast because all the

metropolitan service areas are quite rural in the northeast as they exclude most grants.

We need to get our hands around the difference between federal lands and public lands, and understand that the public lands in the northeast are just as important as the federal lands. Adirondacks is bigger than a lot of parks.

Biomass crop assistance program: we want to ensure regional parity for short rotation woody biomass crops, willow, it's been supported by the department for a long time. It is finally moving forward. It is proven. It's been cofired, it's been fired, it's been gassified, it's been extracted, it's been catalyzed. It is a great resource for the northeast and other places.

This year Catalyst Renewables installed 600 acres of commercial willow.

This is a transition for university research to real operational adaptation by farmers. This isn't a Catalyst

program. They have leased to farmers, they have farmers planting this willow now as a crop on their farmland, and in New York unfortunately there is over 1.2 million acres of underutilized or abandoned farmland. We are not talking food crop land. Half of it was private dollars; half of it was federal and state dollars for this initial expansion.

This program is in fact still a demonstration. It has to be proved that it's operational. And so we need a mechanism which can enable farmers to take the leap from applying a three year or four year lead time crop into the ground, to bridge those kinds of risks, and deploy this crop for all of the energy and environmental reasons that are there.

We can't let this - and this is not a criticism of what conservation reserve is, but we wrote in the last farm bill, not this one, provisions for harvest for willow in the previous farm bill, and it was never

deployed because of rulemaking. And so we need to make sure that there is a straight pathway in rulemaking to be able to deploy these closed loop energy biomass products.

Again, we have great projects in the northeast that are ready to go. We have plenty of transportation fuels that can be produced; we have plenty of heat and power that can be produced; these are being produced right now. But there is no unified federal support program in the northeast.

Right now at Lyonsdale Biomass they are producing heat and power, and the only reason that Burroughs Paper exists in Lyonsdale, New York, is because they can sell them the steam from their plant for $3 per million BTU as opposed to $9 per million BTU of natural gas. That is the largest employer in the region.

Thank you very much for your time, and you will be getting the written testimony.

MODERATOR ORTIZ: Thank you, Mr.

Brower.

That closes our section 9003, biorefinery assistance.

Thank you.

SECTION 9005, BIOENERGY PROGRAM FOR ADVANCED BIOFUELS

MODERATOR ORTIZ: And we are now moving into Section 9005, bioenergy program for advanced biofuels. And our first speaker would be Ms. Brenda Robinson, and following Ms. Robinson will be Mr. Manning Feraci.

BRENDA ROBINSON, ENVIRONMENTAL SOLUTIONS, INC.

MS. ROBINSON: Thank you. Thank you for the opportunity to address the panel.

Good morning, my name is Brenda Robinson, and I'm president and CEO of Environmental Solutions. We are headquartered in Richmond, Virginia. We are an 18-year-old women-owned business, and our business is the beneficial use of waste materials as - the use of agricultural and industrial byproducts to make new products.

One of the major initiatives we have is the manufacture of a proprietary cellulosic fuel or biomass that is used for industrial manufacturers to supply energy. We have relieved the demand on the paper industry for some of the demand of the forest products, and we've doubled the BTU for some of the boilers that the paper industry is using.

We also provide environmental consulting services, help companies evaluate processes to both increase recycling opportunities and minimize waste.

ESI also provides a brokering services for industrial waste to maximize both economic return and beneficial use opportunities.

We employ more than 30 people, and also own and operate the Sustainability Park which is an old tobacco manufacturing company that has been converted to an eco-industrial park in a rural community south of Richmond< Virginia where businesses manufacture and

market environmentally sustainable products and services.

Contained with in the park's 140-acre boundary is infrastructure that includes a water treatment plant, a waste water treatment plant, and three modern boilers. These ready-to-use assets represent an opportunity for rapid commercialization of a bioenergy project.

We have tenants in the park that are consumers of energy, and industrial manufacturers seeking green energy solutions.

We are seeking partners to convert the boilers to an alternative energy using cellulosic or renewable energy crop, or a combination of the two.

This background is important, since I believe the components of the farm bill have some correlation with where I see our company heading.

This morning I'd like to share the opportunities we see, but more specifically

the barriers I believe may exist for companies like mine that wish to engage in the very active search for better, more environmentally appropriate alternatives for energy.

As a background representatives of our company have met with the USDA staff on several occasions to discuss opportunities at the Sustainability Park, and how we might participate in the government's intensive effort to establish alternative energy sources. To this point we have not applied for nor have we received any funding to support any initiatives at the park or ESI through the farm bill.

It's not because we don't want to however. Based on our discussions and our research the program provided for the farm bill are generally not designed to help small rural companies leverage their experience, knowledge and history to support either modifications to existing energy systems, expand unique energy alternatives; or to

participate or expand research activities.

The available USDA funding is structured to pass through large institutions or companies; universities; or nonprofit organizations. The fast track solutions that small entrepreneurial businesses may offer are excluded as the challenges of partnering have severe barriers.

We believe that as you begin to explore the most efficient manner to implement the 2008 farm bill, renewable energy programs, you should do the following.

Target small business as a viable resource to introduce new technologies and energy solutions. The USDA and its government partners should encourage research in agriculture and energy that promotes partnerships between the private and public sectors, with focus and specific emphasis on supporting small business. The country was built on the shoulders of American entrepreneurs, and I believe that the

government has a responsibility to foster creativity not just in the public sector but the private sector as well.

Job creation and innovation is strongly tied to small business entrepreneurs. Let me give you an example. Tomorrow I will be headed for Virginia Tech in Blacksburg, Virginia. It is a trip that I am very excited about. Tech is a land grant university, and it has historic interests in agriculture and forest products. My company and Virginia Tech have much in common and my trip is designed to explore with Virginia Tech possible partnering opportunities. Should they exist, we would like to think that one or two potential projects would complement specific objectives of the farm bill. ;

I'm a business woman, and my perspective on an opportunity is different from Virginia Tech. I have to make payroll, pay taxes, develop strategy, and then implement those strategies to sustain my

company.

I have an urgency to commercialize technologies for those very reasons. I mention this, because while conversations and our dialogue will happen with or without the farm bill, specific opportunities that might have very real promise, whether they are related to rural energy self-sufficiency, crop biomass, or cellulosic biomass, may not occur without access to grants or other funding sources provided by the farm bill.

Perhaps I have customer demand for new solutions, and expertise capable of executing projects, but we seek research funds to move our ideas to market.

That is why I would encourage you to make application process efficient, establish a quick response protocol that supports small business; rural agricultural businesses; the world economy is fast and difficult, and I believe that the efforts like the farm bill should provide much needed

support to ensure businesses like mine can compete with other large institutions and organizations.

Let me mention one or two examples of what I see as a potential barrier. The forest biomass for energy program is a good step at deriving the use of sustainable biomass as fuel source. ESI has a great product that we already produce, and that is made from recycled wood. This is innovative and unique technology, and I believe it is easily transferrable to the low valued forest biomass. Our technology is proprietary; it has great promise, and we would like to be ensured that we engage in a substantial research and development effort with a public university for instance; and the technology could remain ours.

Decisions regarding the energy and whether and how to commit resources to research are generally challenge decisions by Fortune 500 companies. However, they are

considered in many cases life or death to small minority businesses like mine.

I believe the USDA and various government agencies responsible for accelerating those programs contained in the farm bill, and specifically 9004, 9005 and 9012, should prioritize funding in a manner that supports rural farmers and small rural businesses like ours, rather than allocating large dollars to a few projects that are only available to nonprofits, universities or large organizations. I would suggest that a portion of the farm bill be set aside to encourage small businesses, farmers, and rural entrepreneurs the opportunity to change the face of our energy landscape, and provide innovative technology solutions for alternative energy products.

Thank you very much for the opportunity to speak.

MODERATOR ORTIZ: Thank you. Next is Mr. Manning Feraci, and following Mr.

Feraci will be Ed Hegland.

MANNING FERACI, NATIONAL BIODIESEL BOARD

MR. FERACI: Good morning. Thanks for sticking around.

My name is Manning Feraci. I'm the vice president of federal affairs for the National Biodiesel Board.

And before I start I'd like to thank USDA for holding this public hearing today. We really appreciate the opportunity to weigh in with you, and let you know what we think about these important programs.

And likewise, we want to thank you for your continued support for biofuels. You've always been there, very supportive of advancing biofuels in the U.S. And I think it's good public policy, and our industry certainly appreciates everything you do.

Just for a little background so that everyone understands who NBB is, what we do, the National Biodiesel Board is the industry trade association for the U.S.

biodiesel industry. And we really do represent the whole waterfront of the biodiesel industry, everything from biodiesel producers to fuel marketers to feedstock providers.

And as an industry we've experienced some pretty significant growth here in the past couple of years, and we are pretty proud of some of the things that we have done as an industry to integrate ourselves into the fuel supply. We are starting - what started off as a niche fuel is now becoming a mainstream fuel. We are seeing consumers are more comfortable with our fuel. We are seeing more acceptance with engine manufacturers. We are seeing dramatic improvements in fuel quality that are helping to increase biodiesel's penetration into the fuel supply.

I'm going to be very brief, because we've got some people who are going to follow me up here that are going to provide a

little more meat on the bone, and I want you to hear from them.

But the main thing that we want to talk about today is Section 9005, the bioenergy program for advanced biofuels program.

Let me just give you some of our thoughts on how we'd like to see that program implemented.

You know this was a program that we were very supportive of its inclusion in the farm bill. We worked closely with the American Soybean Association to advocate this program's inclusion. We think it has a lot of merit and value in terms of helping out the U.S. biodiesel industry and subsequently getting the good public policy benefits that you have from having increased biodiesel use in the United States, displacing petroleum fuels.

With me today and some of the folks that are going to speak after me to kind

of highlight this, I mentioned at the beginning that we have a wide swath of folks from industry. What you are going to have is, you are going to have the chairman and vice chairman of our organization. One is a farmer; one is a significant fuel producer and marketer. You are going to hear from a small producer who's multi-feedstock, produces multiple feedstocks. You are going to hear from a soy producer. You are going to hear from the American Soybean Association.

And what you are going to hear from them is a consistent message about the way that we want to see this program structured to make it work best for everybody. And let me just briefly touch on that, and then again, I'm going to defer to the other speakers behind me to kind of let them fill in some of the blanks beyond that.

Under Secretary Dorr made an interesting comment in this opening comments, and I think it's relevant to what we are

talking about here. He said that in 2002 that farm bill really helped lay the groundwork for a lot of the programs that we are talking about there. And we really think that that applies on the bioenergy - on this bioenergy program. You know our - the people in our industries experienced with the previous CCC bioenergy program was mostly a positive one. In terms of the administration of the program, they were very supportive of it.

So I think if you look back at that program, there's going to be a lot there that we think is going to be helpful and useful in implementing the new program. But there are two things that we think are important that could be done to improve the program.

The first is adjusting the way the payments are made. Previously you had, everyone is aware that you had two levels of payment. You had one where you had a base production allowance, and then increased

production. And what you will see in written comments that we are going to provide is that we are suggesting that there be one level of payment for all gallons of production, which is another change. Previously it was based on feedstocks consumed, is what your payment was based on. We are advocating a system that you provide it on gallons produced. So if you go to a single level of payment, and you do it on gallons produced, we think it would make the program easier to administer; we think it will be easier for producers to take advantage of the program so it will make it easier for them as well; and we think it si consistent with sound energy policy in terms of it's going to be feedstock neutral and provide assistance to producers out there.

The second thing I'm going to point out is something that you guys have heard a billion times; maybe not a billion times, but you've heard multiple times this morning. But it's a sentiment that we echo:

implementing the program as timely as possible is an industry priority, using the authority that you have to get the funding that Congress provided, and beginning in FY `09 to have that available to have that available at the beginning of the fiscal year.

And then a timely implementation of the final rules so there is some certainty out there for providers and producers so they would know the benefit is coming.

You know we think that if you implement the program in this manner, these slight tweaks to the existing bioenergy program that you had previously, that you will have an effective program that will do a lot of good to help the U.S. biodiesel industry.

And speakers after me will get into some of the public policy benefits that you get from increased biodiesel use.

I'll be very candid: it's not going to be a silver bullet. It's not going to be the be-all and end-all for the U.S.

biodiesel industry. But the fuel's business is a high volume low margin industry, and to support that can come from this bioenergy program can go a long way in terms of making U.S. biodiesel producers more competitive in the marketplace.

So as we go forward, we look forward to working with you on this. We've always had a great relationship with USDA. We look forward to working cooperatively with you to get a program that is structured optimally to help our industry out.

With that I'll conclude my remarks. Thank you.

MODERATOR ORTIZ: Thank you, Mr. Feraci.

Next up Mr. Ed Hegland, and will be followed by Gary Haer.

ED HEGLAND, NATIONAL BIODIESEL BOARD

MR. HEGLAND: Thank you, and good morning.

I'd also like to echo the

sentiments of the previous speakers. Thank you very much for allowing us this public forum to address these issues.

My name is Ed Hegland, and as Manning said in his statement, I'm the farmer of the group. And I farm in Western Minnesota; I raise corn, soybeans and wheat. And I've been involved in the biodiesel industry I guess as a spokesperson and as a voluntary lobbyist through the Minnesota Soybean Growers Association. And now I've been working with the National Biodiesel Board, still a voluntary lobbyist. My wife says now I've been promoted to a full time volunteer. But I do manage to be home on the farm and do that sort of work.

Manning said he wasn't going to steal my thunder, but I think it's been stolen. He said a number of things I'm going to say, but I will reiterate and add to some of those.

The National Biodiesel Board is

the national trade association representing the biodiesel industry as the coordinating body for research and development in the United States. It was founded in 1992 by state soybean commodity groups who were funding biodiesel research and development programs.

Since that time the NBB has developed into a comprehensive industry association, which coordinates and interacts with a broad range of cooperators including industry, government and academia.

NBB's membership is comprised of state, national and international feedstock and feedstock processor organizations; biodiesel suppliers; fuel marketers and distributors; and technology providers.

We've seen tremendous growth in the biodiesel industry in the last number of years, over the last 15 years. In 2007 the industry produced 500 million gallons of biodiesel and is on pace to increase

production above these levels in 2008.

Today there are 171 plants in operation, with a capacity to produce more than 2.2 billion gallons of biodiesel and 60 new plants under construction or expansion which will add another estimated new capacity of nearly 1.13 billion gallons.;

One of the reasons we are here today in front of this group of people is economic development and providing green jobs in rural America. In 2007 alone the U.S. biodiesel industry contributed over $4.1 billion to the nation's gross domestic product, and supported 21,803 jobs.

In addition economic modeling suggests that a vibrant biodiesel industry will positively impact the U.S. economy in multiple ways. America's biodieisel industry will add $26 billion to the U.S. economy between 2007 and 2012, assuming bioidiesel growth reaches one billion gallons of annual product by 2012.

Biodiesel production will create a projected 38,856 new jobs in all sectors of the economy, and additional tax revenues from biodiesel production will more than pay for the federal tax incentives provided to the industry.

Equally as important it will keep billions of dollars in America that would otherwise be spent on foreign oil.

NBB urges USDA to implement the bioenergy program for advanced biofuels in a timely manner, as Manning had stated, and in an equitable manner that provides payment on all gallons of production.

With is the CCC bioenergy program important for U.S. biodiesel producers? This program provides CCC payments to biodiesel producers to help offset the cost of the feedstock used to produce biodiesel. Feedstock costs make up more than 80 percent of production costs. Over the past year feedstock costs have doubled, reaching

record highs, and making it difficult to economically produce the fuel.

A CCC bioenergy program that provides payment on all gallons of production will help all U.S. biodiesel producers displace petroleum with clean-burning domestically produced biodiesel.

Thank you.

MODERATOR ORTIZ: Thank you, Mr. Hegland. Next is Mr. Gary Haer, and following Mr. Haer will be Bob Henry.

Mr. Haer.

GARY HAER, REG

MR. HAER: Good morning. I'm Gary Haer, I'm vice president of sales and marketing for Renewable Energy Group, and also serve as vice chairman of the National Biodiesel Board.

I'd like to thank the panel for the opportunity to address you this morning, and I want to talk today about the state of the biodiesel industry.

First a little background on Renewable Energy Group. Renewable Energy Group is a leading company in the biodiesel industry that has helped build the U.S. biodiesel industry through construction of biodiesel plants, providing biodiesel production technology, and providing marketing and sales of biodiesel within the U.S. market, and in emerging markets for biodiesel.

I think just from the state of the industry today, as was said previously, huge growth opportunities; a lot of emerging applications for biodiesel in the U.S. market. A very bright future. We contribute and support energy independence. We provide 3.5 units of energy for every unit of energy used in the production and manufacture of biodiesel.

From a lifecycle analysis we have the highest energy balance of any fuel produced in the United States today.

We also provide climate benefits

in reduction of CO2 emissions, so our fuel is very well poised to help our nation contribute to climate benefits as well as energy independence.

Then as Ed mentioned, we also provide new jobs in rural America, an investment in rural America that is solely needed at a time when jobs are leaving rural America for higher paying opportunities in metropolitan areas, biodiesel and biofuels production in rural America provides new high paying jobs to those communities that are sorely needed.

So those are bright future opportunities for biodiesel, and things that we are contributing to the U.S. marketplace.

We have also received many positive market developments. Recently we passed a renewable fuel standard for biodiesel which will go into effect in 2009, which again helps provide a base for biodiesel demand in the U.S. marketplace.

Our industry has a goal of 5 percent biodiesel usage in the diesel fuel pool in the United States market. That represents a three billion gallon opportunity for biodiesel today.

As Ed mentioned, our current production capacity, or current production level, is currently 500 million gallons. So there is a huge growth opportunity for our industry and a very bright and promising future.

However, with that positive outlook, our industry is hurting severely. We are faced with challenges in terms of high feedstock costs. Feedstock costs contribute or account for over 80 percent of the costs of biodiesel in the marketplace today from a manufacturing standpoint.

Many of our biodiesel plants were built with the idea or the working capital needs and estimates that were more of an historic nature in terms of feedstock costs.

Today feedstock costs are three times those historic levels that we have seen. So we have never seen feedstock costs at these high prices. It is a severe challenge to our industry and to our biodiesel producers. And while there is much research and development going on to look for alternatives to traditional feedstocks for biodiesel, and we believe that those will come into the marketplace, we are going to be challenged as an industry until those are commercialized and help bring more competitive feedstocks to us as an industry.

We also have a U.S. marketplace that is open to the world, and open to global production in biodiesel. Many of those overseas producers can come into the U.S. market and compete on a level playing field. Many of those overseas producers receive financial assistance, or financial incentives, for production of biodiesel by their home countries. So they are a challenge to us as

an industry, but it's a challenge that our industry is prepared to meet.

We also are facing a situation now where many of our plants have idled, and reasons for our plants to have - in our industry to have idle capacity today is because we are faced with a profit margin squeeze, obviously due to the high feedstock costs.

Our estimate is that currently 25 percent of our capacity is being utilized today, and part of that is due to working capital constraints; part of that is due to inefficiencies of production. Our market in our industry was a young, growing and emerging market, characterized by small scale production. Some of that small scale production is inefficient. But there are ways for us to transition over to a thriving industry and a more competitive industry.

The result of this has been that our industry is going through a consolidation

and attrition phase, and we are challenged with an industry that has been weakened, and is currently on its knees. The bioenergy program for advanced biofuels will be helpful in that, and we are much appreciative as an industry.

However, the previous program that was available to our industry was much helpful as well, because it did help launch our industry. So we are grateful and appreciative for that assistance from USDA.

However, a short term program will not solve our industry's challenges. Our industry needs creative and innovative solutions to form a solid financial foundation for our industry to grow and flourish. Some of the ways that this may be met would be through direct loans to complete new capacity that is on the drawing boards today. This new capacity again is different from the capacity that came into the marketplace when it was an emerging market. This capacity is commercial

size and large scale, utilizing modern production technology that will give it more efficient production and manufacturing cost and allow us to be more competitive in the marketplace.

Loan guarantees may be another option. Long term low interest loans or financing would be a way that our industry could be assisted.

And also production loans for working capital for the reasons that I mentioned earlier.

In summary, our industry is very appreciative, and realizes and recognizes, that the bioenergy program for advanced biofuels will be helpful. However our industry needs a bridge for a long term solution. A long term solution that will enable the U.S. biodiesel industry to grow and flourish and meet the demand goals that we have as an industry.

A short term program is not going

to be the solution to our industry's challenges. And with our help and with a long term program, our industry will be poised to help our nation achieve its national energy independence goals.

And with that I thank you for the time to address you today.

MODERATOR ORTIZ: Thank you, Mr. Haer.

Next is Mr. Bob Henry, and following that will be Mr. Bill Horan.

BOB HENRY, AMERICAN SOYBEAN ASSOCIATION

MR. HENRY: Good morning. I'm Bob Henry. I am also a corn and soybean farmer from Robinson, Kansas.

I am here today on behalf of the American Soybean Association, as soybean oil is the primary feedstock used for U.S. biodiesel production, we have a strong interest in the implementation of Section 9005, the bioenergy program for advanced biofuels.

We are submitting full comments in writing, but I would like to address the major issues here today.

We appreciate very much USDA rural development and rural business cooperative services holding this public meeting on the farm bill energy title programs, including the bioenergy program. The ASA and National Biodiesel Board work together to actively support the inclusion of the bioenergy program and the farm bill reauthorization. I believe our organizations were the most active supporters of the program, which is also evident by our presence here today.

The soybean producer organizations played a large role in the development of the U.S. biodiesel industry. We continue to work closely together with our industry partners, and soybean producers and rural communities that we live in have benefitted tremendously from the new markets that have resulted from the biodiesel production.

We are very proud to be contributing to the effort to move our country toward energy independence while boosting the economy in rural America and improving the environment.

While U.S. biodiesel is being produced from a diverse array of feedstocks, and more second generation feedstocks are in development, soybean oil is still used for up to 80 percent of U.S. biodiesel production. This market has helped to reduce the historical surplus level of soybean oil stocks and replace the markets lost as a result of the shift away from transfats.

In addition the increased use of soybean oil for biodiesel has created increased supplies of soybean meal, a valuable food and feed commodity.

As you know the biodiesel industry has grown tremendously over the past several years. Production has increased from two million gallons in 2000 to over 500 million

gallons in 2008.

While the industry has made tremendous strides in a short period, it is not without challenges. Due to feedstock costs, which represent over 80 percent of biodiesel production input costs, many producers have been forced to suspend operations, or operate at below margin.

We are also facing a well publicized investment in biodiesel production on the part of foreign countries such as Argentina, which uses differential export taxes as an export subsidy, and has an artificially lower cost of production.

We believe that the challenges facing the U.S. biodiesel industry can and will be overcome. In the near term feedstock costs have eased recently, and USDA's most recent crop estimates for 2008 project one of the largest soybean crops in history.

Beginning in 2009 there will be an expanded renewable fuel standard. That

includes a specific program for biomass-based diesel and other advanced biofuels.

This RFS for biomass-based diesel begins at 500 million gallons in 2009, and ramps up to one billion gallons in 2012. Longer term we expect to see continued advances in agricultural productivity that will increase yields and efficiency. There could also be developments in second generation feedstocks that could further expand biodiesel production capabilities.

To realize that future potential and meet the objectives of greater U.S. energy independence, rural economic development, and improving the environment, we need this Section 9005 bioenergy program for advanced biofuels to support current domestic biodiesel production.

The bioenergy program should support necessary to make U.S. biodiesel more competitive, and ensure that the new RFS is filled with domestically produced biofuels.

As mentioned previously as an example, Argentina is poised to substantially increase their biodiesel exports. Argentina's use of DDTs provides an effective export subsidy to its biodiesel exports, and this has contributed to the tremendous expansion of Argentine biodiesel capacity production and exports that is underway.

Seed piracy and the lack of intellectual property enforcement has allowed Argentine producers to utilize seed technologies for free while U.S. farmers are paying for these very same technologies.

This seed piracy and lack of intellectual property enforcement allows Argentine soybean and soybean oil to be produced and marketed at an artificially lower cost.

Again the bioenergy program could provide the support necessary to make U.S. biodiesel more competitive, and ensure that the new RFS is filled with domestically

produced biofuels, further our goal of energy independence.

There are several important implementation priorities for the biodiesel industry that we believe will help ensure that the bioenergy program is utilized to its fullest extent, that is consistent with the congressional intent and national goals and energy independence, economic development and a cleaner environment.

Number one, timely implementation. First we urge you to move expeditiously to implement the bioenergy program and provide payments to U.S. biodiesel producers in fiscal year 2009. As you know the program provides $55 million in mandatory funding for fiscal year 2009.

While the development of final program rules and regulations may be lengthy, we urge you to use your authority to ensure that the full $55 million in program funding is delivered to eligible producers as early as

possible in 2009.

Number two, payment on all gallons of eligible biodiesel produced. A top priority for U.S. biodiesel producers is to ensure that the bioenergy program payments are provided on all gallons of biodiesel produced. The previous bioenergy program was focused by statute on increased or incremental production.

Based on extensive comments from biodiesel producers, USDA used its authority to provide some payments on base production. The statutory language for the bioenergy program has changed in this farm bill reauthorization to eliminate the reference to increase production and report language was included that indicates the intent of Congress that the program support existing advanced biofuel production as well as encourage new production.

This principle is important to ensure competitive fairness among biodiesel

producers that have maintained production during the industry's difficult economic times.

If the program were to focus or provide a higher level of payment on increased production, it would provide a competitive advantage to new producers, or those who restart after having suspended production.

Those who have maintained their biodiesel production should not be punished or put at competitive disadvantage. We believe that providing payments on all gallons of biodiesel produced will also have an added benefit in simplifying the program rules.

Again I want to reiterate our hope that the bioenergy program supports biodiesel to the fullest extent possible; that the program be implemented in a timely manner; and that payment be provided on all gallons of eligible U.S. biodiesel produced.

I want to thank you for your consideration on these comments. We look

forward to working with you and your staff to implement the bioenergy program quickly and effectively.

We also appreciate your interest in the long-term rural development and renewable energy answers of our nation, and the economic viability of the biodiesel industry. We stand ready to work with you on any ideas or concerns that you may have to ensure U.S. soybean farmers and U.S. biodiesel producers continue to increase our contribution to renewable energy, energy independence, rural development, and the environmental goals of this nation.

Thank you.

MODERATOR ORTIZ: Thank you, Mr. Henry. Next is Mr. Bill Horan, and following him will be Mr. Jim Conway.

BILL MORAN, REG

MR. MORAN: Good morning. I also want to thank the committee today for your time in allowing us to offer some comments.

I have worked with many of you in the past, and it's a pleasure for me to be back today.

I am also a farmer from northwest Iowa, corn and soybeans, and I always like to start my remarks with an illustrated story or joke. And my wife told me yesterday that that would be totally inappropriate for this meeting. So I said, but Pam, you know, I'd like people to remember me as kind of a wit. And she said, well, you're half way there.

(Laughter.)

You're going to have to keep up. I'm going to end up with the same recommendations to the committee that you've heard from the three previous speakers. But my job here today as I see it is to explain why that's important.

About two years ago four partners and myself started a company, the Biodiesel Group, and we proceeded to build four biodiesel plants in Iowa, 30 million gallon plants, around the state. We went out and

raised $85 million of equity, most of it came from ma and pa checkbooks. People were very interested for all the reasons you've heard this morning in investing in renewable energy, particular biodiesel.

Well, our plants that we built contracting through REG are multi-feedstock plants, and it was - we are very thankful that we did that because we have been surviving on animal fat. Of course we all started out soybean oil, but as the soybean oil prices skyrocketed, we were able to convert to animal fats. We've run all the vegetable oils in our plants; we've run all of the animal fats. So we have the economic numbers on all the feedstocks.

The reason that it is important in this margin environment we have today, for a few cents at a time, is that we are in a business that is going to be converting now back to more and more veg oils as we move into the winter months, because we you know because

of the coal flow properties.

As we do that the margins are going to get tighter and tighter, because of the high veg oil prices. So it's been critical in a low margin business all summer. It's going to get more critical as we go through the winter. We need this program implemented to bridge us into next summer.

We think that the animal fat acceptance has been tremendous. We've even seen animal fats being used now in Europe. So the quality is there. We can produce the fuels. We have multiple feedstock, and we're going to be able to go forward with this bridge legislation to the bright future that Gary Haer and others talked about down the road.

We have coming corn oil from DDGs; we're very excited about that. Virtually every ethanol plant in the Midwest is installing equipment to take the corn oil from the DDGs. That is going to be a great

feedstock for us. It's a difficult feedstock to work with, but we have developed the technology to do it. So we need to bridge to that. The equipment is just now being installed. It will be next year before much of that oil is on the market; so that's why it is very critical.

I want to end my comments with anecdotal evidence. When we started this business we thought people would want to invest in renewable fuels to make some money. And we did when people wrote out their checks, we did hear some of that. But more often than not we heard people say, I'm writing this check out of our savings account because I want to lessen our dependence on foreign oil. This is money that is going to stay in the United States.

And I'm very pro-military. I'm an ex-Marine, and a Vietnam veteran. But we had one lady write out a fairly sizeable check. And she said to us, if this check stops one

more flag-draped coffin from coming into this country I'm happy. I don't care if I make a dime on renewable fuels.

So my point is, the renewable fuel business is much bigger than the economics, and environmental benefits, the rural development; all of those things are great. But the American people understand that the renewable fuel industry is much bigger and much more important than that.

And so that's why I think that the work that you are doing here today, and the implementation of this legislation, is one of the greatest things we can do for our country.

Thank you.

MODERATOR ORTIZ: Thank you, Mr. Horan.

Next is Mr. Jim Conway, and following Mr. Conway will be Mr. Race Miner.

JIM CONWAY, GRIFFEN INDUSTRIES

MR. CONWAY: Good morning. Biofuels are a very important segment of any

future energy policy of the United States, so I appreciate your interest, Under Secretary Dorr and the entire panel, to discuss the benefits that renewable energy produced basically by rural America can have for our entire country, and how to best implement the new energy program passed by the 110th Congress, and I am particularly interested in Section 9005 of the farm bill.

As I said, I am Jim Conway. I am vice president of sales and marketing for Griffen Industries. And currently I also serve as the secretary of the National Biodiesel Board.

Griffen Industries is a family-owned company, located in Northern Kentucky, that has been in business for over 65 years. We currently have over 1,400 employees that operate 23 plants in 15 states. Mostly in rural communities like Dublin, Georgia; Butler in Russelville, Kentucky; Bastrop, Texas, and Hampton, Florida, to name a few.

All of our operations recycle food waste. We do collection and processing of bakery waste, collection and processing of waste cooking oil from restaurants. And last year we processed over one million tons of food waste that might have ordinarily gone to landfills.

In addition since 1998 we have operated a biodiesel production plant full-time. In fact we were the fourth biodiesel production plant opened in the United States.

The head of the Griffen family, back in the early `90s, had a vision of how important biofuels would be to the long term energy security of our country. He invested the family money in building a plant to produce biodiesel, which at that time was a product very few people had even heard of.

During those early years of production, our company operated this plant at an economic loss. But we were committed to the concept of renewable fuels, and dedicated

ourselves to persevering and in maintaining our production.

And I might say that part of that production went to our own fleet of over 600 power truck units that we operate everyday,.

The farm bill of 2002 which created the first Commodity Credit Corporation's bioenergy program was a valuable asset in our efforts to continue production, and to see our industry grow to the point where today there are over 170 production plants in existence.

I believe the bioenergy program was indeed a spring board to this story of significant growth.

I'm encouraged that Congress had the foresight to renew this program with the new farm bill. I'm also thankful that Congress had the wisdom to give USDA the direction to formulate the rules and to administer this program.

Now there are some elements of the

old program that I feel need to be addressed to make it even more relevant effective in supporting continued development of advanced biofuels of which biodiesel is perhaps the leading producer.

I would encourage the department to formulate a payment plan that treats and pays all gallons equally. I emphasize gallons produced as opposed to pounds of feedstock used as a simpler and more effective program.

The biodiesel industry must have equal treatment of all produced gallons to ensure fair and sustained growth of both the industry and all of its participants. As you've heard higher feedstock prices have affected all producers equally. And the program, this program, is designed to offer some relief from those costs.

And while we want to encourage new and expanded production, we cannot exclude older and more established producers from this type of assistance. By treating all

production equally, the program will ensure the optimum return that the program was designed, to the energy consuming public.

I would also encourage the department to ensure that the entire funded amount, $55 million for 2009, be fully disbursed to advanced biofuels industries. If the supplemental $25 million is funded, it too should be fully disbursed again on gallons produced.

And hopefully these funds will be made available for gallons produced beginning October 1st of this year, or at least retroactive to that date if at all possible.

Contrary to the early formats contained in the old bioenergy program, I also think it is important that all feedstocks be treated equally with the new program. As production has increased, and as further increases are envisioned, it is paramount that all feedstocks capable of producing quality biodiesel should be utilized. The cost of

various feedstocks are closely related. As one goes up in price, they all tend to follow.

All producers should be afforded the opportunity to access the feedstocks which are the most favorably logistically available to them, without regard to how they may be treated by this program.

Uniformity of treatment of all feedstocks is imperative to the continued success of this important program.

Again, I wish to thank Under Secretary Dorr and the entire panel for your time today, and for allowing me to share these brief comments with you. I know that your task is a huge one, but I am confident that you will produce a program that is both fair to all producers, and is effective in promoting energy security for the American public.

I thank you. I will be submitting written comments to follow these up, and if there are any I would be happy to answer any

questions.

Thank you.

MODERATOR ORTIZ: Thank you, Mr. Conway.

Up next will be Mr. Race Miner, which will get us very very close to the noon hour, and we may not have another speaker, and we'll be breaking for lunch, and I'll have a few comments before we go. So.

MR. MINER: Is that a hint to be brief?

MODERATOR ORTIZ: No, do what you got to do.

MR. MINER: I will be anyway.

MODERATOR ORTIZ: Ten minutes, that's all you've got.

MR. MINER: I don't need that much time.

RACE MINER, KEYSTONE BIOFUELS, INC.

MR. MINER: Again, thank you for allowing me to be here. It is a privilege.

My name is Race Miner. I'm the

president, CEO and founding partner of Keystone Biofuels.

Keystone Biofuels is a biodiesel producer located in south central Pennsylvania. We are about 2-1/2 hours north of Washington, D.C.

We started producing biodiesel from soybean oil in March of 2006, and since that time as everybody has testified here earlier, soybean stock prices have gone from 18 cents a pound at that time to over 70 cents a pound now. We of course have started looking for other feedstocks, and we were successful in that endeavor. We have a multi-feedstock facility. We have the ability to produce biodiesel from a range of feedstocks, and we have successfully done that, going from soybean oil to chicken fat to pork fat to now most recently to used cooking oil.

We have grown our facility from initially a half a million gallon plant per year to now being able to produce 20 million

gallons of biodiesel a year. And part of that was with the help of the Rural Development community, and their loan guarantee program that we took advantage of in 2007.

Starting production in 2006, we weren't really able to take advantage of the existing 2002 farm bill, CCC program. But it still played a pivotal role in our decision-making process as to whether or not to build a plant. Unfortunately, we just weren't able to take advantage of it because of construction delays, and that particular program exhausted.

We believe very strongly that the CCC program of the 2002 farm bill as well as the one now proposed in the 2008 farm bill, as well as the federal excise tax credits and any local and state incentives that you are able to receive are investments, very sound investments, in what I see as a post-petroleum era, and the place that we are headed, and the place that we need to be investing our money.

We think it's a very viable investment, and we applaud rural development and USDA for their efforts.

We would just like to in closing reiterate those points that have been made by my colleagues before me, which is, the CCC bioenergy advanced biofuels program, if it is to be implemented, we ask for swift timely implementation, on a per gallon basis, per gallon produced domestically, U.S. biodiesel refiners, regardless of feedstock. We think that program would be easily implemented. The most efficient and effective way to implement it, not only from the department's standpoint, but also from a producer's standpoint as well.

And we have - or actually I have submitted a letter that highlights all these things as well.

So thank you all very much for your time.

MODERATOR ORTIZ: All right, great. I think we have Mr. J.C. Bell - are you back

there, Mr. Bell? We've got some extra time, Mr. Bell. But you have 10 minutes.

J.C. BELL, BELL BIOENERGY

MR. BELL: Thank you. I'm J.C. Bell with Bell Bioenergy. I am grateful for the opportunity to be here to speak to tell you about our company and our concerns in the new farm bill.

Bell Bioenergy is in the development process of manufacturing long chain hydrocarbons from biomass. We use a bacterial process to break down the biomass directly into hydrocarbon.

The hydrocarbon molecules are commonly referred to as petroleum, or oil. We are not talking a biodiesel; it is actually oil.

We are to the step now of building seven production facilities that are going on six Army bases, and one Defense energy support center installation.

During the next year we will be

working through Defense energy to certify that all of the products that we are producing are drop-in equivalents, and meet all ASTM standards for hydrocarbon fuels, whether it be gasoline, diesel, jet fuel, or home heating oil.

In the new farm bill what concerns us the definitions of a biofuel. We are chemically and from a molecular standpoint indistinguishable from fossil fuel, but we manufacture it from renewable biomass. We are to the point, one year from now, a year in October, we will begin the construction of full scale production facilities after all of our products have been certified.

In 18 months we will be to the point of manufacturing 500,000 barrels of what we call bio-crude per day, each of those barrels being 42 gallons, and go from there. In two, two and a half years, we'll be up to a million barrels a day.

We want to make sure that the

funding is there for the assistance to build those plants to make sure that farmers, cities, and other people have the capability to supply the biomass necessary. We need that feedstock.

Now a great deal of what we are using now in the demonstration facilities are waste components, whether it be corn stover or straw as I've heard, or city inert biomass, instead of going to a landfill, we take that inert biomass and turn it into oil.

We are very concerned that everyone be treated exactly the same. If there are credits to be issued for biodiesel or ethanol then our production should be covered in that.

We are looking at a very sizeable development, and are currently in the process of creating those plants.

The other thing that concerns us is the ability to help farmers with long term planning on additional biomass that they can

grow specifically for fuels, whether it be biodiesel or a product like ours.

The farmers out West, the farmers in south Georgia where we are from, need that additional income. And we can't have them making a decision, do I grow and energy crop or do I grow a food crop. WE have to plan for both.

And I thank you for the opportunity to speak, and I hope you have a good lunch.

MODERATOR ORTIZ: Thank you, Mr. Bell.

We will stop here so we can break for lunch. When we come back we'll hear from Mr. Mark Rokala. He's the last speaker under Section 9005, bioenergy program for advanced biofuels. And then we'll continue on with the rest of the agenda.

We will be starting promptly at 1:00 o'clock so make sure that you are back here. I want to reintroduce the panel so we

can properly thank them with our applause for their time.

And here today of course we had Under Secretary of Rural Development Thomas Dorr. But sitting in for him is Douglas Faulkner, who is deputy under secretary for rural development.

We also have Joseph Glauber, chief economist from the office of the chief economist; Gary Mast, deputy under secretary, natural resources, and environment; Floyd Gaibler, deputy under secretary, farm and foreign services; Rob Hedberg, special adviser to research in education and economics; and Karl Simon, director of compliance and innovative strategies division, office of transportation and air quality environmental protection agency, and we also had John Mizroch, a principal deputy assistant secretary, office of energy efficiency and renewable energy, Department of Energy.

Thank you so much, panel. And

we'll be breaking for lunch a little early, but please be back at 1:00. We'll start promptly at 1:00.

(Applause.)

(Whereupon at 11:55 a.m. the proceeding in the above-entitled matter went off the record and resumed at 1:06 p.m.)

MODERATOR ORTIZ: Good afternoon, everyone. We are going to continue with the public meeting.

We have to close out a couple of things. We have the panel back. Just to make sure everyone knows who the panel is, we have Doug Faulkner, Deputy Undersecretary for Rural Development. We have Joseph Glauber, chief economist, Office of the Chief Economist; Gary Mast, Deputy Under Secretary, Natural Resources, Environment; Floyd Gabler, Deputy Under Secretary, Farm and Foreign Services. We've got Rob Hedberg, special adviser, research, education and economics, and I

believe later we might have Karl Simon, director of compliance and innovative strategies division; and possibly John Mizroch, principal deputy assistant secretary, Office of Energy Efficiency and Renewable Energy, Department of Energy.

So that is our panel for this afternoon. We are going to have Mark Rokala. He is the last presenter for Section 9005, bioenergy program for advanced biofuels. And then we'll be moving on into Section 9007, rural energy for America program. And Mr. Craig Metz will be the first presenter right after Mark Rokala.

If the presenters would please speak into the mike so that all the audience can see. And this is again being taped, so that they can pick up what you have to say and present here.

So we'll start right away. Mr. Rokala.

MARK ROKALA, NATIONAL SORGHUM PRODUCERS

MR. ROKALA: Thank you.

First I'd like to thank Rural Development for the opportunity to provide comments on the expanding rural renewable energy opportunities provided in the new authorities of the energy title of the Food Conservation and Energy Act of 2008.

My name is Mark Rokala, and I'm here on behalf of the National Sorghum Producers.

I'd like to provide some background on sorghum's role as an advanced biofuels feedstock, before I provide some comments on Section 9005, the energy program - the bioenergy program for advanced biofuels, and Section 9011, the biomass crop assistance program.

Grain sorghum is known as a water sipping crop, as it uses one-third less water than other starch sources. More importantly, the plant goes dormant in times of drought rather than dying as most other annuals and

perennial plants do. When it does rain the plant reinvigorates itself and starts growing again.

Because of these drought traits, sorghum is grown in the semi-arid regions of the United States, from South Dakota to Texas, and west of the Mississippi to California.

Also there has been a recent Texas A&M study, research, that shows that foraged sorghums produce the same amount of silage using one-third to one-half the amount of water as corn silage.

The sorghum industry is very excited about the fact that sorghum is known as a water-sipping crop, and we believe that that characteristic and trait expands that ethanol belt outside the traditional ethanol belt, and also expands the cellulosic ethanol belt.

As I mentioned the sorghum industry is very excited by its role as a feedstock. Grain sorghum produces the same

amount of ethanol as a bushel of corn. Currently almost a quarter of sorghum is used, processed by an ethanol plant in the sorghum belt.

Next, sweet sorghum, a close cousin of grain sorghum, is used in India, Brazil, and the Philippines as a feedstock in ethanol production. Sweet sorghum's sugar content is almost identical to sugar cane. And many of you may know sweet sorghum as sorghum molasses, the old biscuits molasses.

Finally forage sorghums has a brown midrib, which is a lower percentage of lignin per ton, which means it can be processed into ethanol faster; it's easier to break down than other cellulosic feedstocks.

Also, brown midrib foraged sorghums is high in cellulose, which is an important feedstock needed by the cellulosic plants, processing plants, and yields a higher level of sorghum - or ethanol per ton.

Also just to give you a scope of

the scale of the sorghum industry, there are eight million acres of grain sorghum and foraged sorghums planted in the United States. There is a significantly smaller sweet sorghum population that is raised in Kentucky and Tennessee.

About eight million acres, the increase in the corn crop this year was 10 million new acres, so that gives you kind of a concept of the size of the sorghum industry.

Related to the energy title comments, the sorghum industry also worked very hard to expand the scope of the energy title in the farm bill. We worked with our champions up on the Hill to make sure sorghum was included and would be eligible for programs like 9005 and 9011.

First we encourage USDA and DOE to similar chronologies in their biofuels programs. As they implement these programs, we want to make sure that there is not a lot of confusion between the two programs. And as

a producer group representing a potential feedstock, we ask that the energy title be implemented in a timely manner.

We understand some of the constraints that USDA and DOE are working with. However if you look at the importance of the cellulosic industry and the starch-based industry as providing domestically produced transportation fuel, we hope we can get this done in a timely manner, and get these programs working quickly.

Regarding Section 9005, the bioenergy program for advanced biofuels, the sorghum industry encourages USDA to include all advanced biofuel feedstocks in the program. As mentioned earlier, we also worked with our colleagues up on the Hill to move that program forward.

A majority of the sorghum is produced in states that also produce oil, and the ethanol industry has only recently started to find sorghum as a starch base. Including

sorghum in the program will help expand the ethanol industry, outside the traditional corn belt, and further develop the ethanol industry in the sorghum belt. And sorghum right now is the second largest feedstock, in terms of starch-based feedstock.

Also the sorghum industry is well positioned to utilize Section 9011. Abengoa Bioenergy is building a commercial scale cellulosic demonstration belt in the heart of the sorghum belt, and they are focusing on using crop residues in that area. There are about 600,000 acres of CRP land. There is about 300,000 acres of dry land wheat. There is about 250-300,000 acres of dry land sorghum, and about 100,000 of corn.

Obviously what USDA does in terms of moving this program forward has a huge impact on land use in that area. We encourage USDA to look at ways to make land that is coming out of CRP eligible, make it work so that they can be used to produce a biomass

feedstock.

As you look at that plant, they are needing 100 truck loads of bone dry material a day. That is a lot of material from the sorghum standpoint. They are very interested in making sure there is the resource, and the research and technology to make sure that the harvesting, storage, transportation of biomass works well.

In conclusion, at a recent USDA research education economics conference, highlighting sorghum's biofuel potential, Chinese officials discussed with the sorghum industry their desire to use sorghum as a feedstock for their biofuels industry. The Chinese are very excited about the drought and heat tolerance of sorghum. We hope the USDA recognizes these same traits as the Chinese, and works to include all sorghums in the energy title programs.

Thank you.

MODERATOR ORTIZ: Thank you, Mr.

Rokala. That closes out the Section 9005 bioenergy program for advanced biofuels.

SECTION 9007, RURAL ENERGY FOR AMERICA PROGRAM

MODERATOR ORTIZ: The next presenters will be addressing Section 9007, Rural Energy for America Program. Mr. Karl Metz.

MR. METZ: Think of the baseball team, the Mets.

MODERATOR ORTIZ: Okay, Metz. Mr. Metz, and after Mr. Metz will follow Ms. Karen Edwards. Thank you.

CRAIG METZ, ENSAVE, INC.

MR. METZ: Thank you very much. And I do have a presentation.

Well, first I want to say thank you very much to Rural Development, and also to the distinguished panel, for being present, and giving Ensave the opportunity to comment.

My name is Craig Metz. I'm the CEO of Ensave. And we have a history of

partnering or working with USDA on the energy title in the farm bill both in formulating policy and to implement program goals in the field.

Areas we have assisted USDA in energy issues include in 2003 Ensave partnered with MacTech Federal Programs to assist USDA with establishing guidelines, regulations, and a delivery model for the loan portion within the energy title of the 2002 farm bill.

Ensave also has recently worked with NRCS to develop the standards for the audits, and working through the American Society of Agricultural and Biological Engineers to be able to help those audit standards be developed.

We also are part of the committee working with ASABE to be able to edit those standards, and to be able to work together.

We also have worked with Rural Development and NRCS to be able to communicate a little better between the two agencies when

we wanted that NRCS wanted energy as a stated purpose, and we are looking into the farm energy audits, that we wanted to make sure that they were communicating with rural development, to be able to make sure that the two programs met or if there were any differences, to make sure that those differences were coordinated and addressed.

We also have made several comments presenting information about agriculture energy efficiency to USDA leaders and with field staff.

We also were invited to speak, by Chief Knight back in 2005, for the energy management dialogue about farm energy audits, and the availability of farm energy auditors throughout the United States.

I'd like to just set the table here a little bit, that Ensave, the reason why we are here, we are not an eligible entity to do farm energy audits, although we have had this long history, we and also working with

energy efficiency programs, and doing over 1,500 audits throughout the United States, we are not an eligible entity.

And Ensave has recognized that there has been a need, in order to be able to get qualified energy auditors, data collectors, out in the field. And what we did is, we partnered with the National Association of Resource Conservation Development Councils as well as the National Association of Conservation Districts, and we have begun the training of those folks to be able to be data collectors in the field to be able to do the energy audits.

And in this partnership and the delivery of this infrastructure, which is well underway, the training has been completed in Alabama, Maryland, Oregon and Texas. And Ensave will be providing training in the following states in the coming months: Montana, Colorado, New Jersey, Florida, Vermont, Virginia, California and Arkansas.

Four of those states will be through conservation innovation grants; one will be through the state energy office; and two will be through other funding opportunities.

We also have a statewide program in Texas where, through the office which is operated by the Texas comptroller of public accounts, and the state energy conservation office, this program will support REAP by generating more energy audits, and therefore more REAP applicants from a state which historically has had low participation in rural development energy programs.

In addition to providing farm energy audit data collection training, performing energy audits and promoting the program, Ensave worked to ensure Texas rural development could have multiple opportunities to promote REAP and provide grant application training to interested farms, rural small businesses, and grant packaging consultants.

Within the title itself, there is a section at the bottom of this particular title, D, that states that any similar entity determined by the Secretary may be able to conduct audits. And what we are asking for is that language be added to the rulemaking that reads that a corporation or rural small business that has demonstrated the ability to conduct agricultural energy audits be added.

Ensave has developed an infrastructure. We have developed this infrastructure through this process, and hopefully those states that have not had a lot of applications will be participating in this program.

We also have over 17 years of experience in the agriculture energy field. Ensave has also conducted work with several of our program partners, but if we are not - if this language is not added to the rule, then we will have to partner with an entity that perhaps has the authority or the ability to do

the audits - or I should say, has the authority to do the audits, but maybe not the ability, which would add another layer of what we would consider bureaucracy, or an inefficient process.

Ensave has shared its knowledge with several agencies of USDA in regards to energy issues, and we would like to continue to do so. And Ensave, as Under Secretary Dorr had said in the beginning about the quiver analogy, that we believe that we are an arrow that fits well within that quiver, and we believe that as a leader in agricultural energy efficiency that we certainly should be able to do our work.

And that is it. Thank you.

MODERATOR ORTIZ: Thank you, Mr. Metz.

Next presenter is Ms. Karen Edwards, and Mr. Charles Kubert will follow Ms. Edwards.

KAREN EDWARDS, BIOBASED PRODUCTS COALITION

MS. EDWARDS: Thank you.

I appreciate the opportunity to testify on behalf of the Biobased Products Coalition. This coalition was formed last year with a group of small, medium and large-sized companies all producing biobased products in the United States, as well as allied organizations primarily representing the feedstocks that go into biobased products.

All of these groups care about the biobased provisions that were first created in the 2002 energy title of the farm bill, and work to enhance those provisions in the new farm bill.

First I would like to thank in particular Under Secretary Dorr who has been a long time champion of biobased products, and he gets it about the benefits that they do, and has supported USDA's implementation of the bio-preferred program, that now the new farm bill has carried further the vision for biobased products at the federal level to

encourage markets for biobased products throughout the nation, and has even renamed the program of course to the biobased markets program.

We see that as a real positive vision, because in fact Midwest governors, counties across this country, and the private sector are recognizing the benefits of biobased products ranging from carpet backing to spray-foam insulation to absorbents and many, many more for their potential to what we call the three Es, benefit the environment, energy security, and of course, the rural economy.

And we thank Dr. Glauber, your group, for providing an assessment in the U.S. biobased products market potential and projections through 2025.

Biobased products manufacturers gathered in July in Washington, D.C, and we appreciated that Agricultural Secretary Schafer came and met, and as a business

entrepreneur himself he also gets it about the challenges and the opportunities that face these biobased products industries as they try to market into a really traditional marketplace oftentimes.

So they see great potential, but they also see great obstacles. And that's where we have three points that we would like to communicate about how USDA rural development can assist the biobased products industry in this country.

Number one, please continue, and thank you for your past, the support that you have provided to the overall USDA efforts to implement the general bio-preferred program. USDA Rural Development has supported that effort, and in particular biobased products companies need that label. They need the whole program implemented soon, and they really need that label, because it is key to their marketing efforts to all sectors, not only just to the government but to the private

sector as well.

So if USDA can move forward on that, you can continue to be supportive, that is greatly appreciated.

Number two, I will relate to you a story of one of our biobased products manufacturers just this week. This is a small business in a rural area that is economically facing a lot of hardships. And this little company has been a startup, and they have created jobs.

Just this week they contacted their state rural development office and said, hey, we're a small business. We're producing this product. It's got great environmental benefits. Is there any program within rural development that would help us in our company including our marketing efforts? And the response to them was, wow, it sounds like you have a great product. But unfortunately, your small business doesn't really fit into any of our existing programs.

So therefore the biobased companies would benefit from a carve out or something that specifically assists them in participating in USDA rural development programs so they can individually and collectively market and do other marketing efforts that will help their industry.

Number three, the biobased companies can play a great role in the rural energy for America REAP program and similar efforts. There are biobased spray foam insulations; there are roofing products that can greatly contribute to the energy efficiency of existing or retrofitted facilities. Some of the biobased products can fit into ways to energy.

So we would encourage you to look for ways to encourage the people who do get REAP program funds and other types of programs like that to use biobased products in their overall effort.

And because, let me just conclude

and say there are so many biobased products out there, already USDA has designated 33 biobased product categories that they estimate cover 2,741 different products. And there are many more to be designated, and there are many more products coming online.

Therefore, we look forward to working with you, because with so many different products it's hard to specify any one program. But we would look forward to working with you as you can identify opportunities to advance this young industry that is competing against some tough traditional products.

Thank you.

MODERATOR ORTIZ: Thank you, Ms. Edwards.

Next up to present is Mr. Charles Kubert. And following Mr. Kubert will be Ms. Martha Noble.

CHARLES KUBERT, ENVIRONMENTAL LAW AND POLICY CENTER

MR. KUBERT: Thanks. I feel like I'm coming up for the high school play from the back of the room here.

I'm Charley Kubert. I'm with the Environmental Law and Policy Center in Chicago.

The Environmental Law and Policy Center is the largest energy advocacy group in the Midwest Great Plains area. We are based in Chicago, with satellite offices in Des Moines, Sioux Falls, and now Jamestown, North Dakota.

ELPC has been active in the design, passage and implementation of the energy title in both the 2002 and the 2008 farm bills, beginning in about the year 2000. And since that time we have built a national ag energy network, composed of producer groups, rural development organizations, sustainable ag advocates, and many others. We've got several thousand people on our farm bill interest list to keep them informed of

what's going on with farm bill energy issues.

And we've developed a close partnership with USDA, some would argue perhaps too close, in the implementation of the Section 9006, now known as the REAP implementation. In fact, I think we actually coined the term, rural energy for America program, in a brainstorming session a year or two ago.

Can we go back one, please? Forward.

To give you a sense of our close partnership, several of you may have seen the brochure on the left. This is an American success story. What we did in this publication was, we used it primarily to highlight some of the early successes out of the Section 9006 program, projects that were successful, projects that were saving farmers money through energy efficiency, or generating them revenue through renewable energy projects.

We've circulated several thousand copies of this publication. It's gone everywhere from folks on the Hill to potential applicants to the program to give them some sense of how the program has been used in the past.

We've also developed a very - fairly widely tracked website, farmenergy.org. This has provided both important resources for potential applicants to the REAP program, as well as trying to keep people up to speed both in farm energy policy issues, and ag energy events around the country.

The bulk of my remarks is going to be primarily on the Section 9007 program, which has been enormously successful by any account. It's funded almost 2,000 projects since its inception in 2003 in all 50 states, and we are pleased and excited that the funding is going up from what had been $23 million a year in the first four years of the program to almost $50-60 million over the next

four years.

I am also going to speak as time allows on the Section 9011 program, the BCAP program, which again I think is a tremendous opportunity to fund pilot projects to grow, transport, and process and utilize biomass.

And what is exciting about that is at least at this point there is no statutory funding cap on the program.

The guiding principles as we see them for the REAP program, one is really to identify opportunities to save and produce energy, through energy technical assistance. Now energy technical assistance was something that was included in the 2002 farm bill as a separate section but was never actually funded. This time we've got some funding for the program.

Second is really to improve the quality of the Section 9007 applicants through feasibility study support. This is often for many renewable energy projects, this is often

the hardest money to come by. And setting aside 10 percent of the money for a feasibility study will help farmers get, and rural small businesses get through those initial feasibility study thresholds.

And third, I think it's important that the REAP program going forward supports projects of all sizes, technologies, and markets throughout the country. Although we have had projects in all 50 states, as you will see a little bit later, we have had enormous concentration of REAP funding in just two or three states, and we'd like to see that spread out a little bit more.

In terms of specific recommendations on the energy technical assistance program, we want this to possibly include infield technical assistance for farms that are trying to figure out ways to reduce both diesel and fertilizer use in the field, either through the implementation of precision agriculture or other technologies.

We think it's important that the grantees of this program deliver both direct audit services such as Ensave provides as well as workshops and training to essentially spread the word on the opportunities for energy efficiency.

It's important, this is a rural development program, it's important that the energy technical assistance support rural small businesses as well as farms and agricultural-related businesses.

We believe the program should support multi-year grants to ensure local program continuity and success. One-year grants are really not going to do it for a program that is trying to sow the seeds of energy efficiency over a broad group of eligible farmers.

Finally we think the grant eligibility should extend to other nonprofits as long as they have access to energy professionals.

And last we think that the preference for this grant program should go toward states without existing ag energy technical assistance programs, to essentially bring them up to the speed of some of the states that have had successful state funded or university funded programs.

In terms of feasibility studies, again as I've emphasized, good feasibility studies make for good projects, and they derail bad projects before they get too far along. The REAP statute calls for 10 percent of the money set aside for these studies. We believe that the consultants that people use should be independent of the technology vendors. The feasibility study grants should not affect eligibility for 9007 project grants. In other words, although it's nice for someone to have had a 9007 feasibility study grant, it's not essential for applying or shouldn't give them preference in getting 9007 capital grants.

And finally we believe that the applicant cost share on this program should be about 50 percent, similar to the value-added producer grant program.

In terms of the actual REAP grants, as you can see by this bar chart, what I mentioned before is that a huge share of the Section 9006 funding in the last five years has been concentrated in just a few states. Over 45 percent of the money has gone to Minnesota and Iowa. While we think that those two states have done tremendous work and outreach on this program, we would like to see more of the work - we'd like to see a lot of the money spread around much more around the country.

In addition the REAP legislation now calls for 20 percent of all funds set aside for grants under $20,000. As you can see from this graph, from the next graph, over the first four years of the program, less than 7 percent of the dollars have gone to projects

of that size.

So USDA is going to have to make some major changes in order to ramp that number up, or to try to reach the goal of 20 percent funding there.

Reaching this goal is going to require the energy technical assistance program that the legislation provides for, far expanded USDA outreach, and far more streamlined simplified applications.

I know that the agency has done tremendous work the last couple of years to make this program accessible to smaller applicants. And it's showing. In the last year, 2008, 14 percent of the money went to projects of $20,000 or less.

And finally reduced emphasis on loan guarantees, and increased emphasis by USDA on grant outreach.

I want to touch for a moment on the loan guarantee issue, because this really seems to have been a sticking point with USDA.

The agency has placed increased emphasis on loan guarantees since 2006. In fact, over 50 percent of the funds have been set aside for loan guarantees in the program.

And USDA has also promised priority review of loan guarantees, or loan guarantee grant combination applications.

The results, if you see what's happening in practice, they have fallen short of USDA expectations. Small projects in certain states have essentially - have requested loan guarantees not because they need a loan guarantee, but because it simply boosts their chances of getting a grant.

And in a sense loan guarantees are being forced on applicants who don't need them. And yet the results are that despite the 50 percent set aside, there's only been $9 million in loan guarantee awards versus the $200 million set aside that USDA put for this.

Let me switch quickly in my remaining time to the biomass crop assistance

program. Again this is a critical program for priming the biomass supply chain.

The principals that we see here are that we want to see USDA and this program apply sustainability and rural economic development criteria to energy crop production; provide a safety net to farmers willing to transition to energy crops; and encourage visible working models for energy crop and biomass production and utilization.

In terms of the environmental criteria, the managers report really emphasized these criteria in selecting projects, particularly the wildlife issues. It's important that the agencies incorporate wildlife water quality and carbon sequestration measures selecting the particular projects.

We want to see the project not be limited to native plantings, and we would like to see at least some projects awarded to high yield noninvasive energy crops such as

miscanthus.

Finally I think it's important that the program support both geographic and project size diversity. Size doesn't matter here; there are plenty of applications and plenty of users of biomass who are small and local, and both large and small projects should be encouraged.

Other issues I just want to mention just very briefly. You asked for comments on what kind of guarantee the biomass conversion facility should have who purchase the energy contract. Simply a purchase contract or a letter of intent should be adequate.

In terms of establishment cost - in terms of the three types of payments under this program, we believe that all these should be independent of one another. In other words if one is awarded, one should be able to get a harvest transfer payment or an annual payment without necessarily getting

establishment cost payments.

And finally, and I want to emphasize this again, don't bias the program against small projects, either on the grower's side or on the biomass conversion facility side. Ramping scale up too quickly might not be the best approach. Smaller projects increase innovation and increase the diversity of types of applications, and allows efforts in multiple approaches and technologies, and allows everything from large coal-fired power plants to small combined heat and power facilities to ethanol plants to cellulosic ethanol facilities to take advantage of this program.

MODERATOR ORTIZ: Thank you, Mr. Kubert.

MR. KUBERT: Thank you very much.

MODERATOR ORTIZ: Following Mr. Kubert is Ms. Martha Noble, and following Ms. Noble will be Mr. Bob Gray.

MARTHA NOBLE, SUSTAINABLE AGRICULTURE

COALITION

MS. NOBLE: Good afternoon, and thank you for the opportunity for me to present the recommendation of the Sustainable Agriculture Coalition on the new authorities of the 2008 farm bill for expanding rural renewable energy opportunities.

And also thank you for your patience and your stamina, as we go into the afternoon here. I admire it very much.

The coalition represents 33 family farm rural development conservation and environmental organizations from around the U.S. that share commitment to federal policy reform which promotes sustainable agriculture, and healthy vibrant rural communities.

I will also be submitting written remarks, and I'm going to keep these fairly brief.

In the opening remarks here, I would like to just focus on some general principles that were developed by the

Sustainable Agriculture Coalition shortly after the enactment of the 2002 farm bill.

It was clear that the federal government in that bill was making a commitment to energy, bioenergy from agricultural feedstocks, and energy generation based n farms and rural communities.

We were concerned both with the 2002 farm bill, but then with the huge ramp up from the renewable fuel standard of the initial focus being almost solely on corn ethanol, particularly when it actually has resulted in some operations losing diversity, going to continuous corn; and a system that has high inputs of fertilizers and pesticides; and also in terms of the fossil fuel breakpoints isn't as good as some other systems in these next generations which we're really talking about today could be.

And we also wanted to ensure that rural communities would share in the benefits of agriculturally-based bioenergy and not

simply be mined for their resources, for their agricultural resources.

In our position paper we have a number of general principles, and I just want to emphasize for this talk three of them that I think apply to almost all the bioenergy programs in the farm bill. And then I'll just talk about the two, the 9007 and the 9011 sections.

The first point for us is that the immediate priority of any energy policy is to manage current energy use through conservation in energy efficiency. Reducing unnecessary use of energy is commonsense; it saves money; it helps the environment. And likewise numerous studies have shown that improving the efficiency with which energy is used is the cheapest and quickest energy source.

And we do need a lot of work on energy efficiency and energy conservation on our farms and in our rural communities. If we've seen the distress of farmers who have

been looking at what we are going to probably see as a continuing trajectory of high energy prices with spikes, energy price spikes along the way.

A second major principle for us is that the development of new energy sources should not only be ecologically sound but socially responsible, and locally managed when possible. A farm-based sustainable energy system has great potential to be naturally responsive to the economic needs of rural communities and family farmers.

The public good of a farm-based energy system must meet the same criteria of a sustainable agricultural system: economically viable; locally managed; ecologically sound; and socially responsible. The appropriate scale of new renewable energy systems and their impacts on rural communities should be considered.

A third issue goes to the environmental and conservation sustainability.

Biomass energy crops should be grown and harvested in a way that embodies best stewardship practices to maintain or improve air, water and soil quality.

In looking at specific criteria for judging sustainable biomass energy production it should include the impact both on water quality as well as on water quantity.

Water should not be consumed beyond replacement levels.

The impact on soil quality is extremely important, and I don't think really has had enough attention in this vision or this ramp up of all the energy, all the bioenergy we are going to get out of our agricultural systems.

These systems will be renewable systems as long as the underlying resources in them are being maintained and protected, and that they are healthy systems. Otherwise our renewable energy will not be renewable in the long run.

We also have to consider the effects on wildlife. Harmful effects on wildlife should be held to a minimum with sound and effective wildlife conservation planning.

Air quality is always an issue of importance, and we are looking to some of these systems to help reduce air pollutants, particulate matter, and of course for carbon sequestration. Those are important issues.

The net energy balance is also an issue, and that should be measured over a full lifecycle analysis. When we are looking at what we want to proceed with in terms of agriculturally-based energy.

Diversity is also an issue. Biomass energy production must avoid the monoculture trends of industrial agriculture. Crop rotations must be incorporated at the landscape scale in order to ensure sufficient diversity of species to attain soil quality, wildlife habitat and ecosystem health. ;

With the increase pressure of biomass energy production on the nation's agricultural resources and its natural resources, it is well worth the time, the energy and the forethought of USDA to develop biomass energy systems that can improve the environmental performance of agriculture and increase the health and economic vibrancy of rural communities.

Now I want to turn briefly to a couple of recommendations for specific programs, first the Section 9007 rural energy for America program.

With regards to the energy audits and the technical assistance, SAC was very glad to see the farm bill provision for energy audits retained and combined with the renewable energy development to the technical assistance portion in the REAP program.

The audits were sadly neglected in the implementation of the 2002 farm bill, and we would like them to be a high priority for

the 2008 farm bill.

We also have, going to the second point, we are also concerned about the eligible entities. The coalition represents a number of nonprofit organizations, and many of our organizations have been working, have a history of working, with farmers and ranchers on energy audits and technical assistance. You will be hearing actually from a representative of one of those organizations next, Bob Gray representing the National Center for Appropriate Technology.

We would like to see the Section 9007 be - any similar entities include private nonprofit to have energy expertise, and to have a track record of working with farmers and ranchers.

We are glad to see the feasibility study grants for energy efficiency improvements and renewable energy systems going to agricultural producers and small business, and we agree with some previous

speakers that there will need to be a fair amount of outreach by rural development on these grants.

And we were also very happy to see the smaller grants, $20,000 or less, with a carve out in this program. And those we do endorse what you have just heard from Charles Kubert with the Environmental Law and Policy Center.

But in addition we would like USDA to consider in this grant program of taking some of the approaches that the sustainable agricultural research and education program has taken in terms of incorporating farmer-to-farmer demonstrations as part of that system. Farmers I think in many cases learn best from other farmers, and from learning what has happened to them, not only successes, but also failures, which can teach a lot of people a lot of things.

So taking that approach, or considering working within the SAIR to help

with that demonstration. They've been doing that for years, for 20 years. They just had their 20th anniversary. And they have been doing it very well.

If it goes to the BCAP program, Section 9011, a few things. We are very interested in the criteria for project selection; we worked very hard on that section during the farm bill development. We think the variety and production approaches and range of eligible crops is one of the most important sections, and should have a high priority.

Avoiding monocultures have geographic diversity in the project, a variety of land and soil types, crops with multiple uses. Things like mixed perennial systems, resource conserving crop rotations, can provide benefits both for the land and the farmers.

We are also concerned about huge monocultures from the perspective of putting

farmers' eggs all in one basket, of essentially tying farmers to enterprises many of which may be new. We think it's best to have economic diversity.

And of course we are interested in the criteria for the impact on soil, water and related resources. This is an extremely important provision, and should be a high priority in project selection.

We also recommend that USDA explore the option of allowing the BCAP project farmers to enroll in EQUIP automatically or if they are eligible the conservation stewardship program. We understand that BCAP is going to be administered through the Farm Service Agency, and so we would also recommend that the Farm Service Agency have the Natural Resources Conservation Service as a consultant on conservation planning and technical assistance. This isn't new. This is part of the conservation reserve program. I'm now

saying it should be done exactly that way, and we'll be giving you our written comments with more ideas on that.

With regards to the annual payments to the farmers, we do not think that those payments should be reduced, or they should be reduced minimally, even if the farmer ends up selling the crops from the project. Farmers need clarity going into these projects, and some incentive that they will have some safety in their economic operation. As you have heard from the biorefineries, these are new projects. They may not work. They may fail. There may be some problems along the way. And if you really want to get farmers to do this on a project and trial basis, I think it's good to give them a little certainty of how they are going to fare.

And finally we have a number of problems with the harvesting and collection. We will give you our references on that, but

there was a study done by agricultural research scientists in late 2007 which said we do not have the economic factors even for corn stover, which is the one we know most about, in terms fo how much residue should be left for soil quality. We know about the erosion; but we don't know about soil quality.

Thank you.

MODERATOR ORTIZ: Thank you, Ms. Noble.

Following, our next presenter is Mr. Bob Gray who will be the last presenter in Section 2007, closing out the rural energy for America program.

And then we'll be moving into Section 9009, rural energy self-sufficiency initiative, with Dr. Ernst Cebert.

Mr. Gray.

BOB GRAY, NATIONAL CENTER FOR APPROPRIATE TECHNOLOGY

MR. GRAY: Thank you very much.

I would like to express my

appreciation to the department for doing this, because it is coming at a critical time. And I have to say to all you gentlemen, you have been very attentive; you have been very diligent in listening to all the presentations, and we really appreciate that.

I am Bob Gray, and I work with the National Center for Appropriate Technology, which is a private nonprofit organization. And I'd like to just digress for just a moment a little bit of history here, because I am a history buff.

NCAT got formed in 1976 as a result of the huge gas lines we saw and the energy problems we saw in those days. And at that time they concentrated their efforts on two areas, doing demonstration projects in solar, wind, geothermal. They even did some biofuels work in those days.

And they also helped homeowners through an 800 toll-free line that they had who were either going to retrofit their homes

or building new homes or getting new furnaces to do energy conservation work, because that was a major emphasis at that time as well.

Interestingly enough, as time went on, NCAT got a lot of calls from farmers asking about energy related issues. And for example they got a number of calls at that time of course over the years in Montana, in Butte, Montana. But they got calls from farmers on energy conservation with water irrigation. And so the idea was that we have an 800 toll-free line for energy use for homes and other kind of demonstration projects for renewable energy. We should do something in agriculture.

And that's how the appropriate technology transfer to rural areas program was formed in the mid-`80s by NCAT, and it has been going on now for almost 21 years.

And this program works out of six different states; has offices not only in Montana, California, Arkansas, Louisiana, Iowa

and Pennsylvania. And it provides information to farmers through a toll-free line, 800 line, through an extensive website, through publications and through workshops; those are sort of the four areas it operates under.

It has a grant, a cooperative agreement with rural business cooperative service, with RBS, and we've had it for a number of years. And I would have to say that the working relationship with RBS has been tremendous, and I'd like to give credit to Ben Anderson. I don't know if Ben is here, but he runs a great shop, and we appreciate all the help and guidance that they have given us.

So over the years ATRA's mission has primarily been on sustainable farming practices, and to help farmers with value added products. Because we are working in rural development, there is a lot of emphasis on value-added products. And we have been doing right from the start, helping farmers with incorporating sustainable farming

practices on their operations.

But over the last several years we started getting more and more energy questions, as you would expect. And so we have been doing a lot more work in the energy area.

And interestingly enough, when the farm bill just passed, I'm just going to jump to another title, Title VI, the rural development title, title Section 6016 has authorized ATRA and clarified its mission and added some items under energy, renewable energy and renewable energy work; in other words, saying we will help farmers reduce input costs, conserve energy resources, diversity their operations through new energy crops, and energy generation facilities.

So in a way that we have been doing this, but now it has been placed as part of the farm bill in the rural development title.

Just to give you an idea of some

of the things that we have been doing over the last couple of years, last year for example we held in 12 states we met with over 1,500 producers on farm scale biodiesel production, and our publications are very much sought after. We have a publication for example on irrigation efficiency, and more than 30,000 copies of that were downloaded from our website.

I would just like to concentrate my comments this afternoon on two areas of the energy title in the farm bill. The first one is Section 9007, the rural energy for America program section. And we have in our work, we have worked across the board with USDA officials in all different agencies including CSR, EES, RMA, NRCS of course as well as the Rural Development Agency. So we are ready to work together. We want to avoid any duplication that we might have in the work that we already do.

I would like to just echo Mr.

Metz' comment though about in the - we have been doing these farm energy audits for some time. We did several hundred last year. But we noticed in the language in Section 9007(b) that nonprofit organizations - it doesn't spell out nonprofit organizations being eligible to receive funds to do these farm energy audits. And I would like to see that - it says it's as determined by the Secretary. We hope that when you write the rules that you will broaden that so an outfit like NCAT with their ATRA program can do that.

Also we think the - having 10 percent of the rural energy for America programs going to feasibility studies is a very very good idea. And we have the ability with our staff, which has a number of different agricultural disciplines in it including folks with disciplines across many areas of expertise in agriculture; but we also have engineers available as well. But we think that idea of 10 percent set aside for

feasibility study is a good idea. That is something that we can help to oversee, those feasibility studies.

And lastly I'd like to comment on the Section 9009, the rural energy self-sufficiency initiative.

We have been doing assessments, our engineers at NCAT, have been doing energy assessments for a number of communities throughout the country. As a matter of fact we just completed a couple of assessments recently, one in a community, North Carolina, and in Montana. And we have helped those communities look at becoming self sufficient energywise. We are more than happy and will be sharing that information with USDA, and that works right into Section 9009.

So I guess what I'm saying is, we are not rested, but we are tanned and ready to continue to do the work that we have already been doing with the department, and we look forward to working with you on this energy

title in implementing it, and we think we can do even more than we have already been doing.

Thank you very much.

MODERATOR ORTIZ: Thank you, Mr. Gray, and that closes out Section 9007, rural energy for America program.

SECTION 9009: RURAL ENERGY SELF-SUFFICIENCY INITIATIVE

MODERATOR ORTIZ: We'll now move into Section 9009, Rural Energy Self-Sufficiency Initiative. And Ernst Cebert is up to present.

Following that we will go into Section 9011, Biomass Crop Assistance Program. And Ms. Rita Neznek will be following Dr. Ernst Cebert. Thank you.

Dr. Cebert.

DR. ERNST CEBERT, ALABAMA A&M

DR. CEBERT: Thank you very much. And I would like to thank the panel for giving me the opportunity, and also the staff for making sure all the logistics for something

like this comes off very well.

I'm very surprised that I'm the only one here from a university. And of all universities, a small land grant university in HBCU, and as usual from the university system we always have our PowerPoint to click everything away. But I did not send my Power Point on time, so I am going to have to make believe on the concepts that would be in the PowerPoint.

And the reason my presentation was going to be and is on a concept which we put together out of Miami University. It's referred to as the Biodiesel Classroom on Wheels.

Basically what the concept is, I came up with by putting a fully functional biodiesel processing unit on a trailer with all the necessary aspects necessary to turn - to convert any feedstock into biodiesel. By feedstock I mean in this case waste vegetable oil, animal rendering, yellow grease, which

ever feedstock we might have.

And it's been exactly a year ago last September since we launched the project, and that trailer has covered more than 13,000 miles across the state of Alabama.

So what it is, we call is the Biodiesel Classroom on Wheels, basically COW for short, Classroom on Wheels. We take the demonstration to the site. We would tell farmers or small business owners who are in need of diesel where the price of fuel is basically driving them out of business that as long as they can accumulate a certain amount of feedstock we will come to their location and have them actually do their own biodiesel so they can learn the process properly.

The success of the program has been simply unbelievable to a point where right now I no longer run the program out of the university; the state Department of Agriculture has taken it over, because they have better resources to run it across the

state.

The good thing about the system is that you take your feedstock, you convert it to diesel, you take that diesel, you put it in the same pickup truck that is pulling it across the state.

But what we are learning more as farmers are requesting the use of this particular demonstration system is that they want to know, can they have - can they find funds from programs such as the rural development program to create a similar type of trailers where it can be a coop within a small community, where it can go from farmer to farmer to farmer in the wintertime or anytime during the year. And furthermore, the farmers, they would like to simply put aside 20, 40, 50 acres of land to grow an oil seed crop and make basically produce their feedstock; convert that feedstock to biodiesel for self sufficiency right there on the farm.

And that right now is something

that I cannot stay in my office, because every week I'm being summoned by a farmers' group somewhere around the state to put the logistic on paper as to how this can be done.

What is the bottleneck right now? The bottleneck right now is simply the money. Again, we at our university, HBCU, we are dealing with a lot of small farmers, people with 500 acres or 1,000 acres or so. So having cash flow to invest into a system like this is just not readily available, even though with a small coop they feel if they can get help, a small sized grant, we are talking about $50,000 or less, to actually help build these type of systems, they feel that they can actually overcome this burden of high fuel cost that is on the constant rise. Even though the price of feedstock - we are seeing that feedstock price is going up, but as feedstock prices are going up, the farmer that is growing it is not making a profit, simply because on the front end he is paying more for

fuel, and he is also paying more for all the biobased product, the fertilizers, and all of the herbicide which are biobased product - I mean not biobased but petroleum based products. So therefore their profit has been cut off completely.

So this success story hopefully I am going to send - not hopefully, I will send all the written information and put it on the record for this, so others can view it, because it is definitely something I believe which can be emulated by other states and other rural areas across the country.

I appreciate the time.

MR. MAST: I have one question. How many farmers have you touched and worked with to produce biodiesel?

DR. CEBERT: Well, let me start answering the question by saying that we held a field day, I don't even mention what I do for a living at the university; I'm a plant breeder, and I work with canola, and I'm

developing new canola culture varieties to be grown in the southeast as feedstock for biodiesel. And it is because of that that I am in the business of biofuel now.

We held a field day in which we had over 250 participants came in to see the canola crop, but at the same time to see a demonstration using a biodiesel classroom on wheels. And since we have done that we have, as I said, we've traveled all over the state, and actually having farmers hands-on doing the - some biodiesel demonstration.

Right now the last one I went to is through Marion, Indiana, where the farmers' group, they just right now are feverishly looking for money to put a system like this in place.

So we are working with many farmers, and also entrepreneurs in the process.

Thank you very much.

MODERATOR ORTIZ: Thank you, Dr.

Cebert.

And that closes out Section 9009, rural energy self-sufficiency initiative, and we are moving on to Section 9011, Biomass Crop Assistance Program. First up is Ms. Rita Neznek. And after Ms. Rita will be Mr. Bart Ruth.

SECTION 9011: BIOMASS CROP ASSISTANCE PROGRAM

RITA NEZNEK, AMERICAN FOREST FOUNDATION

MS. NEZNEK: Good afternoon.

Thank you for the opportunity to comment today on the implementation of the energy title in the 2008 farm bill.

I am here today representing the American Forest Foundation and its network of over 90,000 family forest owners and conservation leaders.

Today we are at a crossroads. We have a tremendous opportunity to produce the next generation of home grown energy by tapping one of the largest sources of

renewable biomass, the 262 million acres of family forests in the U.S.

At the same time we can make our water and air cleaner; strengthen our rural economies; keep our lands forested; and create better habitat for wildlife.

How can we do this? We can make sure family forest owners have access to renewable energy markets, while providing these owners with the tools and technologies to harvest biomass sustainably.

Renewable energy markets can create a new revenue stream for family forest owners while helping them stay on the land and continue to provide the environmental and economic benefits we all enjoy. These markets can add to, not replace, existing wood products markets.

The 2008 energy - farm bill's energy title provides important incentives to encourage sustainable product from renewable energy from family forests. I'll focus my

comments on two priority areas in the title that present the greatest opportunity and potentially the greatest challenges for producing renewable energy from family forests.

First, AFF is extremely pleased with the inclusion of biomass from family forests in the overall definition of renewable biomass in the energy title.

Since the incentives in the title, whether it's grants for building a biorefinery or payments for growing or purchasing feedstock, are focused on renewable biomass, family forests will greatly benefit from the incentives in the title, throughout the entire title.

This definition creates a challenge, however, because of the disparity between the farm bill's definition and the definition in the renewable fuels standard in the 2007 energy bill.

Unfortunately the energy bill

restricts what renewable biomass feedstocks can be used to meet the RFS. In doing so large amounts of biomass from family owned forests cannot be used to help meet the new RFS. The 2008 farm bill creates incentives to help meet the RFS, but includes a different definition of biomass that can be used as feedstock that includes family forests as I mentioned.

This will not be easy to resolve and will create uncertainty and conflict in the market as well as in the administration of the 2008 energy bill, or energy title of the farm bill.

Ultimately the energy bill definition should be amended to include all sustainably harvested biomass from family forests as one of the largest potential sources of renewable feedstock. In the meantime, USDA and DOE must maintain the farm bill's broader definition and ensure that the incentives provided in the farm bill are jump

starting the next generation of bioenergy production and tapping the tremendous supply of feedstock available from family forest.

In developing the regulations to implement both the energy bill and the farm bill, the American Forest Foundation encourages consideration of the role of certification, forest certification that is, and what role it can play in sustainable renewable energy production from family forests.

Family forest owner certification through the internationally recognized incredible American tree farm system, a program of AFF, can help family forest owners harvest their biomass sustainably for the production of renewable energy as well as other environmental and economic benefits.

Currently 91,000 family forest owners who own roughly 24 million acres are certified through the American tree farm system.

My second point of emphasis today will be on the biomass crop assistance program. And it's another great opportunity for encouraging sustainable biomass production from family forests. New and existing family forests should be eligible under the program, regardless of whether they are establishing a new forest for biomass production, or taking steps to manage their forests to increase opportunities for biomass production for renewable fuels.

Establishment payments should include funds for activities that are needed to improve availability of biomass for renewable energy. This could include activities such as site preparation, thinning and pesticide application to manage competing vegetation.

Annual rental payments should take into consideration differing market conditions for forests as compared to traditional agricultural lands.

Payments for harvesting, collecting and storing feedstocks should be available to either the individual landowner or the logger allowing flexibility for different harvesting situations of family forest owners.

The AFF's American tree farm system could serve as a vehicle for grouping landowners together into a BCAP project area and coordinating the supply of forest biomass to a bioenergy facility. Flexibility to work with a range of private sector aggregators such as AFF's tree farm system should be incorporated into the program.

The entire farm bill energy title has the potential to encourage sustainable renewable energy production from biomass harvested from family forests. Appropriate implementation of the renewable biomass definition and of BCAP are critical to making this happen.

We look forward to working with

you as you implement these programs. Family forest owners are extremely excited about this new opportunity to play a key role in meeting the nation's energy and environmental challenges.

Thank you very much for your time.

MODERATOR ORTIZ: Thank you, Ms. Ritz Neznek. Next we have Mr. Bart Ruth, and following Mr. Ruth will be Mr. Maurice Hladik.

BART RUTH, 25x25 ALLIANCE

MR. RUTH: Thank you. I'd like to begin by thanking the department and Under Secretary Dorr for having this meeting today, and to the distinguished panel for listening so intently.

And I guess any panel that has a fellow Nebraskan on it has to be distinguished. So I'm looking forward to providing comments today on the rulemaking process for the programs authorized under the Title IX energy title in the Food Conservation

and Energy Act of 2008.

My name is Bart Ruth, and I'm a soybean and corn farmer from eastern Nebraska and currently serve on the 25X25 national steering committee.

As the 21st century unfolds, America has an opportunity to chart a new course for its energy future. Our nation's farmers, ranchers and forest land owners have set a bold vision to provide solutions from the land to meet our energy needs.

The right policy framework and programs are needed, however, to make this reality - make this vision a reality.

The 25X25 national steering committee supports all of the energy programs authorized under Title IX of the Food Conservation and Energy Act of 2008, and urges USDA to fully support the following program imperatives.

First, while we appreciate the complexity of the rulemaking process, we urge

USDA to move expeditiously in developing and finalizing the rules that will guide the implementation of the programs authorized under Title IX.

We appreciate USDA's early scheduling of today's listening session, and we urge the department officials to fast track rulemaking for all Title IX programs.

Secondly, we strongly urge USDA to aggressively work within the federal budget process to ensure that the programs authorized in the Food Conservation and Energy Act of 2008 are fully funded. And I can commit that our organization and our coalition members will be carrying on that - that - that aggressive agenda as well.

Third, USDA should significantly expand its renewable energy research, development and deployment programs. Specifically USDA should support a national goal for research, development, demonstration and deployment of reducing the costs for

renewable energy production by at least 45 percent by the year 2025.

This goal is consistent with the National Renewable Energy Laboratory's current goals.

And finally we encourage USDA to fully utilize the traditional wood-using industry such as sawmills, pulp mills, manufactured board companies, and others, in appropriate programs of Title IX.

These companies look forward to joining USDA in development of future bioenergy facilities, and urge USDA to select existing partners at such sites while seeking out new wood-using energy facilities in areas where wood fiber resources are underutilized.

Furthermore, in order for the forest industry to maximize their participation in the USDA bioenergy programs, the definition of eligible woody biomass needs to encompass biomass produced from across the entire forestry sector.

Even though the Energy Security and Independence Act of 2007 provides another definition of eligible biomass from wood for the EPA administered programs, the EISA definition excludes a significant portion of potential wood resources.

We urge USDA to follow congressional intent of the woody biomass definition as written in the Food Conservation and Energy Act of 2008. ;

In addition to these overarching recommendations, 25X25 national steering committee offers the following comments on individual Title IX programs.

Section 9005, bioenergy program for advanced biofuels: 25X25's number one renewable fuel priority is to accelerate the commercial production of cellulosic and next generation biofuels. We support 9005, and encourage USDA to simplify and to streamline the program rules to get the highest rate of participation from a variety of producers.;

Furthermore, we urge USDA to make payments to producers based on all gallons of biodiesel produced. The program should not tie higher levels of payment to increase production, because it puts producers with consistent levels of production and those that have weathered the recent market challenges at a disadvantage.

Section 9011, biomass crop assistance program, 25X25 strongly supports the biomass crop assistance program. The program should provide transition payments to farmers, forest owners, and ranchers for the conversion of land to energy crop production in preparation for future bioenergy operations.

The program should require the establishment of perennial plant materials such as switchgrass or short rotation trees, and should provide annual payments for the establishment period of that crop. We recommend that the rules for this very

important program set broad parameters for feedstock eligibility, allowing for experimentation with feedstocks of various types.

We also urge USDA to consider that BCAP is first and foremost an energy program, and while bioenergy feedstocks should be planted in a sustainable and environmentally friendly manner, BCAP should not be burdened by so many additional requirements as to force low producer participation.

Currently Section (C)(2)(a) requires a letter of commitment from biomass conversion facility. Some producers are concerned with possible interpretations of this letter of commitment. If USDA gives preference to projects with a signed contract, this may lead to reduced participation.

It may be difficult for producers to receive a letter of commitment from a biorefinery in advance. Determination of project eligibility should be made based on a

case-by-case basis, and not solely rest on the existence of a letter of commitment.

Section (D)(2)(b) assistance with collection, harvest, storage and transportation: despite an abundance of biomass feedstock in this country, feedstocks are often located at significant distances from refineries. Therefore cost-efficient storage and transportation of feedstocks will be a challenge for producers.

Hence we see this section as a critical component to the effective operation of the BCAP program, and urge that it be fully funded as intended by the law.

Thank you for the opportunity to share our preliminary comments and recommendations, and we look forward to submitting additional comments during the formal rulemaking process which will follow.

Thank you for your time.

MODERATOR ORTIZ: Thank you, Mr. Ruth.

Up next to present is Mr. Maurice Hladik, and following Mr. Hladik is Mr. Andrew Bater.

MAURICE HLADIK, IOGEN CORP.

MR. HLADIK: I wish to thank all the panel members and people in USDA for making today happen, and also some special thanks to Anne and Ellen who are out in the crowd there for making this day happen. Without the legislation we wouldn't be here. So thanks for the patience in listening to me so many times drone on about the things I'm going to talk about today.

I'm from Iogen. It's a Canadian company, and we have been producing cellulosic ethanol by the tanker truckload from biomass, normally wheat straw, but other things work, for the last four years. We've got a one acre footprint, six-story high plant; but it's a quarter-million gallon capacity; that we've been tweaking and working on over time.

We have 700,000 tons of straw

contracted in Germany, Idaho and Western Canada. And it looks like the Canadian site will get the nod as the first plant, as the Canadian government are on the verge of offering us a $200 million interest-free loan.

But the U.S. is the prize for technology. We want to be as large a player in this market as we can, and I'm sure our competitors have the same objective, and that's how business is.

Let me paint a picture first of the opportunity and challenge that U.S. agriculture is facing. The 16 billion gallon RFS by 2022 which is really only 13 or so years away involves, just for illustrative purposes, let's assume that the fermentation and distillation in the technology that we use meets the same economies of scale as a conventional ethanol plant; it's the same system. And just for round numbers, we get 80 gallons, and that seems to be the industry standard, of ethanol for every ton of biomass.

So if you took a million tons of biomass, that's 80 million gallons of ethanol, and 80 million gallons would require 200 plants producing cellulosic ethanol over the next 13 years.

Again, for illustrative purposes assuming that the average farmer or grower will provide 1,000 tons of biomass to each of these plants; that involves 200,000 growers.

I just had a quote from the National Association of Wheat Growers, and there's 166,000 wheat growers in this country, and that includes a lot that are very small operators.

So we are facing - we, everybody in this room, and ourselves - are facing a phenomenal change in how this industry, i.e. agriculture, is going to face this. And this isn't a case of building another corn plant, or another flower mill. This is new types of agriculture. I just spent the last two days around Stillwater, Oklahoma, talking to the

people in that area. And it's a great area for switchgrass and other perennials, and they want to become buyer or refinery ready, and how do you get this started. How do you get 1,000 growers in a community within 50-60 miles tuned in to a perennial crop that they have probably not even seen growing before, and the concept of plantation agriculture. We are talking 10-year contracts, maybe based on some formula, but for growers, unless you are into orchards or something, suddenly a row crop grower facing 10 years, contracts, a new crop; we need more of them than we have wheat farmers in the next 12 to 14 years. This is going to be a huge challenge for the industry.

Now the farm bill is addressing this very nicely. Let me just comment on a couple of things before we get into 9011.

Section 9003, the loan guarantee: fantastic, works really well. Just two comments which should be user friendly. To be user friendly, two things that we'd really

like to see. It should be open as much as possible. So if the business plan is to the stage where a loan guarantee is required, they should not have to wait until the next year for the next call for proposals. There should be calls open all the time, or at least on a quarterly basis. There would be access to match the decision making cycle for the biorefinery.

Secondly, particularly in early years, these biorefineries have all sorts of hiccups that occur. And there shouldn't be a closure date. If an investor group has a loan guarantee approved, there shouldn't be a grandfather - it should be grandfathered. As long as they can demonstrate that they are active in the project, they shouldn't have it whisked away from them.

Again, on 9005, keep it user friendly.

Now, to Section 9011, the main reason I'm up here today, we are very

concerned that there is a bit of a disconnect here. It requires a commitment by the biorefinery before the grower becomes eligible for the program. Go right back to the last couple of days in Oklahoma. The growers want to get going; we want to get going. But we can't commit because they have never grown switchgrass before. They are not willing to contract with us to grow switchgrass, because we are not in the area yet. And it's a real chicken-and-the-egg thing, and it's unfortunate that for a legitimate biorefiner, they are not going to commit to a community or a group of farmers. And the unintended consequences could be, A, this program has very little uptake in it; and B, there could be fly-by-night organizations that do commit themselves to communities who do have very little chance of getting a biorefinery going quickly, and it's just like they staked the claim, then like the old gold rush days, and the other biorefiners may be left out.

So we have, and Anne and Ellen know this very much, walking through one approach whereby growers could perhaps put in without any commitment from any biorefiner, hopefully at interest, say five acres where all the costs including the opportunity costs were covered so they could learn how to grow a new biomass crop. Then when we came along we'd have confidence the grower knew how to do it; contract with them; and they in turn would have comfort in contracting.

And perhaps in Section 9008 there would be a provision for this. But our real plea is, focus on how this country can mobilize 200,000 growers with the various programs that you have got in front of them now, and the opportunity to do rulemaking perhaps to have a focus on this wonderful challenge and wonderful opportunity.

And I thank you very much.

MODERATOR ORTIZ: Thank you, Mr. Hladik.

Next up to present is Mr. Andrew Bater. Following Mr. Bater will be our last presenter for the day, Mr. Jesse Caputo.

ANDREW BATER, BIOMASS CONNECTIONS

MR. BATER: Hi, good after, I'm Andy Bater. And I'm grateful to be here this afternoon, that you've all hung out this long. I know it's tough after lunch.

I thank you for the opportunity to speak here today. I am actually both a small farmer and a small business owner. My small business, Biomass Connections dot com, launched just a few weeks ago, just put it up on the Internet. And it's intended to be a forum for farmers to talk to farmers. We heard a lot about this in the last couple of minutes. That is really the target I'm going after.

My Internet business was born out of my small farm experience. I have a small farm in Pennsylvania. It's a new endeavor. I retired from a previous career where I

worked with a bunch of federal regulators just down the street. I think it's easier to get a cab here. And I've learned on my small farm what farmers do or don't know. There is a lot that I don't know.

An earlier speaker said that he was a farmer turned lobbyist. I hate to tell you, I'm sort of a lobbyist turned farmer.

My farm has 20 acres of switchgrass that we planted this past summer. We had all the problems of an initial planting of switchgrass. My wife was aghast at the number of weeds that we've had in the field.

This was farmland that had been let go fallow due to its difficult terrain and poor soil. I researched the options for what I could plant on this land. It's very picturesque land, but it really was not suitable for continuing in its usage as a hay ground.; It had been contoured and tilled in the past. We realized it was really better put into something like perennial grasses.

And my proximity to Penn State was a natural, because Penn State has an excellent biomass program.

My target for the switchgrass is a proposed cellulosic ethanol plant a few communities away; just now broken ground in Clearfield, Pennsylvania. It's about 20 miles. It should be within a reasonable target range.

Now the remainder of my land is forested with lots of Pennsylvania's black cherry and oak trees, and unfortunately I have a lot of miserable locust trees too. I really need to take those locust trees out under some sort of thinning program and send them off to some other biomass program, hopefully fuels for schools or something along those lines.

Folks, I spent the last three months since I retired from my past life learning about this category, and there is a lifetime of more information to learn.

I have a few experiences today

that I think are going to be useful to the USDA. First experience is, I spent the summer going to the FSA office to register my farmland. Now that is a little bit of an exaggeration. But I did take three tips to the FSA office, and three mailings, and lots of research to re-register my land in FSA's eyes, because it had gone fallow. Previous farmers of that land, a few owners ago, had no longer registered it. It took the FSA staff a lot of time. Sometimes there were three or four people behind the counter helping me.

The take-away thought here is, if we are going to register land for these programs, you need to make sure the folks at FSA are ready for what is going to happen when guys like me show up with farmland that hasn't been in use for quite some time.

I think the real key here is that we need markets for biomass both for cellulosic ethanol, bioheat, but we really also need some alternative markets. No

farmer, no one in my family - I come from a farm family - no one will grow a product that can't be sold. Only gardeners do that. I learned last week of work that Michigan State University is doing called ammonia fiber explosion. This is wonderful work. This work will allow materials like switchgrass to be made more palatable both for cellulosic ethanol production but also for animal feed.

And a key thing that struck me when I heard the speaker last week was, that's a great thing. A farmer now knows he has a market for this switchgrass, to the neighboring dairy operation. Not just some proposed cellulosic ethanol plant.

But what was key for me when I read through the act, and what I wanted to mention here today, is that the Secretary has some discretion in reduction to payments, reduction in payments for alternative delivery locations for biomass. I would urge that anything that goes through an intermediate

process that makes it suitable for biomass should not be punished.

I want to envision a world where there are not just big cellulosic ethanol plants that require hundreds of acres of storage, but that there are also intermediate densification or hop-off points. I think this is very important to our business.

And near Penn State, some of the people at Penn State have told me that they envision a model where a town just down the road from my farm will have a hop-off point where they can aggregate switchgrass or miscanthus or whatever it is together, and densify it, then it could be shipped by rail to collection points closer to metropolitan areas.

I think it's very important that these intermediate densification points, or shipping points, or way points, or whatever you want to call them, they really should have all the positive benefits of the act, that a

destination point would have.

We need a lot of implementation assistance. I learned a lot planting my switchgrass. We really need to spend a lot of time telling farmers how this is done. I heard talk earlier of farmer-to-farmer dialogue. It's great. Farmers really want to see other farmers doing this.

I learned from field days. We need to foster shared skills and community support, though. Some of the equipment is necessary for switchgrass is specialty, no-till drills. I had to have a guy come in from the next state to plant my switchgrass. There are specialty high density bailers that are required.

These are things that small farmers like me, and even some larger farmers, will not have - and we need cooperative arrangements, we need pools, we need places for people to borrow or rent these materials.

I mentioned when I began that I

have some woody forest area. There are a lot of services that are needed there too. I would be thrilled if someone would come and cut down all the locust trees in my woods and haul them away and actually make my forest better. But there really is no one to do that. But in Pennsylvania, logging operations revolve around larger trucks with booms that haul away large logs.

We need some services, some cooperatives or collectives, to do this kind of thing. We need a lot of education.

I've been to a couple of seminars now talking about how to thin forests, what trees are desirable and what aren't. We need more seminars like that. That is going to be a key thing.

And the closing point in that education category is, I've already seen opposition to community-based wood heat or biobased programs. We need to educate our citizenry that it's acceptable to have a plant

- I hate to say it - in their back yard to produce energy locally. This is very important.

My last point before I get to my quick conclusion is, I think we need some reasonable forest stewardship requirements. I've always thought that forest stewardship is a wonderful thing. I love the forest. I love the fact that the forests have come back after years of decline. But most of the existing forest stewardship programs are dependent on forest owners having 10, 20 acres plus. There are going to be a lot of small forest owners who would like to participate in this category, and they may not have the wherewithal to participate in those certification programs. We will need alternative checks and balances that will allow a guy with five acres to participate in the biomass energy potential of our country.

Lastly, just a pitch, we need more communication, farmer to farmer, rancher to

rancher, logger to logger. That's really what my new business is about. I urge everyone in this room, I urge everyone at USDA, we have to do a lot better job.

Outside of people in this room, this whole biomass energy business is unknown. When I talk to people I know about what I'm doing, they are like, where did this come from? I've never heard of such a business. We need to get the message out; that's perhaps the most important task of everything that we have ahead of us. Thank you.

MODERATOR ORTIZ: Thank you.

Last presenter will be Mr. Jesse Caputo.

JESSE CAPUTO, ENVIRONMENTAL AND ENERGY STUDY INSTITUTE

MR. CAPUTO: Hello, my name is Jesse Caputo. I'm with the Sustainable Biomass and Energy Program at the Environmental and Energy Study Institute here in D.C.

I'd like to thank you for the opportunity to come here and give ESI's viewpoint on several of these programs. And because I'm last I will try and be brief.

The first program that I'd like to comment on is Section 911, the biomass crop assistance program.

We see BCAP as being a very important solution to a very pressing problem. The fact that investors are equally unwilling to invest in feedstocks before facilities are built, as they are to invest in facilities before there are feedstocks; the so-called chicken and the egg problem that somebody mentioned.

BCAP offers needed incentives and assurance to farmers and foresters to produce these feedstocks. This is an urgent problem, and it is very important that this program be implemented strongly and quickly, in time for the 2009 planting season if possible.

I would also like to stress the

importance of a robust outreach program to ensure widespread interest and participation from the very beginning. Also, because a specific funding level has not been authorized for this program, it is especially important that funding for this important program is vigorously pursued in the budget request process.

A few additional comments and suggestions. A clarification on the definition of crops, agriculture, and agricultural land is needed. In order to develop a reliable, sustainable supply of feedstocks in all regions of this country it is important that we incentivize the use of a diverse range of feedstocks produced on a diverse range of lands. It is important that BCAP encompasses the production of short rotation woody crops, including willow and poplar. It is important that fallow and abandoned agricultural lands are eligible where that is appropriate. And it's equally

important that residues from agriculture and forestry are eligible where they are appropriate.

Residues including residues from Title I crops for instance should be considered a separate eligible crops for collection, harvest, storage assistance grants.

In subsection (C)(2)(b)(6), the Secretary is directed to consider the impact on soil, water and related resources when selecting projects. The importance of this provision cannot be overstated. The final rule should favor projects that enhance water sheds, preserve soils, promote biodiversity, and utilize appropriate feedstocks and sustainable management practices.

As for nonindustrial private forest land we recommend that priority be given to those projects that emphasize management for a full suite of environmental goods and services, including biodiversity,

wildlife habitat, and watershed function.

We would especially discourage funding projects under this program that convert these nonindustrial private forests to woody plantations, monocultures, or agricultural crops.

I'd also like to comment a little bit about Section 9012, the forest biomass for energy program. This is an incredibly important program. Because we all know that woody biomass is an abundant, valuable and available feedstock. However, there are many barriers to harvesting and using this woody biomass in a way that is both sustainable and cost effective.

The Section 9012 program will provide much needed funding to researchers and innovators helping to develop technology, processes and methodologies to improve the efficiency, effectiveness, and sustainability of this resource.

In considering applicants for this

program we hope that priority will be given to those projects that seek to improve best management practices; minimize negative environmental impacts; and find ways to utilize woody biomass that will complement a wide range of forest stewardship objectives, including habitat management, timber stand improvement, hazardous fuels reduction, biodiversity and others.

We also hope that priority is given to projects that seek to understand the economics of forest biomass, and improve the cost effectiveness of using logging residues. In an ongoing series of discussions the ESI has held with stakeholders we have consistently found that poor economics is the primary barrier to the use of such forest biomass in most regions of the country. This is one area where additional research dollars could be especially effective.

Finally I'd like to make a few comments about the Section 9013 community wood

energy program. This is another program that ESI is very excited about. While providing funding for communities to do feedstock assessments, draft community wood energy plans, and install community wood energy systems, this program focuses resources on some of the most important aspects of environmental sustainability: small-scale projects; full assessments; and a strong community focus.

This program has a lot of potential, and I would encourage it to be implemented and ramped up as quickly and as robustly as possible.

Finally a couple of specific suggestions for this program. Community wood energy plans include an assessment of available feedstocks. It is important that availability is understood to mean much more than a simple forest inventory. The availability of woody biomass is dependent on infrastructure, geography, environmental

considerations, and the willingness of forest owners to harvest and sell their material.

I would recommend the coordinated resource offering protocol, CROP, as an example of one tool that can be used to do feedstock availability assessment that takes all of these factors into account.

I would also suggest that full consideration be given to woody biomass resources, other than those from forestry - urban wood residues, mill waste, industrial residues, et cetera.

The community wood plan also includes an assessment of the long-term feasibility of supplying and operating a community wood energy system. It is essential that this assessment include the full suite of environmental considerations, including how woody biomass use will affect forest health, biodiversity, wildlife habitat, and watershed functioning in the community.

Subsection (B)(2)) directs the

Secretary to consider other conservation and environmental criteria in selecting projects. Specifically we feel that priority should be given to those projects that will help achieve forest stewardship objectives, such as timber stand improvement or hazardous fuels reduction.

In addition ESI wants to recommend the consideration also be given to the greenhouse gas and climate change ramifications of each project, giving priority to projects that replace coal and oil over those that replace natural gas.

Similarly, the end use of residues that would not otherwise be used should be considered, because residues that end up in landfills or getting burned in wildfires or in open burns also reduce - release methane and carbon dioxide and other greenhouse gases.

Thank you again for allowing us the opportunity to make these comments, and we look forward to the rulemaking for the entire

title.

MODERATOR ORTIZ: Thank you. That is our last speaker, and that closes out Section 9011.

And I will turn the meeting back over to Under Secretary Dorr.

CLOSING REMARKS - UNDER SECRETARY DORR

MR. DORR: Thank you, Febe. And thank you to all of you who have taken the time out of your schedule today to make these presentations.

I would make the observation that we are actually much ahead of schedule, and in discussion with a number of my colleagues, we have decided that if there are any of you in the audience who would care to make a comment or two, we would encourage you to come up front. We would like to do it from this podium, since we are recording and taping these comments so that we may work them through our system.

But if there is anyone who would

like to come up and make an observation or comment, I would encourage you to do so now. Is there anyone who is interested in doing that?

It appears not, but if you have - I am going to take a couple of minutes, so if you have a second thought, I'd encourage you to do it.

I would also like to turn to our panelists, again thanking them for spending all the time they have today, and also ask if they have any observations they may care to share briefly with the audience that is still here.

Floyd, come on up here.

MR. GAIBLER: Okay. Thank you, Tom. I just wanted to make one comment today with respect to BiCAP, because I had noted several speakers had raised concerns with respect to the funding with this program. And I just wanted to correct here for the record that in the case of the BiCAP program, the

statute requires such sums as necessary. This is mandatory funding from the Commodity Credit Corporation. So this is not a project or a program that does lack funding.

The other point I would make on this particular program is that like some of these other programs, they do not have expedited rulemaking authority, so we will have to issue a proposed rule. And in this particular program we are going to have to do some environmental impact analysis, which will have to be incorporated into that rulemaking.

So this, without the expedited rulemaking it will take time. But this is a new program, so we are going to have to put this together very carefully.

MR. DORR: Thank you. That is an issue that had come up repeatedly. Are there any other comments? Joe or Gary or Robb?

If not, I learned a long time ago that at the end of a long arduous day the last thing you want to do is stand between your

audience and their 5:00 o'clock toddy or the end of the day or the exit or whatever the case might be.

But let me assure you that this has been a very helpful series of discussions for us. Your contributions are remarkably insightful, in the sense that although I think we had thought about a number of them, what you have done, and the ones, and the presentations that I have heard, and the discussion I've heard today, you've expanded on them in a way which I think gives us greater insight.

I want to remind you that - and for any of those who are perhaps listening in on this as well - that we are keeping the file open for another 15 days. We will be receiving comments for another 15 days before we begin to then hunker down and do the hard work, the arduous work, of developing all the rules and the regs and the proposed rules and everything else that we need to do to comport

with rolling out the program.

I think it's important to know, however, that the secretary has made it very clear that although this is coming to the end of an administration, that he has no intent that we slow walk this. And so there is going to be every effort made to aggressively work these through the process in ways that comport with the intent of Congress as well as those of our constituents as we simultaneously approach trying to do a good job.

And I have a couple of other very quick observations, and that is the following. It is clear to me that as we have evolved through the development of these programs, and these insights into renewable energy, particularly biobased renewable energy, that we have made a remarkable amount of progress over the last several years, and that this industry is largely, at least in retrospect to where we were in 2002, much further down the commercialization trail than we were in 2002.

This is much broader than trying to embark on a basic research strategy.

There are clearly developmental and precommercialization issues that have to be dealt with. But I think it's important that we all recognize that this industry is clearly becoming one that has technologies that in and of themselves make it competitive in the long run, but that we have to obviously work our way through this what we all call and know as the valley of death.

I also think that in doing this that it's important to remember that the goal at least from my standpoint, is that we make these decisions based on economics and scientific fact, as opposed to anecdotal, subjective, or perhaps just general anecdotes that perhaps don't reflect the state of the industry and where we're at.

And I think that's important to remember. Because as I have said repeatedly, the extraordinary nature of this country is

the fact that we do have a constitution that is based on rule of law; that is based on contracts; and it is based on legal obligations that we can enforce. And if we adhere to that we will do things that are constructive both for the environment and ultimately for the development of alternative energy resource.

So with that, I would again like to thank all of you for taking the time out of your schedules to join us. I sincerely hope that we have met your expectations to some extent or another. We look forward to your further comments.

And clearly, do not hesitate to contact any of these folks if you feel that there are things that we are not understanding, or that we need additional insight into.

So again, thank you very much, have a safe day home, and we look forward to working with you all in the future.

(Applause.)

MODERATOR ORTIZ: This concludes the session.

(Whereupon, at 2:52 p.m. the proceeding in the above-entitled matter was adjourned.)

Energy Projects In And Around Tyonek Native Corporation Lands

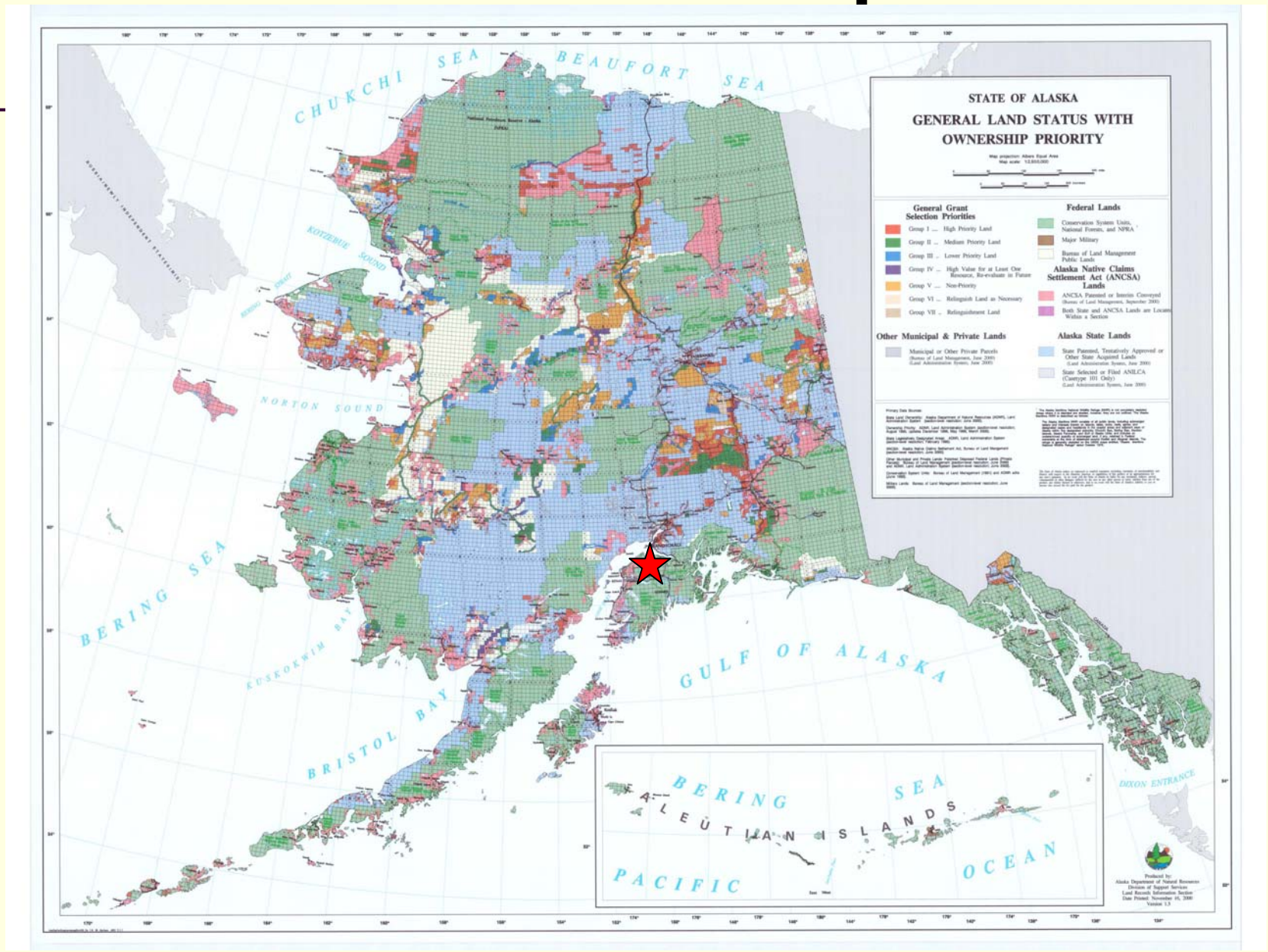
Tyonek Native Corporation

1689 C Street, Suite 201

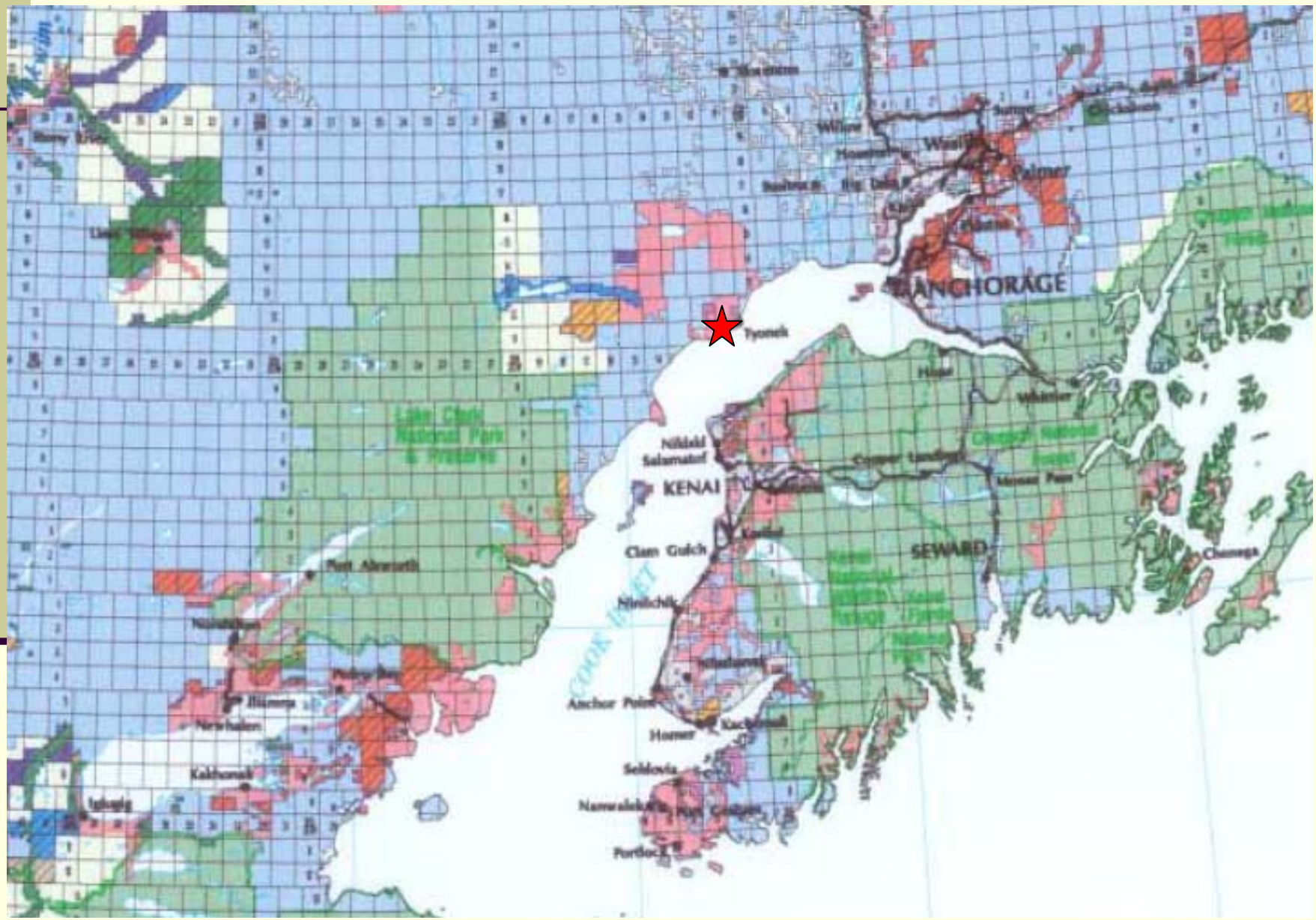
Anchorage, Alaska 99501

September 2008

Alaska Land Ownership



South Central Alaska- Cook Inlet

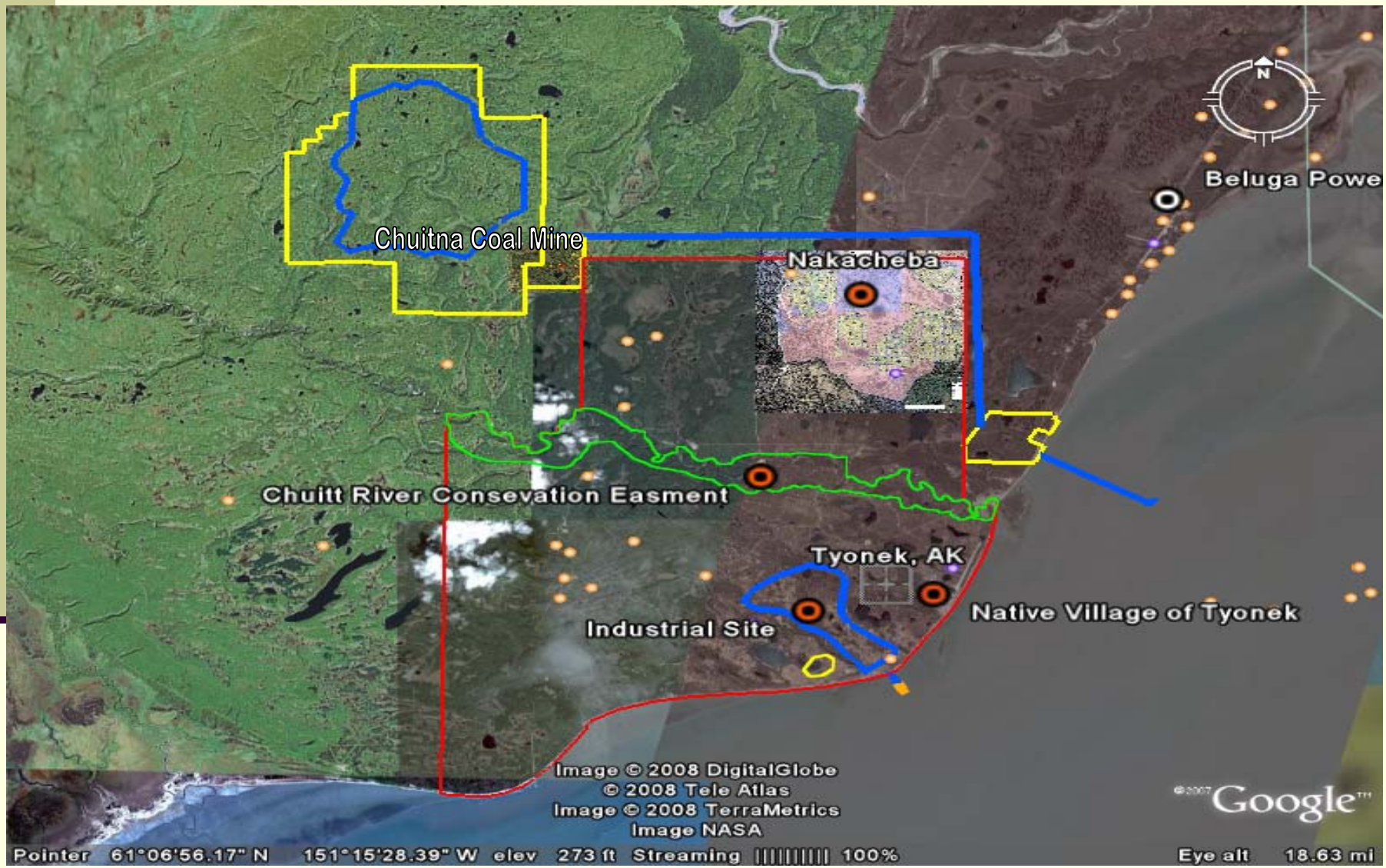


Cook Inlet / South Central Alaska

Tyonek Native Corporation Lands

- Former Dena'ina reservation.
- Only Athabascan whaling community.
- Under '71 ANCSA, subsurface to Regional Corporation, lands to Village Corporation.
- Gated community of 197 residents.
- 45,000 acres around Tyonek.
- Off road system, living costs high.
- Gas fields depleted that supply urban energy.
- Energy alternatives impact Tyonek.

Tyonek Area Lands Activity



West Cook Inlet Energy Projects

Chuitna Coal	600
Coal to Liquid & Power Generation	12,000
Chakachamna Hydropower	1,750
Mt. Spurr Geothermal Power	3,000
TOTAL (millions)	$ 17,350

Chuitna Coal

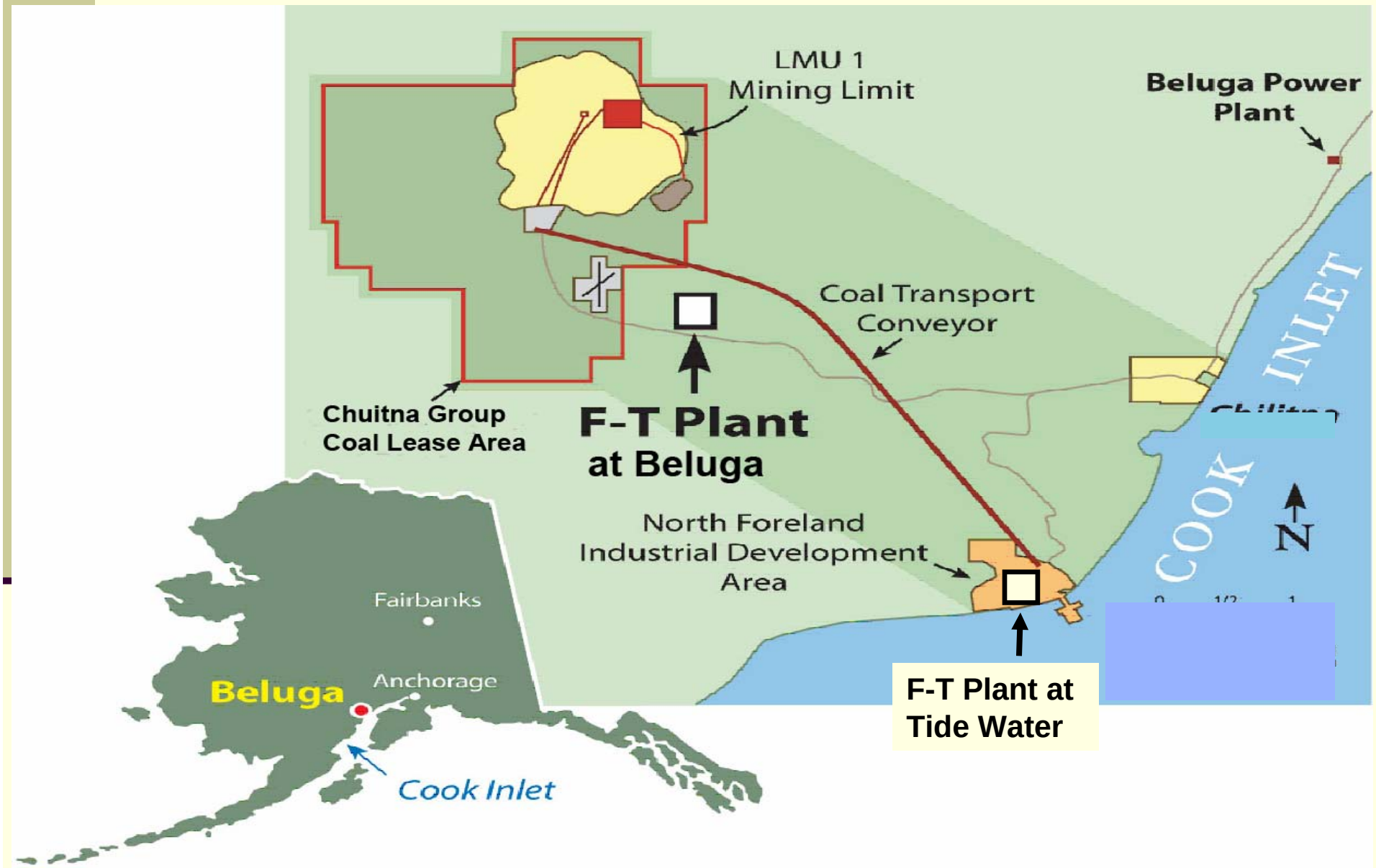
- Second-largest coal strip mine in USA?
- Infrastructure permit application is submitted.
- NVT/TNC contracts start 2010 under MOU.
- Potential easements across TNC lands.
- 180-man camp at mine.
- 10,000-foot conveyor across TNC lands to ship load dock.
- Planned 25-year mine life.
- $600M capital investment.

Coal to Liquid

- Coal gasification/liquid fuels
- 1,000 acre NFF Port Site
- 80,000bpd F-T fuel for ready markets
- 400 MW of waste heat power generation
- CO2 sequestration w/EOR
- $ 12 Billion Project
- 5,000 Construction workers for 5 years
- 500 Operation staff
- Will need a camp or facility base

80,000 bbl/d Coal To Liquids "Beluga CTL Plant"

(Mine Mouth or Tide Water)



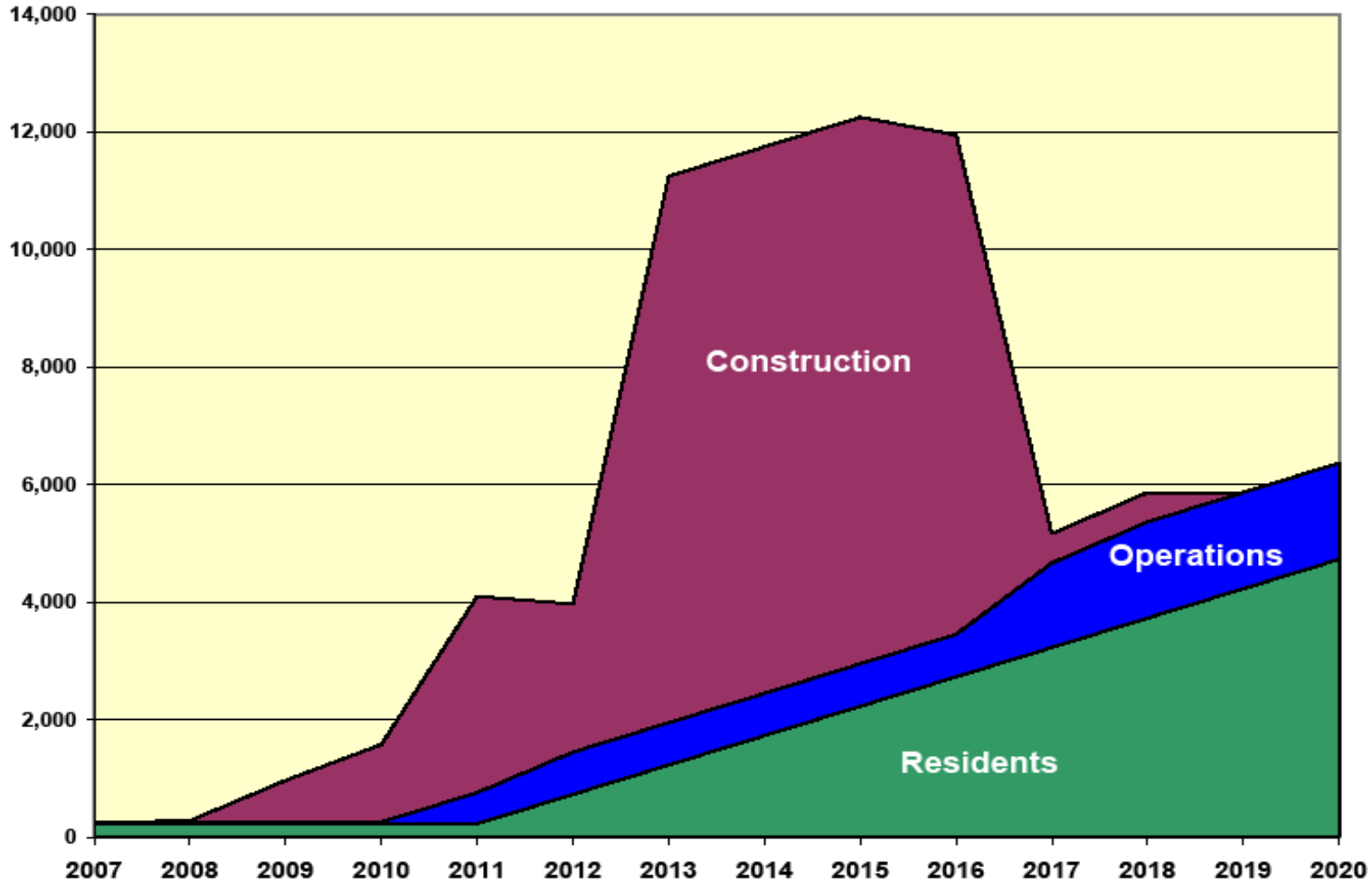
Chakachamna Hydropower

- 300 MW Power for Railbelt
- $.05 per KW hour (estimated)
- 3-5 years for studies, permitting
- 5 years construction, complete 2018
- $2 Billion project
- 40 miles from Tyonek
- Promise to use TNC whenever possible
- 2,000 Construction workers
- 20+ Operations staff

Mt. Spurr Geothermal Power

- Bid opening 10 September 2008.
- Two experienced bidders expected.
- Geothermal exploration in 2009.
- 150 MW power for railbelt grid.
- 400 MW for aluminum production with plant on TNC land.
- 5-8 years for project completion.
- $ 3 Billion project.
- $.02 per KW hour (estimated)
- 3,000 Construction workers
- 300 Operation staff

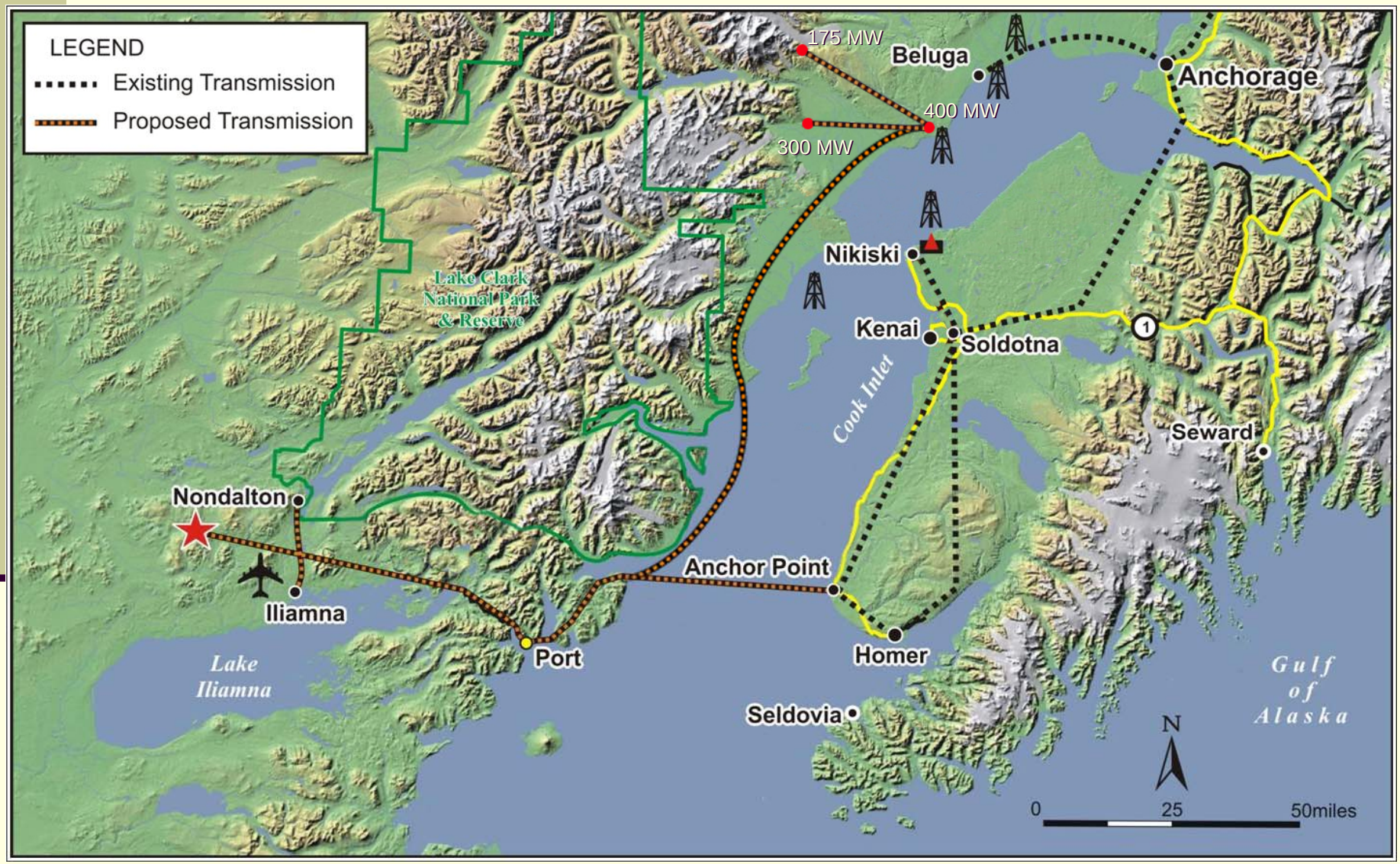
West Cook Inlet
Population Projections



Tyonek Land Planning Projects

New Community - 'Nakacheba'	150
Conservation Easement of approx 3,000 acres	20
1000-acre Industrial Site	-0-
North Foreland Port & Facilities	-0-
West Susitna Road Access	100
Fast Ferry	100
Au Port & Community Development	500
TOTAL (millions)	$ 870

Cook Inlet Power Options



Questions or Comments?

Geri Simon

General Counsel & CAO

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ABENGOA BIOENERGY

Abengoa Bioenergy Hybrid of Kansas

USDA TITLE IX Energy Public Meeting

September 4, 2008

Abengoa is a technology company that applies innovative solutions for sustainable development in infrastructure, environmental and energy sectors. It is present in over 70 countries where it operates through its five Business Units: Solar, Bioenergy, Environmental Services, Information Technology, and Industrial Engineering and Construction.

Industrial Engineering & Construction

With engineering…
we build and operate conventional and renewable energy power plants, power transmission systems, and industrial infrastructures

Environmental Services

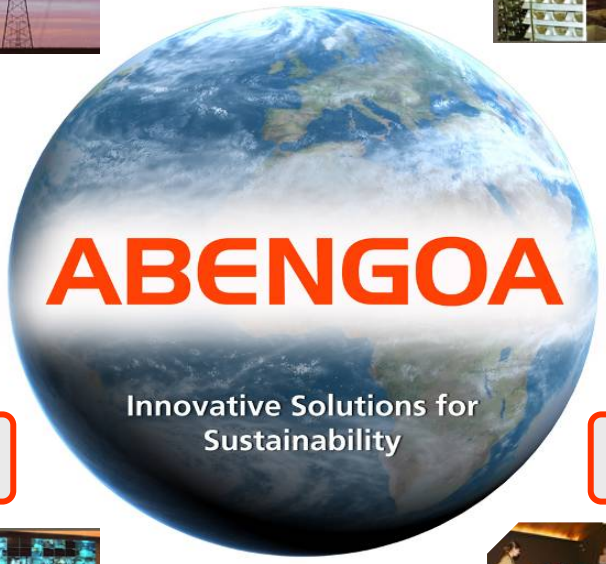
With waste …
we produce new materials through recycling, and we treat and desalinate water

Bioenergy

With biomass …
we produce ecological biofuels and animal feed

Solar

With the sun …
we produce thermoelectric and photovoltaic electric energy



Information Technology

With information technologies …
we manage business and operational processes in a secure and efficient way

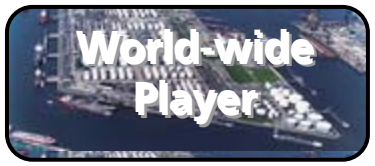
Focus Abengoa

With social and cultural policies …
we contribute to economic progress and the conservation of the environment in communities where Abengoa is present

Science. Solutions. Service.

ABENGOA BIOENERGY

Abengoa Bioenergy Overview



- Leader in new ethanol technologies
  - $480 MM committed to new ethanol technologies, such as lignocellulosic biomass, over the next four years
  - U.S. Department of Energy ($113.7 MM) and European Union ($43.5 MM) research grants
  - Improve current conversion technologies
  - Develop biomass-to-ethanol technologies
  - Demonstration programs for ethanol end uses
- Technology innovator and provider to third parties
- #1 ethanol producer in Europe: 142 MG actual capacity + 192 MG under construction in 2008
- #5 ethanol producer in US: 198 MG actual capacity + 176 MG under construction in 2008
- 142 MG marketed ethanol in EU, 198 MG in US and an additional 100 MG to third parties
- EU: Grain purchases = 43.3 MBu / DGS marketed = 0.5 Mt
  US: Grain purchases = 39.0 MBu / DGS marketed =0.3 Mt
- Customer network: Major oil companies in EU and US: Total, Cepsa, Repsol-YPF, Agip, Shell, Chevron-Texaco, Suncor, Valero, Apex Oil, BP, Exxon, Conoco, Preem, Lyondell, Marathon, Sabic

Science. Solutions. Service.

ABENGOA BIOENERGY

The Global Ethanol Company

Cartagena
40 MMGY
Since 1999

Coruña
53 MMGY
Since 2001

Salamanca
53 MMGY
Since 2006

Lacq, FR
66 MMGY
Since 2007

Rotterdam
126 MMGY
Construction

Prod: production capacity
Cons: capacity under construction today

Europe - Million Gal/y

	2007	2008	2009	2010
Prod:	**142**	**142**	**208**	**334**
Cons:	66	192	126	

York, NE
25 MMGY
Since 1994

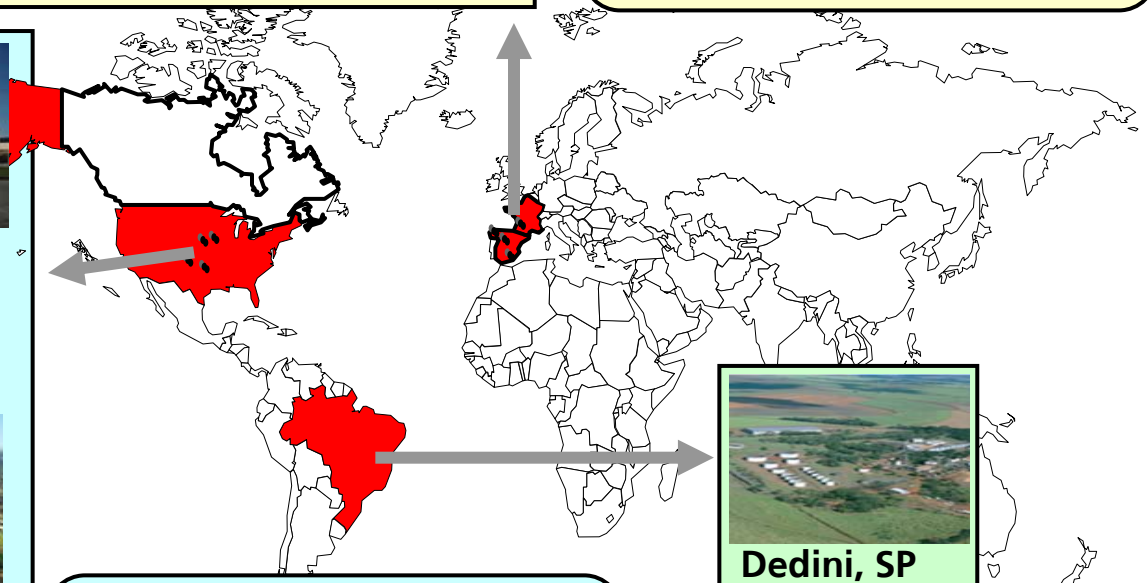
Colwich, KS
55 MMGY
Since 1984

Portales, NM
30 MMGY
Since 1997

Ravenna, NE
88 MMGY
Since 2007

Evansville, IN
88 MMGY
Construction

Granite City, IL
88 MMGY
Construction



USA - Million Gal/y

	2007	2008	2009	2010
Prod:	**198**	**198**	**198**	**374**
Cons:	88	176	176	

Dedini, SP
6/7 Mt/y
Since 2007

Science. Solutions. Service.

R&D Strategy

Abengoa Bioenergy carries out its R&D through its subsidiary company ABNT.
More than 50 investigators in Europe and US working in R&D
Use partnerships, JV's and shareholder equity to identify and
develop production technologies and new price competitive applications

Abengoa Bioenergy DOE Biomass

- US Government goal of making cellulosic ethanol cost-competitive with gasoline by 2012
- Cellulosic ethanol saves even more net energy and results in lower greenhouse emissions than traditional corn-based ethanol

- Abengoa Bioenergy's partnership with the US Department of Energy (DOE) started in 2003 to develop the technology for Advanced Biorefining of Distillers Grain and Corn Stover Blends.
- Following their partnership in developing new biomass-based production technologies, US DOE has recently awarded Abengoa Bioenergy with $76 MM for the construction of the first of a kind commercial facility to produce ethanol from lignocellulosic biomass.

Abengoa Bioenergy's Biomass Project main features:

- $500 MM total investment
- Hybrid Concept:

  - 12 MGPY of Cellulosic Biofuel based on enzymatic hydrolysis technology

  - 88 MGPY of Advanced Biofuel based on starch technology
- Biomass gasification energy used in the process ➡ improves the life cycle
- Start-up of operations in 2011

ABENGOA BIOENERGY

Abengoa Bioenergy Hybrid of Kansas (ABHK)

Abengoa Bioenergy Hybrid of Kansas

- First commercial facility of Abengoa Bioenergy's Cellulosic Ethanol technology
- A $500 million plus project, supported by a $76 million grant from the Department of Energy plus an equity commitment from Abengoa Bioenergy
- Project start of construction, 2nd Half of 2009, operation by 2011
- Project Engineering and Development ongoing since 2007, over $20 million spent to date with a staff in excess of 150 individuals (direct and contract)
- Hugoton Kansas site selected for project based on local attributes:
  - Local Grain and Feed market
  - Significant supply of biomass
  - State and local support for the project
- Key first project in the successful growth of Abengoa's Cellulosic Ethanol Business and the Nation's Cellulosic Ethanol Industry

ABHK Capacity

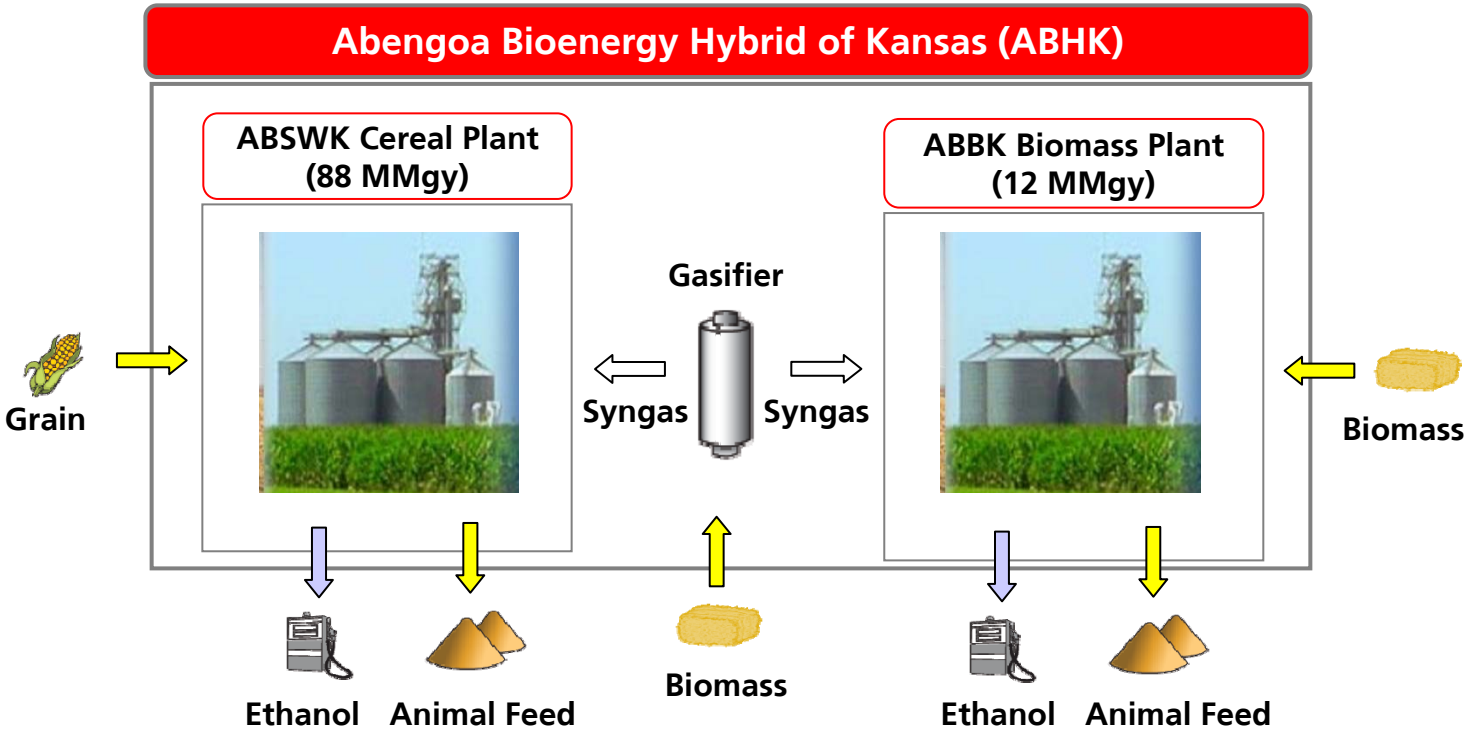
ABBK Biomass Plant

154,000 dry tons of biomass → 12 MMgy Cellulosic Ethanol

245,000 dry tons of biomass → Synthesis Gas to replace Natural Gas

ABSWK Cereal Plant

32 million bushels of grain → 88 MMgy Ethanol



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Cellulosic Ethanol Challenges

- Cellulosic Ethanol today is entering a commercial demonstration phase but is still not cost competitive with 1st generation biofuel technologies.
- There is a higher level of risk associated with Cellulosic Ethanol technologies that can be significantly reduced after completion of the demonstration phase.
- The development of a sustainable and significant supply of biomass is required for Cellulosic Ethanol to become commercially viable.
- Key component of the creation of a sustainable cellulosic ethanol industry is getting through the demonstration phase, the first wave of commercial facilities.
- With higher levels of risk and cost, Cellulosic Ethanol technology may struggle to attract investment and financing.

Section 9003, Biorefinery Assistance

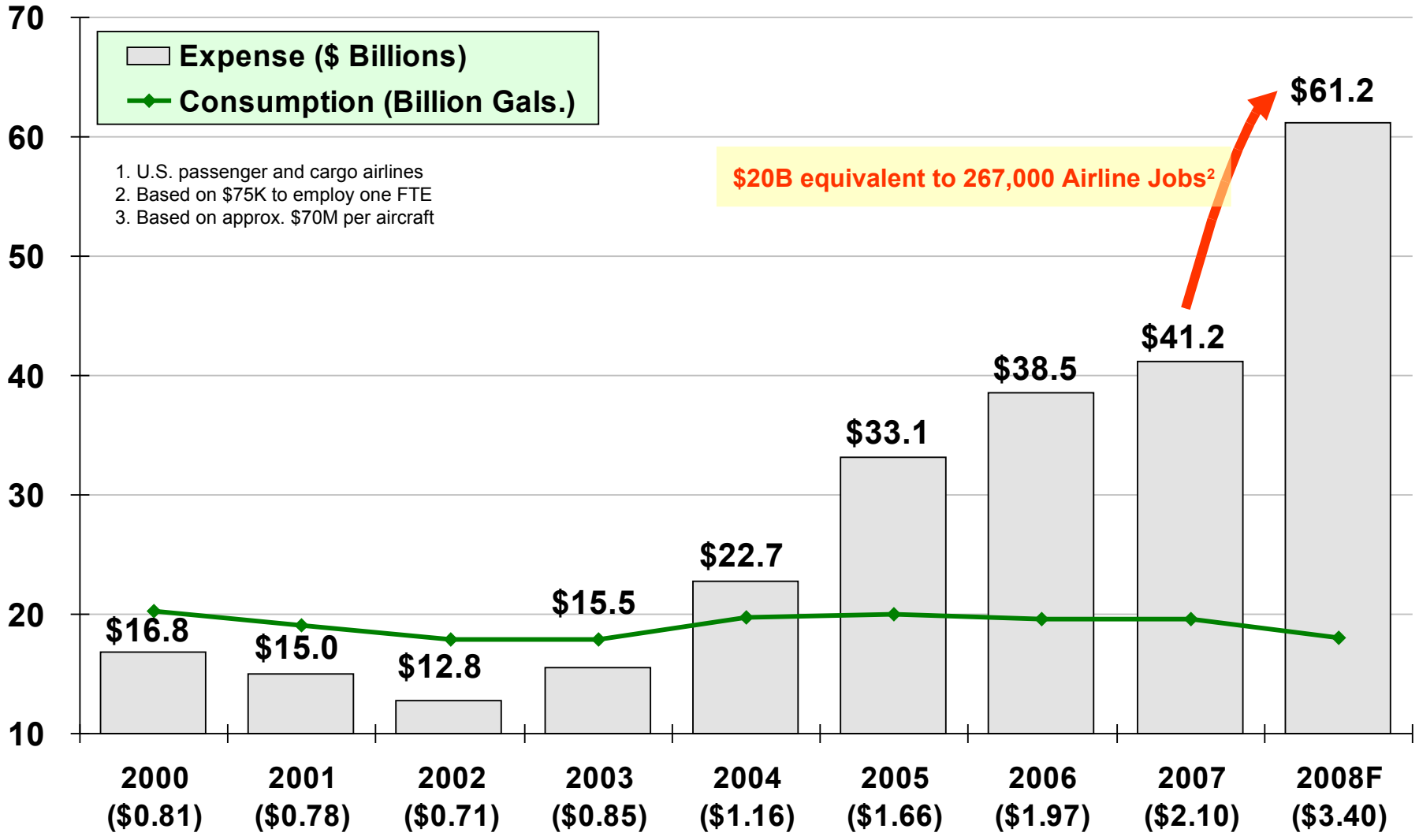
- Loan Guarantee Program could allow for more favorable financing terms, such as a higher debt to equity ratio, lower interest rate, and longer principal repayment period
- Guarantee would insure a high subscription rate to the loan syndication
- Potential for significant improvement in securing necessary loans at attractive rates for this project, insuring overall viability, and ultimately leading to project construction
- How to maximize program effectiveness:
  - Availability in early 2009
  - Loan guarantee level of 100% OR
  - Allow stripping of guarantee debt from non-guarantee debt
  - Prioritize awards for projects with highest probably of success, both technically and financially

Section 9011, Biomass Crop Assistance Program

- Need for a long term supply of reliable biomass critical for investing and financing, BCAP has potential increase likelihood of success
- BCAP could assist in starting facility residues and converting to dedicated energy crops.
- How to maximize program effectiveness:
  - Include the cost of preparing land in establishment costs for perennial crops
  - Allow for an early commitment by USDA for assistance, prior to biomass production
  - Allow for third parties performing collection, harvest, storage, and transportation to qualify for support under section (d)

2008 Jet Fuel Expense[1] Will Break 2007 Record

Expense (Excl. Taxes and Into-Plane Fees) Could Exceed $61B on 18B Gallons

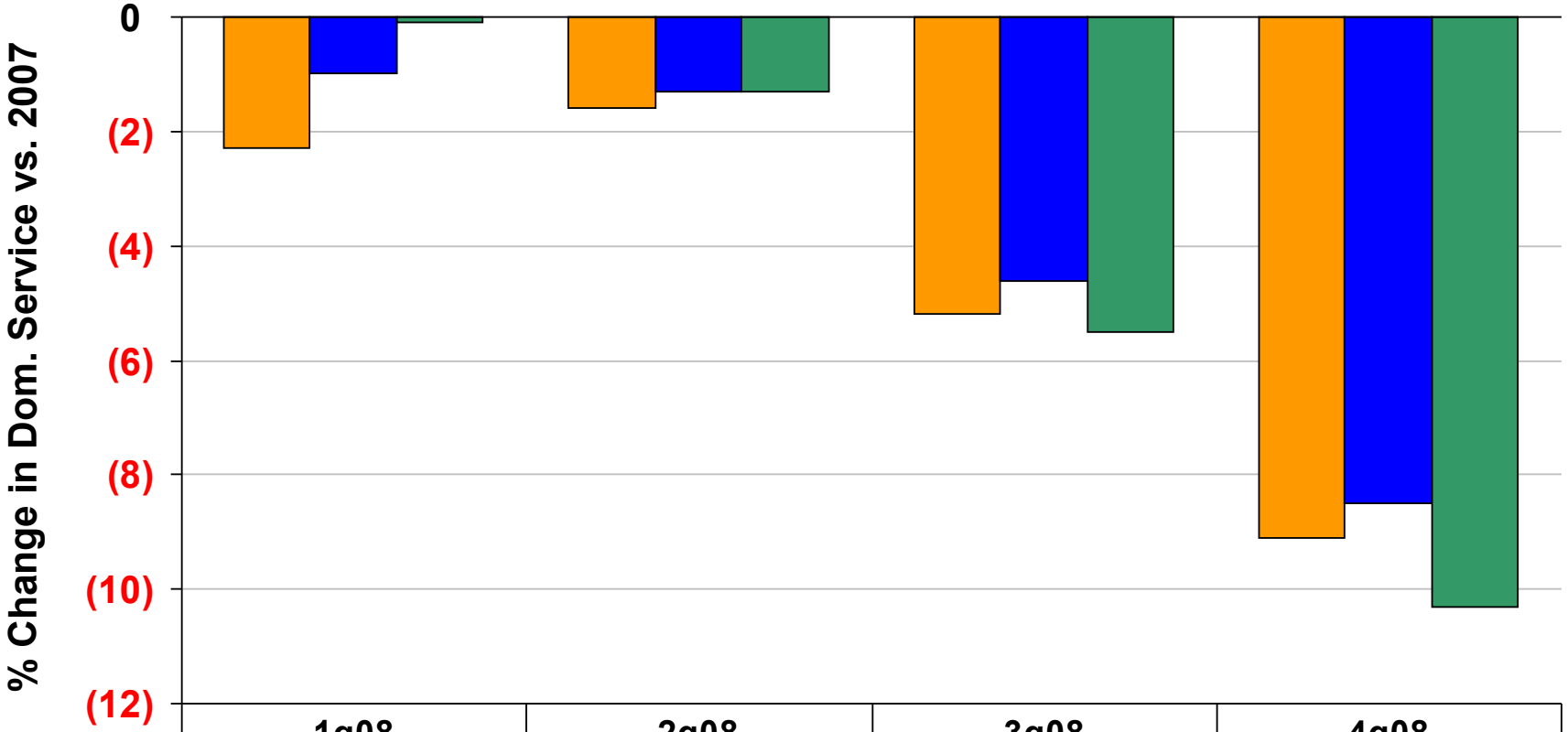


Note: Value in parentheses below year is average price paid per gallon excluding taxes, into-plane fees, pipeline tariffs and hedging costs

Sources: ATA, Energy Information Administration, Department of Transportation

Soaring Fuel Prices Forcing Industry Contraction

Reduction in Domestic Route Frequency and Seating Capacity Reverses 2007 Trend

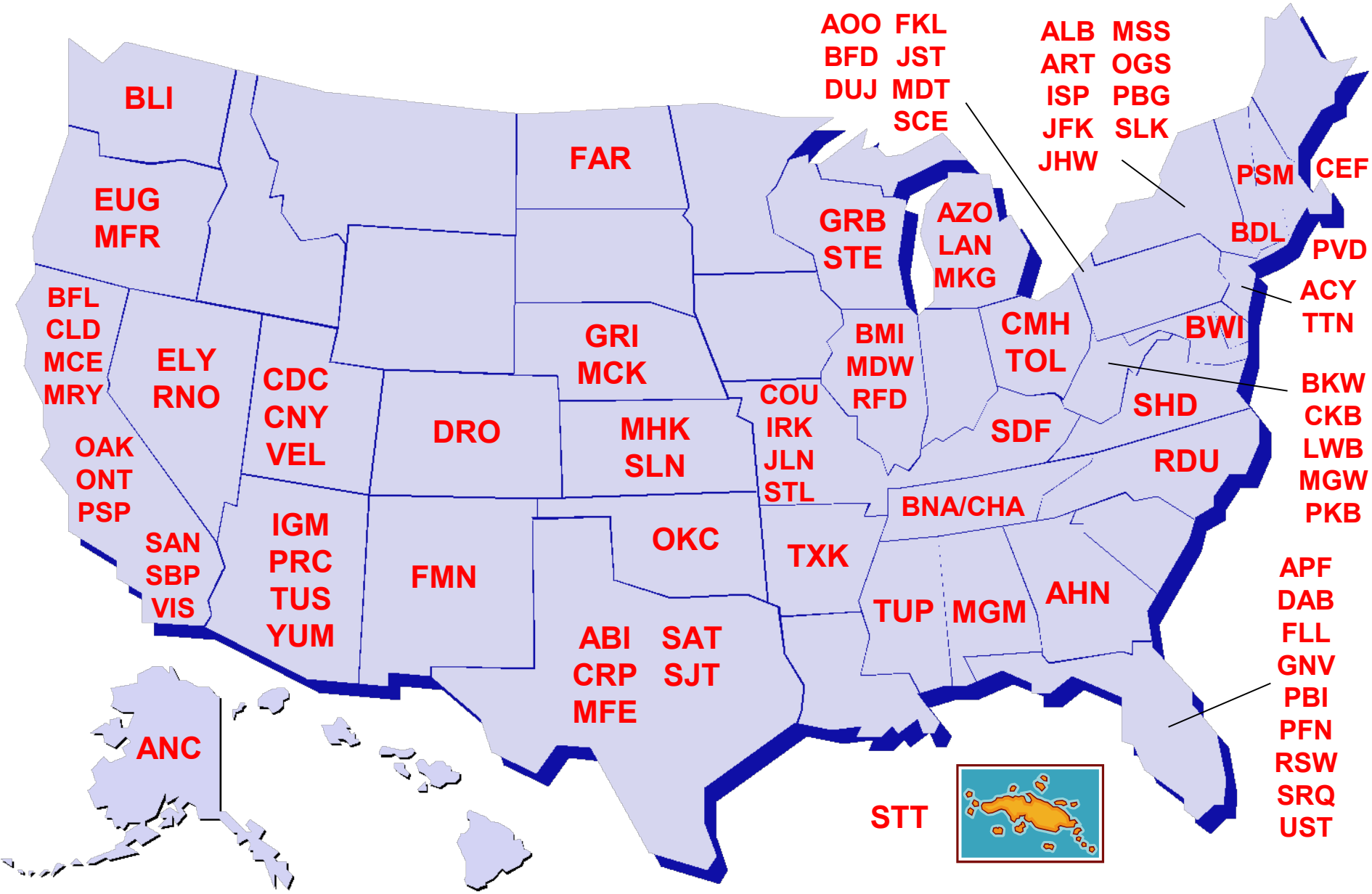


	1q08	2q08	3q08	4q08
Flights	(2.3)	(1.6)	(5.2)	(9.1)
Seats	(1.0)	(1.3)	(4.6)	(8.5)
ASMs*	(0.1)	(1.3)	(5.5)	(10.3)

* An available seat mile (ASM) is one seat flown one mile and is the standard unit of capacity in the passenger airline sector

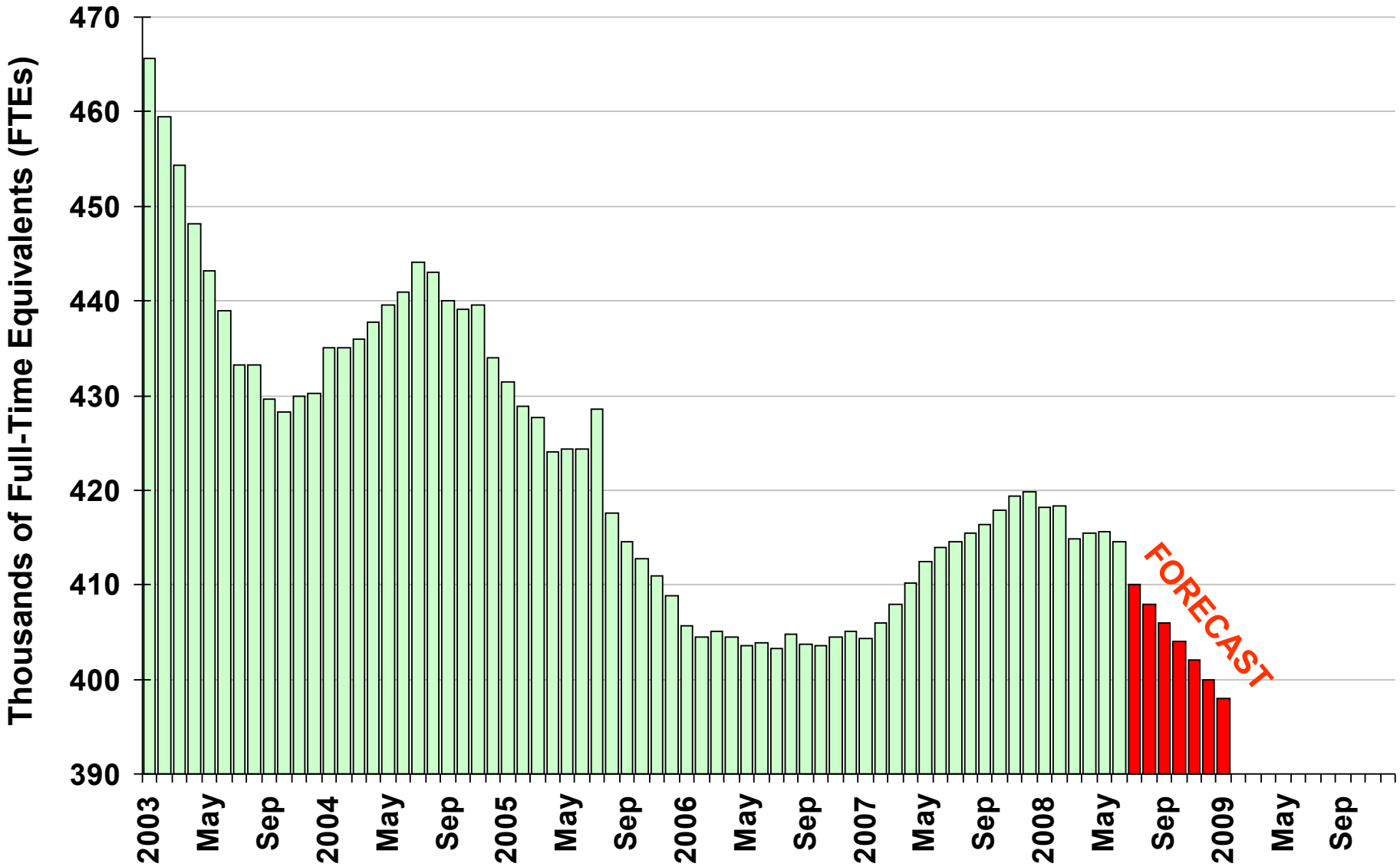
Source: ATA analysis of Seabury APGDat airline schedules as of Aug. 15, 2008

Dozens of U.S. Airports Have Lost or Will Lose Scheduled Service by at Least One U.S. Airline by the End of 2008



Soaring Fuel Prices Taking Heavy Toll on Airline Workers

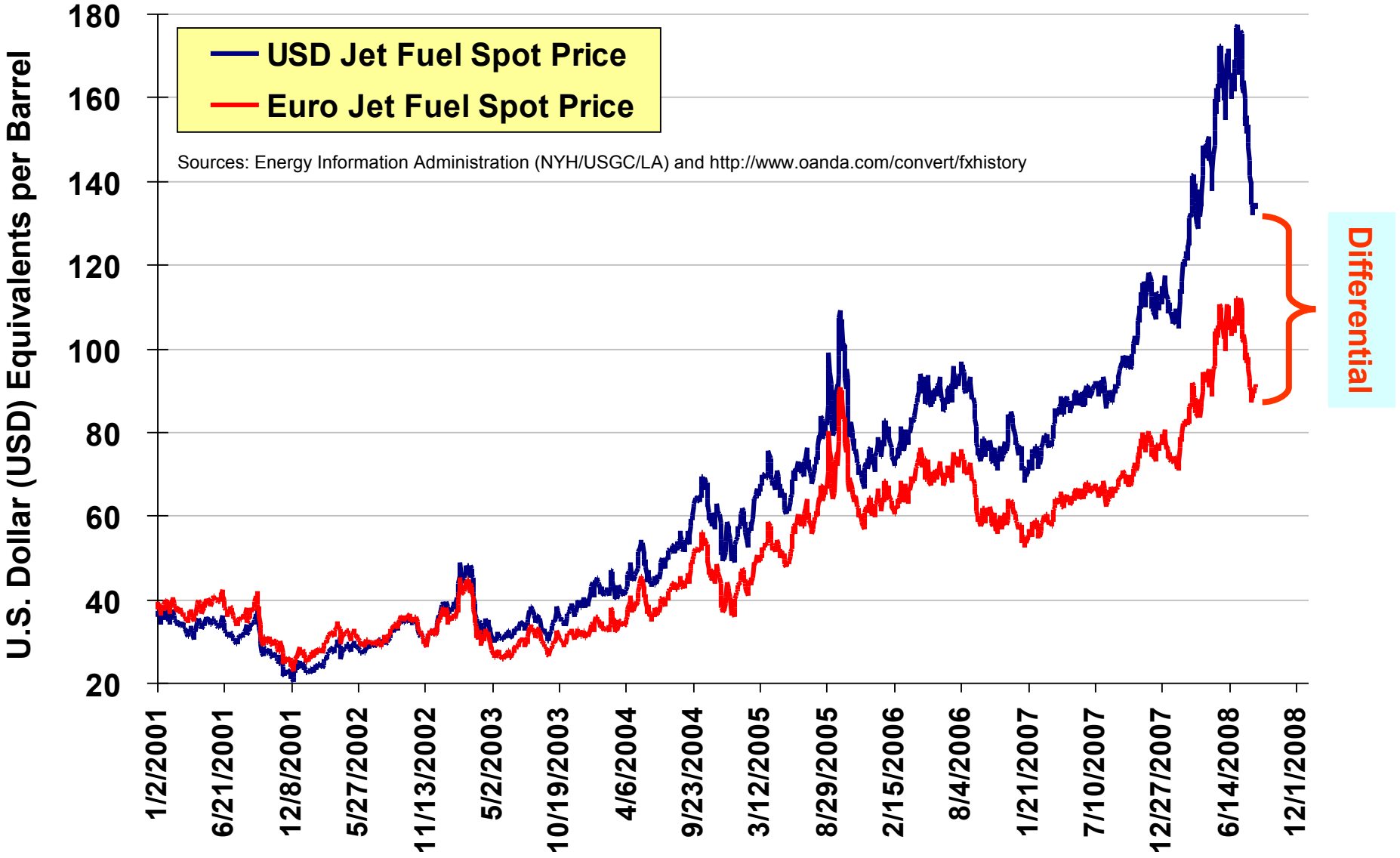
U.S. Passenger Airline Jobs Will Fall Below 400,000 Before 2009



Source: U.S. Bureau of Transportation Statistics

U.S. Airlines Paying Transatlantic Premium for Jet Fuel

USD-Euro Exchange Rate Has Boosted Fuel Price Differential to 45-60%



Commercial Aviation – A Lead Customer for USDA Renewable Fuels

Presented to: USDA Rural Development – Public Meeting on Farm Bill Renewable Energy Provisions
Washington, D.C.

By: Richard L. Altman
Executive Director,
Commercial Aviation Alternative Fuels Initiative (CAAFI)

Date: 4 September 2008

USDA / Commercial Aviation Opportunity In Farm Bill

"***give equal consideration to projects ….that would perform innovative and beneficial research and commercial development of renewable aviation fuels***"…..

…..Manager's language Title 9, FY09' USDA Authorization

Aviation's Unique Strength as Renewable Fuel Customer

- Aviation is dependent on Hydrocarbon based liquid fuels
- Concentrated Airport Distribution allows rapid deployment (80% of fuel to 35 locations)
- Single regulatory framework creates a global market (not 50 different states)
- Accelerated Safety certification efforts targets –
  - Fischer Tropsch Biomass blend approvals by yearend
  - Hydrotreated Renewable Jet (HRJ) blend approvals by 2010
- Globally accepted air quality models implemented via FAA/MIT environmental Center of Excellence
- Aviation systems engineering experience in R&D

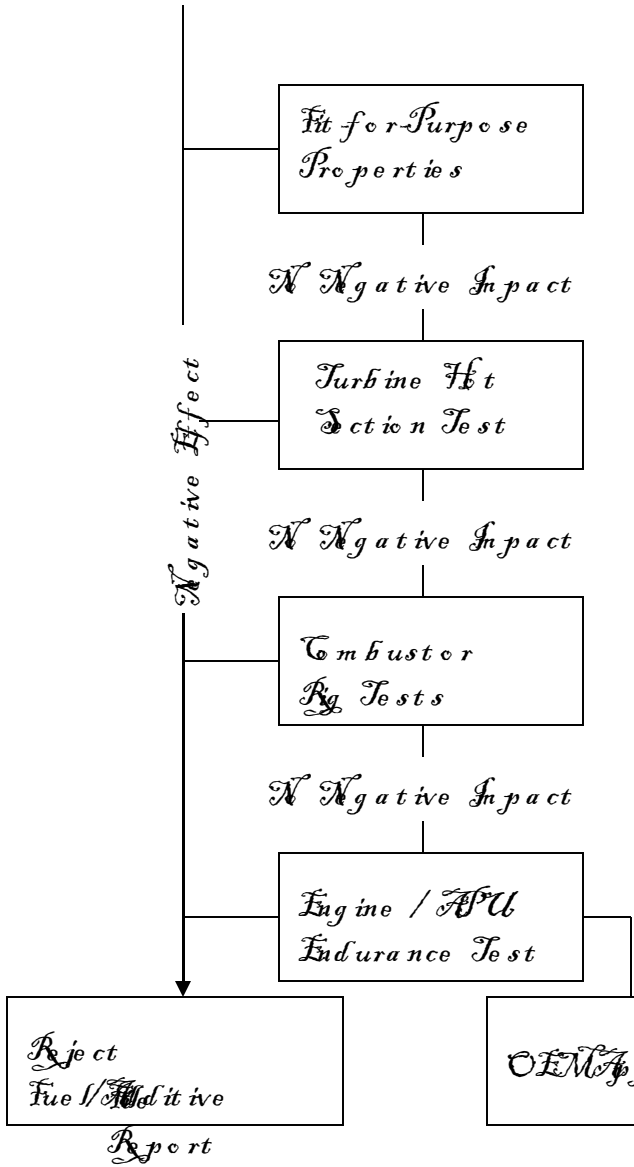
Small group of key evaluators / implementers drives rapid consensus via CAAFI Coalition

Aviation Focused on Secs. 9003, 9005 Response

CAAFI Candidate Tasks:

- **Production Scale up for Engine certification of pure Hydrotreated Renewable Jet (HRJ) (sec. 9003)**
- **Optimize Biomass & Coal Blend Co-Production Techniques (sec. 9005)**
- **Optimize Distribution and Use of Sustainable Biofuels in Aviation (sec 9005)**
- **Production Scenario Analysis for Aviation System Planning (sec 9005)**
- **Optimize Indirect Land Use algorithims in "Well to Wake" Analysis (sec 9005)**

Sec. 9003 Focus – Pilot plants for 100% Certification



Estimate of Fuel Required for 100% Hydrotreated Renewable Jet Evaluation = 250K Gal. – to meet *CAAFI goal*

+

+

=

=

Provided for Aero Engine OEMs, T. Biddle, P&W 7/24/08

CAAFI /AFRL Sustainable Biofuel Advisory Group 9/08

Mission

….. Develop and communicate common roadmaps that enable aviation customers and funding sources to expedite development and deployment….start with Hydrotreated Renewable Jet fuels having quantities in place for multi-FFP tests at USAF Labs

Participants Targeted

- USAF (co-chair)
- CAAFI (co-chair)
- Aircraft Manufacturers (Boeing, GE, P&W)
- Bio-fuels lead companies (UOP, GE, Tyson's, U NDak, Neste)
- FAA, NASA, EERE, USDA, DOD (DARPA)
- Participation of all Bio Fuel Companies attending (>16 entities)

9/09 Meeting/Workshop Goals

- Familiarize Aviation Producers with USDA Program targets
- Formalize R&D / Aviation Certification / Deployment plans
- Form basis for joining/aligning with USDA/EERE BRDI

Commercial Aviation Renewable Fuel Opportunity

….. Compelling Supply Requirement

…. Organized and Focused on Early Certification / Deployment

…. Favorable Distribution Model / Environmental LCA focus

…. Implementation aligning with Farm Bill Sec. 9003, 9005 Provisions

Supporting USDA Producers Via the CAAFI Coalition !

Photos complements the Boeing Company

Synthetic Fuel FT Bio-Blend Process Workshop 09/08

Mission

All project are substantiated as carbon positive and biomass blends are proven to meet both environmental and economic gains….. Airlines are a customer of choice for bio blend Syn fuel producers and > 50% supply of aviation fuel is achieved…..

Participants Targeted

- CAAFI (chair)
- Aircraft Manufacturers (Boeing, GE, P&W, Airbus)
- XTL lead companies (Rentech, Baard, ACCF, Sasol, Shell)
- FAA, NETL, USAF, DOC, DOD (DLA)
- Princeton / Noblis (detailed economics for Bio Blends
- Participation of all XTL Companies attending (>10 entities)

9/09 Meeting/Workshop Goals

- Formalize Roadmaps to Optimize Deployment to Aviation
- Focus on Biomass feedstock transport/gasification technology, end product transport and blending, optimized economics
- Form basis for joining/aligning with USDA/EERE BRDI


We're experimenting with less expensive alternatives to fossil fuel.
DOM PERIGNON
R. E D.
GLENN MCCOY | BELLEVILLE NEWS-DEMOCRAT

Show Me Energy Cooperative

Developing Energy Today for America's Tomorrow

Show Me Energy Creating Economic Development for Rural Missouri

Where is Centerview, Missouri?

SMEC Vision

- VISION STATEMENT
  - Show Me Energy Cooperative has as its guiding vision a commitment to establish an innovative, profitable, leading model for production of biomass based fuels which may be replicated across the country by small producer owned cooperatives that will provide a positive economic impact on the regions where they are located.

Energy Crops Utilized

Biomass Residue

Crop Residue and Native Grasses are harvested by SMEC to Produce Renewable Energy Fuel

SMEC Plant

What is Biomass?

- **Biomass** refers to living and recently dead biological material that can be used as fuel or for industrial production. Most commonly, biomass refers to plant matter grown for use as BioFuels.
  - SMEC will use crop residues such as native and grass hay, corn stalks, Milo and soybean stubble, cereal straw (wheat, oats), and seed tailings, as well as industrial biomass sources such as saw dust, paper fluff, tea and coffee grounds.
    - SMEC Members harvest (bale) cellulose from perennial C4 plants.

Transportation of Biomass

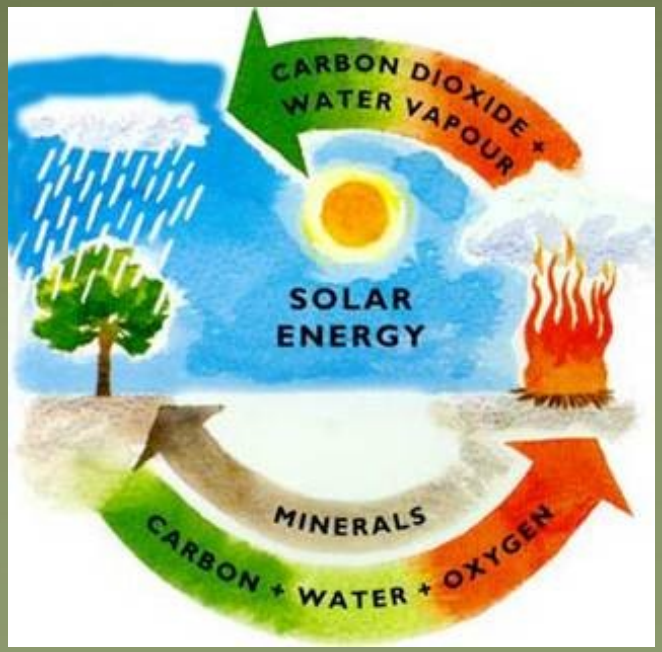
Pellet Mills at SMEC

Biomass Energy Pellets

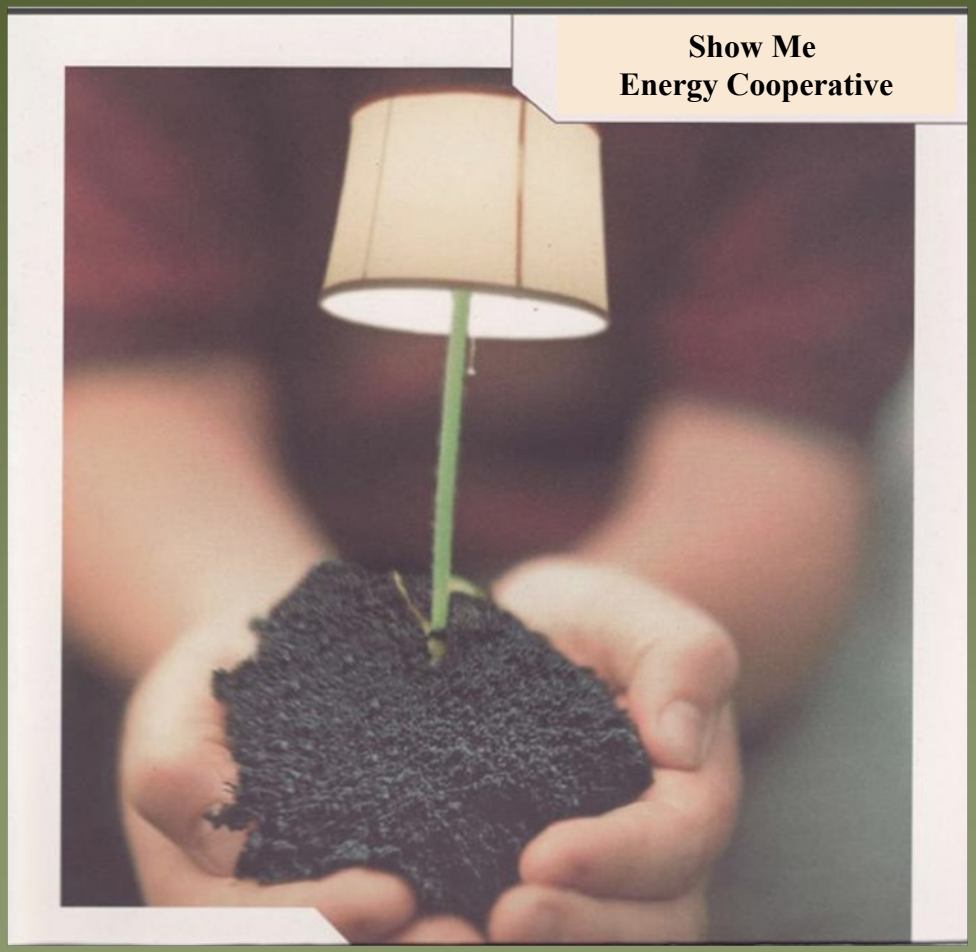
Show Me Energy Partnership with Aquila – Sibley, MO

Environmental Impact

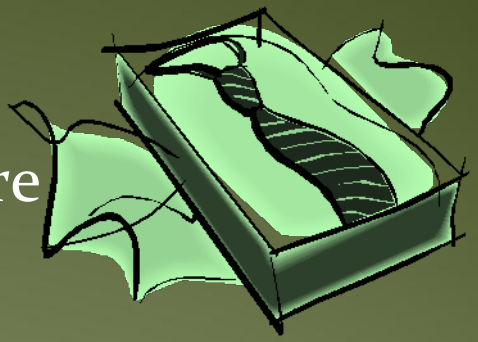
- For each ton of biomass co-fired, Aquila will avoid emitting:
  - -1.69 tons of CO_2
  - -145.82 ounces of Mercury
  - SOX and NOX benefits to be determined



Benefits to the State of Missouri



Benefits to the State of Missouri



- Farmers' Income
  - Increase Value Added Income Per Acre
- Rural Community Development
  - Job Creation – Green Collar Jobs
- Renewable Energy Use through Utility Companies
  - Urban and Rural Utilities Benefit
- Cleaner Water with Renewable Energy Crop Growth
- Energy Production Without Effecting the Feedstock Supply for Animals or Humans

Mosaic Federal Affairs LLC

United States Department of Agriculture
Rural Business-Cooperative Service
Public Meeting
Implementation of Title IX, Energy Authorities
Food, Conservation and Energy Act of 2008

September 4, 2008

MOSAIC
FEDERAL AFFAIRS, LLC

Hiscock & Barclay

Section 9003, Biorefinery Assistance

Provides loan guarantees to fund the development, construction, and retrofitting of commercial-scale biorefineries and grants to assist in paying the cost of the development and construction of demonstration-scale biorefineries.

Federal Biorefinery Assistance in New York and the Northeast has been negligible.

1. Ensure Regional Parity for New York and Northeastern Woody Biomass Feedstocks

MOSAIC FEDERAL AFFAIRS, LLC

HISCOCK & BARCLAY

Lyonsdale Biomass

MOSAIC
FEDERAL AFFAIRS, LLC

Hiscock & Barclay

Section 9003, Biorefinery Assistance

Open Loop Woody Biomass is plentiful

1. Nationally, woody biomass can provide 368 million dry tons/year
2. Nationally, growth rates exceed removal rates by almost 50% (net annual growth on almost 500 million acres of U.S. timberland)
3. In north-central states, growth exceeds removals by 95%
4. Ratio is even greater in the northeast states, where growth exceeds removals by 125%
5. New York State has over 15.6 million acres with over 750 million tons of standing woody biomass
6. In NY, growth exceeds removals by more than 300%

MOSAIC FEDERAL AFFAIRS, LLC

HISCOCK & BARCLAY

Section 9004, Repowering Assistance

Provides for payments to be made to biorefineries in existence at time of enactment of the Act to replace fossil fuels used to produce heat or power to operate the biorefineries with renewable biomass.

1. Clearly favors food and feed-based Ethanol plants
2. Bars new cellulosic/hemi-cellulosic Woody Biomass applications at forest products industry sites.
3. Might conflict with existing Production Tax Credit guidelines
4. Not a re-powering incentive, just another corporate agriculture subsidy.

MOSAIC FEDERAL AFFAIRS, LLC

HISCOCK & BARCLAY

Section 9005, Bioenergy Program for Advanced Biofuels

Provides for payments to be made to eligible producers to support and ensure an expanding production of advanced biofuels.

1. Ensure parity for thermochemical and biochemical technologies
2. Ensure parity for Advanced Hydro-Carbon and Alcohol Next Generation Liquid Transportation Fuels
3. Ensure Regional Parity for New York and Northeastern Next Generation Liquid Transportation Fuels
4. Ensure USDA-helps facilities sited closest to consumer demand.

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Section 9007, Rural Energy for America Program

Expands and renames the program formerly referred to as the Renewable Energy Systems and Energy Efficiency Improvements Program.

1. Audit/Assessment Program-Ensure regional parity to guarantee diverse feedstock focus including closed and open-loop woody biomass. Deploy resources to consortia such as Northeast States Research Cooperative or the SUNY-ESF "Circuit Rider" program.
2. Feasibility studies- Ensure regional parity and focus resources on distributive combined heat and power including rural municipal heating districts in New York and the Northeast.

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Section 9007, Rural Energy for America Program

3. Previous Section 9006 matters-Biomass Utilization Grants
    a. a. Unilaterally focused on western forests
        i. Clearly excludes New York and the Northeastern forests
    b. b. MSA-designation exclusion hurts the Northeast
    c. c. Overly fixated on federal vice public lands.

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Section 9011, Biomass Crop Assistance Program (BCAP)

Provides support to the establishment and production of crops for conversion to bio-energy in project areas and to assist with collection, harvest, storage, and transportation of eligible material for use in a biomass conversion facility.

1. Ensure regional parity for short rotation woody biomass closed loop energy crops.
    a. Shrub willow biomass is a proven closed loop biomass energy crop

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Section 9011, Biomass Crop Assistance Program (BCAP)

2. Allied with cooperative growers, Catalyst Renewables planted 600-acres of shrub willow in commercial demonstration in New York in 2008.
    a. Catalyst's strategic goal is 24,000 New York acres by 2012
    b. Transition from University research to farm-based operations to influence operational adaptation by farmers
    c. Used private dollars (50%) and federal appropriations/New York State funding assistance (50%)

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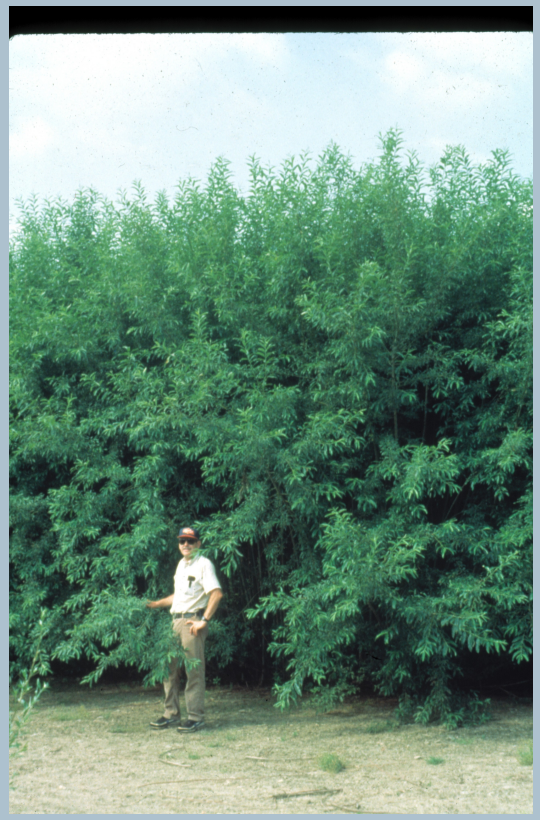
Section 9011, Biomass Crop Assistance Program (BCAP)



d. FY 2009 follow-on appropriation supported by four New York Congressmen/Congresswomen
e. Operational program still must prove itself.
f. Validation requires formalized, reliable funding assistance mechanisms.

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Section 9011, Biomass Crop Assistance Program (BCAP)

3. BCAP cannot end up the same bureaucratic "drill" of the Conservation Reserve and Conservation Reserve (Enhanced) Programs.
4. BCAP should be the means to assist funding for the transition of under-utilized, non-food farmland into productive, suitable woody biomass energy cropland wherever feasible.

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Section 9012, Forest Biomass for Energy

The Forest Service is authorized to conduct a competitive research and development program to use forest biomass for energy.

1. Ensure regional parity for New York and Northeastern woody biomass projects.
   a. Integrated production of energy from forest biomass is ready for commercial demonstration in New York and the Northeast at The Biorefinery in New York.
   b. Manufacture of new transportation fuels from forest biomass is ready for commercial demonstration in New York and the Northeast.

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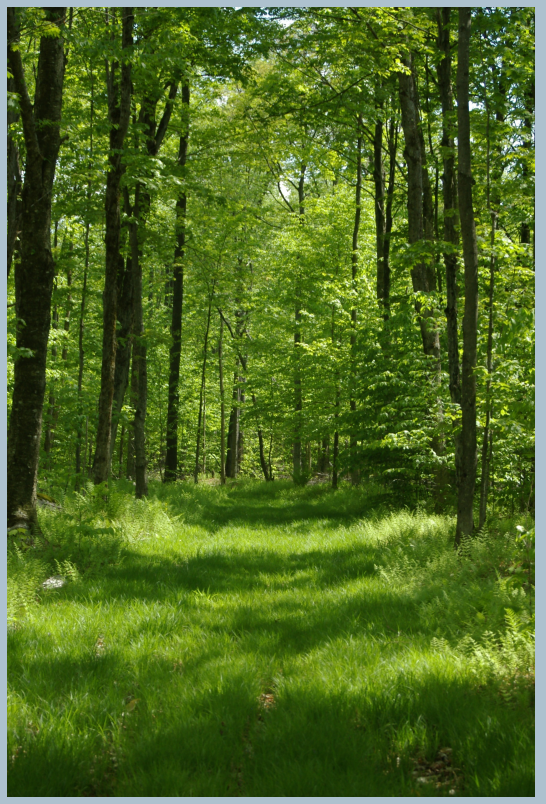
Section 9012, Forest Biomass for Energy

2. At the Lyonsdale Biomass 20Mwe/15,000pph thermal CHP plant in New York.
    a. NYSDEC cites the surrounding Lyonsdale wood-basket as, "the healthiest, best managed forestland in New York State."
        i. Lyonsdale Biomass employs a NYS RPS-certified, sustainable Forest Management Plan.



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Thank You for your Interest.

This Presentation
and the
Formal Submitted Written Comments
are
Posted on the Mosaic Federal Affairs Website

MOSAIC
FEDERAL AFFAIRS, LLC

Michael Brower
Senior Federal Policy Director
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Affiliated with
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Expanding Rural Renewable Energy Opportunities

Inviting a Dialogue with the Public on the New Authorities of the Food, Conservation, and Energy Act of 2008

Presented by:
Craig Metz, Chief Executive Officer for EnSave, Inc.

September 4, 2008
Washington, DC

EnSave

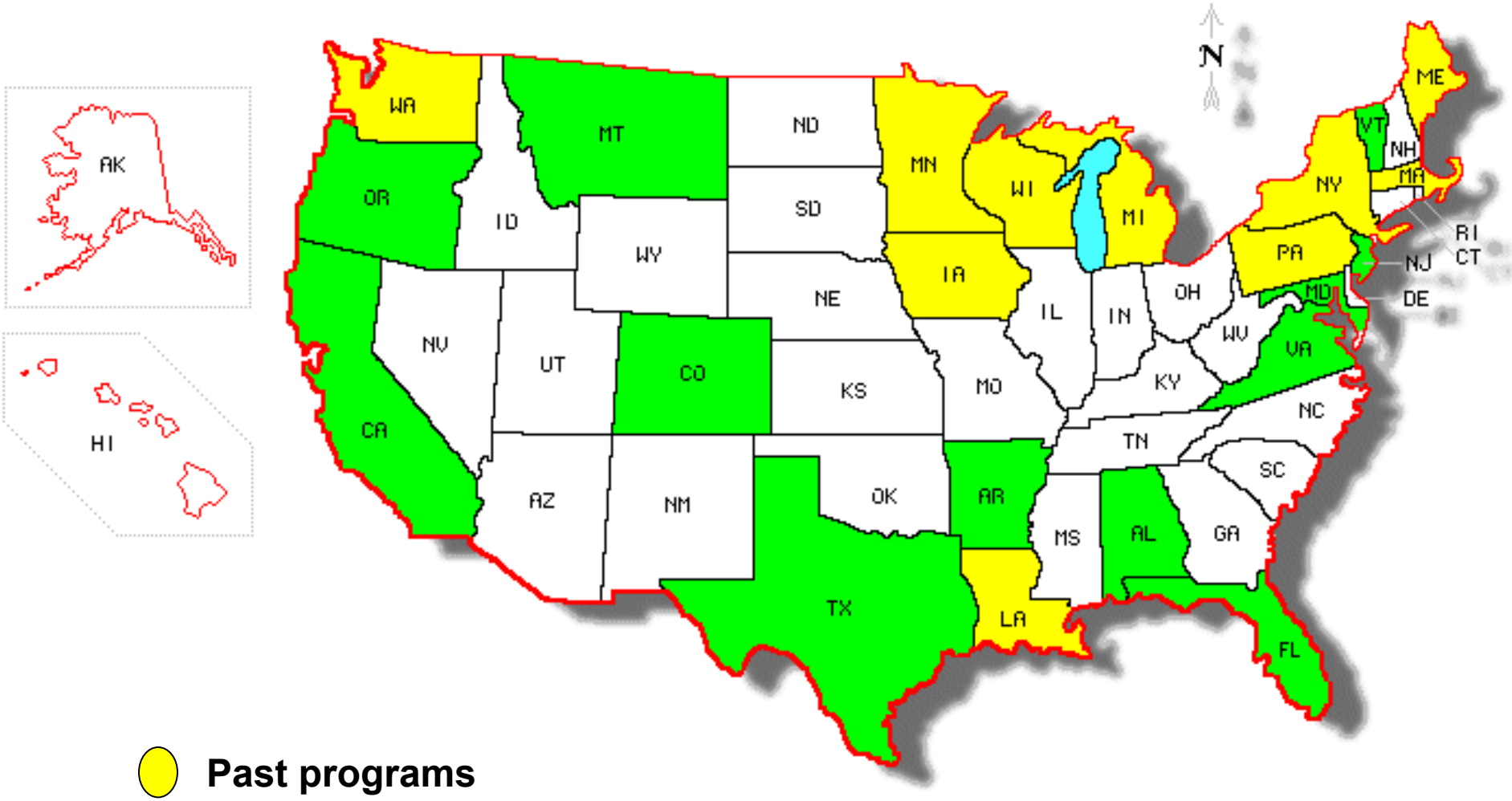
Who is EnSave?

EnSave has provided energy efficiency services to the agricultural sector throughout the United States since 1991.

- Designing and implementing energy efficiency programs for utilities, state energy offices, EPA, USDA and others

- One of EnSave's core program offerings is farm energy audits (over 1,500 completed for all types of farms)

EnSave



Past programs

Active, or pending

EnSave

Title IX – Energy, Section 9007 Language

"(b) Energy Audits And Renewable Energy Development Assistance-

"(2) Eligible Entities – An eligible entity under this subsection is-

"(A) unit of State, tribal, or local government;

"(B) a land-grant college or university or other institution of higher education;

"(C) a rural electric cooperative or public power entity; and

"**(D) any other similar entity, as determined by the Secretary**

EnSave

Suggested Language

EnSave respectfully requests the following language be added to the list of eligible entities:

"a corporation or rural small business that has demonstrated the ability to conduct agricultural energy audits"

EnSave

Why this is Important?

- EnSave has developed an infrastructure to increase program participation (especially in those states with low application rates).
- EnSave has been serving America's agricultural energy needs for over 17 years.
- Entities such as EnSave would be able to conduct their work without going through another layer of bureaucracy, thus ensuring a more efficient process.
- EnSave has shared its knowledge with several Agencies of the USDA in regards to energy issues.
- EnSave is the leading agricultural energy efficiency company in the United States.

EnSave

Thank You

For questions, please contact me:

Craig Metz
Chief Executive Officer
EnSave, Inc.
(802) 434-1822
craigm@ensave.com

EnSave

Optimizing Sections 9007 and 9011 in the 2008 Farm Bill

USDA Public Hearing on Expanding Rural Clean Energy Opportunities with the Food, Conservation and Energy Security Act of 2008

Charles Kubert
Senior Environmental Business Specialist
Environmental Law & Policy Center

About Environmental Law & Policy Center

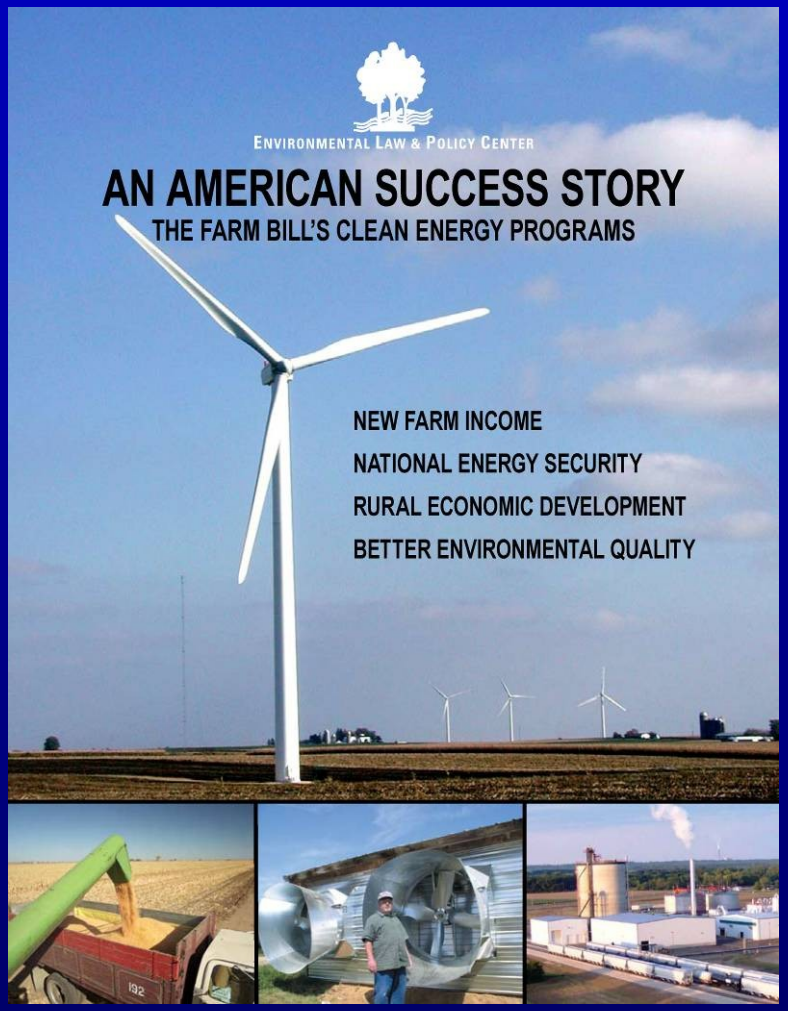
Largest clean energy advocacy group in Midwest/Great Plains

Active in design, passage and implementation of Energy Title in 2002 and 2008 Farm Bills

Have built national ag energy network of producer groups, rural development organizations, sustainable ag advocates and others.

Close partnership with USDA in Section 9006 (REAP) implementation

ELPC's Close Partnership with USDA



Overview

Focus of remarks on implementation of:

Section 9007: Rural Energy for America Program (REAP)

- Funds energy technical assistance, feasibility studies, grants and loan guarantees for rural clean energy projects
- Has funded 1,940 projects in all 50 states since 2003
- Funding increased from $36MM/year (FY08) to $250MM (FY09-12)

Section 9011: Biomass Crop Assistance Program (BCAP)

- Funds pilot projects to grow, transport and utilize energy crops in biomass conversion facilities
- No statutory funding cap

ELPC will submit written comments on these and other Energy Title programs

Rural Energy for America Program (9007)

Guiding Principles:

1) Identify opportunities to save/produce energy through energy technical assistance

- Drive significant energy cost relief for farmers and rural businesses

2) Improve quality of Section 9007 applications through feasibility study support

3) Support projects of all sizes, technologies and markets throughout the country

Energy Technical Assistance-Recommendations

- ETA services may include “in-field” energy assistance
- Grantees should deliver both direct audits and workshops/training
- Program should support rural businesses (not just agriculture) and renewable energy (not just energy efficiency)
- Program should support multi-year grants to ensure local program continuity and success
- Grant eligibility should extend to other non-profits with access to qualified energy professionals (Section 9007, (b) (2) (B))

Energy Technical Assistance-Recommendations

- Maximum grant awards: $250,000/year for single entities, $500,000/year for collaboratives
  - Total funding tops out at $2.8 MM/year (4%) in 2008
- Preference for states without existing ag energy technical assistance programs

Feasibility Studies- Recommendations

Good feasibility studies make for good projects (and derail bad ones)

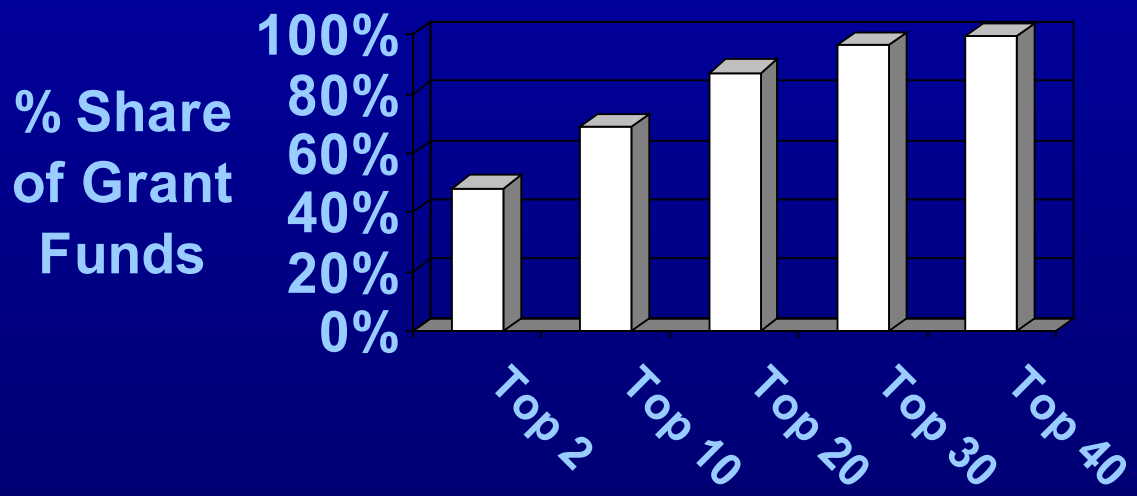
Statute calls for 10% of REAP funding set aside for feasibility studies

- Consultants need to be independent of technology vendors, appropriately credentialed
- Feasibility study grant should not affect eligibility for 9007 project grant
- Applicant cost-share should be 50% (similar to VAPG)

REAP Grants and Loan Guarantees

Large share of Section 9006 grant funding concentrated in a few states

Cumulative Share of REAP Grants- By State,2003-08

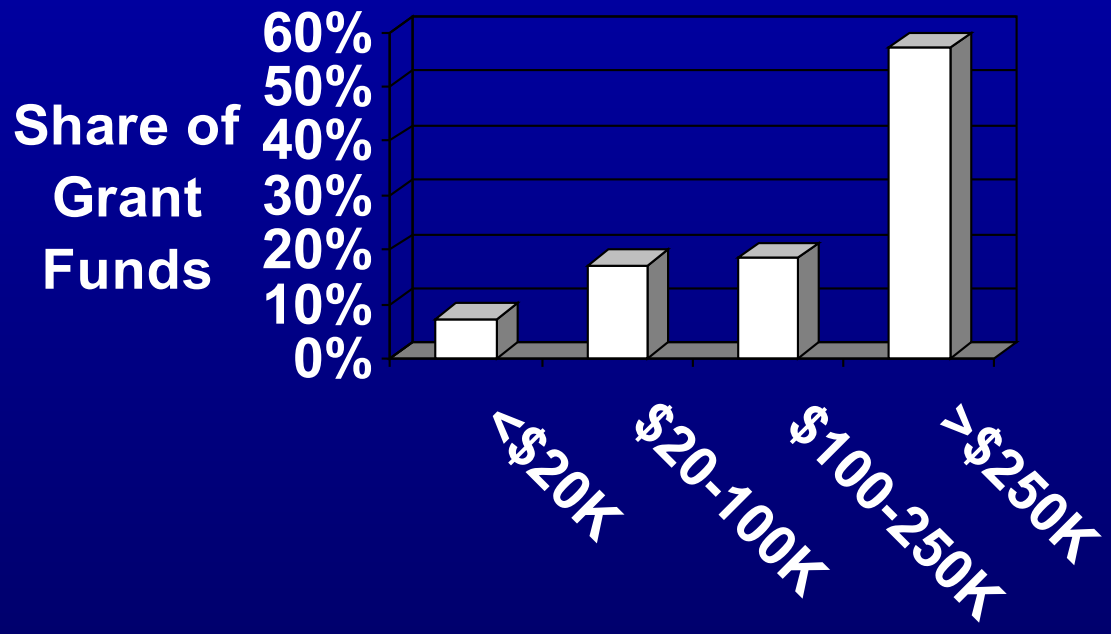


2008: 3 awards in California, 1 in Texas

REAP-Small Grants

REAP legislation requires 20% of funds set for grants under $20,000

REAP Grants by Grant Size-2003-08



REAP-Small Grants

Reaching this goal will require program changes

- Energy Technical Assistance
- Expanded USDA outreach
- Streamline and simplify applications.
- Reduced emphasis on loan guarantees, increased emphasis on grant outreach.

REAP-Loan Guarantees

USDA has placed increased emphasis on loan guarantees since 2006

- Over 50% of funds set aside for loan guarantees
- Priority review of loan guarantee or “combo” applications

- Results fall short of USDA Expectations
  - Small projects in certain states request loan guarantees to boost chances
  - Loan guarantees being “forced upon” applicants when project doesn’t require one
  - Overall demand for loan guarantees well below USDA set-aside: FY08 $205 MM vs <$9MM in awards

Biomass Crop Assistance Program

Important program for priming biomass supply chain

Addresses many challenges in biomass production and utilization.

Guiding Principles:

6) Apply sustainability and rural economic development criteria to energy crop production.
7) Provide safety net to farmers willing to transition to energy crops.
8) Encourage visible working models for energy crop and biomass production and utilization.

BCAP- Project Selection Criteria

- Conservation/Environmental Criteria: Incorporate wildlife, water quality and carbon sequestration measures.
  - Seek input from NRCS, FWS.

- Native Plantings: Do not limit program to native plants.
  - High-yield, non-invasive energy crops (miscanthus) okay.

- Geographic and Project Size Diversity: Both should be encouraged.

BCAP- Other Issues

•Guarantee of BCF Purchase of Energy Crop: Purchase contracts or letters of intent are adequate

•Establishment Cost Payments, Annual Payments and Harvest/transport Payments: All should be independent of one another

•Do not bias against small projects. Ramping scale up too quickly may not be best approach. More smaller projects increases innovation. Allow efforts with multiple approaches and technologies.

For More Information . . .

- Please contact ELPC staff:
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    ckubert@elpc.org, 312-795-3716
  - Andy Olsen, Senior Policy Advocate
    aolsen@elpc.org, 608-442-6998
  - John Moore, Senior Attorney
    jmoore@elpc.org, 312-795-3706
- Visit www.farmenergy.org for additional information.

Mobile Biodiesel Processing in Alabama
"A biodiesel Classroom on Wheels"

Dr. Ernst Cebert
Alabama A&M University
Department of Natural Resources and Environmental Sciences

As interests in biofuels increase, it is essential that state policy makers ensure that producers are well educated in the process of producing these fuels. The Environmental Protection Agency and the Department of Transportation have specific quality standards for all biofuels produced in the United States. Alabama A&M University, Department of Natural Resources and Environmental Sciences and the Alabama Department of Agriculture and Industries have created a '**Biodiesel Classroom on Wheels'**, which provides a mobile educational tool to citizens of Alabama who are interested in the production of biodiesel.

The popularity of small scale biodiesel production is due to the simplicity of the process, which requires few inputs and minimum capital investment. The unit can be taken to different locations around the state to provide hands-on demonstration and training using locally available feedstock (waste vegetable oil, canola and other oilseed crops) and equipment from BiodieselLogic™ of Albertville, Alabama.

Mobile Biodiesel Production Unit

The fully operational mobile biodiesel production system consists of: (1) BDL-55-SS, 84-gallon Biodiesel Reactor with an internal 2250 watt heater; (2) Transfer/mixing pump; (3) 200 micron pre-filter; (4) A 15-gallon meth-oxide mixer & methoxide injection system; (5) Control panel with temp control & high temp limit; (6) Relief valve; (7) Methanol recovery condenser; (8) Heavy duty stands with adjustable locking caster; (9) One combo 110 gallon CS dry wash Amberlite tank w/installed amberlite dry wash cell system; (10) One biodiesel transfer pump w/installed 1-micron final filter station; and (11) Storage tanks. The complete system is assembled on a 6'x16' modified flatbed trailer


State Senator Dr. Parker Griffith at the unveiling of the unit on the campus of Alabama A&M University, with Dr. Cebert in the background.


The Mobile Classroom at Sparkman High School, Harvest AL (Apr. 2008)

for ease of transport to locations in Alabama and surrounding states.

The unit is part of the biofuel research project being conducted by Dr. Ernst Cebert in the Department of Natural Resources and Environmental Sciences, in School of Agriculture at Alabama A&M University. Widespread exposures to small-scale biodiesel have been achieved by displaying the unit at state fairs, cooperative extension meetings and other agricultural related events. The system has also been used as a tool to educate 4-H and FFA youths in the school systems around the state of Alabama (*see attached 2008 schedule*).

During the fall-2007 Alabama State-fair season, the Biodiesel Classroom on Wheels was unveiled at the Alabama Department of Agriculture and Industries' Motor Pool facility in Montgomery, Alabama. After its initial display in several 2007 Alabama state-fairs, the Biodiesel Classroom on Wheels has been in great demand from schools, farmers, and industries. Several industry groups have visited the unit at the Alabama A&M University, Winfred Thomas Agricultural Research Station, in Hazel Green, AL. The Alabama Department of Agriculture and Industries, other public and private institutions are using the unit as an educational tool for their employees. This project has provided the State of Alabama a unique biofuel/biodiesel educational tool to educate its citizens on the production of biodiesel from various feedstocks including oil from locally grown winter canola, and sunflower. This project has been beneficial to all parties including farmers, entrepreneurs, K-12 school systems, community colleges, and end-users, especially for Alabama A&M University's and the Alabama Department of Agriculture and Industries.


The Mobile Classroom at a demonstration to farmers in Tanner, Alabama (May 2008)

2008 Training, Demonstrations and Display of The Alabama Biodiesel Classroom on Wheels

Trip #	Date	Event
1	Jan 22, 08	Alabama Energy Day, State House, Downtown Montgomery, AL
2	Jan 08	Black Caucus Convention, Fair Hope, AL
3	Jan 08	Fleet Managers Convention, Gulf Shores, AL
4	Jan 08	Alabama A&M University, Huntsville, AL
5	Jan 08	Biodiesel Conference, Florence, AL (on display at manufacturing facility) Arab, AL
6	Feb 1, 08	Mont. County Extension Service (Cattleman Assoc.) at Farmers Market Café (Downtown Montgomery) 7am Breakfast
7	Feb 6 & 7, 08	Alabama - Florida Peanut Trade Show, National Peanut Festival, (Fairgrounds) Dothan, AL
8	Feb. 21, 08	Tuskegee University—Tuskegee, AL his till 5pm
9	Feb 22 & 23, 08	Montevallo FFA Farm Day, Montevallo, AL
10	Feb 28, 08	Dr. Cebert, North Alabama Center for Educational Excellence, Huntsville, AL
11	March 13, 08	Dr. Cebert, AAMU Science Day, Huntsville, AL
12	March 14 & 15, 08	”Clover Crawl”, Green Resource Center, AL Power, Homewood, AL
13	April 9, 10, & 11, 08	Grand Bay, AL
14	April 14, 08	Blount Co., Union Springs, AL
15	April 24 & 25, 08	Earth Day Activity, Huntsville, AL (Toyota Plant; Sparkman high school)
16	April 26, 08	Marshall County PALS Environmental Fair, Guntersville, AL
17	May 18 & 19, 20, 2008	Alabama League of Municipalities, Annual Convention, at BJCC. Birmingham, AL.
18	May 21 & 22, 2008	Bridgeforth Farms, Athens, AL (Canola for Biodiesel Field Day)
19	May 23 & 24, 2008	Jubilee Fest, Montgomery, AL
20	June 30, 2008	Russellville, AL, Senator Bedford
21	July 7 & 8, 2008	Alabama Farmers Coop, Birmingham, AL

Trip #	Date	Event
22	July 15, 2008	Moving Alabama Forward, Birmingham, AL
23	July 16, 2008	Moving Alabama Forward, Decatur, AL
24	July 17, 2008	Moving Alabama Forward, Montgomery, AL
25	July 22, 2008	FFA Jefferson Jackson, B-Ham, AL
26	July 31, 2008	Agri-science Classes 4-High schools participated, Clanton, AL
27	Aug. 2, 2008	Farm Expo—Clanton, AL
28	Aug. 4, 2008	Dept of Agriculture & lndustry. (Beard Building) Montgomery, AL
29	Aug. 21 & 22, 2008	A&M Small Farm, North & South AL. Mobile, AL
30	Aug.23, 2008	Ecomax, Rep. Wren, Alcazar Temple, Montgomery, AL
31	Sept. 4, 2008	Flomaton High School, Flomaton, AL
32	Sept. 16, 2008	Talladega School for the Blind, Talladega, AL
33	Sept. 17- 18, 2008	Mid-South RC&D Council, Renaissance, Montgomery, AL
34	Sept. 18-h 9, 2008	Cullman County Fair, Cullman, AL
35	Sept. 23-25, 2008	Baldwin County Fair, Robertsdale, AL
36	Sept. 27, 2008	Marshall County PALS, Environmental Fair, Guntersville, AL
37	Sept. 28-Oct. 2, 2008	Tenn. Valley Expo, Morgan County Fair, Decatur, AL
38	Oct. 3 & 4, 2008	Fayette Chamber of Commerce, (Frog Leg Festival), Fayette, AL
39	OCT. 4-12, 2008	Alabama National Fair, Montgomery, AL
40	Oct. 16-29, 2008	Greater Gulf State Fair, Mobile, AL
42	Oct. 30-Nov. 8, 2008	National Peanut Festival, Dothan, AL
42	Nov. 19 & 20, 2008	A & M Small Farm Conference, Holiday Inn, Huntsville, AL
43	Dec. 5, 2008	Anniston's Christmas parade, GO-GREEN, floats made from recyclable material, Anniston, AL

Work from the past decade at Alabama A&M University has shown that, winter canola can be an alternate to winter wheat and also can be double-cropped with soybean, sunflower and sweet sorghum as additional feedstock for biodiesel and ethanol. The winter canola breeding program in the Department of Natural Resources and Environmental Sciences is developing new promising early maturing winter canola lines, which can be used as viable and profitable feedstock for the production of biodiesel. Average seed yield from AAMU's canola lines ranges from 2000 to greater than 3000 kg ha^{-1} in experimental plots in Northern Alabama.

Also, producers of biodiesel in Alabama would rather use canola oil, not only because of its superior quality, but mainly because it produces between **130-170 gallons** of biodiesel per acre, compare to **48-55 gallons** per acre from soybean. Therefore, by demonstrating the profitability of winter canola, which provided significant profitable yield in the harsh 2006-2007 growing season (the Easter freeze followed by exceptional drought conditions); plus the added-value from its by-products (canola meal) as a feed for poultry production and fish-farming, it is essential to show growers and potential oilseed crushers of the economic wind fall of winter canola for this region. Therefore, through this joint venture, Alabama A&M University will provide educational literatures for producing winter canola as a feedstock for biodiesel in the state of Alabama.

AAMU's on-farm demonstration canola field in Limestone County, Northern Alabama.

Currently, we are evaluating the energy yield potential of **winter canola** cultivars for **biodiesel**; **sweet sorghum and sweet potato** biomass for **ethanol**. We have established a seed to fuel evaluation system, whereby, harvested winter canola seeds will be pressed using a 6-ton oilseed-press; determine oil yield; convert the oil to biodiesel using the "Biodiesel Classroom on Wheels", test the fuel for quality and use the final product in university vehicles. Alabama A&M University has a federal permit to produce up to 10,000 gallons of **ethanol** per year for biofuel research. We will be evaluating the ethanol output of sweet sorghum and sweet potato with a distillation system built by AAMU engineering students. The Ethanol produced by AAMU will be used to convert university vehicles to operate on biofuels.

Alabama A&M is collaborating with Auburn University to investigate a "**Bio-energy Rotation"** system (cotton-canola-soybean) with irrigation in North Alabama, to determine the bio-energy potential for each crop if drought conditions persist.

For More information, please contact:

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The Closed-Loop Renewable Energy Model

INTRODUCTION

The primary issue used to criticize biofuels is its negative impact on food prices, which creates an unfair burden on consumers. Somewhere in the process, decision has to be made: food or fuel. Current bionergy systems are rewarded based on government subsidies and incentives, and output potential of the feedstock. The motivating force in the bioenergy market as is for all other businesses is profit. Therefore, participants including feedstock producers (farmers), seed brokers (ADM, Cargill and others) and biofuel facilities (biodiesel, ethanol) will choose fuel as long as government subsidies continue to generate favorable profit. The unfortunate burden of higher prices of food can be addressed by adopting non-food crops dedicated to biofules, or by creating a closed-loop system whereby any food crop used as a feedstock for fuel must meet the 3F criteria: **Food-Feed-Fuel** in that order.

Switching to non-food crops feedstock could worsen the problem, because farmers would use their food-crop acreages to produce the more profitable fuel-crops. The non-food crop approach will work only if biomass in the form of forest products, algae, switchgrass from non-row crop lands and existing pastures become the primary feedstock for biofuels. In the 3F criteria, farmers can continue to grow the usual food crops; however, the first use of the harvest should be for food, either by direct human consumption or through normal food processing. The second use should meet the need for animal feed, thereby reducing the un-intended side effect of increasing the costs of meat, eggs, dairy and other animal products. The last of the 3Fs (fuel), should come from the waste stream of the first two-Fs; row crop residues (corn stover, peanut hulls) waste vegetable oil, animal fat and animal waste.

BIODIESEL CLOSED-LOOP SYSTEM

Currently, all oilseed crops (canola, cotton seed, peanut, sunflower and soybean) grown in the United States can be used for a closed-loop biodiesel (CLB) system. In this project, we will consider the use of winter canola and sunflower in a double cropping feedstock production scenario.

- ✓ **Feedstock Production –** Locally produced winter canola and sunflower will be purchased at market price. Collaboration with growers will be arranged in order to obtain all input data necessary to determine the economic impact of obtaining the crops locally versus being

shipped-in from other locations. Assessment of feedstock production potential to sustain a pre-determine capacity of oil will be made on a radius not to exceed 100 miles.

Food Component

- ✓ Oilseed Crushing
- ✓ Processing food quality Virgin oil
- ✓ Contracting with primary users of oil for cooking

Feed Component

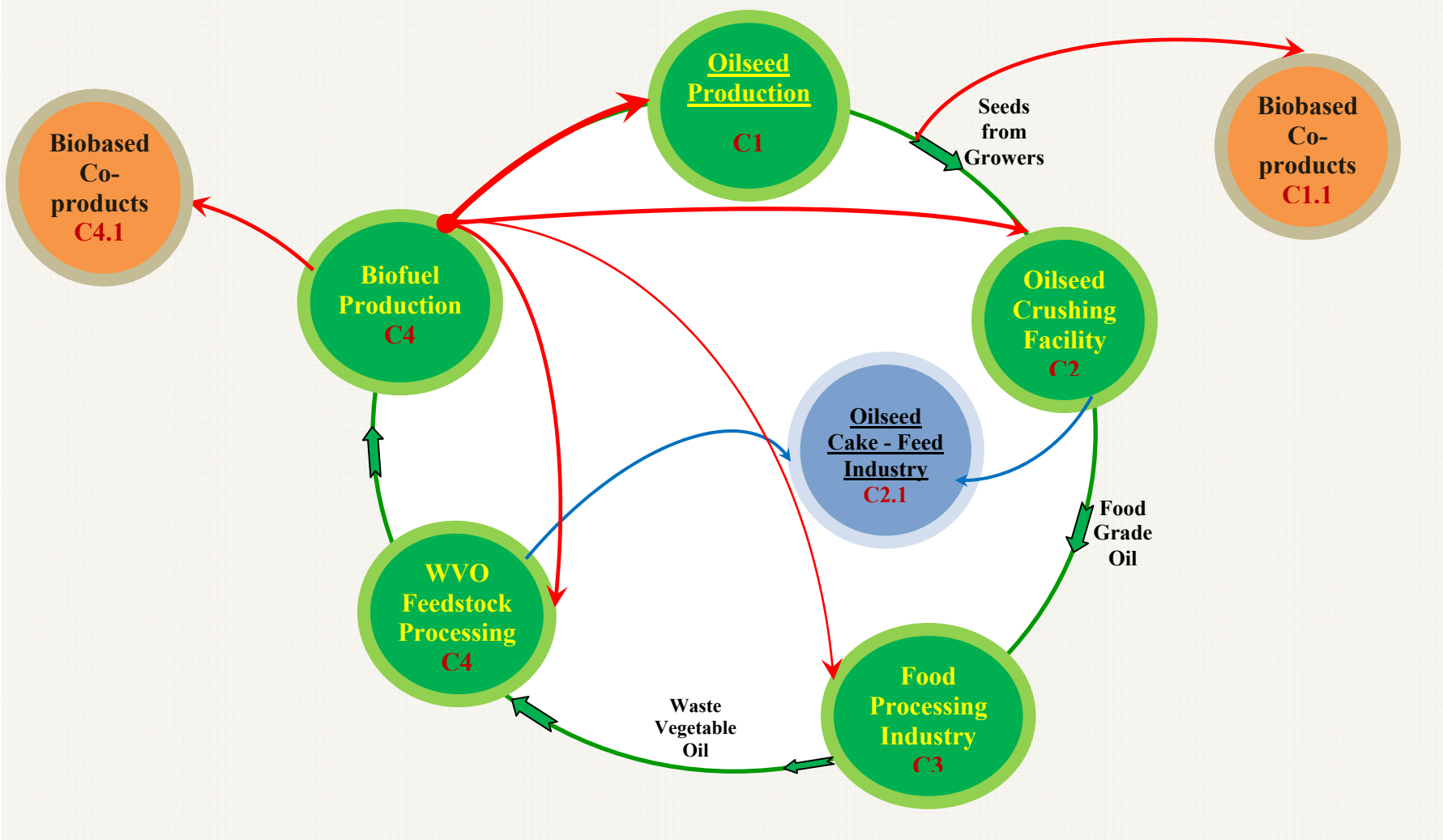
- ✓ Processing of meal
- ✓ Formulating high quality meal for specific clientele
- ✓ Minimize waste-stream by including food component residuals in the feed co-products

Fuel Component

- ✓ Obtain waste vegetable oil (WVO) from primary users
- ✓ Process WVO for high quality feedstock
- ✓ Supply feedstock to biodiesel producers
- ✓ Arrange to obtain glycerol from the biodiesel producers

The proposed model is being tested by Alabama A&M University and its partners in the community. Funding is required to implement a scale-up pilot program of the concept.

The Closed-Loop Renewable Energy Model



Ernst Cebert and LaMar Hauck (September 2008)

I believe the following principles should guide USDA's delivery of all of the Farm Bill energy programs:

1. The allocation of USDA energy program funding should be distributed among the states. Every state in the US is taking steps to increase energy efficiency and generate renewable energy, and every state should receive assistance from USDA's programs. Any concentration of awards to a few states would be a failure of national energy policy.

2. USDA Rural Development's greatest asset is its decentralized structure and workforce. Grant award decisions should be pushed down from the national level to the state level. This will allow maximum use of USDA Rural Development's structural advantage. National competitions -- which pass over USDA's close-to-the-customer expertise & decision-making; which seem to require lengthy narrative applications with long-turnaround times; and which tend to daunt small rural applicants -- should be avoided as a delivery model.

3. Awards should be distributed widely among qualified applicants. Rather than award applicants all-or-nothing of what they apply for, local decision-makers should be given latitude to reduce award levels in order to assist more applicants at still meaningful levels.

4. Applications should be simplified across the board. The smaller the award, the simpler the application should be. The old Section 9006 application was excessive and needs to be dramatically limited. USDA should develop specifically-tailored, simple application forms rather than using "standard forms" and "general certifications" that are confusing and off-target.

5. State RD offices should be authorized to develop application forms and delivery mechanisms that mesh closely with their state's energy incentive programs.

6. Award decisions should be announced in a expeditious manner. In most cases, awards should be announced within 30 days of application deadlines.

Thank you for your careful consideration of these comments.

Jeffrey Deiss

Comments of the Algal Biomass Organization in response to a call for comments and a Notice of Public Meeting entitled "Expanding Rural Renewable Energy Opportunities—Inviting a Dialogue with the Public on the new authorities of the Food, Conservation, and Energy Act of 2008 (Pub. L. 110-234) ("the Act")."

Submitted to the Department of Agriculture, Rural Business Cooperative Service

September 19, 2008

Robin Robinson
Rural Business-Cooperative Service
US Department of Agriculture
Room 5830 South Agriculture Building
STOP 3201
1400 Independence Avenue, SW
Washington, D.C. 20250-3201

These comments are submitted by and on behalf of the Algal Biomass Organization (the "ABO") in the above-referenced matter. The US Department of Agriculture is taking public comment regarding the implementation of Title IX of the Farm Bill. The ABO is grateful for this opportunity to participate in this important dialogue and submit comments.

The ABO was recently formed with the purpose of aggregating the interests of those entities most interested in developing commercial applications for and further research on the practical uses of algae. The ABO is a not-for-profit organization dedicated to the advancement through research and education of the field of algal biomass production technologies. The mission of the ABO is to promote the development of viable commercial markets for renewable and sustainable commodities derived from algae.

The primary purposes of the ABO are as follows:

- Facilitate commercialization and market development of algal biomass specifically for biofuels production and greenhouse gas abatement.
- Deliver information to the public on initiatives, funding opportunities, and industry development.
- Provide networking and collaboration opportunities.
- Establish cutting edge research and commercialization summits and other meeting opportunities.
- Develop a high quality interactive repository of information on algal biomass technology, science, products, processes, patents, and economics.
- Facilitate intellectual property aggregation, licensing, and royalty management.
- Develop quality and measurement best practices for algal biomass, products, systems technology, and econometrics.
- Afford career advancement and consultation opportunities.

The membership of the ABO is open to for-profit and non-profit organizations and all interested individuals including investors, researchers, producers, end-users, and technology suppliers. The organization is supported financially by member organizations and individuals, as well as grants and donations from private, corporate, and government entities.

With that background in mind, the ABO's overarching message to the USDA in the implementation of the Farm Bill is to maintain a level playing field, to avoid adverse treatment of any particular class of biofuel producers, and to allow all biofuel producers, including algae producers, to flourish under programs established by the federal government to encourage the development of fossil fuel alternatives.

Thank you, again, for this opportunity to participate in a dialogue on the implementation of Title IX. We look forward to continued involvement in this process.

On behalf of membership and the Board of the Algal Biomass Organization,
Sincerely,

/signed/

Billy M. Glover
Board Co-Chair
Algal Biomass Organization
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NGVAMERICA
Natural Gas Vehicles for America

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Richard R. Kolodziej
President

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September 16, 2008

Ms. Robin Robinson
Confidential Assistant
Office of the Administrator
Rural Development, Business and Cooperative
Programs, Room 5803
US Department of Agriculture
South Agriculture Building, STOP 3201
1400 Independence Avenue, SW
Washington, DC 20250-3201

RE: Notice of Public Meeting on Implementation of Title IX, Energy Authorities of the Food, Conservation and Energy Act of 2008

I. Introduction

Natural Gas Vehicles for America (NGVAmerica) respectfully submits the following comments in response to the United States Department of Agriculture's ("USDA") notice requesting comments on the various energy authorities adopted as part of the Food, Conservation and Energy Act of 2008, Pub. L. No. 110-234 ("the Act"). *See* 73 *Fed. Reg.* 50302 (August 26, 2008). NGVAmerica is a national organization of over 100 member companies, including: vehicle manufacturers; natural gas vehicle (NGV) component manufacturers; natural gas distribution, transmission, and production companies; natural gas development organizations; environmental and non-profit advocacy organizations; state and local government agencies; and fleet operators. NGVAmerica is dedicated to developing markets for vehicles that operate on natural gas or biomethane and building an NGV infrastructure, including the installation of fueling stations, the manufacture of NGVs, the development of industry standards, and the provision of training.

II. Comments

NGVAmerica is dedicated to creating and advancing new markets for the use of natural gas and biomethane as a motor vehicle fuel. This effort includes working with producers, vehicle manufacturers, and customers to further the use of natural gas a transportation fuels. Natural gas offers a number of advantages when compared with petroleum motor fuels. These advantages include offsetting petroleum imports, reduced emissions of criteria pollutants, and reduced greenhouse gas emissions. These advantages are enhanced when the natural gas is produced from renewable biomass. Moreover, studies show that using

biomass to produce biomethane or renewable natural gas provides superior benefits when compared with other transportation fuels produced from biomass.[1] Several studies also project that large amounts of renewable natural gas can be produced from a variety of biomass sources. The claim regarding the greater efficiency of biogas is supported by the submission of the Gas Technical Institute (GTI), which estimates that producing biogas from renewable sources such as animal waste, forest residues and agricultural waste "can be produced at efficiencies ranging from 60 – 70%." We are confident that using biomass to produce biomethane or renewable natural gas provides the best potential solution for rural communities because it enables the most diverse possible use of this resource – as the fuel can be burned on-site or transported via pipeline or tanker to nearby facilities for a number of different uses, including use as a transportation fuel either in a gaseous form or liquefied.

NGVAmerica supports the USDA's efforts to promote and facilitate greater production and use of fuels from biomass. We also appreciate the fact that USDA appears willing to consider and support a wide range of diverse uses for biomass. With respect to biogas and efforts to promote its use, the Act specifically includes biogas as an advanced biofuel under section 9001(3)(B)(v). This definition recognizes biogas produced from landfill gas, sewage waste treatment gas and other sources of renewable biomass. Thus, there is no question that biogas projects potentially qualify for the new programs enacted as part of the 2008 Farm Bill. We anticipate that companies involved in facilitating biogas projects will be interested in funding under sections 9003, 9004, 9005 and possibly several of the other sections.

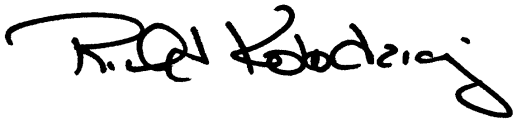
Biogas use as a transportation fuel has received little attention here is the U.S. Most biogas is instead used to produce electricity due to the fact that federal tax policy encourages this use but does not encourage use for transportation purposes. Currently, if biogas is used on-site to produce electricity, the operator receives a substantial tax credit (1.9 cents per KWH). If the biogas is used for any other purpose (including as a transportation fuel), it does not qualify for that tax credit. Despite this inequity, interest in biogas for transportation is growing as concern over petroleum prices and imports is encouraging more aggressive efforts to promote alternative fuel use. A number of projects are underway and several state and local governments are pursuing initiatives to increase the use of biogas. California officials have signed a memorandum of understanding with Sweden that commits them to work together to promote biogas use. A delegation of Swedish officials also is slated to visit Michigan later this month to discuss biogas development. Clean Energy Fuels, the largest provider of natural gas for transportation use in North America, recently acquired the rights to a landfill in Texas so that they can market and sell the landfill's output of renewable natural gas. We anticipate that the availability of USDA funding to support such programs will only increase this interest particularly with respect projects in rural areas.

[1] http://biopact.com/2006/10/hydrogen-out-compressed-biogas-in_01.html; http://biopact.com/2007/02/study-biogas-can-replace-all-eu-imports.html

III. Conclusion

NGVAmerica appreciates the opportunity to provide these comments and looks forward to the chance to participate in these programs.

Sincerely,



Please contact the persons listed below for more information:

Richard Kolodziej
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Renewable Bio-gas:
An Opportunity for Substantial Carbon Reduction

Producing renewable gas (RG) and using it at the site of production or distributing it through the country's existing natural gas infrastructure is one of the most efficient ways to utilize a variety of U.S. renewable resources.

RENEWABLE GAS FACTS

- Bio-gas from renewable sources including animal manure, forest residues and agricultural wastes can be produced at efficiencies ranging from 60–70%.
  - This compares to biomass-to-liquid-fuels efficiencies of 45–60% and biomass-to-electricity efficiencies of 20–35%[1].
  - Additionally, all of the technology components to produce renewable gas from this variety of sources exist today.
- RG is the most versatile form of bio-energy, since it can be used directly at the site of production, in residential commercial or industrial applications, to produce electricity, or used in the transportation sector as compressed gas, which already is a major transportation fuel throughout the world.
- Another benefit of generating RG is that it can be delivered to customers via an existing U.S. pipeline infrastructure instead of over the road, which creates additional greenhouse gas emissions.

- In 2001, biomass accounted for 3-4% of the total primary energy consumption within the European Union. Four of the fifteen European Union member states have bio-energy shares of more than 10%; Finland (16%), Sweden (14%), Portugal (13%), and Austria (11%).[2]

RECOMMENDATIONS

Congress and policy makers should consider creating an incentive for renewable bio-gas similar to the one that exists for renewable electricity and renewable liquid transportation fuels.

Waste Nut Shells
Photo courtesy of DOE/NREL

This will create a level playing field for investors in the renewable energy industry and generate a renewable source that can be used by residential, commercial and industrial customers throughout the United States.

Renewable pipeline quality gas provides industries like steel, aluminum, chemical and heat treating a renewable option for production without any changes to their operations.

RESOURCES FOR RENEWABLE BIO-GAS

- If the U.S. used half of this biomass source to create RG, or one quad per year*, then about 5% of natural gas can be displaced by RG, **reducing CO_2 emissions by another 45–70 million metric tons per year.**
- Utilizing major dairy farms, swine and cattle feedlots to create pipeline quality gas (and simultaneously reducing methane emissions from the manure) **can add another 10 million metric tons of CO_2 displacement to this number.**

*Based on the United States Department of Energy's recently completed scenario analysis[3] for an RPS standard of 15% renewables for electricity generation, an incremental 2 quads equivalent of biomass energy are used to help achieve this goal.

1 http://www.sgc.se/Rapporter/resources/seminar_screen.pdf, pl 305.
2 http://www.ec-asean-greenippnetwork.net/dsp_page.cfm?view=page&select=146
3 http://www.eia.doe.gov/oiaf/servicerpt/prps/rps.html,

June, 2008
Prepared by GTI
202-661-8645

MAUMEE VALLEY GROWERS
Choose the Very Best.

September 19, 2008

Robin Robinson, Confidential Assistant
Office of the Administrator, USDA
Rural Development, Business and Cooperative Programs, Room 5803
South Agriculture Building, STOP 3201
1400 Independence Ave SW
Washington, DC 20250–3201

Dear Mr. Robinson:

Northwest Ohio greenhouse growers have come together to form the Maumee Valley Growers (MVG), an industry-based association committed to sustaining and growing our greenhouse industry. All growers benefit by working together through a collaborative process and sharing resources and knowledge to identify solutions to commonly shared problems. Our offices are located at The University of Toledo in the Urban Affairs Center.

For the last three years, our MVG organization has worked closely with area growers, academia (research) and public sector officials (city/county) to promote local awareness through branding strategies, promotional campaigns and other marketing techniques. This partnership continues to receive tremendous support by our 9th District Representative, Congresswoman Marcy Kaptur. These efforts have transitioned structured activities into tangible regional accomplishments.

One of these accomplishments was the establishment of a voluntary pooled natural gas purchasing program. This program allowed us to negotiate a level playing field for retailers, wholesalers and multi-generational greenhouse grower owner/operators not only in NW Ohio but throughout the entire state. Last year alone, our organization was able to save nearly 60 growers 16% off their gas bills. The success of this program is a direct result of offering access to ALL growers large and small regardless of individual usage requirements.

Unfortunately, the ability for our growers to replicate this success through participation in the USDA Farm Energy Bill is not possible. As you are well aware, growers doing business in urban areas or those contiguous to them are NOT eligible to apply. As many as two-thirds of our NW Ohio growers are from Lucas County and are automatically disqualified from participating. This is also true for many growers in Ohio operating facilities near Cleveland, Cincinnati, Columbus, Dayton and others.

We understand that over the years good intent has resulted in gradual unintended consequences due to population shifts. It is imperative we recognize this inequality and modify Section 9006 to accommodate ALL growers regardless of urban or suburban agricultural producer status.

We believe the language under consideration will rectify the situation:

(1) IN GENERAL- In addition to any similar authority, the Secretary shall provide loan guarantees and grants to ***agricultural producers and rural small businesses****--*
(A) to purchase renewable energy systems, including systems that may be used to produce and sell electricity; and
(B) to make energy efficiency improvements.

As our regional and statewide programs continue to develop and benefit our growers, we look forward to the opportunity to participate in the USDA energy program with equal vigor and enthusiasm.

We very much appreciate your consideration in this matter and look forward to your decision.

Joe Perlaky, Program Manager
Maumee Valley Growers
The University of Toledo
419-356-4847

cc: Congresswoman Marcy Kaptur - 9th. District, State of Ohio
Dr. Neil Reid, Director, Urban Affairs Center, Associate Professor
Geography and Planning, The University of Toledo
Dr. Michael Carroll, Professor/Director, Center for Regional Dev.,
Bowling Green State University
Randy Monhemius, USDA Business Programs Specialist - Rural Dev.
Andy Olsen, Senior Policy Advocate, Environmental Law & Policy Ctr.

COMMENTS ON TITLE IX, USDA "900_" PROGRAMS

by Scott Sklar, President, The Stella Group, Ltd.

I want to begin my comments to formally thank USDA for administering this set of legislated programs not only to the letter of law, but the spirit of the law. These programs are well managed, have solid results, and are making a difference. By increasing the experience of the agricultural community with advanced energy and water technologies, that lower costs and reduce emissions, they will make the US agricultural sector more profitable and resilient.

I wish to make a recommendation to USDA addressing the entire suite of section 900_ programs. The criteria for selection of actual technologies and projects to be funded ought to be 'first and foremost' oriented towards replicability and scaleability. The US government ought to leverage the technology and service providers to a scale-up market penetration and delivery to have higher impact in this sector.

The second recommendation, is that smart energy and water investments have multiple benefits. Reduction of energy use and the related costs are a major benefit. And significant reductions of wastes and emissions, both regulated (such as SO,NOx, particulates, and nitrogen-loaded affluent, aflatoxin, etc.) and unregulated emissions (GHG, mercury, carcinogens, etc.) will save money, reduce liability, and enhance health. But the other critical attributes of distributed energy and water technologies is sustain production when traditional utility systems fail.

Since September 11th, our homeland security and homeland defense focus has been to shore-up our critical infrastructure. That orientation has focused on backing up energy functions for first responders, communications (cellular and landline switches), transportation (bridges, railroad crossings, etc.), and monitoring/sensing/surveilance. But many experts believe this same intensity of preparedness needs to be incorporated in the agricultural and food processing sector.

That means energy back up to pipeline pumps - water, sewage, and fuels (diesel, gasoline), natural gas and irrigation, as well as refrigeration on farms, storage warehouses and even on transportation (trucks, railroad cars, etc.) , and finally back up on internal pumps, motors and process controls from ethanol plants, to dairies and canneries. Infusion of the portfolio of commercially-available renewable energy on-site technologies routinely used by the US Department Defense and commercial industry has only anecdotal distribution with the agricultural sector. For our national security and agricultural security, the United States needs energy and water safety and redundancy spread geographically throughout the agricultural sector.

These USDA Title IX programs can be a viable approach to merge three core asset values of advanced domestic renewable energy technologies - lowering energy costs and imports, reducing emissions and wastes, and significantly enhancing critical functions so the agricultural sector can withstand and maintain productivity during large-scale pipeline (water, natural gas or fuels) or electric grid failures or disruptions.

As we have shown through our programs at National Defense University for the military, educating key planners and decisonmakers is essential to ease and accelerate adoption of new technologies and applications. I strongly urge, in cooperation with State and local governments, for a more proactive role by USDA on the lessons learned about both successful and unsuccessful case studies on applications.

Again, I want to laud USDA for their willingness to embrace new programs, implement the programs wisely, and manage these programs well - it is a great national service. Thank you and thanks for the opportunity to submit my views. - Scott Sklar

Scott Sklar
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The Stella Group, Ltd.. is a strategic marketing and policy firm for clean distributed energy users and companies which include advanced batteries and controls, energy efficiency, fuel cells, geo-exchange, heat engines, minigeneration (natural gas/propane), microhydropower, modular biomass, photovoltaics, small wind, and solar thermal (including daylighting, water heating, industrial preheat, building air-conditioning, and electric power generation). The Stella Group, Ltd. blends distributed energy technologies, aggregates financing (including leasing), with a focus on system standardization. Scott Sklar, the Group's founder and president, lives in a solar home in Arlington and both his VA and DC office buidings have solar, Virginia and his coauthored book:The Forbidden Fuel, and A Consumer Guide to Solar Energy, was re-released for its third printing, and his ongoing commentaries and Q&As are on the largest renewable energy web portal: www.RenewableEnergyWorld.com.

Scott Sklar is Chair of the Steering Committee of the Sustainable Energy Coalition and serves on the (non-profit) Boards of Directors of, the Business Council for Sustainable Energy, and the Renewable Energy Policy Project, and CoChairs the Policy Committee of the Sustainable Buildings Industry Council.

Scott Sklar was selected as the Renewable Energy Industry Representative onto REEEP No Am Adv CommitStee of UN Int'l RE Activity in August 2006. REEEP is a Public-Private partnership and was launched by the United Kingdom along with UN agencies UNIDO and UNDP, 30 other governments, and Sklar was also appointed in April 2007 onto National Advisory Council for Environmental Policy & Technology (NACEPT) of USEPA.

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9003 – Biorefinery Assistance—Provides loan guarantees to fund the development, construction, and retrofitting of commercial-scale biorefineries and grants to assist in paying the cost of the development and construction of demonstration-scale biorefineries. The Act provides $75 million in fiscal year (FY) 2009 and $245 million for FY 2010 for loan guarantee costs for the financing of commercial-scaled biorefineries. In addition, the Act authorizes appropriated funding of $150 million for each of FY 2009–2012, for both the demonstration and commercial scaled biorefineries.

COMMENT: Commercial-scale biorefineries need to be able to produce multiple co-products in order to be competitive in the marketplace. They must be able to quickly adapt to price changes due to supply and demand and dynamically change product streams and maximize market opportunities. In the short term, the major throughput in biorefineries will be liquid transportation fuels with multiple co-product streams. In the future higher value products could possibly displace fuels as the main product stream. Economic analysis of the chemicals, energy, and agriculture markets is critical to maximize profits and ensure sustainability. Continued analysis of the streams will enable advances is conventional process such as reduced water or energy consumption, reduced emissions, or increased throughput from multiple feedstocks.

Section 9004, Repowering Assistance—Provides for payments to be made to biorefineries in existence at time of enactment of the Act to replace fossil fuels used to produce heat or power to operate the biorefineries with renewable biomass. The Act provides $35 million for FY 2009, to remain available until expended. In addition, the Act authorizes additional appropriated funding in the amount of $15 million for each of FY 2009–2012. Section 9005, Bioenergy Program for Advanced Biofuels—Provides for payments to be made to eligible producers to support and ensure an expanding production of advanced biofuels. The Act provides $55 million for FY 2009 and 2010, $85 million for FY 2011, and $105 million for FY 2012. In addition, the Act authorizes appropriated funding in the amount of $25 million for each of FY 2009–2012.

COMMENT: One of the largest costs to a biorefinery is power. Inexpensive power (usually coal) is used in most biorefineries today in order to reduce input or operating costs and maximize profits. Incentives to use fuels with less BTUs in order to achieve "sustainability" targets such as domestic renewable fuels and reduction in greenhouse gas emissions, will be more expensive. In order for the U.S. to be competitive globally, carbon constraints need to be enforced equally to all nations – otherwise carbon reductions will put U.S. producers at a disadvantage. The incentives need to be adequate economically to off-set costs and reward the behavior. The idea is to encourage renewable fuels through a Biorefinery, and these incentives must be careful not to put biorefineries at a disadvantage to petroleum refineries. The end goal, a reduction in emissions, must always be considered, through incentives to use renewable biomass not only applied to biorefineries but their competitors such as petroleum refineries.

Testimony on Implementation of Energy Title (IX) of the Farm Bill

My name is Al Christopherson, chairman of the board for Minnesota's Agricultural Utilization Research Institute. AURI is a nonprofit organization created to improve the economy of rural Minnesota through the development of new uses for the state's agricultural commodities. A key area of value-added advancement continues to be in the development and implementation of renewable energy enterprises fueled by agricultural products and other renewable sources.

AURI has a long history of advancing renewable energy from agricultural products, having worked extensively on biofuels research and the development of alternative energy sources such as biodiesel, biomass and biogas. Since 2004, AURI has operated the Center for Producer-Owned Energy, created from USDA funding awarded through the Agricultural Innovation Center demonstration program. Since 2006, AURI has coordinated the Minnesota Renewable Energy Roundtable, a statewide effort involving more than 100 organizations to identify barriers and create action plans for the advancement of renewable energy opportunities in the state.

It is our belief that this background and experience can help contribute to the efficiency and effectiveness of several of the energy programs outlined in this bill. It has been our experience that providing local, grassroots assistance that can be applied locally offers businesses and community the greatest chance for commercial success.

Section 9003 – Biorefinery Assistance

AURI understands the importance of the Biorefinery Assistance program. AURI programs revolve around determining technical and economic feasibility and commercial viability. It is important that unbiased studies are conducted and to the extent possible, results shared with other interested parties. This prevents unnecessary duplication of effort and paves the way for future groups and the next generation of development. It is vital that economies of scale are considered as well as plans for applying what is learned on demonstration-scale to a commercial-sized operation.

It has been our experience that a key factor in the viability of any renewable energy enterprise, particularly one involving biomass, revolves around the feedstock. Most biomass has different cost, handling, storage and transportation considerations than traditional energy sources. These variables factor heavily into a project's operating costs and overall viability. We have found it vital that organizations venturing into this arena have a network of resources to assure access to the best possible solutions and implementation plans.

Section 9004 –Repowering Assistance

For existing biorefineries, energy costs greatly impact profitability. Many are looking to offset those costs by adapting new technologies utilizing biomass or other available resources to their operations. AURI has successfully assisted several Minnesota processors in their efforts to

repower using biomass. These plants are using feedstocks including agricultural residue, wood fibers, ethanol processing coproducts and other low-value sources to power their operations. Through technologies such as gasification, fluid bed reactors and anaerobic digesters, many of these processors have significantly reduced their need for fossil fuels.

Installing many of the current technologies requires significant capital investment. Funding through the Repowering Assistance program will certainly help offset that barrier. It is vital that biorefineries that are considering repowering get unbiased information and consider all possible technologies given the available feedstocks. We have found that tapping into expertise is vital to success and helps opportunities to develop more rapidly.

Co-locating facilities should also be considered. Currently in Minnesota, warm water from a sugar processing plant is being captured for an aquaculture facility and excess heat from a refinery is being captured for greenhouses that produce food for local markets. This co-location can maximize efficiency and spur development as well as wise energy use.

Section 9005-Biorefinery Program

The Mustang wasn't the first vehicle produced by Henry Ford. It was developed after several generations of vehicles. Similarly, efforts are underway across the country to develop the next generation of biofuels using alternative feedstocks.

Key to the success of this program will be the ability to foster implementation. Our experience has been that many technologies using biomass and forestry resources for fuel are technically feasible but aren't economically competitive. It will take funding, as well as a network of support, to develop sustainable options. These options will need to be proven both technically and economically prior to implementation. Unbiased evaluations need to be developed and that information shared with interested parties in an effort to spur larger scale development

Section 9009 – Rural Energy Self-Sufficiency Initiative

For significant steps toward energy independence to be taken, efforts need to proceed beyond individual enterprises to focus on entire industries and communities. AURI has partnered with several groups in Minnesota to evaluate opportunities and develop handbooks detailing findings in areas such as biodiesel feasibility and community wind development. These types of activities help move groups toward self-sufficiency.

The Rural Energy Self-Sufficiency program can have a significant impact on this type of development by supporting efforts to view energy needs on a broader scale. In our estimation, this program can be most successful through partnering, collaborating and leveraging all appropriate local resources. Once opportunities are identified, implementation needs to occur.

AURI is in the process of developing a community energy assessment template that can be applied to communities across the state. Once the template is complete, the effectiveness of this

program can be multiplied if non-site specific information can be shared with other interested communities. While audits of each community will reveal unique resources and circumstances, some baseline information could be universally beneficial.

Section 9011 – Biomass Crop Assistance Program

As we have seen in our extensive work in biomass energy development, the feedstock itself is often the most important input. This Biomass Crop Assistance Program can help to mitigate some of the issues facing large-scale cellulosic energy development by helping to identify crops appropriate for the region in which conversion will take place. Varied weather, soil and climatic conditions impact crop yield and vitality. Research that identifies potential crops that thrive in particular conditions will be extremely valuable in furthering the development of cellulosic crops.

In conclusion, one of the most important lessons that AURI has learned in its twenty year history is that no project should stand in isolation, but rather a broad collaborative network of experts should be created to assure success from feasibility to implementation. Whether a project is found to be viable or not, the lessons learned from each should add to a broader body of knowledge that is easily accessible and fosters wider success in the next generation of programs.

Thank you for the opportunity to provide testimony today. It is encouraging to see serious attention being given to the development of long-term energy solutions from renewable sources that not only work toward energy independence, but also economic prosperity for communities.

September 16th, 2008

BlueFire ETHANOL

Ms. Robin Joy Robinson
Special Assistant to the Administrator
USDA Rural Business and Cooperative Programs
1400 Independence Avenue, SW (Room 4231)
Washington, DC 20250

RE: Implementation of Title IX, Energy Authorities of the Food, Conservation and Energy Act of 2008

Ms. Robinson,

Thank you the opportunity to provide comments to assist the USDA on the implementation of certain new authorities authorized under Title IX.

BlueFire Ethanol Fuels, Inc. is currently developing cellulosic ethanol projects in California and other area of the US, utilizing a patented concentrated acid hydrolysis process ("Technology") owned by Arkenol, Inc.

Our Technology has been demonstrated at two pre-commercial facilities. The first of two pilot plant facilities was located in Orange, California and operated from the mid to late 1990's. The second facility ("Izumi") was located in Izumi, Japan and operated for over four years. The Izumi facility was decommissioned in late 2006 after a successful demonstration campaign jointly conducted between JGC and Japan's New Energy Development Organization known as NEDO. In both installations, the process demonstrated the use of a wide spectrum of cellulosic feedstocks, including, but not limited to; rice straw, wheat straw, green waste, various species of wood residues, sorted MSW, and paper.

BlueFire currently has three facilities in various stages of development consisting of one commercial demonstration scale and two commercial scale facilities.

Facility Highlights

BlueFire Ethanol Lancaster, LLC ("Lancaster") –

- Located north of Lancaster, California adjacent to the Lancaster Landfill
- The plant is designed to convert approximately 130 bone dry tons per day of cellulosic materials to about 3.1 million gallons per year of ethanol
- Land Use Permit from the LA County Regional Planning Division has been issued to allow construction of the facility.

31 Musick Irvine, CA 92618 Tel 949-588-3767 Fax 949-588-3972 Website: www.bluefireethanol.com

- Issuance of our air permit from the Antelope Valley Air Pollution Control District is expected shortly.
- Subject to obtaining all required permits, start of construction is expected by the end of Q4 08'-Q1 09' with completion and startup commencing twelve months later.
- Engineering is in the final stages of detailed design
- Facility will utilize the combustion of lignin (a process byproduct) in a solid fuel boiler to satisfy approximately 70% of its energy needs with the balance being made up of other renewable biomass.
- Facility will divert approximately 43,000 dry tons of biomass per year from landfill burial.
- Facility is located within a rural development area as determined under USDA's Rural Development programs.

BFRE II ("DOE Facility") –

- To be located in Riverside County
- Converting approximately 700 metric dry tons per day of cellulosic materials to about 18 million gallons per year of ethanol
- BlueFire has been selected to receive a $40 million cost share award from the U.S. Department of Energy
- Preliminary permitting and siting efforts have begun with permit applications to be filed by the end of this year
- Assuming a one year permitting process, start of construction by end of 2009 is expected with start of operation 12 to 18 months later.

BFRE III –

- This project will be submitted in response to a recent U.S. Department of Energy invitation to BlueFire to submit a project under DOE Loan Guarantee program
- This project is targeted to produce 55 million gallons of ethanol per year
- Potential locations in California and other states are currently under review

We provide the following preliminary comments for Title IX - Section 9003 & Section 9005. We would welcome the opportunity to continue the dialogue with USDA to assist in the development of regulations that satisfy the requirements of the Act and are responsive to industry needs.

Section 9003: Biorefinery Assistance

Grant (Demonstration Scale)

Suggested additions for subsection (d)(C) Scoring System: We suggest that other commercialization hurdles beyond technology development be included in the evaluation in order to properly assess the commercialization capability of the proposal. Some of those factors include:

- Level of completion of the project engineering
- Level of completion of environmental permitting
- Level of acceptability to the region

Loan Guarantee (Commercial Scale)

1.) The definition of commercial scale should not be a definitive volume of product, rather it should be a scale that can support the economics required to meet debt financing. We suggest a definition such as:

Commercial Scale" means any Advanced Biofuel facility that can reasonably demonstrate the ability to economically support a Lender's customary commercial interest rate with a sufficient debt coverage ratio.

2.) **Eligible Lender** – The "eligible lender" definition should be broad to allow maximum participation and encourage innovative partnerships among strategically aligned entities. The definition should include "any individual or legal entity either recognized or approved by the USDA with the credit worthiness to lend money to the project and may include: commercial banks, savings and loans, insurance companies, institutional investors, investment banks, factoring companies, venture capital investment companies, or trusts acting on behalf of bondholders and lenders.

3.) Subsection (e)(2)(B)(iii) Authority to Guarantee Loan – suggest "The Secretary may guarantee up to 100 percent of the principal and interest due on a loan guaranteed in subsection (c)(2)".

We applaud USDA's leadership in advancing energy issues as it relates to enhancing our nation's agricultural sectors. We look forward to continuing the dialogue with you and your staff in the expeditious implementation of the Title IX sections of the 2008 Farm Bill.

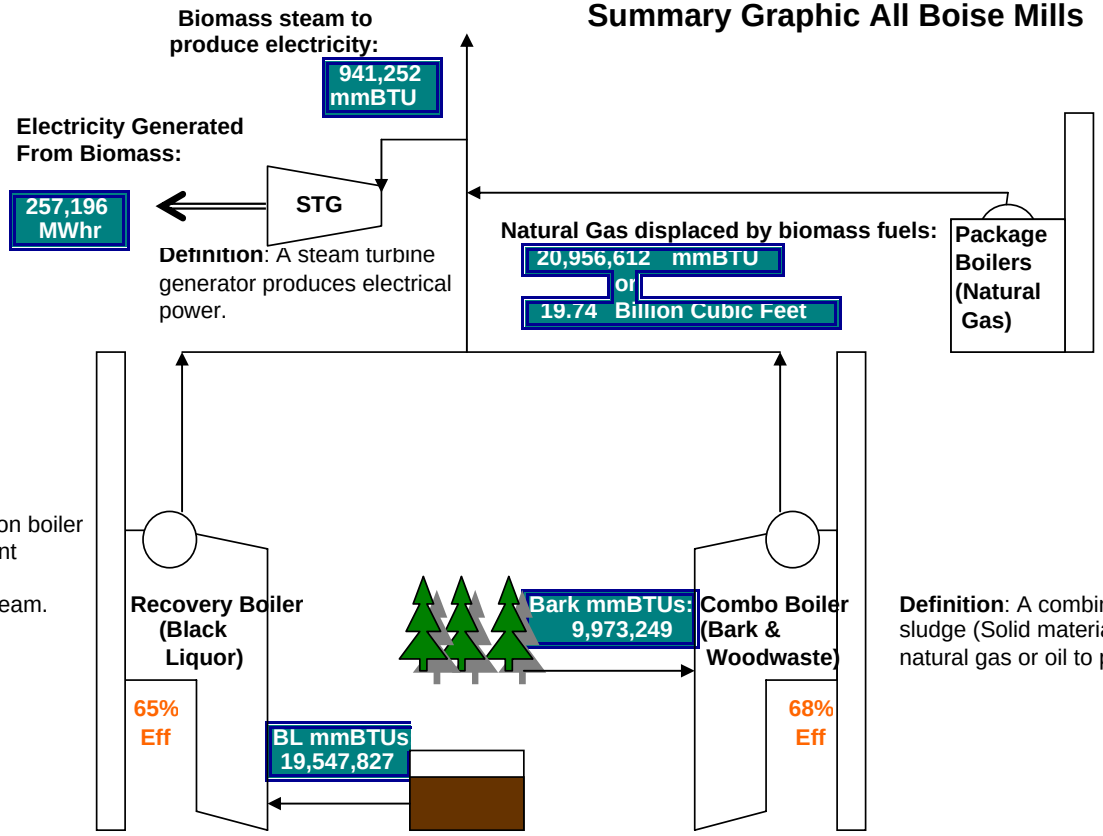
Sincerely,

Arnold R. Klann
President & CEO
BlueFire Ethanol Fuels, Inc.
Email: arklann@bluefireethanol.com

YTD (through August) 2008 (All Boise Mills)

Total Biomass BTU's used to make steam:	29,521,076	mmBTU
Total mmBTU's natural gas displaced by biomass:	23,371,132	mmBTU
Total amount of natural gas displaced by biomass:	21.93	Billion cubic ft
Of this amount, portion used to self-generate electricity:	941,252	mmBTU
Total Electricity self-generated from biomass fuels:	257,196	MWhrs

Summary Graphic All Boise Mills



Definition: A boiler fired with natural gas to produce steam.

Biomass - Forest wood used as a fuel for boilers to produce steam to generate energy, heat or electricity.

Definition: A combination boiler used to recover the spent chemicals from cooking liquor and to produce steam.

Definition: A combination boiler fired with biomass, sludge (Solid material filtered out of mill wastewater that is burned in boilers.), natural gas or oil to produce steam.

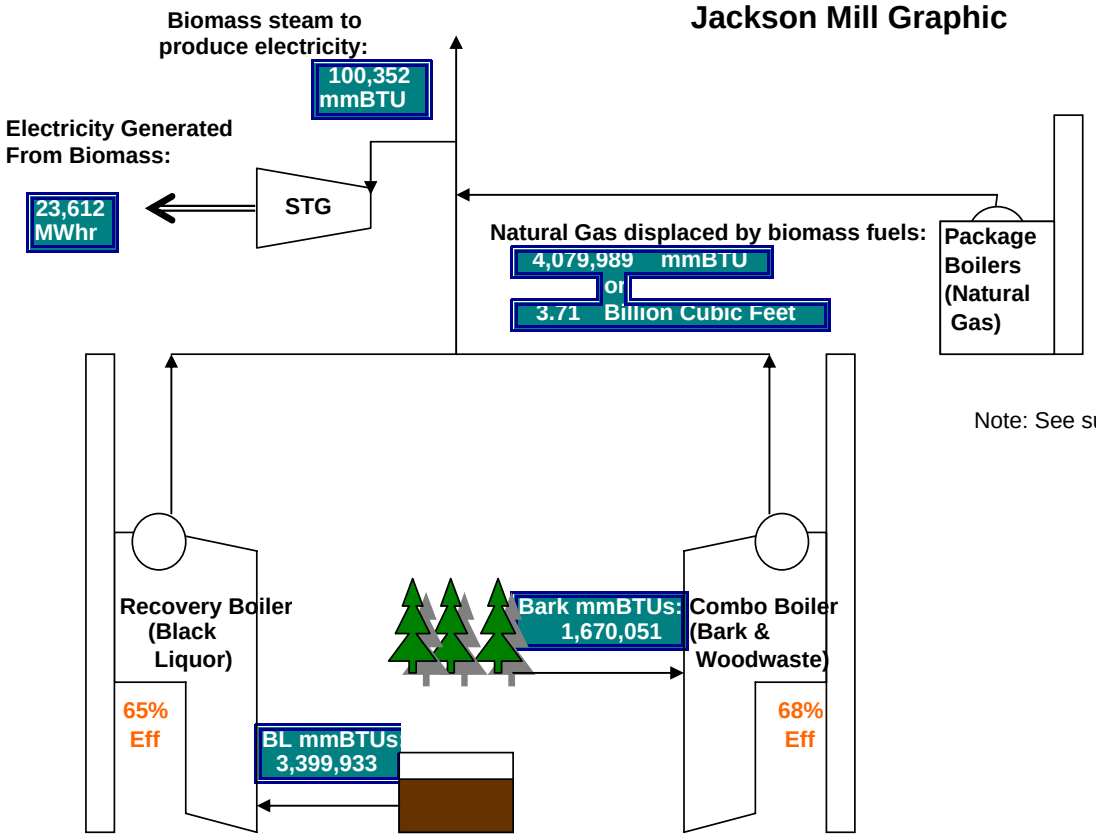
YTD (August 2008) Energy From Biomass

Jackson Mill Data	**Jan-08**	**Feb-08**	**Mar-08**	**Apr-08**	**May-08**	**Jun-08**	**Jul-08**	**Aug-08**
Black Liquor MMBTUs to make steam:	430,890	272,508	560,407	407,052	445,773	429,581	419,391	434,332
Hog Fuel MMBTUs to make steam:	212,269	151,134	288,154	209,421	221,019	205,453	222,475	160,125
Total Biomass MMBTUs	**643,159**	**423,642**	**848,561**	**616,473**	**666,792**	**635,034**	**641,865**	**594,457**
MMBTUs of Natural Gas Displaced:	517587	341343	683182	496329	536641	510897	516935	477074
Million Cubic Feet of Natural Gas Displaced:	471	310	621	451	488	464	470	434
MMBTUs to STG	384481	353586	384150	370499	360554	348658	331778	344340
Power Boiler Natural Gas MMBTU's	330943	206214	294183	275910	266287	239400	234904	234905
MMBTUs to STG from Black Liquor	53538	147372	89967	94589	94267	109258	96874	109435
Steam Turbine MMBTU's consumed	48619	31075	63140	47495	46260	45086	45086	45087
BL MMBTUs to STG	6770	12952	14787	12126	12095	14128	13164	14329
Self-Generated Electricity from Black Liquor (MWhr):	1593	3047	3479	2853	2846	3324	3098	3372

YTD
3,399,933
1,670,051
5,069,984
4,079,989
3,709
2,878,047
2,082,746
795,301
371,848
100,352
23,612

YTD (through August) 2008 (Jackson Mill Summary)

Total Biomass BTU's used to make steam:	5,069,984	mmBTU
Total mmBTU's natural gas displaced by biomass:	4,079,989	mmBTU
Total amount of natural gas displaced by biomass:	3.71	Billion cubic ft
Of this amount, portion used to self-generate electricity:	100,352	mmBTU
Total Electricity self-generated from biomass fuels:	23,612	MWhrs



Note: See summary page for component definitions.

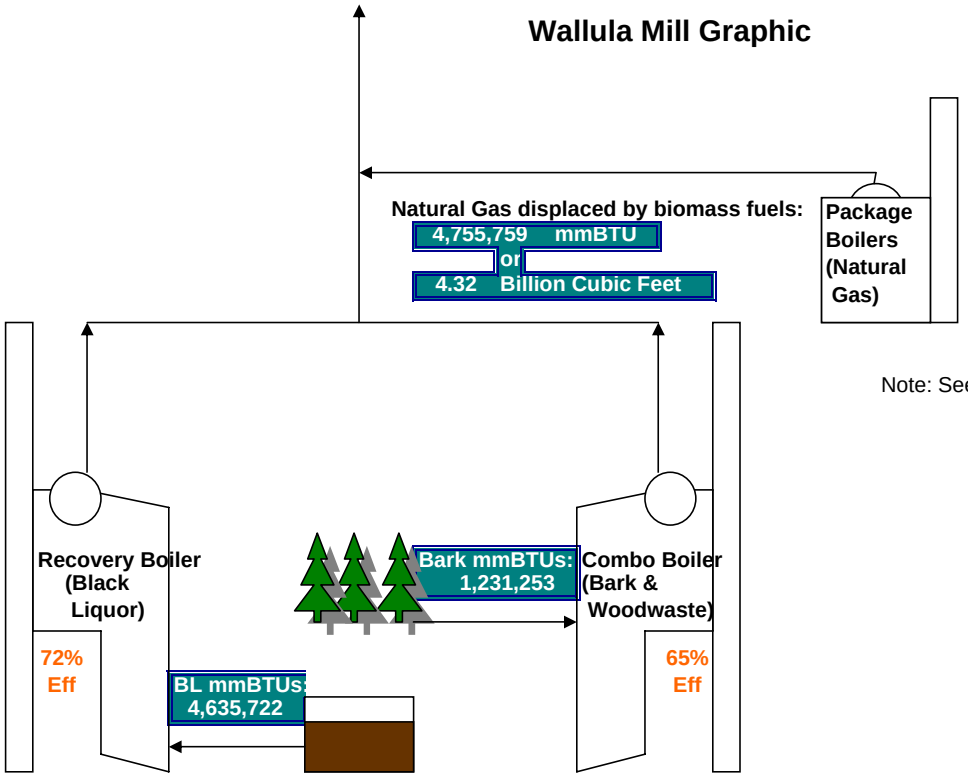
YTD (August 2008) Energy From Biomass

Wallula Mill Data	**Jan-08**	**Feb-08**	**Mar-08**	**Apr-08**	**May-08**	**Jun-08**	**Jul-08**	**Aug-08**
Black Liquor MMBTUs to make steam:	609,715	352,019	769,697	593,139	655,998	385,595	641,743	627,818
Hog Fuel MMBTUs to make steam:	132,446	104,707	224,698	166,986	146,054	159,361	152,565	144,436
Total Biomass MMBTUs	**742,161**	**456,726**	**994,395**	**760,125**	**802,052**	**544,956**	**794,308**	**772,254**
MMBTUs of Natural Gas Displaced:	599605	370977	807421	616793	648241	445581	642658	624482
Million Cubic Feet of Natural Gas Displaced:	545	337	734	561	589	405	584	568

YTD
4,635,722
1,231,253
5,866,976
4,755,759
4,323

YTD (through August) 2008 (Wallula Mill Summary)

Total Biomass BTU's used to make steam:	5,866,976	mmBTU
Total mmBTU's natural gas displaced by biomass:	4,755,759	mmBTU
Total amount of natural gas displaced by biomass:	4.32	Billion cubic ft



Note: See summary page for component definitions.

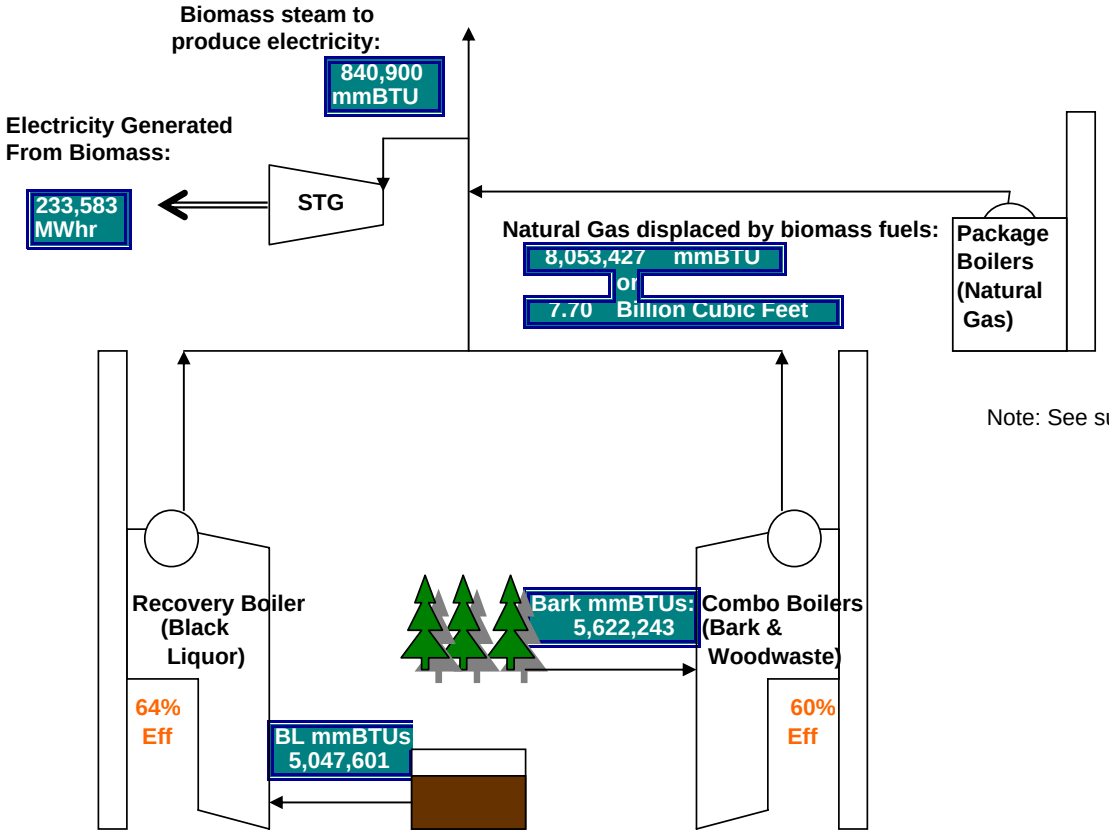
YTD (August 2008) Wallula Energy From Biomass

DeRidder Mill Data	**Jan-08**	**Feb-08**	**Mar-08**	**Apr-08**	**May-08**	**Jun-08**	**Jul-08**	**Aug-08**	YTD
Black Liquor MMBTUs to make steam:	644,472	457,474	513,450	674,060	708,996	658,120	708,467	682,562	5,047,601
Hog Fuel MMBTUs to make steam:	734,386	531,597	627,344	790,558	790,350	633,331	731,440	783,237	5,622,243
Total Biomass MMBTUs	**1,378,858**	**989,071**	**1,140,794**	**1,464,618**	**1,499,346**	**1,291,451**	**1,439,907**	**1,465,799**	10,669,844
MMBTUs of Natural Gas Displaced:	1040358	746026	859774	1104553	1131668	977068	1088150	1105832	8,053,427
Million Cubic Feet of Natural Gas Displaced:	995	713	822	1056	1082	934	1040	1057	7,699
MMBTUs to STG	1640939	1145283	1335170	1571720	1596889	1390928	1566384	1569031	11,816,344
Power Boiler Natural Gas MMBTU's	262081	156211	194375	107102	97544	99477	126477	103233	1,146,500
MMBTUs to STG from Black Liquor	1378858	989072	1140795	1464618	1499345	1291451	1439907	1465798	10,669,844
Steam Turbine MMBTU's consumed	139320	93996	54000	130176	136908	123732	126216	123912	928,260
BL MMBTUs to STG	117069	81175	46139	121305	128545	114883	116025	115759	840,900
Self-Generated Electricity from Black Liquor (MWhr):	32519	22549	12816	33696	35707	31912	32229	32155	233,583

YTD (through August) 2008 (DeRidder Mill Summary)

Total Biomass BTU's used to make steam:	10,669,844	mmBTU
Total mmBTU's natural gas displaced by biomass:	8,053,427	mmBTU
Total amount of natural gas displaced by biomass:	7.70	Billion cubic ft
Of this amount, portion used to self-generate electricity:	840,900	mmBTU
Total Electricity self-generated from biomass fuels:	233,583	MWhrs

DeRidder Mill Graphic



Note: See summary page for component definitions.

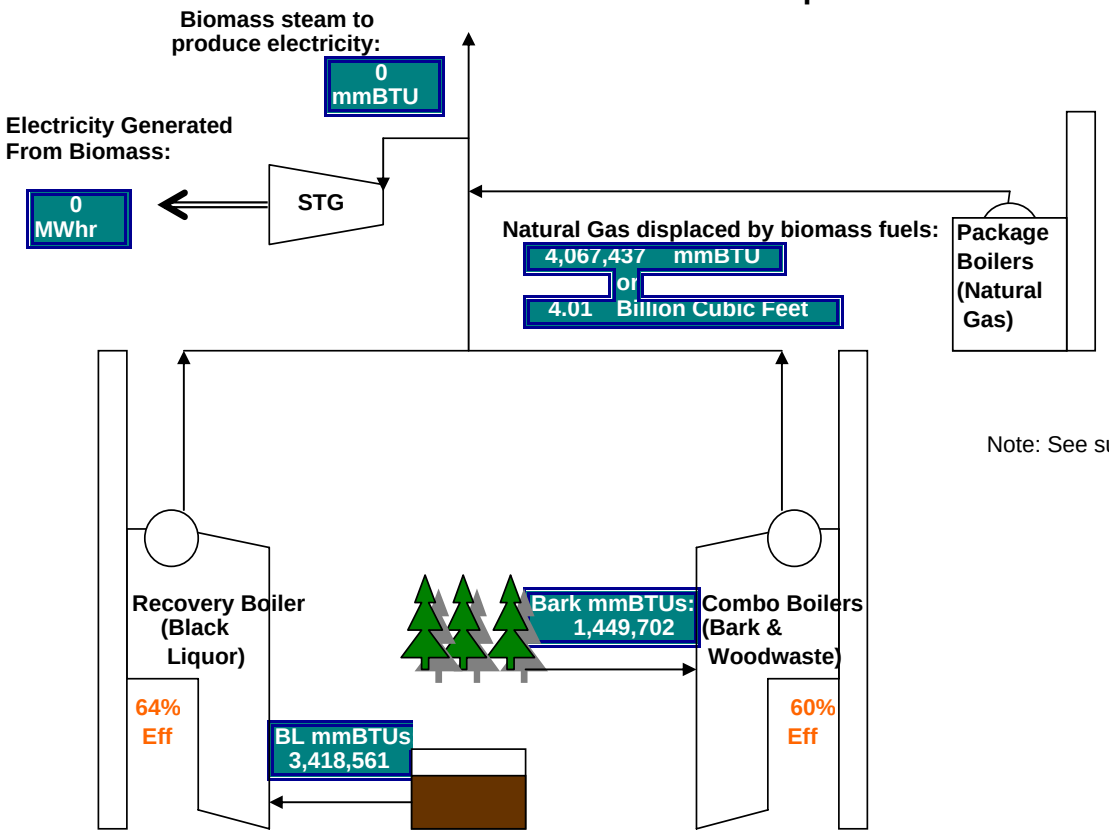
YTD (August 2008) Energy From Biomass

I'Falls Mill Data		Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	YTD
Black Liquor MMBTUs to make steam:		479,478	471,341	518,789	489,767	146,891	470,497	413,719	428,079	3,418,561
Hog Fuel MMBTUs to make steam:		191,716	187,702	201,147	183,948	141,095	187,873	172,939	183,280	1,449,702
Total Biomass MMBTUs		**671,194**	**659,043**	**719,936**	**673,715**	**287,986**	**658,371**	**586,658**	**611,359**	4,868,262
MMBTUs of Natural Gas Displaced:		561281	551153	602315	563906	237238	550568	490261	510716	4,067,437
Million Cubic Feet of Natural Gas Displaced:		553	543	593	556	234	542	483	503	4,007
MMBTUs to STG		49688	47773	37568	34841	13181	25455			208,506
Power Boiler Natural Gas MMBTU's		384182	360243	337205	323986	269183	292804			1,967,603
MMBTUs to STG from Biomass		0	0	0	0	0	0	0	0	0
Self-Generated Electricity from Black Liquor (MWhr):		0	0	0	0	0	0	0	0	0
1STG MW	641-JI-018	4.1	4.0	3.9	3.8	1.2	0.9	3.7	3.1	
2STG MW	642-JI-018	3.3	4.1	3.9	3.8	1.5	4.0	3.0	2.6	
5STG MW	645-JI-018	6.0	6.2	6.4	6.5	2.3	3.7	2.1	3.1	
1 kW = 1,000 Watts = 3,412 Btu/h										
1STG mmBTU/hr		14.7	14.4	14.1	13.6	4.3	3.3	13.3	11.0	
2STG mmBTU/hr		12.0	14.6	14.2	13.7	5.4	14.5	10.9	9.3	
5STG mmBTU/hr		21.6	22.4	23.1	23.2	8.3	13.3	7.4	11.2	
Steam Turbine MMBTU's consumed		35883	35799	38182	36391	13372	22407	23473	23427	228,935
Biomass MMBTUs to STG		0	0	0	0	0	0	0	0	0

YTD (through August) 2008 (I'Falls Mill Summary)

Total Biomass BTU's used to make steam:	4,868,262	mmBTU
Total mmBTU's natural gas displaced by biomass:	4,067,437	mmBTU
Total amount of natural gas displaced by biomass:	4.01	Billion cubic ft
Of this amount, portion used to self-generate electricity:	0	mmBTU
Total Electricity self-generated from biomass fuels:	0	MWhrs

I'Falls Mill Graphic



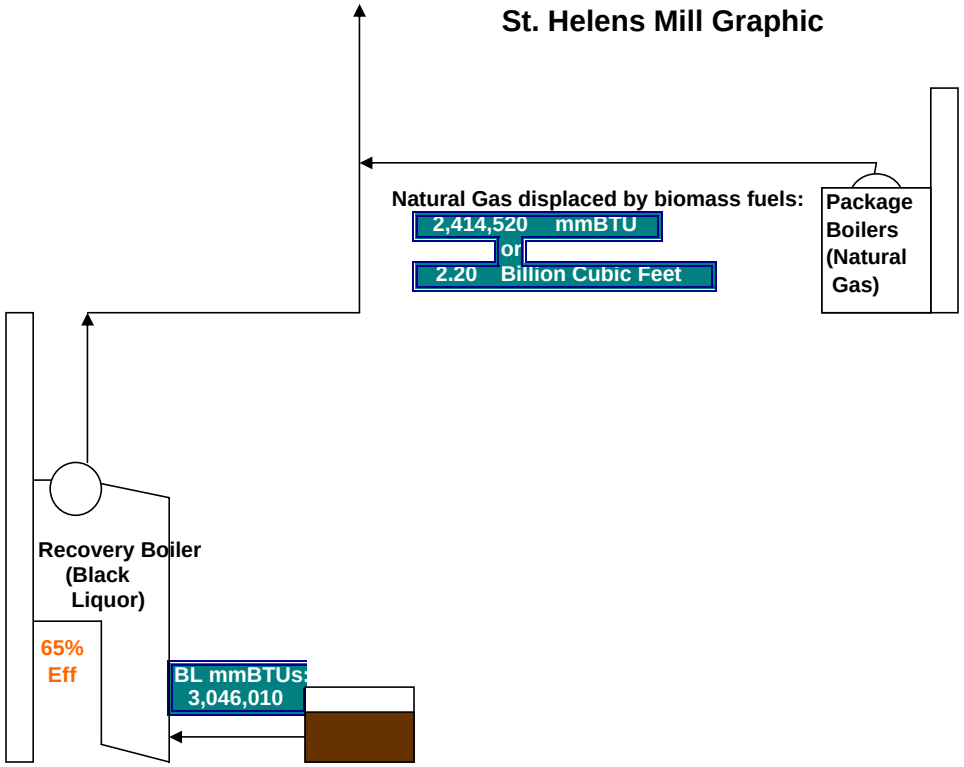
Note: See summary page for component definitions.

YTD (August 2008) Energy From Biomass

St. Helens Mill Data	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	YTD
Black Liquor MMBTUs to make steam:	375,099	353,496	394,878	374,986	414,909	383,509	361,988	387,145		3,046,010
Hog Fuel MMBTUs to make steam:	0	0	0	0	0	0	0	0		0
Total Biomass MMBTUs	**375,099**	**353,496**	**394,878**	**374,986**	**414,909**	**383,509**	**361,988**	**387,145**		3,046,010
MMBTUs of Natural Gas Displaced:	297335	280210	313013	297245	328891	304001	286942	306884		2,414,520
Million Cubic Feet of Natural Gas Displaced:	270	255	285	270	299	276	261	279		2,195
MMBTUs to STG	0	0	0	0	0	0	0	0		0
Power Boiler Natural Gas MMBTU's	287,589	263,858	238,671	230,917	203,916	193,776	197,632	174,398		1,790,756
MMBTUs to STG from Black Liquor	0	0	0	0	0	0	0	0		0
Steam Turbine MMBTU's consumed	0	0	0	0	0	0	0	0		0
BL MMBTUs to STG	0	0	0	0	0	0	0	0	0	0
Self-Generated Electricity from Black Liquor (MWhr):	0	0	0	0	0	0	0	0	0	0
9 PB Steam (klbs/hour) 629f905.pv	3291	3060	3113	3270	3405	2963	3207	2395		
6 PB steam 626f605.pv	3896	2958	3284	2090	2993	3131	3104	2945		
7 PB steam 627f705.pv	334	380	0	758	0	81	83	278		
8 PB steam 628f805.pv	2382	2688	1822	1833	624	499	411	388		
	287589	263858	238671	230917	203916	193776	197632	174398		
2 rec steam (klbs/hour) 522f706.pv	4587	4127	4117	4088	4661	4708	4571	5141		
3 rec steam 523f808.pv	8329	8046	9480	8825	9626	8498	7894	8190		
MMBTU month	375099	353496	394878	374986	414909	383509	361988	387145		

YTD (through August) 2008 (St. Helens Mill Summary)

Total Biomass BTU's used to make steam:	3,046,010	mmBTU
Total mmBTU's natural gas displaced by biomass:	2,414,520	mmBTU
Total amount of natural gas displaced by biomass:	2.20	Billion cubic ft
Of this amount, portion used to self-generate electricity:	0	mmBTU
Total Electricity self-generated from biomass fuels:	0	MWhrs



Note: See summary page for component definitions.

YTD (August 2008) Energy From Biomass

Boise, Inc.

Biomass Overview:
In general, the forest products industry is very efficient and one of the largest producers and users of renewable biomass energy in the world. When a tree is harvested, the largest part of the tree goes to pulp mills, sawmills or plywood plants where the bark is removed and the logs converted into pulp, lumber, plywood or engineered wood products. The bark is burned in highly efficient boilers and the steam is used to dry the paper, lumber or the veneer, which minimizes the need for fossil fuels.

Boiler Overview:
The chemicals collected during the pulp washing process are reused in the chemical recovery (kraft) process. These chemicals are concentrated in an evaporation process then burned in the recovery boiler. During the evaporation process a by-product, soap, is separated and pumped to the tall oil unit for further processing. Collected concentrated chemicals and organic components of lignin (biomass) are burned in the recovery boiler to produce a by-product steam. Steam generated by the recovery operation provides energy required for the mill's processes. As a by-product of the combustion process, the inorganic components of the chemicals fall to the bottom of the recovery boiler where they are removed and conveyed to a causticizing process; there they are treated with lime (calcium oxide) to be reused. After causticizing, the reacted lime (calcium carbonate) is separated by filtration, burned to calcium oxide in the limekiln and stored for reuse. Additional steam is obtained from a combination boiler, which primarily burns wood waste (biomass), no. 6 fuel oil or natural gas. Package boilers are fired with natural gas or oil to generate steam for the paper making process, when needed. The energy from the boilers is used to operate the pulp mill and to dry the paper. These boilers often are also connected to a steam turbine to co-generate electricity. The result, again, is minimizing the use of fossil fuels.

Written Statement
Rick Grant, Regional Manager, Alabama Operations
Boise Inc.
USDA Hearing – Energy Title –
Food, Conservation, and Energy Act of 2008 (P.L. 110-246)
September 4, 2008

Thank you for the opportunity to appear before the U.S. Department of Agriculture's office of Rural Development regarding this important meeting on "Farm Bill Renewable Energy Provisions" of the Food, Conservation, and Energy Act of 2008 (P.L. 110-246).

My name is Rick Grant, and I am the regional manager of Alabama Operations for Boise Inc. I am speaking today on behalf of Boise Inc.'s 4,600 employees. Headquartered in Boise, Idaho, Boise Inc. is publicly-traded on the New York Stock Exchange and manufactures packaging products and papers, including corrugated containers, containerboard, label and release and flexible packaging papers, imaging papers for the office and home, printing and converting papers, newsprint, and market pulp. We own and operate significant paper and pulp mills in Alabama, Minnesota, Louisiana, Washington, and Oregon, and generate revenues in excess of $2 billion annually.

My objective today is to draw attention to the unintended effects that government subsidization of biomass-based renewable energy initiatives may have on the natural supply/demand balance of our nation's raw wood materials.

I request that as you develop implementing regulations, you be fully aware of consequences on companies in forest-based industries, which are seeing new pressures on raw wood materials supply from government-subsidized bio-energy companies. Given this new competition, established industries not only contend with higher input costs for energy, chemicals, and freight, but also stand to be unfairly disadvantaged by competing with subsidized entities for vital biomass feedstock. Wood fiber is the key component in the production of our paper and packaging products.

Boise's Commitment to Sustainability

At Boise, we continuously strive to balance the efforts of sustainability with customer requirements, environmental perspectives, and returns to our investors. Our integral values are working safely, using our natural resources wisely, engaging our communities where we operate, and taking positions to improve the environment for our future generations. All of our employees are involved in learning and communicating the benefits of sustainable business practices.

More specifically:

- Boise has obtained Chain of Custody Certification from the Forest Stewardship Council, which certifies and tracks attributes from fiber source to customer.

- Boise's chain of custody and wood fiber procurement systems are certified by the Sustainable Forestry Initiative® (SFI), which tracks wood procurement and fiber source attributes. SFI endorses forest management practices that ensure all forest values – wildlife habitat, watershed, recreation, and timber production – are sustained for the long term.
- Boise's chain of custody system is also certified by The Programme for the Endorsement of Forest Certification.
- In addition to our managed forest certifications, each of our paper manufacturing facilities has an environmental management system that is certified to meet the ISO 14001 standard by an independent third party.
- Boise has made it a priority to protect air quality in areas where our manufacturing facilities are located. From 2000 to 2004, we reduced greenhouse gas (GHG) emissions by five percent companywide. In 2007, we set a new goal for further reductions of at least 10 percent by 2014. It's part of our commitment as a member of EPA's Climate Leaders Partnership, which Boise joined in 2005. We'll achieve this through energy conservation programs, by converting from fossil fuels to renewable biomass fuels, and by exploring combined heat and power (cogeneration) opportunities. Climate Leaders is a voluntary program to help companies develop GHG inventories and set aggressive GHG reduction goals. In 2006, our GHG emissions were 3 percent below our 2004 Climate Leaders baseline.
- In addition, Boise is a member of the Chicago Climate Exchange, which operates a cap and trade system for greenhouse gas emissions, and a member of ENERGY STAR®, the EPA voluntary program designed to help companies protect the environment through assessing and improving energy performance.

In general, the forest products industry is very efficient and one of the largest producers and users of renewable biomass energy in the world. When a tree is harvested, the largest part of the tree goes to sawmills or plywood plants where the bark is removed and the logs converted into lumber, plywood or engineered wood products. The bark is burned in highly efficient boilers and the steam is used to dry the lumber or the veneer, which minimizes the need for fossil fuels. Even the sawdust produced during lumber milling is used to make particleboard for furniture production.

Next, the residual parts of the log are chipped into small pieces and shipped to a pulp mill to produce wood pulp and eventually paper. During the chemical pulping process, the wood fibers are separated from the lignin, the naturally occurring "glue" which binds fibers together in a tree. The lignin and the chemicals used to extract it are put through a recovery process through which the chemicals are recycled and the lignin is burned in a boiler, providing the mill with a renewable biomass based source of energy.
In many cases, mill power boilers burn additional biomass, such as bark. The energy from the boilers is used to operate the pulp mill and to dry the paper. These boilers often are also connected to a steam turbine to co-generate electricity. The result, again, is minimizing the use of fossil fuels.

At Boise Inc., approximately 65% of the energy used in our manufacturing processes comes from renewable sources, with the bulk being biomass as I've described. While this may sound like a high rate, it is not unusual for the forest products industry.

Given our commitment to sustainability, and the fact that we operate *de facto* biorefineries already, Boise supports the movement to biomass-based energy and understands the vital role it plays in reducing our country's dependence on fossil-fuels and greenhouse gas emissions. However, the government and legislative emphasis on biomass energy has significant implications for our company and our peers in the forest-products industry.

For example, in the state of Alabama, where we operate our Jackson paper mill, we are seeing a rapidly expanding number of new and planned bio-energy facilities that will compete with us for wood biomass in that state. In Minnesota, three pellet mills, a gasification plant, a bio-fuel cube facility, and two energy-generating plants are under consideration within one to 260 miles of our International Falls mill. All would consume mill residue, open market biomass and/or roundwood and woody biomass. In the Pacific Northwest, where we operate two paper mills, there are also a large amount of incremental boiler increases and usage on the horizon. (A list of these operations is attached to my written statement.)

The reasons for this increased activity, we believe, are partly global in nature, and partly a result of pressure in the U.S. to identify alternative sources of fuel given the high cost of oil and other petroleum-based products.

In terms of global factors, various environmental initiatives, including cap and trade, are emerging from the European Union and their members. This is providing an impetuous for that region of the world to look for alternative fuels to meet their environmental objectives. The U.S. is one of their targets for alternative fuel supplies.

Here in the U.S., as you know, there are several specific drivers contributing to this trend. These include EPA's development of a renewable fuels standard (RFS) that was enacted as part of PL 110-140, the Energy Security and Independence Act of 2007. Development of regulations for the Energy Title of the Farm Bill by your office is a critical component to this situation.

I would like to now address specific elements of Title IX on Energy of the 2008 Farm Bill.

Biorefinery Assistance

Specifically, the Energy Title of the Farm Bill provides $1 billion to promote biomass energy, including forest-based biomass energy, in several programs. Sec. 9003 calls for "grants and loan guarantees to new and retro-fitted commercial scale biorefineries." The Secretary must take into consideration whether the project "will have a positive impact on resource conservation, public health, and the environment."

Moreover, in Section 9003 (Biorefinery Assistance), the Secretary must evaluate several criteria including: "whether the applicant can establish that if adopted, the biofuels production technology proposed in the application will not have any significant negative impacts on existing manufacturing plants or other facilities that use similar feedstocks" (p. 424). We believe this determination is essential to avoid potential economic hardship on mill operations already using such fiber.

In addition, the legislation provides $320 million in mandatory funding for loan guarantees for commercial biorefiners. $250 million of the maximum amount is guaranteed for fiscal years 2009 and 2010. The Joint Managers state that "existing facilities including wood products facilities" should be eligible for this program (p. 217). It is essential that funds amending the Biomass Research and Development Act of 2000 be provided to allow the Departments of Agriculture and Energy to work with the Forest Service to implement necessary research for this program.

Lastly, (Sec. 9005) the 2008 Farm Bill includes $300 million over a period of four years to fund biomass growers, including funding a number of factors that will promote research and development of biofuels and biobased products. In this regard, we urge that the Agency factor in the following Managers' statement: "with respect to forest biomass, the feedstock for the production of advanced biofuels is often the same feedstock used by forest products facilities, including pulp and paper mills. The Managers encourage the Secretary to consider competing market outlets when establishing the payment rate for such feedstocks" (p. 226, Joint Statement of Managers).

Biomass Crop Assistance

As we have articulated, our operations generate a significant amount of renewable energy in which woody biomass is a key feedstock. We urge (Sec. 9011) that current wood products operations be eligible for remuneration under Section (d). We believe that this may have been the original intent of the legislation and we believe that by the Agency taking this position, there will be greater incentive for my company and others to expand their renewable energy supplies.

Tax Provisions of the 2008 Farm Bill

The National Academy of Sciences (Sec. 15322, P. 626) is to prepare an analysis of the tax credit's "impact on regional agricultural and silvicultural capabilities of commercially available forest inventories." This study must be completed 36 months after enactment of this legislation. We urge that this analysis be conducted in a timely manner, and offer our help in providing data on the impact of ethanol to forest inventories.

Boise Position

We appreciate the new economic development opportunities in our local areas and understand the need to diversify our nation's energy portfolio. But we must ensure that the existing wood-consuming mills are given a fair opportunity for survival.

We realize that it is not the intent of bio-energy producers to harm existing wood-using industries. However, it is critical that economic balance be the focus of the Agency's developing regulations, otherwise we may damage the economic equilibrium of our local and rural areas and create unintended consequences for our operations and our employees.

History has shown in many industries that subsidized competitors behave differently in the marketplace than unsubsidized competitors. Given that such companies need not rely solely on market forces to turn a profit, they can be less disciplined in their business approach and thus upset rational supply and demand. If new/planned bio-energy producers, bolstered by subsidies and incentives, disproportionately consume, and consequently run up the prices on, chips/round wood, local mills will be placed into a crisis situation. Ultimately, jobs may move off-shore.

Existing businesses have contributed to our nation's economic engine for decades, and we want this tradition to continue. Therefore, we are soliciting your help. We request that a comprehensive and balanced perspective be used in development of implementing regulations. This will ensure that our packaging and paper manufacturing businesses are given a fair opportunity to prosper and thrive in the years ahead.

We understand the depth of the challenge and appreciate the opportunity to share our viewpoint and concerns with you today. We are committed to offering you any assistance that will be useful to ensure prosperity for our employees, communities, and shareholders while also recognizing the importance to the U.S. and the rest of the world in creating more sustainable sources of energy.

Thank you.

Attachment 1:

New and Planned Biomass Facilities in Alabama:

The following list is a summary of currently known new and planned facilities that will be using/drawing wood from Alabama's wood basket by category:

Pellet Mills

Selma, AL	1 million tons/year
Jackson, AL	1 million tons/year
Marianna, FL	1.2 million tons/year
Lucedale, MS	Amount not known.
Moundville, AL	Amount not known.
	3.2 million tons/year +

Power Plants

Ft. Gaines, GA	1.1 million tons/year
Franklin, GA	0.5 million tons/year
	1.6 million tons/year

Boiler Fuel

McIntosh, AL	70,000 tons/year
Hope Hull, AL	8,000 tons/year
Cullman, AL	100,000 tons/year
Hattiesburg, MS	70,000 tons/year
	248,000 tons/year

Paper/MDF/OSB Mills

Cantonment, FL	1,000,000 tons/year
Oxford, AL	400,000 tons/year
Thomasville, AL	1,300,000 tons/year
	2,700,000 tons/year

Biodiesel and other fuels

Bay Minette, AL	150,000 tons/year
	Black Belt Region 500,000 acres (Sugar cane to jet fuel. This will decrease the amount of land for forestry.)

New and Planned Biomass Facilities in Louisiana/Texas:

The following list is a summary of currently known new and planned facilities that will be using/drawing wood from Louisiana's wood basket by category:

Power Plants

Lufkin, TX	500,000 tons/year
Nacogdoches, TX	1 million tons/year
	1.5 million tons/year

Boiler Fuel

Nacogdoches, TX	Amount not known.

Biodiesel and other fuels

Lacassine, LA	Amount not known.

New and Planned Biomass Facilities in Minnesota:

The following list is a summary of currently known new and planned facilities that will be using/drawing wood from Minnesota's wood basket by category:

Pellet Mills

Mt. Iron, MN	100,000 tons/year
Duluth, MN	154,000 tons/year
Rice Lake, WI	36,000 tons/year
	290,000 tons/year

Power Plants

Hoyt Lakes, MN	275,000 tons/year
	275,000 tons/year

Boiler Fuel

Ft. Frances, Canada	700,000 tons/year
	700,000 tons/year

Biodiesel and other fuels

MN	150,000 tons/year
Little Falls, MN	Amount not known.
	150,000 tons/year +

Food, Conservation, Energy Act of 2008 Title IX Authorities Rule Making Written Amplifying to Remarks Provided by Michael R. Brower, Senior Federal Policy Director, Mosaic Federal Affairs LLC, September 4, 2008

The following remarks are provided along with Mosaic Federal Affairs LLC's September 4, 2008, presentation for and on behalf of The Biorefinery in New York, Catalyst Renewables Corp, Renewables LLC, Tree Source Solutions LLC, Lyonsdale Biomass LLC, US Salt LLC Biomass Conversion Project, SUNY-ESF, SUNY College of Technology at Delhi, SUNY Center for Sustainable and Renewable Energy, O'Brien & Gere/SUNY Agricultural College at Morrisville Controlled Environment Energy and Agriculture Project, and Hiscock & Barclay LLP.

Section 9003, Biorefinery Assistance

First, we seek to address Section 9003, Biorefinery Assistance, which provides loan guarantees to fund the development, construction, and retrofitting of commercial-scale biorefineries and grants to assist in paying the cost of the development and construction of demonstration-scale biorefineries. A November 2007, Union of Concerned Scientists report warns that certain alternative fuels produce more emissions than gasoline or diesel. "Biofuels; an Important Part of a Low-Carbon Diet" indicates that liquid coal can release 80% more global warming pollution than gasoline. Corn ethanol can be either more or less polluting than gasoline, depending on how the corn is grown and the ethanol is produced. On average, corn ethanol can reduce emissions about 20%, though there is uncertainty due to differing land use practices. The cleanest alternative, cellulosic liquid transportation fuels from woodchips or other cellulosic non-food/feed feedstock could reduce emissions by more than 85 %. The report calls for a national low-carbon fuel standard that accounts for alternative fuels' global warming emissions over their entire life cycle - "from the till to tailpipe". (UCS Press Release, 11/13/07/ www.ucsusa.org). Heretofore, federal decision-makers have been keenly focused on food or feed-based alcohol fuels to the exclusion of New York and Northeastern United States woody biomass-based liquid transportation fuels. In fact, federal biorefinery assistance in New York and the Northeast has been negligible. We strongly urge the Secretary to write a rule for Section 9003, which ensures inclusive regional parity for New York and Northeastern woody biomass feedstocks.

Wood from the forest and from farmed short rotation woody biomass energy crops offers a significant renewable alternative and environmentally more benign replacement options to diminishing fossil-based energy supplies. We urge parity for loans and grants designed to aid commercialization of non-food/feed based liquid transportation fuels, bio-products and bio-polymers. Across the Northern Forest of New York, New Hampshire, Vermont and Maine our neighbors are equally embracing the challenge of thermochemically and biochemically produced liquid transportation fuels from our plentiful mixed northern hardwood trees produced in close proximity to urgent demand for liquid transportation fuels.

Projects are ready for commercial demonstration; one of these projects is the Biorefinery in New York, which is being supported by $10,000,000 from the New York State Energy Research and Development Authority and New York State Department of Agriculture and Markets. The

Biorefinery in New York needs equitable access to federal Food, Conservation and Energy Act of 2008 Title IX funding support to achieve ample financial resources and equipment associated with a biorefinery commercial demonstration plant.

Biomass for bio-energy and bio-products including liquid transportation fuels can be drawn from a variety of feedstock sources including forests, agricultural crops, organic residue streams and dedicated woody or herbaceous crops. Research suggests development and deployment of woody biomass resources have distinct energy, economic and environmental advantages over agricultural sources:

1. Woody biomass is available year round and from multiple sources. End users are not dependent on single source material.
2. The net energy ratios for bio-energy and bio-products including liquid transportation fuels derived from woody biomass are large and positive, meaning that considerably more energy output is produced from these systems than is used in the form of fossil fuels to produce the woody biomass and generate end products.
3. Woody biomass can be sustainably managed and produced, while simultaneously providing an array of environmental and socioeconomic benefits.
4. The physical-chemical characteristics of woody biomass from hardwoods are fairly consistent even when supplied from multiple sources.
5. The forest products industry and wood-based renewable energy generation firms have developed superior technical and engineering competencies to manage the variability occurring during large, continuous woody biomass shipments.

Sustainably harvested forest woody biomass can nationally provide at least 368 million dry tons of wood per year. Nationally, the net annual incremental forest woody biomass growth on almost 500 million acres of U.S. timberland exceeds forest woody biomass removals by almost 50%. In the north-central states growth exceeds removals by 95%. This ratio is even greater in the northern forest of the northeast states, where growth exceeds removals by 125%. In New York State there are over 15.6 million acres of timberland with over 750 million tons of standing biomass. The net annual increment growth on New York timberland is more than 300%.

Forecasts indicate equitably funded biorefinery applications can increase returns on New York State and Northeastern United States forest and farm community investments; thus helping to sustain rural communities and the associated quality of life. Woody biomass production from the forest products industry and from farmed short rotation woody biomass energy crops using bio-technology applications will improve income for New York State and Northeastern United States farm and forest communities. Increased rural income from forestry and farmed short rotation woody biomass energy crops operations coupled with new and sustained jobs at businesses retained or formed and retention of energy dependent manufacturing jobs will improve the rural tax base. New woody biomass products including ethanol, acetic acid, and biodegradable plastics hold the potential of creating or sustaining approximately 20-40 jobs per biorefinery site depending on product choices and hold the promise of close location of follow-on manufacturing operations using biorefinery products. This will ensure the viability of these facilities sustaining

hundreds of jobs associated with the supply of feedstock and the operation of these regional mills.

Today, the New York State forest products industry adds more than $7.7 billion to the state's economy each year and provides 60,000 jobs, but is still in decline. Equitable regional wood based biorefinery funding promises to create more economic vitality for the forest products industry from new value-added products and processes and enhanced existing manufacturing processes. The wood based biorefinery as a biosciences industry cluster offers to reverse the job loss and economic decline in Upstate New York's farm and forest communities. The same will be true as the concept is replicated across the Northeastern United States and the Nation.

Section 9004, Repowering Assistance

Next, we will briefly address Section 9004, Repowering Assistance, which provides for **payments to be made to biorefineries in existence at time of enactment** of the Act to replace fossil fuels used to produce heat or power to operate the biorefineries with renewable biomass. We assert this section clearly favors food and feed-based ethanol plants since generally only food/feed-based ethanol plants are eligible. This is a bar to new cellulosic/hemi-cellulosic woody Biomass applications at forest products industry sites that are ideal for woody biomass power because of existing, proven wood handling systems. We also suggest that this Section may conflict with existing IRS Section 45 Production Tax Credit guidelines. Nevertheless, in this section because the incentive is designed to be exclusive, the incentive actually becomes corporate agriculture subsidy.

Section 9005, Bioenergy Program for Advanced Biofuels

Section 9005 provides for payments to be made to eligible producers to support and ensure an expanding production of advanced biofuels. Advanced Biofuels must be properly defined and if corn-based ethanol is excluded, we suggest pressed oil-based bio-diesel should also be excluded.

We asked the Secretary to ensure parity for thermochemical and biochemical technologies and Advanced Hydro-Carbon and Alcohol Next Generation Liquid Transportation Fuels to help end dependency on imported and domestic fossil fuels including coal and natural gas presently being used to manufacture over-the-road diesel, aviation fuels and U.S. military alternative fuels.

At the Biorefinery in New York research sites, proprietary and licensed property has demonstrated capacity to produce high-quality, commercially adaptable Jet A-1 from woody biomass. Present demonstrated capability is 55,000 gpy and production of 5,000,000 gpy of Jet A-1 could be achieved with equitable Food, Conservation and Energy Act of 2008 Title IX support. We ask the Secretary to ensure regional parity for New York and Northeastern United States Next Generation Liquid Transportation Fuels in his rule-making. Finally, we ask the Secretary to ensure Food, Conservation and Energy Act of 2008 Title IX support helps facilities sited closest to consumer demand.

Section 9011, Biomass Crop Assistance Program (BCAP)

Section 9011 provides support to the establishment and production of crops for conversion to bio-energy in project areas and to assist with collection, harvest, storage, and transportation of eligible material for use in a biomass conversion facility. New York State leads the nation in short rotation shrub willow woody biomass closed loop energy crop research, development and commercialization. We ask the Secretary to ensure regional parity for short rotation woody biomass closed loop energy crops during Section 9011 rule making. Shrub willow biomass is a proven closed loop biomass energy crop, the time for commercial deployments is today and Section 9011 offers a pathway to return millions of under-utilized or abandoned non-food farmland to productive use. Allied with cooperative growers, Catalyst Renewables planted 600-acres of shrub willow in commercial demonstration in New York in 2008. Catalyst used private dollars (50%) and federal appropriations/New York State funding assistance (50%). FY 2009 follow-on appropriation supported by four New York Congressmen/Congresswomen. Catalyst's strategic goal is 24,000 New York acres by 2012. We seek the rule-making for Section 9011 to enable transition from university research to farm-based operations to influence operational adaptation by farmers on farms. The Catalyst initiative, while the first operational program still must prove itself. Such validation requires formalized, reliable funding assistance mechanisms as the author's of the Food, Conservation and Energy Act of 2008 intended BCAP to be. We suggest, BCAP cannot end up the same bureaucratic "drill" of the Conservation Reserve and Conservation Reserve (Enhanced) Programs, which have willow harvest provisos, but bureaucratically barred deployment under CRP/CR(E)P. BCAP should be the means to assist funding for the transition of under-utilized, non-food farmland into productive, suitable woody biomass energy cropland wherever feasible.

Use of willow biomass crops, combined with other woody biomass resources such as low value wood from forest and wood manufacturing residues, to replace fossil fuels for bioproducts and bioenergy defines the way forward to energy security because wood is more abundant than agricultural commodities and residues. According to a recent USDOE/USDA report, dedicated woody and herbaceous crops will provide almost 40% of the nation's 998 million dry tons of biomass for bioproducts and bioenergy produced annually from agricultural sources. Their deployment will put over 24 million hectares of land into productive use, create thousands of new jobs in rural areas and produce an array of environmental benefits. According to USDA, there are over 600,000 acres of under-utilized farmland in New York that could

be used to produce fast-growing willow biomass crops. According to NYS Agriculture & Markets, this available land for biomass cultivation doubles to 1,200,000-acres by including New York's wet and poorly drained soils.

Biomass production of willow crops on a per acre basis is at least 10 times greater than trees in a natural forest, allowing greater amounts of biomass to be produced over a smaller area. Willow biomass crops are harvested on a three to four year rotation, in contrasts to the decades between harvests in natural forests. We suggest to the Secretary that a continued goal of BCAP must be to facilitate the commercialization of willow biomass crops as part of the mix of woody biomass feedstocks for bioenergy and bioproducts.

Bottlenecks to rapid expansion of willow acreage are planting stock supply, planting equipment, and a lack of entrepreneurs with an understanding of the crop that rapidly install and manage commercial acreage support from a properly crafted and deployed BCAP can help overcome these barriers.

The production and use of willow biomass crops creates a wide array of environmental and rural development benefits while simultaneously producing a renewable feedstock for bioenergy and bioproducts.

1. Willow used for bioenergy production is CO_2 neutral and has a very positive net energy ratio, ranging from 1:11 to 1:26 (Fossil Fuel in Useable Renewable Energy Out).
2. Willow's perennial nature and extensive fine-root system means that these crops reduce soil erosion and non-point source pollution.
3. Willow promotes stable nutrient cycling and relative to agricultural crops has enhanced soil carbon storage in roots and soil organic matter.
4. Willow provides habitat for a wide range of birds and can enhance landscape-diversity, especially in regions where shrub land is in decline.
5. Markets for willow biomass crops include bioenergy, liquid transportation fuels, bioproducts and other niche markets.
6. Willow biomass crops provide local economic benefits by helping to diversify farm crops and creating an alternative source of income for landowners.
7. New varieties of willow bred and tested produced yield increases of greater than 30% in research station trials.
8. Since willow is grown and used in the local community, the jobs created along the entire production and conversion chain can stay in the local community.
9. Research indicates 75 direct and indirect jobs can be created for every 10,000 acres of willow biomass crops that are established.

Section 9012, Forest Biomass for Energy

Section 9012 authorizes the Forest Service to conduct a competitive research and development program to use forest biomass for energy. We ask the Secretary to ensure regional parity for New York and Northeastern woody biomass projects. Integrated production of energy from forest biomass is ready for commercial demonstration in New York and the Northeast at The Biorefinery in New York. Manufacture of new transportation fuels from forest biomass is ready for commercial demonstration in New York and the Northeast.

At the Lyonsdale Biomass 20Mwe/15,000pph thermal CHP plant in New York NYSDEC cites the surrounding Lyonsdale wood-basket as, "the healthiest, best managed forestland in New York State." Lyonsdale Biomass employs a NYS RPS-certified, sustainable Forest Management Plan. Lyonsdale locally pays over $6,000,000 annually to about 150-forest community workers in the "woods" and $1,600,000 to 24 workers at the plant. The Biorefinery in New York is ready for commercial demonstration of renewable electricity, thermal energy, liquid transportation fuels, commodity chemicals and polymers…all from forest biomass

Some Policy Concerns for Consideration

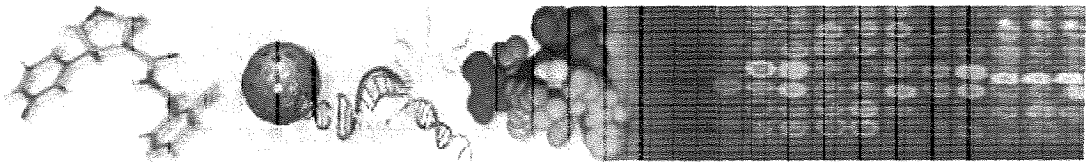
There are current, valid concerns about conflicting definitions currently "in-law" regarding "what is biomass."

- Energy Policy Act 2005
- Farm Bill
- Energy Act of 2007
- And several others…

Strongly suggest that in no case should woody biomass from farm or forest be excluded as an integral component of the biomass definition whether from federal lands, public lands, Native American lands or private lands.

Successful applications of biomass for biopower, liquid transportation fuels and bioproducts depends on production tax credits for power, thermal energy, liquid transportation fuels manufacture and fossil replacement products. Biomass Production Tax Credits must be at par with wind, geothermal, closed loop biomass and solar Investment Tax Credits. We assert incentive fosters innovation and parity ensures optimum diversity.

Thank you for the opportunity to comment.



C^2 Biotechnologies, LLC

We are using biotechnology to improve the quality of life.

September 11, 2008

Robin Robinson
Office of the Administer, USDA
Rural Development Programs
Room 5803
South Agriculture Bldg, STOP 3201
1400 independence Avenue, SW
Washington, DC 20250-3201

Subject: Comments USDA public meeting on Implementation Title IX 2008 Energy Act.

Dear Mrs. Robinson,

On this particular somber day, a day of reflection on national issues revolving around security, energy and economy, with presidential elections looming in the near future I write to you to voice my concerns as an entrepreneur, a scientist and family man about USDA implementing the 2008 Energy Act.

I did not have the privilege of attending the public forum on implementing Title IX, Energy Authorities of the Food, Conservation, and Energy Act of 2008 but did review a summary of events provided by Joanne M. Ivancic from Advanced Biofuels USA, a nonprofit group located in Frederick, MD. I was particularly moved by some of the comments provided by Mr. Robert Kozak, President of Atlantic Biomass Conversions, Inc. and Board Member of Advanced Biofuels USA. Many of the concerns voiced by Mr. Kozak have in one way or another directly affected our progress as a start up biotechnology company developing products for the bio-fuel markets.

C2 Biotechnologies, LLC was designed to develop innovative consumables for bio-ethanol producers, specifically enzymes used to convert biomass into a fermentable sugar cocktail. Our technology allows us to combine multiple enzymatic activities into one molecule which results in a reduction in manufacturing costs and facilitates ease of use for our intended clients. Unfortunately we have encountered several of the same hurdles to commercialization that have been voiced by Mr. Kozak.

The barriers we have encountered to commercialization are related to scales of production / demonstration and competition by large companies. First, as a start up company, we have found it difficult to demonstrate or prototype our technology simply due to market scales. The costs to take material constructed and tested on a laboratory bench to a scale that can be tested in a demonstration project with even a local, small potential customer has been above the current SBIR funding levels. Other funding mechanisms, grants, loans, appropriations, investment, are difficult to procure because of

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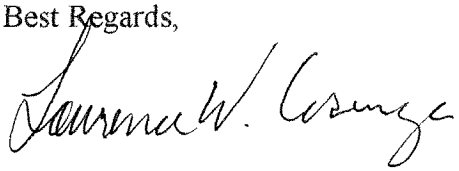
risk associated with scale, utility of innovation, start up sustainability, projected return on investment. Secondly it appears that our funding proposals have been ranked against those from larger, established organizations who simply win because of size and market presence but generally lack innovation. Large companies have the ability and infrastructure to produce any enzyme at a substantially reduced rate compared to a small business. But, the innovation to build useful products for new markets, such as cellulosic ethanol, takes research, time and chance. Most of the infrastructure of a large company is dedicated to maintaining current markets and not necessarily poised for testing innovation. We felt this most directly after applying to a New York State program, NYSERDA (PON 1195), for funding to construct and test a fusion enzyme that combines two of the three activities required to convert cellulosic material into fermentable sugar. During a verbal debriefing we were told that our risk profile was too large compared to other established concerns. It has been these kinds of hurdles, market versus demonstration scales and large company competition that has impeded our progress to commercialization.

We feel that while the language in the USDA's energy act is intended for innovation, in reality the funds may find their way to established business concerns that address production cost using economies of scale and not necessarily innovative ideas. Because of the specific events mentioned and others that have occurred we would like to add our support for the concerns voiced by Advance Biofuels USA and Mr. Kozak. Furthermore, we would like to recommend that a member(s) from Advanced Biofuels USA assist drafting 2008 Energy Act and / or in reviewing / ranking innovative projects for potential funding.

Best Regards,



Lawrence W. Cosenza, Jr., Ph.D.
Founder & Chief Science Manager
C2 Biotechnologies, LLC

CC: Kirsten Gillibrand (NY-020) / Joanne M. Ivancic (Advanced Biofuels USA)

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Implementation of Title IX, Energy Authorities of the Food, Conservation, and Energy Act of 2008

Comments: Robert Kozak
President, Atlantic Biomass Conversions, Inc.
Board Member, Advanced Biofuels USA

- Overall goal should be to develop an Amercian Advanced Biofuels industry that is sustainable both environmentally and economically.
- USDA also should realize that advanced biofuel technologies are not commercially available today (2008). There are many very good, innovative ideas, conversion systems and crops, at the lab level. These sections of the 2008 Farm Bill could go a long way to getting them to market.

Section 9003 Biorefinery Assistance

With the limited funds, this program should only be used for Advanced or 3rd generation Biofuels.

1st generation are corn-to-ethanol and soybean biodiesel: commercial production
2nd generation is cellulosic ethanol: Number of DOE funding projects.

Examples of 3rd generation (or True advanced Biofuels) include: advanced hemicelluloses/lignin conversion processes, either to intermediates (sugar cocktails) or final fuels, "grassoline" gasoline equivalents, bio-jetfuels, advanced biosynthetic diesel fuels, and fuels cell liquid electron carriers.

Selection Criteria

- Don't be afraid to fail, many state programs realize that not all technologies are going to "hit home runs" Low-risk selection criteria result in non-innovative technologies.
- Co-ops and innovative feedstocks should be given high rankings, as the bill language states
- Pilot-Scale, rather than larger sized biorefineries should be funded. More ideas in the field for the limited money available. Again innovations are needed.
- Biorefinery Design: Multiple Stage, decentralized/centralized hybrid Biorefineries should be included as well as the conventional integrated biorefinery design
- Something we forget. Goal should be to reduce overall system transportation costs

Questions in Farm Bill Wording

What is Demonstration-Scale? Pilot or Prototype

What is a Large Scale market? In transportation fuels, all markets tend to be large.

Section 9005 Bioenergy Program for Advanced Biofuels

Selection Factors

- Again, should be limited to 3rd generation biofuels
- National Defense, jet and turbine fuels
- Getting new fuels to market
- Biofuel Intermediates as well as Finished products should be eligibile, JP-8, sugar cocktails

Section 9011 Biomass Crop Assistance Program

Before this program is initiated, USDA/ARS should conduct a study of available energy crops to determine eligibility. This could be done under the language in this section that outlines selection criteria

- Ecological fitness of crops to specific environments
- High per acre yields with low fertilizer inputs
- Ease of harvesting
- Availability of biomass conversion processes

This would solve the chicken-and egg issue between crops and biorefineries that is created by some of the language in this section. Letter of commitment, etc.

"2) assist agricultural and forest land owners and operators with collection, harvest, storage, and transportation of eligible material for use in a biomass conversion facility"

Section 9012 Forest Biomass for Energy

Selection Criteria

- Include reactivating mothballed pulp-and-paper plants.
- Pilot-Scale, rather than larger sized biorefineries should be funded. More ideas in the field for the limited money available. Again innovations are needed.

- Biorefinery Design: Multiple Stage, decentralized/centralized hybrid Biorefineries should be included as well as the conventional integrated biorefinery design
- Something we forget. Goal should be to reduce overall system transportation costs

Under Secretary Dorr and distinguished panel members, thank you for the opportunity to provide input on the implementation of Title IX, Energy Authorities of the Food, Conservation and Energy Act of 2008. I am Denny DeVos, Corporate Finance Director for POET. POET currently has 26 ethanol facilities, in the Midwest, with combined annual production capacity of approximately 1.5 billion gallons.

9003 Bio-refining Assistance:

POET believes that the Bio-refining Assistance Grant Program will potentially benefit "Project Bell" our cellulosic pilot plant that will convert corncobs and corn fiber into ethanol. Project Bell is currently under construction and will be producing cellulosic ethanol before 1-1-2009. Research conducted at "Project Bell" along with research at POET's Bench & Lab Scale facilities will enable POET to begin construction of "Project Liberty", a 25 million-gallon cellulosic facility, in late 2009 or early 2010.

Of equal if not greater importance is the Bio-refining Assistance Loan Guarantee Program.

POET believes that we will not be able to obtain loans to finance new or emerging technologies being adopted to produce advanced bio-fuels without a loan guarantee.

Examples of Bio-Mass conversion facilities that would be supported by the loan guarantee program are: Solid fuel boilers; cellulosic ethanol facilities; anaerobic digesters; oil extraction; and fractionation facilities.

These technologies will be adopted in both new and existing facilities. Because of this, it is essential that implementation of the guarantee program includes the ability to work with facilities that have existing debt.

The loan guarantee program will need to allow refinancing the existing debt under the new guaranteed loan or only require a first security interest in the new Bio-Mass conversion facility assets. Two potential scenario's of this are:

Scenario #1

Producer obtains a $20 million guaranteed loan to add a solid fuel boiler, fueled by renewable biomass to an existing facility. The cost of the boiler project is $25 million. Prior to the solid fuel boiler project, there is remaining senior debt with first lien security in all company assets of $35 million. The cost of the original plant was $65 million. For the guarantee program to be utilized the guaranteed loan would only be able to obtain a

first lien security position on the new solid fuel boiler assets or be of adequate size to refinance the existing debt. If the existing debt is not refinanced a second lien could be taken on the balance of the company's fixed assets that existed prior to the solid fuel boiler project.

Scenario #2

Assuming the senior debt in scenario #1 is not refinanced. This same plant expands the plant capacity after the solid fuel boiler loan guarantee is in place. The cost of the expansion is $100 million and new senior debt of $70 million is added over and above the now remaining $30 million of nonguaranteed senior debt. This results in a new nonguaranteed senior loan of $100. In order to obtain financing for the expansion the guaranteed loan would need to allow the nonguaranteed loan to have the first lien in all existing and new company assets, except those related to the solid fuel boiler project. Again, the guaranteed loan could maintain a second lien on all fixed assets.

At POET, we believe there is tremendous opportunity to adopt new and emerging technologies for the development of advanced bio-fuels. Without grants and guaranteed loans, we will not be able to access adequate financing to deploy these technologies.

9004 Repowering Assistance

The repowering assistance program offers the opportunity for our existing ethanol production facilities to further reduce or eliminate the use of fossil fuels in our production process.

At POET, we do not believe there is a single solution to eliminating the use of fossil fuels. A combination of systems, such as anaerobic digestion, solid fuel boilers, landfill bio-gas and wind towers might be employed at a single production facility.

Assuming a cost of $9/mm BTU, annual natural gas costs at a 65 million gallon ethanol facility are approximately $17,000,000. We estimate the capital investment required to significantly reduce or eliminate the use of fossil fuels to be $1.00 - $1.25 per gallon of production.

At present, lenders are only willing to lend approximately $1/gallon of production capacity for a basic facility that costs in excess of $2/ gallon to build. Therefore, there is no financing available, for repowering ethanol facilities, without guaranteed loans to support the new investment.

These technologies will be adopted in existing facilities. Because of this, it is essential that implementation of the guarantee program includes ability to work with facilities that have existing debt.

The guarantee program will need to allow refinancing the existing debt under the new guaranteed loan or only require a first security interest in the new Bio-Mass conversion facility investment. Two potential scenario's of how this might work are:

Scenario #1

Producer obtains a $20 million guaranteed loan to add a solid fuel boiler, fueled by renewable biomass to an existing facility. The cost of the boiler project is $25 million. Prior to the solid fuel boiler project, there is remaining senior debt with first lien security in all company assets of $35 million. The cost of the original plant was $65 million. For the guarantee program to be utilized the guaranteed loan would only be able to obtain a first lien security position on the new solid fuel boiler assets or be of adequate size to refinance the existing debt. If the existing debt is not refinanced a second lien could be taken on the balance of the company's fixed assets that existed prior to the solid fuel boiler project.

Scenario #2

Assuming the senior debt in scenario #1 is not refinanced. This same plant expands the plant capacity after the solid fuel boiler loan guarantee is in place. The cost of the expansion is $100 million and new senior debt of $70 million is added over and above the now remaining $30 million of nonguaranteed senior debt. This results in a new nonguaranteed senior loan of $100. In order to obtain financing for the expansion the guaranteed loan would need to allow the nonguaranteed loan to have the first lien in all existing and new company assets, except those related to the solid fuel boiler project. Again, the guaranteed loan could maintain a second lien on all fixed assets.

While guaranteed loans will be essential to achieve minimal repowering investment, if significant investment is to be made, the program will need to include a payment for each mm BTU replaced. POET recommends a payment of $3/mm BTU. This payment will be needed for 3-5 years.

The repowering program has the potential to significantly reduce our use of fossil fuels. If the program were available today POET has repowering investment plans that we would implement.

9005 Bioenergy Program for Advanced Biofuels

This program authorizes the Secretary to make payments to an eligible producer of advanced biofuels. An advanced biofuel is defined as fuel derived from renewable biomass other than corn kernel starch. By definition, the Secretary could enter into a contract with a producer of cellulosic ethanol or a producer of ethanol from starch as long as the starch is not from the corn kernel.

Furthermore, renewable biomass is defined as any organic matter that is available on a renewable or recurring basis. Therefore, the Secretary is also authorized under this program to make payments for the utilization of landfill and sewer gas and solid fuels such as wood chips, wood waste, corn stover, grasses, and manure as a source of energy.

POET recommends the payment be made based on gallons produced or energy unit replaced (e.g. mm BTU or kilowatt). Since the payment is made directly to the producer of the advanced biofuel it should not impact eligibility for tax credits that might apply.

It is strongly recommended that the duration of the contract with the Secretary match the length of the loan obtained to finance the capital investment required to produce the advanced biofuel. This would provide stability to the cash flow and greatly increase the availability of financing to produce advanced biofuels.

If Section 9005 Bioenergy Program for Advanced Biofuels were used in conjunction with the Section 9004 Repowering Assistance Program, it would not be necessary to make payments for energy replaced by repowering, from funds allocated to the Repowering Assistance Program.

Likewise as long as there is a separate payment made to producers of cellulosic ethanol, payments made under this program should exclude payments for the production of cellulosic ethanol.

This program for advanced biofuels is an opportunity to encourage rapid deployment of capital invested in the production of advanced biofuels. Because of this I encourage you to move quickly in the implementation of this program.

9011 Biomass Crop Assistance Program

POET's focus in Section 9011 is on assistance for collection, harvest, storage and transportation of renewable biomass by a person with the right to collect or harvest eligible material. Our Project LIBERTY, a 25 million gallon facility, will require collecting cobs from a minimum of 275,000 acres and involve a minimum of 400 producers.

We will be asking these producers and many others in the future to do something they have never done before. For the producer to make the required capital investment and depart from normal harvesting practices they will require an assurance of payment and returns on investment significantly greater than investments made in long proven practices.

It is quite possible that the producer will not undertake all facets of harvesting, collection, storage and transportation of the renewable biomass. However, all payments under the program should be made directly to the producer and in turn the producer is responsible for payments of services provided by others.

The matching payment of up to $45 per ton is only available for 2 years. Because we expect producers will increase their capital investment and commitment to collecting biomass, after gaining experience, it is essential that the producer be paid for incremental increases of tons collected. An example of how this would work is as follows:

Year	Tons Harvested	Cost Share Tons
1	50	50
2	70	70
3	70	20
4	90	20
5	90	20

Section 9011 authorizes payments for the delivery of eligible material to a biomass conversion facility. A biomass conversion facility is defined as a facility that converts renewable biomass into heat, power, bioproducts and advanced biofuels. Under this definition, biomass conversion facilities could utilize a wide variety of biomass material. It will be important to recognize this during implementation.

In the fall of 2007 POET collected cobs from 4,000 acres of corn and conducted over 100 experiments on the harvesting, collection, storage and transportation of cobs. We have committed to conducting research on an even greater number of acres from the 2008 crop. We are confident that the process we develop for the harvesting, collection, storage and transportation of biomass will be successful. However, this program is necessary as a final step in obtaining commitments from our farmer producers to partake in this new farming practice.

I thank you for the opportunity to provide input and would be happy to respond to questions.

Denny DeVos
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NATIONAL ASSOCIATION OF STATE FORESTERS

444 North Capitol Street, NW, Suite 540, Washington, DC 20001

September 19, 2008

Ms. Robin Robinson
Room 5803, South Agriculture Building
STOP 3201
1400 Independence Avenue, SW.
Washington, DC 20250-3201

Dear Ms. Robinson:

New authorities within Title IX of the 2008 Farm Bill represent a significant opportunity to improve the health of the nation's public and private forests. The National Association of State Foresters (NASF) applauds Congress's recognition—through the new Energy Title Programs—of the critical role non-industrial private forest lands play in helping meet national goals for renewable energy and advanced biofuels. The Title IX Programs will help stimulate markets for previously unmerchantable woody-biomass and will provide families and individuals with new income sources to manage for the numerous essential public benefits provided by their forest lands.

The enclosed includes NASF's recommendations regarding the implementation of the new programs authorized under Title IX of the Act. We believe the National and State Priorities laid out in Title VIII (Sec 8001 and 8002) of the 2008 Farm Bill provide guidance on project selection processes of the Farm Bill programs.

NASF appreciates the opportunity to share comments and asks the Department to consider the enclosed recommendations related to the implementation of the Energy Title programs. Please contact NASF Executive Director Jay Farrell (jfarrell@stateforesters.org or 202-624-5976) if you have any questions about our enclosed suggestions. We look forward to continued collaboration in crafting rules and administrative guidance for the 2008 Farm Bill.

Sincerely,

Kirk Rowdabaugh, President
National Association of State Foresters

Implementing Title IX of the 2008 Farm Bill:
National Association of State Foresters (NASF)
Recommendations for Implementing Energy Title Programs

September 19, 2008

New programs within the Energy Title of the 2008 Farm Bill hold enormous potential for improving the management of private forest lands across the country while also helping achieve national goals for renewable energy. Careful consideration is needed, however, as rules are generated to help guide the implementation of these new authorities. NASF offers the following recommendations to ensure these programs achieve their full potential in helping improve the ability of non-industrial private forest landowners in managing their forests for renewable energy, clean air and water, wildlife habitat and numerous other important public benefits.

Biorefinery Assistance (Sec. 9003)
Interim guidance and the Notice of Funds Availability should be issued with the urgency cited in the Manager's statement in a manner consistent with the direction provided in Section 9003. Subsequent rulemaking should adjust interim guidance (where appropriate) to ensure that future criteria for selecting funded projects reflect the intent of the broader assistance program defined in section 9003.

The Manager's Statement recognizes the ability to use funds under section 9003 to retrofit existing wood products facilities. NASF suggests wood products facilities interested in retrofitting existing facilities to produce biofuels—*in addition to current or new production of wood-products*—should be eligible for grants and loans guarantees under this program. In other words, regulations should not require that biofuels replace production at an existing facility in order to be eligible.

The Biorefinery Assistance Program requires the Secretary to establish a scoring system which considers whether the applicant proposes to work with producer associations or cooperatives (section 9003) when providing grants or loan guarantees. The Biomass Crop Assistance Program (section 9011) is designed to provide agricultural and forest landowners with financial assistance in establishing, producing, gathering and storing renewable biomass. NASF believes the programs compliment each other and recommends the Secretary provide funding assistance through each program which advances the intended goals of the other.

NASF recommends loan guarantees provided through Biorefinery Assistance Program cover *both* construction and post construction financing. Further, feasibility studies under this section should not be construed so as to require applicants to recreate an existing feasibility study completed by a third-party where one is already in place.

Bioenergy Program for Advanced Biofuels (Sec. 9005)
"It is the intent of the Managers that the Secretary support existing advanced biofuel production, as well as encourage new production. The Managers recognize that, with respect to forest biomass, the feedstock for the production of advanced biofuels is often the same feedstock used by forest products facilities, including pulp and paper mills. The Managers encourage the

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Secretary to consider competing market outlets when establishing the payment rate for such feedstocks." (pg. 226)

Regulations could circumnavigate the feedstock issue cited by the managers for pulp and paper mills by noting that the "renewable biomass" definition includes "wood waste or wood residue," such as manufacturing byproducts from forestry operations. Pulp and paper facilities would therefore be eligible to use spent pulping liquors in biofuels production and still receive payments under this program without otherwise affecting their feedstock.

The Secretary may assign the basis for payment amounts under this subsection (d) according to quality and duration of the production, net nonrenewable energy content of the fuel, and "other appropriate factors." NASF recommends the Secretary assign a premium payment for producers who have completed an assessment that documents the available sustainable supply of forest biomass on the surrounding landscape and have procurement programs that only accept woody-biomass from forests with a management plan (approved by a State Forester) or are certified through an existing forest certification program or demonstrated equivalent.

Rural Energy for America Program (Sec. 9007)
Regulations should clarify that renewable heating projects meet the definition of "renewable energy" for eligible activities under this section.

The REAP program should be linked to Sec. 9009, 9012, and 9013 programs. For example, Sec. 9009 community assessments should have an equivalency with assessments under this section to be used as a basis for joint grant or loan fund application by multiple parties. "Community wood energy plans" under Sec. 9013 could have a similar sufficiency status for assessments and project scoring under REAP.

Biomass Research and Development (Sec. 9008)
While the FR Notice did not make specific reference to this section, it does include several sections that pertain directly to NIPF and federal lands feedstock supplies [Sec. 9008(e)(3)(C)(ii) and (iii)]. The Managers intend for the program to bridge the gap between basic university research and commercialization. NASF recommends that forest biomass research under this program should focus on large-scale utilization potential. Feedstock supply elements under this Section should be linked to, or designed to support the Comprehensive Study of Biofuels commissioned in Sec. 15322.

Rural Energy Self-Sufficiency Initiative (Sec. 9009)
See Sec. 9012.

Biomass Crop Assistance Program (Sec. 9011)
NASF recommends the Secretary outline the procedures by which a "producer" (e.g., a contractor, "operator of contract acreage") will receive harvesting and transportation incentives [Sec. 9011(d)] for "renewable biomass" material harvested from state and federal forestland. The law prohibits state and federal forestland from being enrolled as BCAP contract acreage for the purpose of receiving biomass crop payments, but 9011(d)(1)(B) was designed to make

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producers eligible for the harvest and transportation incentives, including those from state and federal land.

It will also be important to specify the project sponsorship process for biomass conversion facility owners. In some cases, the facility owner could also be the "producer" in that they hold contract for forest biomass material and their contractors will be the ones to harvest and transport it. This might create complications with establishing the 1:1 harvest/transport payment amounts.

The BCAP should provide assistance to new forest landowners interested in establishing biomass supplies on former agricultural lands. In addition, the BCAP should provide assistance to private forest landowners who manage their existing forests for increased opportunities to provide biomass for renewable fuel and energy production. This could include byproducts from thinning, site preparation, fuel reduction, forest health treatments and other forest management activities. The Secretary should consider differing market conditions for forests (as compared to traditional agricultural lands) when allocating annual rental payments.

Forest Biomass for Energy (Sec. 9012)
NASF recommends that for the project selection and grants proposed under the Rural Energy Self Sufficiency Initiative (Section 9009) and Forest Biomass for Energy (Section 9012) that emphasis or priority be placed on projects that:

- Contain numerous contiguous forestland ownerships that help promote landscape level management objectives;
- Contain provisions that achieve long-term or permanent forest cover;
- In addition to biomass utilization, contain multiple resource management objectives directed at conservation of forest resources such as Threatened and Endangered Species habitat;
- Achieve objectives of Community Wildfire Protection Plans and other provisions of the National Fire Plan directed at hazardous fuels reduction and mitigation;
- Include specific measures to enhance forest health including control of insects, disease, and invasive plants;
- Expedite the removal and utilization of storm damage and debris;
- Augment or generate new markets for forest-based products including woody-biomass utilization for district heating or combined heat and power.
- Promote achievement of other federal mandates and programs directed at utilization of renewable resources for energy.

Funding allocations made through Section 9012 on forest lands should be consistent with state-wide assessments and strategies defined in Section 8002 or, in the absence of Assessments and Strategies, priorities identified by the State Forester.

Community Wood Energy Program (Sec. 9013)
The Secretary should require Community Wood Energy Plans to demonstrate that the surrounding forest resource can supply woody biomass on a sustainable basis before awarding any competitive grants to acquire or upgrade community wood-energy systems under this program. NASF recommends the Secretary require plans that document the available sustainable supply of forest biomass on the surrounding landscape and have procurement programs that only

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accept woody-biomass from forests with a management plan (approved by a State Forester) or are certified through an existing forest certification program or demonstrated equivalent.

Overall Comments
Except where the Conference Report or Statement of the Managers specifies differently, regulations should cite the definition of "renewable biomass" and "renewable energy" in Sec. 9001 to describe the feedstock and project eligibility for receipt of assistance under all Title IX programs.

NASF applauds the 2008 Farm Bill's recognition of biomass from forests within the broad definition of "renewable biomass" in the Energy Title. The inclusion of woody-biomass feedstocks holds enormous potential to support proper management of our nation's public and private forests. Unfortunately, the definition in the 2008 Farm Bill does not align with that found in the 2007 Energy Independence and Security Act (EISA). The EISA limits the role of federal and private forests in contributing towards national renewable fuels goals and prevents new markets and income opportunities for landowners from developing. Uncertainty and conflict will prevail in the marketplace until the renewable biomass definition in EISA is broadened to reflect that found in the 2008 Farm Bill.

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Dear Robin Robinson:

New Planet Energy, LLC ("NPE"), a bioresource development company formed in 2007 to commercialize new technologies that utilize cellulosic feedstocks, waste materials and other sustainable resources in the production of renewable energy and biobased products, is pleased to have the opportunity to comment on Section 9003 of the Energy Title of the 2008 Farm Bill.

We greatly appreciate USDA's efforts in expediting implementation of the Title IX provisions of the Farm Bill.

New Planet Energy would like to offer the following comment:

We would urge USDA to be all-inclusive in its consideration of the types of feedstocks that can be used by a biorefinery to produce renewable fuels, particularly since:

1. The term "eligible technology" is defined as "(A) a technology that is being adopted in a viable commercial-scale operation of a biorefinery that produces an advanced biofuel," and

2. The third criteria under the scoring systems set forth under Section 9003 states that the Secretary shall consider "(iii) whether the applicant is proposing to use a feedstock not previously used in the production of advanced biofuels."

There is disagreement -- and, hence, confusion -- among the various definitions in federal law that apply to the feedstocks that can be used to make ethanol and other renewable fuels. It is clear that cellulosic ethanol is considered to be ethanol produced from "any lignocellulosic or hemicellulosic matter." However, it is not clear which feedstocks are included under the various definitions.

For example, Section 1501 of the Energy Policy Act of 2005, which established the Renewable Fuels Standard, includes definitions under subsection (a)(2) for both "cellulosic biomass ethanol" and "waste-derived ethanol." The definition for cellulosic biomass ethanol states that "The term `cellulosic biomass ethanol' means ethanol derived from any lignocellulosic or hemicellulosic matter that is available on a renewable or recurring basis, including-- ... (viii) municipal solid waste."

In the next subparagraph, the definition for waste-derived ethanol states that "The term `waste derived ethanol' means ethanol derived from-- `(i) animal wastes, including poultry fats and poultry wastes, and other waste materials; or `(ii) municipal solid waste."

The definition for "renewable fuel" also states that "The term `renewable fuel' includes-- `(I) cellulosic biomass ethanol and `waste derived ethanol';"

There is no reference, however, to either municipal solid waste nor waste-derived ethanol

in the definitions in Section 201 of the Energy Independence Security Act of 2007 that extends and expands the Renewal Fuel Standard. The list of inclusions under the definition for "advanced biofuel," in Section 201(A)(ii) does not include a mention of municipal solid waste, but it does not specifically exclude it either, since the subparagraph states that "The types of fuels eligible for consideration as `advanced biofuel' *may include* [emphasis added] any of the following: ..."

Similarly, the list of inclusions under the definition for "advanced biofuel" in Section 9001(3)(B) of the Farm Bill does not include a mention of municipal solid waste, but it does not specifically exclude it either, since the subparagraph states that "the term `advanced biofuel' *includes*-- ..."[again, emphasis added].

On the other hand, some definitions in federal law do specifically exclude solid waste and wood that is pressure-treated, chemically-treated, or painted, such as the definition for "biomass" in the Energy Policy Act of 2005 under Section 932(a)(1)(C)(ii) that states: "The term `biomass' means-- ... (C) any waste material that can be converted to energy, is segregated from other waste materials, and is derived from-- ... (ii) wood waste materials, including waste pallets, crates, dunnage, manufacturing and construction wood wastes (other than pressure-treated, chemically-treated, or painted wood wastes), and landscape or right-of-way tree trimmings, but not including municipal solid waste, gas derived from the biodegradation of municipal solid waste, or paper that is commonly recycled."

New Planet Energy will be utilizing the INEOS Bioethanol Process (formerly known as the Bioengineering Resource, Inc. or BRI process), which is a gasification-fermentation technology capable of producing ethanol from any carbonaceous material, and from any mix of feedstocks, including special-grown crops, green vegetative wastes, agricultural residues, food wastes, municipal solid waste, biogas, animal manure, unrecyclable paper, seaweed and algae, carpeting, asphalt shingles, discarded tires, auto shredder residue, plastics and other materials.

We are locating our first commercial demonstration plant in Vero Beach, Florida adjacent to the Indian River County landfill specifically so we can utilize municipal solid waste in our process. Data on the types of materials that make up the municipal solid waste stream in Florida indicate that almost 60% of the waste stream is comprised of organic materials -- including yard wastes (14.0%), lumber from Construction and Demolition (C&D) debris (9.0%), corrugated paper (8.5%), other paper (8.6%), newspapers (5.2%), office paper (3.5%), food wastes (5.4%) and textiles (2.5%).

In addition to municipal solid waste, we plan to use citrus trees, citrus waste, vegetative waste, seaweed, animal manure, and special-grown crops as part of our feedstock stream.

We hope that the pioneering work that was so skillfully completed by Senator Grassly in defining feedstocks in the Energy Policy Act of 2005 will be reflected through the programs of USDA, and that USDA will be all-inclusive rather than exclusive in considering the range of feedstocks that can be used to produce renewable liquid transportation fuels.

We also hope that USDA will recognize the advantages offered by the INEOS Bioethanol process and other gasification processes, such as those being developed by Coskata and Range Fuels, due to their ability to utilize such a broad range of feedstocks, which will allow projects employing these processes to score higher on the third criteria in the scoring system under Section 9003.

Our further hope is that ethanol derived from all of these feedstock sources will qualify for coverage under the Section 9003 grants and loan guarantees, as well as for all of the Federal tax incentives and programs that will assist developers in bringing these critically important sources liquid fuel to optimum production at the earliest possible time.

Should you have any questions about these comments please do not hesitate to contact me.

We appreciate your consideration of these comments. Thank you.

Craig Evans
ON BEHALF OF
NEW PLANET ENERGY, LLC & NPE Florida, LLC
Email - craig@privatelands.org
Cell - 561-302-5782

September 18, 2008

Mr. Paul Harte
Farm Service Agency
United States Department of Agriculture
Washington, DC

Dear Mr. Harte,

We are writing to provide input into the rule making process for title 9 for the 2008 farm bill. The following represents the initial set of comments and concerns as you began the rule making process.

9003

1. Broad definitions should be used for a bio-refinery and advanced bio-fuels.
2. Bio-refinery—a facility that uses biomass to create power, fuels, and value added chemicals
3. Advance biofuels—a fuel derived from biomass fiber to heat, provide transportation or create electricity.
4. Co-product—a by-product from the conversion of bio-fuel such as, ash, bio-sledge, bio-mash.
5. By-product—any product left over from the conversion of biomass that has little or no economic value.
6. Established market—A market that exist for use of biomass and the energy derived from the conversion process.
7. Potential market—a local market that can be developed for biomass products, that has strong state and federal initiatives
8. Local ownership—90% of the shareholders of the legal entity live within 100 miles of the processing biorefinery

9. Area—50 mile radius of the biorefinery
10. Demonstration Projects—a biomass project that develops the use of biofuels for transportation, electricity, or heat.
11. Viable commercial scale—A biomass project that conducts business day to day, lessening our dependence on fossil fuels, and develops a tax base.
12. Financial and performance reporting—Monthly profit and loss, balance sheets, board minutes, quarterly tours on site.
13. Eligibility—should only be allowed for United States Corporation/non-profits who produces a 100% corporate tax base. The entity should be owned 100% by United States Citizens.
14. USDA Guarantee should be open to regulated and non-regulated financial institutions.
15. Feasibility study—Equity ownership, environmental attributes of the project, job creation.
16. Qualified Preparer—a minimum of Bachelor of Science in Agriculture/ Engineering with 2 years experience in biomass fuels production.
17. Turn around time-90 days ARA (after receipt of applicant)
18. Review—9 member panel with no conflict of existing bio-refinery participation all United States citizens—no federal employees.
19. Level of qualification—reducing CO2 and net energy values. Associated cost should be eligible (except advertising, R &D). Specific statutory criteria should not carry more weight and the agency should consider all factors—jobs, economic impact, time line.

20. Impact anticipation should be indentified on benchmarks developed by applicant. Should be independently verified and reported yearly, by a highly trained environmental engineer/agricultural engineer.
21. Low-value feedstocks should be given the same consideration as high-value feedstock.
22. Suggestions on loan terms—20 years tied to short term treasuries, Max cap 3%.

IOGEN CORPORATION

September 18, 2008

Ms. Robin Robinson
Room 5803
South Agriculture Building
STOP 3201
1400 Independence Avenue, SW.
Washington, DC 20250-3201.

Dear Ms. Robinson,

Thank you and your USDA colleagues for inviting a submission regarding our interests in various aspects of Title IX of the 2008 Farm Bill. Our comments are as follows:

Section 9003 – Biorefinery Assistance Program

- To match the decision making process of biorefinery investors, access to the loan guarantee program should be either available at all times or if a formal call for proposals with a closing date be necessary, this should occur at least on a quarterly basis.
- Obtaining a loan guarantee is but one important element of project development that biorefinery investors must secure before construction can commence. Thus delays, particularly given the newness of the industry can be expected. Therefore, access to this facility should not be terminated as long as the investors can demonstrate that the biorefinery investment remains viable and that significant efforts are underway to bring the project to fruition.
- While it is clearly specified in the Bill, the 10% portion of the loan not covered by the guarantee is problematic inasmuch as the lending community has limited ability to assign risk to ventures employing new technologies. Given that this portion of the venture could be as high as $25 million and therefore significant, lenders could be prone to place a large premium on the entire loan and perhaps thus challenging the viability of the project.
- One option that rule making might address would be to allow the 10% of the loan that the guarantee did not cover to be from a less than arm's length lender. This would provide the biorefinery investors with the opportunity to provide a loan to the venture from internal finances in lieu of equity.

Section 9011 – Biomass Crop Assistance Program

- This is an excellent program to support a mature project where the biorefinery investors are committed to the project and growers in the community have experience in growing dedicated perennial biomass crops.
- Given the risks involved it would be most helpful if the financial support of 75% would include opportunity costs to growers.

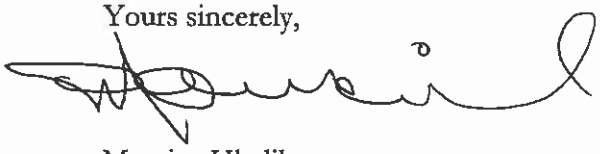
310 HUNT CLUB ROAD EAST OTTAWA ONTARIO CANADA K1V 1C1 TEL (613) 733-9830 FAX (613) 733-0781

- However, this program does little to encourage growers that are new to the industry to bring themselves to the stage where they are comfortable in entering into a long term contract with a biorefinery. Indeed, biorefiners will be reluctant to contract with farmers who have no demonstrated experience in dedicated biomass production.
- The problem is further exacerbated by the fact that this is a new form of agriculture involving perennial plants such as switchgrass or miscanthus that are unknown to many growers and challenging to get established.
- There is also the need for long tem contracts (perhaps 10 years) to protect the growers who are now into plantation agriculture with a two to three year establishment period. This is a new concept for those farmers accustomed to annual row crops.
- The 16 billion gallon RFS for cellulosic ethanol will require 200 million tons of biomass assuming 80 gallons of product per ton. For illustrative purposes this will require 200 thousand growers each supplying 1000 tons on average. This is an incredible opportunity and challenge for US agriculture and will involve more growers than are currently engaged in wheat production (166 thousand).
- Unfortunately it does little to bring growers (and biorefinery investors) to the stage where they will have the confidence to enter into substantial long term contracts to supply biomass.

Sections 9005 and 9008

- One concept is to encourage small scale (say five acre) plots for growers to become familiar with one or more perennial biomass crops.
- As an incentive all costs, real and opportunity, would be covered for perhaps five years.
- The product of the exercise would be grower knowledge but the biomass could serve as wildlife habitat, bedding, low quality feed or mulch for road side plantings.
- No formal biorefinery involvement would be required but applications where several farmers in a community applied as a group would be encouraged.
- Within the rule making parameters of sections 9005 or 9008 perhaps this concept could be introduced even on a relatively modest scale with the objective that, if successful, it could become a significant program in the next Farm Bill.

Yours sincerely,



Maurice Hladik
Marketing Director
Iogen Corporation

cc: Anne Steckel – US Farm Bureau
Mark Gaede – National Association of Wheat Growers
Samantha Slater – Renewable Fuels Association
Anne Simmons – Majority Senior Professional Staff to Chairman Peterson
Eldon Boes – Majority Congressional Fellow (Staff) to Chairman Harkin
Adam Guzzo – Farm Service Agency - USDA

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GROWING WITH AMERICA SINCE 1861

AF&PA Statement

USDA Rural Business Cooperative Service
Public Meeting on Implementation of
Title IX, Energy Authorities of the
Food, Conservation, and Energy Act of 2008
September 4, 2008

The American Forest & Paper Association appreciates the opportunity to provide input on the Energy Authorities of the 2008 Farm Bill. AF&PA is the national trade association of the forest, pulp, paper, paperboard, and wood products industry. We are businesses producing essential products for people from renewable & recyclable resources that sustain the environment. Our industry accounts for approximately 6 percent of the total U.S. manufacturing output, employs more than a million people, and ranks among the top 10 manufacturing employers in 42 states with an estimated payroll exceeding $50 billion.

We support policy efforts to increase our nation's energy security. Our member companies are leading the effort to achieve this objective by combining advanced technology and innovative manufacturing practices with responsible stewardship of our natural resources. The industry is a leader in the generation and use of renewable energy from biomass residue in our mills. Sixty-four percent of the energy used at AF&PA member pulp and paper mills, and 74 percent of the energy from our wood products facilities, is generated from carbon-neutral biomass. Forest product industry facilities account for 82 percent of the total biomass energy generated by all industries collectively. In other words, we are the largest producers of renewable biomass energy in the country.

Our renewable energy use and production is accomplished while adhering to disciplined market-based standards of accountability that ensure the wood fiber we use is grown and harvested in a sustainable manner. Since 1995, all AF&PA members must subscribe to the principles of the Sustainable Forestry Initiative® (SFI), which sets rigorous forest management standards that are reviewed by external partners from conservation groups and research organizations. With over 226 program participants and 156 million acres of certified well managed forests, the SFI® program ensures that America's forest and paper companies are committed to sustainable management. Our historic commitment to renewable energy and sustainable forest management demonstrates that a balance between the two is both possible and necessary.

It is clear from both the text of the 2008 Farm Bill and the Joint Statement of the Managers that the new bioenergy programs are intended to strike a similar balance

between the needs of existing biomass users and the need to develop additional sources of bioenergy. We strongly support this goal. We encourage USDA's Rural Business Service to make every effort to ensure that these programs are implemented to achieve this goal, and to ensure that existing users of biomass and producers of biomass energy have the opportunity to participate in these important new programs.

In particular, we urge USDA to look closely at the language that authorizes the Biorefinery Assistance Program (Sec. 9003), Bioenergy Program for Advanced Biofuels (Sec. 9005) and the Biomass Crop Assistance Program (Sec. 9011), as discussed below.

Biorefinery Assistance (Sec. 9003): This section provides for grants and loan guarantees to new and retro-fitted "commercial scale biorefineries." Both the grants and loan guarantees have a number of criteria that the Secretary must take into consideration. For grants, these include whether the project "will have a positive impact on resource conservation, public health, and the environment." For the loan guarantees, the Secretary is required to evaluate 10 factors, including:

> *"whether the applicant can establish that if adopted, the biofuels production technology proposed in the application will not have any significant negative impacts on existing manufacturing plants or other facilities that use similar feedstocks." (p. 431)*

USDA should carefully evaluate any proposals received under this provision to ensure that they will not severely harm the long-term agricultural and silvicultural capability of a state or region of the country.

There is wide-spread concern about unintended consequences from biofuels production. Carefully reviewing proposals to ensure that they do not threaten the ability of natural resources in the state or region to satisfy production levels, while meeting demand from existing biomass feedstock users that rely on the same resource to produce food and manufacture products, would help address that concern.

Ensuring that this review is meaningful and rigorous will help maintain a working balance between the resource needs of existing biomass users and the emerging resource needs of the cellulosic biofuels industry. This also would help preserve the health, viability, and productivity of our agricultural and forest lands throughout the country, as well as economies in rural areas.

The joint statement of the managers specifically states that "existing facilities including wood products facilities" should be eligible for this program (p. 216 of the Joint Statement of the Managers).

Bioenergy Program for Advanced Biofuels (Sec. 9005): This program provides $300 million over 4 years for payments to growers of biomass feedstock, based on a number

of factors including the net renewable energy content of biofuels produced from those feedstocks. The managers' statement includes the following:

> *"The Managers recognize that, with respect to forest biomass, the feedstock for the production of advanced biofuels is often the same feedstock used by forest products facilities, including pulp and paper mills. The Managers encourage the Secretary to consider competing market outlets when establishing the payment rate for such feedstocks."* (p. 227 of the Joint Statement of Managers)

We urge USDA to take this caveat seriously and evaluate the impact of this and other bioenergy programs on other users of biomass feedstocks, particularly woody biomass. The narrow definition of renewable biomass established by the Energy Independence and Security Act (EISA) of 2007 heightens our concerns. It restricts eligibility based on forest types and successional stage and disqualifies most fiber from public ownerships, which has the potential to focus all wood bioenergy procurement on existing plantation forests, a critical part of the fiber supply for our industry.

Biomass Crop Assistance (Sec. 9011): This section provides for up to 75% of the costs of establishing biomass energy crops, and up to $45/ton for harvest, storage, and transportation to a "biomass conversion facility" (pp. 446 – 450). As noted above, existing paper and wood products facilities are substantial producers of renewable energy from wood biomass and by-products of the pulp and papermaking processes. We urge USDA to make deliveries of wood biomass to existing paper and wood products facilities eligible for payments under subsection (d). We believe it was the intent of this subsection to support wood use at existing facilities, not simply new wood bioenergy facilities. This interpretation provides greater incentives for wood energy use in concert with the existing wood and paper products industry, which will lead to a net gain in new renewable energy production.

Conclusion:

Thank you again for the opportunity to provide input on these important programs. We know that USDA has heard a great deal about the need to balance food needs with new bioenergy production. We believe that the model of sustainable management pioneered by America's forest products industry can be used to guide implementation of the bioenergy provisions to avoid unnecessary conflicts and support development of new bioenergy sources in a rational manner.

Department of Agriculture

Rural Business –Cooperative Services

Comments on Implementation of Title IX Energy Authorities of the Food, Conservation and Energy Act of 2008

By: David Kolsrud, Farmer, Business Developer specialized in locally owned value added projects
DAK Renewable Energy
304 Splitrock Blvd, Suite 205
Brandon, SD 57005

General Comment:
Working with local groups for the last 14 years I found that it takes 4 key points to a successful project.

1. Vision-Include all at the beginning
2. Cooperation
3. Commitment-Best with cash & feed stock
4. Common Sense-Don't build in an over built industry

Comments –Sec 9003:
Loan guarantees should not exceed 80% of the loan; good projects will get financed at this level or less.

Comments- Sec 9004:
Maybe this section is limited to biomass, but I think it should include wind. Why? Wind projects are now currently aimed at supplying power to the grid. I think biorefiners could install gas/electric boilers which could be connected directly to the wind turbines (by passing the grid). Run off gas when the wind is low and electric when towers are producing.

Comments- Sec 9005:
Preference should be given to projects that are locally owned.

Implementation of Title IX, Energy Authorities of the Food, Conservation, and Energy Act of 2008

Comments: Robert Kozak
President, Atlantic Biomass Conversions, Inc.
Board Member, Advanced Biofuels USA
507 N. Bentz St.
Frederick, MD 21701
Atlanticbiomass@aol.com

Title IX Implementation: Overall Goals

First and foremost I urge whichever Administration takes office in January to honor the intent of Title IX legislation, to assure that the mandatory funding levels defined in Title IX are not held up in Congress, and any additional funds that require appropriation (Section 9012) are quickly provided.

The overall goal of Title IX should be to develop an American Advanced Biofuels industry that is sustainable both environmentally and economically. This is, I believe, the intent of the legislation.

To that end, biorefinery and biomass crop assistance programs should both be focused exclusively on only advanced biofuel projects and should not be used to support earlier generations of biofuel production. Furthermore, project selection criteria should focus on sustainability over immediate availability of technology. USDA should realize that most, if not all, sustainable advanced biofuel technologies are not commercially available today (2008). There are many very good, innovative technologies, conversion systems, and crops, at the lab level. Properly implemented Title IX programs, especially in these times of virtually non-existent early-stage credit, would go a long way to getting these technologies to market and would provide the start to an American Advanced Biofuels industry that could provide both long-term energy security and long-term rural economic growth.

Section 9003 Biorefinery Assistance

With the limited funds available, this program should only be used for Advanced or 3rd generation biofuels which is the legislative intent of this section

By way of definition:

1st generation biofuels are corn-to-ethanol and soybean biodiesel. Both of these are in wide-spread commercial production.

2nd generation biofuel is cellulosic ethanol. DOE has provided funding for a number of commercial-scale demonstration plants. In addition, General Motors has provided funding for two cellulosic ethanol companies, Coskata and Mascoma.

3rd generation (or True Advanced Biofuel) technologies include: advanced hemicelluloses/lignin conversion processes, either to intermediates (sugar cocktails) or final fuels, and aqueous reforming "green gasoline" processes. 3rd generation biofuels include; bio-jetfuels, advanced biosynthetic diesel fuels, biogasoline, and fuel cell liquid electron carriers.

Selection Criteria

Criteria used to select candidate projects should be focused on encouraging innovation within the limited funding provided. They should include the following.

- Don't be afraid that some funded projects may fail. The purpose of this section is to find cutting-edge solutions. Many state technology programs realize that not all technologies are going to "hit home runs" and accept that risk. USDA should follow this philosophy. Remember that low-risk selection criteria result in non-innovative technologies.
- Co-ops and innovative feedstocks should be given high rankings, as the bill language states.
- Pilot-Scale Plants rather than larger sized biorefineries should be funded. $340 million is not much funding. With smaller scale pilot plants, more ideas can reach the commercial stage with the limited money available. Again, innovations, not overall production levels, are needed at this stage of Advanced Biofuel development.
- Multiple stage, decentralized/centralized hybrid biorefineries as well as other concepts should be included as well as the conventional integrated biorefinery design. At this stage of development, selecting only one type of biorefinery design would close the door on needed innovation.
- Something we often forget in biofuel discussions is that the cost of transporting biomass and biofuel is usually a primary profit/loss decision point in crop selection and biorefinery design. The goal of Section 9003 should therefore be to find innovative solutions that can reduce overall system transportation costs

while also maximizing biorefinery efficiency and producing maximum amounts of advanced biofuels.

Questions in Farm Bill Wording of Section 2003

What is a Demonstration-Scale project? Where does that fit in the engineering continuum of Pilot/Prototype/Commercial?

What is a Large Scale market? In transportation fuels, all markets tend to be large.

Section 9005 Bioenergy Program for Advanced Biofuels

Selection Criteria

- As in Section 9003, funding should be limited to 3rd generation biofuels.
- Production of National Defense fuels, i.e., jet and turbine fuels, should be considered as selection criteria.
- Production of biofuels with equivalent energy to existing gasoline, diesel, or jetfuel should be given high priority.
- Biofuel intermediates as well as finished products should be eligible for Section 9005 funding. These would include "sugar cocktails" that are used to produce biogasoline or bio-jetfuel, or oil intermediates for advanced biosynthetic diesel.

Section 9011 Biomass Crop Assistance Program

In keeping with the overall goal of developing an environmentally as well as economically sustainable Advanced Biofuel industry, Section 9011 should provide funding for only sustainable energy or dual use crops. Therefore, before this program is initiated, USDA/ARS should conduct a study of available and near-term future crops to determine eligibility. While this may slightly delay the implementation of this section, it is crucially important that high nutrient input or ecologically unfit crops are not included for funding. This study could be done under the language in this section that outlines selection criteria. Specific crop criteria to be developed should include:

- Ecological fitness of crops to specific environments,
- Regional/ecological criteria,
- High per acre yields with low fertilizer inputs,
- Ease of harvesting,
- Availability of seed crop, and

- Availability of biomass conversion processes. *Section 9011 language: "2) assist agricultural and forest land owners and operators with collection, harvest, storage, and transportation of eligible material for use in a biomass conversion facility"*

Developing these criteria within the ARS system would solve the chicken-and egg issue between crops and biorefineries that is created by some of the language in this section such as letters of commitment, etc. More important, such a study would produce objective, science-based criteria for crop-selection which would help assure the long-term health of rural biofuel economies.

Section 9012 Forest Biomass for Energy

Selection Criteria

Many of the selection criteria recommended for Section 9003 apply for Section 9012 as well. These include:

- Don't be afraid that some funded projects may fail.
- Funding should be limited to 3rd generation biofuels.
- Pilot-Scale Plants rather than larger sized biorefineries should be funded.
- Innovative biorefinery concepts should be accepted.
- Innovative solutions that reduce overall system transportation costs while also maximizing biorefinery efficiency and producing maximum amounts of advanced biofuels should be a primary selection criteria.

In addition, program emphasis should be given to reactivating mothballed pulp-and-paper plants. In every region of the country, there are pulp-and paper plants closed because of the move to importing most of our paper from China and other countries. These plants present a significant opportunity for creating a forest based advanced biofuels industry at relatively low cost. Not only are they located near underutilized forest resources, they already have the infrastructure needed to build a biofuels biorefinery and in most cases these plants have been updated to meet EPA air and water regulations. Furthermore, they are located in rural communities needing economic revitalization because of their closure.

Focusing Section 9012 prototype projects in these facilities could not only develop a forest based advanced biofuels industry very quickly and at lower than expected costs, but it would also provide a way to provide long-term economic growth for many rural

communities that are now suffering through high unemployment and the outward migration of much of their younger people.

VIA FAX & EMAIL

September 19, 2008

Ms. Robin Robinson, Confidential Assistant
Office of the Administrator
USDA Rural Development, Business, and Cooperative Programs, Room 5803
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1400 Independence Avenue, SW
Washington, DC 20250-3201
(202) 690 – 4730 Fax (202) 690 - 4737
email robin-robinson@wdc.usda.gov

Subject: Public comment in response to public meeting held on September 4, 2008 entitled "Expanding Rural Renewable Energy Opportunities-Inviting a dialogue with the public on the new authorities of the Food, Conservation and Energy Act of 2008 (Pub. L. 110-234("the Act")."

Dear Ms. Robinson:

The Algal Biofuels Consortium (ABC) is submitting the following comments applicable to sections 9003, 9005, 9007 and 9008 ("the Sections"). Algal-derived biofuels offer a unique opportunity to meet certain needs addressed in the Sections of the Act.

1. It is critical to start these funding programs as soon as possible in order to accelerate the implementation of alternative solutions.
2. Algal-derived biofuels should not be restricted to specific algae strains or species, and a broad definition of algae including, but not limited to, microalgae, macroalgae and seaweed, is recommended.
3. We strongly encourage all discretionary funding to be utilized
4. Given the magnitude of the opportunity, we encourage dramatically increasing budgets.

The ABC's membership, comprised of universities, laboratories and private industry, offers technical assistance to USDA if needed in the development of these programs. Thank you for your consideration.

Sincerely,

Alina Kulikowski-Tan
Member and Acting Director of Private Public Partnerships
Algal Biofuels Consortium

FLOWER POWER USA
902 4th ST SW STE B
Auburn, WA., 90001

Transcript of oral presentation and written comments to the USDA Rural Development Public Meeting Title IX, Energy Authorities of the Food, Conservation and Energy Act

September 4th, 2008,
USDA Jefferson Auditorium
South Building, USDA,
1400 Independence Ave. SW., Washington DC

My name is Ion Manea and I am with FLOWER POWER USA / HERITAGE FARM COOPERATIVE of Auburn, Washington.

Thank you for the opportunity to make this presentation and provide comments as to:
1. "**ADVANCED BIOFUEL**" and "**BIOREFINERY**" terms **applicable to SEC. 9003**, **SEC. 9004** and **SEC. 9005.**
2. **SEC. 9003 (d) (C) and SEC. 9003 (e) (C) GRANTS AND LOAN GUARANTEES SCORING SYSTEM**

COMMENTS TO:
"ADVANCED FUEL" APPLIED TO SEC. 9003 (B) (2) (A) AND (B) AND "ADVANCED BIOFUELS" APPLIED TO SEC. 9005

"**Eligible technology**" as defined in (SEC. 9003 (2)) includes "**advanced biofuel**", and "**biorefinery**".
"**Advanced biofuel**" definition in (SEC. 9001). (3) specifically includes diesel-equivalent fuel from **renewable biomass**, including **vegetable oil** and animal fat.
'**Biorefinery**' as defined in (SEC. 9001, (7)) means a facility that converts renewable biomass into '**biofuels**' and **"biobased products**"; and may produce electricity.
'**Biofuel**' as defined in (SEC. 9001 (5)) means a fuel derived from **renewable biomass.**
`**Renewable biomass**" as defined in (SEC. 9001 (12), (B)) includes, any organic matter that is available on a renewable or recurring basis including renewable plant material including… feed grains, other agricultural commodities, other plants and trees, and algae.

It is well established that:

- As sun energy storage in plants and algae, **vegetable oil** is a valuable biofuel due to its high energy content, while extraction is clean with low energy requirements through non chemical technologies.
- Plant and algae material are **renewable biomass**.
- **Vegetable oil is a product of plant and algae and could be derived from their oil deposits** and not from starch including corn starch.

- **Vegetable oil is derived form plant oil deposits** and not derived from plant starch including corn kernel starch.
- **Vegetable oil is a fuel** that can be combusted with oxygen to generate energy closed to that generated by an equal volume of fossil diesel fuel.

It follows that according to the above and to SEC. 9001. (3) (iv), SEC. 9001 (12), (B) (I), (II), (III) and (IV), SEC. 9001 (5) SEC. 9001(3) (A):

Vegetable oil, as a fuel derived from renewable biomass is a biofuel, and vegetable oil, as a fuel derived from renewable biomass but not from corn kernel starch is an advanced biofuel.

Vegetable oil use as feedstock is the sole reason some chemically derived diesel-equivalent fuels can claim biofuel and advanced biofuel status.

Although emerging technologies for direct usage of natural vegetable oil as diesel or heating fuel equivalent are emerging and its potential for jet fuel formulations and fuel cell hydrogen feedstock has been documented, in America, fuel grade, quality assured vegetable oil industry is in its infancy.

In accordance to SEC. 9001 (5), SEC. 9001 (3) (B) (IV), and SEC. 9001 (12) (B) (i) (I),(II),(III), (VI) and in order to avoid deductive determination and as applicable in SEC.9003 (b) (2) (A) and (B) we propose the following interpretations:

The term "biofuel" includes all fuels (solid, liquid or gaseous) derived from renewable biomass as defined in and including vegetable oil from plants and algae.

Subject to Sec. 9001, subparagraph (A), the term `advanced biofuel' includes natural vegetable oil that can be used directly or indirectly as fuel, fuel additive or feedstock for the production of energy regardless of energy generation path (diesel or jet engine, fuel cell etc.)

"BIOREFINERY" TERM AS APPLIED TO SEC. 9003 (B) (2) (A) AND (B) AND SEC. 9004 AND SEC. 9005

'**Biorefinery**' as defined in (SEC. 9001, (7), (A), (B)) means a facility that converts renewable biomass into **'biofuels' and "biobased products**"; and may produce electricity.

`**Biobased product**' as defined in (SEC. 9001, (4), (A), (B)) means a product determined by the Secretary to be a **commercial or industrial product (other than food or feed)** that is composed, in whole or in significant part, of **biological products**,.. or **an intermediate ingredient or feedstock**.

It is not clear if in addition to conversion of renewable biomass to biofuels, a biorefinery is mandated to produce "biobased products" as well.

If the production of **"biobased products" is not mandatory**, then no further clarification is needed and a facility that produces advanced biofuels including vegetable oil meets the definition of a "biorefinery" regardless of production of "biobased products".

If the production of **"biobased products" is mandatory** then more clarification is needed.

1. The term **(other than food or feed)** in (SEC. 9001, (4)) needs to be clarified.

a. Food and feed are commercial and industrial biological products that could be used as intermediate ingredient or feedstock and Secretary determination is not needed. This interpretation is in accordance with SEC. 9008. (a) (1) (B) that specifically includes animal feed as a commercial and industrial product derived in connection with the conversion of biomass to fuel. It is also in accordance with SEC. 9008 (e) (3) (B) (ii) that specifically includes animal feed as a part of the range of the diversified biobased products that potentially can increase the feasibility of fuel production in a biorefinery.

b. Food and feed are not biobased products.
In this case, a facility that converts biological material to advanced biofuels and food and/or feed by products will not meet the definition of a "bioferinery", regardless of their high commercial or industrial value as foods, feeds, intermediate ingredient or feedstock .

An example will be a facility that produces advanced biofuel and other commercial or industrial by products that either have a high biological content or can be used as intermediate ingredient or feedstock.

If the by products are utilized in the food or feed supply chain, value will be added to them thus they could substantially reduce the cost of producing the advanced biofuel. However the facility will not meet the requirements of the "biorefinery" definition. Consequently, the facility's technology will not meet the eligibility requirements of SEC. 9003 (B) (2) despite fulfilling the purposes and goals of SEC. 9003 (a) and having the potential to increase the feasibility of fuel production in that facility.

If the same products are utilized in a non food or non feed application thus leaving the food or feed supply chain, it is probable that their contribution to the production cost reduction of advanced biofuel will be minimal. However the facility will meet the requirements of "biorefinery" definition.

2. If the by product is not a **commercial or industrial product** and is not composed in a significant part of **biological products**, or if it is not **an intermediate ingredient or feedstock** then it is not a biobased product and the facility producing advanced biofuel will not meet the definition of "biorefinery" requirements.

In this case even a facility with a high degree of conversion of biological material to advanced biofuel while having a small by-product of non commercial or industrial value will not meet the "biorefinery" requirements.

An example will be a wood gasification facility that will convert most of the wood to clean combustion gas and will have a small non biological ash residue of no commercial or industrial value.

As applicable to SEC. 9005 and SEC. 9003, (b) (2), and in accordance to **(**SEC. 9001, (4)) SEC. 9008. (a) (1) (B) SEC. 9008 (e) (3) (B) (ii) and to above narrative from pct. 1a, we propose that the definition of "biorefinery" to be interpreted as:

The term `biorefinery' means a facility (including equipment and processes) that-
(A) converts any organic matter that is available on a renewable or recurring basis including agricultural commodities into advanced biofuels including vegetable oil that can be used directly or indirectly as fuel, fuel additive or fuel feedstock for the production of the energy, and
(B) may produce electricity, and
(C) may produce biobased products including food and/or feed

COMMENTS TO:
SEC. 9003 (d) (C) and SEC. 9003 (e) (C)
GRANTS AND LOAN GUARANTEES SCORING SYSTEM

The purpose of SEC. 9003 is to assist in the development of new and emerging technologies for the development of advanced biofuels. (SEC. 9003 (a) PURPOSE), and the Secretary shall make available grants and load guarantees for eligible entities and on competitive basis.

For establishing the priority of eligible applications, scoring system has been established as per SEC. 9003 (d) (C) and SEC. 9003 (e) (C) for Grants and Loan Guarantees respectively.
Although both grants and loan guarantees could be applied to the same project same project, their scoring criteria are different as follows:

Criteria	**Grant**	**Loan Guarantee**
1. Scalability for commercial use (SEC. 9003 (d) (C) (ix)	Listed	Not LIsted
2. Potential Market for advanced biofuels and bioproducts. (SEC. 9003 (d) (C) (i)	Listed	Not LIsted
3. Applicant has established market for advanced biofuels and bio-products. (SEC. 9003 (e) (C) (i)	Not Listed	Listed
4. Significant negative impact on existing manufacturing facilities that use similar feedstock. (SEC. 9003 (e) (C) (vii)	Not Listed	Listed
5. Level of local ownership proposed in the application (SEC. 9003 (e) (C) (ix)	Not Listed	Listed

It appears that two scoring criteria for loan guarantees ((SEC. 9003 (e) (C) (i) and SEC. 9003 (e) (C) (vii))) are less helpful in serving the purpose of the SEC. 9003 (a) as to assist of new and emerging technologies for the development of advanced biofuels.

We propose to introduce (SEC. 9003 (e) (C) (ix) into Grant scoring criteria ((SEC. 9003 (d) (C)) and to use Grant scoring criteria ((SEC. 9003 (d) (C)) as the sole scoring criteria for both Grants and Loan Guarantees.

RATIONALE FOR THE REQUEST

SEC. 9003 (e) (C) (i)

The stated purpose of SEC. 9003 is to assist in the development of new and emerging technologies for the development of advanced biofuels and it will be unrealistic to expect to have an established market ((SEC. 9003 (e) (C) (i)) for advanced biofuels and biobased products for which the technology or market are still emerging.

(SEC. 9003 (e) (C) (i) is not helping in the development of new and emerging technologies when assistance is needed the most: before the establishment of a market. (SEC. 9003 (d) (C) (i) that consider the potential market instead is more in line with the purpose of SEC. 9003.

SEC. 9003 (e) (1) (C) (vii)

The purpose of SEC. 9003 (e) (1) (C) (vii) needs clarification to determine of how it can serve the purpose of SEC. 9003 that is to assist in the development of new and emerging technologies for the development of advanced biofuels. (SEC. 9003 (a) PURPOSE).

As is written, the phrase “significant negative impacts on the existing manufacturing plants or other facilities that uses similar feedstock” could be interpreted in different ways.
One interpretation will be that if a certain feedstock is used by an existing manufacturing facilities to produce biofuels and non biofuel products, a new manufacturing facility that will use a similar feedstock but newer and more efficient technology to produce advanced biofuels will have a competitive advantage thus it may have a “significant negative impact on existing manufacturing facilities.

Consider for example the chemical conversion of vegetable oil (edible oil) to biodiesel. This technology is using hazardous and toxic chemicals, produces waste produce low value byproducts like glycerol and recovers only 90% of the feedstock as advanced biofuel. Any vegetable oil (including non edible) is in essence “similar feedstock” to the production of advanced fuels.

A technology for 100% non chemical conversion of vegetable oils into advanced biofuels on the farm, with no hazardous, toxic and pollutants waste and less energy, is a new and emerging technology that is more cost effective than those used in the existing manufacturing facilities. It is environmentally sound and if the advanced fuel is used locally in farm equipment it will reduce the farming expenses and may produce a new revenue stream from adding value to the vegetable oil from selling it as fuel and from tax credits benefits.

Even though the new technology has the potential to make the farm “fuel self sufficient” and regardless of its advance in vegetable oil production (high yields, new plants, algae,

marginal land) in essence the resulting vegetable oil is a “similar feedstock” to other vegetable oils, and therefore the proposed technology could impact less advanced existing manufacturing plants or other facilities that use similar feedstock for the oleo-chemical industry (paints, soaps, biodiesel, edible oils, oleo-chemicals etc.).

(SEC. 9003 (d) (C) (iii) criteria considers the use of feedstock not previously used in the production of advanced biofuels and it is more in line with the purpose of SEC. 9003.

Additionally, if the applicant is an agricultural producer and/or user of feedstock and/or the resulting biofuel or advanced biofuel, the impact on rural development, resource conservation, public health and environment is more positive regardless if the feedstock has been previously used as feedstock by existing manufacturing plants of facilities.

We propose that **(SEC. 9003 (e) (C) (ix), “level of local ownership” to be added to the Grant scoring criteria ((SEC. 9003 (d) (C)) grant scoring criteria (SEC. 9003 (d) (C) as sole scoring criteria for both grant and loan guarantee with (SEC. 9003 (d) (C) (iii) interpreted as follows:**
“whether the applicant is proposing to use a feedstock not previously used in the production of advanced biofuels or regardless of use of a feedstock by existing manufacturing plants or facilities providing that advanced biofuel is produced on the farm”

Thank you for your consideration and for the opportunity to comment.

Ion Manea Principal,
FLOWER POWER USA, Inc. & HERITAGE FARM COOPERATIVE

REFERENCES:

SEC. 9001. DEFINITIONS

(3) ADVANCED BIOFUEL-

(A) IN GENERAL- The term `advanced biofuel' means fuel derived from renewable biomass other than corn kernel starch.

(B) INCLUSIONS- Subject to subparagraph (A), the term `advanced biofuel' includes—….

(iv) diesel-equivalent fuel derived from renewable biomass, including vegetable oil

(4) BIOBASED PRODUCT- The term `biobased product' means a product determined by the Secretary to be a commercial or industrial product (other than food or feed) that is--

(A) composed, in whole or in significant part, of biological products, including renewable domestic agricultural materials and forestry materials; or

(B) an intermediate ingredient or feedstock.

(5) BIOFUEL- The term `biofuel' means a fuel derived from renewable biomass.

(7) BIOREFINERY- The term `biorefinery' means a facility (including equipment and processes) that--

(A) converts renewable biomass into biofuels and biobased products; and

(B) may produce electricity.

(12) RENEWABLE BIOMASS- The term `renewable biomass' means--…

(B) any organic matter that is available on a renewable or recurring basis… including--…

(i) including renewable plant material including…

(I) feed grains;

(II) other agricultural commodities;

(III) other plants and trees;

(IV) algae;

SEC. 9003. BIOREFINERY ASSISTANCE

(a) Purpose- The purpose of this section is to assist in the development of new and emerging technologies for the development of advanced biofuels, so as to--

(1) increase the energy independence of the United States;

(2) promote resource conservation, public health, and the environment;

(3) diversify markets for agricultural and forestry products and agriculture waste material; and

(4) create jobs and enhance the economic development of the rural economy.

(b) Definitions- In this section:

(1) ELIGIBLE ENTITY- The term `eligible entity' means an individual, entity, Indian tribe, or unit of State or local government, including a corporation, farm cooperative, farmer cooperative organization, association of agricultural producers, National Laboratory, institution of higher education, rural electric cooperative, public power entity, or consortium of any of those entities.

(2) ELIGIBLE TECHNOLOGY- The term `eligible technology' means, as determined by the Secretary--

(A) a technology that is being adopted in a viable commercial-scale operation of a biorefinery that produces an advanced biofuel; and

(B) a technology not described in subparagraph (A) that has been demonstrated to have technical and economic potential for commercial application in a biorefinery that produces an advanced biofuel

SEC. 9008. BIOMASS RESEARCH AND DEVELOPMENT.

(a) Definitions- In this section:

(1) BIOBASED PRODUCT- The term `biobased product' means--

(A) an industrial product (including chemicals, materials, and polymers) produced from biomass; or

(B) a commercial or industrial product (including animal feed and electric power) derived in connection with the conversion of biomass to fuel.

SEC. 9008 BIOMASS RESEARCH AND DEVELOPMENT

(a) DEFINITIONS.-In this section:

(1) BIO BASED PRODUCT.-The term "biobased product" means-…

(B) a commercial or industrial product (including **animal feed** and electric power) derived in connection with the conversion of biomass to fuel….

(e) BIOMASS RESEARCH AND DEVELOPMENT INITIATIVE….

(3) TECHNICAL AREAS.- The secretary of Agriculture shall direct the Initiative in the 3 following areas:…

(B) BIOFUELS AND BIOBASED PRODUCTS DEVELOPMENT.- research, development and demonstration activities to support-…

(ii) product diversification through technologies relevant to production of a range of biobased products (including chemicals, animal feeds, and cogenerated power) that potentially can increase the feasibility of fuel production in a biorefinery.

SEC. 9003 (d) GRANTS.—

(1) COMPETITIVE BASIS.—The Secretary shall award grants under subsection (c)(1) on a competitive basis.

(2) SELECTION CRITERIA.—

(A) IN GENERAL.—In approving grant applications, the Secretary shall establish a priority scoring system that assigns priority scores to each application and only approve applications that exceed a specified minimum, as determined by the Secretary….

(C) SCORING SYSTEM.—In determining the priority scoring system, the Secretary shall consider—

(i) the potential market for the advanced biofuel and the byproducts produced;

(ii) the level of financial participation by the applicant, including support from non-Federal and private sources;

(iii) whether the applicant is proposing to use a feedstock not previously used in the production of advanced biofuels;

(iv) whether the applicant is proposing to work with producer associations or cooperatives;

(v) whether the applicant has established that the adoption of the process proposed in the application will have a positive impact on resource conservation, public health, and the environment;

(vi) the potential for rural economic development;

(vii) whether the area in which the applicant proposes to locate the biorefinery has other similar facilities;

(viii) whether the project can be replicated; and

(ix) scalability for commercial use

SEC. 9003 (e) LOAN GUARANTEES.—

(1) SELECTION CRITERIA.—

(A) IN GENERAL.—In approving loan guarantee applications, the Secretary shall establish a priority scoring system that assigns priority scores to each application and only approve applications that exceed a specified minimum, as determined by the Secretary….

(C) SCORING SYSTEM.—In determining the priority
scoring system for loan guarantees under subsection (c)(2), the Secretary shall consider—
(i) whether the applicant has established a market for the advanced biofuel and the byproducts produced;
(ii) whether the area in which the applicant proposes to place the biorefinery has other similar facilities;
(iii) whether the applicant is proposing to use a feedstock not previously used in the production of advanced biofuels;
(iv) whether the applicant is proposing to work with producer associations or cooperatives;
(v) the level of financial participation by the applicant, including support from non-Federal and private sources;
(vi) whether the applicant has established that the adoption of the process proposed in the application will have a positive impact on resource conservation, public health, and the environment;
(vii) whether the applicant can establish that if adopted, the biofuels production technology proposed in the application will not have any significant negative impacts on existing manufacturing plants or other facilities that use similar feedstock;
(viii) the potential for rural economic development;
(ix) the level of local ownership proposed in the application; and
(x) whether the project can be replicated.

Robin Robinson
Special Assistant to the Administrator
USDA Rural Business and Cooperative Programs
1400 Independence Avenue, SW (Rm-4231)
Washington, DC 20250

Dear Ms. Robinson:

On behalf of Tyson Foods, Inc., a joint partner with Syntroleum Corporation in a new alternative fuels venture, Dynamic Fuels, we appreciate the opportunity to provide comments on some of the critical programs in Title IX of the Food, Conservation, and Energy Act of 2008.

For the purposes of background, Dynamic Fuels is a 50:50 venture between Tyson Foods, Inc. and Syntroleum to convert a variety of inedible fats and greases into renewable transportation fuels for both military and civilian markets. These fuels will include high-quality on-road renewable diesel as well as premium aviation fuel. For both applications, our fuels will be completely fungible within the existing fuel infrastructure and will have superior environmental and performance characteristics.

On October 6, 2008, Dynamic Fuels will break ground on our first biofuels facility in Geismar, Louisiana. Production is scheduled to begin in 2010. This facility, the first of its kind in North America, will produce 75 million gallons of renewable synthetic fuel annually. It is our intention that this will be the first of several Dynamic Fuels facilities in North America.

As we assess plans for future advanced biofuels plants, the loan guarantee program contained in Section 9003 of the energy title is of critical importance. The ability of USDA to provide loan guarantees up to a value of $250 million, and to guarantee up to 90 percent of the loan amount, will be critical to many future advanced biofuels facilities. When establishing the criteria for awarding these loan guarantees, we encourage USDA to give special consideration to projects that: bring first of their kind technologies to the United States; are compatible with the current fuel infrastructure; utilize an innovative range of feedstocks; and meet or surpass the performance standards of comparable petroleum products. In addition, we urge USDA to give equal consideration to advanced biofuels facilities that produce aviation fuels. Renewable jet fuel has great promise both in military and civilian applications and we hope that Section 9003 as well as other sections of the energy title will fully support the production of renewable aviation fuels.

Another significant program in the energy title is Section 9005, the Bioenergy Program for Advanced Biofuels. This program can provide critical funding to support the next generation of biofuels. As guidelines are developed for Section 9005, we urge you to give special consideration to new or increased production on a year-to-year basis. While some level of support for existing production is reasonable, we would recommend a higher level of support for new or increased production. A tiered system will help to ensure that the program will truly be encouraging the development of new processes and technologies, and not just supporting more established biofuels technologies. In addition, for the purposes of this program, we recommend that feedstocks be treated in a neutral fashion as Dynamic Fuels, and many other emerging biofuels companies, may utilize a variety of different feedstocks during the same production run.

Again, we are grateful for the opportunity to comment on these sections of the energy title and look forward to working with USDA further on the implementation of these important programs.

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VIA EMAIL

September 19, 2008

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Email robin-robinson@wdc.usda.gov

Dear Ms. Robinson:

Carbon Capture Corporation ("CCC") is engaged in the nascent algae-based biofuel industry, spurred by growing concerns over reliance on imported oil, shortages of food supplies, and greenhouse gas emissions leading to global warming. These concerns have created demand for algae-based products that can provide alternative fuels, supplement the world's food supply, and help reduce carbon emissions. Our vision is to help reverse global warming while producing local, affordable, renewable and sustainable fuels. We utilize carbon dioxide (CO2) emitted from stationary sources such as fossil fuel power plants to accelerate the growth of algae, and plan on using the resulting biomass to produce green alternatives to natural gas, butanol, diesel or jet fuel propellants. Other applications include the production of certain animal feed. The impact is a reduction of CO2 emissions into the atmosphere via certain fossil fuels displacement. An added benefit includes new sustainable, indigenous and renewable fuels from a source that does not compete with food crops.

CCC is submitting the following comments applicable to sections 9003, 9005, 9007 and 9008 in response to the public meeting held September 4, 2008.

1. This matter is urgent, and we look forward to engaging as soon as possible.
2. Efforts funded under this program should include algal-derived renewable diesel, methane and jet fuel propellant (JP-8). For Diesel, we recommend the use of ASTM standard for Ultra Low Sulfur diesel fuel; D975-8. Algal-derived JP-8 should be suitable for US military applications.
3. We recommend that USDA does not restrict or limit algal species at this stage.
4. We urge USDA to increase and give the maximum funding from discretionary and mandatory sources.

Sincerely,

B. Raemy

Bernard Raemy
Executive Vice President
Carbon Capture Corporation

Carbon Capture Corporation
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Abengoa Bioenergy Biomass of Kansas
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ABENGOA BIOENERGY
ABENGOA BIOENERGY BIOMASS OF KANSAS

September 19, 2008

Submitted via e-mail to: robin.robinson@wdc.usda.gov

Thomas C. Dorr
Under Secretary for Rural Development
U.S. Department of Agriculture
Attention: Robin Robinson
Room 5803 South Agriculture Building, Stop 3201
1400 Independence Avenue, SW
Washington, DC 20250-3201

Re: Comments on Section 9003, 9004, 9005 and 9011 (Biorefinery Assistance, Repowering Assistance, Bioenergy Program for Advanced Biofuels, and Biomass Crop Assistance Program).

Dear Under Secretary Dorr:

On behalf of Abengoa Bioenergy, we are extremely pleased and grateful for the USDA's continued support of the renewable fuels industry. We believe that the direction the USDA is taking as reflected in the Energy Title of the Food, Conservation and Energy Act of 2008 will be critical for the further development of the domestic production of Advanced Biofuels and Cellulosic Biofuels, both of which are key strategic fuel alternatives aimed at the sustainable reduction of foreign oil consumption.

As you are probably aware, Abengoa Bioenergy is in the process of developing a biorefinery project that will produce up to 84 million gallons per year of Advanced Biofuel, 12 million gallons per year of Cellulosic Biofuel, and 500 Million BTU's per hour of synthesis gas from biomass, another type of Advanced Biofuel. This project is the first commercial application of Abengoa Bioenergy's biomass technology, and has the potential of being replicated in other parts of the country, helping grow our domestic production of Advanced Biofuels and Cellulosic Biofuel. The growth of Advanced Biofuels and Cellulosic Biofuel is critical to the growth of renewable fuel because it expands the existing ethanol industry on non-corn feedstocks inside and outside the corn belt, creating a higher potential sustainable output of ethanol.

We greatly appreciate your efforts to seek public input on the implementation of Title IX. We are especially grateful for the opportunity to present information at the Sept. 4 public meeting on the subject and to be able to follow up our public presentation with additional written comments.

The following is a summary of our comments on some of the sections in Title IX.

Section 9003, Biorefinery Assistance Program

The Loan Guarantee Program has significant potential to assist Biorefineries that will produce Advanced Biofuels. There are several aspects regarding the details of the Loan Guarantee Program that can greatly affect this potential assistance:

- In part (e)2 Limitations.- the loan guarantee amount has three limitations, $250,000,000 total, 80% of total project costs, and 90% of the principal and interest due on the guaranteed loan. It is imperative that with the 90% limitation of the principal and interest, stripping of the non-guaranteed portion of the debt be allowed, for the following reasons:
  - The rating associated with a partially guaranteed obligation will be substantially lower than the 'AAA' rating of a fully guaranteed instrument. The result of the higher credit risk will be less attractive financing, in terms of rates, required collateral, sponsor guarantees, term, etc.

    - An inability to strip will create a hybrid loan facility for which there is no market, a debt instrument with an unsecured, non-guaranteed portion equivalent to "quasi-equity", for which there is no true market.
- Although not mentioned, it is important that the loan guarantee be non-recourse as to all persons and entities. This is the type of project financing that a parent company such as Abengoa Bioenergy will be willing to commit the required equity and is a typical project financing structure for this type of project. If not a non-recourse project financing then the parent company will be guaranteeing all or part of the debt, which is not feasible.
- The program's availability is critically important with regards to Abengoa Bioenergy's Hugoton Kansas project. It is critical for successful financing that this program is available by the end of 2nd quarter 2009, or financing of the project could be delayed.

Section 9004, Repowering Assistance

To maximize the impact of this section for the industry, we propose the following considerations:

- Allow the term "existing Biorefineries" to include those that had received financing and committed to the use of fossil fuels but prior to the completion of construction at the time of the passage of this legislation. This will allow for the inclusion of several projects that will be large fossil fuel consumers and potentially increase the impact of this program in reducing overall fossil fuel consumption.
- Considerations for award should include:
    - The potential to replicate the method of fossil fuel consumption reduction at other Biorefineries,
    - Replacement of fossil fuels vs. reduction methods. Replacement technology tends to have a larger potential to reduce fossil fuels and can be more readily replicated at other Biorefineries. Replacement of fossil fuels also tends to be newer technology in more need of assistance than reduction methods.

Section 9005, Bioenergy program for advanced biofuels

It is our position that an ethanol plant producing Advanced Biofuel from sorghum should qualify for payments under this program. Payments to producers of advanced biofuels including sorghum would help support a stable and expanding production base in the semi-arid regions of the US, also known as the sorghum belt. Sorghum's qualification for payment in this program helps develop a second, starched-based feedstock that would help expand the ethanol industry outside of the corn belt. Payments under this program would also provide incentives to grow sorghum in the semi-arid regions of the US, rather than encourage irrigated corn production which has a significant impact on our water supplies. Sorghum is one of the most drought tolerant crops grown in the world and it plays an important role in the rural economy of the semi-arid plains.

It is also our position that all producers of advanced biofuels should qualify for the same payment rate. Payments for each gallon of production should be the same for every type of advanced biofuels.

We also encourage USDA to develop a program that pays biofuel producers if the plant produces Advanced Biofuel for a portion of the year, and possibly Biofuel from corn for the remainder of the year. This situation will occur as Advanced Biofuel facilities targeting sorghum as a feedstock come on line and the demand for sorghum is greater than sorghum production in the beginning years, until this production increases to meet demand. If there is a shortage of sorghum, a plant may have to resort to corn as a feedstock, but still should legitimately qualify for Advanced Biofuel payments for actual Advanced Biofuel gallons produced in a given year.

Section 9011, Biomass Crop Assistance Program

The BCAP could be one of the single most important programs for the growth of Advanced Biofuels and Cellulosic Biofuels. There is a significant challenge today in the cost of transition and establishment of non-corn based and cellulose based feedstocks to supply second and third generation Biorefineries. Successful rapid establishment of this new supply chain could make a difference in years how quickly these renewable fuels can make a real impact on our nations cost of energy. We offer the following comments:

- In part (a)7, the definition of Producer should allow for partial investment or ownership by companies that may also qualify as a Project Sponsor under (a)8. In many cases the biomass crop producer may require outside investment to move forward as a biomass crop producer, and this investment money may only be available from a Project Sponsor. This is especially true for establishment cost payments that are limited to 75% of actual cost.

- In part (c)5(B), Inclusion of the cost of land preparation for the establishment of perennial crops, including:
  - Leveling of land to make it suitable for harvesting equipment
  - Weed control during the first three years of establishment of the new crop
  - Nutrient supplements as needed (micro nutrients more likely than macro nutrients)

- All of these costs will be real costs and are necessary for the successful establishment of perennial crops. The cost will differ by region and previous land use and management, but to maximize effectiveness of this incentive, the definition of land preparation costs needs to be sufficiently broad. These items should be included under 5 (B) ii, the cost of planting the perennial crop, as determined by the Secretary.

- Although the law excludes land currently enrolled in CRP, we feel it is critical for the successful establishment of energy crops that this program supports the pro-active and sustainable conversion of CRP acres into eligible land under this program. Benefits from this include:
  - For acres that are coming off of CRP and can't be re-enrolled due to oversubscription, which is the case near our project in Hugoton, Kansas, those acres could be converted to producing switchgrass that would preserve the same conservation goals of CRP, and after a few years after the BCAP incentives expire will be supported by private industry. The alternative is these fragile soils can be torn up and converted to farmland.
  - For landowners who want to convert from CRP to this program for economic reasons, the benefits are the same as above, CRP conservation goals met and after the BCAP incentives expire the cost will be covered by private industry.
  - Any acres converted from CRP to BCAP will reduce the cost to the program (CRP), while maintaining the conservation goals.
  - Two mechanisms to support conversion from CRP:
    1. Allow CRP acres that will come off contract within three years to qualify for establishment payments.
    2. Provide an extension for acres coming off CRP in the near term, before the availability of BCAP, as a bridge to get those acres into BCAP and maintain the conservation benefits of CRP. Again, the alternative is these acres would be torn up and converted to farmland.

- In part (d), allow for a third party, other than the Project Sponsor or land owner, to qualify for this payment, and allow for investment and ownership by the project sponsor. Again, a situation where investment by the project sponsor may be necessary to create this step of the supply chain.

- Overall, for this program to add as much value as possible to a Project Sponsor, a commitment from BCAP needs to be possible prior a project receiving financing, as BCAP may actually enhance financing terms.

Again, we appreciate your efforts to solicit public comments on Title IX and we look forward to continuing to work with the USDA for the advancement of our domestic renewable fuel industry. We would also like to invite you or anyone from the Committee or USDA to come to Hugoton Kansas and visit our development office and site to witness first hand the progress we are making on our Advanced and Cellulosic Biofuel Biorefinery; the pleasure would be ours.

If there are any questions or comments regarding the information we have provided, please contact me at any time at 636-236-6199 or by e-mail at christopher.roach@bioenergy.abengoa.com.

Regards,

Chris Roach
Business Development Manager

Statement of
C. Kyle Simpson, Brownstein Hyatt Farber Schreck
On behalf of Rentech, Inc.
At the Public Meeting on Implementation of
Title IX, Energy Authorities of the Food, Conservation and Energy Act of 2008
Rural Business-Cooperative Service, USDA
September 4, 2008

Thank you for this opportunity to provide comments on the implementation of Title IX, the Energy Authorities of the Food, Conservation and Energy Act of 2008 (the Act). My name is Kyle Simpson. I am appearing at this public meeting on behalf of Rentech, Inc., which is one of the world's leading synthetic fuels technology and development companies. Over the last twenty five years, the company has developed and patented the Rentech Process, an advanced version of the well-established Fischer-Tropsch process. The Rentech Process can convert a wide array of carbon-bearing materials, including green resources such as biomass, into ultra clean fuels and chemicals. Our objective is to create value for our stakeholders by helping the world reduce its dependency on oil and to lower emissions, including harmful greenhouse gases.

With these goals in mind, we strongly supported the inclusion of language in the conference report that accompanied the Act that specifically encourages the Secretary of Agriculture and the Secretary of Energy to put development of renewable aviation fuels on equal footing with other fuels by giving consideration to projects under the initiatives in Title IX that would perform innovative and beneficial research and commercial development of renewable aviation fuels.[1] This language in the conference report clearly shows that Congress sought to expand the United States Department of Agriculture's (USDA) efforts on renewable fuels development to include renewable aviation fuels. Further, the bill's managers in Congress recognized that the development of renewable fuels for aviation have lagged far behind other fuels and sought to put them on equal footing.

Rentech is a company that is developing a U.S.-based synthetic jet fuel production capability and is interested in support from the federal government under the Act to commercialize the conversion of crops and forestry waste to jet and other fuels. An intitial customer for this renewable aviation fuel will be the U.S. Air Force. Loan guarantees and other financial assistance authorized by the Act will help greatly to meet the challengs of financing projects to supply fuel to the Air Force and to the private airline industry as well. In the Act, Section 9003, the Biorefinery Assistance Program, and Section 9005, the Bioenergy Program for Advanced Biofuels authorize initiatives that could provide funding that would help us to accelerate our

[1] H.R. REP. NO. 110-627, at 911 (2008) (Conf. Rep.) ("The Managers recognize the tremendous potential market that exists in this country for renewable aviation and jet fuel, and acknowledge that while much research and development has been directed toward, the development of biofuels for ground transportation, the development of renewable aviation fuels has lagged far behind. For this reason, the Managers encourage the Secretary of Agriculture and the Secretary of Energy to give equal consideration to projects under this initiative that would perform innovative and beneficial research and commercial development of renewable aviation fuels.")

ability to demonstrate the company's capacity to commercialize a facility to make renewable aviation fuels.

For example, as part of our development plan, Rentech would like to acquire a gasifier to convert renewable feedstocks to synthetic gas. Rentech has a propriety process that can convert that syngas to jet fuel. The current challenge is the commercialization of biomass gasification systems, which exist but are not in commercial operation in the United States. Rentech would like to acquire and install an existing gasifier at its East Dubuque, IL, fertilizer plant. The gasifier would provide syngas from biomass to the fertilizer plant for fertilizer production, which would be a one-of-a-kind facility, and we would also transport syngas to our product demonstration unit in Colorado where it would be used to produce jet fuel. Just a few weeks ago, Rentech began to produce synthetic aviation fuel from natural gas at our product demonstration unit. We are anxious to produce synthetic aviation fuel from renewable resources.

In addition to Sections 9003 and 9005 in the Act, other sections that you are taking comment on today may be well suited to advance the development of renewable aviation fuel and feedstocks for that purpose. As intended by Congress, we encourage you to give equal consideration to projects implemented under any of these initiatives that would perform innovative and beneficial research and commercial development of renewable aviation fuels.

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National Alliance of Forest Owners

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National Alliance of Forest Owners
Comments to the
U.S. Department of Agriculture
Regarding Implementation of Title IX,
Food, Conservation, and Energy Act of 2008
Submitted on September 15, 2008

Introduction

The National Alliance of Forest Owners (NAFO), a growing alliance of private forest owners, managers and organizations dedicated to protecting and enhancing the economic and environmental values of private forests across the country, appreciates the opportunity to comment on sections 9003 and 9011 of the Food, Conservation, and Energy Act of 2008. NAFO members own or manage over 66 million acres of private forests in 47 states.

While our members are engaged in the traditional forestry business, they are increasingly engaged in supplying wood, wood waste and wood residues for use as a feedstock to produce renewable fuels and electricity. NAFO believes that America's well-managed forests will play an important role in meeting U.S. energy needs in the future and that domestic policy should encourage investment in forests as a source of renewable energy.

General Comments

NAFO shares the Department of Agriculture's commitment to expanding rural communities' opportunities for business development in the energy sector. We believe that USDA's new authorities under the Food, Conservation, and Energy Act (Farm Bill) provide a comprehensive roadmap to develop a substantial, sustainable renewable energy industry. NAFO supports the Farm Bill's clear intent to administer all of these programs in a manner that is feedstock and technology neutral.

The new and expanded energy programs provided under Title 9 of the Farm bill establish USDA as the principal federal agency responsible for supporting each sector – from field to fuel – of the fledgling bioenergy industry. We encourage the USDA to administer these Title 9 programs in a manner that places working forests on equal footing with other working lands in the development of this industry. While foresters did not have many opportunities to participate in the first generation of biofuels, centered on corn ethanol, the second generation of biofuels, focused on cellulosic feedstocks, represents a tremendous opportunity for working forests and this nation. With more than 425 million acres of private forestland in the U.S., our forests can support the growth of this industry in all regions of the country, and help grow the economies of rural communities.

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Section Specific Comments

NAFO offers comments on two specific sections within Title IX of the Farm Bill.

1. Section 9003. Biorefinery Assistance

§9003(E)(1)(C)(vii). "Scoring System- In determining the priority scoring system for loan guarantees under subsection (c)(2) the Secretary shall consider-

> ***(vii) whether the applicant can establish that if adopted, the biofuels production technology proposed in the application will not have any significant negative impacts on existing manufacturing plants or other facilities that use similar feedstocks."***

The Biorefinery Assistance Program established in the Farm Bill enumerates ten factors to be considered by the Secretary in making a determination whether to award a loan guarantee to an applicant. These factors generally relate to the ability of an applicant to demonstrate a high probability of success for the proposed facility. Although the USDA is directed to consider the potential impact a project would have on incumbent forest products industries in the immediate vicinity, this should be considered in context and balanced against other important enumerated considerations, such as the potential for new markets and rural economic development.

There have been concerns raised by some regarding the impact of a forestry-based commercial bioenergy industry on existing manufacturing capabilities. While we understand these concerns, we do not believe a conflict exists. As new markets develop, we are confident that private forests can provide feedstock for biofuels and bioenergy while also continuing to providing resources for existing timber-based industries. In fact, it is likely that an expanding renewable energy market reliant on wood will increase both the number and productivity of forested acres. In addition, a maturing market will create or expand opportunities for integration between existing manufacturing and energy production.

Section 9003 requires applicants to demonstrate that a project will not have a significant negative impact on manufacturing plants that use similar feedstocks. We believe that this is a threshold that the vast majority of applicants will easily be able to meet. At the same time, we urge USDA to use care to maintain the elasticity of wood supplied to energy and manufacturing both to optimize its availability for energy production and to avoid creating an unfair market advantage for one sector over another. NAFO asks that USDA interpret this factor as applying in only the most limited of circumstances where the actual harm of a biorefinery to an incumbent industry is immediate, significant and outweighs the benefit the proposed biorefinery would bring to the region. Promising biorefinery project applications should not be disqualified based on a perception of harm, or because the project will result in an incremental feedstock price increase.

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2. Section 9011. Biomass Crop Assistance Program

§9011 (a)(5)(A)

"ELIGIBLE LAND.-

(A) ***IN GENERAL- The term "eligible land" includes agricultural and nonindustrial private forest lands (as defined in section 5(c) of the Cooperative Forestry Assistance Act of 1978 (16 U.S.C. 2103a(c)).***

NAFO believes that all private forest owners, regardless of their size or status should have the ability to participate in this program. Accordingly, we encourage the USDA to strictly interpret this section in accordance to the law it references:

> ***For the purposes of this section, the term "nonindustrial private forest lands" means rural, as determined by the Secretary, lands with existing tree cover, or suitable for growing trees, and owned by any private individual, group, association, corporation, Indian tribe, or other private legal entity.***

Again, we believe access on an even playing field is essential to the full realization of these new programs and accordingly discourage any impediments to participation based on arbitrary definitions of qualifying lands.

Comments of Sapphire Energy

Notice of Public Meeting entitled "Expanding Rural Renewable Energy Opportunities—Inviting a Dialogue with the Public on the new authorities of the Food, Conservation, and Energy Act of 2008 (Pub. L. 110-234) ("the Act")."

submitted to

Department of Agriculture, Rural Business Cooperative Service

September 19, 2008

Robin Robinson
Rural Business-Cooperative Service
US Department of Agriculture
Room 5830 South Agriculture Building
STOP 3201
1400 Independence Avenue, SW
Washington, D.C. 20250-3201

On behalf of Sapphire Energy, I submit the comments below on specific sections of Title IX of the Farm Bill. The US Department of Agriculture is taking public comment and "initiating a dialogue" on the implementation of Title IX of the Farm Bill. Sapphire Energy appreciates the opportunity to file these comments.

Sapphire was incorporated in May of 2007 and is headquartered in San Diego. Sapphire's goal is to be the world's leading producer of clean, renewable crude oil from industrial microorganisms and create an entirely new industry category—"Green Crude Production". Fuels from renewable sources such as algae are going to play an increasing role in mitigating the effects of the world's dwindling oil supply. Sapphire Energy's platform takes advantage of breakthroughs in science and solar energy to produce a synthetic energy that is carbon positive, renewable and replaces petrochemical-based products. Sapphire's Green Crude can be seamlessly integrated into the global liquid fuel transportation and refining network.

Sapphire Energy will truly change the energy and petrochemical landscape, leading the way to an independent, American energy future.

Sapphire's primary concern here is to maintain a level playing field in the implementation of Title IX, as well as all other programs implemented by USDA. It is Sapphire's position that algae represents the best hope for a source of alternative fuels and, therefore, the best hope for energy independence.

Our comments here will be focused on Sections 9002, 9003, 9005, 9008, and 9011 of Title IX.

Section 9002—Bio-based Markets Program

It would appear that Congress intended in Section 9002 to create a procurement preference for bio-based products, including biofuels deriving from renewable biomass. Algae qualifies as renewable biomass and therefore qualifies for the procurement preference. Sapphire Energy supports this interpretation. The language of Section 9002 also provides flexibility to agencies to decline to grant a preference where the subject of the potential preference is not reasonably available within a reasonable period of time or is only available at an unreasonable price.

Algae has emerged relatively recently as a potentially valuable alternative fuel source, as well as a source of other products. Its relatively recent arrival does not warrant a different level of treatment in procurement decisions. If producers of algae-based products can meet the price and timing demands of federal agencies and negotiate comparable, if not superior terms, they should be rewarded not penalized. It is the position of Sapphire Energy that the agency flexibility in Section 9002 should not be interpreted as second-class treatment for emerging sources such as algae. It is also the position of Sapphire Energy that Congress should not have excluded, later in subsection 9002(d), the procurement of vehicle fuels, heating oil and electricity from the program. This is precisely where algae shows the greatest promise and where the Farm Bill was presumably aimed. But we are considering our options in this section and may take up this language with Congress, not USDA.

Section 9003—Biorefinery Assistance

Sapphire Energy strongly supports the creation of a comprehensive biorefinery program. Algae refiners, emerging to become key players among alternative fuel producers, will be able bring the substantial promise of algae to market with assistance such as that authorized in Section 9003. It is our interpretation that algae will qualify for the important grants authorized here. A biorefinery is defined as one that converts renewable biomass into biofuels and bio-based products, and algal-based fuels and byproducts qualify as biofuels and bio-based products. We urge USDA to preserve this interpretation.

Section 9005—Bioenergy Program for Advanced Biofuels

This program provides financial support to small biofuel producers. Sapphire Energy supports this program, although remain concerned that the 150 mmgy cap on eligible facilities might either serve as a disincentive to growth in production or make it difficult for producers to transition into larger-scale production. This production limit is a thoughtful one when considering facilities that make non-fungible fuels such as ethanol. However, technologies such

as Sapphire that are integrating fungible products into the crude or product pipelines will likely follow the more traditional oil industry scale up, a process by which we will pilot and produce volumes at around the 300 barrel per day level (approximately 4 MMgy) and then transition from there directly to world-scale at around 30,000 to 60,000 barrels per day. Facilities that produce less than 150 mmgy are not considered significant by traditional upstream standards. Thus, we urge that this support be expanded to facilities that are more common first commercial world-scale.

Section 9008—Biomass Research & Development

Research and development in biofuels and bio-based products is an important objective of the Farm Bill. Sapphire Energy supports this initiative and intends to participate as a research and development grant recipient, as well as in the activities of the Biomass Research & Development Board and the Biomass Research & Development Technical Advisory Committee.

Section 9011—Biomass Crop Assistance Program

This program supports biomass crops with financial assistance. Sapphire Energy supports crop assistance for all biomass crops, including algae, perhaps the most promising of all the energy biomass crops. The language appears to include algae as an eligible crop for purposes of receiving assistance, and Sapphire Energy urges USDA to preserve that interpretation. Language in this section applicable to collection and harvesting excludes algae from the definition of "eligible materials". It would appear that this exclusion has limited application in the text. It is perhaps only applicable to the payment of assistance to third-parties other than the producer. This ambiguity is problematic and we urge USDA to enforce an interpretation that does not in any way prevent algae growers and producers from participating in this important program.

Thank you for this opportunity to express our opinions regarding the implementation of Title IX. Sapphire Energy expects to be involved hereafter in this rulemaking as well as any other proceedings. We look forward to working with you on this important matter.

Tim Zenk
Vice President, Corporate Affairs
Sapphire Energy

9004

1. Number of Grants, 20 in 2009--Grant-Recommend 250 K max single year.

   Use for –profit business only.
2. All biomass feedstocks should be considered that has hard data for net energy.
3. Agreed—With one additional amount of CO2 reduced
4. Yes—consideration should be given for new projects through 2012. Existing bio-refineries apply for future payments without additional systems supplied
5. Maximum percentage of eligible costs should be 50%
6. Eligible matching fund sources—Cash, Equity, Line of credit, other grant income
7. Financial need factors—ability for the bio-refinery to be commercially viable in 7-10 years.
8. All proven technology should be allowed
9. Yes—Minimum reduction of fossil fuels of 30%

Sustainable Agriculture Coalition

September 19, 2008

Robin Robinson
Office of the Administrator
USDA Rural Development, Business and Cooperative Programs
Room 5803, South Agriculture Building, Stop 3201
1400 Independence Ave., SW
Washington, DC 20250-3201

Re: USDA Listening Session on Title IX Energy Authorities of the Food, Conservation and Energy Ac of 2008 (73 Federal Register 50302).

Dear Ms. Robinson,

Thank you for the opportunity to provide written comments on behalf of the Sustainable Agriculture Coalition (SAC) in response to "Notice of a Public Meeting on Implementation of Title IX, Energy Authorities of the Food, Conservation and Energy Act of 2008" (73 Fed. Reg.50302). These written comments supplement a SAC presentation at the September 4, 2008 USDA listening session. SAC represents 33 family farm, rural development, conservation and environmental organizations from around the U.S. that share a commitment to federal policy that promotes sustainable agriculture production systems, family-based farms and ranches, and healthy, vibrant rural communities. Many of our organizations have a long track record providing farmers and ranchers with information and technical assistance to increase on-farm energy efficiency and renewable energy production, including renewable energy for on farm use. A list of current SAC member organizations is appended to these comments.

GENERAL COMMENT ON THE FARM BILL'S ENERGY TITLE

With the enactment of an Energy Title in the 2002 Farm Bill, it was clear to SAC that the federal government would be committing significant resources to the development of bioenergy from agricultural feedstocks and other energy generation based on farms and in rural communities. SAC was concerned with the initial focus on the production of ethanol from corn - especially continuous corn monocultures - whose production requires high levels of fertilizer, pesticides and fossil fuel. We also wanted to ensure that rural communities would share in the benefits of agriculturally-based bioenergy and would not just be "mined" for bioenergy resources.

SAC prepared a position paper entitled *Renewable Energy from Farms,* which was endorsed by many of our member organizations shortly after enactment of the 2002 Farm Bill. This paper embodies our vision for a sustainable energy future. The following three points from the General Principles for Sustainable Agriculture and Energy in the position paper are particularly relevant to ensuring that the 2008 Farm Bill energy programs improve the environment, health and economic wellbeing of our nation's farms, ranches and rural communities:

1.The immediate priority of any energy policy is to manage current energy usage through conservation and energy efficiency. Reducing unnecessary use of energy is common sense, saves

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money, and helps the environment. Likewise, numerous studies have shown that improving the efficiency with which energy is used is the cheapest and quickest energy "source";

2. Development of new energy sources should not only be ecologically sound, but socially responsible and locally managed when possible. A farm-based sustainable energy system has great potential to be naturally responsive to the economic needs of rural communities and family farmers. The public good of a farm-based energy system must meet the same criteria of a sustainable agriculture system: economically viable, locally managed, ecologically sound and socially responsible. The appropriate scale of new renewable energy systems must be considered; and

3. Biomass energy should be grown or produced in a sustainable way that provides net environmental benefits. Biomass energy crops should be grown and harvested in a way that embodies best stewardship practices to maintain or improve air, water and soil quality. Criteria for judging sustainable biomass energy production includes:

- **Impact on water quality**. Surface or ground water should not be polluted with sediments from erosion, with pesticides, with nutrients, or with any other waste products. Aquatic ecosystems should not be harmed and water should not be consumed beyond replacements levels.

- **Impact on soil quality.** Soil quality should not be degraded. Soil organic content, water retention, and fertility should be improved.

- **Effect on wildlife.** Harmful effects on wildlife should be held to a minimum with sound and effective wildlife conservation planning.

- **Effect on air quality.** Biomass energy production should result in a net increase in air quality, from net reduction in such air pollutants as oxides of nitrogen, particulate matter and carbon dioxide.

- **Net energy balance**. More energy should be released through biomass energy use than is consumed in producing it (over its lifecycle). This includes energy consumed from planting, cultivating, any fertilizer or pesticide application, harvesting and transporting to market.

- **Diversity.** Biomass energy production must avoid the monoculture trends of industrial agriculture. Crop rotations must be incorporated at the landscape scale in order to ensure sufficient diversity of species to attain soil quality, wildlife habitat, and ecosystem health.

With biomass energy production increasing the pressure on the nation's agricultural and natural resources, it is well worth the time, effort and forethought of USDA to develop energy systems in rural areas - including a mix of biomass, wind, and solar - that improve the environmental performance of agriculture and increase the health and economic vibrancy of rural communities. Energy production from agricultural systems will only be truly "renewable" if it does not erode and degrade the nation's agricultural and natural resource base.

COMMENTS ON SPECIFIC SECTIONS OF THE 2008 FARM BILL ENERGY TITLE

Section 9004: Repowering Assistance

A biorefinery seeking assistance from USDA to replace fossil fuels with renewable biomass in its operations must demonstrate to the USDA Secretary that the renewable biomass system is feasible based on an independent study that accounts for economic, technical, and environmental aspects of the system.

SAC recommends that in implementing this provision USDA require that the analysis of environmental aspects include the environmental effects of the production of the renewable biomass feedstock. We further recommend that USDA provide not just for an accounting of environmental aspects but also for accountability by the biorefinery for any net environmental harm arising from the production and use of the renewable biomass.

Section 9007: Rural Energy for America Program (REAP)

1. **Section 9007(b): Energy Audits and Renewable Energy Development Assistance**

    a. ***Subsection 9007(b)(2) "Eligible Entities" Should include Non-profit Organizations with Demonstrated Expertise and Experience in Working with Farmer and Ranchers to Conduct Energy Audits and Develop Renewable Energy.***

We urge the USDA Secretary to use the authority in Section 9007(b)(2)(D) to provide in REAP regulations that "entities eligible" to receive grants for providing energy efficiency and renewable energy assistance to agricultural producers and rural small businesses include non-profit organizations with expertise in energy efficiency audits and renewable energy systems and a demonstrated track record of working with farmers and ranchers and small rural businesses.

A number of SAC non-profit organization members have years of experience working with farmers, ranchers, and rural communities on energy audits and renewable energy systems. A few examples of this work include:

The Kansas Rural Center's Wind Energy Projects: The Kansas Rural Center has undertaken projects to promote community wind projects in Kansas rural communities. A Wind for Schools Project led by the The Kansas Rural Center and Kansas State University is working to install 1.9 kW Skystream wind turbines at 15 rural schools during the next three years. The project has selected the first round of school applicants and is installing turbines during the spring and summer of 2008 at five Kansas schools. A second round of projects has been selected for installation in 2009. The Kansas Rural Center is also conducting Regional Wind Energy Forums in communities across the state, in partnership with County Economic Development offices, several RC&Ds, Farm Bureau county committees, National Renewable Energy Laboratory, and the Kansas Energy Office. These Regional Forums examining opportunities and barriers to wind energy development, looking at such issues as leasing and landowners' rights, community wind development, state policies concerning wind development, non-grid usage of stranded wind resources, funding wind projects, county commissioner issues, transmission and interconnection, and rural economic development. Another project is "Energy Facts and Figures" which provides high quality information to County Commissioners, local officials and economic development professionals about a renewable energy future that can feature large amounts of wind energy development, a substantial portion of it community owned. The Project develops materials to assist local decision makers and works to make connections between those officials, farm groups, the Wind Applications Center and the Kansas Energy Office. More information about these wind projects is on the web at http://www.kansasruralcenter.org/wind.html.

The Kansas Rural Center's Clean Water Farms Project: Also, since 1995, The Kansas Rural Center has provided farmers and ranchers with information and technical assistance to improve the conservation performance of their operations through a Clean Water Farms Project. This project includes an environmental assessment process, the development of an action plan by the farmer or rancher, and monitoring of environmental improvements. The Project also provides cost share and technical assistance for establishing conservation practices. Farmers who receive the full $5,000 limit are considered to have a "demonstration project" and the farmer will be asked to host a farm tour or share information via

workshops or other outreach avenues to other farmers. The Clean Water Farms Project also conducts groups workshops in which numerous people with knowledge about conservation practices and systems come together to work with a small groups of farmers and ranchers. For more information on this Clean Water Farms Project, see the website http://www.kansasruralcenter.org/CWFP.htm.

The Center for Rural Affairs: One of the first projects of the Center for Rural Affairs was a Small Farm Energy Project, a 3-year research and demonstration project on 48 farms in Cedar County Nebraska. The Project demonstrated the adoption of alternative energy technologies by small farms that in 1979 dollars saved an average of $1,138 for each participating farm. Since 1993, the Center staff has included Martin Kleinschmit and other staff with combined expertise in renewable energy, energy conservation, and sustainable agricultural practices. The most recent event was the Center's hosting of Nebraska's first Renewable Energy Fair in Hartington NE held on September 18, 2008. The Center held workshops and demonstrations on the 2008 Farm Bill energy programs, energy conservation, small-scale wind turbines, Nebraska's C-BED Project (community-owned wind energy), solar collectors, photo voltaics, bio-fuels, methane, school wind projects, energy safety, and much more. In addition, Center energy staff emphasized that significant energy savings can be made on many farms and ranches through behavioral and management changes that do not involve large expenditures for new equipment but do result in significant energy conservation.

The National Center for Appropriate Technology (NCAT): Since 1987, an NCAT project – the Appropriate Technology Transfer to Rural Areas (ATTRA) – has offered no-cost technical assistance to farmers, ranchers and other people in rural areas on sustainable agriculture production, processing and marketing. The 2008 Farm Bill made ATTRA a permanent program. In addition, Congress gave ATTRA an express charge "to assist agricultural producers that are seeking information to (A) reduce input costs; (B) conserve energy resources; (C) diversify operations through new energy crops and energy generation facilities; and (D) expand markets for agricultural commodities produced by the producers by using practices that enhance the environment, natural resource base, and quality of life.[1] These activities are not new to NCAT's work. Over the previous five years, NCAT has developed a new Farm Energy Area on the ATTRA website, www.attra.ncat.org, issued dozens of new energy-related publications, and hired additional NCAT staff with energy expertise. In the last year alone, NCAT has sponsored workshops on farm-scale biodiesel production that were attended by over 1,500 producers in twelve states. In addition, NCAT is currently engaged in a three-year project funded by USDA's Risk Management Project to improve the availability and usefulness of farm energy audits nationally.

b. *Subsection 9007(b)(3) Selection Criteria and Subsection 9007(b)(4)Use of Grant Funds*

SAC recommends that in the selection criteria for energy audits and renewable energy assistance USDA should give a priority to projects that include farmer-to-farmer demonstration of energy efficiency improvements and renewable energy systems. These projects could include workshops and field days with farmers and ranchers who have used REAP grants and loans to improve their operations. We further recommend the REAP regulations make clear that the use of grant funds under Subsection 9007(b)(4) includes activities and opportunities for farmer-to-farmer information.

With regard to the selection criteria for "geographic scope" in Subsection 9007(b)(3)(B), SAC recommends that USDA give the highest priority to direct assistance provided by entities within a state or region to farmers or ranchers residing in the same state or region. A truly effective energy audit requires direct contact with the farmer, rancher, or rural business person on the ground where the energy savings are to be made. Web-based information, publications and other "remote" assistance to farmers and

[1] 2008 Farm Bill, Title VI, § 6016.

ranchers on renewable energy technologies and resources can be useful tools for a grant project. But they should be backed up with workshops, demonstrations, and direct contact in settings where farmers, ranchers and rural business people have the opportunity and feel comfortable to ask questions about their own operations. The number of people served by a project is an important selection criterion but more important is whether the contact was effective and likely to increase the ability of the agricultural producers or small business owners to conserve energy and incorporate renewable energy technology into their businesses.

Leveraging of funds is a legitimate criterion for project selection, particularly if the leveraged funding involves increasing the conservation performance of a farm or ranch. For example, farmers and ranchers can receive Conservation Security Program payments, and may receive Conservation Stewardship Payments, for establishing on farm renewable energy systems. These systems must be compatible with the overall CSP goal of improving resources of concern. A proposal under Section 9007(b) to provide assistance to establish renewable energy technologies could be targeted to farmers in a state who are enrolled in CSP and have included renewable energy production in their CSP plans. In addition, many non-profit organizations have expertise, experience, and some funding sources for assisting farmers and ranchers with renewable energy production and could serve more farmers with additional assistance from USDA. SAC would be concerned, however, if USDA used "leveraging funding" to establish a high matching requirement above 25 percent of the costs of a grant. We also recommend that USDA expressly provide in regulations that a grant recipient can provide in-kind contributions to fulfill a matching requirement.

Section 9011: Biomass Crop Assistance Program (BCAP)

1. Recommended conservation and environmental measures for crop production and harvesting on BCAP acreage.

SAC finds that it is critically important that the BCAP require a high standard of conservation and environmental performance for crop production and harvest on BCAP acreage. First, as noted in above in our General Comments, the nation's agricultural resources have been targeted by the 2008 Farm Bill, the Renewable Fuel Standard (RFS) of the Energy Independence & Security Act of 2007, federal tax credits, and numerous state incentives as the base for producing an increasing percentage of the nation's liquid transportation fuel. In addition, agricultural feedstocks such as switchgrass are envisioned as biomass for energy from burning and gasification operations. If agricultural feedstocks become a significant source of energy for the U.S., the pressure on our agricultural production resources, including soil and water quality, will intensify. This significantly increases the need for agricultural production with a higher level of conservation performance than conservation compliance, the "norm" we have currently have as for our nation's agricultural conservation performance.

Congress also clearly recognized the importance of the conservation component of BCAP, with the inclusion of "the impact on soil, water, and related resources" among the selection criteria for participation in the program. The 2008 Farm Bill report includes the congressional intent that the BCAP wildlife-relate concerns also be included in this priority. Further, the BCAP contracts must include "the implementation of (as determined by the Secretary) of a conservation plan or a forest stewardship plan or equivalent plan. The Managers' summary also emphasizes that BCAP contracts include resource conservation requirements.

SAC recommends that in implementing BCAP the Farm Service Agency (FSA) work closely with NRCS in developing the conservation measures for crop production and harvesting on BCAP acreage. FSA and NRCS can look to the Conservation Stewardship Program as a model, with its emphasis on resources of concern and conservation planning for an agricultural production system. We urge USDA to give the

opportunity to enroll in the CSP to all farmers participating in a BCAP project who meet the threshold requirements for CSP participation. Farmers in BCAP projects who are not CSP eligible should be allowed the opportunity for automatic enrollment in EQIP in order to meet BCAP conservation requirements. This linkage between USDA conservation programs and BCAP projects will provide both conservation cost-share assistance and technical assistance to BCAP participants without increasing BCAP costs. It will help ensure that new bioenergy crops are developed and established in a manner that protects and conserves soil quality, water quality, wildlife and wildlife habitat, and other agricultural and natural resources.

Some of the groups commenting on BCAP have opined that it was an energy program, not a conservation program. But even if the clear farm bill legislative requirements for conservation measures on BCAP acreage did not apply, the BCAP should include conservation measures to meet the RFS of the Energy Independence & Security Act of 2007. The RFS is a major driver for the production of agricultural feedstocks for ethanol, biodiesel and other biofuels to be blended into gas and biodiesel. The RFS requires that renewable fuels must now be produced from renewable biomass harvested from land "cleared or cultivated" prior to December 17, 2007, the enactment date of the EISA. The RFS also requires that advanced biofuels must met a threshold of 50% of the lifecycle green house gas (GHG) levels for gasoline and diesel fuel in 2005; biomass-based biodiesel must also met this 50% lifecycle GHG level; and cellulosic biofuel produced from cellulose, hemicellulose or lignin must meet a 60 % lifecycle GHG threshold. The term `lifecycle greenhouse gas emissions' means the aggregate quantity of greenhouse gas emissions (including direct emissions and significant indirect emissions such as significant emissions from land use changes), as determined by the EPA Administrator, related to the full fuel lifecycle. If a bioenergy facility intends to make biodiesel or ethanol eligible for the tax incentives provided by meeting the RFS requirements, the conservation standards for agricultural feedstock production in a BCAP project associated with that facility will have to meet both the restrictions on breaking out new land for cultivation and the RFS life cycle GHG levels thresholds.

Moreover, the BCAP is not merely a one-shot financial incentive for a group of biomass crop producers. Section 9011(c)(3)(B) requires that BCAP contracts include an agreement to make available to the USDA or an institution of higher education or other entity designated by the Secretary information that Secretary considers to be appropriate to promote the production of eligible crops. The BCAP should be administered to help develop basic information on the agronomic and conservation performance of numerous biomass production systems. The demonstration of strong conservation performance by particular biomass production systems could enhance public support for biomass energy production.

Selection Criteria: Priority for BCAP projects with mixed native plantings.

BCAP should provide the highest priority for projects involving the establishment of mixed native perennial plantings. Recently published research involving a 10-year study by Dave Tilman and colleagues showed that 16 native prairie species on average yielded 238 percent more biomass than land planted to a single species. Greater diversity increased carbon sequestration, provided more stable annual yields, and significantly reduced the need for pesticides, herbicides and fertilizer applications, especially nitrogen.[2] Prairie hay can be burned or gasified and research is underway on producing cellulosic ethanol from grass mixtures. In addition, mixed prairies provide high quality livestock grazing, which can be used for extra income for farmers and ranchers and as an additional management tool.

A recent article in the Land Stewardship Newsletter examines the costs and time to establish mixed prairie on previously cultivated land. Establishment on row cropped land is easiest, with more perennial

[2] Tilman, D., J. Hill, & C. Lehman (2006) *Carbon-negative biofuels from low-input high-diversity grassland biomass.* 314 SCIENCE 1598-1600.

weed control needed initially in former pastureland. Although initial establishment costs run from $300 to $400 an acre, subsequent costs for maintenance are much lower with little need for replanting and, with good management, little need for inputs such as fertilizer. Some economic return from the prairie may be available within 3 years.[3]

The Tallgrass Prairie Center in Iowa is currently researching the effects of harvest frequency on prairie plots. Their work indicates that the multiple uses in rotation may result in the best economic return for farmers, with a prairie harvested for biomass one year and grazed the next. These multiple use prairies could be managed to make them more hospitable for prairie wildlife.

Taken together, this information indicates that mixed perennial prairie and grasslands grow well on relatively infertile soil and could be established on marginal crop land. Farmers with high quality cropland will likely not be induced to participate in BCAP without very high payments. A priority for BCAP projects that convert land in row crops to native perennial systems may provide significant amounts of biomass with relative low impacts, easily meet the GHG emission threshold of the RFS as row crop land is converted to perennial cropland, and overall exact relatively low costs to the program.

Selection Criteria: Projects with Annual Crops

While SAC recommends that highest priority for BCAP projects with mixed native perennials, we also recommend that BCAP projects for annual crops be limited to annuals incorporated into existing row crop acreage to establish a resource conserving crop rotation. Incorporation of a crop such as camellina or a biodiesel producing legume could both provide feedstock for bioenergy and improve the overall conservation performance of BCAP acreage formerly planted in a monoculture annual crop or a simple crop rotation. BCAP should not be used to fund any projects involving continuous, monoculture production of annual crops.

Selection Criteria: Opportunity to participate in local ownership of conversion facility. SAC urges USDA to give a high priority to BCAP projects involving bioenergy conversion facilities that provide an opportunity for local ownership, particularly ownership by the farmers providing agricultural feedstock. This criterion should also include projects that will result in greater energy self-sufficiency and the retention of wealth generated at the local and regional level. The history of energy production includes numerous examples of communities "mined" for local resources and left with wrecked ecosystems and little else. USDA and other federal and state agencies have promoted bioenergy as a part of a long-term rural development strategy. This will be true only if publicly funded incentives are targeted to projects that include local control and retention of wealth generated by project in the local community.

Additional Selection Criteria

The BCAP program should not be used to fund only a few large agricultural projects involving large-scale monoculture production. Instead, it should be used to help solve the chicken and egg quandary facing bioenery development. Bioenergy companies do not want to risk building a commercial bioenergy plant without assurance that there is a consistent and adequate supply of biomass. In turn, farmers, seed producers, custom harvesters and others do not want to try out a new crop in a new agricultural production system without assurance of a market for the new crop. In selecting BCAP projects, USDA should select an array of projects and focus on linking demonstration scale bioenergy plants with farmers willing to incorporate new bioenergy crops into existing systems, especially those that could achieve both conservation and economic benefits from the addition of crops.

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[3] Brian DeVore, *Plugging into the Prairie*, THE LAND STEWARDSHIP LETTER (SUMMER 2008) posted on the web at http://www.landstewardshipproject.org/lsl/lspv26n2.pdf.

BCAP Payments

Establishment Payments: The BCAP provides reimbursement for up to 75% of establishment costs of eligible crops. SAC recommends that USDA provide the full 75% cost share only for the establishment of mixed native perennials.

Annual Payments: Annual payments should be relatively simple and predictable, based on a measure such as the rental rates for the Conservation Reserve Program. The intent of the 5-year contract term is to encourage farmers to try new crops that may need a few years to become established before providing any economic return. The best result is payments that are not so high as to induce farmers in high quality cropland for food production to switch to biomass crop production but to provide an incentive for farmers with marginal cropland or pastureland to participate in BCAP projects that may well have both increased conservation and economic benefits.

Reduction in Payments: SAC recommends that USDA impose only minimum reductions in contract payments, even when farmers gain economically from the crop. Farmers will be more willing to try out new crops in new cropping systems if there is a bottom line of economic return. There should be no penalty for sale of seed. Native perennial crops will need a ramp up in seed production, not penalties for those establishing the systems. Haying and grazing should not be penalized either unless it interferes with establishment of the crop for biomass production. Haying and grazing may be elements of a good conservation management system for some crops and should not be penalized. USDA should make any potential payment reductions clear and certain in the BCAP contract.

Collection, Harvest, Storage and Transportation

SAC is very concerned that the financial incentive for collection, harvest, storage and transportation includes incentives to remove crop residues. Recent research by a team of USDA Agricultural Research Service scientists led by Wally Wilhelm, a scientist with the Agroecosystems Management Research Unit, Lincoln, NE has raised concerns about the use of crop residues for biomass. Research by this group indicated that the corn stover needed to replenish soil organic matter was greater than that required to control either water or wind erosion in the ten counties (in nine of the top eleven corn production states in the U.S.) investigated. This outcome emphasizes the need to further evaluate the validity of widely circulated estimates of U.S. cropland capacity to sustainably supply feedstock for the emerging cellulosic ethanol industry.

The team concluded that there is a critical need to gather additional high-quality replicated field data from multiple locations to confirm their calculations and to expand the computations to a broader range of cropping systems before major decisions are made about the percent of stover that can designated for biomass energy production. In addition, they state that an extensive effort is needed to expand development of existing crops, discover and develop unconventional crops, and create and deploy advanced cropping systems that exploit the potential of all crops so that biomass production can be expanded to provide a sustainable supply of cellulosic feedstock without reducing soil organic matter, thus undermining the productive capacity of the soil.[4]

[4] W. W. Wilhelm, Jane M. F. Johnson, Douglas L. Karlen & and David T. Lightle, *Corn Stover to Sustain Soil Organic Carbon Further Constrains Biomass Supply,* 99 Agronomy Journal 165-1667 (2007). This research in the paper contributes to the USDA-ARS Renewable Energy Assessment Project (REAP) goals and was funded by the USDA-ARS and USDA-NRCS agencies.

SAC recommends that participants in this portion of the BCAP should also be required to meet sustainability standards, including an NRCS-approved conservation plan for soil, water, air and wildlife, or a Forest Stewardship plan to ensure harvest levels and practices are sustainable and protect soil, water, air and wildlife. Funding should not be provided for crop residue collection, unless there is research in the region establishing maximum levels of residues removal without degrading soil quality. Ideally, these payments should be limited to farmers participating in BCAP projects.

We thank you for the opportunity to provide USDA with these recommendations on implementation of the 2008 Farm Bill Energy Title programs. We look forward to additional opportunities to work with USDA, especially in implementation of the REAP and Biomass Crop Assistance Program.

Sincerely,

Martha L. Noble

Martha Noble
Senior Policy Associate

Sustainable Agriculture Coalition

2008 MEMBER ORGANIZATIONS

Agriculture and Land Based Training Association (ALBA)
Salinas, California
www.albafarmers.org

California Farmlink
Sebastapol, California
www.californiafarmlink.org

C.A.S.A. del Llano (Communities Assuring a Sustainable Agriculture)
309 E. 6th Street
Hereford, Texas 79045
(806) 364-4445

Center for Rural Affairs
Lyons, Nebraska
www.cfra.org

Community Alliance with Family Farmers
Davis, California
www.caff.org

Dakota Rural Action
Brookings, South Dakota
www.dakotarural.org

Delta Land and Community, Inc.
www.deltanetwork.org/ar/dlc.htm

Ecological Farming Association
Watsonville, California
www.eco-farm.org

Future Harvest/CASA (Chesapeake Alliance for Sustainable Agriculture)
Stevensville, Maryland
www.futureharvestcasa.org

Illinois Stewardship Alliance
Rochester, Illinois
www.illinoisstewardshipalliance.org

Institute for Agriculture and Trade Policy
Minneapolis, Minnesota
www.iatp.org

Iowa Environmental Council
Des Moines, Iowa
www.iaenvironment.org

Iowa Natural Heritage Foundation
Des Moines, Iowa
www.inhf.org

Izaak Walton League
St. Paul, Minnesota
www.iwla.org

Kansas Rural Center
Whiting, Kansas
www.kansasruralcenter.org

Kerr Center for Sustainable Agriculture
Poteau, Oklahoma
www.kerrcenter.com

Land Stewardship Project
White Bear Lake, Minnesota
www.landstewardshipproject.org

Michael Fields Agricultural Institute
East Troy, Wisconsin
www.michaelfieldsaginst.org

Michigan Integrated Food and Farming System
www.miffs.org

Michigan Land Use Institute,
Traverse City, Michigan
www.mlui.org

Midwest Organic and Sustainable Education Service (MOSES)
Spring Valley, Wisconsin
www.mosesorganic.org

The Minnesota Project
Canton, Minnesota
www.mnproject.org

National Catholic Rural Life Conference (NCRLC)
Des Moines, Iowa
www.ncrlc.com

National Center for Appropriate Technology
Butte, Montana; Fayetteville, Arkansas; Davis, California
www.ncat.org

Northern Plains Sustainable Agriculture Society
Fullerton, North Dakota
www.npsas.org

Ohio Ecological Food and Farm Association (OEFFA)
Columbus, Ohio
www.oeffa.com

Organic Farming Research Foundation (OFRF)
Santa Cruz, California
www.ofrf.org

Pennsylvania Association for Sustainable Agriculture
Millheim, Pennsylvania
www.pasafarming.org

Practical Farmers of Iowa
Ames, Iowa
www.practicalfarmers.org

Rural Advancement Foundation International, USA (RAFI-USA)
Pittsboro, North Carolina
www.rafiusa.org

Sierra Club Agriculture Committee
www.sierraclub.org

Union of Concerned Scientists
Food and Environment Program
Washington D.C.
www.ucsusa.org

Washington Sustainable Food and Farming Network (WSFFN)
Mount Vernon, Washington; Cheney, Washington
www.wsffn.org

September 4, 2008

Thomas C. Dorr
Under Secretary for Rural Development
U.S. Department of Agriculture
Attention: Robin J. Robinson
Room 4231
1400 Independence Avenue, SW
Washington, DC 20250

Dear Under Secretary Dorr:

Thank you for the opportunity to provide input into USDA's rulemaking process for the programs authorized under Title IX (energy title) in the Food, Conservation, and Energy Act of 2008.

I am writing today to transmit the energy title recommendations of the 25x'25 National Steering Committee. 25x'25 is a diverse alliance of agricultural, forestry, environmental, conservation and other organizations and businesses that are working collaboratively to advance the goal of securing 25 percent of the nation's energy needs from renewable sources by the year 2025. The 25x'25 goal has been endorsed by 750 partnering organizations, 30 Governors, 14 state legislatures and the U.S. Congress through Energy Security and Independence Act of 2007 (EISA) which was signed into law by President Bush on December 19, 2007.

As the 21st century unfolds, America has an opportunity to chart a new course for its energy future – one that uses our abundant natural renewable energy resources to steer us to new economic opportunities and jobs, more robust national security, and a cleaner, healthier environment. Our nation's farmers, ranchers and forest land owners have set a bold vision to provide solutions from the land to meet our energy needs. The right policy framework and programs are needed, however, to realize the vision.

The federal government, and USDA in particular, can play a key role in helping renewable energy and efficiency blossom in rural communities, and simultaneously help farmers, ranchers and forest land managers contribute to a cleaner, sustainable and secure energy future.

The 25x'25 National Steering Committee supports all of the energy programs authorized under Title IX of the Food, Conservation and Energy Act of 2008 and urges USDA to fully support the following program imperatives:

First, while we appreciate the complexity of the rulemaking process, we urge USDA to move expeditiously in developing and finalizing the rules that will guide the implementation of the programs authorized under Title IX. We appreciate USDA's early scheduling of today's listening session and we urge Department officials to fast track rulemaking for all Title IX programs.

Second, we strongly urge USDA to aggressively work within the federal budget process to ensure that programs authorized in the Food, Conservation and Energy Act of 2008 are fully funded. To deliver the economic, security, and environmental benefits of renewable energy to all Americans, the 25x'25 Alliance is proposing that the government increase funding for programs by $13 billion annually and $66 billion over the next five years. This taxpayer investment in renewable energy will yield substantial benefits for all Americans by putting the country on the path to create $700 billion in new economic development, reducing dependence on imported oil by 10 percent, and cutting carbon dioxide emissions by 1 billion tons. The U.S. paid more than $400 billion for imported oil in 2006. By investing a small fraction of that figure in renewable energy, we can reduce our dependence on oil, create new economic opportunities here at home, and significantly reduce greenhouse gas emissions.

Third, USDA should significantly expand its renewable energy research, development and deployment programs. Specifically, USDA should support a national goal for research, development, demonstration, and deployment of reducing the costs of renewable energy production by at least 45 percent by 2025. This goal is consistent with the National Renewable Energy Laboratory's current goals. Increasing funding for renewable energy RDD&D should focus on:

- Sustainably increasing agricultural and forestry crop energy yields while enhancing environmental benefits.
- Harvesting, storing, transporting, and utilizing biomass feedstocks.
- Improving cellulosic ethanol and other cellulosic biofuel processing pathways.
- Developing industrial, commercial, residential and other stationary applications for renewable energy.
- Lowering the costs of wind, solar, geothermal and other forms of renewable electricity.
- Developing small scale and distributed energy technologies and
- Producing supplementary biobased products that create additional value.

Finally, we encourage USDA to fully utilize the traditional wood using industry (such as sawmills, pulp mills, manufactured board companies, and others) in appropriate programs of Title IX. These companies look forward to joining USDA in development

of future bio-energy facilities, and urge USDA to select existing partners at such sites, while seeking out new wood using energy facilities in areas where wood fiber resources are underutilized. Furthermore, in order for the forestry industry to maximize participation in USDA bioenergy programs, the definition of eligible woody biomass needs to encompass biomass produced from across the entire forestry sector. Even though the Energy Security and Independence Act (EISA) of 2007 provides another definition of eligible biomass from wood for EPA –administered programs, the EISA definition excludes a significant portion of potential wood sources. We urge USDA to follow Congressional intent of the woody biomass definition as written in the Food, Conservation and Energy Act of 2008.

In addition to these overarching recommendations, the 25x'25 National Steering Committee offers the following comments on individual Title IX programs.

Section 9004: Repowering Assistance for Biorefineries:
Before USDA moves to implementation, we would like to receive clarification on the options that a Biorefinery has to finance its repowering project. 25x'25 partners are interested in learning if a Biorefinery can use outside financing to repower, and what, if any, are the rules and restrictions for entering an agreement with a renewable electricity source in order to repower a biorefinery.

Section 9005, Bioenergy Program for Advanced Biofuels:
25x'25's number one renewable fuel priority is to accelerate the commercial scale production of cellulosic and next generation biofuels. We support Section 9005, and encourage USDA to simplify and streamline program rules to get highest rate of participation from a variety of producers. Furthermore, we urge USDA to make payments to producers based on *ALL* gallons of biodiesel produced. The program should not tie higher level of payment to increased production, because it would put producers with consistent levels of production at a disadvantage.

Section 9011: Biomass Crop Assistance Program (BCAP):
25x'25 strongly supports the Biomass Crop Assistance Program. The program should provide transition payments to farmers, forest owners and ranchers for the conversion of land to energy crop production in preparation for future bioenergy operations. The program should require the establishment of perennial plant material such as switchgrass or short rotation trees and should provide annual payments for the establishment period of the crop. We recommend that the rules for this very important program set broad parameters for feedstock eligibility, allowing for experimentation with feedstocks of various types.

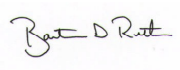
We also urge USDA to consider that BCAP is first and foremost an energy program, and while bioenergy feedstocks should be planted in a sustainable and environmentally-friendly manner, BCAP should not be burdened by so many additional requirements as to force low producer participation.

Section (c)(2)(A)(ii) currently requires "a letter of commitment from a biomass conversion facility." Some producers are concerned with possible interpretations of a "letter of commitment." If USDA gives preference to projects with a signed contract, this may lead to reduced participation. It may be difficult for producers to receive a a letter of commitment from a biorefinery in advance. Determination of project eligibility should be made based on a case-by-case basis, and not solely rest on an existence of a letter of commitment.

Section (d) (2) (B) "Assistance with collection, harvest, storage and transportation:" Despite an abundance of biomass feedstock in this country, feedstocks are often located at significant distances from a refineries. Therefore, cost-effective storage and transportation of feedstock will be a challenge for producers. Hence, we see this section as a critical component to the effective operation of the BCAP program and urge that it be fully funded as is intended in the law.

Thank you for the opportunity to share our preliminary comments and recommendations. We look forward to submitting additional comments during the formal rule making process which will follow.

Sincerely,



Bart Ruth
25x'25 National Steering Committee Member

September 19, 2008

Submitted via email to: robin.robinson@wdc.usda.gov

Thomas C. Dorr
Under Secretary for Rural Development
U.S. Department of Agriculture
Attention: Robin Robinson
Room 5803 South Agriculture Building, STOP 3201
1400 Independence Avenue, SW
Washington, DC 20250-3201

Re: Comments on the Section 9005, The Bioenergy Program for Advanced Biofuels

Dear Under Secretary Dorr:

On behalf of the American Soybean Association (ASA), I am writing to share our thoughts on the implementation of the Farm Bill Section 9005, Bioenergy Program for Advanced Biofuels. We appreciate very much USDA Rural Development and Rural Business-Cooperative Service holding the public meeting on the Farm Bill Energy Title programs, including the Bioenergy Program for Advanced Biofuels. The ASA and National Biodiesel Board (NBB) worked together to actively support the inclusion of the Bioenergy Program in the Farm Bill reauthorization. As the primary proponents of the program, we worked with Congress throughout the process in support of its inclusion in the final Farm Bill.

Background

The U.S. biodiesel industry was in large part hatched from the work of soybean producer organizations. We continue to work closely together, and soybean producers and our rural communities have benefited tremendously from the new markets that have resulted from biodiesel production. We are very proud to be contributing to the effort to move our country toward energy independence, while boosting the economy in rural America and improving the environment.

While U.S. biodiesel is being produced from a diverse array of feedstocks, and more second generation feedstocks are in development, soybean oil is still used for the majority of U.S. biodiesel production. The premium is paid for soybean oil over other feedstocks because of the high quality of biodiesel it produces. This market has helped to reduce the historical surplus level of soybean oil stocks and replaced the markets lost as a result of the shift away from trans fats. In addition, the increased use of soybean oil for biodiesel has actually created increased supplies of soybean meal, a valuable food and feed commodity.

The biodiesel industry has grown tremendously over the past several years. Production has increased from 2 million gallons in 2000 to over 500 million gallons in 2008. While the industry has made tremendous strides in a short period, it is not without challenges. Due to feedstock costs, which can represent over 80% of biodiesel production input costs, many producers have been forced to suspend operations or operate at or below the margins. We are also facing a well publicized investment in

biodiesel production on the part of foreign countries, such as Argentina, which imposes Differential Export Taxes (DETs) as an export subsidy, and has an artifically lower cost of production. With the absence of tariff protection at the U.S. border and the subsidies and the artificial cost of production advantages enjoyed by countries such as Argentina, it is possible that foreign produced biodiesel could displace domestic biodiesel in our own market.

We believe that these challenges can and will be overcome. In the near term, feedstock costs have eased recently and USDA's most recent crop estimates for 2008 project one of the largest soybean crops in history. Beginning in 2009, there will be an expanded Renewable Fuel Standard (RFS-2) that includes a specific program for biomass-based diesel and other advanced biofuels. This RFS for biomass-based diesel begins at 500 million gallons in 2009 and ramps up to 1 billion gallons in 2012. Longer-term we expect to see continued advancements in agricultural productivity that will increase yields and efficiencies. There could also be developments in second generation feedstocks that could further expand biodiesel production capabilities.

Why the U.S. Biodiesel Industry Needs the Bioenergy Program

To realize that future potential and meet the objectives of greater U.S. energy independence, rural economic development, and improving the environment, we need the Section 9005, Bioenergy Program for Advanced Biofuels to support current domestic biodiesel production. The Bioenergy Program could provide the support necessary to make U.S. biodiesel more competitive and ensure that the RFS-2 is filled with domestically produced biofuels.

As mentioned previously, Argentina is poised to substantially increase their biodiesel exports. According to a report on the sector by USDA, Argentina is expected to quadruple their production in 2008 and by the end of the decade will be making 10 times the amount it produced in 2007. Argentina's use of DETs provides an effective export subsidy to its biodiesel exports and this has contributed to the tremendous expansion of Argentine biodiesel capacity, production, and exports that is underway. In the past year Argentina raised their export tax on soyoil from 24% to 32%, while the export tax on soy based biodiesel was left at 5%, with a 2.5% tax credit.

Seed piracy and lack of intellectual property enforcement has allowed Argentine producers to utilize seed technologies for free while U.S. farmers are paying for these very same technologies. This seed piracy and lack of intellectual property enforcement allows Argentine soybeans and soybean oil to be produced and marketed at an artificially low cost. For example, U.S. soybean producers in 2008 paid approximately $15 per 50 pound unit in royalty for the Roundup Ready technology on top of the price of seed and genetics. However, due to the lack of intellectual property enforcement in Argentina, Argentine growers generally aren't paying a dime for the Roundup Ready technology. At an average of 1.2 units/acre this translates into an $18 per acre artificial advantage for Argentine soy production over U.S. production owing to seed piracy and the Argentine government's lack of intellectual property enforcement. At an average of 42 bushels per acre, that translates into a 43 cent per bushel or $15.75 per metric ton price artificial production cost advantage for Argentine soybeans.

Again, the Bioenergy Program could provide the support necessary to make U.S. biodiesel more competitive and ensure that the new RFS-2 is filled with domestically produced biofuels, furthering our goals of energy independence.

Program Implementation

There are several important implementation priorities for the biodiesel industry that we believe will help ensure that the Bioenergy Program is utilized to its fullest extent, and is consistent with the congressional intent and national goals of energy independence, economic development, and a cleaner environment.

Timely Implementation

First, we urge you to move expeditiously to implement the Bioenergy Program and provide payments to U.S. biodiesel producers in fiscal year 2009. As you know, the program provides $55 million in mandatory funding for Fiscal Year 2009. While the development of final program rules and regulations may be lengthy, we urge you to use your authority to ensure that the full $55 million in program funding is delivered to eligible producers as early as possible in 2009.

Payment on All Gallons of Eligible Biodiesel Produced

A top priority for U.S. biodiesel producers is to ensure that the Bioenergy Program payments are provided on all gallons of biodiesel produced. The previous Bioenergy Program was focused, by statute, on increased or incremental production. Based on extensive comments by biodiesel producers, USDA used its authority to provide some payments on base production. The statutory language for the Bioenergy Program was changed in this Farm Bill reauthorization to eliminate the reference to increased production and Report Language was included that indicates the intent of Congress that the program "…support existing advanced biofuel production, as well as encourage new production."

This principle is important to ensure competitive fairness among biodiesel producers that have maintained production during the industry's difficult economic times. If the program were to focus or provide a higher level of payment on increased production, it would provide a competitive advantage to new producers or those that re-start after having suspended production. Those who have maintained their biodiesel production should not be punished or put at a competitive disadvantage. We believe that providing payments on all gallons of biodiesel produced will also have an added benefit of simplifying the program rules.

Payment Caps

We urge that any program or payment caps be implemented only insofar as they are necessary due to the total program funding and the number of eligible producers that apply. We urge you to ensure that all funds available for a given year are distributed to the eligible producers that apply in that year.

Thank you for your consideration of these comments. We look forward to working with you and your staff to implement the Bioenergy Program quickly and effectively. We also appreciate your interest in the long-term rural development and renewable energy interests of our nation and the economic viability of the biodiesel industry. We stand ready to work with you on any ideas or concerns that you may have to ensure U.S. soybean farmers and U.S. biodiesel producers continue to increase our contribution to the renewable energy, rural development, and environmental goals of the nation.

Sincerely,

John Hoffman
President

Ms. Robinson:

As Title IX of the 2008 USDA Farm Bill is finalized, I would ask that the Department consider the following:

Section 9005, the BioEnergy Program for Advanced BioFuels, states that direct payments may be made to producers of advanced biofuels. I would request that the definition of advanced biofuels be clarified. If the intent of the definition is those fuels that are used as a substitute for fossil fuel use and are produced from renewable feedstocks, I would recommend that methane produced from anaerobic digestion of stillage flow from the ethanol process be defined as an advanced biofuel. This methane can be refined to natural gas pipeline standards, and therefore could be used as a substitute for natural gas to fuel the ethanol plant production or any other commercial natural gas requirements. That this methane is produced with the stillage stream from the ethanol process makes it renewable.

On the same topic but within a different section of the Farm Bill, Section 15321 references cellulosic biofuel producer credits. Within the same discussion points as referenced above, I recommend that this section 15321 also include methane from stillage as a cellulosic biofuel, and therefore be eligible for the producer credit.

Thank you,

Scott Blumhoefer
Vice President
Heartland Corn Products
(507) 647-5000

September 19, 2008

Submitted via e-mail to: robin.robinson@wdc.usda.gov

Thomas C. Dorr
Under Secretary for Rural Development
U.S. Department of Agriculture
Attention: Robin Robinson
Room 5803 South Agriculture Building, Stop 3201
1400 Independence Avenue, SW
Washington, DC 20250-3201

Re: Comments on Section 9005, the Bioenergy Program for Advanced Biofuels

Dear Under Secretary Dorr:

On behalf of the National Sorghum Producers (NSP), we appreciate the USDA's continued support of the domestic production and use of renewable fuels, and we believe that sorghum will continue to be on the forefront of new, advanced biofuels because of its diverse feedstock qualities that allow it to fit into starch, sugar and biomass renewable fuels production schemes. Currently, 15% of all sorghum used domestically is process through an ethanol plant.

We applaud you for holding a public meeting and seeking public input on how to implement Title IX of the Food, Conservation and Energy Act of 2008 (Farm Bill). The Bioenergy Program for Advanced Biofuels has the potential to significantly impact ethanol production in the Sorghum Belt. We believe that an ethanol plant producing an advanced biofuel from sorghum should qualify for payments. The ethanol industry is the single most significant industry to impact the local prices paid to sorghum producers in years. Producers are consistently paid ten to fifteen cents a bushel higher price when an ethanol plant starts competing for sorghum.

The National Sorghum Producers is a national commodity organization that represents sorghum farmers throughout the United States by promoting research, education on sorghum issues, and working on legislative issue like this. We have been actively involved in supporting research on sorghum for use as an advanced biofuel and for educating not only private industry, but the federal government on the benefits of sorghum within this industry and the diverse nature of this crop that can play a vital role in our nations move towards a more secure and independent source of fuel.

We encourage USDA to implement all of its Energy Title programs in a consistent and uniform manner with biofuels programs authorized in the Energy Independence and Security Act (EISA) of 2007 (P.L. 110-140). Consistent implementation will simplify procedures for use of USDA's

and the Department of Energy's renewable fuels programs. We believe uniformity should be a top priority for implementation of the Energy Title.

As you are aware, Section 9001 under Title IX defines "advanced biofuels" as the following:

''SEC. 9001. DEFINITIONS.

IN GENERAL.—The term 'advanced biofuel' means fuel derived from renewable biomass other than corn kernel starch.
''(B) INCLUSIONS.—Subject to subparagraph (A), the term 'advanced biofuel' includes—
''(i) biofuel derived from cellulose, hemicellulose, or lignin;
''(ii) biofuel derived from sugar and starch (other than ethanol derived from corn kernel starch);
''(iii) biofuel derived from waste material, including crop residue, other vegetative waste material, animal
waste, food waste, and yard waste;
''(iv) diesel-equivalent fuel derived from renewable biomass, including vegetable oil and animal fat;
''(v) biogas (including landfill gas and sewage waste treatment gas) produced through the conversion of organic matter from renewable biomass;
''(vi) butanol or other alcohols produced through the conversion of organic matter from renewable biomass; and
''(vii) other fuel derived from cellulosic biomass.

Based on this definition, all sorghums clearly meet the definition for "advanced biofuels." This means grain sorghum, forage sorghums, silage sorghum, hay sorghums (which include things such as sudangrass and sorghum x sudangrass hybrids), sweet sorghums, and high biomass or energy sorghums. We believe that all biofuel facilities producing an advanced biofuel from any of the previously mentioned sorghums should qualify for the program.

We strongly believe, as the National Biodiesel Board said in their testimony at USDA, which all producers of advanced biofuels should qualify for the same payment rate. Payments for each gallon of production should be the same for every type of advanced biofuels. We also encourage USDA to develop a program that pays biofuel producers if the plant produced ethanol from sorghum for three month and then switched to corn for the remaining nine months of the production year.

This would also encourage ethanol plants to diversify their feedstocks and not rely on a single source for their feedstock needs. Several renewable plants are working to integrate starch based technologies with cellulosic technologies and implementation of this program would assist in achieving this.

Payments to producers of advanced biofuels would help support a stable and expanding production base in the semi-arid regions of the US, also known as the sorghum belt. Sorghum's qualification for payment in this program helps develop a second, starched-based feedstock that would help expand the ethanol industry outside of the Corn Belt. We need to diversify and produce locally grown feedstock, rather than shipping starch from other parts of the country to meet the needs of our current ethanol infrastructure. Payments under this program would also provide incentives to grow sorghum in the semi-arid regions of the US, rather than encouraging the use of other high water use crops. As you are aware, sorghum is one of the most drought tolerant crops grown in the world and it plays an important role in the rural economy of the semi-arid plains.

In the Joint Explanatory Statement of the Committee of Conference, Congress listed three criteria to base payment on, quantity and duration of production, net non-renewable energy content and other appropriate factors as determined by the Secretary. The sorghum industry believes that the Secretary should include water consumption to produce a feedstock as one of those criteria for payments.

Again, we thank you for this opportunity to submit comments in relationship to Section 9005 of the Farm Bill and look forward to our continued working relationship with your Department as we work to educate the industry about the benefits of sorghum as an advanced biofuel. Please feel free to contact me or the office if we can be of further assistance.

Sincerely,

Toby Bostwick
Chair
National Sorghum Producers

National Biodiesel Board
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www.biodiesel.org

September 4, 2008

Submitted via email to: robin.robinson@wdc.usda.gov

Thomas C. Dorr
Under Secretary for Rural Development
U.S. Department of Agriculture
Attention: Robin Robinson
Room 5803 South Agriculture Building, STOP 3201
1400 Independence Avenue, SW
Washington, DC 20250-3201

Re: Comments on Section 9005, the Bioenergy Program for Advanced Biofuels

Dear Under Secretary Dorr:

On behalf of the National Biodiesel Board (NBB), I appreciate the U.S. Department of Agriculture's (USDA) continued support of the domestic production and use of biofuels. We applaud you for holding this meeting and for seeking public input on how to implement Title IX of the Food, Conservation and Energy Act of 2008 (Farm Bill). The following comments will focus on Section 9005 of the Farm Bill, the Bioenergy Program for Advanced Biofuels.

NBB is the national trade association representing the biodiesel industry as the coordinating body for research and development in the United States. NBB also works closely with the American Soybean Association and the National Renderer's Association, just to name a few, on issues relating to feedstock development.

Section 9005, the Bioenergy Program for Advanced Biofuels, provides $55 million in FY 2009; $55 million in FY 2010; $85 million in FY 2011; and $105 million in FY 2012 to make payments to eligible producers to support and ensure an expanding production of advanced biofuels. The NBB's diverse membership - feedstock providers; large and small producers; single and multi-feedstock producers – is in agreement as to the best way to implement this program. Specifically, industry's goals for the program are the following:

- A single program for all domestic biodiesel producers where all producers are treated alike;
- where the payment on each gallon of production is exactly the same for every producer; and
- that is measured by a gallon of biodiesel or "advanced biofuel".

Industry strongly encourages USDA to use its authority to implement the program during FY 2009 in a manner that makes program payments available retroactive to October 1, 2008, as envisioned in statute. In addition, we respectfully ask that a final rule be implemented in a timely manner to provide certainty and stability to eligible producers.

NBB has historically worked cooperatively with USDA to administer and implement a similar program from the 2002 Farm Bill, which was named the Commodity Credit Corporation (CCC) Bioenergy Program. The regulations for the previously authorized program can be found at 7 CFR Part 1424. In general, the program was administered efficiently and effectively and we would encourage a similar program where payments are made to biodiesel producers on a quarterly basis.

To be specific, we recommend modifications to Section 1424.7 or the "Gross Payable Units" section of the old rule, which created a two-tiered payment system for biodiesel producers "additional production payments" (APP) and "base production payments" (BPP).

Under the new rule, industry encourages USDA to create a "one-payment system" that is measured on a gallon of biodiesel or "advanced biofuels" production. The payment should be the same for every producer on each gallon of production, regardless of feedstock used to produce the fuel. This change is not only consistent with sound energy policy, it has the potential to simplify administration of the program for both USDA and eligible producers that opt to participate in the program.

Consistent with our view on a "one-payment system," we encourage you to refer to the following report language from the recently enacted Farm Bill which states:

> *The Conference substitute directs the Secretary to make payments to producers of advanced biofuels to support a stable and expanding production base. The payments are to be based on the quantity and duration of production, the net non-renewable energy content of the advanced biofuel, and other factors as determined by the Secretary. (Section 9001, new section 9005 of FSRIA)*
>
> *It is the intent of the Managers that the Secretary support existing advanced biofuel production, as well as encourage new production.*

Industry views the Bioenergy Program for Advanced Biofuels as an important component of a larger federal policy framework that will help the U.S. biodiesel industry play a constructive role in the nation's overall energy strategy. If the "one payment system" we are recommending is ultimately adopted by USDA, the program will help make domestically produced biodiesel more price competitive in the marketplace. Feedstock costs make up approximately 80% of production costs. Over the past year, feedstock costs have doubled, reaching record highs and making it difficult to economically produce the fuel. A Bioenergy Program for Advanced Biofuels that provides payment on all gallons of production will help all U.S. biodiesel producers offset these rising input costs and displace petroleum with clean-burning, domestically produced biodiesel.

The U.S. biodiesel industry has made great strides over the past few years. Production has increased from 25 million gallons in 2004 to approximately 500 million gallons of fuel in

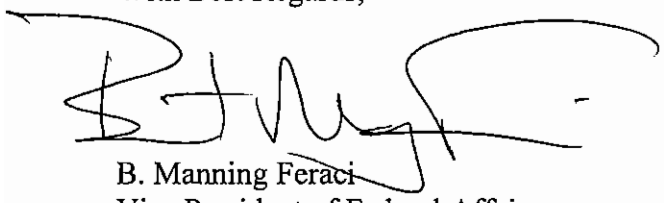
2007. In addition, industry led efforts to dramatically improve fuel quality and penetrate existing fuel infrastructure have increased consumer acceptance of biodiesel.

With that said, there are challenges facing the industry as it moves forward, such as feedstock development. From the standpoint of energy security, climate change, and green job creation, there remains a compelling public policy case for continued support of the biodiesel industry. The Bioenergy Program for Advanced Biofuels in and of itself is not the silver bullet that will address the sum total of the challenges facing the biodiesel industry. However, as part of a larger biofuels policy, it holds great potential to help make U.S. biodiesel producers more competitive in the low margin, high volume fuels marketplace. Thus, a program that is structured to provide support on all gallons of production can provide a substantial benefit to industry.

Finally, we look forward to working with you on the Biodiesel Education Program which we have historically partnered with you on and would encourage you to allow us to do so again.

Again, thank you for your continued support of biofuels and your willingness to seek the input of industry on the Bioenergy Program for Advanced Biofuels. Please do not hesitate to contact me if I can be of further assistance on this matter.

With Best Regards,



B. Manning Feraci
Vice President of Federal Affairs
National Biodiesel Board

9005

1. Rebate on biomass fuel produced
2. Potential payees—local and regional bio-refineries, size-sales of 20 million or less
3. A.S.T.M. standards –Duration of production—20 years
4. Net-non renewable energy-Carbon utilized to make biomass fuels
5. A.S.T.M. standards
6. Size should have no bearing
7. All production
8. Debt to asset ratio
9. Yes—all of them
10. No
11. No

September 4, 2008

Submitted via email to: robin.robinson@wdc.usda.gov

Thomas C. Dorr
Under Secretary for Rural Development
U.S. Department of Agriculture
Attention: Robin Robinson
Room 5803 South Agriculture Building, STOP 3201
1400 Independence Avenue, SW
Washington, DC 20250-3201

Re: Comments on the Section 9005, Bioenergy Program for Advanced Biofuels

Dear Assistant Secretary Dorr:

Biofuels are an important segment of any future energy policy of the United States. I appreciate your interest and that of this panel in holding a public meeting to further discuss the benefits that renewable energy that is produced by rural America can have for our entire country and how to best implement the new bioenergy program past by the 110th Congress as outlined in section 9005.

My name is James Conway and I am Vice President of Sales and Marketing for Griffin Industries. I also currently serve as Secretary of the National Biodiesel Board.

Griffin Industries is a family owned company located in Northern Kentucky that has been in business for over 65 years. We have over 1400 employees that operate 23 production plants in 15 States. Our plants are mostly in rural communities like Dublin, Ga. , Russellville, Ky. , Bastrop, Tx. And Hampton, Fl. All of our operations recycle food wastes. We do rendering, collection and processing of bakery waste as well as collection and processing of waste cooking oil from restaurants. Last year we processed over 1 million tons of products that might ordinarily have gone to land fills.

Since 1998 we have operated a biodiesel production plant full time. In fact, we were the fourth biodiesel production plant opened in the United States. The head of the Griffin family saw back in the 1990's how important biofuels would be to the long term energy security of this country. He invested family money in building a plant to produce biodiesel which at that time was a product that very few had even heard of.

During those early years of production our company operated this biodiesel plant at an economic loss. But we were committed to the concept of renewable fuels and dedicated ourselves to persevering and

in maintaining our production. Part of that production went to fuel our fleet of over 600 power truck units.

The Farm Bill of 2002 which created the first Commodity Credit Corporation's Bioenergy Program was a valuable asset in our effort to continue production and see the industry grow to a point where today there are over 170 production facilities in existence. I believe the Bioenergy Program was a vital springboard in that story of growth.

I am very encouraged that Congress had the foresight to renew this program with the new Farm Bill. I am also thankful that congress had the wisdom to give USDA the direction to formulate the rules and admininistration of this program. There are some elements of the old program that I feel need to be addressed to make it even more relevant and effective in supporting a continued development of Advanced biofuels of which Biodiesel is the leading producer.

I would encourage the Department to formulate a payment plan that treats and pays all gallons produced equally. I emphasize gallons produced and not pounds of feedstock used. The biodiesel industry must have equal treatment of all produced gallons to insure fair and sustained growth of both the industry and its participants.

Higher feedstock prices have affected all producers equally and this program is designed to offer some relief from these costs. While we want to encourage new and expanded production we cannot exclude older and established producers from this assistance. By treating all production equally this program will insure the optimum return of the program to the energy consuming public.

I would also encourage the Department to insure that the entire amount funded, $55 million for 2009, be fully disbursed to the advanced biofuels producing industries. If the supplemental $25 million is funded it too should be disbursed based on gallons produced. Hopefully this can be made available for gallons produced beginning Oct. 1, 2008 or a least made retroactive to that date.

Contrary to the early formats contained in the old bioenergy program it is important that all feedstocks be treated equally with this program. As production has increased and as further increases are envisioned it is paramount that all feedstocks capable of producing quality biodiesel should be utilized. The cost of various feedstocks are closely related. As one goes up in price they all tend to follow. All producers should be afforded the opportunity to access the feedstocks which have the most favorable logistic availability to them without regard to how they may be treated by this program. Uniformity of treatment of all feedstocks is imperative to the success of this important Government program.

I wish to again thank Secretary Dorr and the entire committee for the opportunity to share these comments with you. I know your task is a huge one but I am confident you will produce a program that is both fair to all producers and effective in promoting energy security for the American public.

If I can answer any questions or provide more information please feel free to contact me at 859-572-2582 or at jconway@griffinind.com. Thank you.

Respectfully submitted,

James L. Conway
Vice President Sales and Marketing
Griffin Industries, Inc.

Michael J. McAdams
Executive Director
703-891-4816

September 19, 2008 Via Email to: robin.robinson@wdc.usda.gov

Robin Roy Robinson
Special Assistant to the Administrator
USDA Rural Business and Cooperative Programs
1400 Independence Avenue, SW (Rm-4231)
Washington, DC 20250

Re: Comments on Title IX, USDA Energy Authorities of *the Food, Conservation and Energy Act of 2008*

Dear Ms. Robinson:

I am writing to you on behalf of the member companies of the Advanced Biofuels Coalition (Coalition) to indicate our strong support of the Department of Agriculture's efforts to promote the development of next generation biofuels needed for our country's energy supply and security. These comments are submitted in the context of the Department's energy authorities under Title IX of the *Food, Conservation and Energy Act of 2008* (farm bill).

The USDA BioEnergy Program was created under the 2002 farm bill to support first-generation domestic biofuel production. Successful use of funding under this program helped provide and ensure financing of many first-generation biorefineries. As a result, domestic production capacity of these first generation biorefineries expanded significantly and is helping to readily meet federal requirements under the Renewable Fuels Standard program established under the 2005, and subsequent 2007 energy policy legislation.

Currently, our country imports about 60% of its crude oil, at a cost of more than $1 billion per day. The energy authorities given to the Department under the 2008 farm bill can help enable the continued advancement of nonpetroleum-based fuels through a broad set of technology development, demonstration activities and commercial scale grant and loan guarantee projects. The BioEnergy Program under the new farm bill serves as an important incentive for the targeted development and construction of advanced biofuels facilities. Just at Congress looks for continued success, our Coalition sees the BioEnergy Program playing a critical role once again to help build advanced biofuels production capacity in the United States. This new, expanded capacity is crucial to ensure that we achieve the goals set by energy policy.

One of the most promising options to address our country's fuel needs is displacing

petroleum-based fuels with next generation advanced biofuels derived from renewable resources. These next generation biofuels include products such as cellulosic-based ethanol, renewable butanol, renewable diesel fuel, synthetic renewable and biodiesel fuel, algae-derived biofuels, microbial-derived hydrocarbon fuels, catalytically-produced renewable hydrocarbon fuels, and other renewables-based gasoline, diesel, jet and home heating fuel substitutes.

The Department's programs under Title IX to promote the development and deployment of advanced biofuels should ensure that full and equitable consideration be given to this range of next generation renewable fuels. Although previous initiatives have generally focused on conventional biofuels and feedstocks, the Coalition urges the Department to take advantage of new innovations on process technologies and feedstock sources to produce advanced biofuels. The development and promotion of multiple options for renewable fuels allows us to maximize the advantages for these fuels while mitigating challenges of their use.

Many of the next generation biofuels are more compatible with our country's existing distribution infrastructure, consequently their transportation and distribution costs could be much lower. Supporting these next generation biofuels in future demonstrations and commercial scale-up projects can increase the likelihood that both the best technologies and best fuels advance to full deployment and production.

The Advanced Biofuels Coalition represents a wide range of biofuels and technology companies primarily engaged in making next generation of biomass-based, renewable and advanced fuels. Our companies offer tremendous opportunity to bring significant volume and high quality fuels to the marketplace in the near future. We firmly urge the USDA to support a broad portfolio of advanced biofuels in its development, demonstration and commercial scale-up activities, bioenergy payments and biorefinery assistance projects, and rural energy and business development programs. The BioEnergy Program funding provided by the 2008 farm bill can do what it was intended to do – help expand new construction of domestic advanced biofuels refineries.

We look forward to upcoming announcements by the Department seeking solicitations for advanced biofuels initiatives under Title IX of the 2008 farm bill.

Sincerely,

Michael J. McAdams
Executive Director

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September 4, 2008

Submitted via email to: robin.robinson@wdc.usda.gov

Thomas C. Dorr
Under Secretary for Rural Development
U.S. Department of Agriculture
Attention: Robin Robinson
Room 5803 South Agriculture Building, STOP 3201
1400 Independence Avenue, SW
Washington, DC 20250-3201

Dear Secretary Dorr:

The National Renderers Association (NRA) commends you and your office for convening today's public meeting on the renewable energy provisions of the 2008 Farm Bill. NRA looks forward to working with you and your agency staffs – as we have in the past – on steps to be taken to implement the various provisions of the Farm Bill energy title, with particular interest in Sec. 9005, "The Bioenergy Program for Advanced Fuels."

NRA is the international trade association for the independent rendering industry, an industry which safely and efficiently recycles animal and poultry by-products, as well as recycled cooking oils and greases, into valuable ingredients for the animal feed, pet food, chemical, cosmetic and energy industries. Many of NRA's member companies are actively engaged in the production of biodiesel or are poised to enter the biodiesel market. Animal-based biodiesel – that which is refined from non-edible animal byproducts and restaurant oils and grease – is perhaps the only truly recycled, renewable and sustainable alternative fuel.

With feedstock costs comprising up to 80% of the cost of producing biodiesel and given that over the past 12 months, feedstock costs have, in some cases, more than doubled, the Bioenergy Program for Advanced Fuels will be important in controlling biodiesel production costs by offsetting advancing feedstock prices. At the same time, targeting U.S.-produced biodiesel maintains competitiveness with imported biofuels, fuels with access to U.S. programs and fuels generally receiving domestic incentives.

From its inception as an administrative program designed to provide incentives and assistance to start-up biomass fuel production, what was previously called the "CCC Bioenergy Program" has provided important support to start-up biodiesel companies, including several NRA member companies. NRA appreciates the cooperation of your agencies in facilitating the broadening of

the program over time, as well as your actions to ensure to the extent possible the fair and equitable treatment of all qualifying biofuels regardless of feedstock.

We share with our colleagues in the American Soybean Assn. and the National Biodiesel Board the goal of seeing a bioenergy program implemented at USDA that is equitable – treating all domestic producers, whether start-up operations or existing companies, the same – and where there is no difference in qualifying payments on a per-gallon basis to each producer based upon the feedstock used to produce the biodiesel.

NRA recommends the following steps be taken in implementing the Bioenergy Program for Advanced Fuels:

- The program should be in place by the end of calendar 2008 so that it benefits from FY2009 funding as authorized in the 2008 Farm Bill;

- Payments should be based on a gallon of biodiesel or "advanced fuel."

- We encourage implementation of a retroactive payment scheme recognizing program participation as of Oct. 1, 2008;

- Payments should be made to producers on a quarterly basis, similar to the CCC Bioenergy Program through changes to Sec. 1424.7 ("gross payable units") that would create a single payment system calculated on a gallon of biodiesel produced rather than the previous two-tier system.

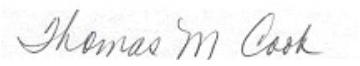
- There should be no payment differences based upon the feedstock used to produce the biodiesel.

NRA views the Bioenergy Program for Advanced Fuels as helping create incentives to fully utilize domestic biodiesel – consistently produced – at a time when biodiesel is significantly underutilized by the petroleum industry. Currently, the industry is producing at about 25% of capacity and the program will help increase demand.

We look forward to working with the Rural Business-Cooperative Service on implementation of the Bioenergy Program for Advanced Fuels, as well as in the Biodiesel Education Program, continuing a long history of productive partnership between NRA and USDA on alternative energy development.

Thank you for your consideration of NRA's views. Please feel free to contact me at any time should you or your staff have questions. I can be contacted at 703-683-4983, or by email at *tcook@nationalrenderers.com*.

Sincerely,



Thomas M. Cook, President

September 19, 2008

Submitted via e-mail to: robin.robinson@wdc.usda.gov

Thomas C. Dorr
Under Secretary for Rural Development
U.S. Department of Agriculture
Attention: Robin Robinson
Room 5803 South Agriculture Building, Stop 3201
1400 Independence Avenue, SW
Washington, DC 20250-3201

Re: Comments on Section 9005, the Bioenergy Program for Advanced Biofuels

Dear Under Secretary Dorr:

On behalf of Levelland Hockley County Ethanol, LLC, we appreciate the USDA's continued support of the domestic production and use of renewable fuels. As a user of sorghum in our ethanol facility, we believe that sorghum will continue to be on the forefront of new, advanced biofuels because of its diverse feedstock qualities. Sorghum fits into starch, sugar and biomass renewable fuels production schemes.

LHCE is a 40 million gallon per year ethanol plant in Levelland TX. Our total feedstock is made up of local Sorghum. Using Sorghum also allow us to create a 41% protein feed that is consumed 100% locally. To protect the environment we are in the process of capping our CO2 and use gray water from the City of Levelland to produce our ethanol. Because of this plant, we are starting to see E-10 offered to consumers in this area of Texas for the very first time.

We applaud you for holding a public meeting and seeking public input on how to implement Title IX of the Food, Conservation and Energy Act of 2008 (Farm Bill). The Bioenergy Program for Advanced Biofuels has the potential to significantly impact ethanol production in the Sorghum Belt. We believe that an ethanol plant producing an advanced biofuel from sorghum should qualify for payments under Section 9005 of the Farm Bill.

We encourage USDA to implement all of its Energy Title programs in a consistent and uniform manner with biofuels programs authorized in the Energy Independence and Security Act (EISA) of 2007 (P.L. 110-140). Consistent implementation will simplify procedures for use of USDA's and the Department of Energy's renewable fuels programs. We believe uniformity should be a top priority for implementation of the Energy Title.

As you are aware, Section 9001 under Title IX defines "advanced biofuels" as the following:

''SEC. 9001. DEFINITIONS.

IN GENERAL.—The term 'advanced biofuel' means fuel derived from renewable biomass other than corn kernel starch.
''(B) INCLUSIONS.—Subject to subparagraph (A), the term 'advanced biofuel' includes—
''(i) biofuel derived from cellulose, hemicellulose, or lignin;
''(ii) biofuel derived from sugar and starch (other than ethanol derived from corn kernel starch);
''(iii) biofuel derived from waste material, including crop residue, other vegetative waste material, animal
waste, food waste, and yard waste;

''(iv) diesel-equivalent fuel derived from renewable biomass, including vegetable oil and animal fat;
''(v) biogas (including landfill gas and sewage waste treatment gas) produced through the conversion of organic matter from renewable biomass;
''(vi) butanol or other alcohols produced through the conversion of organic matter from renewable biomass; and
''(vii) other fuel derived from cellulosic biomass.

Based on this definition, all sorghums clearly meet the definition for "advanced biofuels." This means grain sorghum, forage sorghums, silage sorghum, hay sorghums (which include crops such as sudangrass and sorghum x sudangrass hybrids), sweet sorghums, and high biomass or energy sorghums. We believe that all biofuel facilities producing an advanced biofuel from any of the previously mentioned sorghums should qualify for the program and that producers of advanced biofuels made from sorghum should qualify for the same payment rate as other advanced biofuels. Payments for each gallon of production should be the same for every type of advanced biofuels. We also encourage USDA to develop a program that pays biofuel producers if the plant produced ethanol from sorghum for three months and then switched to corn for the remaining nine months of the production year.

Again, we thank you for this opportunity to submit comments in relationship to Section 9005 of the Farm Bill. Please feel free to contact me or the office if we can be of further assistance.

Sincerely,

Sam J Sacco
General Manager
LHCE

U.S. Canola Association
Suite 320
600 Pennsylvania Ave. S.E.
Washington, DC 20003

Tel: 202/969-8113
Fax: 202/969-7036

September 19, 2008

Submitted via email to: robin.robinson@wdc.usda.gov

Thomas C. Dorr
Under Secretary for Rural Development
U.S. Department of Agriculture
Attention: Robin Robinson
Room 5803 South Agriculture Building, STOP 3201
1400 Independence Avenue, SW
Washington, DC 20250-3201

Re: Comments on the Section 9005, The Bioenergy Program for Advanced Biofuels

Dear Under Secretary Dorr:

On behalf of the U.S. Canola Association (USCA), I am writing to share our thoughts on the implementation of the Farm Bill Section 9005, Bioenergy Program for Advanced Biofuels. We appreciate very much USDA Rural Development and Rural Business-Cooperative Service holding the public meeting on the Farm Bill Energy Title programs, including the Bioenergy Program for Advanced Biofuels.

Background

Canola producers have benefited from the new markets that have resulted from biodiesel production. We are very proud to be contributing to the effort to move our country toward energy independence, while boosting the economy in rural America and improving the environment.

Canola has emerged as an important oilseed crop in the northern region of the U.S. in the last decade. Canola production has increased from approximately 100,000 acres in 1996 to over 1 million acres today. This equates to approximately 700,000 tons of canola.

The same attributes that make canola oil a healthy food also make it an ideal feedstock for biodiesel. Canola based biodiesel has much better cold flow properties than biodiesel made from higher saturated fat oils. Other advantages of canola are that it produces a biodiesel with a higher cetane number than other feedstocks (which results in more energy per gallon) and it produces a very high amount of oil per acre.

One of the largest biodiesel production plants in the U.S. now utilizes canola from North Dakota. The use of canola for biodiesel production has greatly increased the demand for canola from the northern region of the U.S., resulting in improved prices for growers.

Research on new canola varieties ideally suited to biodiesel production is underway in the U.S. at several research centers in North Dakota, Idaho and Montana. In North Dakota, over 40 different lines of canola are being tested which may potentially deliver higher yields and higher oil content. Research in specific fatty acid profiles also started in 2006 under technology initiatives to foster the growth of biodiesel production in the region.

The state of North Dakota has also initiated a program to improve the quality of the region's canola crop. Recently, North Dakota State University was granted $2 million for a Center of Excellence Program for Oilseeds. This program is matched by approximately $8 million from private sector participation. The program will involve the breeding and development of canola varieties that will increase the profitability of biodiesel production from canola.

The northern region of the U.S. has ample room in the crop rotations to accommodate increased acreage of canola needed to supply the growing biodiesel sector. In North Dakota alone, canola acreage could increase to approximately 3.5 – 4 million acres based on a four–year rotation. Shorter rotations could allow for even more canola acreage. This illustrates the huge potential of canola as a biodiesel feedstock in this region.

Biodiesel offers great promise not only to the canola industry, but to the entire global vegetable oil complex in reducing our dependence on petroleum supplies while improving the profitability of farmers.

The biodiesel industry has grown tremendously over the past several years. Production has increased from 2 million gallons in 2000 to over 500 million gallons in 2008. While the industry has made tremendous strides in a short period, it is not without challenges. Due to feedstock costs, which can represent 80% of biodiesel production input costs, many producers have been forced to suspend operations or operate at or below the margins. The industry is also facing a well publicized investment in biodiesel production on the part of foreign countries, such as Argentina, which imposes Differential Export Taxes (DETs) as an export subsidy, and has an artificially lower cost of production. With the absence of tariff protection at the U.S. border and the subsidies and the artificial cost of production advantages enjoyed by countries such as Argentina, it is possible that foreign produced biodiesel could displace domestic biodiesel in the U.S. market.

We believe that these challenges can and will be overcome. Beginning in 2009, there will be an expanded Renewable Fuel Standard (RFS-2) that includes a specific program for biomass-based diesel and other advanced biofuels. This RFS for biomass-based diesel begins at 500 million gallons in 2009 and ramps up to 1 billion gallons in 2012. Longer-term we expect to see continued advancements in agricultural productivity that

will increase yields and efficiencies. There could also be developments in second generation feedstocks that could further expand biodiesel production capabilities.

Why the U.S. Biodiesel Industry Needs the Bioenergy Program

To realize that future potential and meet the objectives of greater U.S. energy independence, rural economic development, and improving the environment, we need the Section 9005, Bioenergy Program for Advanced Biofuels to support current domestic biodiesel production. The Bioenergy Program could provide the support necessary to make U.S. biodiesel more competitive and ensure that the RFS-2 is filled with domestically produced biofuels.

Program Implementation

There are several important implementation priorities for the biodiesel industry that we believe will help ensure that the Bioenergy Program is utilized to its fullest extent, and is consistent with the congressional intent and national goals of energy independence, economic development, and a cleaner environment.

Timely Implementation

First, we urge you to move expeditiously to implement the Bioenergy Program and provide payments to U.S. biodiesel producers in fiscal year 2009. As you know, the program provides $55 million in mandatory funding for Fiscal Year 2009. While the development of final program rules and regulations may be lengthy, we urge you to use your authority to ensure that the full $55 million in program funding is delivered to eligible producers as early as possible in 2009.

Payment on All Gallons of Eligible Biodiesel Produced

A top priority for U.S. biodiesel producers is to ensure that the Bioenergy Program payments are provided on *all gallons* of biodiesel produced. The previous Bioenergy Program was focused, by statute, on increased or incremental production. Based on extensive comments by biodiesel producers, USDA used its authority to provide some payments on base production. The statutory language for the Bioenergy Program was changed in this Farm Bill reauthorization to eliminate the reference to increased production and Report Language was included that indicates the intent of Congress that the program "…support existing advanced biofuel production, as well as encourage new production."

This principle is important to ensure competitive fairness among biodiesel producers that have maintained production during the industry's difficult economic times. If the program were to focus or provide a higher level of payment on increased production, it would provide a competitive advantage to new producers or those that re-start after having suspended production. Those who have maintained their biodiesel production should not be punished or put at a competitive disadvantage. We believe that providing payments on all gallons of biodiesel produced will also have an added benefit of simplifying the program rules.

Payment Caps
We urge that any program or payment caps be implemented only insofar as they are necessary due to the total program funding and the number of eligible producers that apply. We urge you to ensure that all funds available for a given year are distributed to the eligible producers that apply in that year.

Thank you for your consideration of these comments. We look forward to working with you and your staff to implement the Bioenergy Program quickly and effectively. We also appreciate your interest in the long-term rural development and renewable energy interests of our nation and the economic viability of the biodiesel industry. We stand ready to work with you on any ideas or concerns that you may have to ensure U.S. canola farmers and U.S. biodiesel producers continue to increase our contribution to the renewable energy, rural development, and environmental goals of the nation.

Sincerely,
Steve Kakela
President
U.S. Canola Association

Biobased Products Coalition
600 Pennsylvania Avenue S.E., Suite 320
Washington, DC 20003

September 19, 2008

Submitted via email to: robin.robinson@wdc.usda.gov

Thomas C. Dorr
Under Secretary for Rural Development
U.S. Department of Agriculture
Attention: Robin Robinson
Room 5803 South Agriculture Building, STOP 3201
1400 Independence Avenue, SW
Washington, DC 20250-3201

Re: Comments on the Farm Bill Energy Title

Dear Under Secretary Dorr:

The Biobased Products Coalition (BPC) appreciates the opportunity to provide comments regarding the importance of the Energy Title of the 2008 Farm Bill. The BPC, which was formed in 2007, includes small, medium and large U.S. companies that make biobased products and intermediate ingredients, as well as agricultural organizations that represent feedstock providers.

Congress and USDA have recognized the value of this emerging industry to benefit America's energy security, rural economy, and the environment. To reflect this potential, the 2008 Energy Title of the Farm Bill changes the name of the Section 9002 program to "Biobased Markets Program".

Our organization commends USDA Rural Development for the financial support you provided for the implementation of the biobased provisions that were first included in the 2002 Farm Bill. USDA has already identified 33 biobased product categories and estimates that they cover 2,741 individual products, ranging from carpet backing to absorbents and much more. We appreciate that Agriculture Secretary Ed Schafer addressed biobased representatives gathered in July where he gave an encouraging message that the federal biobased products program is a priority. To advance this effort, we propose USDA Rural Development consider three specific actions.

First, we ask that you continue to support USDA's overall efforts, including the labeling program and appropriate verification of claims, as well as other efforts to expand on the opportunities for the young U.S. biobased industry to grow and reach its full potential.

Second, USDA should dedicate funds through rural development programs to support biobased products marketing and industry development. Many biobased manufacturers are small or medium-size businesses. While some have sought USDA Rural Development funding, their overwhelming experience is that their small business

structure does not make them a “fit” for support, because they are not “growing” products and are not cooperatives.

Third, USDA should commit Renewable Energy for America Program (REAP) funds for agricultural operators and businesses that use biobased products to make energy efficiency improvements. The REAP program is an excellent avenue to promote biobased products to applicants for these grants by giving special consideration to those candidates who integrate biobased products into their proposals. It is our hope that by educating these applicants about the benefits of biobased products, they will make the switch to biobased products and help create long-term markets. Because USDA Rural Development offices are located across the nation, this could be an important action in educating many new communities on biobased products. It also complements the initiatives of diverse groups, like the Midwest Governors Association and county organizations, in advancing a biobased economy.

Thank you for this opportunity to provide comments. We plan to request a follow up meeting with USDA Rural Development leadership to further explore these opportunities. If you have any questions, please feel free to contact Karen Edwards at 703-281-7600 or Tom Hance at 202-969-8900 of Gordley Associates, which represents the BPC.

Sincerely,
Biobased Products Coalition

STATE OF WASHINGTON

DEPARTMENT OF AGRICULTURE

P.O. Box 42560 • Olympia, Washington 98504-2560 • (360) 902-1800

September 17, 2008

Robin Robinson, Confidential Assistant
Office of the Administrator
U.S. Department of Agriculture Rural Development
Business and Cooperative Programs
Room 5803, South Agriculture Building, STOP 3201
1400 Independence Avenue SW
Washington, DC 20250-3201

Dear Ms. Robinson:

The Washington State Department of Agriculture appreciates the opportunity to comment on Title IX, the energy title of the 2008 Farm Bill. We are encouraged by the energy title's potential to benefit Washington's agricultural producers and rural communities. Many producers are struggling to keep up with energy price increases, and programs such as the Rural Energy for American Program are vital to help our producers remain viable and competitive amid rising energy costs.

We are pleased to submit the following comments on Title IX of the Farm Bill.

- **Award Rural Energy for America (REAP) program funds through state-level allocations.** Historically, the bulk of the funding was awarded to producers in just a few states. A state-by-state allocation would ensure more equitable distribution of the funding and promote energy project development across the U.S.
- **Create a simple application process for energy audit grants.** We are very pleased that energy audits will be eligible for funding under the Rural Energy for America program. The cost of professional energy audits is prohibitive for some producers, and in some cases has discouraged producers from applying for USDA energy efficiency grants in the past. We encourage USDA to create a simple application process that will allow growers to quickly apply for and receive cost-share for energy audits. We also encourage USDA to cost-share energy audits at a high rate (75% or higher).

We look forward to working with USDA staff in Washington to help our producers access the energy programs in the 2008 Farm Bill.

Sincerely,

Jeff Canaan
Bioenergy Coordinator
jcanaan@agr.wa.gov
360-902-1918

9007

1. Geographic scope—100 mile diameter of the biorefinery
2. Net energy, CO2 reduction studies
3. Net energy values, CO2 reduction
4. Geographic scope documentation—LIFE CYCLE ASSESMENT AUDITING (LICA)
5. Yes
6. Maximum dollar amount—40 million yes cap on funds
7. All costs except R&D and advertising
8. LICA

I am writing in reference to applications I submitted to the 9006 grant program in FY 2008. In working with the state USDA office of Rural Development, and with the eight farmers whose applications were submitted, I offer the following queries:

If a farmer has annual production of greater than $500,000 per year, according to program parameters, he is not classified as a "small" or "very small" ag producer. As you are aware, this distinction makes them ineligible for certain points. My question is, if this program is about energy conservation, why is there such a distinction? These larger producers are consuming more energy than the smaller ones. Their projects will likely be larger, and in order to implement their energy efficiency projects they are very likely to require the financial assistance as much as the smaller producers.

Another question: The producer is eligible for extra points if the total project cost remains below $50,000. Understandably, Section 9006 parameters list a limit of funds that may be requested per application – no less than $1,500 and no greater than $250,000, and not to exceed 25% of total project costs. What I fail to understand is the distinction between a $50,000 project and a $50,400 project. Why does the cost of the project gain merit for being smaller and not greater in concept, especially if/when it correlates to greater energy savings?

Unfortunately, these distinctions have the effect of applications being "forced" into program parameters. For example, one application preparer said he made sure all his applications were submitted as simplified applications (total project costs below $200,000) in order to qualify for those extra points. Ultimately, a realistic evaluation of on-farm energy consumption and savings is skewed.

In short, current (Section 9006) scoring criteria seem to discount ag producers who fall in between small and very large producers. I am confounded that according to at least two of the scoring criteria, energy conservation seemed less indicative of the projects' merit than some arbitrary economic parameter.

As we anticipate further funding of this program in the Section 9007 REAP program, I urge you to consider revising the point system to avoid discrimination based on project costs, or annual productivity.

COMMENTS OF ROBERT GRAY
NATIONAL CENTER FOR APPROPRIATE TECHNOLOGY
"Expanding Rural Renewable Energy Opportunities – Inviting a Dialogue with the Public on the new authorities of The Food, Conservation, and Energy Act of 2008"

September 4, 2008

The National Center for Appropriate Technology (NCAT) is pleased to offer the following comments on the implementation of energy provisions in Title IX of the Food, Conservation, and Energy Act of 2008 (the Farm Bill). Specifically, we wish to comment on Section 9007, the Rural Energy for America Program and Section 9009, the Rural Energy Self-Sufficiency Initiative.

NCAT is a national nonprofit organization with about 60 employees located in Montana, Arkansas, California, Iowa, Louisiana, and Pennsylvania. NCAT has been committed to renewable energy and energy conservation since 1976, making us one of the oldest and most respected energy organizations in the United States. For example, we have conducted over 500 farm and ranch energy audits; trained hundreds of energy engineers; managed dozens of utility-funded energy conservation programs; and built and facilitated all kinds of renewable energy demonstration projects – including wind, biofuels, geothermal, anaerobic digestion, and the use of solar energy for electric generation, space heating, and water-heating.

Since 1987, our ATTRA Project – Appropriate Technology Transfer to Rural Areas – has been offering no-cost technical assistance to farmers, ranchers, and other rural people on sustainable agricultural production, processing, and marketing. ATTRA is funded through a cooperative agreement with the USDA Rural Business-Cooperative Service.

The 2008 Farm Bill makes ATTRA a permanent program, and gives it, for the first time, the explicit mission of providing energy-related technical assistance. ATTRA is now required "to assist agricultural producers that are seeking information to (A) reduce input costs; (B) conserve energy resources; (C) diversify operations through new energy crops and energy generation facilities; and (D) expand markets for agricultural commodities produced by the producers by using practices that enhance the environment, natural resource base, and quality of life." (Title VI, Section 6016)

In giving ATTRA this mission of energy-related technical assistance, the new Farm Bill makes official something that has, in fact, been going on for many years. About five years ago, NCAT began ramping up to meet new information needs that were being driven by high energy costs and an explosion of interest in producing renewable energy on agricultural lands. We built a whole new Farm Energy area with our ATTRA website (www.attra.ncat.org). We created dozens of new energy-related publications. We hired new staff with energy expertise. NCAT also began conducting workshops for agricultural audiences around the country on energy conservation and renewable energy funded by a series of grants separate from the ATTRA project.

For example, within the past twelve months NCAT sponsored workshops on farm-scale biodiesel production have been attended by over 1, 500 agricultural producers in twelve states. Our popular guidebook on irrigation efficiency has been customized and distributed in 15 states – over 30,000 copies altogether. We are also currently midway through a three-year research project (funded by USDA's Risk Management Agency) on how to improve the availability and usefulness of farm energy audits nationally.

NCAT has been a strong advocate for the energy programs in the Farm Bill, and we are delighted to see increased funding for the REAP Program (Section 9007) as well as the new Rural Self-Sufficiency Initiative (Section 9009). We are pleased to offer the following comments on the implementation of these two programs.

1. We would like to thank the many USDA agencies that have been partners or cooperators with NCAT in delivering energy-related technical assistance to agricultural producers and rural communities. These include USDA Rural Development; the USDA Natural Resources Conservation Service; the USDA Risk Management Agency; and the Cooperative State Research, Education and Extension Service. Because of all the collaborative work over the years, NCAT has the staff and infrastructure in place to begin assisting immediately with the implementation of energy programs in the Farm Bill. We are widely known and trusted for our technical expertise in agriculture and energy, and for our skill in communicating with rural audiences.
2. NCAT is eager to participate in the new energy audit/technical assistance component of REAP. But the eligibility language (Section 9007b) does not specifically identify nonprofits as eligible, leaving this to be "determined by the Secretary." We would ask the Secretary of Agriculture to allow nonprofit organizations to compete for these funds. Many other non-profit organizations, like NCAT, are highly qualified to provide these services.
3. NCAT is glad to see that 10 percent of REAP funds are allocated to feasibility studies. These studies will provide an assurance that public funds are being spent wisely and an assurance to rural landowners that they are investing in projects with a reasonable chance of success. NCAT urges that implementation include safeguards to assure that these feasibility studies are conducted by those with no financial interest in the projects being proposed. As a national non-profit organization we offer our services and would be happy to play a role in conducting or overseeing these feasibility studies.
4. NCAT is enthusiastic about the new Rural Self-Sufficiency Initiative, and our engineers have already conducted energy assessments for a number of rural communities – towns like Pittsboro, North Carolina and Billings, Montana. We are eager to work with other towns that are interested in energy self-sufficiency,

and we would be happy to share our experiences with USDA as you begin to implement this new program.

ENVIRONMENTAL LAW & POLICY CENTER
Protecting the Midwest's Environment and Natural Heritage

Comments to the United States Department of Agriculture on Section 9007 of the Food, Conservation, and Energy Act of 2008

Submitted by

The Environmental Law & Policy Center
35 East Wacker Drive, Suite 1300
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312-673-6500
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Address inquiries to:
John Moore, Senior Attorney (jmoore@elpc.org)

Introduction

Since its inception in the 2002 Farm Bill, the Rural Energy for America Program (formerly Section 9006, the Renewable Energy Investment and Energy Efficiency Improvement Program) has awarded funds to nearly 2000 projects of all types and sizes—from small efficiency projects to large wind farm and biofuel facilities-- in all 50 states. By all accounts this program continues to be a success, and the increased funding and statutory changes in the 2008 Farm Bill will create opportunities for this program to reach more agricultural producers and rural small businesses, help to control energy costs and produce more sustainable, renewable energy. This is a true win-win-win for farmers, rural economic development and the environment.

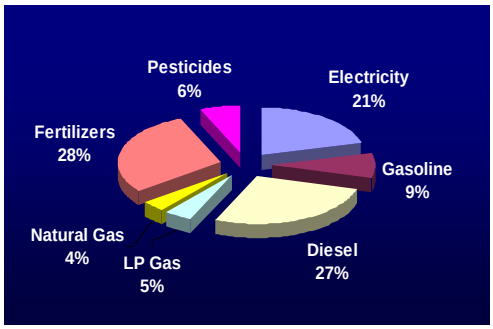
A guiding principle of this program should be to support clean energy projects of all sizes and technologies throughout the country through energy technical assistance, feasibility studies and direct capital grants and loan guarantees. Our comments provide actions that USDA can take through the rulemaking process to achieve this principle.

I. Energy Audits and Renewable Energy Development Assistance

Although Congress authorized an energy technical assistance program in Section 9005 of the Farm Security and Rural Investment Act of 2002 Congress never funded the program. The explicit inclusion of this type of program in Section 9007 of the 2008 Farm Bill is important for at least two reasons. First, even with relatively modest funding it will achieve impressive economic and environmental payback. Earlier this year ELPC calculated that, based on USDA energy usage statistics, a $15 million energy audit/technical assistance program would achieve the following energy and carbon savings:

- Farmers and rural businesses would save $700 million dollars over five years (through a reduction in expenses for fertilizer, pesticide, electricity, propane and diesel).
- Approximately 1.5 billion pounds of carbon dioxide emissions would be avoided in the same five year period.

Distribution of Ag Energy Use by Source, 2002



Source :John Miranowski, Iowa State University, "Energy Consumption in U.S. Agriculture", Presentation to Farm Foundation Conference, "Agriculture as a Producer and Consumer of Energy."
Note: Pesticide and fertilizer percentages refer to energy consumed indirectly in the manufacture of these products.

An energy audit and technical assistance program is an important step in realizing those savings.

Assistance for energy audits targeted at the agricultural sector is not available in most states[1]. The REAP audit/assistance program will help to fill that gap. Because the Department has not administered a technical assistance program like this before, we have several recommendations to ensure that the limited funding available for this program maximizes benefits to the agricultural producers and rural small businesses that it targets.

[1] American Council for an Energy Efficient Economy, "Energy Efficiency Programs in Agriculture: Design, Success and Lessons Learned," 2005

A. Eligible Entities

Section 9007(b)(2)(D) authorizes USDA to issue grants to "any other similar entity" in addition to the specified government units, higher-education institutions and rural electric cooperatives or public power entities. USDA should interpret the term "any other similar entity" to include other non-profit organizations that serve the agricultural or rural business sectors. Entities such as RC&D Councils, agricultural commodity organizations and farmer cooperatives play important roles for their service territories and constituents. Even if they do not have existing energy technical assistance capabilities in-house, they should be able to contract for these services and deliver them under their sponsorship. We believe non-profits are similar to the entities named in statute.

We also recommend that two or more eligible entities be permitted to submit a single, joint application, for example, a rural electric cooperative partnering with a university cooperative-extension service and a state energy office.

The rules should also ensure that entities are allowed to subcontract to either for-profit or public/not-for-profit entities to deliver energy audits, renewable energy assessments or other energy information services. Some organizations that lack the technical expertise to carry out energy audits may have other attributes that otherwise make them good candidates to administer a program otherwise, such as outreach capabilities, access to a network of agricultural producers and rural small businesses or expertise in renewable energy or energy efficiency technologies.

B. Use of Grant Funds

Entities should have the maximum flexibility to tailor their programs to the specific needs and opportunities in their targeted geographic service area. The legislation broadly authorizes recipients to use grant funds to (1) conduct and promote energy audits; and (2) provide

recommendations and information on how to improve farm and rural small business energy efficiency and how to use renewable energy technologies and resources in operations. (§ 9007(b)(4)).

Within this broad authorization, ELPC supports the four following categories of activities that are eligible for funding:

1.) Energy audits: These audits are essential for identifying opportunities for energy efficiency improvements.

2.) Renewable energy assessments: The potential for agricultural producers and rural small businesses to produce energy from renewable sources depends entirely on the resource availability – whether it be wind, sun or biomass.

3.) In-field energy management: While fuel and fertilizer efficiency-related projects are not eligible for support under the REAP grant and loan guarantee program, addressing their use is a way to help grain farmers in particular benefit from this program while lowering their largest variable operating costs. . Diesel, gasoline and fertilizer (synthesized from natural gas) prices have risen sharply in recent years Permitting grantees to focus on in-field energy management, including precision agriculture assessments and workshops, could help farmers reduce these expenditures.

4.) Workshops and Educational Activities: Eligible activities should include in-person workshops, videoconferencing, webinars, websites and printed materials should all be eligible activities. While these are not substitutes for direct one-on-one audits, these activities allow a grantee to leverage limited resources in reaching a broader audience and promote the availability of audits.

C. Maximum Grant Size and Related Conditions

We recommend that USDA limit grants to $250,000 per year for single-entity applicants and $500,000 per year for multiple-entity applicants. Since energy technical assistance funding is limited to 4% of total Section 9007 funding (or approximately $2.8 million per year in FY2009), this limit ensures that at least 5-10 projects will receive funding. A smaller cap would limit the ability of the program to reach large service areas, while a larger cap could limit the number of projects that get funded and, as a consequence, also limit the geographic area that the program can cover.

USDA should allow for and indeed give preference to multi-year grant requests. Multi-year grants would help to maintain program continuity as awareness of local energy technical assistance programs and providers grows. Multi-year grants would also better serve farmers and rural small businesses by enhancing the knowledge base of the providers. A grant period of two to three years would allow this continuity while providing an opportunity for USDA to periodically review whether the grant recipient is utilizing the limited funding in the most effective way.

D. Selection Criteria

USDA should use a point-based system to evaluate and select grant applicants, weighting the selection criteria on their relative importance. The three ranking criteria that we think should receive the most weight, in order of importance are:

1.) The potential of the proposed program to produce energy savings and environmental benefits." We believe that grant applications should be evaluated both on the merits of the services the entity would provide directly as well as the program's capacity-

building potential. This would ensure that the program benefits continue on even if federal funding is not available in future years. This is very important because:

- Thirty states lack any type of comprehensive energy technical assistance program for agriculture today.
- Only four programs provided any type of renewable energy assessment services.[2]

"Environmental benefits" should include an estimate of potential greenhouse gas reduction benefits. This criterion also supports the selection of grantees with an effective strategy for targeting agricultural sectors and businesses and technologies with the most potential for greenhouse gas reduction, either because they have been underserved in the past or because their energy use could be reduced in a very cost- efficient way. In other words, it encourages selection of applicants that propose to target the "low-hanging fruit."

2.) "The plan of the eligible entity for performing outreach and providing information and assistance to agricultural producers and rural small businesses on the benefits of energy efficiency and renewable energy development." The plan should include any existing outreach networks that might be utilized to better serve the target population. Additionally, the applicant should be required to provide details about the sectors and technologies that they intend to target.

Proposals need not target all sectors or provide a full range of services. For example, an entity may seek to provide only renewable energy education or only energy audits. Programs that target only one sector or technology, for example, dairy farms or retail businesses, should

[2] American Council for an Energy Efficient Economy, "Energy Efficiency Programs in Agriculture: Design, Success and Lessons Learned," 2005

also be given full consideration. However, the Department should give preference to proposals that seek to deliver a combination of direct assistance and educational activities.

3.) "The ability and expertise of the eligible entity in providing professional energy audits and renewable energy assessments." Although this criterion is important, we want to emphasize again that many areas currently lack local expertise in agriculture-specific energy audits and renewable energy technical assistance. If applicants have a viable plan for staffing, training or contracting with people who have the technical skills necessary to effectively carry out the program, they should not be at a disadvantage if their application is otherwise outstanding relative to the two criteria listed above.

Selection criteria that should be weighed less include:

1.) "The number of agricultural producers and rural small businesses to be assisted by the program" The Department should normalize across projects by measuring the number of agricultural producers or businesses that can be assisted per dollar of grant assistance requested. This will encourage efficient use of funds and prevent the selection process from being biased toward programs that are larger in scope or serve larger target populations.

2.) "The ability to leverage other sources of funding" While leveraging federal dollars with existing funding is important, preference should be given to grant applicants in states that do not have existing agriculture/rural energy efficiency programs in order to build capacity in these under-served areas.

3.) "Geographic scope of the program" As referenced above, applicants need not serve all agricultural and rural business sectors within a geographic area but instead focus on areas of particular opportunity. Similarly, the geographic scope can be defined narrowly or

broadly if the applicant can demonstrate a demand for energy technical assistance that is relative to the funds requested.

E. Merit review

USDA should engage NREL or another organization skilled in energy efficiency and renewable energy assessments, to assist in the merit review called for on page 906 of the Managers' Report.

F. Use of grant funds

1.) Grants awarded under this program may be used for educational and outreach activities in addition to direct energy audit and renewable energy assessment services.

2.) Grantees can spend reasonable funds on program marketing and administration.

3.) The rules should ensure that the Energy Audit and Assistance piece is fully integrated with the rest of Section 9007. Energy audits and renewable energy assessments performed under this program should meet the requirements for those required to apply for a REAP grant or loan guarantee.

G. Reporting

Although the legislation does not specify any reporting requirements, grantees should submit reports semi-annually and at the end of the grant award period outlining services provided, number of services performed and persons or businesses reached, conversion (i.e., number of energy audits resulting in energy efficiency investments being made) and a detailed record of expenditures.

II. Renewable Energy and Energy Efficiency Grant and Loan Guarantee Program

REAP also includes several improvements to the existing Section 9006 grant and loan guarantee program, such as expanded program eligibility, larger loan guarantee limits, a small-project grant amount set-aside, and other changes.

A. Program Eligibility

The Section 9006 program previously applied to "farmers, ranchers and rural small businesses." Under the USDA interpretation of this definition, greenhouses and nurseries located in non-rural areas were excluded from eligibility for Section 9006 grants and loan guarantees (despite the use of the term "agricultural producer" in Section 4280.107 in the Department's final rules for the program[3]) . The legislative language in Section 9007 of the 2008 Farm Bill deliberately expanded the scope of the renewable energy and energy efficiency grant and loan guarantee program to include all "agricultural producers and rural small businesses." (§ 9006(c)(1)). Under this new statutory provision and USDA definitions of "agricultural producer", the Department should recognize that that any greenhouse or nursery operation, and any other non-rural agricultural producers, should be eligible for the grant and loan guarantee program, *regardless of location*. It is worth noting that greenhouse operations are very energy intensive, particularly in northern climates. These energy needs can be significantly reduced through energy efficiency investments. Greenhouse operators are also receptive to solar, biomass and geothermal energy technologies.

B. Loan Guarantees

Loan guarantees can help facilitate debt financing for many, primarily larger, projects. However, the track record of the past few years has shown that agricultural producers and rural small businesses do not embrace loan guarantees to the extent that USDA seeks to promote them.

We recommend changes to match the loan guarantee program with projects that would benefit the most from them.

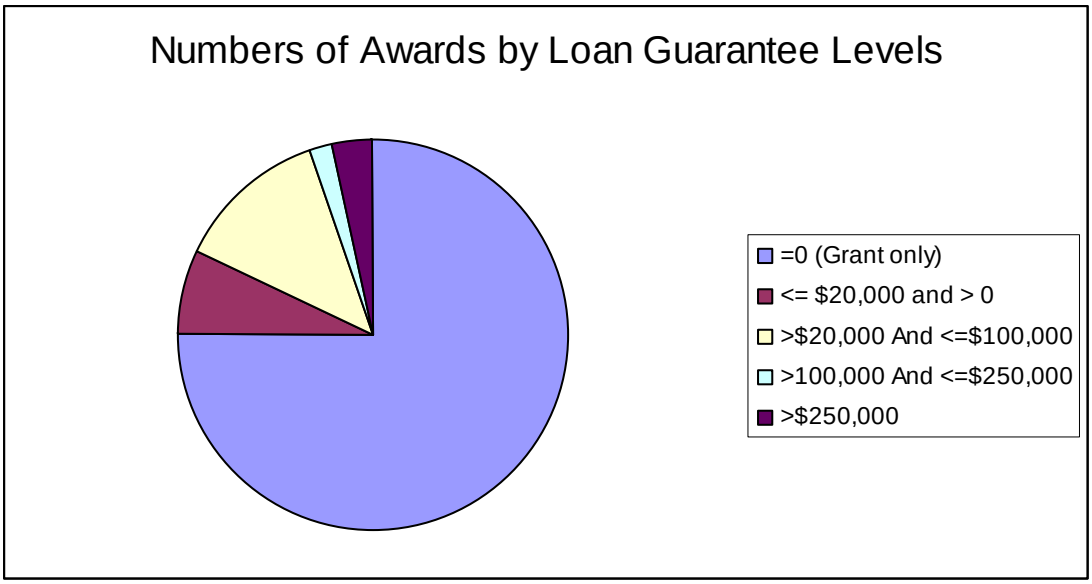
The 2008 Farm Bill increased the maximum loan guarantee amount from $10 million to $25 million. The higher limit will help larger projects secure debt financing. We support the higher loan guarantee amount in the legislation and believe the USDA should use this tool to promote clean energy projects, but not at the expense of grants.

Over the past several years of the Section 9006 program, the Notice of Funding Availabilities (NOFA) and administrative rules have placed greater emphasis on loan guarantees. Yet, program results have not demonstrated the outcome which USDA intended, *i.e.*, a strong demand for loan guarantees and the ability, therefore, to leverage limited program funding. For example, in 2008, USDA set aside over $200 million for loan guarantees or more than 50% of program funding. The Department also expedited review of loan guarantee or combination loan guarantee/grant applications (73 Fed. Reg. 12070). Despite this prioritization, USDA received requests for only $71 million and awarded only $15 million in loan guarantees. The following table shows results from the past three years:

Fiscal Year	**USDA Set Aside for Loan Guarantees ($MM)**	**Loan Guarantees Requested ($MM)**	**Loan Guarantees Awarded ($MM)**
2008	205	71	16
2007	Not available	126	57
2006	Not available	58	24

These results demonstrate that the market demand for loan guarantees is well below that for grants, and does not justify the large set-aside. The following chart provides a breakdown by number of awards which again shows that loan guarantees are requested far less than grants.

[3] 70 Fed. Reg. 41306



Loan guarantees are a useful financing tool for larger projects and indeed 90% of the value of loan guarantees awarded from 2003-08 have been for guarantees of $250,000 or greater. Yet 80% of the total number of loan guarantee awards has been for requests of $100,000 or less, suggesting that applicants who typically do not need loan guarantees are requesting them in combination with grants to enhance their chances of receiving an award. These loan guarantees come at a *net cost* to grant recipients in the form of the upfront payment of up to 1% and annual renewal payment of 0.25%. While the loan guarantees reduce risk to borrowers, experience has shown that the technical review performed by NREL under the application process also helps bankers gain confidence in project proposals. In addition, the smaller projects requesting loan guarantees have measurable and predictable energy savings and paybacks, further reducing the need for guarantees.

We recommend two steps to remedy this problem. First, the Department should eliminate the set aside and priority review for loan guarantees and instead let applicant need determine the mix of grants and loan guarantees. There is no reason to prioritize loan guarantee applicants and effectively discriminate against grant-only applicants.

Second, Rural Development offices should include lenders in their outreach on the Section 9007 program (see below) so that they are aware of and can promote the program to their borrowers for whom a loan guarantee improves the chances of financing a project.

C. Program Outreach

REAP requires USDA to "ensure, to the maximum extent practicable, that adequate outreach relating to this section is being conducted at the State and local levels." The Managers' Statement further states that "this outreach should include local Rural Development, Farm Service Department, Natural Resources Conservation Service and Extension offices." Congress likely included this requirement to help more evenly distribute program funds throughout rural America. Between 2003 and 2008, 52% of Section 9006 program funds were awarded to projects in just five states (MN, IA, WI, NY, IL) and 12 states had 5 or fewer projects funded over the 6-year program period. Some large states with enormous rural renewable energy and energy efficiency opportunities (e.g., California, Florida) have had virtually no applicants for the program. The following table illustrates the problem:

Share of USDA Section 9006 Grant Funding, 2003-08

State Ranking	Share of Grant Funding (%)
Top 5 States	52%
Top 10 States	69%
Top 20 States	87%
Bottom 20 States	4%
Bottom 10 States	<1%

We believe that the high concentration of program funds awarded to a small number of states over the past five years is due, in part, to effective outreach by Rural Development staff in those states coupled with local partners such as grant writers, equipment vendors, utilities and RC&Ds.

USDA has made some effort in addressing this problem. It has made some of the best state rural energy coordinators available to help in other states and started to increase capacity to administer this program across state offices. USDA has also sought to streamline small project applications.

To further improve outreach, Rural Development should commit additional staff resources to the REAP and other energy programs, and encourage workshops and web-based information sessions similar to what has been done by the Rural Development Iowa office and others. Rural Development's website for this program (http://www.rurdev.usda.gov/rbs/farmbill/index.html) needs to become far more robust with more content, automated application tools, resources for potential applicants and links to supporting web sites external to USDA.

Finally, we believe that the new energy audit/assistance grants and feasibility study grants will help to build program demand across more states.

D. Small Project Set-Aside

REAP requires that at least 20% of the available funding be set aside for grants of $20,000 or less. The intent behind this requirement is clear—to provide greater support for lower-cost, less complex projects which provide immediate energy cost relief to agricultural producers and rural small businesses.

The number of grants meeting this size criterion continues to grow. However, in the 2003-08 period overall, only 7% of the total grant funds were awarded to projects of this size.

Reaching the 20% or greater level specified in the statute will require several changes by the Department. The Department should take steps to streamline the grant application process which, by most accounts, remains burdensome and an obstacle to a growth in applications for

small projects. These steps will also help the Department effectively manage a large increase in applications driven both by the increased funding level and increased emphasis on small projects:

1.) Automating and/or putting the application process on-line. At a minimum, this should include the creation of standard application templates and database-driven software systems to populate federal forms with common information (e.g., project owner and address).

2.) Evaluating small project grant applications on a continuous basis as received, using particular criteria such as financial payback or relative energy savings/energy production as a threshold for award decisions. Projects not meeting these criteria could be re-evaluated in the general application pool and funded based on their relative scoring and availability of funds. Small projects have shorter decision horizons. A rapid application turnaround would encourage more applicants who are contemplating near-term energy efficiency or renewable energy investments.

3.) Providing a standard payment for projects utilizing certain pre-approved equipment and technologies, again on a continuous basis. Payments could be based on a cents/kilowatt-hour or cents/therm saved for efficiency projects (e.g., 4c per projected kwh saved during the first year following installation) or on a dollars/unit of capacity for small renewable projects (e.g., $3/watt). The Department could get guidance from, and build upon, many of the state utility ratepayer-supported Clean Energy Funds in setting these levels[4]. While the types of standard incentives vary considerably across these state programs, some examples include:

[4] Good sources of information on these programs include the Clean Energy States Alliance (www.cleanenergystates.org), the New York State Energy Research and Development Authority (www.nyserda.org), the Energy Trust of Oregon (www.energytrust.org) and Wisconsin Focus on Energy (www.focusonenergy.org).

State	Technology	Incentive
Wisconsin	Milk Pre-Cooler for Dairies	$750
New York	Solar PV	$3-5/installed watt
New Jersey	Small Wind Systems	$3.20/annual kwh produced
California	Small Wind Systems	$1.50/installed watt

The Energy Technical Assistance program, feasibility studies and increased outreach outlined above will also help in reaching this goal as agricultural producers and rural small businesses will be better informed both about opportunities to save/produce energy and the REAP program itself. We also applaud the Department for other steps it has taken in recent years to simplify the application process for smaller projects, such as by reducing the amount of required personal financial information and eliminating the project technical study requirement.

E. Feasibility Studies

REAP sets aside 10% of annual funding to provide support for feasibility studies for large renewable energy and energy efficiency projects. This is a valuable component of REAP that will help applicants develop sound projects. . Conversely, feasibility studies can also filter out projects which are not technically or economically attractive before large sums are invested in their development. The upfront expense of these studies is often a significant barrier to moving projects forward.

USDA has a number of good models for feasibility and planning grant programs both at the federal and state level that it can consult in developing program rules for the REAP feasibility study grants. Our recommendations are based, in part, on a review of those programs, and they include the following:

1.) Applicant Eligibility: The program should use the same applicant eligibility as the Section 9007 project grants and loan guarantees, i.e., agricultural producers, rural small businesses and rural electric cooperatives.

2.) Technology Eligibility: Any commercial or pre-commercial technologies eligible for Section 9007 grants and loan guarantees are eligible with the exception of renewable energy projects whose purpose is to offset an applicant's domestic energy use.

3.) Project Size Eligibility: Feasibility study grant requests should be limited to those proposed projects which would have a total project cost when built of $200,000 or greater (based on the cutoff amount for “full” applications under the previous Section 9006 program).

4.) Matching Funds: Applicants should provide matching funds at least equal to the grant funds requested, to make sure they are, themselves, invested in the effort. In-kind contributions can count towards up to 25% of an applicant’s share.

5.) Maximum Grant: The maximum feasibility study grant should not exceed the lesser of 5% of estimated project costs or $100,000.

6.) Application Submission: The Department should model its application format and submission requirements after the Value Added Producer Grant Program (see 72 Fed Reg. 18949 for the 2007 NOSA).

7.) Evaluation Criteria: The Department should use the following criteria in evaluating applications:

- Nature of the project, focusing on suitability of the project in the context of available resources in the project region. To assure renewable energy project viability, applicants should make a case that sufficient quantity and/or quality of renewable resources exist in the proposed project area for the project envisioned. This might take the form of wind speed data from neighboring airports, or approximations of biomass residues or acreage for new energy crops. The rules should include scoring for addressing the nature and magnitude of the renewable resource.

- Technical Maturity: The Department should award additional points to projects that demonstrate a degree of technical risk or innovation if the project has the potential to be replicated commercially.

- Consultant Qualifications: Applicants should demonstrate that the proposed outside consultants are capable of performing the feasibility study. To maintain study quality and impartiality, it is important that the consultants are independent of any particular technology or equipment vendors.

- Project Leadership: Applicants should demonstrate that the entity has capable project management.

- Quality of Work Plan: Workplans should be sufficiently detailed with well-defined goals, reasonable tasks, timelines, deliverables and budgets.

- Environmental Benefits: Applicants should estimate the anticipated environmental benefits of the proposed project including carbon reduction benefits.

- Economic Benefits: The proposal should illustrate benefits in terms of increased employment or other local economic benefits should the project be built.

- Business Size: The Department should award additional points for small or start-up enterprises without sufficient resources to complete the feasibility study. This reduces the number of "free riders" who would otherwise do a feasibility study without support.

- Administrator Discretion: The Department should be able to award additional points for applicants who help to fulfill additional goals of the program including geographic and technology diversity.

8.) Application Technical Review: The Department should engage the National Renewable Energy Laboratory (NREL) for review of Criteria 1-3 and 6 referenced above in each application submitted under this program.

9.) Reporting Requirements: Successful grantees should be required to submit semi-annual and final performance reports detailing work completed and funds expended.

10.) Payment Terms: USDA's grant should only be paid upon feasibility study completion and after appropriate documentation and invoices submitted to the state Rural Development office.

11.) Eligible Expenses: In addition to study costs, technical services such as wind speed monitoring, soil borings or preliminary design should be eligible expenses.

12.) Grantees under this program may later apply for a grant or loan guarantee under Section 9007. The reports produced should be suitable for submission with a Section 9007 grant or loan guarantee request. However, receipt of a feasibility study grant under this program should not be a factor (positive or negative) in making capital grant or loan guarantee decisions under Section 9007.

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Thank you for the opportunity to submit these comments. We look forward to working with Rural Development in the development of final rules for Section 9007 and in the implementation and continued success of this important program.

Dear Ms. Robinson:

We appreciate the opportunity to submit comments on the 2008 Farm Bill. Our recommendations are as follows:

GENERAL RECOMMENDATIONS

We recommend that USDA ensure a fairer, more even distribution of money across the US. We recommend that 75% of the annual national amount available to allocated to each state on a formula proportional to farming activity and that applications for projects <$2 million be evaluated only at state level. The remaining 25% would be awarded at the national level for projects exceeding $2 million. We recommend an open application period rather than a single NOFA and RFP period.,

We highly recommend a change to the rules to eliminate the possibility for an entity to garner multiple grants simply by using the legal maneuver of creating multiple LLC's. Nearly every year there has been a wind project that divides itself into 4-9 LLC's and is awarded multiple maximum grant awards. While theoretically an individual farm could do the same thing by forming an LLC for each digestion tank and generator combination to get around the $500,000 maximum per project, these farmers are typically too busy and too pressed for cash to pay attorneys and accountants for such a manuever. If USDA really wants to award more money to larger projects, then allocate grant dollars based on BTUs produced, delivered and utilized. The removal of dollar funding caps per project in the new Farm Bill may help this.

Finally, we recommend finding a way to give preference to projects with a large amount of local expenditures. The economic impact of the projects increase substantially when the projects are constructed using materials, labor and equipment from local companies.

Other specific recommendations:

1. Section 9007 Renewable Energy Grant Applications

1.a. Simplify the application process:

1.a.1. Create a list of recognized technologies and a description and only require the applicant to go into a detailed description of technology in the application if they will deviate from the recognized technologies. For instance, small differences in equipment selection with anaerobic digestion are not differences in technology, and should not have to be separately proven as commercially available. Clearly differentiate between new suppliers of proven technologies and new technologies.

1.a.2. Discontinue use of NREL reviews for applications using proven, commercial technologies. The reviews have been highly inconsistent, non-calibrated and resulted in good applications being failed or scored low. NREL reviewers have not had up-to-date information about systems and system providers already operating, and have made erroneous assumptions about what can and cannot work in real applications.

1.a.3. Eliminate redundant and duplicative sections of the technical report and business feasibility section.

1.a.4. Eliminate redundant and duplicative sections of the grant and loan packages when submitted as a combination.

1.b. Create optional track - Pay for Performance:
Create an option whereby the applicant can avoid the entire current application detail and select to be paid upon completion of the project subject to successful completion of the project. The applicant would be required only to outline the anticipated results/outputs of the project, and when achieved, the project would be awarded the money. In this way USDA is not paying out money for anything that doesn't achieve the results, and avoids all the work of trying to evaluate whether or not it will. The USDA can eliminate costly progress reporting and reviews. The applicant will have far more leverage over the system provider to ensure the project is completed successfully.

1.c. Eliminate inconsistency in rules - Pre- vs. Post-award Process for Bids and Contracts:
In order to file the application, the applicant must at a minimum have received budgetary quotations for the project. However, since the timeframe between application and award can stretch to 6-9 months, the applicant will be highly unlikely to recieve firm quotations. The current application process scores higher if the applicant precisely names the companies providing the products and the names of individuals from those companies who will play key roles. Again, the long time frame between application and award makes this difficult. Companies become busy with other projects, and some companies go out of business or merge in this period of time. We recommend that USDA eliminate the requirement for assigning project roles if the applicant intends to conduct competitive bidding once they receive the award. The pre-construction conference can serve to ensure that qualified individuals have been obtained for each r! ole.

The RD instructions allow the applicant to proceed with the project after making application and prior to receiving the grant award. We recommend USDA change the rules to adopt a new procedure whereby the USDA catches up with a project in already in progress or completed. The new rules should clearly state what paperwork the USDA expects to be able to examine once it it ready to recognize the project.

1.d. Eliminate the requirement for the use of AIA contracts, and Simplify the Contracting Requirement.
For anaerobic digester projects, the AIA contracts are inappropriate and cumbersome. The USDA supplement to the AIA document adds to the confusion. Neither of the documents are sufficient to cover the actual provisions of most AD contracts.

We recommend USDA simplify contracting by providing a list of terms that must be included in all contracts over $50,000 (whether a single contract to a turnkey project provider, or multiple contracts to providers of each element of the system) and leave the format up to the applicant and their contractors.

1.e. Be Clear About Award Bias
If USDA intends to award grants disproportionately to a certain type of project

(large/small, wind/solar/AD, etc.) be explicit about that in the announcement so that applicants can determine whether or not they should expend the time and effort to apply. Because of the high complexity of the application process for large projects, grant application preparation can cost $5,000 to $50,000. This is a waste of money if a certain type of project will not be favored. The current system harms the image of the program, creating an impression of unfairness, arbitrary decisions, and confusion. For every applicant that loses out when the tide shifts to a certain type of project during the review process, 10 more potential applicants will never even consider applying.

1.f. Recognize and Reward Multiple Benefits in Scoring

Rather than forcing a project to choose between energy efficiency and energy generation, or choose between energy replacement and energy generation, we recommend the scoring process be changed to reward projects that have multiple merits. In this way, the USDA will be granting money to the most deserving projects. On-farm biogas to energy projects, for instance, provide energy efficiency improvements by eliminating the line losses associated with conveyance of energy from central generating facilities to the farms. They also frequently eliminate 25-75% of the vehicle fuell used for hauling liquid manure by allowing the farm to use pumps and center pivots instead of trucks. On-farm projects replace the most expensive energy - purchased energy - and can also provide the opportunity to produce large quantities of excess energy without adding transportation costs associated with centralized systems. Projects such as these should score point! s in all categories.

1.g. Standardize and Quantify Environmental Benefit

We recommend that USDA adopt standard values applicants should use in order to quantify environmental benefits to elimintate the lack of calibration between projects regarding greenhouse gas or carbon reductions, and to eliminate the role that differences in protocols can make in the NREL technical review. If the environmental benefit is a pass/fail or yes/no, we recommend USDA vastly simplify this section by listing technologies or systems that are already recognized to have an envrionmental benefit.

1.h. Set Standard Interest Rate for Loan Guarantee

We recommend the USDA establish a maximum interest rate for the loan guarantee portion to ensure that the applicant receives some benefit in exchange for the additional assurance provided to the lending institution. This will help justify the additonal work required for that application.

1.i. Allow use of Used/Rebuilt Equipment, In-kind Labor and Eliminate Requirement for Five Year Warranty

The biggest challenge for these projects is economic viability. Farms could save significant money if the USDA rules allowed use of rebuilt equipment and in-kind labor. Long lead times and high costs could be eliminated. For many projects, common off the shelf equipment components will be used which do not carry long warranties. Motors, gear boxes, separators, fans and compressors - all of these are necessary items that will normally have a 6 months to 18 month warranty. Projects should not be penalized for this.

1.j. Eliminate the Conflict between ROI and Demonstration of Financial Need
The previous scoring awarded more points for more profitable projects as calculated on an ROI basis, while also requiring that the project demonstrate financial need. These two seem to be in conflict.

1.k. Disburse grant funds in proportion to spending
The current system of providing grant funds only when 75% of TEPC have been expended requires applicants to obtain financing for 100% of the project, given the delay between paying out the money and getting the grant dollars. We recommend proportional grant payments.

Respectfully submitted,

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www.phase3renewables.com

EnSave

September 4, 2008

United States Department of Agriculture
1400 Independence Avenue, S.W.
Washington DC 20250

RE: EnSave's public comments: Expanding Renewable Energy and Energy Efficiency Opportunities in Rural America

Dear Panel Members:

EnSave, Inc. is a business that has performed farm energy audits since 1991. We are considered the industry leader in agricultural energy efficiency programs and farm energy audits, and have performed over 1,500 energy audits for farms across the United States. Several of these energy audits have been in support of Rural Development's Section 9006 applications.

The new Farm Bill language states that REAP is to: "promote energy efficiency and renewable energy development for agricultural producers and rural small businesses through: 1) grants for energy audits and renewable energy development assistance; and 2) financial assistance for energy efficiency improvements and renewable energy systems." Eligible Entities to apply for grants for energy audits are: (A) a unit of State, tribal, or local government; (B) a land-grant college or university or other institution of higher education; (C) a rural electric cooperative or public power entity; and (D) any other similar entity, as determined by the Secretary.

Therefore, a business such as EnSave which provides agricultural energy audits is not an eligible entity unless the Secretary determines it to be so. Unless we are considered an eligible entity to apply for energy audit grants within the 2009 REAP, we will lose a substantial part of our business and will effectively be excluded from directly providing a service we have helped develop and have provided for over seventeen years. Additionally, farmers will not be able to directly use the services of an industry leader, thus drastically reducing their access to technical assistance. We request your help in assuring we meet the criteria for an eligible entity to apply for grants for energy audits.

During rulemaking or any Notice of Funding Availability efforts, we request that language is included that specifically states the Secretary determines ***"a corporation or rural small business that has demonstrated the ability to conduct agricultural energy audits"*** is eligible to apply for grants for energy audits and renewable development assistance.

I sincerely appreciate your support of this matter and respectfully request that you honor our request. Please contact me at (802) 434-1822 should you have any questions.

Sincerely,

Craig Metz,
CEO

65 Millet Street, Suite 105 • Richmond, Vermont 05477 • Phone 800.732. 1399 • Fax 802.434.7011 • www.ensave.com

"Expanding Rural Renewable Energy Opportunities-

Inviting a Dialogue with the Public on the new authorities of the Food, Conservation, and Energy Act of 2008"

Presented by:
Craig Metz, Chief Executive Officer for EnSave, Inc.

Talking Points for Power Point Presentation

September 4, 2008

EnSave has designed and implemented agricultural energy efficiency programs since 1991. Our clients include state and federal energy and environmental agencies, investor-owned utilities and rural electric cooperatives. We have run comprehensive energy efficiency programs in several states and have delivered over 1,500 farm energy audits to farmers across the United States.

We have a long history of working with USDA on the energy title of the Farm Bill, both to formulate policy and to implement program goals in the field. Areas where we have assisted USDA with energy issues include:

- In 2003, EnSave partnered with MACTEC Federal Programs to assist USDA with establishing guidelines, regulations, and a delivery model for the loan portion within the energy title of the 2002 Farm Bill
- Serving on core committee for development of USDA NRCS / American Society of Agricultural and Biological Engineers Energy Audit Standard in 2007 and 2008.
- Working with American Society of Agricultural and Biological Engineers to review NRCS Energy Audit Standard in 2007 and 2008.
- Coordinating development of farm energy audit standards / guidelines with both USDA NRCS and USDA Rural Development to ensure the process is consistent in 2007 and 2008.
- Speaking upon invitation from NRCS at the 2005 Energy Management Dialogue about its farm energy audits and the availability of farm energy auditors throughout the United States.
- Presenting information about agricultural energy efficiency to USDA leadership and field staff

EnSave recognized a need to get more energy audit data collectors in the field, able to visit farms in all corners of rural America. To meet this need, we developed partnerships with the National Association of Resource Conservation & Development Councils and the National Association of Conservation Districts to train their members and affiliates in data collection and provide these local organizations with a new skill and revenue source.

This partnership and the delivery of an infrastructure are well underway, with training recently completed in:

- Alabama
- Maryland
- Oregon
- Texas

EnSave will provide training in the following states within the upcoming months:

- Montana (USDA Conservation Innovation Grant)
- Colorado (USDA Conservation Innovation Grant)
- New Jersey (USDA Conservation Innovation Grant)
- Florida (USDA Conservation Innovation Grant)
- Vermont (Environmental Protection Agency)
- Virginia (National Association of Resource Conservation & Development Councils)
- California (National Association of Resource Conservation & Development Councils)
- Arkansas (Arkansas Energy Office)

The Texas training is part of the Texas Agricultural Technical Assistance Program, operated through the Texas Comptroller of Public Accounts, State Energy Conservation Office. This program will support REAP by generating more energy audits, and therefore more REAP applications, from a state that has had historically low participation in Rural Development's energy efficiency programs.

In addition to providing farm energy audit data collection training, performing energy audits, and promoting the program, EnSave worked to ensure Texas Rural Development could have multiple opportunities to promote REAP and provide grant application training to interested farms, rural small businesses, and grant packaging consultants.

Because of our long history as an advocate for and participant in USDA's energy efficiency programs, we need to make sure *"a corporation or rural small business that has demonstrated the ability to conduct agricultural energy audits"* is eligible to apply for grants for energy audits and renewable development assistance.

Thank you.

September 12, 2008

Robin Joy Robinson
Special Assistant to the Administrator
USDA Rural Business and Cooperative Programs
1400 Independence Avenue, SW (Room 4231)
Washington, DC 20250

RE: EnSave's public comments: Expanding Renewable Energy and Energy Efficiency Opportunities in Rural America

Dear Ms. Robinson:

EnSave, Inc. would like to include the following information as an addendum to our September 4, 2008 comments.

The Farm Bill language defines the following entities as eligible to apply for grants for energy audits:
(A) a unit of State, tribal, or local government; (B) a land-grant college or university or other institution of higher education; (C) a rural electric cooperative or public power entity; and (D) any other similar entity, as determined by the Secretary.

In our September 4 letter we requested the Secretary determine ***"a corporation or rural small business that has demonstrated the ability to conduct agricultural energy audits"*** be an eligible entity based on a variety of factors. However, we did not explain how we are a "similar entity" to items B and C above. While EnSave is not a land–grant college or university or an institution of higher education, or a rural electric cooperative or public power entity we do see ourselves as energy educators. USDA is asking these entities to provide an educational service that EnSave offers.

Land grant universities or other institutions of higher education use the Extension Service system to provide researched-based education and technology transfer to the community. Organizations like EnSave are similar because they provide educational services to the community focused on energy efficiency. In particular, EnSave educates farmers about energy efficiency through an energy audit.

EnSave is also a similar entity to a rural electric cooperative. According to the National Association of Rural Electric Cooperatives, one of the core cooperative principles is Education, Training, and Information. EnSave also provides education to cooperative members and cooperative employees in the form of energy audits, energy audit training, and energy efficiency education.

Because EnSave offers energy efficiency education and farm energy audits and the two entities described above would be offering a similar service, we believe we meet the criteria for the secretary to determine that we are an "other similar entity".

Thank you for your consideration of these comments.

Sincerely,

Craig Metz
Chief Executive Officer

Enclosure: September 4, 2008 letter

EnSave

September 4, 2008

United States Department of Agriculture
1400 Independence Avenue, S.W.
Washington DC 20250

RE: EnSave's public comments: Expanding Renewable Energy and Energy Efficiency Opportunities in Rural America

Dear Panel Members:

EnSave, Inc. is a business that has performed farm energy audits since 1991. We are considered the industry leader in agricultural energy efficiency programs and farm energy audits, and have performed over 1,500 energy audits for farms across the United States. Several of these energy audits have been in support of Rural Development's Section 9006 applications.

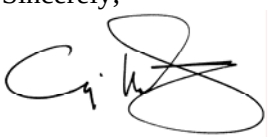
The new Farm Bill language states that REAP is to: "promote energy efficiency and renewable energy development for agricultural producers and rural small businesses through: 1) grants for energy audits and renewable energy development assistance; and 2) financial assistance for energy efficiency improvements and renewable energy systems." Eligible Entities to apply for grants for energy audits are: (A) a unit of State, tribal, or local government; (B) a land-grant college or university or other institution of higher education; (C) a rural electric cooperative or public power entity; and (D) any other similar entity, as determined by the Secretary.

Therefore, a business such as EnSave which provides agricultural energy audits is not an eligible entity unless the Secretary determines it to be so. Unless we are considered an eligible entity to apply for energy audit grants within the 2009 REAP, we will lose a substantial part of our business and will effectively be excluded from directly providing a service we have helped develop and have provided for over seventeen years. Additionally, farmers will not be able to directly use the services of an industry leader, thus drastically reducing their access to technical assistance. We request your help in assuring we meet the criteria for an eligible entity to apply for grants for energy audits.

During rulemaking or any Notice of Funding Availability efforts, we request that language is included that specifically states the Secretary determines ***"a corporation or rural small business that has demonstrated the ability to conduct agricultural energy audits"*** is eligible to apply for grants for energy audits and renewable development assistance.

I sincerely appreciate your support of this matter and respectfully request that you honor our request. Please contact me at (802) 434-1822 should you have any questions.

Sincerely,



Craig Metz,
CEO

65 Millet Street, Suite 105 • Richmond, Vermont 05477 • Phone 800.732. 1399 • Fax 802.434.7011 • www.ensave.com

WINDUSTRY™

September 19, 2008

Robin Robinson
Room 5803
South Agriculture Building
STOP 3201
1400 Independence Avenue, SW
Washington D.C. 20250-3201

Dear Ms. Robinson,

Attached please find the following document as submitted electronically to you today in response to the Rural Business-Cooperative Service Notice of a Public Meeting on Implementation of Title IX, Energy Authorities of the Food, Conservation and Energy Act of 2008 as published in the Federal Register on August 25, 2008:

- Comments of Windustry on the USDA Farm Bill Section 9007: Rural Energy for America Program

Sincerely,

Lisa Daniels, Executive Director

Windustry
2105 First Avenue S
Minneapolis, MN 55404
612.870.3461 *phone*
612.813.5612 *fax*
www.windustry.org

WINDUSTRY™

Windustry respectfully submits the following comments on the USDA Farm Bill §9007 Rural Energy for America Program.

Section 9007(b):
Windustry believes that the entities that are eligible for funds under section 9007(b), Energy Audits and Renewable Energy Development Assistance, should include organizations that provide significant education and outreach as well as technical expertise on wind energy development. These entities should be considered a "similar entity" under section 9007(b)(2)(D) to the extent that they meet the criteria listed under subsection (3). With regard to the selection criteria for funds awarded under section 9007(b), Windustry requests that the Secretary considers the outreach and education aspects of the applying entity as a vital piece to the success of the entire program.

Renewable energy development is a multi-faceted business that requires detailed and extensive knowledge on numerous areas, including finance, understanding property rights, understanding tax implications, technical knowledge about the equipment and a basic understanding of how electricity works and can be connected to the current grid. The ability of organizations to take on compiling all of this information and disseminating it to the rural producers and rural businesses is critical to the success of the Rural Energy for America Program. The more knowledge that someone has about renewable energy development and the more support they have in determining the best course of action, the more likely it will be that their application and project will be successful. This will only help to facilitate the application process within the USDA.

Additionally, Windustry believes that we are a good example of how important education and outreach is for rural energy development. We have a vast online informational resource and travel around the state of Minnesota holding landowner forums to help rural producers and businesses understand the wind development process. Windustry has been involved in educating landowners about wind energy development for over 10 years and during that time we have accumulated a core of expertise within our office as well as a team of experts who we contract out to help communities with technical studies. The process for such an organization to be considered an eligible entity by the Secretary should be more clearly defined.

Section 9007(c):
Windustry believes that a diversity of business models for wind energy projects is an important factor and should be considered under section 9007(c)(2)(G). There are many different ways that communities have come together and structured a business plan to finance wind energy development and they are all important to the further growth of rural economies. The Secretary should welcome applications for project funding from all of these business models and not place emphasis on any one particular example.

September 15, 2008

Robin Robinson, Confidential Assistant
Office of the Administrator
U.S. Department of Agriculture Rural Development
Business and Cooperative Programs
Room 5803, South Agriculture Building, STOP 3201
1400 Independence Avenue SW
Washington, DC 20250-3201

Dear Ms. Robinson:

The Oregon Department of Agriculture appreciates the opportunity to comment on Title IX, the energy title of the 2008 Farm Bill. We are very excited about the potential for the energy title to benefit Oregon's agricultural producers, especially given Oregon producers' past success in applying for Farm Bill energy programs. Many producers are struggling to keep up with energy price increases, and programs such as the Rural Energy for American program are critical to help producers adapt to rising energy costs.

We are pleased to submit the following comments on Title IX of the Farm Bill.

1. **Award Rural Energy for America (REAP) program funds through state-level allocations.** While we are pleased that many Oregon producers have received funds from this program in the past, many other high quality Oregon projects were turned down for funding. The bulk of the funding was awarded to producers in just a few states. A state-by-state allocation would ensure more equitable distribution of the funding and promote energy project development across the U.S.
2. **Allow agricultural producers within Metropolitan Statistical Areas to apply for REAP funds.** Several of Oregon's top agricultural products, including nursery products, fruits, and vegetables, are grown close to large cities within Metropolitan Statistical Areas. Agricultural producers should have the opportunity to apply for Rural Development energy grant and loan funds regardless of their location.
3. **Create a simple application process for energy audit grants.** We are very pleased that energy audits will be eligible for funding under the Rural Energy for America program. The cost of professional energy audits is prohibitive for some producers, and in some cases has discouraged producers from applying for USDA energy efficiency grants in the past. We encourage USDA to create a simple application process that will allow growers to quickly apply for and receive cost-share for energy audits. We also encourage USDA to cost-share energy audits at a high rate (75% or higher).

We would also like to recognize the excellent USDA Rural Development staff in Oregon for their work promoting USDA energy grant programs and assisting applicants and packagers with grant applications. Under their leadership, successful applications in Oregon have increased significantly during the past few years. We look forward to working with them to help Oregon producers access the energy programs in the 2008 Farm Bill.

Sincerely,

Stephanie Page, Renewable Energy Specialist
PH (503) 986-4565
FX (503) 986-4750
spage@oda.state.or.us

Congress of the United States
Washington, DC 20510

September 3, 2008

The Honorable Ed Schafer
Secretary
U.S. Department of Agriculture
1400 Independence Avenue, S.W.
Jamie L. Whitten Building, Room 200-A
Washington DC 20250

Dear Mr. Schafer,

We are writing to urge you to include small rural businesses as an eligible entity within the Rural Energy for America Program (REAP). By granting eligibility to small rural businesses through the rule making process the Department will ensure that REAP will offer access to the best resources available to help farms and rural small businesses reduce their energy use.

The 2008 Farm Bill states that REAP are intended to: "promote energy efficiency and renewable energy development for agricultural producers and rural small businesses through: 1) grants for energy audits and renewable energy development assistance; and 2) financial assistance for energy efficiency improvements and renewable energy systems." Eligible Entities to apply for grants for energy audits are: (A) a unit of State, tribal, or local government; (B) a land-grant college or university or other institution of higher education; (C) a rural electric cooperative or public power entity; and (D) any other similar entity, as determined by the Secretary.

In many cases small rural business are uniquely qualified to provide producers energy audit assistance to reduce energy use. One such company is EnSave, Inc., a Vermont small business that has performed farm energy audits since 1991. EnSave, Inc. has proven itself as an industry leader in agricultural energy efficiency programs and farm energy audits by performing over 1,500 energy audits for farms across the U.S. Several of these energy audits have been in support of Rural Development's Section 9006 applications. While EnSave, Inc. is just one example of a rural small business that can assist producers with farm energy audits, their track record serves as an example of a rural small business who we believe should have the ability to compete for funding under REAP.

We therefore urge you to include rural small businesses that have demonstrated the ability to conduct agricultural energy audits as an eligible entity during rulemaking process or any Notice of Funding Availability for the Rural Energy for America Program.

Thank you for your attention to this matter.

Sincerely,

Patrick Leahy
United States Senator

Bernard Sanders
United States Senator

Peter Welch
United States Representative

9009

1. Community—a population center within a county that is legally organized

   Conventional Energy—Energy that is produced by fossil fuels

   Substantially energy self-sufficiency—reducing dependence by 30% on fossil fuel derived energy.

   Rural in character—Rural land is more of total area, than urban land area.

   Eligible project cost—all except R&D and advertising

   Eligible technologies—All technologies that have commercial potential of 3 years or more.
2. Benchmark—local energy cost, available biomass supply, LICA assessments
3. Bachelor of Science Environmental Engineering—Benchmark CO2 reduction/net energy values
4. Application for profit entity existed for 1 year prior to applying
5. Use of grant funds-consideration-step by step process
6. No
7. 5 grants per state, 1 per community, limited multi-purposed applicants of 20% of applicants.
8. IRS – No tax due
9. Profit and Loss/balance sheet
10. All eligible cost (except advertising and R&D) communities should spend their match before receiving funds.

To whom it may concern:

I am a volunteer advocate for a number of interrelated interests and ecosystems here in the Northern Great Basin. Our communities are dying slowly, infrastructure is failing, and resources have been not managed for ecosystem functioning for several years. The communities and the Forest Service and BLM are all aware of the problems, and the needs, but have not had funding to enable solutions. More precisely, under one of the hats I wear as an adviser to the local school district, we have 7 individual buildings, heated with 9 separate OIL fired boilers. Fossil fuel costs have practically bankrupted the district in the past few years. Natural gas is NOT available, and we have the highest level of heating degree days in Oregon (8,200 last year). The District has had to lay off key individuals in the past two years, to meet the level, and falling annual budgets, and the increasing costs of fuel.

We have hundreds of thousands of acres of forest, and rangeland that are overstocked with immature trees, and are not operating in Proper Ecological Functioning Condition. Healthy Forests Initiatives, and Fire reduction practices are helping, but are severely underfunded. In the meantime, the schools, and other commercial and institutional facilities are eager to get BACK to biofuels for their heating needs. Even now, having to truck materials a great distance, cost analyses have shown that there is a 3:1 payback for utilizing woody bio-mass in practically any form. We have applied for a number of grants for feasibility studies, and hopefully, for implementation of the results of those studies. USDA Rural Development has funded our studies, and so far, USDA USFS has not been able to help with materials - infrastructure is the missing link. We are committing to conversion of one of the larger boilers to pellet fuels, but want to consider conversion of the other 8, as well. We need LOTS of help, as there is no funding available locally. We are going to be grant dependent to accomodate what needs to be done. If the implementation of the Farm Bill provisions for renewable energy (9009), and Wood Energy (9013) have to be split into different agencies' realms of administration, that Rural Development still be the implementing agency, working with community partners and individuals. We have a record and familiarity with them. USFS should therefore concentrate on the wood energy aspects of the Bill. They NEED to communicate, and operate from the same goals and vision for success in the program to be enabled. We have had great support and relationships with both in this area. It would be far more effective if it were truly a team effort.

Respectfully submitted,

William R. Renwick II

Robin:

Following are my comments concerning guidelines and implementing regulations (if required) for Farm Bill Section 9009. I work in wood energy programs for the USDA Forest Service and have completed several successful projects with USDA Rural Development, Small Business Office (Oregon), that neither agency could have completed by themselves:

1. Explicit Language About Relationship Between Sections 9009 and 9013 (Community Wood Energy Program) - It appears Section 9009 (administered by
USDA Rural Development) can be used for any renewable energy source and 9013 only for wood energy (administered by USDA Forest Service). My suggestion is that implementing language and guidelines clearly state the connection between the two programs, and that regular staff-level communication be established between USDA Rural Development and USDA Forest
Service offices to ensure best use of limited funds and reduce confusion;

2. USDA Administrator for Section 9009 - I'd like to suggest that USDA Rural Development, Small Business Program, be lead for Section 9009 because of existing relationships, programs, experience and prior investments in renewable energy programs;

Thank you for the opportunity to comment,

Larry Swan
U.S. Forest Service

19 Colonnade Way, Suite 117, State College, PA 16803
917-270-5193 andy@biomassconnections.com

Written Comments In The Matter Of:

Expanding Rural Renewable Energy Opportunities
Inviting a Dialogue with the Public on the new authorities of the
Food, Conservation, and Energy Act of 2008
(Pub. L. 110–234) (''the Act'')

Background

I am both a small farmer and small business owner. Both of these ventures are start up operations in every sense of the phrase. My small business, BiomassConnections.com, launched this summer, is intended to provide an Internet forum for farmer to farmer discussion of the biomass category. It was borne out of my experiences as a small farmer in Pennsylvania, where I have decided to return to my agricultural heritage after a twenty five year career in an entirely unrelated industry. In that earlier life, I helped fellow engineers and the staff of a different federal agency comport regulatory policies with the way things are in the real world (or "in the market"). This regulatory background makes me somewhat of an unusual farmer, one highly attuned to making sure the ideas of government can be effectively and efficiently implemented in the field.

My farm has twenty acres of switchgrass that was planted this summer. This was farmland that had been let go fallow due to its difficult terrain and poor soil. Research of my options for restoring this land to a tillable state, either via contour farming techniques or for a return to grass hay production, led me to realize that this is exactly the type of marginal ground many envision using for biomass production. Consequently I planted switchgrass, with the target market a cellulosic ethanol plant planned for construction just a few communities away. The remainder of my land is forested with a mix of Pennsylvania's famous oak and black cherry trees, and, unfortunately, locust trees too. Those fast growing locust trees need to be thinned out to foster the development of the more marketable hardwood trees. Such woody biomass "thinnings" could themselves be used for bioheat, perhaps targeted towards the Fuels for Schools program to augment or replace expensive fossil fuels.

I have spent the last three months engaged in learning about biomass production and processing, and recognize that I have really only scratched the surface of this category. However there are a few lessons from my experiences to date that are worth mentioning with regard to the biomass energy programs facilitated by the Act.

Section 9011 Biomass Crop Assistance Program

Farm Service Agency Staffing Augmentation

This past summer I registered my farmland at the local Farm Service Agency (FSA) office; this was done in anticipation of possible eligibility for the Biomass Crop Assistance Program. It took three in-person visits along with a number of letters back and forth to accomplish this, as my farmland hadn't been registered in many years and had to be broken off from a very old previous listing. The FSA staff was extremely helpful while walking me through all the required steps. The take away message here is: be sure to allocate enough resources for such registration or changes, as clearly I won't be the only person registering "new" land for use in biomass production. Even farmers of land that is currently registered for traditional crops or conservation reserve programs will require some face time at the local FSA office as changes are made.

Section 9011 Biomass Crop Assistance Program

Financial Support of Alternative Uses For Biomass

Clearly the most important consideration for a farmer entering the biomass business is determining whether there is a market to begin with. Recently I learned of the AFEX (Ammonia Fiber Explosion) research work conducted by Michigan State University. This work not only preprocesses switchgrass so that it is better prepared for a destination bioenergy plant, it also renders it more suitable for animal feed. Secondary traditional agriculture markets like this could be invaluable, as most farmers are not like me; they aren't willing to take a chance on a crop with no existing market let alone one that won't be harvested until two plus years hence. While the Biomass Crop Assistance Program does have provision for price supports if biomass is delivered to a biomass processor, it should also recognize the benefits of establishing such secondary markets and not unduly reduce payments to eligible producers who deliver to end users other than a biomass conversion plant. The Payment Reduction language in the Act states that such an adjustment will be by "an amount determined to be appropriate by the Secretary". A more favorable financial determination by the Secretary during these first formative years would go a long way towards promoting the needed growth of the biomass crop industry.

Section 9011 Biomass Crop Assistance Program

Allowed Use of Intermediate Production Facilities

The Biomass Crop Assistance Program anticipates that producers and a planned or already constructed "biomass conversion facility" will enter into a compact for a particular geographic area. This is intended to make sure that there is a probable market for the biomass material. Consequently one could imagine that most of the land in such a program would be near a cellulosic ethanol or other bioenergy processing facility. However, this is not the only model supported by the statute. The definition of "biomass conversion facility" in section 9001 of the Act does not require a facility to produce a finished biomass product. Instead, a facility that converts renewable biomass into "bio based products," products which include "an intermediate ingredient or feedstock," qualifies as a biomass product. This is an important point because, for reasons of scale, storage, transportation cost, and proximity to market it may make sense for a cellulosic ethanol plant to be constructed in a large city with

densified or preprocessed feedstock shipped to it via rail. Those intermediate densification or preprocessing facilities and their surrounding farmer partners should then become the entities eligible for support under the program.

Section 9011 Biomass Crop Assistance Program

Implementation Assistance

While not specifically a topic called out for comment, I am compelled to point out that small farmers will need access to specialty services and expertise in order to grow biomass. For example it was surprisingly difficult to find a local custom operator with the right type of no-till drill to plant my own field of switchgrass. I ended up hiring the services of a friendly contractor from another state, not the most economical way to do business in a time of $4 diesel fuel. Fostering support of shared community and regional skills and equipment will be a key part of assisting the small farmer, and all such efforts that the USDA can undertake will be welcome. Frankly this may well be a need for the large farmer too. With switchgrass a long term perennial crop lasting eight years or more it may be difficult for even the largest farmer to justify buying such a specialty planter, let alone the high pressure balers needed to efficiently harvest it.

Section 9012 Forest Biomass For Energy

Section 9013 Community Wood Energy Program

Grower and Community Woody Biomass Education

At the start I mentioned that improving my forested areas could be an avenue for feedstock for bioenergy. At local forestry conferences I have observed considerable interest in this kind of program; much of it coming from small landowners like myself; people who want to do the right thing. Similar to the concerns mentioned for perennial grass crops, there are services that are needed here too. For example, cooperative or contract arrangements to gather up and transport the material. Expertise in which trees should be thinned and the methods to do so must also be shared. Moreover, education of the general public on the positives of using this material at regional bioenergy facilities is essential, or these facilities won't be constructed due to local community concerns about pollution, truck traffic, or other environmental worries.

Section 9012 Forest Biomass For Energy

Reasonable Forest Stewardship Requirements

Surprisingly I have also recently learned that there is a need for a much better understanding of how forest stewardship programs tie into woody biomass production. I had always thought that such programs were a good thing, but significant amounts of forest area reside in the hands of small landowners like me. These landowners might not have the wherewithal to have their wooded areas officially inspected and registered under the guidelines of existing forest stewardship programs. We may need some alternative environmental checks and balances so that we don't burden small landowners such that we prevent them from being part of the solution to our nation's energy challenges.

Section 9011 Biomass Crop Assistance Program

Importance of Marketing and Promotional Efforts

In closing it's important to reiterate that we must not underestimate the educational and marketing challenges ahead of us. Farmers are by definition busy people. Large farmers spend their time managing their diverse and far flung operations, and small farmers often need to support themselves through other means. Policies and procedures must be communicated in a way that farmers and landowners are able to easily grasp at times of their convenience. Most importantly we need to provide more examples of farmers who have successfully grown and marketed biomass crops, as well as forums for those individuals to meet with their peers. Marketing and promotional efforts both public and private must be augmented with adequate funding and support, as early on the message is perhaps the most important aspect of all the tasks ahead of us.

Respectfully Submitted,

Andrew Bater

Digitally signed by Andrew Bater
DN: CN = Andrew Bater, C = US, O = Biomass Connections LLC
Reason: I am the author of this document
Date: 2008.09.18 16:26:18 -04'00'

Andrew Bater

Biomass Connections LLC

September 18, 2008

Ms. Robin Robinson
Special Assistant to the Administrator
U.S. Department of Agriculture
Rural Business and Cooperative Programs
1400 Independence Avenue, S.W., #5803
STOP 3201
Washington, DC 20250-3201

BY EMAIL: robin.robinson@wdc.usda.gov

RE: September 4, 2008 Public Meeting on Farm Bill Renewable Energy Provisions
Biomass Crop Assistance Program (BCAP)

Dear Ms. Robinson:

The American Seed Trade Association (ASTA) is pleased to provide follow-up comments to the September 4 public meeting on the Farm Bill's Renewable Energy Provisions. Our comments will focus on the Biomass Crop Assistance Program (BCAP).

ASTA is the leading national trade association that represents over 775 companies involved in the seed industry. Our members hail from nearly every state and the seed sectors represented range from alfalfa to zucchini. ASTA members provide a majority of the quality seed for farm bill programs as well as seed for other agencies and departments to 75 at the federal and state levels. Our customers rely on quality seed and support. ASTA members stand ready to assist USDA in developing rules that will maximize the energy and conservation opportunities of the biomass feedstock production.

The following comments and suggestions are provided:

(a)(2)(B)BCAP Project Area Selection Criteria. We understand that the BCAP program has no statutory funding cap and can assume that the application process will be competitive. That being the case, we believe that there would be benefit to score applications. Such action would help to ensure that projects with the highest energy and sustainability provisions would be given appropriate consideration.

(i)"volume of eligible crops produced. We would propose that eligible crops produced should be interpreted to include the proposed uses, thereby giving equal consideration to large and small programs.

(ii) volume of renewable biomass other eligible crops grown on contract acres. ASTA believes that selection criteria should favor those projects where a greater share of material is coming from within the project area to encourage a closer relationship between the biomass conversion facility and its suppliers.

(iii) anticipated economic impact. ASTA assumes that for the most part, BCAP project areas will include those from Title I crops. Accordingly, our belief is that the existence of a project will likely lead to downstream local economic benefit in the conversion facility.

(vi) Impact on soil, water and related resource. ASTA agrees that Congress intended the BCAP program to provide incentive for long-term environmentally beneficial and sustainable energy crop production. We draw your attention to the Conference Report which emphasizes the program's criteria. Specifically, on page 919, "…the primary focus of the BCAP will be promoting the cultivation of perennial bioenergy crops and annual bioenergy crops that show exceptional promise for producing highly energy-efficient bioenergy or biofuels that preserve natural resources, and that are not primarily grown for food or animal feed." Moreover, the selection should criteria should, in our opinion, establish standards for wildlife protection as they relate to the timing of harvest, monoculture versus polyculture, and other considerations. In addition, natural resource concerns should also address the potential of a given project to sequester carbon. Our view is that perennial crops and trees offer tremendous potential to capture and store atmospheric carbon relative to annual grain crops. In sum, the zero net carbon balance associated with using the harvestable portion of energy crops root systems of these crops can provide long-term sequestration of carbon in the soil.

(vii) and (viii) Variety in production approaches and range of eligible crops. ASTA advocates a range of production approaches and eligible crops in projects across the country. We do, however, believe it is not necessary to see a range of approaches and crops within a single BCAP project area.

(ix) Additional information. ASTA would respectfully propose the program to encourage projects from both a variety of locations and a variety of land and soil types.

(c) (5)(B)Amount of Establishment Payments. The legislation provides for payments up to 75 percent of establishment costs for perennial crops. We note, however, that there are no criteria for determining the level of these payments. We would recommend that the covered percentage be tied to the score on the selection criteria, as described in (c) (2) (B).

(c)(5)(C) Amount of annual payments. ASTA is not clear whether these payments are intended to cover the "lost opportunity cost" of not growing conventional crops on the land or simply the fixed cost of owning or renting the underlying land. For administrative ease, we would recommend that these payments be based on the local land rental rate in much the same way as the Conservation Reserve Program contracts rates are set. It appears to us that these payments are available to producers of annual crops, even though these crops are intended to be harvested in the same growing season in which they are established. Accordingly, we believe that the annual payment for *annual* crops should only be made in the case of a crop failure. Finally, it is unclear whether a producer should be eligible for annual payments if they are otherwise ineligible for or did

not qualify for establishment cost payments. We would suggest a further review to determine whether a producer for a perennial crop is eligible for both payments.

Consultation with Natural Resource Conservation Service. ASTA strongly encourages FSA to consult with the NRCS to best coordinate the program. ASTA believes that such coordination and interaction will complement similar and appropriate discussions with external offices at the Environmental Protection Agency and Departments of Interior and Energy.

Thank you for this opportunity to provide our unique input as the rulemaking process begins for the BCAP program. We look forward to continued dialogue and will be providing additional comments and perspective as the process moves forward.

Sincerely,

Leslie Cahill
Vice President, Government Affairs

USDA Rural Business - Cooperative Service
Public Meeting on Implementation of Title IX, Energy Authorities of the Food, Conservation, and Energy Act of 2008 – September 4, 2008.

Sec. 9011 BIOMASS CROP ASSISTANCE PROGRAM

The BCAP Program is a very important solution to a very pressing problem – the fact that investors are equally unwilling to invest in feedstocks before biomass facilities are in place as they are to invest in facilities before feedstocks are in place (the so-called "chicken and egg" problem). BCAP offers needed incentives and assurance to farmers and foresters to produce these feedstocks. This is an urgent problem and it is very important that this program is implemented strongly and quickly, in time for the 2009 planting season. I would also like to stress the importance of a robust outreach program to ensure widespread interest and participation from the start. Because a specific funding level has not been authorized for this program (authority is for "such sums as are necessary"), it is especially important that funding for this important program is vigorously pursued in the FY2010 budget request.

A few additional comments and suggestions:

A) A clarification on the definition of "crops", "agriculture" and "agricultural land" is needed. In order to develop a reliable, sustainable supply of feedstocks in all regions of the country, it is important that we incentivize the use of a diverse range of feedstocks produced on a diverse range of lands. It is important that BCAP encompass the production of woody crops (including willow and poplar), that fallow and abandoned agricultural lands are eligible, and that residues from agriculture and forestry are eligible where appropriate. Residues (including residues from Title I crops), for instance, should be considered as eligible crops for collection/harvest/storage assistance grants.

B) Sec. (c)(2)(B)(vi) directs the Secretary to consider "the impact on soil, water, and related resources" when selecting projects. The importance of this provision cannot be overstated. The final rule should favor projects that enhance watersheds, preserve soils, promote biodiversity, and utilize appropriate feedstocks and sustainable management practices. As for nonindustrial private forestland (NIPF), we recommend that priority be given to those projects that emphasize management for a full suite of environmental goods and services, including biodiversity, habitat, and watershed function. We would especially discourage funding projects under this program that convert NIPFs to woody plantations, monocultures, or agricultural crops.

Sec. 9012 FOREST BIOMASS FOR ENERGY

Woody biomass is an abundant and valuable resource and one that can be produced sustainably as a product of multiple-use, multiple-value forest management. However, there are many barriers to harvesting and utilizing woody biomass sustainably and cost-effectively. The Sec. 9012 program will provide much-needed funding to researchers and innovators hoping to develop technology, processes, and methodology that improve the efficiency, effectiveness, and sustainability of this resource.

In considering applicants for this program, we hope that priority will be given to those projects that seek to improve best management practices, minimize negative environmental impacts, and find ways to utilize

woody biomass that will complement a wide range of forest stewardship objectives, including wildlife habitat management, timber stand improvement, hazardous fuels reduction, biodiversity, and others. We also hope that priority is given to projects that seek to understand the economics of forest biomass and improve the cost-effectiveness of using logging residues, forest thinning, and other material from the woods. In an ongoing series of discussions with stakeholders, EESI has consistently found that poor economics is the primary barrier to use of such forest biomass in most regions of the country. This is one area where additional research dollars could really be effective. Finally, I would like to point out that funding for this program is not mandatory; EESI would strongly encourage the administration to pursue full funding for this program in the FY10 budget request and beyond.

Sec. 9013 COMMUNITY WOOD ENERGY PROGRAM

EESI is really very excited about the Community Wood Energy Program. By providing funding for communities to do feedstock assessments, draft community wood energy plans, and install community wood energy systems, this program focuses resources on some of the most important aspects of environmental sustainability - small-scale projects, thorough assessments, and a strong community focus. This program has a lot of potential and I would encourage it to be implemented and ramped up as quickly and robustly as possible. The funding authorized for this program is considerably less than EESI would have liked to have seen and it is not mandatory. Full funding should be an important goal of the FY2010 Budget Request.

A couple of specific suggestions:

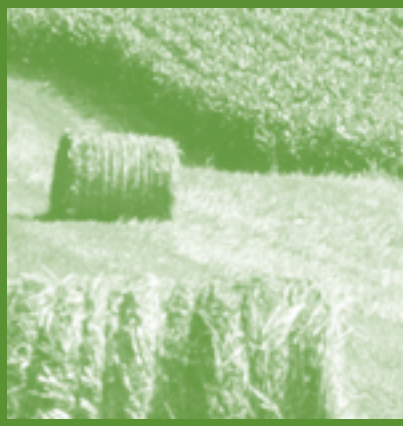
A) Community wood energy plans include an assessment of "available feedstocks." It is important that availability is understood to mean much more than a simple forest inventory. The availability of woody biomass is dependent on the available infrastructure, geography, environmental considerations, and the willingness of forest owners to harvest and sell material. I would recommend the Coordinated Resource Offering Protocol (CROP) tool as one example of a feedstock availability assessment that takes all of these factors into account. I would also suggest that full consideration be given to woody biomass resources other than forestry – urban wood residues, mill waste, industrial residues, etc.

B) The community wood plan also includes an assessment of the "long-term feasibility of supplying and operating a community wood energy system." It is essential that this assessment include the full suite of environmental considerations, including how woody biomass use will affect forest health, biodiversity, wildlife habitat, and watershed functioning in the community.

C) Sec. (b)(2)(C) directs the Secretary to consider "other conservation and environmental criteria". Specifically, we feel that priority should be given to those projects that will help achieve forest stewardship objectives (such as timber stand improvement or hazardous fuels reduction) in addition to providing clean, renewable community energy. EESI recommends that consideration also be given to the greenhouse gas and climate change ramifications of each project, giving priority to projects that replace coal and oil over those that replace natural gas or that utilize woody biomass that would be otherwise be landfilled or burned, releasing methane and carbon dioxide.

Next-Generation Biofuels

Taking the Policy Lead for the Nation



A REPORT OF THE
CHESAPEAKE BAY
COMMISSION
AND THE
COMMONWEALTH OF
PENNSYLVANIA

SEPTEMBER 2008

pennsylvania PA
STATE OF INNOVATION

Commonwealth of Pennsylvania

Chesapeake Bay Commission
Policy for the Bay

Chesapeake Bay Commission
Policy for the Bay

pennsylvania PA
STATE OF INNOVATION

Chesapeake Cellulosic Biofuels Project

To Our Readers:

As America's dependence on foreign oil continues to grow, our nation is confronted with an energy crisis that jeopardizes our economy, our national security and our way of life, reasons that underscore the urgency of investing in and developing homegrown, alternative fuels.

The Chesapeake Bay region has the opportunity to emerge as the leader in this transformation, particularly in the development of next-generation biofuels. In order to do so, however, we must proceed in a manner that maximizes the economic opportunities of this emerging technology, while also protecting our natural resources.

This publication represents the culmination of a year-long effort on behalf of the Commonwealth of Pennsylvania and the Chesapeake Bay Commission to guide the region to a leadership role in the nation's evolution to cellulosic biofuels. In the course of this effort, the issues of energy independence and the economy assumed new importance as gasoline and grain prices reached record highs. Against the backdrop of these unprecedented challenges, our Biofuels Advisory Panel developed a roadmap to develop the next generation of biofuels using a new set of feedstocks independent of food crops that can be grown sustainably with greater environmental benefits for our lands and waters.

We present here the results of their work — 10 regional and 10 state-specific recommendations on how to enter the cellulosic era in a way that ensures both economic growth and environmental stewardship. These recommendations will be discussed thoroughly on September 4, 2008, at the Cellulosic Biofuels Summit in Harrisburg, Pennsylvania. This first-of-its-kind gathering will offer attendees valuable information on how the competitive advantages of our region — an extensive supply of forest and agricultural crop residues, favorable conditions for growing perennial grasses, and the existing volume of municipal solid wastes — can establish the region as a national leader in this endeavor; yield lasting benefits to our farm, forest and industrial economies; and advance our Chesapeake Bay restoration goals.

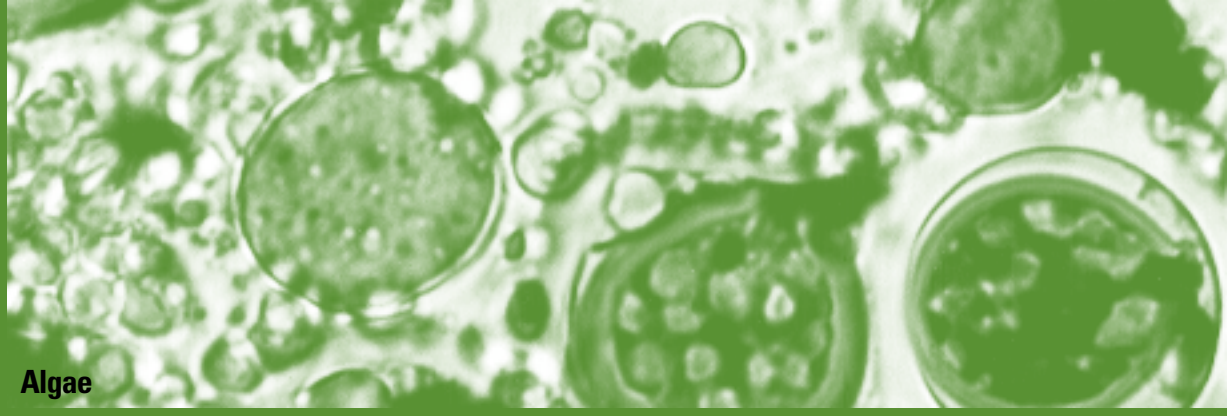
We look forward to working with you on this important matter.

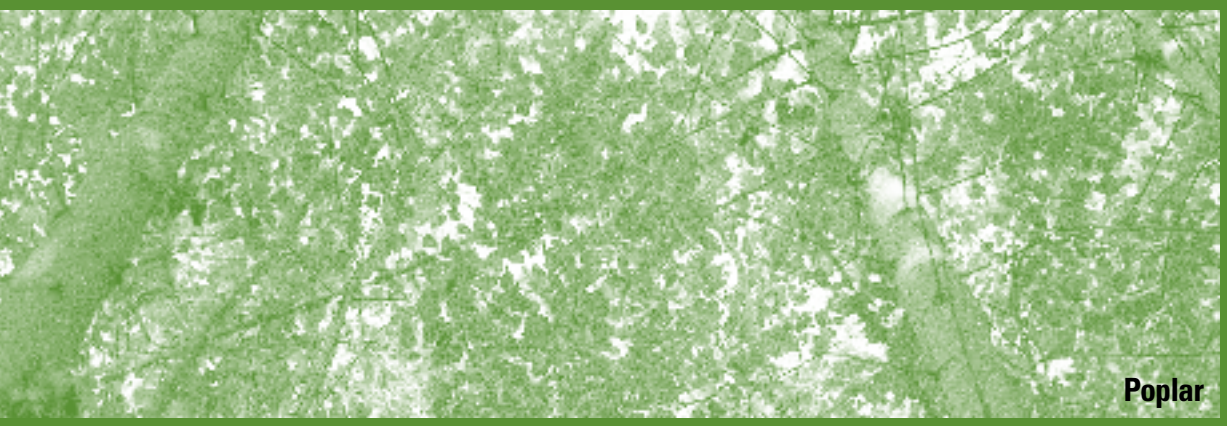
Sincerely,

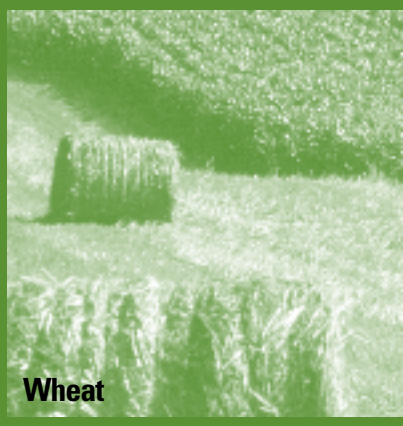
Edward G. Rendell, Governor
Commonwealth of Pennsylvania

Rep. Arthur D. Hershey, Chairman
Chesapeake Bay Commission

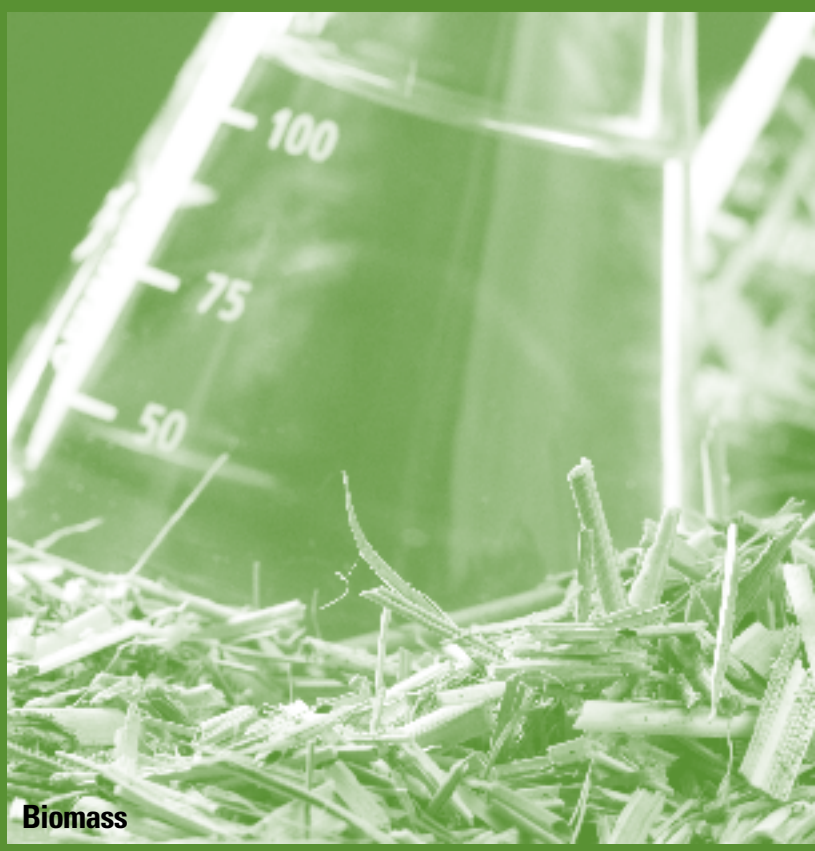

Manure


Algae


Poplar


Wheat


Willow



Biomass


Switchgrass


Wood chips


Barley

PHOTO CREDITS

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WOOD CHIPS: DOE/NREL, WARREN GRETZ
BIOMASS: PENN STATE
BARLEY: LYNNE HOOT

Next-Generation Biofuels

Taking the Policy Lead for the Nation

A REPORT OF THE CHESAPEAKE BAY COMMISSION & THE COMMONWEALTH OF PENNSYLVANIA

SEPTEMBER 2008

The Chesapeake Biofuels Project

Biofuels Advisory Panel

The Chesapeake Bay Commission and the Commonwealth of Pennsylvania wish to thank the following experts for generously sharing their time and knowledge in the preparation of this report. Without their tireless participation and expertise, this report would not have been possible. We also extend our appreciation to Delegate James Hubbard for his proficient leadership of our policy-making process.

Delegate James Hubbard, Chairman, *Maryland House of Delegates*

R. Bruce Arnold, *Retired, Scott Paper Company*

Russ Brinsfield, Ph.D., *University of Maryland, Harry R. Hughes Center for Agro-Ecology, Inc.*

James Casey, Ph.D., *Washington & Lee University*

Matthew Ehrhart, *Chesapeake Bay Foundation*

Calvin Ernst, *Ernst Conservation Seeds, Inc.*

Dan Griffiths, *Pennsylvania Department of Environmental Protection, Office of Energy & Technology Deployment*

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Bob Hutchison, *Maryland Grain Producer*

Brian Kittler, *National Fish & Wildlife Foundation*

Dan Nees, *Forest Trends*

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Sharron Quisenberry, Ph.D., *Virginia Tech, College of Agriculture & Life Sciences*

Russell Redding, *Pennsylvania Department of Agriculture*

Tom L. Richard, Ph.D., *Penn State, Institutes of Energy & the Environment*

Allen Rider, *Retired President, New Holland North America*

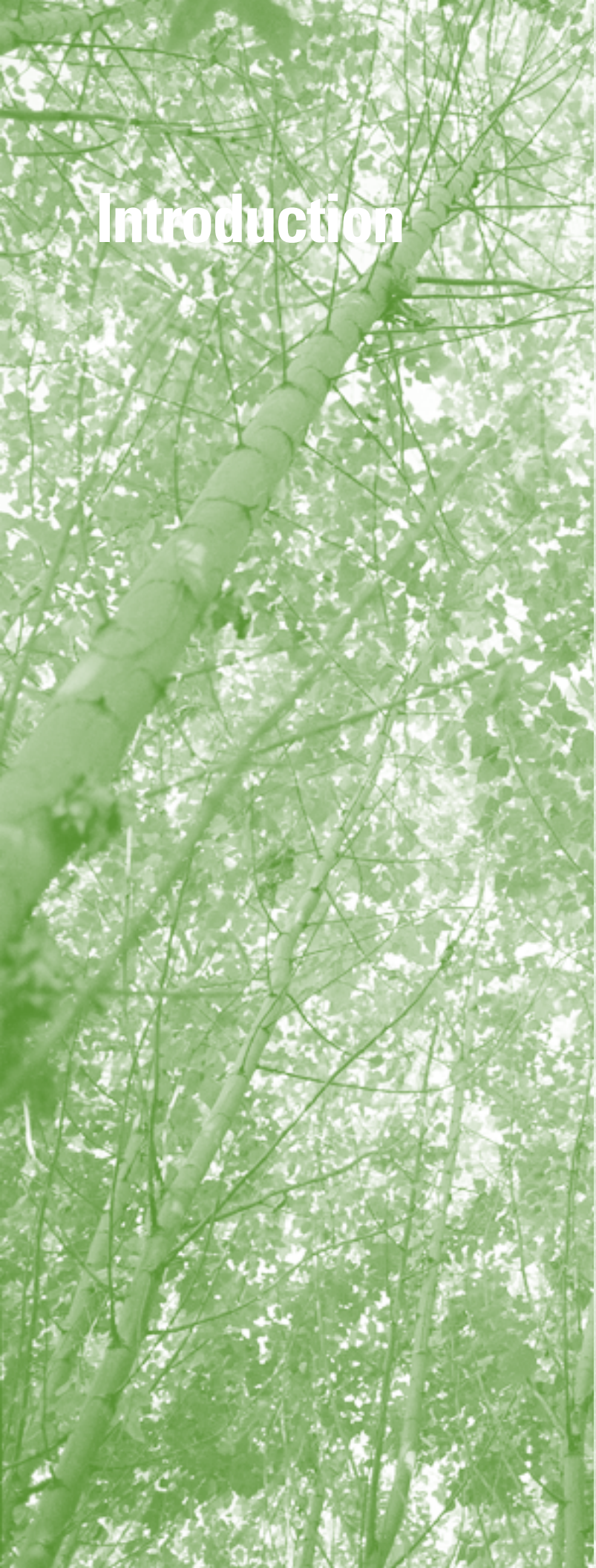
Nathan Rudgers, *Farm Credit of Western New York*

Andrew Smith, *Virginia Farm Bureau*

John M. Urbanchuk, *LECG, LLC (a global expert services consulting firm)*

Edwin White, Ph.D., *State University of New York, College of Environmental Science & Forestry*

Malcolm Woolf, *Maryland Energy Administration*



Introduction

Every major source of energy used by modern society has an environmental impact — and all too often these impacts are negative. Today, the Chesapeake Bay region has an unprecedented opportunity to take the lead in a new era of energy production that could produce a wealth of positive impacts for our economy, farms and families, as well as our forests, rivers, and the Chesapeake Bay.

The opportunity lies with the new biofuels industry, which is currently exploding on both the national and international levels. The assets of the Chesapeake region make it well-positioned to become a leading player in the production and use of biofuels. Our climate, soils, and landscape can produce a wide range of feedstocks. Refining facilities can be placed near the sources of feedstocks, with efficient access to petroleum blenders and the open market. And the region already hosts a thriving biotechnology industry and a multitude of excellent, university-based researchers.

Many decisions driving the growth of the biofuels industry are made in a global marketplace and are beyond our control. However, as a region not yet fully invested in the production of first-generation biofuels (e.g. ethanol derived from corn or other grains), we have a rare opportunity in which our region's business, political and scientific leaders can proactively assert leadership in producing the next generation of biofuels — and they can shape elements of this emerging industry to serve both economic and environmental goals. To do this, we must act now.

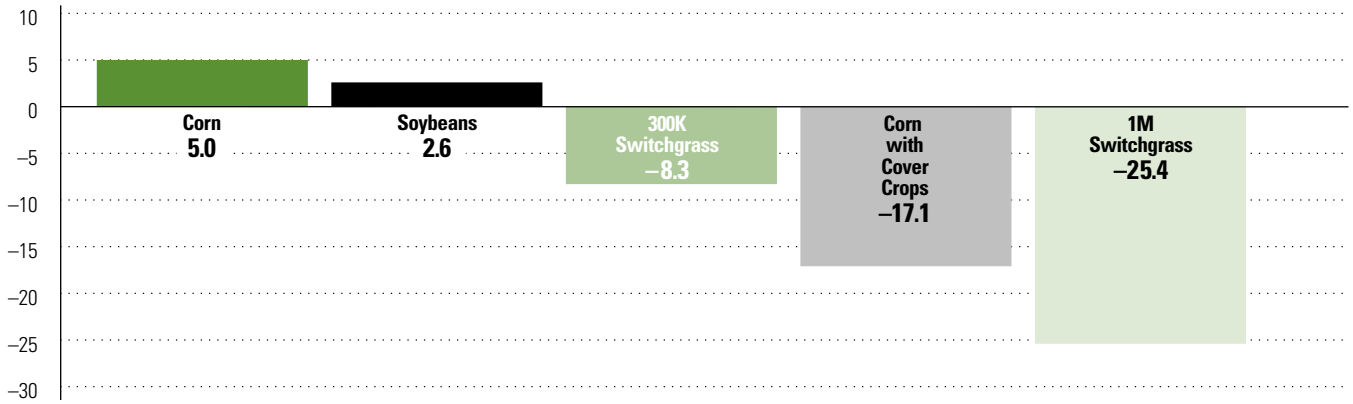
The Chesapeake Bay Commission's 2007 report, *Biofuels and the Bay: Getting it Right to Benefit Farms, Forests, and the Chesapeake,* outlined a number of ways in which the growth in biofuel production could harm our region's environment (see Figure 1). It also demonstrated a number of ways we could capitalize on biofuels for both economic and environmental benefits. One of the many recommendations in the report was to make the Chesapeake region a leader in the development of cellulosic ethanol.

Cellulosic ethanol is among the suite of next-generation biofuels that will soon emerge from research laboratories to the commercial market. Ethanol and other fuels derived from cellulose hold much promise for supporting the nation's energy needs while helping to advance environmental goals. First-generation ethanol — derived from corn, barley and other grains — can degrade water quality in rivers, streams and the Chesapeake Bay, unless aggressive best management practices are put into place. On the other hand, cellulosic ethanol and other advanced biofuels use plant material for feedstock, such as perennial grasses,

FIGURE 1

Comparing Nitrogen Loads from Various Biofuel Feedstocks

Millions of pounds per year of nitrogen delivered from the Chesapeake Bay watershed to the Bay under five modeling scenarios.



Assumptions for Alternative Scenarios (Next 3–5 Years):

- **Corn:** 300,000 additional acres of corn with typical levels of management practices
- **Soybeans:** 300,000 additional acres of soybeans with typical levels of management practices
- **300K Switchgrass:** 300,000 acres of switchgrass, converted primarily from hay and pastureland, with no fertilization
- **Corn with Cover Crops:** Cover crops on all existing and new (additional 300,000) corn acres and one quarter of all other row crops, watershed-wide.
- **1M Switchgrass:** 1 million acres of switchgrass, converted primarily from hay and pastureland, with no fertilization

SOURCE: U.S. EPA CHESAPEAKE BAY PROGRAM OFFICE, 2007

woody material, and corn stover. These feedstocks can help meet the nation's fuel needs while actually helping to protect water.

Although not yet commercially viable, most experts agree that a cellulosic biofuels industry is only a few years away. In response, Pennsylvania Governor Ed Rendell and the Chesapeake Bay Commission stepped forward at the 2007 meeting of the Chesapeake Executive Council to jointly champion the Chesapeake Cellulosic Biofuels Project.

The Commission and the Commonwealth appointed a 22-member Biofuels Advisory Panel, comprised of experts from the public, private, and academic sectors across the watershed, to provide substantive and political guidance throughout the process. Delegate James Hubbard, who first led the Commission to investigate biofuels as 2007 Chairman of the Chesapeake Bay Commission, was appointed chairman of the advisory panel.

The Chesapeake Cellulosic Biofuels Project was staffed by the Chesapeake Bay Commission, assisted by a talented team of consultants. A Coordinating Committee was named, consisting of agency representatives from each state in the watershed, to help ensure transparency and a constant flow of information. A large number of funders also helped to ensure our success. A complete listing is provided on page 36.

The Coordinating Committee also helped the Advisory Panel and staff team conduct stakeholder outreach sessions and state briefings to solicit a continuous stream of substantive input. Via face-to-face meetings and extensive e-mail exchanges, the Advisory Panel and staff team drew upon input from farmers, forest landowners, biofuel developers, environmental and conservation representatives, rural development advocates, agricultural and wood product and petroleum industry representatives, as well as academic and government partners, to develop the policy recommendations presented in this report.

As co-champions of this effort, the Commonwealth of Pennsylvania and the Chesapeake Bay Commission offer these recommendations to policy makers, opinion leaders, energy providers and consumers for consideration and adoption, so that the legacy of biofuels in our region will be one of economic prosperity, environmental sustainability and resource restoration.

Why the Chesapeake? Why Now? The Case for Cellulosic Biofuels

Biofuels and the Bay: Getting It Right to Benefit Farms, Forests and the Chesapeake, published by the Chesapeake Bay Commission in 2007, makes quite clear that biofuel development can produce significant benefits on multiple fronts — if managed correctly. The region's economy, environment, and farm and forestry communities each stand to gain from a smart, energetic entry into the biofuels market.

The nation may benefit, too. Biofuels can help displace a significant portion of the more than 180 billion gallons in petroleum-based gasoline, diesel and home heating oil consumed in America each year. As shown in Figure 2, the six states that comprise the Chesapeake region account for a substantial share of these fuels, including over 43 percent of home heating oil. While portions of some states are outside the watershed, they are likely also markets for biofuels produced within the watershed.

Water quality in the Chesapeake Bay and its rivers may also benefit from biofuels, once cellulosic and other advanced biofuels become commercially viable. The initial burst of ethanol production in the United States, which has focused on corn and other grains as a feedstock, is troubling for water quality. Corn tends to demand high levels of fertilizer and uses it relatively inefficiently. Without the aggressive use of best management practices, an increase in corn crops could also increase the amount of nitrogen runoff in the Bay and its rivers. In fact, the expanded planting in the Corn Belt is contributing to the record size of the oxygen-starved dead zone near the Mississippi Delta.

The feedstocks for cellulosic biofuels, on the other hand, create far less concern for water quality. The planting, management and use of cellulosic feedstocks such as perennial grasses and woody crops can in fact move us closer to Bay restoration goals by absorbing nitrogen and reducing the erosion of sediment into local waterways.

The Science & the Opportunity

To date, the production of ethanol and biodiesel in the Chesapeake watershed has not been significant (see map, page 8). There are several reasons for this. Ethanol is currently produced for market using corn or other grains as feedstock. Some farmers in the Bay region have tapped into this market, but the farms here are smaller than the U.S. average and produce more specialty crops. Farmers must also balance the new demand for ethanol feedstock with the long-standing local market for corn and soybeans as livestock and poultry feed. Another challenge is the comparatively high cost of prime farmland due to develop-

FIGURE 2

Sales of Traditional Fuels In the Chesapeake Bay Region

Millions of gallons sold

	Gasoline (2007)	On-Highway Diesel (2007)	Home Heating Distillate Fuel (Oil and Kerosene) (2006)
New York	5,683.1	1,097.0	1,092.7
Pennsylvania	5,020.4	1,515.0	689.2
Virginia	3,945.5	1,073.0	184.5
Maryland	2,464.0	558.7	138.0
West Virginia	731.5	294.5	15.5
Delaware	448.9	66.8	28.8
District of Columbia	89.2	8.3	7.5
Region Total	**18,382.6**	**4,613.2**	**2,156.2**
National Total	**137,765.6**	**39,118.3**	**4,984.8**
% of National Total	**13.3%**	**11.8%**	**43.3%**

SOURCE: John Urbanchuk analysis of EIA Preliminary Petroleum Marketing Annual 2007, Table 45, and Fuel Oil and Kerosene Sales 2006.

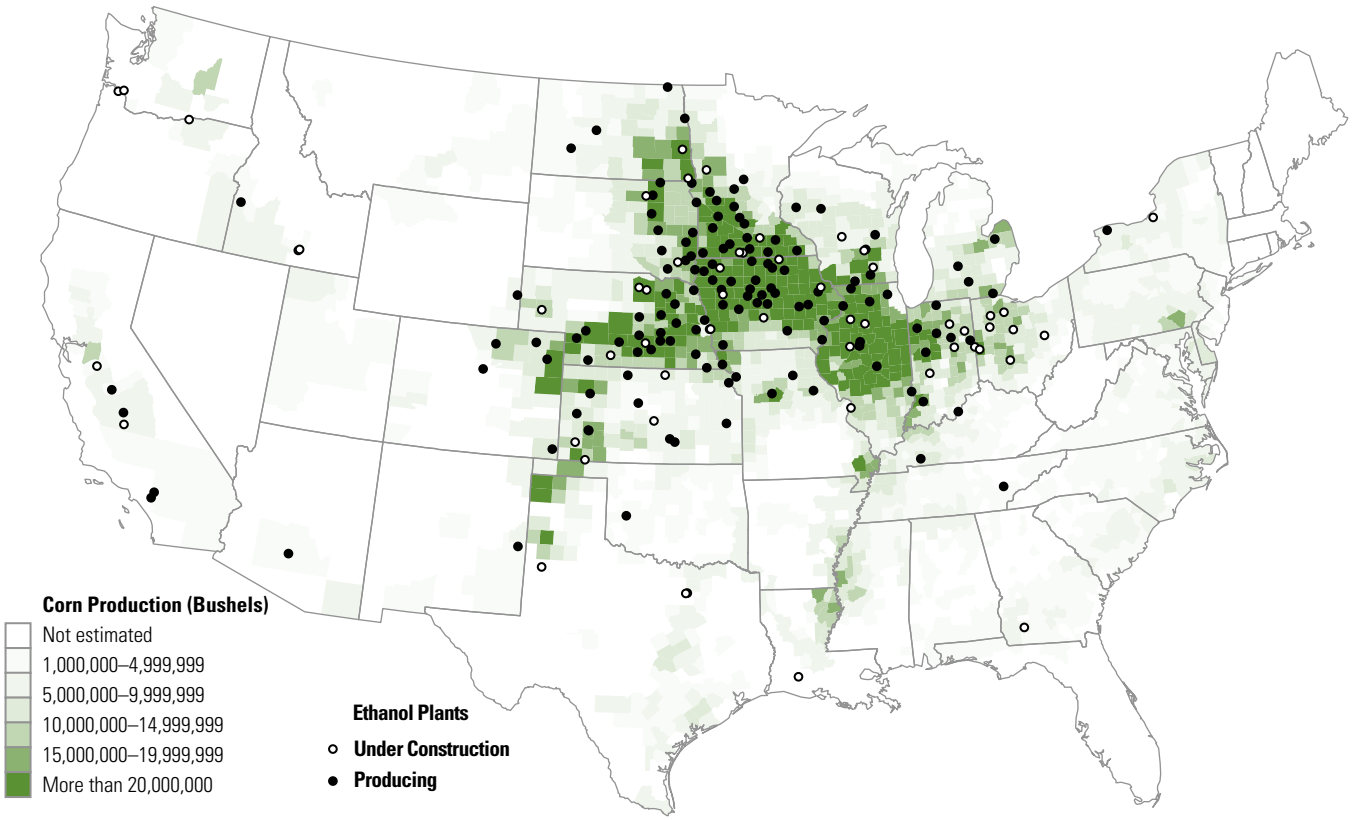
ment pressures throughout much of the region. Farmers find it economically difficult to expand production of traditional crops and thus difficult to support the current biofuels industry.

However, impending advances in technology will soon spawn the next generation of biofuels. Cellulosic ethanol and other fuels made from crop residues, perennial grasses, woody material, manure, algae and even municipal waste (see Figure 3) will help overcome the challenges associated with corn-based ethanol, such as nutrient leaching and degraded water quality. Biofuels also represent an opportunity to move farming in the region from a chronically low-margin sector of the local economy into an area of sustainable growth and value-added opportunities.

Extensive research is being conducted throughout the country to define the most efficient methodologies for producing cellulosic ethanol at a cost and volume that will meet market needs. As seen in Figure 4, there are currently 55 pilot plants and early commercial ventures under construction in the United States that will assist in

Choosing Our Future

The Chesapeake region is the least invested in ethanol of any corn-growing region in the nation.



SOURCE: U.S. Department of Agriculture, National Agricultural Statistics Service, 2007

FOCUS National Renewable Fuel Standard

The National Renewable Fuel Standard (RFS), established in the Energy Independence and Security Act of 2007, mandates annual increases to the U.S. production of biofuels. By 2022, biofuels will constitute 36 billion gallons, or about 20 percent of U.S. transportation fuels. These increasing annual goals are listed in the chart below. The Act also grants the Administrator of the U.S. Environmental Protection Agency the authority to temporarily waive part of the biofuels mandate if implementing the Act would severely harm the economy or the environment, or if there is an inadequate domestic supply to meet the requirement.

To date, ethanol derived from corn has been virtually the exclusive renewable fuel produced in the United States. The 2007 production level was approximately 8.5 billion gallons. The RFS calls for 15 billion gallons of this type of biofuel to be produced by 2015 and maintained at that level through 2022. After 2015, next-generation biofuels — which are slated to come on line in 2009 — will make up the remaining increase to total 36 billion gallons by 2022.

A variety of fuels are considered to be next-generation biofuels, including: ethanol made from cellulose, hemicellulose, lignin, sugar or starch (except for corn starch) or from waste material such as crop residue, animal waste, food waste, or yard waste; biomass- based diesel; biogas including landfill gas and sewage waste treatment gas; biobutanol; and other fuels derived from cellulosic biomass.

The RFS mandate, together with generous federal incentives and state participation, can help to position the Chesapeake region as a leader in cellulosic biofuels. With comparatively little investment in corn ethanol in the region, abundant stocks of cellulosic feedstocks, top university resources and other regional advantages, the Chesapeake region is poised for the front line of next-generation biofuel production.

Renewable Fuel Standard

Phased-in schedule in billions of gallons

Year	Renewable Biofuel	Advanced Biofuel	Total Renewable Fuel
2008	9.0		9.0
2009	10.5	0.6	11.1
2010	12.0	0.95	12.95
2011	12.6	1.35	13.95
2012	13.2	2.0	15.2
2013	13.8	2.75	16.55
2014	14.4	3.75	18.15
2015	15.0	5.5	20.5
2016	15.0	7.25	22.25
2017	15.0	9.0	24.0
2018	15.0	11.0	26.0
2019	15.0	13.0	28.0
2020	15.0	15.0	30.0
2011	15.0	18.0	33.0
2022	15.0	21.0	36.0

FIGURE 3
Potential Biofuel Crops for the Chesapeake Bay Region

Common Name	Latin Name	Biofuel Use	Comments
Alfalfa	*Medicago sativa*	cellulosic ethanol	
Algae	(Various species)	biodiesel, cellulosic ethanol	Grown in ponds or indoors
Barley	*Hordeum vulgare*	grain ethanol, cellulosic ethanol	Can be grown as winter crop
Camelina	*Camelina sativa*	biodiesel	Some areas of watershed
Canola	*Brassica juncea B.rapa, B.napus*	biodiesel	Can be grown as winter crop
Castor Bean	*Ricinis communis*	biodiesel	Some areas of watershed
Corn	*Zea mays*	grain ethanol	
Cuphea	*Cuphea* hybrid	biodiesel	Some areas of watershed
Miscanthus	*Miscanthus xgiganteus*	cellulosic ethanol	Double the biomass of switchgrass
Mustard	*Brassica nigra, B. juncea, Sinapis alba*	biodiesel	Double the oil of soybeans/acre
Peanut	*Arachis hypogaea*	biodiesel	Extreme southern watershed
Poplar	*Populus* hybrid	cellulosic ethanol	
Sorghum	*Sorghum bicolor*	grain ethanol, sugar ethanol	Some areas of watershed
Soybean	*Glycine max*	biodiesel	
Sugar beet	*Beta vulgaris*	sugar ethanol	
Sunflower	*Helianthus annuus*	biodiesel	
Switchgrass	*Panicum virgatum*	cellulosic ethanol	
Other biomass sources under consideration for advanced biofuels include wood chips, willow, forest slash, and mixed municipal waste.			

SOURCE: National Arboretum "Power Plants," Agricultural Research Service, USDA, 2008

defining the technologies of the future for this industry. Six are under construction or planned for in Bay states: three in New York, two in Pennsylvania, and one in Maryland. Not all are in the watershed.

A collaboration involving the U.S. Department of Energy, Conoco Phillips, and Iowa State University is also developing cellulosic technologies that will use gasification, pyrolysis, and fermentation to produce fuels from corn stalks, stems, leaves, other non-food agricultural residues, hardy grasses and fast-growing trees. In addition to the production of cellulosic ethanol, emerging technology will soon support a wide range of biofuels including biobutanol, renewable diesel, and biogasoline and jet fuel (see Figure 5).

Government grants, loans, loan guarantees and tax credits — coupled with Renewable Fuel Standards (see Sidebar, page 9) and cutting edge research at universities and government labs — are also boosting the development of cellulosic biofuels. The U.S. Department of Energy is investing up to $375 million in three new Bioenergy Research Centers that will accelerate the development of cellulosic ethanol and other biofuels, as part of the national "Twenty in Ten" initiative to reduce U.S. gasoline consumption by 20 percent within 10 years. The U.S. Department of Energy is also investing $385 million for six cellulosic bio-refinery projects over the next four years. When fully operational, the bio-refineries are expected to produce more than 130 million gallons of cellulosic ethanol per year.

The adoption of a low-carbon fuel standard in California to reduce the carbon intensity of the state's transportation fuel use 10 percent by 2020 will further advance the development of cellulosic biofuels. Other states may follow, only furthering the demand.

Positioned to Lead

The Chesapeake Bay region is well positioned to take leadership in this revolutionary shift to greener, renewable fuels, and to enjoy its economic and environmental benefits.

A number of diverse feedstocks can be grown in the Bay region as sustainable crops for cellulosic biofuels throughout the year and transported at low cost to major East Coast energy markets. A large number of universities and research institutes in the region are already working on cellulosic biofuels, and many private companies are willing to partner and develop competitive technologies. This research will not only produce a variety of biofuels such as ethanol, butanol, biodiesel and biohydrogen,

FIGURE 4

Cellulosic Refineries are Emerging in the U.S.

	Commercial Scale	Demonstration Scale	Pilot Scale
Completed	-	2	3
Under Construction	1	3	5
Planning Stage	21	14	6
Total	**22**	**19**	**14**

Commercial-scale biorefineries use at least 700 tons of feedstock per day to produce 10 to 20 million gallons per year of biofuel.

Demonstration facilities use approximately 70 tons of feedstock per day, yielding at least 1 million gallons per year.

Pilot-scale plants are generally smaller and are used to develop new methods and technologies.

Cellulosic Refineries in the Bay Watershed States

Facilities Under Construction			
Location	**Scale**	**Size**	**Feedstock**
Clearfield, PA	Pilot	5 tons/day of feedstock	Wood, agricultural residues
Madison, PA	Pilot	40,000 GY	Cellulosic waste, municipal solid waste
Rome, NY	Pilot	500,000 GY	Wood chips, paper waste
Planned Facilities			
Location	**Scale**	**Size**	**Feedstock**
Lyonsdale, NY	Pilot	183,000 GY ethanol & 5 MGY jet fuel	Wood Chips, willow, low-grade timber
Middletown, NY	Demo	8 MGY	Municipal solid waste
Curtis Bay, MD	Demo	3.5 MGY	Marsh grasses, waste material

GY = gallons/year MGY = million gallons/year

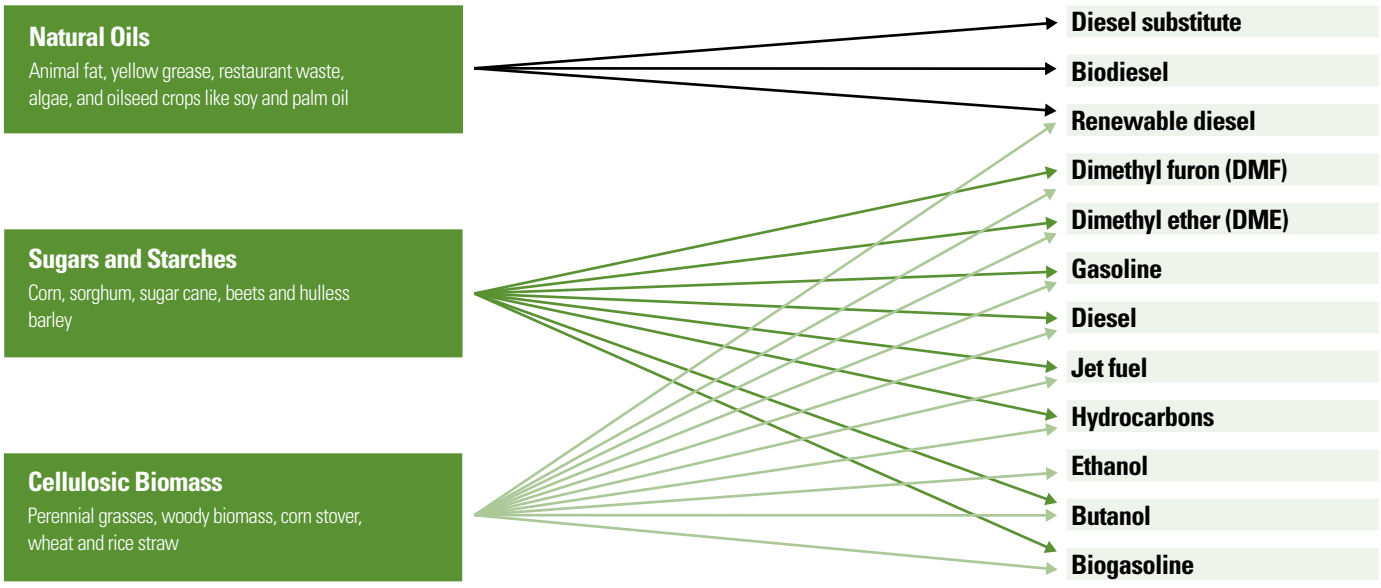
SOURCE: Environmental and Energy Study Institute, July 2008; EESI includes the use of municipal solid waste in their feedstocks for a cellulosic refinery.

but also by-products that will have extra value for use in polymers, animal feed supplements and as substrates in the cosmetic and supplemental nutrient business (see Sidebar, page 13).

Significant additional investment will be needed to commercialize and expand these next-generation technologies, which are not without challenges. Unlike converting corn and other grains to ethanol, cellulosic materials require significant pretreatment or mechanical preparation before the conversion (see Figure 6). Therefore, the capital costs for launching cellulosic production facilities will be higher. Emerging opposition to first-generation biofuels by the petroleum, livestock, poultry and food manufacturing industries could challenge the resolve of the federal government to support the development of next-generation biofuels. This risk is exacerbated by the impact of the global credit crisis, which has caused limited access to capital.

FIGURE 5

Biofuels: Think Beyond Ethanol



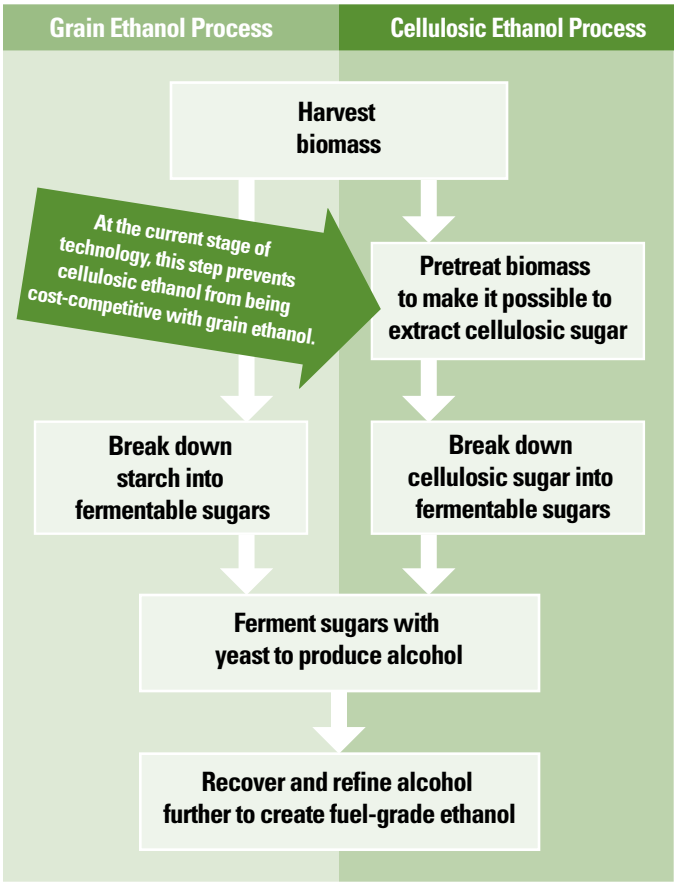
SOURCE: Chesapeake Bay Commission, 2008

Nevertheless, the biofuels sector has benefited from ready access to capital markets, thanks in part to supportive government energy policies. And the cost associated with next-generation start-up facilities has not deterred interest: the potential production volume and significant positive environmental results continue to attract skilled researchers and investors. Overall, the growth of venture capital investments in renewable energy technology has grown exponentially — jumping to $3.4 billion in the United States in 2007 and more than tripling the amount invested two years earlier. On a global scale, investments grew by 60 percent in 2007 and climbed to nearly $150 billion.

Assuming a level of continued investment in the region, the new conversion technologies will create opportunities for crops and woody biomass that can be specifically adapted for growth in the region as biofuel feedstocks, especially on marginal lands not suitable for producing more traditional crops. According to analysis by the Chesapeake Bay Program, at least one million acres of these lands are available in the watershed. Additionally, cellulosic feedstocks lend themselves to the types of best management practices that serve to lower carbon dioxide emissions and mitigate nitrogen, phosphorous and sediment impacts on water quality.

FIGURE 6

Grain-Based vs. Cellulosic Ethanol Production: Moving From Feedstock to Fuel



SOURCE: Chesapeake Bay Commission, 2008

FOCUS Co-Products, By-Products & Residues

Making the Most of an Integrated Bio-refinery

Dr. Tom Richard, Penn State University

A bio-refinery exists to produce fuel. But the decision to launch a bio-refinery — and the ability to make it profitable — may equally depend on the plant's co-products, by-products and residues.

Co-products are jointly and intentionally produced marketable products (for example, lumber and plywood from trees). By-products are ancillary and of considerably less value than the primary products (to continue the example, sawdust). Residues are recovered wastes whose markets are weak and sometimes negative (paper-mill sludge).

These distinctions begin to blur in well-integrated systems, often moving materials up the value chain from residue to by-product or even co-product. Sawdust, for example, was once a waste or residue, but is now a byproduct with increasing value, especially as it is converted to pellets to be burned as an energy source in pellet stoves.

A profitable bio-refinery will need markets for co-products, by-products and residues. When feedstock prices rise or fuel prices fall, income from these products often makes the difference between profit and loss. In fact, sales of some by-products are cited as one of the drivers for ethanol plants now being built in the Chesapeake region. These include dried grains and solubles, which are largely used as animal feed, and carbon dioxide, which supports the food industry by putting the "pop" in carbonated beverages.

Next-generation bio-refineries will generate their own suite of co-products, by-products and residues. Cellulosic fermentation, for example, will produce carbon dioxide and lignin as the primary co-products. That lignin might be burned or gasified to produce heat, power and possibly liquid fuels. Even the residual ash contains minerals such as calcium, phosphorous and potassium, and has value as a fertilizer or admixture for concrete. Microbial biomass, another residue, could be burned, marketed as livestock feed or perhaps used as a fertilizer.

One particularly interesting by-product, derived from a processing technique known as pyrolysis, is the residual char. This char significantly improves soil quality and can be used to recycle nitrogen and other nutrients back to agricultural crops. Recycling char may increase the potential for biomass harvests, while enhancing the long term sustainability of the entire system.

Supporting the research and developing the markets for these types of products not only makes for an efficient use of resources, but may provide investors with a more enticing and profitable entry into the biofuels industry.

The Chesapeake Cellulosic Biofuels Project: A Grand Vision

In accepting its charge from Governor Rendell and the Chesapeake Bay Commission to make the Chesapeake region a leader in sustainable next-generation energy, the Biofuels Advisory Panel developed the following vision statement:

The Chesapeake Bay region will lead the nation in the evolution of sustainable cellulosic and advanced biofuel production.

The words of this statement were chosen carefully. First, "evolution" recognizes that next-generation biofuels are not possible without the utilization of first-generation technologies. Specifically, the Advisory Panel recognized that corn ethanol is a necessary national foundation for the development of infrastructure and markets that will make next-generation technologies commercially viable (see Sidebar, page 15).

Second, "sustainable" refers to environmental, economic, and social factors and has been defined by the Advisory Panel to include practices that result in:

- The reduction in nutrient and sediment loadings to the Chesapeake Bay and its rivers;
- Net energy benefits;
- Net greenhouse gas reductions, both direct and indirect;
- Neutrality or benefits with respect to food security and cost;
- Net social and economic benefit to affected local communities; and
- No net loss of biodiversity and natural resources, including both water quality and quantity.

Third, the reference to "cellulosic and advanced biofuel" highlights the unique potential cellulosic biomass presents to the region, but encourages a flexible approach to policymaking that is favorable to the development of multiple next-generation biofuels.

To achieve its vision, the Advisory Panel adopted a guiding principle and set of objectives which was used to inform all subsequent panel decisions (Sidebar, page 17).

The Listening Sessions

During May 2008, the Advisory Panel of the Chesapeake Cellulosic Biofuels Project reached out to a diverse collection of stakeholders, conducting four listening sessions throughout the Bay watershed. The purpose of the listening sessions was to provide updates on goals, deliverables and timelines, and to obtain feedback on the assumptions,

FOCUS Corn Ethanol

The Foundation for Tomorrow's Biofuels

Nearly all biofuel plants operating in the United States today are producing ethanol by using corn as their primary feedstock. As of July 8, 2008, the Renewable Fuels Association reported that 161 ethanol plants are currently in operation and another 49 are either expanding or under construction. When fully operational, these 210 plants will have the capacity to produce 13.6 billion gallons of ethanol annually, which could displace nearly 10 percent of the nation's transportation fuel. Ethanol production in 2007 was approximately 8.5 billion gallons.

Corn ethanol, however, has faced political, environmental and economic challenges. It has been subject to much criticism for its water quality impacts, net energy benefits and competition with the food supply. The Chesapeake region imports more corn than it produces due to the extensive demand for livestock and poultry feed, so there has been a great deal of concern over the increased cost of corn and the extent to which this is due to ethanol competition. There is also interest is assuring that any augmentation of local corn production does not increase risk to water quality. Bay states must step up their dedication to the aggressive use of best management practices to mitigate the potential for additional nutrient runoff associated with increased corn acreage.

Nonetheless, corn ethanol production remains the foundation of the nation's expanding biofuels industry. While the federal government is investing millions of dollars to accelerate the commercial scale development of cellulosic ethanol and other alternative biofuels, the cumulative investments, research, skilled employees and infrastructure associated with corn ethanol production have created a solid platform for producing large quantities of home grown fuels that stimulate local economies and reduce our dependence on foreign oil.

Corn ethanol also provides a foundation for testing and evaluating new feedstocks, as well as biomass pretreatment and conversion technologies. These critical contributions will aid in the transition to a new generation of transportation and home heating fuels. In addition, many cellulosic ethanol and other next-generation biofuel plants will likely be co-located with existing corn ethanol plants. Much of the infrastructure for storing, processing and transporting feedstocks and fuels is already in place or under construction, thus reducing some of the technological and capital risks associated with cellulosic biofuels.

vision and principles that would serve as the building blocks for the Advisory Panel's recommendations. Collectively, the sessions also proved to be an important forum for establishing and strengthening relationships with stakeholders who will influence the evolution of biofuel development in the watershed.

While each listening session was unique, they elicited five shared perspectives from the participants:

1. *Strong support exists for regional collaboration.* There was widespread agreement that next-generation biofuels will present an opportunity to improve the economic viability of agriculture and forestry in the region, while simultaneously improving water quality and benefiting living resources in the Chesapeake Bay.
2. *Cellulosic feedstocks will soon be in demand.* While market conditions will determine which feedstocks are grown in the region and where, participants in the listening sessions believe that the next generation of feedstocks will include cellulosic materials like corn stover, straw and other crop residues, winter annuals (especially barley and canola), perennial grasses, forest trimmings, wood residues, short-rotation woody biomass crops and municipal waste.
3. *The Biofuels Project should advance cellulosic biofuels as a whole, rather than focusing solely on cellulosic ethanol, and support next-generation conversion technologies that match the region's feedstocks.*
4. *The greatest asset for the development of a biofuels industry in the Chesapeake region is the extraordinary expertise among its many renewable energy advocates.* The intellectual capital demonstrated during the listening sessions shows that the region can create a model for the nation. Our farmers and other renewable energy leaders are committed to controlling nutrient runoff from their lands and understand the implications of crop decisions on the Bay and its rivers. This knowledge is being leveraged to create a regional, diversified portfolio of biofuels that capitalizes on the local potential while optimizing benefits for the environment.
5. *Whatever actions are taken with respect to next-generation biofuels, the results must be economically, socially and environmentally sustainable.* In part, this perspective was a reaction to the recent negative publicity surrounding grain-based ethanol. It was also a reflection of the Chesapeake Bay Commission's report, *Biofuels and the Bay,* which indicated how production of grain-based ethanol crops could use proven management practices to actually improve water quality and the Chesapeake.

Crafting a Regional Roadmap

Drawing on input from the listening sessions, as well as its own expertise, the Biofuels Advisory Panel identified three major areas in which action is required to make this region a national leader in the evolution of cellulosic and advanced biofuels:

Feedstocks: The Chesapeake region is blessed with the land and climate to produce a significant amount of cellulosic biomass. To establish this promising industry, we must assure the production of a large, reliable and accessible supply of biomass.

Natural Resource Protection: As shown in the *Biofuels and the Bay* report, the production of certain biomass crops has the potential to not only sustain water quality but improve it. However, that potential depends on the types of biomass used, where they are grown, and the best management practices that are put into place.

Marketing and Infrastructure: With no existing commercial biofuel plants in the Bay region, there are both opportunities and challenges for production capacity, distribution of feedstocks and biofuels, and marketing of biofuels and their co-products.

We recognize that many of the decisions related to the development of the cellulosic biofuels industry are in the hands of private investors and producers, but the public sector can also play a role in overcoming certain market weaknesses. In fact, our goal of economic, environmental, and social sustainability can best be achieved through the cooperative efforts of both the public and private sectors.

The recommendations below are suggestions for sustainable cellulosic biofuels policies that make sense for this region at this time. Some are best dealt with in the near term, while others set out long-term objectives for the region. Because individual recommendations may address more than one of the above subject areas, they are instead categorized by those actions that require regional cooperation or could be taken within individual states.

Opportunities for state-level policy or legislation appear under both regional recommendations and state recommendations. Specific actions that could occur at the state level and address these opportunities are identified and succinctly summarized in Appendix I.

The following recommendations will not apply equally to all six states, because some states have already taken actions on a few of these recommendations. To assist the states in their policy analyses, a comprehensive list of the current biofuels-related policies of the six Chesapeake watershed states is provided at www.chesbay.state.va.us.

The Panel's Guiding Principle and Objectives

Before launching their effort, the Biofuels Advisory Panel agreed to an overarching principle to guide their work, along with a set of objectives that would execute their vision.

Guiding Principle

It is necessary to support the successful attainment of the Chesapeake Bay region's biofuels goals while simultaneously reducing nutrient and sediment loadings and strengthening the economic viability of agriculture and forestry in the watershed.

Objectives

To accomplish these multiple objectives we will:

- Encourage regional collaboration among research institutions, stakeholders, government agencies and policy makers.
- Advance policies and programs that are economically viable, environmentally sound and socially acceptable.
- Support research to find new alternative biofuels that maximize energy output while minimizing environmental impact.
- Capitalize on the region's unique assets including diversity in technology, intellectual capital, ability to sustainably produce feedstocks and proximity to markets.
- Effectively engage land owners and managers, planners, community leaders and other stakeholders in the development of recommendations.
- Maintain the capacity to produce safe and abundant quantities of food, feed and fiber.
- Efficiently and effectively leverage government resources while encouraging private investment.

FOCUS Algae: Fuel of the Future?

Dr. Jennie Hunter-Cevera, University of Maryland Biotechnology Institute

The Mid-Atlantic region is rich in water, sunlight and carbon dioxide. Unfortunately for the Chesapeake Bay, we are also rich in the capacity to grow algae. However, what has long been the bane of the Bay may one day be an ally in its restoration. Scientists are investigating how algae-based biofuel conversion systems may provide a significant opportunity for future fuel production, much like cellulosic biofuel but with a greater yield.

Research has demonstrated that biofuels produced from algae could potentially supply enough fuel to meet all of America's transportation needs by using a scant 0.2 percent of the nation's land, an area equivalent to that of Maryland. Water, sunlight, nitrogen, phosphorus and carbon dioxide are the basic ingredients to grow algae. Demonstrations have shown that algae may double their volume overnight under optimal conditions and be harvested day after day. The oil produced by algae, up to 50 percent of their weight, can then be harvested and converted into biodiesel. The algae's carbohydrate content can be fermented into ethanol.

Algae crops and conversion techniques may result in a cleaner-burning fuel than petroleum-based diesel or gas. It is conservatively estimated that a properly managed algae growing system could produce from 2,000 to upwards of 5,000 gallons of liquid fuels per acre per year. Current annual crop-based biofuel production is approximately 20 gallons per acre from corn; 50 gallons per acre of soybeans; 150 gallons per acre from canola; and 650 gallons per acre from palm.

There are an estimated 65,000 to 100,000 known algae species. Hundreds of thousands more species may still be identified and cultured. Algae do not require soil and can grow well in brackish water. In the desert southwest, where much of the groundwater is saline and unsuitable for other forms of agriculture, algae can proliferate. Algae require 1/100th of the water per acre compared to other crops, and the carbohydrate and protein elements can be used for other purposes including feed and fertilizer. Algae are low maintenance and their ability to ingest carbon dioxide and excrete oxygen is attractive; it serves as an important means for mitigating the buildup of carbon dioxide in the atmosphere due mainly to fossil fuel emissions.

Using algae as an alternative fuel is not a new idea. Between 1978 and 1996, the U.S. Department of Energy performed algal biofuel research at their National Renewable Energy Laboratory in Golden, Colorado. Field trials with open ponds in California, New Mexico and even Hawaii were performed.

Difficulties encountered included land area requirements, evaporation of water and contamination by invasive plant species and other life forms in the ponds. Ultimately, the oil produced from algae was not economically competitive in 1996, when the price of a barrel of oil was $20.00.

In 2007, in response to the change in oil prices and the call for energy independence, the Energy Security and Independence Act included language promoting the use of algae for biofuels, and triggered a renewed interest in the technology. From Maine to Florida, Virginia to California, Canada to Mexico and overseas, there are government, academic and industry researches working toward a reliable and reproducible source of algae-based biodiesel fuel to meet air and land transportation needs. But there are obstacles to overcome, especially production costs. Algae biodiesel costs have to compete with both traditional petroleum-based diesel and other alternative biofuels. As of yet, no one has demonstrated the ability to achieve this at either a commercial or demonstration scale.

Issues with large-scale algae farms or facilities include "balance within the system." The water needs to be just the right temperature for algae to proliferate. Ponds can become overgrown with unwanted plant and animal species, and atmospheric levels of CO_2 are often not high enough to spur exponential growth. Although algae usually produce more oil when they are starved, they do not reproduce themselves at high rates under starvation conditions. Additionally, ponds have a limited amount of surface area for solar absorption.

Potential solutions include new and novel equipment and structures to begin the widespread mass production of algae; better monitoring tools for quality assurance; and improved harvesting and conversion techniques. Infrastructure costs with regard to equipment and controls are viewed as the biggest obstacle in making algal biofuels affordable and reliable. The bottom line rests on scale-up costs. Can a commercial-scale algae facility produce biodiesel at a cost competitive with petroleum or other biofuel sources?

Solutions are being explored by many different firms using vertical growing systems, bioreactors, solar tubes and flue gas-fed systems, as well as other growing media using effluent and run-of-river systems to reduce the volume or space needed to grow algae. Many more exciting and novel solutions are routinely being tested.

Scientists are even experimenting with growing algae at wastewater treatment plants, including in the Bay region. Turning sewage waste into biodiesel could be a promising means to making fuel while also eliminating a significant contributor to the Bay's water quality problems. The algae could assist in the sewage treatment process by taking up the nutrients in the wastewater so less nitrogen and phosphorus could be discharged to the Bay — and biodiesel could be produced from the algae.

With this significant amount of research activity, algae systems could soon be deployed in a widespread manner. The talent and other resources available in the Chesapeake region, including algae, provide a competitive advantage. Continued mindful investments in ongoing research, establishment of key partnerships, and proof-of-concept production trials on large scale projects are clearly the next steps in making algal biofuel a significant choice for our alternative fuel needs.

Recommendations for Regional Action

1 Coordinate regional action to secure federal funding. New opportunities have arisen in the federal Food, Conservation, and Energy Act of 2008 ("the Farm Bill") and the Energy Independence and Security Act of 2007 ("the 2007 Energy Act"). In addition, the Department of Energy (DOE), via the Energy Policy Act of 2005 and other DOE programs and the Department of Defense (DOD) present significant research and development funding opportunities.

Sections of the two Energy Acts and of the Energy and Conservation titles of the Farm Bill provide opportunities to facilitate the development of next-generation biofuels. But their complexity and funding status as authorizations, mandatory programs and programs needing appropriations all call for ongoing cooperation among the states of the Chesapeake region to assure maximum access and utility of the funds. Bay states should establish a cooperative group to sort through the various provisions and work together to secure funding for biofuels development.

Background: The 2008 Farm Bill provides a wide range of new programs related to biofuels (see Appendix II). Particular focus should be on:

1. The provisions of the Energy Title related to the Transition Assistance Program for farmers, as well as grants and loan guarantees for biomass energy systems that can help close the funding gap for small, first-stage facilities; and
2. The provisions of the Conservation Title related to the Bay watershed, as well as harvest guidelines for cropland enrolled in the Conservation Reserve and Conservation Reserve Enhancement Programs.

In addition to the Farm Bill, there are provisions to assist biofuels development in both the 2005 and the 2007 Energy Acts. The new biofuel-related provisions included in the 2007 Energy Act are summarized in Appendix III. The DOE is dedicated to finding a solution to transportation fuels through cellulosic feedstocks. In addition, the DOD is focused on converting battlefield trash of all types (e.g. shipping pallets, mess hall waste and other refuse) into energy.

The combination of all these provisions needs to be understood and mapped out for the region in a cooperative undertaking by Bay states to most effectively access and support these programs.

2 Coordinate regional input on U.S. Department of Agriculture (USDA) conservation programs to promote sustainable feedstock production and harvest.

States should ensure that areas under USDA Conservation Reserve and riparian buffer programs may be used for biofuel feedstock production where it is possible to guarantee that the conservation purposes of those programs remain in effect.

Background: The growing demand for biofuels and the move to cellulose-based biofuels could potentially result in the conversion of important resource lands to cropland for feedstocks. In particular, there is concern about the loss of lands enrolled in the Conservation Reserve Program and the Conservation Reserve Enhancement Program, as well as lands in use as forest and other riparian buffers under state programs. While it may be possible to combine the use of such lands for some biofuel crops and still meet the goals of conservation reserves and buffers, guidelines for planting and harvest should be clear and compliance assured.

In turn, appropriate use of biofuel crops may provide an added incentive for participation in these programs, thus expanding and enhancing them. States should collaborate with each other and with the USDA to establish guidelines for planting, fertilizing and harvesting feedstocks consistent with the conservation programs when such lands are being proposed for biofuel use.

3 Discourage use of invasive non-native feedstocks.

States in the Chesapeake region should agree to a long-term protocol that discourages the introduction and use of invasive non-native species as feedstocks for the next generation of biofuels.

Background: Some of the species that may come under consideration for use as biofuel feedstocks may not be native to the Chesapeake region and may not have been grown here before to any extent. Given the experience with previously introduced non-native species that escaped cultivation to become invasive, care should be taken to evaluate the potential of a species introduced as a biofuel feedstock to become invasive. Where uncertainty exists, states within the region should collectively agree to withhold public funding for the planting or conversion of these species for biofuels, and to evaluate current regulations for their adequacy to protect against unintended consequences from establishment of these species.

4 Encourage local or on-farm use of biomass.

The use of biomass for combustion and gasification at the local or farm level should be encouraged. This sustainable practice, valuable in its own right for meeting energy goals, also helps build the market and infrastructure for next-generation biofuels from the same types of feedstock.

Background: Considerable progress has been made in the Chesapeake region using wood, switchgrass, straw and other feedstocks for local heating and energy generation through combustion and gasification. Pennsylvania has a program known as Fuels for Schools and Beyond, which works with schools, hospitals and businesses to convert heating systems to such fuels. These are proven technologies with long-term viability. They happen to use feedstocks that hold potential for next-generation biofuels and as such are helping to build the market and infrastructure for expanded production. But they are viable in their own right and should be encouraged so that biofuel applications of the feedstocks are in addition to and not in place of their development.

5 Develop a regional carbon trading strategy that addresses the role of biofuels.

A regional strategy should be developed to maximize opportunities from a federal carbon trading protocol and provide guidance for the role of biofuels in the carbon trading market. The strategy should be advocated to the region's Congressional leaders.

Background: The production of feedstocks for cellulosic biofuels can also help to sequester significant amounts of carbon and reduce greenhouse gas emissions. In a carbon trading market, this ecosystem service could generate carbon credits that would add another significant economic benefit to the region and further the growth of

forestry, agriculture, and advanced biofuels industries. The ability of best management practices to generate marketable credits will also provide incentives for their implementation.

However, these benefits will only be realized if the federal protocol acknowledges the types of carbon and other greenhouse gas reductions likely to be provided by sustainable farming and forestry practices in our region, including the full comparative life cycle effects of biofuel production. The benefits of biomass production and conversion in the watershed must be quantified and clearly communicated to the region's Congressional delegation in order for them to become advocates for the region's capacity to reduce greenhouse gas emissions and to assure inclusion in any federal legislation.

A starting point for Bay states is to develop state-level greenhouse gas registries that quantify all carbon sequestration and emission offset opportunities in the agricultural and forestry sectors, including offsets for the carbon dioxide (CO_2) generated during the production of ethanol. Other potential offsets include the use of CO_2 as a substrate by algae to produce biodiesel, the pumping of CO_2 into greenhouses to promote growth of specialty crops or greenhouse plants, or the sequestration of carbon in large amounts by certain microbes which are then utilized as an additional feedstock source.

6 Coordinate as a region to affect national energy policy.

National policy must establish an even playing field for advanced cellulosic biofuels, and regional leaders should work with their Congressional delegation to ensure this is a priority. Similar work should occur with state legislatures to achieve such fairness in state laws. Particular attention should be paid to even-handed treatment for all fuels.

Background: Much of the debate over biofuels relates to their associated subsidies and tariffs enacted by Congress, most recently in the 2008 Farm Bill and in debates over the future of the Renewable Fuel Standard (see Sidebar, page 9). At the same time, counter-arguments have been made that petroleum, coal and other traditional energy sources benefit from their own set of subsidies, tax breaks and other advantageous laws that must be considered before removing biofuel subsidies.

While the arguments on both sides have merit, this issue needs to be resolved by Congress and state legislatures. This recommendation, recognizing that there are important traditional fuel interests in Bay states, calls for maintaining biofuel subsidies until such time that these fuels become cost effective and can compete in the market place with petroleum-derived fuels.

7 Establish a regional analytical framework for biofuels development.

A regional biofuels analytical framework is needed to estimate how the industry will evolve, with regular updates that address regional feedstock capacities, competing uses, potential limitations such as water supply, economic diversity, infrastructure needs, and the potential benefits to the economy and state revenues. An advisory group of outside experts should be established to support this effort.

Background: Most land use decisions in the region are made by county or municipal governments, whose regulations often do not address biorefineries. Instead, local governments will most likely apply existing chemical manufacturing subdivision regulations, thus effectively preventing biorefinery construction.

Furthermore, nationwide, there is a high level of confusion, disagreement and controversy related to the development of biofuels. This has been illustrated in recent proposals to suspend or roll back the national Renewable Fuel Standard due to the alleged impacts of corn ethanol on food prices. There is no reason to believe that the level of conflict will be any less or the battles any fewer as next-generation biofuels enter the picture, although the primary adversaries may shift from food and feed producers to legacy energy and transportation fuel providers.

This makes it extremely important for decision-makers to be buffered from misinformation and inaccurate claims and to have access to current, accurate information on the actual and anticipated industry conditions. A regional analytical framework should be developed under the guidance of a panel of advisors to provide this level of security, possibly through engagement of a Chesapeake Bay Program Action Team. Because the industry and the global factors that impact it are dynamic, the analysis should be updated as needed to reflect changing conditions. This will provide state executives, lawmakers, investors, farmers and foresters with a common and up-to-date understanding of likely pathways and timeframes, and prevent over-reactions to short-term controversies that affect the biofuels industry.

8 Establish a regional strategy to encourage greater use of higher blends of biofuels.

As higher blends of biofuels become available, states in the Chesapeake region should work with the private sector to maximize their availability and use. The strategy could include incentives and warranties to encourage sales of vehicles that use higher blends, the installation of blender pumps and the guarantee of access to higher blend biofuels along major interstate highways or within heavily-populated areas.

Background: More and more vehicles are being manufactured to use higher concentrations of ethanol and biodiesel, while those fuels are currently widely available at ten and five percent mixes only. In order to help make 85 percent ethanol blends and up to 100 percent biodiesel mixes more reliably and readily available to drivers who can use them, there are a number of steps that could be taken regionally; other state-specific actions are outlined below. A regional strategy would be most useful in encouraging the manufacture and sale of vehicles that can use higher blends, developing blender pump technologies, and establishing biofuels corridors or pump concentration areas. The first such corridor will open this year along I-65 from Indianapolis, Indiana to Mobile, Alabama.

9 Establish regional research priorities for next-generation biofuels.

A regional agenda of research priorities should be developed with the participation of private sector biofuel interests, the regional biotechnology industry, government and the university-based biofuel research community.

Background: There is an ever-broadening research agenda for biomass production and advanced biofuel formulation and processing. While much of this is proprietary work done by investors, there are important issues that can be addressed by a more open collaboration of biotech industries and publicly-funded research institutions. The Chesapeake region has an enviable concentration of biotech companies and university and government research and extension capabilities that should be brought to bear, especially on issues of regional benefit. Key priorities for the Bay watershed consist of Research, Development and Demonstration projects to conserve and enhance natural resources, including:

- Nutrient reduction and carbon sequestration capabilities throughout the biofuels production system;
- Improved varieties of next-generation biomass feedstocks, tested through small-scale trials;
- The potential of algae, manure and urban wastes as feedstocks;
- Effective and environmentally acceptable harvesting and collection systems;
- Integration of best management "systems" for biofuel production from farms and forests;
- Soil carbon models to allow producers to compute how much crop residue can be collected without degrading soil quality;
- Systems and practices for harvesting, collecting, transporting and storing biomass energy feedstocks;
- Estimates of water needs and availability for feedstock production and refining;
- Ability to use acid mine discharge in biofuel manufacture;
- Impacts of climate change on biofuel feedstock production capabilities in the region;
- Increased utilization of distillers grains (assuming local grain-based ethanol production) and other biorefinery co-products;
- Life-cycle analysis of complete biofuel systems;
- Planting of underutilized farmland and reclaimed mine lands; and
- Technology capable of processing multiple and mixed feedstocks into biofuels and by-products.

10 Implement a regional outreach effort to promote next-generation biofuels.

A coordinated regional outreach effort should be established to ensure that the national and worldwide biofuels markets are fully informed about the natural assets and advantages of the Chesapeake region for the next generation of biofuels, namely:

- *The climate and soils to grow a wide diversity of feedstocks;*

- *Great variety in landscapes and land types for growing feedstocks;*
- *An underutilized forest products capacity;*
- *A reliable supply of municipal solid waste;*
- *The potential for refining facilities of all scales located near feedstocks;*
- *Ready integration of biofuel production with animal agriculture;*
- *Close proximity to petroleum blenders and markets;*
- *A thriving biotechnology industry; and*
- *An excellent university-based biomass research infrastructure.*

Background: It was surprising to discover how little investment in advanced biofuels has been made within the Chesapeake watershed, considering that federally supported biofuel crop and refining projects are operating in many other regions. In the future, when advanced biofuels become more clearly profitable for private investment, the region will be in the position to provide a great number of advantages, as set out above. Much of the documentation of these advantages already exists, such as that produced by the Northeast Sun Grant Initiative. A concerted effort is needed to notify potential investors that the region offers excellent conditions for a number of crops and facilities for these new biofuels, including algae, wood-based feedstocks, and municipal waste.

Recommendations for State Action

1 Proactively communicate consistent messages about the benefits of next-generation biofuels, including cellulosic biofuels, and the importance of their sustainable production.

Convey an awareness that biofuels are happening now, and that their development can happen in a way that maximizes the benefits to farmers, foresters, the general public, the state and the environment.

Background: At present, there is a high level of confusion among the general public over the costs and benefits of biofuels and their development. As state policies and programs regarding biofuels are developed and implemented, each citizen deserves a clear statement from state leadership that outlines likely developments, their implications, and strategies that can maximize the benefits and reduce the costs to states and communities.

Because decisions regarding land use, industry investment, and feedstock production are made at the local level, the need for consistent messaging is more critical at the state level than it is regionally. There should be an estimate of the likely scale of development, the impacts on land from next-generation feedstocks, and the effects on communities from investments in refining and transportation.

In preparing these messages, states should draw on the resources of national organizations such as the Ethanol Promotion and Information Council, the National Biodiesel Board, the Renewable Fuels Association, and the U.S. Department of Energy's Clean Cities Program.

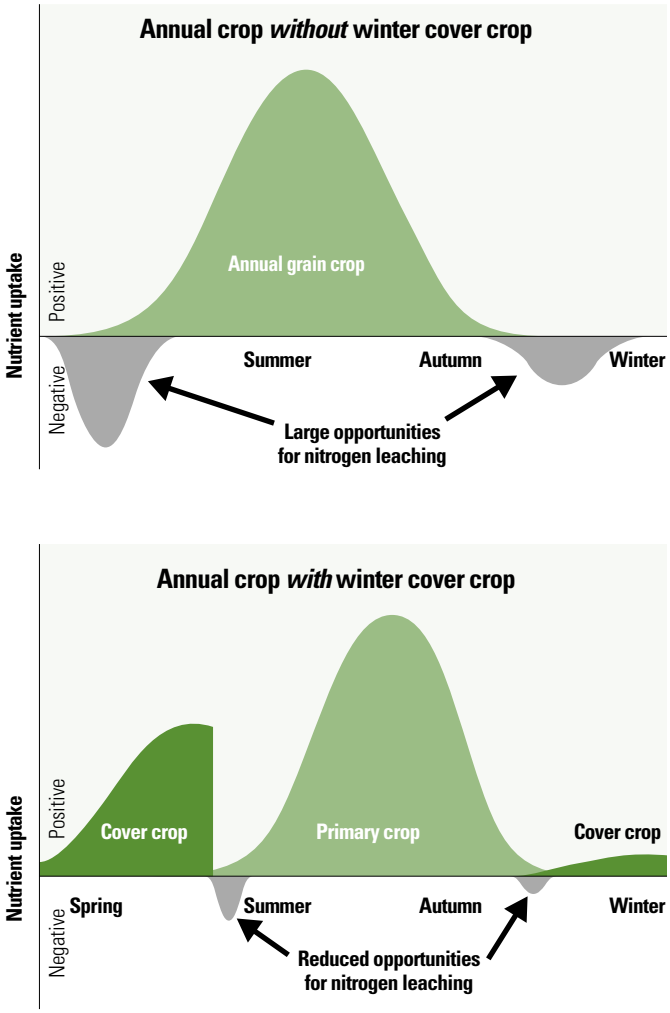
2 Encourage winter biofuel crops as first-generation feedstocks during the transition to advanced biofuels.

Traditional and newly developed winter crops, such as hulless barley, should be encouraged as biofuel crops that support existing combustion, grain-based ethanol and biodiesel technologies. They can also be managed to provide many of the benefits of cover crops, including erosion control and absorption of excess nutrients from previous row crops.

Background: Transition to next-generation biofuels from grain-based ethanol will not be instantaneous, and anything that can be done to augment farm income and reduce environmental impacts in the interim should be encouraged. Two biofuel crops that achieve this dual

FIGURE 8

Maximizing the Potential for Biomass Production and Uptake of Nutrients



SOURCE: Andrew H. Heggenstaller, Iowa State University

goal are barley and canola. Both can be grown as winter crops. If managed to optimize fertilizer efficiency, they can also act as cover crops that reduce erosion and nitrogen leaching from the field (see Figure 8). Barley can be used for grain ethanol or combustion and (eventually) its straw can be processed into cellulosic ethanol. Canola is the most popular crop for biodiesel in Europe. States should work with their Cooperative Extension offices, Conservation Districts and other technical assistance providers to modify programs or develop new programs to help this happen.

3 Assure broad and effective use of best management practices for growing and harvesting feedstocks.

Geographically-relevant conservation best management practices (BMPs) should be established for the planting and harvesting of biofuel crops, including crop residues and forest crops.

Background: Given the possible environmental effects and opportunities presented by converting substantial land areas to cropland for feedstocks, states in the region need to establish systems to maximize nutrient reduction, preserve wildlife habitat and achieve other goals for Bay restoration. Some of these actions will address how land is chosen and crops are grown. Others will focus on the use of fertilizer and other nutrients, while still others will deal with the management and protection of highly erodible land and other sensitive areas.

Each state will need to determine the mix of requirements and incentives to achieve the benefits of these BMPs, recognizing that farmer and forester interest in biofuels production may be an important catalyst for conservation. At a minimum, adequate funds need to be appropriated at the state level and provided by the federal government to establish or expand BMP cost-share programs as well as conservation education and technical assistance support. States should also consider establishing residue management assistance programs designed to help farm and forest land managers and owners properly harvest, store and transport cellulosic feedstocks for biofuel production.

4 Establish or update state removal guidelines for crop residues and forest slash and provide incentives for their adoption.

Crop residues such as corn stover and forest slash hold great promise as feedstocks for cellulosic and other next-generation biofuels, but there are concerns about the effects of their removal on long-term soil quality, erosion control, wildlife habitat and nutrient loadings to streams and the Bay. Consequently, removal guidelines should be established to reflect soil type, climatic conditions and land configuration, among other factors. In cases where existing guidelines were established before the demand for biomass feedstocks was a factor, such guidelines should be updated.

Background: There is a high level of interest over the potential of corn stover and forest slash as feedstocks in this region for cellulosic and other next-generation biofuels. Some corn stover is used for animal bedding and some for feed, but much is left on the field for soil conditioning and erosion control. While stover would make an excellent cellulosic feedstock, these other uses — especially the conservation portion — have caused concern about how much can be safely removed for biofuel production. Studies at Penn State and elsewhere in the watershed have laid the groundwork for these necessary guidelines and would allow significant portions to be removed under most land and soil conditions.

Forest slash (the leaves and branches left behind from logging) is another feedstock with enormous regional potential and presents a more mixed picture. In some areas, such as the pines of the lower watershed, slash is simply burned and adds to greenhouse gases. In the more northerly hardwood areas, slash has erosion and soil conservation values similar to corn stover and also provides good wildlife habitat.

Complementary management practices such as cover crops, rotations and forest thinning may permit higher removal rates, but long-term sustainability of these practices must be assured. Consequently, states should consult with the U.S. Department of Agriculture to set standards for removal that are consistent with local conditions. However, guidelines are not enough. States should also provide incentives for farm and forest landowners to implement the recommended practices.

5 Provide incentives for creating and implementing forest management plans.

The owner of any forest that provides biomass or fast-growing trees for biofuels feedstock should develop and implement a forest management plan. Special and unique forests with important conservation, historic and social value should be preserved from replacement with biofuel feedstocks, including fast-growing trees.

Background: Forests — which currently cover 60 percent of the Bay watershed — are a potential source of biofuel feedstocks from slash, thinnings and timber. Forests also serve important ecological functions, such as filtering nutrients, reducing sediment runoff and providing wildlife habitat. Working forests with sustainable management plans are the best kind of forest for nutrient retention because the trees are healthy and growing.

While proper thinning can enhance forest capabilities for timber, habitat and recreation, the potential increase in demand for timber and forest slash for biofuels may result in unsustainable harvests that could result in ecological harm. In order to allay these concerns, incentives should be in place to encourage implementation of forest management plans in forests used for feedstocks. There is a wide variety of available voluntary management plan opportunities for owners, from formal certification programs managed by forestry associations to state guidance and the web-based Forestry for the Bay program. Overall efforts should be made to preserve existing forests from clearing for biofuel crops.

One key incentive for implementing forest management plans is the ability of forest management practices to generate carbon credits that have market value. This subject is the focus of the Bay Bank initiative, spearheaded by the Pinchot Institute for Conservation.

6 Encourage the sustainable production of next-generation feedstocks on abandoned or underutilized land.

States should encourage the establishment of sustainable, next-generation feedstocks on abandoned lands (such as previously mined or farmed areas) as well as on reclaimed mined areas and other underutilized or lower value lands.

Background: Next-generation biofuels provide many opportunities to make use of abandoned or underutilized land that would otherwise be unproductive. This includes abandoned mine lands, reclaimed mine lands, abandoned farmland, dredge spoil sites and highly erodible lands.

Due to their extensive perennial root structure and ability to grow with limited fertilizer and other inputs, some biocrops can grow well where row crops or even grass pastures are difficult to produce or maintain. Cellulosic feedstock such as warm-season grasses or hybrid trees may be particularly suitable for these lands.

States could further this goal by including biofuel crops as an approved reclamation activity; the use of reclaimed mined land is already allowed under most mining regulatory programs. As lands are reclaimed, however, the programs should encourage the use of best management practices as part of their reclamation oversight. These activities could also be part of a larger effort within states to incorporate low-energy, sustainable development techniques in the mining and reclamation processes.

7 Ensure the nursery and seed industry has adequate supplies of seed and plant stocks.

States should share information about the development of biofuels policy with the nursery and seed industry to ensure that there is an adequate supply of seed and plant stocks to address the anticipated growth of biofuel crops.

Background: The nursery and seed industry is usually responsive to demand for species that need to be grown. However, the pace of development and the wide variety of potential new feedstocks could create unexpected demand and an underserved market. This is especially true of switchgrass and fast-growing trees like poplar and willow. States should work with nursery and seed associations to assure that the latest information from prospective investors is available.

8 Facilitate the production and purchase of biofuels through consumer incentives and infrastructure development.

In order to create a viable biofuels industry, sufficient infrastructure must be in place to deliver feedstocks to refineries and biofuel products to blenders and on to the ultimate consumer. Additionally, states should assist in the development of consumer demand for next-generation biofuels by establishing purchase requirements and incentives that range from internal state policy to public tax incentives.

Background: In order for a biofuel feedstock to have value, it must be able to be delivered to a refinery and ultimately to the consumer as a biofuel product. For cellulosic feedstocks, this will most likely require significant transportation over rural roads and rail lines. Unfortunately for our region, a lack of continued investment in these transportation systems has left them with a limited capacity to serve this emerging industry. Furthering the challenges, transportation of cellulosic feedstock is limited to roughly a radius of 50 miles due to the cost of diesel fuel. This requires consideration of locating a refinery in the center of a mostly rural or forested area uninterrupted by urban settings. Strategic planning and funding for this infrastructure is therefore needed to develop refining potential.

Likewise, in order to purchase biofuels, consumers must have both a reason to choose the biofuel and access to the biofuel itself. There are a number of ways that states are helping to build demand for biofuels. Some require state agencies to purchase flexible fuel vehicles and make use of biofuels in those state vehicles. Others encourage the public to purchase flexible fuel vehicles through vouchers or tax incentives. There are also efforts to increase the presence of biofuels at service stations through blending pumps and corridor programs, as noted earlier.

Some states have also adopted goals for the biofuel content of gasoline and diesel. The simplest of these in Eastern states is to extend statewide the 10-percent ethanol content used in some urban areas to meet air quality goals. Pennsylvania has recently adopted a series of biofuel content goals based on in-state production levels over time.

State incentives should target cellulosic and other advanced biofuels to maximize environmental and social benefits. Legislation establishing state tax credits for installing E85 (an alternative fuel that contains 85% ethanol and 15% gasoline) or blending pumps together with grants to assist in funding pump conversions should be considered. Also, state legislation may be required to overcome exclusivity contracts with petroleum suppliers. Finally, Underwriters Laboratories, as the entity responsible for certifying all fuel pumps in the nation, should be encouraged to prioritize the certification of E85 and blending pumps to accelerate their availability in the market.

9 Utilize state economic development programs.

States should make creative use of their economic development programs to support the development of feedstocks and refining facilities for next-generation biofuels.

Background: Some states outside of the Bay region, have established economic development programs that encourage new business investments in next-generation biofuels, with specific provisions related to agriculture.

The integration of these initiatives with the new programs and funds available under the federal Farm Bill and Energy Acts is especially important. In particular, the coordinated development of feedstock and refining capacities can help overcome the "chicken or the egg" problem of a start-up industry, which requires both reliable source materials and available processing capability.

Although we recommend earlier that states work together on effective ways to use the Farm Bill and Energy Act programs, overall assistance to the biofuels industry

must reflect the full range of programs available in each state. Therefore, each state should develop a strategy for providing a mix of state programs and federal assistance to potential investors. It is especially important to modify these tools to address likely gaps in the life cycle of biofuels from feedstock to conversion to delivery.

10 Focus facility support on small, first-stage operations.

States should give priority support to small, first-stage pilot plants for advanced biofuels.

Background: Both public and private funds for next-generation biofuels tend to focus on research and full-scale operational biofuel facilities. This leaves the start-up stage for new biofuels technologies relatively uncovered. While universities are bench-testing these technologies, states should provide assistance for small start-up plants while urging the federal government to help close this funding gap.

Examples of new state or federal biofuel development tools include loans, loan guarantees and tax credits coupled with standards that establish requirements for biofuel use. States can also reach out to investors and the federal government to match them with universities that have developed promising new technologies. A range of such incentives may encourage investors to sponsor a public/private partnership that can help move biofuels technology from the lab to the market. This critical transition phase, often called "the Black Hole of Commercialization," relies on small, first-stage plants that are firmly in need of funding.

Appendix I

Suggested State Legislative Actions

Appendix I provides suggestions for specific legislation to implement the state recommendations made in this report. Here, the actions are arrayed in five categories that each require a unique set of policy actions to facilitate the transition to next-generation biofuels.

1. Production Incentives

- Establish or increase existing production credits for cellulosic feedstocks so as to offer a larger incentive than grain-based feedstocks.
- Restrict existing production credits to small grain winter cover crops that are native to the Bay region.
- Set incremental state-wide biofuel production goal, either by aggregate mass/volume or percentage of fuel mixture.
- Pay producers a per acre fee (rental fee) to transition field production to cellulosic feedstocks.
- Establish a renewable or alternative biofuel energy grant program for conversion technology, facility construction, or retrofitting of farm equipment.
- Offer effective tax credits to feedstock producers, refiners, and other major stakeholders in the production supply chain.
- Remove any prohibitions on incentives, credits, or subsidies for production of cellulosic ethanol or biodiesel.

2. Infrastructure Incentives

- Establish cellulosic biofuels grant programs for installation of blender pumps at commercial and retail refueling stations — reimburse a certain percentage of installation costs (dispensing equipment, storage tanks, associated piping, etc.), or cost-share up to a certain percentage.
- Establish a competitive biofuels/alternative fuel funding program for municipalities for installation and infrastructure costs.
- Allow for an alternative fuel job creation tax credit or equivalent incentive that provides tax credits for businesses involved in the manufacture of components for Alternative Fuel Vehicles (AFVs), AFV conversions, or the production, storage, or dispensing of cellulosic ethanol as a vehicle fuel.

3. Tax Incentives

- Exempt alternative fuel from state sales tax; authorize municipalities to do the same. Consider limiting exemptions to higher biofuel blends (B20 or above, E85 or above).
- Exempt or reduce personal property taxes paid on AFVs or Flex Fuel Vehicles (FFV).
- Exempt or reduce vehicle excise tax paid on AFV/FFVs.
- Exempt or reduce vehicle registration fees by a certain percentage for all AFV/FFVs.

4. State Fleet Mandates

- Require a certain percentage of state vehicles, or require a certain percentage of fuel used by state vehicles, to use cellulosic ethanol or biodiesel, ensuring that the blend requirement is sufficient (E85, B20).
- Require all new state vehicles purchased be AFV/FFVs, or require state agencies to include a goal to purchase a significant number of AFV/FFVs in their vehicle procurement plans.
- Integrate into agency plans strategies on reducing petroleum consumption and emissions.
- Provide grant funding or cost-share opportunities to municipalities and school systems for purchasing new alternative fuel buses.

5. Natural Resource Protection

- Establish a regional protocol or interstate agreement that bans the introduction or use of invasive non-native species as feedstocks for advanced biofuels.
- Discourage or prohibit public funding or incentives for the establishment or use of invasive non-native species.
- Set regional research priorities to ensure improved varieties of feedstocks and natural resource benefits.
- Establish best management practices that lessen detrimental land-use changes and favor feedstocks that reduce nutrient and sediment runoff and fertilizer use.
- Appropriate adequate funds to establish or expand best management practice cost-share programs, conservation education, and technical assistance support.
- Establish residue management assistance programs to help farm and forestland owners and managers properly manage biofuel production.
- Develop or update removal standards for crop residue and forest slash that reflect soil types, climactic conditions, land configuration, and enhance local ecological function.
- Establish competitive incentives to ensure crop residue and forest slash removal standards are met.
- Require forestland owners to develop, possess, and implement a forest management plan for forests used as advanced biofuel feedstocks.
- Include biofuel crops as an approved reclamation activity on abandoned or underutilized land while encouraging use of best management practices as part of the reclamation process.

Appendix II

The 2008 Farm Bill

Federal programs benefiting biofuels production and the Chesapeake Bay:

Title XV — Trade and Tax Provisions

Tax Credit for Cellulosic Biofuels Production

Establishes a new tax credit for domestic producers of cellulosic biofuels of up to $1.01 per gallon for fuels produced from agricultural waste, wood chips, perennial energy crops and other non-food feedstocks. This tax credit is expected to be worth about $400 million over 10 years.

Title IX — Energy

Biomass Crop Assistance Program (BCAP)

Encourages production of next-generation biofuels by establishing project areas for biomass production and conversion. Pays producers up to 75 percent of costs for crops, plus annual payments to compensate for lost opportunity costs until crops are established and provides cost-share payments for collection, harvest, storage and transportation. All projects must follow conservation or forest stewardship plans. Preference is given for perennial crops and highly energy efficient annual crops, and to preserving natural resources. Uncapped funding, estimated at $70 million.

Rural Energy for America Program (REAP)

Assists farmers and rural businesses with grants for the development of renewable energy technologies, such as biofuels, and to increase energy efficiency. Also, provides loan guarantees for up to $25 million per project. Total funding is $225 million.

Bio-Refinery Assistance

Assists in the development of new and emerging technologies for next-generation biofuels by providing demonstration-scale plants with grants up to 30 percent of costs and commercial-scale plants with up to $250 million in loan guarantees. Total funding is $320 million.

Bioenergy Program for Next-Generation Biofuels

Encourages production of next-generation biofuels by providing incentive payments to producers. Up to 5 percent of total payments can be paid to large facilities with a refining capacity of more than 150 million gallons per year. Funded at $300 million.

Rural Energy Self-Sufficiency Initiative

Encourages rural communities to develop and implement energy self-sufficiency by authorizing grants to develop and install integrated renewable energy systems. Authorized at $20 million.

Repowering Assistance

Increases the market for energy crops by providing grants to existing bio-refineries to produce energy from biomass for plant operations and to replace fossil fuel boilers with new systems that run on renewable biomass. Funded at $35 million.

Biobased Markets Program

Expands the procurement requirements for federal agencies to purchase bio-based products and establishes a voluntary labeling program for producers of bio-based products. Funded at $9 million.

Biofuels Infrastructure Study

Directs the U.S. Department of Agriculture, Department of Energy, and Environmental Protection Agency to jointly study the infrastructure requirements of biofuels production, transport, and distribution. The study will include market trends, availability of feedstocks, water requirements, alternative transportation options, impacts on safety of transportation systems and resource conservation.

Biomass Research and Development

Creates a joint program for the U.S. Departments of Agriculture and Energy to coordinate policies and procedures to promote biofuels and conduct research and development for the production of biofuels and biobased products. Funded at $118 million.

Forest Biomass for Energy

Establishes a competitive research and development program to encourage use of forest biomass for energy. Project priorities include developing processes to use low-value forest biomass for energy production, integrating forest biomass into bio-refineries, new transportation fuels, and improving growth yield. Authorized at $60 million.

Renewable Fertilizer Study

Directs the U.S. Department of Agriculture to study the production of nitrogen and phosphorus-based fertilizer from renewable resources in rural areas. The study will address processes, technologies, cost-competitiveness, and environmental impacts. Authorized at $1 million.

Biodiesel Fuel Education Program

Provides grants to educate the public about the benefits of biodiesel fuel use. Funded at $5 million.

Title II — Conservation

Chesapeake Bay Watershed Program

Addresses resource concerns related to the Bay including improving water quality and restoring, enhancing and preserving soil, air and related resources. Authorized to be funded at $438 million.

Environmental Quality Incentives Program

Provides payments to producers to adopt and maintain agricultural conservation practices and now includes forestry practices such as forest management and fuels management. The program allows for innovative approaches that generate public benefits such as water and soil quality improvements, renewable energy production, and wildlife and open space protection. Authorized to be funded at $7.325 billion.

Conservation Stewardship Program

Creates a nationwide stewardship system of incentives for adopting, improving and maintaining practices to achieve environmental benefits. Authorized to be funded at $1.1 billion in additional funds.

Wildlife Habitat Incentives Program

Provides cost-share assistance to improve and protect wildlife habitat on agricultural, forest and tribal land. Authorized to be funded at $445 million.

Cooperative Conservation Partnership Initiative

Sets aside 6 percent of all conservation program funds for carrying out cooperative projects. Allows states, local governments, conservation districts, producer groups and nongovernmental organizations to develop conservation initiatives that address common natural resource concerns.

Farmland Protection Program

Helps keep land in farming activities by providing funds to purchase development rights. The program has been streamlined to allow for greater flexibility at the local level. Authorized to be funded at $743 million.

Wetlands Reserve Program

A revised procedure for valuing property and a streamlined review process will facilitate enrollment of wetlands acres. Authorized to be funded at $1.3 billion.

Appendix III

The 2007 Energy Bill

Federal programs benefiting biofuels production and the Chesapeake Bay:

Title II — Energy Security through Increased Production of Biofuels

Renewable Fuel Standard (RFS)

Increases the renewable fuel standard to 9 billion gallons in 2008, and expands it to 36 billion gallons by 2022. (See Sidebar, page 9).

Study of Impact of RFS

The National Academy of Sciences will study the impacts of the RFS on other competing feedstock related industries and consider policy options.

Environmental and Resource Conservation Impacts

Directs the U.S. Environmental Protection Agency to study the effects on of the RFS on air quality and other environmental concerns such as water quality, resource conservation issues and the growth and use of cultivated invasive or noxious plants.

Production of Next-Generation Biofuel

Supports next-generation biofuel production through a grant program that gives preference to proposals with the greatest reduction in lifecycle greenhouse gas emissions compared to the comparable motor vehicle fuel lifecycle emissions during calendar year 2005; proposals that do not achieve at least an 80 percent reduction in such lifecycle greenhouse gas emission will not be approved. Authorized at $500 million.

Renewable Fuel Infrastructure Grants

Provides grants for infrastructure development for renewable fuel blends of 10 percent to 85 percent ethanol. Includes technical and marketing assistance and a pilot program to establish refueling infrastructure corridors. Authorized at $1.4 billion.

Biofuel Production Research and Development

Provides grants to universities for research, development, demonstration and commercial application of biofuel production technologies in states with low rates of ethanol production, including low rates of production of cellulosic biomass ethanol. Authorized at $75 million.

Bio-Refinery Energy Efficiency

Provides grants for research and development and commercial applications of cellulosic biofuel technologies and for the conversion of existing corn-based ethanol plants to produce cellulosic biofuels.

University Based R&D Program

Creates a competitive, geographically diverse grant program to support universities in the research and development of renewable energy technologies. No grant will exceed $2 million. Authorized at $25 million.

Biofuels and Bio-Refinery Information Center

Develops a biofuels information repository housing data related to all facets of renewable fuels.

Prohibition on Franchise Agreement Restrictions Related to Renewable Fuel Infrastructure

Prohibits franchise agreements from restricting the ability of stations to sell E85, B20 or renewable diesel, including installation of related infrastructure.

Federal Fleet Refueling Centers

Requires each federal agency to install at least one renewable fuel pump at each federal fleet fueling center by January 1, 2010. Uncapped authorization.

Acknowledgements

Researchers, Writers and Facilitators

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The Coordinating Committee

Our special thanks go to the government liaisons who provided communication back to their agency leadership. The Committee, chaired by Ann Swanson, included Bill Brannon (W.Va.), Robins Buck (Va.), Patricia Buckley (Pa.), Corey Buffo (D.C.), Cathy Bunting-Howarth (Del.), Mark Dubin (CBPO), Peter Freehafer (N.Y.), Patrick McMillan (Md.), Russ Perkinson (Va.), and Chris Rice (Md.). Julie Winters served as our liaison to the EPA Chesapeake Bay Program Office.

Cellulosic Biofuels Project Sponsors

Chesapeake Bay Commission

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- Department of Conservation and Natural Resources
- Department of Environmental Protection via Pennsylvania Association of Conservation Districts, Inc.

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WRITTEN COMMENTS

**Expanding Rural Renewable Energy Opportunities-
Inviting a Dialog with the Public on the New Authorities
of the Food, Conservation and Energy Act of 2008**

September 4, 2008

The Chesapeake Bay Commission is a tri-state (Maryland, Pennsylvania and Virginia) legislative commission focused on implementing effective policy for the Chesapeake Bay. As agricultural and energy policies within the Farm Bill certainly play a significant role in the region's efforts to restore the Bay, the Commission regrets that we were unable to attend the USDA public meeting to present our comments on the new Energy Title programs in person.

In fact, on September 4, together with the Commonwealth of Pennsylvania the Commission co-hosted a Biofuels Summit in Harrisburg. Attached to these written comments please find a copy of our report that was released at the Summit, *Next Generation Biofuels: Taking the Policy Lead for the Nation*. The report contains 10 regional recommendations, together with 10 state recommendations for action to transition the Chesapeake Bay watershed as a leader in the production of next-generation biofuels.

Next-generation biofuels are of paramount importance for the region's energy security, farm sustainability and water quality protection. The Commission's report encourages the production of next-generation biofuels and stresses the importance of regional collaboration, multistate and federal partnerships, and promotes participation in many of the Farm Bill programs.

To ensure success, these new Farm Bill programs must include appropriate levels of technical assistance, education and outreach so that farmers know of the new programs and are able to implement them. This transition assistance is of particular importance with the Biomass Crop Assistance Program and the Forest Biomass for Energy program. Farmers must understand the shift to these new practices and technologies.

Colleges and universities within the watershed states are developing new and emerging technologies for next-generation biofuels. The Farm Bill Energy programs and grant and loan guarantees are exceedingly significant to enable the region to take the next step in constructing demonstration-scale plants and commercial-scale plants for next-generation biofuels production.

Thank you for your leadership and strong commitment to advancing renewable energy sources for the nation. Sustainable production of next-generation biofuels promises great opportunities for the Bay watershed, both economically and environmentally.

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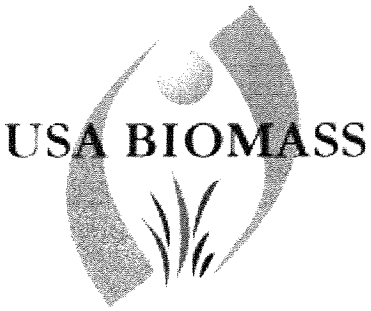

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August 28, 2008

Robin Robinson
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US Department of Agriculture
Rural Development, Business and Cooperative Programs
Room 5803
South Agriculture Building, STOP 3201
1400 Independence Avenue, SW
Washington, DC 20250-3201

Re: Rural Business-Cooperative Service Notice, Public Meeting on Implementation of Title IX, Energy Authorities of the Food, Conservation and Energy Act of 2008

Dear Assistant Robinson:

The USA Biomass Power Alliance ("USA Biomass") respectfully submits the following comments in advance of the September 4, 2008 informational meeting and pursuant to the request for written comments as set forth in the Federal Register.

By way of background, USA Biomass is the nation's leading voice for power generators utilizing biomass. Comprised of approximately 50 members in 20 states, our members provide almost 2,000 MW of renewable capacity to the nation's grid. At a time of increased awareness and importance of renewable energy, our members are the "workhorse" of the renewable power sector, providing reliable, base load power while also reducing greenhouse gas emissions and creating and sustaining rural economies from Maine to California. More information about our members and organization can be found at www.usabiomass.org.

Obviously, we are directly and substantially impacted by any federal program relating to biomass. Our industry is fortunate that both Congress and the Administration have recognized the importance of biomass in the 2008 Farm Bill. Within the Energy Title, our members are affected, directly or indirectly, with almost every section including Sections 9003, 9004, 9005,

9007, 9009, and 9012. However, since other organizations are likely to highlight many of the important issues relating to those sections, we would like to tailor our comments specifically to 9011, the so-called Biomass Crop Assistance Program, or "BCAP."

The single largest cost factor facing our members is the collection and transportation of woody biomass, urban wood, and agricultural wastes from the "field" to the "plant." Almost every national study undertaken in recent years highlights the abundance of the biomass resource in this country. Moreover, removal and conversion of biomass to energy has many benefits, from forest fire abatement to greenhouse gas reductions. The challenge is the cost-effective collection and transportation of the fuel. For a variety of reasons, biomass feedstocks are often located at some distance from the power plant. As diesel prices continue to escalate, our members face dramatically rising fuel costs associated with transporting these renewable fuels. This situation, in turn, creates financial challenges in meeting power purchase agreement obligations and keeping our facilities economically viable.

As we read Section 9011, specifically Section 9011(d), the Secretary must make payments for, inter alia, collection, harvest, storage, and transportation in amounts as set forth in (d)(2)(B). This newly created payment obligation is a critically important benefit to all USA Biomass members.

As part of the public informational meeting on September 4, we would like USDA to address the following questions regarding BCAP:

- When will USDA be implementing rules regarding Section 9011?
- Can our members seek payments now, in advance of the rulemaking? If so, what procedure shall we follow?
- What amount of funds will be available to implement the program?
- Is funding contingent upon a subsequent appropriation?

We appreciate your response to these questions, and look forward to our further participation in this important initiative for our industry.

Sincerely,

Robert E. Cleaves, IV
President and CEO
USA Biomass Power Alliance

September 19, 2008

Submitted via e-mail to: robin.robinson@wdc.usda.gov

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U.S. Department of Agriculture
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Re: Comments on Section 9011, the Biomass Crop Assistance Program (BCAP)

Dear Under Secretary Dorr:

On behalf of the National Sorghum Producers (NSP), we appreciate the USDA's continued support of the domestic production and use of renewable fuels, and we believe that sorghum will continue to be on the forefront of new, advanced biofuels because of its diverse feedstock qualities that allow it to fit into starch, sugar and biomass renewable fuels production schemes. Thank you for holding a public meeting and seeking public input on how to implement Title IX of the Food, Conservation and Energy Act of 2008 (Farm Bill).

The National Sorghum Producers is a national commodity organization that represents sorghum farmers throughout the United States by promoting research, education on sorghum issues, and working on legislative issue like this. We have been actively involved in supporting research on sorghum for use as an advanced biofuel and for educating not only private industry, but the federal government on the benefits of sorghum within this industry and the diverse nature of this crop that can play a vital role in our nations move towards a more secure and independent source of fuel.

We encourage USDA to implement all of its Energy Title programs in a consistent and uniform manner with biofuels programs authorized in the Energy Independence and Security Act (EISA) of 2007 (P.L. 110-140). Consistent implementation will simplify procedures for use of USDA's and the Department of Energy's renewable fuels programs. We believe uniformity should be a top priority for implementation of the Energy Title.

In regards to Section 9011 (BCAP), the NSP strongly encourage the Department that all Title 1 crop residues, for example grain sorghum stover, be included in the program. We support the USDA working with bioenergy companies to bring cellulosic and other biomass conversion technologies to the market in a timely and efficient matter. Currently, many of our sorghum forages are eligible for LDP payments; however, the FSA has published, through its LP-2022

Notice a list of those sorghums that are ineligible for LDP payments. If Title 1 crop residues are in fact ineligible, then the Department needs to ensure that sorghums that are ineligible for LDP payments are eligible for program support under BCAP.

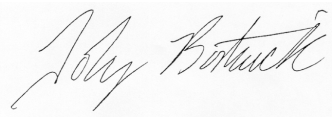
NSP believes that sorghum can be a significant and profitable cellulosic feedstock. For example, research recently released by Texas A&M shows that some forage sorghums can produce up to 60 tons (wet) per acre on one-third the water of other starched based forage crops. Several of our hay-type sorghums and forages are currently on the market and that exceed the tonnage estimates of many of the proposed perennial feedstocks. Cellulosic processing plants are very interested in high yielding, lower water using cellulosic feedstocks.

While BCAP encourages planting of perennials, establishing a perennial to produce the volume need in a timely manner for a cellulosic plant will be difficult. There are several hurdles that perennial crops must overcome in order to be a viable biomass feedstock. Some of the issues facing the perennial feedstocks are a lack of seed industry to supply seed stock for planting the required acres to meet our energy demands, lack of agronomic research to support planting, harvesting, and storage of the crops, and little research on plant diseases and insects that may impact yield potential. For this reason, we encourage USDA to provide equal focus on annual crops as an important component of the overall biomass feedstock needs for the country. In the sorghum belt, Abengoa is building a cellulosic plant in Kansas. We believe that annual crops can help provide immediate feedstock for that processing facility when it is needed. Contracting with farmers to produce a crop that they are familiar with the production, harvest, storage, and transport of makes good business sense for our members and, we would think, for the future of a cellulosic processing facility.

Although the law excludes land currently enrolled in CRP, we feel it is critical for the successful establishment of energy crops that this program supports the pro-active and sustainable conversion of CRP acres into eligible land under this program. Back in the mid 1980s, sorghum acres declined from 18 million acres to approximately 9 million by 1993. Most of this land was enrolled into the CRP program. NSP supports CRP and encourages producers to put fragile and very marginal lands into the program; however, we strongly believe that many of these CRP acres could be successfully brought back into production in support of our need for renewable feedstocks for cellulosic or other biomass conversion technologies. There are several benefits for using some of these CRP acres and these include: once CRP contracts have expired, these acres are no longer considered CRP acres and therefore they should be considered for BCAP; for producers who want to convert CRP land to this program for economic reasons, the benefits would be similar; for those acres coming out of CRP and that can't be re-enrolled because of oversubscription, this would provide an opportunity for producers to establish these acres for biomass feedstock production; and, any acres converted from CRP to BCAP would reduce the cost of CRP. Sorghum would play an important role in restoring these acres to productive agricultural lands for use in biomass feedstock production.

Again, we thank you for this opportunity to submit comments in relationship to Section 9011 of the Farm Bill and look forward to our continued working relationship with your Department as we work to educate the industry about the benefits of sorghum as an advanced biofuel. Please feel free to contact me or the office if we can be of further assistance.

Sincerely,



Toby Bostwick
Chair
National Sorghum Producers

9011

1. Sustainability—provides income to producers to plant, wildlife conservation Harvest after nesting habits, Water quality.
2. No—promote high energy crops, sterile Miscanthus, ragweed, seed producing straws and other cellulosic sustainable plant waste.
3. Net energy produced, CO2 reduced
4. Provided a reviewed CPA audit
5. None

I appreciate the ability to comment. I would like to write supplementary comments in October.

Sincerely,

Steve Flick

Chairman of the Board

Show Me Energy Cooperative

P.O. Box 177

Centerview, MO 64019

Phone: 660-656-3780

Comments on Title IX, Section 9011
Biomass Crop Assistance Program (BCAP)

Western Organization of Resource Councils
Randy Joseph, Chair
220 South 27th Street, Suite B
Billings, MT 59101
406.252.9672

Dakota Resource Council
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Dickinson, ND 58602
701.483.2851

Northern Plains Resource Council
220 South 27th Street, Suite A
Billings, MT 59101
406.248.1154

Thank you for the opportunity to offer ideas and suggestions at this early stage of the rulemaking process. The Western Organization of Resource Councils was instrumental in advocating for this section of the Farm Bill, and we offer specific guidance for ensuring that this important renewable energy program be designed to optimize the benefits to rural communities and economies, significantly advance sustainable renewable energy supplies while maximizing reductions in greenhouse gases, and provide the greatest possible net energy gains for renewable liquid fuels.

Our members are farmers who are very interested in providing sustainable biomass through the establishment of perennial crops. Second generation ethanol presents a rare opportunity to significantly increase the nation's energy security and independence, bring value to rural communities and agricultural producers, and reduce the carbon footprint of our transportation fuels, if done properly. As the Dept. of Agriculture begins to implement this legislation, here are some elements to incorporate into the process to ensure that the new BCAP program lives up to its potential.

Farmers as Owners and Regional Pre-Processing

One of the specific selection criteria that Congress incorporated into Section 9011 is the opportunity for producers and local investors to participate in the ownership of the biomass conversion facility. In order to advance the possibilities for local ownership, we urge the Secretary to develop rules which would allow for the development of biomass pre-processing centers where farmers can cooperatively pre-treat and convert biomass into appropriate feedstocks for larger biorefineries. This model of distributed processing would strengthen the position of farmers in the biorefining supply chain and would enhance the likelihood of benefits accruing to producers and rural communities as advanced biofuels become a reality. (Please refer to "Technical and Financial Feasibility Analysis of Distributed Bioprocessing Using Regional Biomass Pre-Processing Centers"

by Joseph E. Carolan, Satish V. Joshi, and Bruce E. Dale in Journal of Agricultural & Food Industrial Organization, Vol.. 5, Article 10, 2007)

Emphasize a Diversity of Biomass Feedstocks and Production Approaches
Because the production of liquid fuels from biomass is in its infancy, we strongly encourage the Department to develop rules that are broadly inclusive of a variety of feedstocks, and regions, as this new industry gets established.

Hardwire the BCAP Program to Foster Sustainability, Net Energy and Greenhouse Gas Reductions
Much of the impetus for second generation biofuels comes from the growing awareness and consensus that competition for land between food and fuels must not be a major factor in the marketplace, and that the relatively lower net gains in energy and in greenhouse gas reductions implicit in corn based ethanol as currently produced must be displaced by more efficient and climate friendly approaches to renewable liquid fuels. In the few months which have elapsed between passage of the 2008 Farm Bill and the beginning of rulemaking, market forces and public reaction to energy and food prices have combined to underscore the importance of these considerations in selecting biomass crops for assistance.
The long term viability of second generation biofuels hinges on its credibility as a truly low carbon fuel.

Emphasize Low Input Feedstocks
A key to minimizing the lifecycle greenhouse gas emissions from perennial biomass feedstocks will be to focus on those that require low inputs. Research by University of Minnesota Regents Professor G. David Tilman has found that Low Input High Diversity (LIHD) plots were, on average, 238% more productive than monocultures, including switchgrass. These LIHD plots also removed highly significant amounts of carbon dioxide from the atmosphere and sequestered the carbon in the soil. Biofuels produced from LIHD biomass have a double advantage with respect to greenhouse gases, because producing them sequesters carbon in soil and using them offsets greenhouse gas emissions from fossil fuels. Utilization of native prairie plants has the additional advantage of demonstrating over decades sustainable annual hay yields without irrigation, fertilization, herbicides or re-planting.

State of Wisconsin
Jim Doyle, Governor

Department of Agriculture, Trade and Consumer Protection
Rod Nilsestuen, Secretary

September 15, 2008

Thomas C. Dorr
Under Secretary for Rural Development
U.S. Department of Agriculture
Attention: Robin J. Robinson
Room 4231
1400 Independence Avenue, SW
Washington D.C.

Dear Under Secretary Dorr:

Thank you for the opportunity to provide written comments and input into USDA's rulemaking process for the programs authorized under Title IX (Energy Title) in the Food, Conservation, and Energy Act of 2008 (Farm Bill).

I applaud your leadership in this area of USDA in promoting rural economic development and energy independence through existing programs and ask for continued support of the tremendous opportunities to expand these efforts with the programs and funding in the new Farm Bill provisions. It is critical that your agency be diligent in making sure that the path to energy independence foremost benefits rural communities and its residents, agriculture cooperatives and small businesses and entrepreneurs working in rural areas.

Foremost among sections of the energy title provisions that can serve as a catalyst for new jobs and businesses among agriculture, forestry and related sectors is the Biomass Crop Assistance Program (BCAP) found in Section 9011. The U.S. Congress clearly recognizes that our "working lands" of agriculture and forestry can be the source of a critical portion of biomass for energy, fuels and products of the future. The challenge is to build onto the existing infrastructure to create the necessary biomass growing, harvesting, aggregation, collection, short-term storage and just in time deliver of to end users.

Below are some responses to the questions circulated by USDA relative to Section 9011 Biomass Crop Assistance Program and Section 9003 Biorefinery Assistance Program

Section 9011- Biomass Crop Assistance Program

1. *The conservation and environmental impacts of a proposal are among the mandated selection criteria. Be that as it may, what conservation and environmental protection measures should be required for crop production and harvesting on BCAP acreage?*

Response: Call for sustainable agriculture and forestry management using the current best management practices.

Implement an incentive schedule. Example: Assuming rental and crop establishment payments are provided for each acre/hectare enrolled. At, and after, time of harvest, continue making rental payments on that portion of the enrolled land that is not harvested for sale to a bioenergy customer and remains standing on the land as habitat and/or erosion control. This approach will provide the producer a set of metrics that they can use in determining their own stewardship practices. Perhaps the rules should consider an escalating payment schedule that rewards harvesting less and keeping more, up to, say, 20% of enrolled land. Allow the landowner to decide what section of the land to not harvest. Again, that land that is most difficult to harvest will likely be set-aside and, in practice, such areas are often most valuable for erosion control and habitat. Also, recognize the fundamental agronomic differences between perennials and annuals. Perennial crop production will necessitate that a residual remains above the ground and the roots in the soil. This condition is necessary for future year production, and guarantees soil protection from both water and wind erosion.

Require existing conservation program requirements for annual/bi-annual crops (crop residual remaining on ground, conservation tillage, etc.)

2. *Should BCAP allow only native plantings on eligible acreage?*

Response: No

3. *For the purposes of ranking and selection proposed BCAP Projects, what criteria should the Secretary consider in addition to the eight (listed below) mandated by the Food, Conservation and Energy Act of 2008?*
   a. *The volume of the eligible crops proposed to be produced in the proposed BCAP project and the probability that such crops will be used for BCAP purposes.*
   b. *The volume of renewable biomass projected to be available from sources other that the eligible crops grown on contract acres.*
   c. *The anticipated economic impact in the proposed BCAP project area.*
   d. *The opportunity for producers and local investors to participate in the ownership of the biomass conversion facility in the proposed BCAP project area.*
   e. *The participation rate by beginning or socially disadvantaged farmers or ranchers.*
   f. *The impact on soil, water, and related resources.*
   g. *The variety in biomass production approaches within a project area, including agronomic conditions, harvest and postharvest practices; and monoculture and polyculture crop mixes.*
   h. *The range of eligible crops among project areas.*

Response: Additional criteria/guidelines:

i. Demonstration and sharing of off-take contracts

j. Tract record, competence and performance guarantees of technology venders, EPC and construction firm of biomass conversion facility(s)

k. Allow biomass production incentives and subsidies to also be provided to producers who lease land for production not only for the land owner/producer.

4. What evidence should the Secretary use to determine that biomass conversion facilities not yet operational at proposal submission have sufficient equity available?

Response: Independent evaluation of financial feasibility by established firm, preferably by a bonding, debt or other credit analysis firm

5. *What level of reduction in annual payments to BCAP producers should be required when biomass is delivered to an energy facility, and/or when a Collection, Harvest, Storage and Transportation Payment*

Response: Incorporate evaluation of off-take contracts into criteria. Strongly advocate limiting, or even elimination, of direct payments to producer for biomass shipped to market (e.g. the proposed matching payments of $1 for every $1 per ton paid by the bioenergy conversion customer). Instead, consider the following:

1. Land rental payments (e.g. CRP style) for crop establishment period
2. Cost sharing or full cost recovery for establishment of crops, including post establishment management practices prior to time of first harvest.
3. Continue rental payments, and post establishment payments on that portion of enrolled land NOT harvested, but retained for erosion control and/or habitat (See comment to Q1, Section 9011).
4. Allow market forces to determine price/ton. Markets will reward those producers who manage for Btu content. Require off-take contract with biomass conversion facility to incorporate pricing system that indexes competing fossil fuel prices (e.g. natural gas or coal)
5. Give higher weight (scoring scale) to those projects in which the off-take contracts are fully transparent in the incorporation of all related and qualified for renewable energy credits, carbon offsets, energy investment tax credits, etc. In other words, reward those projects where the biomass conversion company shares the environmental incentives with the biomass producers.

Section 9003 – Biorefinery Assistance

1. The terms “biorefinery” and “advanced biofuel” have broad definitions. Should the definitions be narrowed for the purposes of Section 9003?

Response: No, broader is better. Make certain that all types of biomass conversion facilities are included in the definition, including the most basic forms **(pelletizing, chipping, drying, etc.)** of facilities. Recognize that having an existing facility be economically viable (“going concern”), with experience in markets, supply and operations, will provide a population of firms that will be in a position to adopt emerging technologies that benefit their own situation and competitive opportunity. Not all bio-refineries will be converted pulp-paper operations, grain ethanol, bio-diesel or cellulosic liquid-fuel facilities. Many bio-refineries may be most profitable by operating as pre-processing or pre-treatment facilities, which extract various components from the raw feedstock and then transport

those materials for additional refining/conversion at a larger scale operation. This sort of industry model may evolve primarily as a reflection of the high cost of transportation (incentive not to move water, incentive to densify Btus, etc.).

2. Do you have comments on how the following should be defined? " Biorefinery", "Advanced Biofuel" "viable commercial scale operation", "technical and economic potential for commercial application", "Co-product", "byproduct", "established market", "potential market", "local ownership", "area" (in terms of the location of like facilities), "demonstration project", or "viable commercial scale operation".

Response: Add: "demonstrated history of modular expansion of technology" to list. Define this as technical proof that the conversion technology has been successfully tested and implemented beyond "bench-top" or "pilot-scale" experiments AND that the technology vender has a tract record of not just developing a static size of capacity but also has a history of successfully, expanding the operational capacity of the conversion facility (modular expansion).

3. What information will benefit lenders in terms of financial and activity performance reporting?

Response:

1) Gross profit margin(GPM)/unit output(UO), both with and without direct labor costs
2) Operating profit margin(OPM)/UO, both with and without direct labor costs
3) Total project capital employed/UO
4) Construction capita employed/UO
5) Off-take and supply pricing assumptions. Distribution and supply chain descriptions.

4. Should eligibility for this program be open to entities with broad international ownership?

Response: Preference should go to domestic ownership business and exceptions should only be if project is done with majority direct business partners located in the U.S. and/or states applying for funds.

5. Should the guarantee be available only to regulated lenders or open to non-regulated lenders?

Response: Absolutely, Yes.

6. Other than the technical and economic elements, what should be included in a well documented feasibility study and who would you consider a qualified preparer? Who should review the feasibility studies, and what should be the expectation for turn-around time?

Response: (Items to be included in feasibility study)

1) Supply system assumptions
2) Existing markets and pricing history for biomass, if any
3) Pricing models and model contracts, both for off-take and supply
4) Inclusion of renewable energy incentives and carbon offsets in supply contracts
5) Qualifications of Engineering, Procurement and Construction Management firm (EPC)
6) Identification of off-take markets/customers
7) Energy and Mass Balance process flow designs/flow charts
8) Risk management plans and policies (facility, technology, off-take and supply), including performance guarantees from technology vendors and/or EPC

Response: (Review & Turn-around time) Regionally based technical advisory committee, with significant participation by commercial lenders active in this industry. 30 day turn-around.

7. What level of qualifications should those preparing Technical Reports or Environmental Reports be required to have? Should associated costs be considered pre-loan eligible costs? Should specific statutory scoring criteria carry more weight than others? In addition to the scoring criteria, should the Agency consider other evaluation criteria?

Response: (Qualifications for preparing Tech & Env. Reports) Professional Engineering firm with acceptable statement of qualifications and/or tract record in evaluating similar (biomass or energy) projects

(Pre-loan cost treatment as eligible costs) Yes

(Statutory criteria carry more weight) Yes

8. What is the best way for an applicant to identify its ability to address the purposes of the program in terms of anticipated impact on resource conservation, public health, and the environment, and the potential for rural development? How should actual impact be measured and reported?

Response: (Demonstration of anticipated impacts and monitoring) Utilize a Citizen's Advisory Group in review process. Also, require substantial documentation of project's expected market share of regionally produced raw material resources. Encourage joint development agreements between project developer and affected local governments, regarding monitoring, impacts, conflict resolution and mitigation.

9. What consideration should be given to projects using low-value feedstocks that will adversely impact other local or non-local industries using like feedstock?

Response: Market forces may determine.

10. Do you have opinions, concerns or suggestions regarding loan terms and conditions such as equity requirements, guarantee fees, percentages of guarantee, or timing of the issuance of the Loan Note Guarantee?

Response:

Demonstration project – 25% equity, 75% debt, 75-90% guarantee
Initial commercial scale project – 30-35% equity, 70-65% debt, 75-90% guarantee
Full-scale commercial project – 40% equity, 60% debt, 75-90% guarantee

I would be very interested in discussing any of these suggestions in greater detail.

Sincerely,

Gary Radloff
Director of Policy and Communications
Wisconsin Department of Agriculture, Trade and Consumer Protection

NATIONAL WILDLIFE FEDERATION®
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Washington, DC 20036
(202) 797-6800
NWF's mission is to inspire Americans to protect wildlife for our children's future

September 19, 2008

Robin Robinson
Office of the Administrator
USDA Rural Development, Business and Cooperative Programs
Room 5803, South Agriculture Building, Stop 3201
1400 Independence Ave., SW
Washington, DC 20250-3201

Dear Ms. Robinson,

Thank you for the opportunity to provide these comments on behalf of the National Wildlife Federation (NWF), in response to the "Notice of a Public Meeting on Implementation of Title IX, Energy Authorities of the Food, Conservation and Energy Act of 2008" (73 Fed. Reg. 50302). Addressing global warming is the top priority of the National Wildlife Federation. Therefore, we have a strong interest in promoting next generation bio-energy that is sustainable and results in greatly lowered greenhouse gas emissions. We currently serve on the Council for Sustainable Biofuels Production, which is seeking to develop a certification scheme for sustainable bioenergy production. We are also interested in promoting on-farm opportunities for energy savings and carbon sequestration. While these comments will focus on the Biomass Crop Assistance Program, we look forward to working with the Department throughout the rulemaking process and implementation of all Title IX programs.

NWF has examined the issues surrounding next generation biofuels/bioenergy in some depth, especially as they relate to wildlife and sustainability. We worked for nearly two years with industry, academics, nonprofits, and legislators to develop and advocate a framework for a landowner assistance program for bioenergy in the Farm Bill that met the needs of next generation energy companies, farmers, and foresters, as well as wildlife and the environment. Although the Biomass Crop Assistance Program (BCAP) was not all we had hoped for, we believe that it will go far in enabling USDA to begin assisting landowners in growing the feedstocks needed to fuel next generation bioenergy facilities.

Since the final program did not include funding for interested landowners to develop and organize producers into projects for participation in the BCAP, we hope that USDA will utilize all resources at its disposal, including Cooperative Extension, Rural Development, Forest Service, Farm Service Agency and Natural Resources Conservation Service Staff to help foster the development of these projects. We hope that the Farm Service Agency will also take

advantage of the expertise of all of these agencies, along with the U.S. Fish and Wildlife Service, Department of Energy, and the Environmental Protection Agency in designing and implementing Title IX programs. Our comments on USDA's implementation of BCAP are included below.

Sustainability:
It is critically important to the long-term viability of the biomass energy/fuel industry that their practices be sustainable. This fact was recognized by Congress and the legislative language of Section 9011 includes "the impact on soil, water, and related resources" among the selection criteria for participation in the program. The Manager's summary further explains that they "intend that the use of 'soil, water and related resources' under this section includes wildlife-related concerns. (page 233)" Further, the minimum terms of contracts under the BCAP program include "the implementation of (as determined by the Secretary) – (I) a conservation plan; or (II) a forest stewardship plan or equivalent plan," and the Manager's summary further stresses that "contracts include resource conservation requirements (page 233)." In order to meet the requirements of the new Renewable Fuels Standard in the Energy Independence and Security Act of 2007, cellulosic biofuels will need to achieve a 60 percent full life cycle reduction in greenhouse gas emissions over conventional fuels and meet certain land use requirements. Together, these requirements will have implications for what lands, feedstocks, inputs, and management practices are used in producing bioenergy feedstocks.

Land Eligibility: Setting standards for what lands are eligible for enrollment in the BCAP program will be especially important to meeting both "soil, water and related resources concerns" and life cycle greenhouse gas emissions reduction targets. Lands that were native sod as of enactment of the statute are appropriately made ineligible for inclusion in the program (they would also be ineligible under the RFS). Yet due to the potential for displacement of food crops to newly broken areas as a result of BCAP enrollment, we encourage USDA to consider priority enrollment of lands that are the most marginal for food crop production and those that have been abandoned for such purposes.

While the managers make clear that they "intend that nonindustrial private forestland be included as 'eligible land' in a BCAP area," they also "encourage the Secretary to consider the most suitable use of the land and encourage the maintenance of native forests and late successional forest stands and discourage the conversion of native forests to non-forest use. (managers summary, page 233). We encourage USDA to take the manager's direction on this issue in order to protect soil, water, wildlife and biodiversity, as well as minimizing greenhouse gas emissions brought about by land use changes. Specifically, NWF suggests that USDA take into account the following sustainability considerations in selecting and developing contracts for BCAP projects on forested lands:

- Projects that rely upon the conversion and clear-cutting of mature standing forests and forested wetlands for dedicated biomass crops should be ineligible for any support under the BCAP program. Under limited circumstances, especially where non-native species are a problem, conversions may be a necessary silvicultural tool to bring a forest into a more natural condition.

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- The ability of forests to provide biomass is highly dependent on forest type and the intensity of removals. Particular attention must be paid to soil disturbance, nutrient cycling, and provision of deadwood for wildlife habitat. Public harvesting standards (e.g. such as the state of MN) or third-party certification systems (e.g. FSC) can ensure a proper balance between forest ecology and biomass removal.

- Many forest-derived biomass feed stocks such as wood chips, wood pellets, and roundwood can be used in efficient thermal combustion systems to generate heat and power. Combined cycle (CHP) systems are most desirable at scales which do not create undue pressure on the forest resource or negative carbon balances from the processing and transportation of biomass fuels.

- Where possible, commercial and institutional biomass energy facilities should move towards securing "dedicated" biomass supplies (a closed loop system) to ensure accountability in procurement, forest sustainability, and net carbon benefits. In the absence of a dedicated supply, clear fuel procurement guidelines should be developed which emphasize harvesting supervision from a registered forester and the role of forest management plans in determining safe removal levels. (The reliance on wood and wood waste from land clearing, for example, is not "renewable.")

- Woody biomass energy plantations should be developed only on sites and soils that support such a use. Priority landscapes that are suitable for such plantations are previously degraded agricultural lands and which utilize native species. Particular attention should be paid to the scale and layout of the plantation in terms of landscape biodiversity and environmental impacts. Guidance on these issues can be found in NWF's 2006 report *The Possibility of Plantations (attached)*.

Feedstock eligibility: While we believe that USDA should allow all native perennial species that do not have the potential to become invasive or noxious to be eligible for assistance under the BCAP, we believe that those projects that propose to utilize mixtures of natives be given a higher priority for enrollment and higher levels of cost share and annual payments. Research published in the world's leading scientific journals has shown that highly-diverse mixtures of native perennial plants receiving little or no fertilizer and pesticide outperform monocultures[1,2]. Favorable treatment of mixtures is further justified by the low level of research on implementation and development that has gone into utilization of these crops to date (compared to that dedicated to monoculture feedstocks such as switchgrass), despite their potential to sustainably produce renewable biofuels that maximize net energy gain and greenhouse gas reductions, while also providing improved water quality, wildlife habitat and restoration of soil fertility.

Annually harvested high-diversity mixtures of native prairie plants have an advantage in that they maintain themselves without inputs. Published studies show that annual nitrogen fertilization rates of 45 to 90 lbs/acre are needed to get high monoculture switchgrass biomass yields[3] Look on the web for Woodson County, Kansas, the self-proclaimed Prairie Hay Capital of the World. Agricultural records show that its native prairie has had sustainable hay yields for more than 70 years without any irrigation, fertilization, herbicides or re-planting. Low input,

high diversity plantings require no nitrogen inputs because legumes provide all the nitrogen needed. Nitrogen fertilizer is both economically and energetically expensive. Large amounts of greenhouse gases are released when it is made, and a potent greenhouse gas (nitrous oxide) is emitted when it is applied to a field. Moreover, nitrogen fertilizers can lead to pollution of groundwaters, rivers and the ocean.

Another benefit of low-input high-diversity mixtures of native prairie plant species is that they grow well on infertile soil. This would allow us to keep more of our fertile lands in corn, soybeans and other food crops. It would also mean that there would be less conversion of native ecosystems around the world to cropland to grow the grains that we no longer exported. This would be a significant greenhouse gas benefit because land clearing, such as of Brazilian rainforests, releases immense amounts of carbon dioxide into the atmosphere.

While the BCAP program does allow for enrollment of annuals, the manager's summary makes clear that such annuals should be limited to those that "show exceptional promise for producing highly energy-efficient bioenergy or biofuels that preserve natural resources…" (p. 233). It would be rare to find an annual feedstock that could show such promise as an energy feedstock that the energy involved in replanting and maintaining such a crop would be sufficiently offset as to show a 60 percent (or even 40 percent) reduction in life cycle greenhouse gas emissions. When impacts to natural resources, such as runoff of pesticides, herbicides, and fertilizers, are considered, such feedstocks are not likely to measure up. Native perennials will, in nearly all instances, prove superior in terms of energy efficiency and sustainability.

NWF believes that the BCAP program is best focused on providing support for the development of native perennial and native perennial mixed feedstocks that are appropriate to the proposed site. Natives are better adapted to the local landscape and their potential to become invasive or noxious is much better understood. Several non native species proposed for use as biomass feedstocks in the U.S. have shown a high propensity to become invasive, including giant reed, jatropha and miscanthus, among others.[4] Even sterile genotypes often spread very successfully as weeds, giant reed serving as an extreme example. Planting of inappropriate species for the site, should also be prohibited – such as the planting of tree species in areas of native grassland. Such afforestation is damaging to grassland-adapted wildlife.

Management and Harvesting: A management plan or Forest Stewardship Plan are required for BCAP contract acreage. USDA should involve the Natural Resources Conservation Service, U.S. Forest Service, U.S. Fish and Wildlife Service, and state fish and game agencies in the development of these plans. The plans should address protection of soil, water, wildlife and carbon resources, including: minimizing the amount of mechanical operations performed on the crop, maintaining nutrient and organic matter levels of the soil, controlling erosion, limiting inputs and maintaining wildlife populations and diversity.

Harvest timing will be critical for those feedstocks that have the potential to attract nesting birds. No harvesting should be allowed during the primary nesting season. Unharvested (but managed as needed) buffers should be required to protect all wetlands, streams and other surface waters. Unharvested refuges should be required, on a rotating basis across the enrolled land that provide

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sufficient cover for over-wintering wildlife and sufficient nesting structure for birds the following Spring.

Selection Criteria
The BCAP program will serve the best role in advancing the future of bioenergy in this country if it is used to assist landowners in piloting a variety of types and scales of bioenergy projects, and not simply to reward those projects that would have happened without BCAP support. It is far too early in the development of the biomass energy industry to pick winners – in terms of scales, feedstocks or conversion technologies. NWF therefore encourages USDA to develop a scoring system to rate projects according to their innovation, as well as their potential to produce the most energy efficient, greenhouse gas reducing and sustainable energy projects. The scoring system should be flexible enough to ensure that a wide variety of scales and the widest possible geographic distribution of projects are included. Priority should be given to feedstocks that are being grown for the first time in an area, as these producers will be taking on the most risk.

Payments:
Establishment Payments: The statute allows for reimbursement of up to 75% of establishment costs of eligible crops. NWF encourages USDA to reward innovation and sustainability by paying a higher establishment cost to those attempting those crops that others have not yet attempted and those that show the most promise of being sustainable. It serves much less of the public good, for example, to assist in the re-planting costs of a loblolly pine plantation, where the landowner has ample experience in establishing such a crop than assisting with the establishment of a mixed plant system with native forbs and grasses.

Annual Payments: The most productive purpose of annual payments is to make it economically possible for a landowner to take on the risk of growing a new crop and to weather the time lag before the new crop is capable of being sold for energy. This does not mean that payments should reach such a level as to encourage farmers to switch their productive commodity croplands to biomass crops. Besides being extremely expensive, this would not be desirable, as taking productive lands out of food and feed production would only shift that production to virgin lands elsewhere, defeating the greenhouse gas reduction purpose of producing bioenergy. Payments should be based on an easily understood system, such as the "rental rates" used for the CRP program. NWF does not believe that limited BCAP funding should be used to support annual crops, but if they are to be enrolled, annual payments should be used only as "risk management," to cover crop losses due to unforeseen circumstances.

Reduction in Payments: NWF encourages USDA to use payment reductions sparingly in order to ensure predictability in income for those willing to participate at the cutting edge of producing biomass feedstocks. Since contracts only last for five years, payment reductions should only be considered in exceptional circumstances. While payment reductions are certainly appropriate where crops have become economically fully viable, they could become a serious problem for those who, although able to sell their feedstocks, are not yet receiving sufficient payments to cover their costs. Sale of seed off of enrolled lands should not be penalized, however use for haying or grazing, since not the intended purpose of the program, . If reductions are excessive and feedstock prices low, there is little incentive for participants to bother harvesting and selling their crops. The process for determining whether a reduction should be applied and the level of

those reductions need to be clearly set so that producers can make educated decisions about whether to participate in the program.

Collection, Harvest, Storage and Transportation:
NWF encourages USDA to allocate no more than 15% of BCAP funds to collection, harvest, storage and transportation costs. The funding should be used to help landowners pilot new techniques and practices, not simply to subsidize these activities for a small proportion of landowners. Funding should be awarded with an eye to developing or improving techniques that will make biomass energy more efficient and sustainable. Participants in this portion of the BCAP should also be required to meet sustainability standards, including an NRCS-approved conservation plan for soil, water, air and wildlife, or a Forest Stewardship plan to ensure harvest levels and practices are sustainable and protect soil, water, air and wildlife.

Again, we thank you for the opportunity to provide USDA with our thoughts on implementation of the Biomass Crop Assistance Program. We look forward to working with you throughout the rulemaking process to ensure BCAP assistance is best targeted to assist landowners in growing biomass that will fuel our next generation of bioenergy in ways that significantly reduce our greenhouse gas emissions and protect our natural resources for future generations.

Sincerely,

Julie M. Sibbing
Director, Climate, Agriculture and Wildlife

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South Dakota Department of Agriculture
Office of the Secretary
523 East Capitol Ave., Pierre, SD 57501-3182
(605) 773-5425 (650) 773-5926 FAX

September 19, 2008

The Honorable Ed Schafer
Secretary
U.S. Department of Agriculture
1400 Independence Avenue, SW
Washington, D.C. 20250

Dear Secretary Schafer:

I am writing to provide the following comments regarding the new energy title, Title IX, of the 2008 Farm Bill. The provisions in Title IX are a boon to South Dakota agriculture, as these newly enacted statutes provide great resources for rural and agricultural communities by expanding existing development of renewable and alternative sources of energy.

In South Dakota, renewable energy development has been a success; since 2002, South Dakota's ethanol production has increased from 165 million gallons per year to over 990 gallons per year today. South Dakota is currently home to 15 commercial ethanol plants, and we are also proud to have more farmer-owned plants than any other state. The growth of South Dakota's ethanol industry has helped to stimulate economic development in our rural communities with new, high quality jobs, leading to increased household incomes, and a revival of main street rural America.

Looking forward, South Dakota agriculture will continue to play a role in renewable energy development, using existing and new renewable feedstuffs for energy production. Against this background, the support and availability of resources that title IX of the 2008 farm bill provides for next generation biofuels is very encouraging. As USDA drafts rules and regulations to implement the energy title provisions, it is imperative that all sources of domestic energy and renewable feedstuffs are considered for research and development potential and investment opportunities.

Title IX's renewable energy programs include payments for biomass harvesting, collection, storage, and transportation in Section 9011. Section 9011 indicates that biomass producers are eligible to receive payments under the Biomass Crop Assistance Program for 2 years. As USDA drafts rules governing how these payments will be

issued, I would urge USDA to ensure that biomass producers are given the option to choose two sequential years in which to enroll in the program. And, in the event a producer chooses to enroll in the program during the final year of the 2008 Farm Bill, I would urge USDA to clarify that a producer's contract for the Section 9011 payments would remain in effect beyond the 2008 Farm Bill, in order for the producer to receive payment for the second year of biomass production under this program.

Moreover, I do not advocate a payment system under Section 9011 wherein payments in year 2 are based on incremental biomass production; rather, I would urge USDA to issue payments for the base biomass production in both years of the 2 year payment program. An incremental payment system could send distorted signals to biomass producers, encouraging producers to alter existing stewardship practices in order to yield greater acres of biomass in year 2; or, to strip all eligible biomass acres in year 2, ignoring any potential dire environmental consequences. Payments based on actual quantities of biomass produced still encourages farmers to dedicate biomass as a renewable energy input, and lessens the unintended consequences associated with an incremental payment system.

Title IX's renewable energy programs also include payments for eligible biofuels production under Section 9005. In order to receive payments for the production of biofuels, the eligible biofuels producer is required to enter into a contract with USDA. On behalf of our state's biofuels producers, I would strongly urge USDA to implement a contract term that provides payments to eligible biofuels producers for the same length of time as the life of the loan that an eligible biofuels producer obtained to finance the capital investment necessary to produce the advanced biofuel. This type of contract term will provide needed stability to biofuel producers' financial management, encouraging participation in this new program.

In addition, as USDA drafts rules regarding the new financial assistance programs in Title IX, I urge USDA to streamline the application processes for the new loans, grants, and loan guarantee programs.

Thank you for your consideration of written comments on Title IX. Please feel free to contact me at any time. I look forward to working with you, as USDA implements the energy title of the farm bill.

Regards,

Bill Even
Secretary
South Dakota Department of Agriculture

Sustainable Northwest

September 18, 2008

USDA Rural Business and Cooperative Programs
Room 5803 South Agriculture Building
STOP 3201
1400 Independence Avenue, SW
Washington, DC 20250-3201

To Whom It May Concern:

We are pleased to submit this letter in support of Section 9013 of the Food, Conservation, and Energy Act of 2008. We feel that, if implemented correctly, the Community Wood Energy Program (CWEP) will both empower rural communities and reinvigorate local economies. This letter offers several suggestions to help ensure the program's potential can become a reality.

We are members of the Rural Voices for Conservation Coalition (RVCC), a collection of western local, regional, and national organizations that have joined together to promote balanced conservation-based approaches to the ecological and economic problems facing the West. Utilization of forest biomass from ecologically-based restoration activities presents a tremendous opportunity for rural communities to restore landscapes, generate local energy, and stimulate economic development.

For more information, please refer to our Woody Biomass Issue Paper (http://www.sustainablenorthwest.org/quick-links/resources/rvcc-issue-papers/Issue%20Paper%20-%20biomass08.pdf).

We strongly believe that community wood energy projects could provide multiple benefits to rural communities across the West, including:

- Increased energy independence and efficiency at the grassroots level (schools, community facilities, local governmental buildings, etc.)
- Dramatic fuel cost savings to generate thermal energy in rural communities that have been impacted by the rising costs of heating oil, propane, and natural gas
- New economic development and employment opportunities in fuel harvest and transport, densified fuel manufacturing, facility design, construction, operation and maintenance
- Improved forest health and ecosystem functionality through the removal of hazardous fuels
- A net decrease of carbon emissions by switching from fossil fuels to renewable carbon-neutral fuels

USDA Rural Business and Cooperative Programs and cooperating agencies must do two things in order for the CWEP to have the widest reaching impact in rural communities:

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1. Ensure program flexibility in providing financial assistance to communities at various stages of renewable energy development, such as:
    a. Outreach to local residents,
    b. Securing technical assistance to conduct feasibility analyses,
    c. Facility design, and
    d. Project capitalization.

2. Investments should be focused in a "cluster" approach to increase the opportunities for near-term results. Certain regions of the country have taken significant steps forward in developing successful approaches to community wood energy. In particular, communities in New England, the upper Midwest, the greater Northwest, and the Southwest are ripe for community wood energy development.

The initial investment in this program will be most effective if it is targeted to the regions of the country that are pioneering community wood to energy. A targeted investment strategy to these regions would provide a greater return on investment than a national funding strategy. A targeted approach would create synergies and accelerate broad implementation across each region, more effectively building a regional energy economy. These "clusters" could then provide effective models to facilitate knowledge transfer to other regions of the country.

We applaud Congress for the inclusion of the Community Wood Energy Program in the Food, Conservation, and Energy Act of 2008. With thoughtful implementation, this program will have a profound positive impact on the economies of rural communities as community energy projects function as a means of wealth capture, address national climatic concerns in regards to energy generation, and provide a mechanism to utilize by-products from forest restoration activities.

Sincerely:

Chad Davis
Sustainable Northwest
Portland, OR

Phil Chang
Central Oregon Intergovernmental Council
Redmond, OR

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Resource Innovations
Eugene, OR

Jay McLaughlin
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