



**CONFERENCE PROCEEDINGS: RESOURCES FOR
GLOBAL GROWTH**

**“RESOURCES FOR GLOBAL GROWTH: LINKING
AGRICULTURE, ENERGY AND
TRADE FOR THE FUTURE”**

**8:30 AM – 5:00 PM
TUESDAY, DECEMBER 06, 2005**

**TRANSCRIPT PROVIDED BY
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PROGRAM

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MORNING KEYNOTE ADDRESS:

SENATOR TOM DASCHLE,
SENIOR DISTINGUISHED FELLOW,
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PANEL I: PARTNERSHIP FOR THE FUTURE: LINKING AGRICULTURE, ENERGY, TRADE & DEVELOPMENT

MODERATED BY:

GAYLE SMITH, SENIOR FELLOW, CENTER FOR AMERICAN
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ECONOMIC COMMISSION FOR AFRICA, AND
COMMISSIONER, COMMISSION FOR AFRICA

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JOHN D. PODESTA, PRESIDENT AND CEO,
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PANEL II: INCENTIVES FOR INNOVATION: AGRICULTURE, ENERGY AND THE PRIVATE SECTOR

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**PANEL III: GLOBAL ECONOMIC DEVELOPMENT: LINKING
AGRICULTURE, TRADE, ENERGY AND POVERTY
ALLEVIATION IN THE DOHA ROUND AND BEYOND**

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**THE WAY FORWARD: CONCLUDING REMARKS AND
SUMMARY**

Introductions and Morning Keynote Address

JOHN PODESTA: Good morning everyone. We're about to begin. I'm John Podesta. I'm the president of the Center for American Progress and I'd like to welcome you to today's conference on "Agriculture, Energy, and Trade in the 21st Century." Thank you for braving what Washington considers bad weather. I grew up in Chicago, so it's a little bit different out there. Just a couple thank yous at the beginning. I really want to – a special thanks – you'll hear from her a lot later – to Gayle Smith, who really runs our program in this arena, and she has a great team working with her: Peter Ogden, Jake Caldwell, and Rebecca Schultz, who put together that little booklet on biofuels, which is terrific. I hope you all take it and stick it in your pocket and carry it around with you. And Rebecca did that in conjunction with the Energy Future Coalition and I want to recognize Reid Detchon, who is the executive director and our great partner in our work in this area.

A week from today, negotiators representing the 148 member countries of the World Trade Organization will gather in Hong Kong to undertake what was supposed to be the final session of the Doha Development Round, a series of trade talks aimed at ensuring that global trade reflects the needs, aspirations, and potential of the world's developing countries to engage in the world economy. Sadly, all signs indicate that the Hong Kong meetings will not take us over the finish line and that we will not reach a deal on the central issue now dividing the developed and developing worlds, and that's agricultural trade.

In failing to reach an agreement, we're failing billions of people who depend on agriculture for their survival. The G20, the block of developing countries that is pressing the United States and the European Union to liberalize our agricultural policies, represents 60 percent of the world's population and 70 percent of the world's rural population. Their position was shaped and defined largely by cotton farmers in West Africa, farmers who earn on average less than \$35 a month and from whom cotton was once "white gold," but it is now in the words of the president of Mali, "a burden and a cause of poverty." For these farmers, the over \$4 billion the United States pays out annually to American cotton farmers this year translates into \$250 million in direct losses and \$1 billion in indirect costs, primarily because our heavily subsidized cotton floods the world markets and depresses prices.

There are many problems at the heart of global poverty ranging from good governance to corruption and conflict, to the availability of marketable natural resources, but that cannot mask the fact that the world's poorest countries' inability to compete in the global agricultural market has great consequences for the world's poorest countries and for the poorest people in those countries, and indeed, I think, for all of us.

More than 50 developing countries rely solely on the export of two or three commodities, like cotton, to finance their national economies, yet over the last 25 years the real dollar price of 41 to 46 of the leading commodities has fallen. Poor countries are poorer as a result. Even with the expansion of global trade, 54 countries are poorer today than they were 15 years ago and poverty levels in Africa have increased 43 percent over the last decade.

As I believe you know, farmers in West Africa took action. They pushed their governments to press their case in world trade talks. Last year, Brazil took the matter to the WTO, filed a challenge against American cotton subsidies, and won. And so today we're faced with a challenge: if we want to see a successful conclusion to the Doha Development Round and if we want to send the signal to the developing world that sweeping economic liberalization they have undertaken over the last 15 years will be matched by our own, we must confront and act upon the trade distorting impact of some of our agricultural policies.

The Bush administration has put forward a plan to cut subsidies, but I believe that plan is flawed for two reasons. First, it's, I think, unlikely to gain approval from Congress from either Republicans or Democrats. And second, and I think more important – perhaps it's the reason for the first – it proposes to cut subsidies without offering an alternative plan for rural America. The Center for American Progress has a different strategy for moving forward and one that we believe offers the potential of a win-win future for America's family farmers and a more even playing field for the world's poorest producers.

Our view is that the way to solve this problem is to empower American farmers to remain globally competitive, to expand the income they earn from the marketplace by creating new markets for America's agricultural bounty. It's reasonable to assume that because of the costly investments we make in the agricultural sector at the federal level, and given our position in agricultural trade talks, that American farmers are wealthy. That is in fact not true. While the 10 percent of the commodity producers who collect over 70 percent of our agricultural payments are doing well, rural Americans are in trouble. Hundreds of family farms are shutting down every month, 88 percent of rural counties in America suffer from persistent poverty, 20 percent of kids living in rural America live well below the poverty line.

Our strategy is focused on improving the lives of farming families at home and abroad and rests on three critical elements. First, we must invest in the capacity of American family farmers to lead our nation into the future, a future of domestic energy production, increased prosperity, and greater security. By bringing the innovations afforded by biofuels and emerging bio-industries to bear, we can create a new generation of marketable products for family farmers. America's longstanding dependence on fossil fuels is eroding our federal budget, sending household costs through the roof, and damaging our environment. And global oil reserves are being depleted faster than new reserves are being discovered.

America's longstanding dependence on fossil fuels is also distorting our foreign policy, forcing us to pay and protect dictators and despots, even as we champion the cause of democracy. We have the potential to produce the bulk of our liquid fuels needs right here in the United States from agriculture. Energy crops can be produced in almost every region in the United States.

An agricultural economy that runs on renewable energy will provide two new and potentially substantial markets for farmers to enter. One for the energy products and one for the tradable carbon credits that are the mechanism of tracking emission reduction. An agricultural economy based on food, fiber and energy production will generate higher incomes for American farmers and bring jobs to rural America. Farmers who today own shares in ethanol plants have recouped gains(?) equal to 50 cents per bushel; and in Minnesota, by processing corn products rather than exporting raw corn, the value per bushel for the farmer has doubled.

Meanwhile, biomass can substitute not only for energy inputs, but a range of industrial and chemical inputs from the production of plastics, solvents, alcohols, and lubricants, and we're seeing that happening today in the marketplace.

Second, we propose that the federal government make the investments needed to jump start and sustain an agricultural economy driven by renewable energy and innovation, with some of those investments coming from the redeployment of funds now invested in export subsidies.

We propose investments in five key areas: one, research and development for genomics and other key scientific and technical innovations. Two, investment in the infrastructure that will allow the successful deployment of biofuel production and distribution. Three, financing, including loan guarantees and other mechanisms, for new biofuel production projects to promote deployment. Four, investing in risk management and other tools required by American farmers to shift into energy production. And five, market development, including for example the renewable fuel standards that can extend consumer choice and bring consumers to new energy markets.

The third prong of our strategy takes us back to the developing world where we propose protecting the investments we'll eventually make in a successful development round of trade negotiations. On the surface, it's easy to assume that American farmers and African farmers and developing country farmers are on the opposite sides of the fence, when in reality what unites them is far greater than what divides them. As do our own family farmers, the world's poorest farmers want a fair price for their products, the ability to add value to what they produce, and the means to increase income and reduce cost. We propose, therefore, that we also invest in breaking down non-tariff barriers that constrain economic development for those countries by focusing foreign aid investment on agriculture, and particularly increasing the capacity of the world's poorest countries to produce value-added exports and to create the infrastructure to get those products to markets, to expand market access for the world's poorest countries; and importantly,

sharing with the developing world the know-how that can allow them to reduce the high cost of their own oil imports, make energy more affordable and accessible to rural communities, and potentially open new sub-regional markets for the transfer of emerging bio-based energy technologies.

Ours is an ambitious strategy and one that importantly (inaudible) goal, that the goal is to improve the lives and livelihoods of family farmers both at home and abroad. Throughout the course of the day, we'll hear much more about the strategy from people who come at these issues from a diverse range of perspectives.

Now it's my pleasure to introduce someone with a perspective that's critical to our understanding, the man who knows more about America's family farmers than perhaps any of us in this room: Senator Tom Daschle, who I'm happy to say is now a distinguished senior fellow at the Center for American Progress. Throughout his career in the Senate, Tom Daschle annually scheduled something called "unscheduled driving time." I understand that in 2004 he did that in an E-85 vehicle and maybe we'll hear more about that.

He would get behind the wheel by himself to crisscross South Dakota, to listen to his constituents, most of them family farmers. Senator Daschle has committed himself to addressing their problems, but also – and he always brought this to the Senate – to invest in their potential, to give them the better lives that they would work hard for. We believe there is no better person to kick off our discussion than the man who has invested his career in ensuring that America's family farmers work for America and that America works for them.

It is my pleasure to introduce to you Senator Tom Daschle.

(Applause.)

SENATOR TOM DASCHLE: Thank you very much, John, for that kind introduction. Thank you for your warm reception. Good morning, everyone. We have a South Dakota scene outside so I feel very much at home this morning.

I am very gratified to be associated with the Center and with John in this effort. He has done just an outstanding job in the time that the Center has been created and existed and it's because he has the likes of people who are stellar in their fields like Gayle Smith. It's been a joy to work with Gayle as well, and I have enjoyed my time with the Center a great deal. I have always said on many occasions that the Center for American Progress is not a think tank; it's an action tank. And it has worked without fail week after week and month after month to put good ideas into action, and this is yet the latest demonstration of the commitment that John, the Center, and others are making to ensure that we have the opportunity to move these ideas forward, so I join him in welcoming all of you this morning.

I want to express my gratitude to the panelists who are going to be appearing throughout the day on the important issues that we'll be discussing. And I want to note a special thanks for my dear friend Tom Buis, somebody that I have had the good fortune to know and work with very closely on agricultural issues for a long, long time and I am very pleased that he is part of the panel and will be sharing his wisdom with us again this morning. I've been blessed with the friendships of some wonderful people over the years, but none more loyal or supportive than Tom Buis and I am very appreciative of his presence here today.

I also want to thank, in his absence, but I'll have more to say about this, this afternoon, Dick Lugar for being our luncheon speaker. I have worked with Dick very closely on a number of issues over the years, and I'm just delighted that he'll be part of our program as we consider what the agenda on these issues will be in Congress for the rest of this year and the rest of the Congress.

Not long after my last election, I was reminded of a story of someone else who suffered a similar fate in one of his elections: Winston Churchill, who lost, as you may recall, in 1945. And as he was poring over his coffee one morning, his wife Clementine said to him "Winston, just remember this: that this experience could be a blessing in disguise." He looked at her across his coffee and he said, "Well, if it is, it is very well disguised." (Laughter.) But at the moment I know the feeling. But I have to say, this new opportunity has given me a new perspective – an opportunity to see things in ways that you can't sometimes when you're involved in the intensity of the day-to-day efforts that are underway in the Congress.

And it's easier for me to see missed opportunities to bring people together to confront the shared challenges; and if ever there was a challenge for which we need all stakeholders to come together to develop a shared national consensus, it is this. It is in the negotiations for the WTO's Doha Round.

The consensus on trade in this country is shattering. Concern about economic development is growing. One case has been decided, as John noted, in the WTO and others are pending. Farmers in this country are struggling, as they always have, to acquire a fair price. And we're learning that up to 300 family farmers a month, even today, are going out of business. The struggle continues to have significant influence on people in rural America as they view trade and consider the negotiations in the Doha Round.

Yet, as the U.S. delegation prepares to travel to Hong Kong next week, I have a sinking feeling of a dramatic missed opportunity. Though these negotiators are going to sit down to discuss farm programs, American farmers have had precious little opportunity to raise their concerns and ideas with people within the administration. I understand there's a concept in Swahili, *bwogomoi*, that literally means "to put down your heart." The term could, it seems to me, easily apply to the way African farmers put their heart into the land they work. It is less poetic, but in South Dakota we could call the same concept "sweat equity."

Well, as trade talks continue, we are seeing more and more family farmers in this country and all over the world who are sweating more for dramatically less. Consider this: this fall there were farmers in this country who literally could not get into the field to harvest because they knew that the price they would get for their crop would not even pay for the diesel that they needed to run their tractors and combines over that ground.

Despite the sheer challenge of pouring their hearts into their land to get little in return, we are now told by the administration that the only option in Hong Kong is to pit American farmers against their colleagues in developing nations. A successful outcome in trade negotiations does not require that that be so.

Had the administration done five years ago what the Center is doing today, bringing together all stakeholders in this vitally important debate on trade, we might not face the challenge that we currently do. So I commend all of those responsible for bringing us together today for looking for a new way to make the global trading system work for producers in the United States as well as producers overseas.

Consider where we stand today on the eve of Hong Kong and in the run-up to the debate on the farm bill itself. We must recognize that we have an opportunity to effect several different policy goals including, but certainly not limited to, freeing America from dependence on foreign oil by increasing U.S. production of renewable energy sources, combating hunger and malnutrition around the globe, making trade policy more equitable, and assuring all independent farmers and ranchers worldwide an adequate income so that they can continue to produce the high quality food throughout the world.

The secret to success is finding a way to balance each of these goals in a manner that is beneficial to all rather than taking from some to the benefit of others. As one of the architects in the existing farm bill, I believe that if done intelligently, we can accomplish these myriad goals.

First, we need strategies to reduce our dependence on foreign oil and decrease emission of carbon gases by encouraging domestic renewable energy production. At the same time, we need programs and policies that promote our common values, including, but not limited to, assuring that farmers around the world have the opportunity to a fair price for their crops so they're not dependent on government subsidies in the first place.

One idea is to begin to restore profitability for farmers and ranchers through the creation of a worldwide energy reserve, to stabilize prices in otherwise volatile grain and livestock markets. I'm absolutely certain that every producer in the Midwest, or for that matter in West Africa, would rather get his income from the marketplace than from any government program. But in the United States, to make the market work again we have to address excessive market concentration, overproduction, poor distribution, and other growing challenges that force farmers to rely upon the farm bill's income safety net.

I'm convinced we can do this, and more, while still providing independent producers who make up the backbone of our world communities a strong income safety net that will ensure that they will continue to make a living providing us with the safest food supply in the world – an income safety net that is not in conflict with our other goals in building a stronger international trading system.

But I have long been concerned about this administration's lack of support for the components of the net that benefits producers the most even though no conflict has to exist. Take, for example, the reconciliation bill that is before the Congress. It cuts both farm and conservation programs. The putative savings from these cuts will be spent many times over to fund additional tax giveaways for the wealthiest people in this country.

We learned from the grand failure of the 1996 farm bill that the core of any fiscally responsible agricultural policy is a countercyclical program that responds only when prices are low. In 2002, we passed a bill that provided true countercyclical support for healthy producers in periods of these low prices, and we included an 80 percent increase in the conservation spending, in addition to establishing the first ever energy title in the farm bill.

I'm particularly proud of this last provision, which helped to spur new demand for agricultural products, including \$200 million for a USDA bioenergy program that is incredibly important to the growth of small, community-sized ethanol plants and new, high-paying jobs all over this country. That law also included progress for its robust payment limits. I would have preferred clearer and fairer limits, but this was an important step.

Rather than building upon this success, the administration is continually trying to frustrate the progress we've made in hopes of going back to these failed policies. Even worse, they justify this by suggesting that we must change our farm programs because the WTO tells us to. And the administration does all of this without providing a clear alternative for American farmers, while building deeper resentment towards the WTO and trade proposals generally.

There is also deep skepticism that Washington will protect world interests and those of small farmers and ranchers over the interests of powerful corporations. More often than not, just the opposite is true. More often than not, that skepticism is justified.

A clear alternative would focus on four principles. First, the core of the program should be a robust, marketing-loan program that treats all producers equally. Second, we should enact stricter payment limits to ensure that assistance actually goes to small producers. Third, we should decrease our reliance on trade distorting direct payments that artificially increase land values and make it more difficult for the next generation of producers to begin farming. Fourth, we should include a permanent national – a natural disaster program so when a weather related crop disaster occurs, help is certain and help is consistent, rather than subject to Washington's political whims.

Those principles ensure a safety net that would truly be countercyclical and trade sensitive. It would pay producers when the market fails, but not when prices are good. Going back to a system of direct, decoupled payments that are paid even when prices are good is impossible to justify. A real trade sensitive alternative for our farmers would also continue to push, in the farm bill that we began four years ago, to make rural America the answer to the America's energy needs.

Americans understand the role of agriculture throughout American history. Farmers in many ways founded this country, and until today most of the best ideas have been formed by people coming from the rural parts of this great land.

Here's one idea whose time has come: rural Americans can be a key part of our national energy solution. Washington must use all the tools at this great country's disposal to make that happen now. A common misperception of U.S. farm policy is that it is the amount of money in the commodity title that producers care most about. Well, it isn't. If you ask any producer what he would like to see in a farm bill, he or she will tell you that they want a farm bill that gets them a fair price from the marketplace, not from a government check. And they merely want a farm bill that will provide adequate income insurance when prices are low. And these two things, today, are not mutually exclusive.

If we can craft complementary trade sensitive policies that will increase demand and at the same time spur development of new markets for agricultural production, we will keep prices above the income safety-net thresholds while being able to have an income insurance in place that truly protects producers in times of need. That's why I felt so strongly that we include the first ever energy title in the 2000 bill, and it's why I worked with Senator Lugar to introduce the concept of the renewable fuel standard in 2000. The RFS, which has now been enacted into law, will provide significant benefits to agricultural producers. It's been estimated that corn prices will actually increase by fifty cents a bushel under RFS, and will raise farm income by more than \$1.3 billion annually, thereby decreasing the threshold and the truly countercyclical income safety-net needs that have been so much a part of previous efforts.

In addition, it is estimated the RFS will actually increase our employment across the country by more than 214,000 jobs. We will create \$5.3 billion in new investment in renewable fuel production capacity. These are impressive statistics by any measure, but more importantly they are real benefits for real Americans. We have an incredible opportunity to build upon this success in the next farm bill. Ethanol plants are built today at an incredible pace. Today there are 24 new plants under construction and several others that are now being expanded that will add more than 2 billion gallons of additional ethanol capacity, representing a 50 percent increase in our domestic ethanol supply. Given this rapid expansion, we need to seriously consider increasing the levels included today in the renewable fuel standard.

We should also establish a renewable energy grain reserve. Like the strategic petroleum reserve, this reserve would ensure sufficient feed stock in the event of a

shortage due to natural disasters or other shortages. Beyond this, a renewable energy grain reserve would help keep market prices at acceptable levels for producers, thereby decreasing the overall cost of income and the income safety net that I discussed earlier.

Third, we could do other things to spur an increased demand for ethanol. While the RFS provides a baseline for ethanol demand, there are other things we can do to create additional demand through what John referenced: E85. E85 is a blend of 85 percent ethanol and 15 percent gasoline, as most of you know. It is designed for use in flexible fuel vehicles – so-called FFV's. With approximately five million flexible fuel vehicles on the road today, E85 has great potential as an alternative fuel. But because flexible fuel vehicles can run on both gasoline and E85, most owners are not aware that they're driving an FFV and are simply using gasoline today.

Industry research indicates that nearly 70 percent of flexible fuel vehicle owners are unaware they're actually driving one today. Increasing FFV production and E85 use represent the best near-term solution to significantly reducing our dependence on foreign oil, but today only 500 of the nearly 180,000 retail stations offer E85. In order for retailers to more widely adopt E85, station owners must have confidence that there will be sufficient consumer demand. FFV's represent approximately 2 percent of all vehicles. That's going up, but without a significant ramp up in production of FFV's, E85 use will remain relatively small.

We should take steps now to ensure that the entire new car fleet is FFV compliant within 10 years. Keep in mind this simple fact: today it costs automakers a mere \$50 dollars per engine to make existing engines fully FFV ready.

Fourth, we should establish a renewable biodiesel standard, similar to the renewable fuel standard, to foster development of biodiesel plants and to encourage further use of biodiesel across this country.

And fifth, we should enact a renewable portfolio standard mandating that a certain percentage of our electricity be generated from renewable resources such as wind, biomass, and solar.

Ethanol and biodiesels are not the only form of energy that can be produced by farmers and ranchers. Wind energy also holds great promise, and many rural areas across the country have wind in abundant supply. I can attest to that as someone coming from the fourth richest wind state in the country today. Like the RFS, the renewable portfolio standard will generate new demand for renewable and cleaner forms of electricity, and provide needed incentives for expansion of wind, solar, biomass, and electricity production.

Finally, we need to provide a federal commitment to increase transmission capacity for wind. We need a federal commitment to build transmission lines similar to the Roosevelt-era commitment to provide electricity to rural America we did so successfully in the 1930s. The issue is not capturing the wind, but transmitting the

energy to where it is needed the most. We should use this farm bill as an opportunity to provide incentives for the creation of new transmission capacity to help jumpstart wind energy production all through rural America.

These investments in rural America have a huge potential payback for all Americans, but they also have a huge potential trade policy payback, a national economy payback, national security and economic development both home and abroad. Some analysts suggest that these kinds of investments in biodiesel today will result by 2050 in \$20 billion a year in fuel cost savings and an 80 percent reduction in transportation related emissions. And consumers do not have to wait until 2050 to see the positive impact; they can feel it today.

Last month in Sioux Falls, South Dakota, Don Endres, the CEO of VeraSun Ethanol, undertook what he called E85 Tuesday. He sold E85 for 85 cents less per gallon than every other mix of gasoline available. What better signal could there be that ethanol sets us free from foreign oil, and sets us free from higher prices all the while reducing the need for direct government subsidy?

That's why I hope the administration doesn't wait for the next farm bill to advance this agenda. The energy law just passed includes significant options for dramatic increases in investment in research and development of new biofuels. The president should use those tools in the next appropriations bill.

Consider the options in agriculture and trade policy for our country and for our friends through the developing world. If through increased research and development we can further perfect technology for biofuels, the same technology that will help set America free of dependence on oil from Saudi Arabia and Venezuela would help set our friends in Africa, in Latin American, and in Asia free from spending their hard won currency on the same imported oil.

During the last decade, a coalition that included Pope John Paul II and Bono dramatically increased funding for debt relief. I was proud to support that effort, but alarmed to learn that even while we reduced the debt burden in these countries, some are losing 5 percent of their GDP to pay today for imported oil.

The same technology that will reduce carbon emissions in this country will reduce carbon emissions and increase economic growth in countries throughout Africa, Latin America, and Asia. The same technology that will help create new and higher paying jobs in rural America will help create new and higher paying jobs through Africa, Latin America, and Asia.

It would be a huge missed opportunity if next year's budget includes funding for tax credits for R&D for oil companies at a time of record profits, but does not include the funds needed for R&D of biofuels authorized in the same new energy law. Given the challenges we face in rural America on trade, on energy, on climate, and on economic development, we can't afford any more missed opportunities.

Robert Kennedy once said, “The future is not a gift; the future is an achievement.” To achieve the future we all want, we have to recognize that we can do better. To do better, we have to use the tools at our disposal, perfect the tools in the farm bill, and make the best possible use of the negotiations next week in Hong Kong.

I firmly believe that we can do so without taking the heart out of our country’s agricultural policies that affect small, poor farmers in rural America or rural areas in any country around the world, but to do so we must think outside the box on energy, on conservation, on our humanitarian obligations around the globe, (or?) our farm and rural policy in which farmers, ranchers, rural residents, and the communities in which they live [now rely](#). In short, we must think innovatively about a new direction. I hope our discussion today will not only enlighten, but will spur action – action that can move us forward and allow us to do better.

Thank you all very much.

(Applause.)

Panel I
Partnership for the Future:
Linking Agriculture, Energy, Trade and Development

GAYLE SMITH: If you wouldn’t mind taking your seats, we will be getting started. Thanks everyone. Again, I’m Gayle Smith, a senior fellow at the Center for American Progress and I’d like to begin by introducing our first panel this morning, moving from right to left across the stage.

To my right is a friend and colleague, K. Y. Amoako, who has just concluded two terms as the executive secretary or head of the Economic Commission for Africa where he led that continental research organization in a host of new initiatives to assess progress in governance in Africa, to develop subregional economic trading blocks, important labor response to long-term structural impacts of HIV and AIDS, and to figure out how to adapt new information technologies to Africa’s development. K. Y. was at the lead in creating the Africa Trade Policy Center, which conducts research and training for African finance ministers engaged in troubled global trade negotiations, and also served on Prime Minister Tony Blair’s Africa Commission, which recently shaped the discussions of the G-8 summit at Gleneagles last summer. I’m happy to say that early next year K. Y. will be announcing the creation of the new organization designed to help increase capital flows to Africa.

To his right is Jason Clay, who literally knows everything there is to know about every agricultural commodity. (Laughter.) This is true. Jason is an anthropologist by training. He has 20 years of very creative work with human rights and environmental

NGOs on remarketing and trade in reinforced products. This is the man who brought us Rain Forest Crunch. He's also – that's true. He's also the author of a very important book on world agriculture and the environment. This is one of the finest resources available; again, for everything you ever wanted to know about every commodity out there, and I'm not plugging it just because Jason asked me to. He is currently the vice president for conservation and innovation at the World Wildlife Fund.

To his right is Tom Buis, who's vice president for government relations at the National Farmers Union and a leading advocate for family farmers. Tom has been very helpful to us and to me in particular in understanding the plight and potential of family farmers in America and what they have in common with farmers abroad. He served as the senior agricultural policy advisor to Senator Daschle, and before moving to Washington in 1987 was a full-time grain and livestock farmer in Indiana, so he knows what he's talking about.

Finally, many of you know John Podesta as Bill Clinton's former chief of staff and more recently as the CEO and president of the Center for American Progress. You may not know that John has dedicated much of his career to the issues we're discussing today. He had his career on Capitol Hill as chief counsel for the Senate Agricultural Committee, worked as a senior fellow at the Natural Resources Defense Council on climate change, serves on the steering committee of the Energy Future Coalition, and is on the board of the League of Conservation Voters. He is also, and importantly, my boss. (Laughter.)

With this panel, what we'd like to do is frame the issues for today and consider the real gains to be had for linking agriculture, energy and trade. And I would like to begin with the question to K. Y. As John noted in his remarks, the focus on global trade negotiations today on agriculture came to the fore primarily because of the actions taken by small farmers in West Africa, but from your perspective, having given your whole life to development in Africa, what is it that the poorest countries in the developing world really want to see out of the Doha agreement?

K. Y. AMOAKO: Well, I think I'll start off by saying that much of what is of our greatest concern is the impact that (inaudible) subsidies in Paris are having on our abilities to compete in the global economy. Therefore, it's very, very critical, as Senator Daschle and others have said, that at the meetings beginning next week in Hong Kong that we see progress on this issue – very critical. And as John also said, the impetus for change (inaudible) had over the concern of the (inaudible) Western Africa and the status quo is unacceptable.

Now, more broadly today, the poorest countries in the world are Africa and sub-Saharan Africa (inaudible). Poverty is not declining, the (most?) are living on less than one dollar a day. It's ludicrous. (Inaudible) that we have to confront with. Our share of world trade, (first of all?), is also declining and there's a real risk that Africa – or most countries in Africa (inaudible) in our present situation will create (inaudible) recipients of

aid. Now, (inaudible) but for me the key issue that aid alone will not enable to allow us to transform our economies, and that's what we need the most.

If you take the average worker in Africa today, he or she is a poor farmer. Like I said, living on less than one dollar day. With primary commodity prices falling, net incomes are shrinking. If you add to that the whole issue of the cost of HIV/AIDS in the short and long run – the short and long run, the cost of infrastructure, and all these factors (inaudible) poverty – but there is a way out and its been clear in all the literature on the experience of the rest of the world that (inaudible) has a long way – a lot to do with getting people out of poverty.

The average (income in our?) country today relies on a few primary commodities and what we need most is to be able to get opportunities for trade to compete in our (inaudible) communities, to add value to our products, to access your markets, and to bring technology and innovations to bear. To do all these things and to get (success?) there's a lot we in Africa have to do for ourselves, and there's a lot we are doing already: improving governance, reducing corruption, (forming regional?) blocs for trade to increase our competitiveness and also to enhance the viability of our markets. But it seems to me that all these things are necessary but are not sufficient. To be sufficient we need our growing partners, it seems to me, to play their role by leveling the playing field.

Now, in Washington, (inaudible) Tom Friedman has convinced (inaudible) that the world is flat; that in the competitive global economy the world is being flattened. It's true, but when it comes to agriculture (inaudible) I don't think the world is flat. There are too many speed bumps in the way, so we need to do more on that. So the talks (inaudible) in Doha is going to be important. In this instance, Senator Daschle, I thought – the message I heard very clearly is that basically farmers or small farmers around the world are the same. They don't want to be poor. They don't want to be dependent. They want markets to work for them, and therefore, if you ask them what (are our views?). We want the same thing as your small farmers do. The markets to work for us, to use the ability to exercise our rights to (be free?).

MS. SMITH: Thank you, K. Y.

Jason, if I can move to you, I think it's clear that one of the trends we're seeing in global agriculture is the impoverishment of some of the poorest countries in the world. But obviously, as you know better than anyone, there are a lot of other trends that we need to take into account, as noted before, and I wonder if you can just highlight a few of those for us.

JASON CLAY: Okay. Gayle and I first met in Ethiopia or near Ethiopia; I guess in Sudan. And in interviewing refugees, I heard an expression, which I think is very apt in this context, and an Oromo told me – and Oromo is a nation that lives in Ethiopia – told me that they have a saying that goes: you can't wake a person who's pretending to sleep. And I think there are some global trends among us that are well on their way that we need to be acknowledging. One is market concentration and market changes globally.

Another is Brazil emerging as the agricultural superpower in the world and the third is biofuels, renewables, et cetera. And again, I think Brazil is preparing itself to be in a position on that.

There's half as many global agribusinesses today as there were 10 to 20 years ago. Globally, 3(00) to 500 buyers buy 80 percent of the commodities that are traded internationally. If you want to change agricultural commodity trade, you don't talk to a billion consumers; you talk to 300 or 500 buyers. That's where the power is.

The investments that are changing the world are not coming from NGOs. They're not coming from multilaterals like the World Bank or the FAO, which put \$10 to \$12 billion a year into developing countries. They're not coming from national governments like our own through USAID or the UK through DFID or any of the other bilateral agencies, which put about \$57 to \$60 billion in. They're coming from the private sector: \$240 billion a year. And they're also coming from China. China has put \$30 billion into Brazil, \$20 billion into Argentina, \$12 billion into Angola. This is just in the last couple of years. So these are the realities of the world we live in, and these are the realities of what's shaping the world we're going to live in. We need to keep those in mind.

Through all this, Brazil has emerged as an agriculture superpower. It is (the) number one or two exporter in seven leading commodities globally. In fact, this year (it) just took away the number one category of poultry exports from the U.S. It has four other crops that are very large and growing that are significant to U.S. farmers. Pork is number four globally, and cotton. It's currently the sixth largest producer and the fourth largest exporter. Within ten years, all bets are that it will be the number two producer and the number one exporter.

Brazil has more land that has not been used for agriculture than the U.S. currently has in agricultural production, so that there's tremendous capacity to expand production in Brazil, and this is not going to be without environmental costs, but the capacity is there. It has soil, sun, and water. It has a year-round climate. It is positioned very well for the new technologies that can be produced from bioengineering. It has the largest ag(ricultural) surplus in the world and it has the largest share of world agricultural trade.

When was the last time that oil was priced \$11 a barrel? Less than three years ago. A lot of the interest in biofuels and renewables are based on an assumption that oil prices are going to be \$40, \$50, \$60, \$70 or – Goldman Sachs – even \$100 a barrel. It may happen, but there's going to be a lot of fluctuation, and for people investing hundreds of millions, even billions of dollars in refining technology for ethanol and others, it's those \$11 barrels that make you think twice. And so we need to really look at what are the costs of production.

Here I think Brazil is important. They produce ethanol at \$22 a barrel that's ready to go into your car. This is from sugar cane. When they produce that ethanol, they also leave more carbon in the soil than they take off. They also produce a gas which can be used to make renewal energy to sell on the grid, and you can two to three times as much

energy to sell on the grid as they actually consume in making the sugar or the ethanol. This is the technology that exists today and this is essentially the advantage of the tropics in the renewables debate, so we need to be aware of that.

They have 182 sugar mills in Brazil; 172 of those produce ethanol from sugar cane. They have 90 more that are either under construction or they're doing environmental impact assessments to bring into production all of these that are going to be totally dedicated to ethanol production. They currently produce about a billion liters of ethanol a year, and their goal is 10 percent of the world's petroleum consumption on an annual basis. They have five million hectares in sugar cane and they're planning to go up to 35 million hectares, and that's where having that land availability makes a big difference.

I think that in our discussion we need to focus on two things, not just what is possible technically to do, but what is profitable to do and what is profitable within an open, global trade system.

Thank you.

MS. SMITH: Thank you, Jason.

Tom, I saw you shaking your head as – nodding your head as Jason was speaking, and I wonder if from your perspective as an advocate for family farms in the United States you could talk about what we need to do to make sure that they remain competitive in a world that is obviously very different than the world just ten years ago but changing, as Jason suggests, very rapidly.

MR. TOM BUIS: Sure. Part of the reason I was nodding my head is last January Dave Fredrickson, the president of National Farmers Union, and myself, and a small delegation went to Brazil. We saw firsthand the American companies down there that do the processing, the American companies that provided the inputs, and American companies that provided the machinery, the American technology that our friends down in Brazil are using, but not paying for the same as American farmers. We also saw how they treated labor and the environment. And I think as we go down this global path, you have to look at trade policy that doesn't pit farmer against farmer, commodity against commodity, and truly try to level that playing field.

Current trade negotiations don't include, for example, environmental standards, labor standards, currency manipulation. And a lot of people ask why is that important to farmers. Well, it's important because it's the cost of doing business. Here in the United States, our society has deemed it important how we treat workers, how we protect the environment, and also we don't have the capability to manipulate currency. Those all makes us either competitive or uncompetitive. And with Brazil and some of the other developing countries with very developed agriculture, that's going to be a key component of whether or not we survive in the future.

I also want to point out, I think what Tom Daschle said was just absolutely on target: we need a price in the marketplace. Every farmer, whether we're here or throughout the world, has to have that price in the marketplace. People work hard, they invest their time, their labor, blood, sweat and tears, and they deserve a profit. We're not getting that now. And so when you start to debate a farm bill, everyone looks at the symptoms and not at the cause, and how do you address the cause. And I think what Tom Daschle proposed on the energy – put a heavier emphasis on the renewable energy fuels from the farm – can help us address the cause, and that's low prices.

I think what Clay mentioned about concentration is a very key component as well because if you only have a half dozen players throughout the world that control the flow of these commodities – and often don't compete in the same market – it's pretty safe to say they're not going to pay a profitable price to the producer. And the one area in our ag sector where we've seen a reversal of concentration has been in the production of renewable fuels, ethanol. In the last ten years, there used to be this one three-letter company that was the largest manufacturer of ethanol in the world. (Laughter.) Now the largest single entity is farmer-owned cooperatives. That's provided jobs in rural America. That money is reinvested in those rural communities, and it's provided a profitable price to the farmers.

My hat's off to Tom Daschle and Dick Luger for having the vision to continue to push that envelope on renewable fuels and renewable fuel standards because that's what's spurring that growth – growth for the farmers.

The other key components I think that always have to be considered in this farm bill – and a lot of people think it's these greedy farmers getting all the payments; it's not. The reason the farmers get – are getting the payment is because of the low prices, and there's nothing wrong with having a safety net that's truly countercyclical so if the marketplace fails – and we all want to see it succeed, but if it fails we have something in place. And one component of that, obviously, is a marketing loan program, but the second component is permanent disaster assistance.

If we all remember what happened in 2004: we had a major drought that had been going on for six or seven years in the Rocky Mountain states and the plains states. And the administration wasn't in favor of disaster assistance for those farmers who lost their crops because of lack of rain, but suddenly within three months of the reelection campaign in a state controlled by his brother who's the governor, we had four hurricanes. We had disaster assistance that year. We shouldn't have to count on the political climate to address the problems with severe weather climate.

MS. SMITH: Thank you, Tom.

John, there are a lot of people out there who question whether it's really viable to produce, as you suggested in your opening remarks, the bulk of our liquid fuels from agriculture. Many of them would say if we can do it, why haven't we done it yet? I wonder if you could talk about the real viability in terms of both policy and production.

JOHN PODESTA: Okay, Gayle. Thank you. I probably should follow the lead of my time in the senate and yield back my time to Jason. I have a hard time reading books that long, let alone writing them, but – so you – but let me make a few comments.

It seems to me that it is not only viable to move in this direction, it's absolutely necessary for the country. And I say that from the perspective of three dimensions: security, from the perspective of the environment, and from the perspective of the long-term economic health of the country. We import 21 million barrels of oil a day – I'm sorry. We consume 21 million barrels of oil a day; 13 million are imported. The percentage of that oil that is coming from the Middle East is going up, not down. It's cost us in one Oak Ridge Laboratory study about \$7 trillion in our overall economic growth – in GDP growth over the last 30 years to deal with the oil shocks that have been hard on the economy from the price going up and down.

As Jason said, I think one of the questions about viability is, in fact, the question of price. I actually sat in the White House in 1999 and worried about \$10-a-barrel oil, what were we going to do about, what our policy would be, how you would keep domestic producers online with – I think, actually the price went down to around \$11 at that point. So the price volatility has been a factor, I think, that has retarded the growth of alternatives, but I think now it is clear it is necessary and I think the public understands that, consumers understand that as they fill up their tanks or as the home heating oil season comes on board that is really critical that we get on a different path.

It's critical, I think, from a security perspective as well. I think that – I mentioned this in my opening remarks, but I think that the addiction to imported oil in particular distorts our foreign policy in a whole range of ways and prevents us from projecting our values as Americans around the rest of the world.

And then, finally, I think with respect to the environment and climate change, it – we absolutely need to take a different energy path and different movement towards a different energy future. When you think about the challenge that this country and the world face from global warming, that threat is real. The science is in. I was taken by Jason's comments about you can't make someone wake up who's pretending to be asleep. (Laughter.) I kind of thought of –

MS. SMITH: Been there.

MR. PODESTA: I kind of thought of our vice president. He – (laughter).

But nine out of the ten hottest years on record have been since 1995. The cost can be astronomical. We're seeing rising sea levels. We're seeing rising intensity of storms. And, quite frankly, as we think about the developing world, the brunt of the kind of physical, human, economic costs actually take place I think hardest – get hit hardest in some – in the areas of the developing world. Their capacity to adapt is quite frankly less than ours, and ours, as we've seen this year of course, is not that great to begin with.

Even the Pentagon, I think, now recognizes that climate change itself is a security challenge as we envision crop failures around the world, as we envision environmental refugees not 100 years from now, but 10, 15, 20 years from now. We have got to get onto a different energy path and I think that one of the places that – where we can do that with some real significance is in the area that we're talking about this conference and with a shift from fossil fuels to renewable biofuels.

Jason threw out statistics around Brazil, but those can be duplicated with a shift from – in technology. It's important, I think, to broaden the sources of biofuel feed stocks. There's been much talk and our packets talk about the shift from starch-based feed stocks to cellulosic ethanol and what that – that can be both important economically as we begin to bring the price down, but it's also important environmentally because I think that the CO₂ gains, if you will, the ability to back out oil imports in the – or fossil fuel imports in the production of that kind of fuel with the right new investments and right new technology are critical and also the fixation of CO₂, as Jason previously noted, I think is quite important.

I'll just add one fact to the Brazil story. Again, a recent study found that they saved \$43.5 billion between '75 and 2000 by shifting their energy usage from imported oil to the production of ethanol. And I think that's only through 2000. If you think about what it means to their economy when you do have oil prices at \$50 or \$60 a barrel, the gains are enormous economically, and I think actually duplicated around the world, particularly in fast growing developing countries which are adding to this climate change burden as they develop and begin to bring on stream. I'm thinking about the Chinas and Indias and Brazils of the world bring on stream a lot of GDP growth. It just exacerbates the whole climate question, so if they develop along the same path that the United States and Europe developed over the course of the 19th and 20th century with – in terms of fossil fuel use per production of GDP, we're going to be just in a world of hurt with respect to the climate change challenge. We need to change the path there.

And I think that the tools that we're talking about today give us a real opportunity to do that. We've seen the start of that in the last energy bill. We talked more about the kind of tools that are necessary to bring on full-scale production of biofuels, which will help us economically revitalize rural America, in my opinion, but also deal with the security and climate challenges that the country and the world face.

MS. SMITH: I wonder, K. Y., if I can bring it back to you. There's been a number of assertions that some of the technologies you were talking about using here to produce biofuels from agriculture could be applied to the developing world, and you certainly know from your long-time experience in ECA that many times, although Africa produces a lot of oil, it's proven to be a bit of a curse.

And I wonder if from your perspective this kind of technology and development really would be viable for some of the poorer countries in the world.

MR. AMOAKO: Well, I think before I talk about viability, let me talk about the situation today and pick out some questions (that Daschle?) is saying about the cost of biofuels. I'm just (inaudible) African economies and therefore they need to find some alternative sources, but let me give you some facts.

As the senator said, (5 percent of GDP?) of some countries in that class (inaudible). And a tremendous (inaudible) have had this part of the market economies undermined in (inaudible). You know, many African countries have been through this (inaudible) with a lot of time in the context of the condition of Africa (work with?) others to assure that that need will come to many of these countries and after many, many years (with this approach?).

Secondly, now that we have it in place, the cost of (our imports?) is already offsetting our gains. Now we're waiting for (inaudible), so that's a key issue. And it's happening (inaudible) by this and then you go by this. Let me give you an example from my own country, Ghana. When the present government came to power in the year 2000, it came up with a vision for the country which I think was rather bold. Ghana has (inaudible) in 2000 was below \$400. So the president said, my ambition for Ghana is to ensure that by the year 2010 we'll more than double our (inaudible) income by (\$1,000?) a year.

A couple of weeks ago, the president was asked about his vision again since there were now (inaudible) the year (2018?) (inaudible) the year 2000 anymore, so he was (inaudible). So one of the main reasons because of our imports. That's how (inaudible). So I think that's a real issue. Therefore, anything that will allow us to produce energy from agriculture will be extremely important. I know a lot of details that (inaudible) Ghana and also for Madagascar. But there are (many) huge challenges for us. Of course there is the technology itself, and then there's also the trade that goes with it, the investment and infrastructure that we are required to deploy it, and finally the investments (inaudible) that will be (environmentally stable, these investments inaudible). But if we cannot scale (down?), perhaps we can begin some pilot programs to see how this works.

Another reason why I think we need to move in this direction is also the point that (inaudible) climate change – it's a major issue for us – a major, major issue for us. In order for (inaudible), countries are getting more and more (drier?). And more recent, (inaudible) at one of your (meetings?) came out with a report where it predicted that sub-Saharan as well as Southern Africa will become drier and drier. So now that we're talking about getting (agriculture?) (inaudible) so we can compete more, the paradox is that the climate change, the impact on our ability to produce where exports (will be reduced?), so it is an issue that is important to us and probably what we can do (inaudible).

MS. SMITH: Jason, K. Y. made reference to making this sustainable and John's also mentioned that, and I'm wondering, given your background in both agriculture but also environmental work, if we move in this direction what do we need to put in place to

make sure that the model is actually sustainable environmentally, whether it be in the United States or even in some of the world's poorest developing countries?

MR. CLAY: There's one issue that I think we just want – I want to underscore, which is that mostly what I will talk about is environmental sustainability, but I just want to talk a little bit about social sustainability – what some of the trade flows are now. The world is becoming dominated by south-to-south trade flows. There are products that used to be shipped to the U.S. or Europe for processing are now being shipped directly from Brazil to China, from Indonesia to China, from anywhere to China. And I think we need to also to think about that, but even in developing countries, manufacturers – these same multinational companies that are half as many as there were 20 years ago – are beginning to purchase much more locally. And they're doing this not because it's cheaper. They're doing it because it helps create markets for their products.

A Unilever in Indonesia is actually buying soybeans to make soy sauce in Indonesia from a study we just did from five and a half thousand farmers. They do that because that's five and a half families that have money to buy their products. If they bought those same soybeans – the same amount of soybeans in the United States, it would be three farmers. If they bought the same amount of soybeans in Brazil, it would be one farmer. And I think with the private sector increasingly trying to develop markets with the next billion and the next billion consumers after that – I mean, developed countries aren't buying more food. We may buy a niche market. We may buy novelty items. We may differentiate our food more, but we're not buying that much more food. Developing countries are, and they need to get into those markets, but they need to make sure the people in those markets have money to buy the products they make. So that's one kind of sustainability trend that I think is going on that is very important.

Another – and this, I guess, is what you want me to talk about is really the environmental sustainability of it all – of agriculture as it's practiced on the planet today. More than half of all land that's habitable on the planet is used for either agriculture or ranching today, and that is increasing by .25 to .5 percent per year. Do the math. Within a short period of time, there's going to be no natural habitat left. Ninety percent of all the farmland – all the land that's farmed today has a net carbon loss. That means there's more soil erosion than there is soil being built up by the crops being grown. That's when you only target the grain or the specific fruit that you're taking off the field. If you start talking about biomass, and removing all the stalks and all the plants and all those things, the amount of carbon being lost is going to increase dramatically because that's currently what is rebuilding the soil. If it doesn't rebuild the soil, you're going to have to add inputs, and the energy costs for that are going to get really expensive.

So we need to look at those kinds of net carbon issues. There's been a lot of focus on the energy side of this. It's really the net carbon issue. It's not a net energy issue and it's not CO₂ in the atmosphere. It's the soil. With farming, it's all about the soil. If you don't manage that soil, you don't have farming in the future.

The Copernicus Institute in the Netherlands has just done a report and I don't think it's been put on their website yet, but it will be before the end of the week. It was just announced last week in a conference in Rio. And what they found was using a lot of that data on agricultural production that with the current amount of land in production, we can produce a diet of 2,200 calories per person for nine billion people on the planet, not adding anymore land to the mix. We can produce four times as much energy from the land as we currently use from unrenovable or nonrenovable sources – four times as much.

We can do this if we use already existing, proven technologies and better management practices. The problem is, most farmers around the world are not using better management practices, and so there's a huge gap there between what is possible and what is happening on the ground. Any discussion of renewables and biofuels that doesn't also talk about education, talk about innovation, talk about leapfrogging technologies to the next best systems is going to miss the mark. And it's all about continuous improvement. Today's better management practice is tomorrow's norm and the day after the one we're trying to get rid of because it's not good enough anymore, and we need to think about it that way.

Their work also shows that this happens mostly with perennials or tree crops and mostly in the tropics because they have a year-round competitive advantage. So those are, I think, some of the major environmental issues that I think we need to begin to look at. We know that farming marginal lands is where you get the biggest environmental impacts in a negative sense. Our research in a lot of different commodities in a lot of different countries has shown that virtually every producer on the planet can take 5 to 15 percent of their land out of production and produce more on what's left because they spend their time fighting nature on that 5 to 15 percent rather than increasing production on this productive land. If we're going to pursue this path, we need to make sure that this happens on the most productive land, rather than just expanding into the marginal land, because we're going to have real environmental impacts if that takes place.

Thank you.

MS. SMITH: See, this is the thing about Jason. In one answer he can talk about soy sauce, net carbon management, calories, biofuels and perennials and make it all make sense. I like that – made very good sense. All right.

Tom, bringing it back home, we've talked about a vision here, but I wonder if you can address, again from the perspective of the family farmer, what some of the other instruments and issues, policies, resources are that we could bring to bear that would really make this survival a future for the farmers that you represent.

MR. BUIS: Well, Gayle, I think you have to look at everything sort of as one big, broad package. You have to look at the trade conglomerate. You have to look at the domestic farm policy. You have to look at our budget priorities. You have to look at our energy needs. You have to look at addressing world hunger. And I don't know if this

has been brought up here today, but 800 million people go to bed hungry every night. And we produce surpluses after surpluses in this country and in many other countries and the capacity to produce is there; maybe not the capacity or the will to distribute those products around the world, but I don't think you can just look at one single part and say this is going to be the answer.

We talked a lot about addressing the cause, not the symptoms, and farm bills tend to focus on the symptom – whatever is the hot issue at the moment, whether it's low prices, whether it's high prices, whether it's world trade driving – but we don't get back, again, to that overall problem and I think that's why this is a great – and my hat's off to the Center and to others for participating because that's the type of ideas we need to drive this next farm bill. Let's do it from a positive and let's try to get profitability out here. We'll see what every farmer wants: get that money from the marketplace, not the government, and make that true safety net.

The other point that strikes me is a lot of people seem to say American farmers are really making it tough for farmers in developing countries, yet if we go down this road that the administration has been proposing to eliminate farm subsidies, American-produced commodities are going to be cheaper, not more expensive. And so if people around the world think they have to compete against low-priced U.S. commodities today, wait until land values devalue, because you no longer have that safety net amortized in the land value, and then you're just going to see lower prices. So the whole process needs to be thought out very carefully. I commend you for putting this together.

MS. SMITH: Well, we obviously have needed and will continue to need you in this. You mentioned the farm bill, which among many of the issues that we're talking about here today is a politically charged issue, and I think the entire equation, if you will, that we're talking about has serious political ramifications. How do you make the changes we're talking about? What does that mean for domestic agricultural policy, for trade policy, for energy? None of these issues is without controversy.

And, John, I introduced you as someone with the great expertise in all these issues; you also have great expertise in politics, I believe, and I wonder if you could talk about whether it's really politically viable to do this.

MR. PODESTA: Well, I think you see a lot of movement today politically towards a future that we're describing. I think a lot has been done, but there's also a lot of – I think there's a lot of political energy, if you will – to make a pun – behind it. I'm sitting here wearing a "25 by '25" button, and that's a producer-led coalition that was spurred on by the energy future coalition – and I mentioned it to you earlier – of people who have really come together just to try to vision a domestic agriculture world where 25 percent of our energy needs as a country as a whole, not just in the (retail?) fuel sector, are provided through the world economy through agricultural resources. Some of that is wind, some of that is – much of it is in this transition to liquid fuels that are coming from biomass. You see other initiatives. Again, Dan Lashof is here from the NRDC. He's part of the Set America Free Coalition. I'm not sure if Dan and Frank Gaffney ever sat in

a room together until fairly recently. You see other efforts of security hawks who have come together and said we've got to get on a different path to get the United States off of its oil addiction and take away this –the impact that has with respect, as I mentioned earlier, the distortion of our foreign policy.

You see a lot of new coalition – bipartisan coalitions forming in Congress. I think, look, frankly that's spurred on by the fact that gas prices like this summer, that oil went – you know, going over \$60 a barrel, but then home heating oil is going to be a crisis for many people in this country this winter. But you see, whether that sentiment is coming from concern about the long-term viability of our environment or it's coming from the near-term price shock of the rising in oil price, I think you see a lot of will and you see a lot of public sentiment for a different future.

I think the public sort of gets this. They know that if government policy could get – can align itself with where the market could go, if we could do the kinds of things as Senator Daschle mentioned this morning – require that all vehicles be fitted for E85 in ten years, take the kinds of steps that are at least authorized in the energy bill that passed this summer, but we await to see whether there'll be money appropriated for things like new investment in production facilities. They – I think the public gets that with American ingenuity, American know-how, there's a lot of future potential both in rural America, but for jobs across the country in this new energy future, so I think that the world is there to be grasped by, I think, the political leadership that wants to do it.

And as I said, I think whether it's Senator Lieberman and Brownback's effort to introduce more biofuels into the mix or you see Jack Kingston and Eliot Engel on the House side, you see that these coalitions forming of people that in many other areas hardly talk to each other, which is a different sort of lament that we have about where Congress stands today, but I won't go down that path. But I do think that this is an area where you can see some real progress.

I think it has come along with a few other things. One is – and again, I'm picking up some threads that were mentioned earlier. Senator Daschle mentioned a move to cut the funds for conservation. I think that's – and it reminded me as Jason was talking about where fragile lands are going worldwide, we also have to think about that. I think in respect to what is happening in the U.S. and I think it's a terrible mistake on priorities to start taking money out of those kinds of programs, out of conservation, out of R&D when in fact we need more of that. For people who are concerned about wildlife in this country I think that that's the kind of – that itself is an important motivating issue, and we need to let people be heard.

I think as we shift on this trade dimension, we need to manage those accounts, put it into more productive uses, try to move that money into a way in which we kind of vision the future by these investments in R&D to do, I think, what's most important here, which is to change the technology mix. And again, I'm underscoring something that Jason said, that we can't really get there. It isn't a viable strategy to just do more of what

we're doing today. We've got to change the technology mix. We've got to invest in these new technologies.

The CO₂ budget that he raised looks a lot better once you've made the transition through the investment in biotechnology. You get the enzymes and the mix right to get into this new future through crop waste and cellulosic ethanol that begins to fix CO₂ in soil, rather than take it out. Those are all things that the government can do. They can support the right kind of policy initiatives to do it. It ought to come along with – again, the kind of safety-net questions that were discussed earlier this morning to make sure that we have a viable safety net for family farmers, which requires a mix of attention to payment (inaudible) that Senator Grassley, Senator Dorgan have focused on.

I want to just close, though, with one thought and that's to the question of social sustainability. I think we ought to also remember that when we think about development, we think about people who are poor in this world, the three billion people who live on \$2 a day or less, the billion plus who live on \$1 a day, those are the people who also lack access to modern energy and their economic development really requires the capacity to be able to access modern forms of energy. It isn't that they don't pay much for energy. When you spend four hours a day searching for firewood, sometimes risking your life to do so, as you know well, Gayle, in places like Darfur, or whether – where you're powering a light bulb with batteries, which you'll see in the poorest villages in the world, people are paying a lot for energy, but they don't have access to modern forms of energy.

In order to kind of tackle that problem, provide some hope for those people and to provide kind of new sources of energy, we're also going to have to clearly change the mix and the flow and the investment in this renewable world, so that's, I think, why the focus that has taken place now really at the UN level on trying to provide renewable energy for all people in the world without exacerbating or exponentially exacerbating it, I suppose – these environmental dangers and challenges – climate, the loss of land, et cetera, that Jason talked about – is really critical. And I think that the United States, in fact, and I think the – rather than be a lagger in this regard can really create new industries that can create a brighter future for people here, but also for people around the world who are desperately poor.

MS. SMITH: I think that's a good place to end the discussion up here and open it up to the audience.

In our view, this equation is, if you will, sort of win/win/win across the board and we can in some ways solve one problem and at the same time solve multiple others by addressing an energy crisis, investing in domestic agriculture, and thus freeing up markets in an important way in the developing world. And again, our view is that this is really the path forward to importantly change the terms of the debate, both about things like the farm bill here, but also in the Doha development round so that we really are talking about development and not undertaking what looks at present much more like a divorce settlement than actual trade negotiations.

With that – and I’m going to stand up here so that I don’t have my back to anyone – we’d like to open it up to questions. We have a couple of people with microphones and if you would just let us know whether you are addressing your question to a particular panelist or to the whole panel. And please stand, if you will, and we’ll get a microphone to you.

Yes?

Q: I’d like to address this question to the panel. How do we stop – in Maryland there’s a lot of real estate developers ripping up the farmlands and they’re breaking down all the farmlands for these housing developments. How do we stop that – from them selling off the land to real estate developers? How are we going to even have the farms?

MS. SMITH: Okay. Thanks. I’d like to take a few questions. Can you hear me? I’d like to take a few questions, if you will, and then we’ll put them all up here together. Yes, please. Back here. Yes, I’ve got a bit of a glare and I don’t want to put sunglasses on, so if you could raise your hand, I’ll come to you next. But we’ve got one right back – yeah, Dan, go ahead.

Q: Dan Lashof, NRDC. The general proposition here that by expanding the market for farm products in the form of renewable energy we can create a source of farm income that reduces the need for subsidies and therefore ease the trade negotiation makes a lot of sense, but I’m wondering if the panel could address what that agreement – what that actually would look like in the trade negotiations in a little bit more detail. How would that really work?

And the discussion also indicated that there are trade issues themselves that could be a part of this in the energy equation as well because – for example, the question of barriers to bringing ethanol from Brazil into the U.S. market and how would we address that if ethanol can be produced more cheaply from corn – from sugar cane in Brazil than it can be from corn in the U.S., that has the potential to create its own trade conflict. I’m wondering how we would address that as we try to move in this direction.

MS. SMITH: Thank you.

Q: Dave Michaels, with the (inaudible) Initiative. This question is for Jason. With the – I guess you made the point that the \$11 barrel of oil that is really turning off investors to refine ethanol – the investment that we require for that. Taking that into account, why do you think there’s not more interest in diesel engine conversion and (straight?) vegetable oil as fuel?

MS. SMITH: Okay. We’ll take one more.

Q: I’m Carolyn Brickey and I’m with Protected Harvest, and I guess I have two comments. One is that I think based on comments of all the panelists that we ought to think about whether there’re four things people can all agree on if they think these facts

are true before you start trying to put a package together and address each one of those things. The trend that Jason alluded to, I thought, were startling and probably not well thought through by those of us who were interested in working on farm policy.

The other thing I would say, and John also alluded to this, but I would come more directly at it is that if we're going to pose biofuels and other types of alternative energy sources as better for the environment, we'd better damn well make sure that it is better for the environment and better be able to prove it and show that it is.

MS. SMITH: Thank you. Let me open it up to the panelists. I'll let you self select on whether you know what to do about real estate developers, because I'm not sure I have the answers. But in some (inaudible) kind of interesting questions is what is really the shape of an agreement for a Doha round need to look like? How do we address the potential for other trade conflicts that may arise out of increased liquid fuels production, including the fact that it may be available cheaper elsewhere?

Jason, a particular question to you on the vegetable oil side and biodiesel. And I think, Tom, your points are really important and I think we can take a stab on that on the four facts on which we agree moving forward, but also importantly on the environmental sustainability.

And if I may come back down this way or you can self select. Do you want to start or – go ahead, Tom.

MR. BUIS: Well, first on Maryland houses (laughter) that's the most profitable farming there is is farming houses there, so we have to restore profitability. (Laughter.) There are some provisions in the farm bill – farmland protection provisions that have tried to create programs to help preserve those lands, but it's a huge problem. And it's even a bigger problem when that farmer sells his farm for a housing subdivision, takes all those thousands of dollars in profit and moves out into a more rural area and bids up the land prices and does it (inaudible) a lot of times (inaudible).

The trade agreement. If you're going to have a trade agreement that levels the playing field, it has to include all factors of trade; not just tariffs, not just duties, not just domestic subsidies and export subsidies, but it's got to include those other key factors: currency manipulation, labor environment, labor environment and health and safety standards. And this kind of leads into the other question about Brazil bringing ethanol into the country. We can compete with Brazil on any commodity they grow if they'll compete on the same level playing field on the environment, labor, and (currency?). The reason our sugar costs more in the United States is we don't pay our workers \$2 a day. We don't dump our refuse in the creek. And until that happens, all of the rest of the trade agreement – the negotiation (factors?) are window dressing.

It's not worked in the past. American agriculture is probably the classic example. We had a \$27 billion ag trade surplus in 1993 before we embarked on the free trade agenda. Today that's down to \$4 billion. It's very likely we're going to be a net

importer. And it's not because we can't – don't have the capacity to produce. It's because we don't have the capacity to produce under a level playing field.

MS. SMITH: Jason? Thank you.

MR. CLAY: I think there is a lot of interest in biodiesel, as well as heating oil. I know in the EU there are actually subsidizing energy plants that are burning palm oil. They're subsidizing them to the point of, I think, 16 Euros per ton. Those are about to be phased out, but about 500,000 tons have been used. There – Europe has a target of 5.75 percent of all energy being renewable very soon and they're going to miss that. It's like 2010 – they're going to miss that deadline it looks like, so they're starting to get a little worried and using more of it. Virtually all of the canola grown in Europe and much of what's grown in Canada is going into biodiesel programs right now, and that has not (inaudible) with fish oil substitutes, which canola was one of the things to take pressure off of wild fisheries. All of these things have repercussions throughout the food chain and throughout the environment that produces those different commodities.

But I guess the real issue is that we don't seem to have right now with the technology and the plant species that we have good sources of biodiesel that are renewable. Palm oil is too low down the carbon chain, so it's much more solid. It doesn't burn well. Canola is an annual product that has to be done in one to three or one to four-year rotations, so it takes a huge amount of land to do this, and there's a lot of erosion and other kinds of inputs associated with it. So we need to be thoughtful about this biotechnology. It may allow us to get there sooner, but so far the biotechnology has been more about selling Roundup than about other things. So if we can get off of that kick and onto some other traits and plans that we want, I think it would be very interesting.

Ethanol. Brazil has a quota for selling ethanol into the U.S. that was put into the CAFTA agreement. It also has unlimited access to U.S. markets for ethanol as long as 50 percent of the ethanol comes from central America, so Brazil is going to be selling ethanol to the U.S., there's no question. And it looks like very soon they're going to be selling ethanol to Europe as well. There's a pipeline being built – an ethanol pipeline from the sugar growing areas in Brazil to the coast to facilitate the transport of this.

I guess just two other comments on other issues. We need to be looking at new technology and not being kind of locked into the old ones. Senator Daschle talked about wind and I think wind has tremendous potential in some areas, but it costs a heck of a lot of money to build transmission lines, about \$1 million a mile for some of these larger transmission lines. That's a huge cost. Why don't we leap frog that? Why don't we convert that energy at the windmill into hydrogen and have hydrogen-powered vehicles go around and pick it up like on (a milk run?). I mean, there are other ways to think about generating energy, transporting energy, using energy. I don't know that that one would work, but if great minds get together, they can come up with something probably better than building antiquated or 50-year-old technology to evacuate power.

The other issue is I think we're really talking not so much in terms of global issues of poverty and small farmers. It's not about entitlements or not even really about income, but it's about assets and it's about opportunities, and that's we've got to focus on for the future. Most farmers want opportunities. They don't want a handout. They want an opportunity and anything that builds their assets – the soil, the renewable energy sources, et cetera – is going to be good for them.

MS. SMITH: John, do you have –

MR. BUIS: Well, just add on a couple points. Dennis (inaudible) told me yesterday that E85 in South Dakota was selling for \$1.57 a gallon. I mean, I think that the potential to come on market with new forms of these liquid fuels is very high. I somewhat agree with Tom and I somewhat disagree with Tom. I think where – or I think he overstates the case. I think that the – that global trade needs to begin to grasp these other human dimension questions. I mean, we can define our strategies towards doing that, including labor and environment. And I think that (inaudible) part of the fact that the end of the Clinton administration began to be able to grapple with that, at least at a (inaudible), level of the (inaudible), et cetera. But I think it could also overstate the case and kind of mask the fact that there will be lower cost producers on some commodities and the ability to have a system that essentially gives benefits to people who can produce at a low cost. K. Y. and Jason both raised the question of tropical production – you know, that there is some value in that. We just got to do – it harkens back to Carolyn's point about let's get clear about what the real facts are and see if we can get agreement on the real facts. And I think if we do get agreement on the real facts we can make progress.

And I'm not – I think Carolyn deserves a response on the environmental benefit side. While I think there are environmental challenges in the shift, I think there's clearly environmental upsides if we get the policy right, and that's why it's so important, I think, again to support conservation, but to also support the research and development agenda for these new technologies which have tremendous environmental upside, I think, more than the current breed of technologies.

And I think with regard to Dan Lashof's question, the third panel of the day is really geared at trying to kind of marry this all and provide a vision where we go in the Doha round. I kind of want to circle back and maybe end with where I began, which is in finding something to criticize in the way that the Bush administration put forward its proposal in Doha. They did it without regard to what the future would hold for rural America. And I think that's politically naïve, and I think it's really – it's kind of unsustainable; that if there's going to be a path forward, it has to marry the interests and provide a vision for how family farmers here are going to succeed as well as farmers around the rest of the world. And it seems to me that that's the secret to kind of cutting the Gordian knot, I guess, of the Doha round. We had to provide a kind of viable future not just for the Brazils, and not even just for the farmers in West Africa, although I think it's our moral obligation to do so, but we have to do it with a perspective that says that family farmers in rural America here can succeed in that world as well in order to have the (pool of?) support to move forward.

MS. SMITH: K. Y., would you like to add anything?

MR. AMOAKO: I'll pick up on John's point and also the context of what he has set out to do about it. I think that might be (inaudible) in Doha, but for many of us in the northern countries of Africa, the issues about purchases and tariffs are fundamental. (Inaudible). It's not only a trade issue; it's an environmental issue. And that's why the perspective of this proposal is just very interesting, because (I said?) in the long run we can have a (inaudible) our countries more productive, more competitive. We need to (inaudible) because over the years one of the things (inaudible) investments in Africa in particular, the World Bank and the others (inaudible). And I think we need to go back to – so the extent of your proposal seems to me would allow us also not only to (pick up?) American (farmers' model?), but what you were describing earlier in your remarks about (inaudible) support investments in the (inaudible) in this country and we (inaudible) back to the table (inaudible).

MS. SMITH: Thank you, K. Y.

I would like to close this panel. Carolyn, I'm not sure I can get exactly the facts, but I think there's some sort of core principles that all the panelists have raised on which there is agreement. I wrote down in my notes; the first one is catch up with Brazil quickly. (Laughter.) But I think it's very evident from both Jason and K. Y.'s comments that the agricultural environment we're dealing with globally is much, much different than the one even of five to 10 years ago, let alone 20 years ago, and that if we're going to move forward, we've got to take stock of what that environment is rather than hoping it will be like it was.

I think the second that we've heard repeatedly is that there is a need for a safety net, but that as important, if not more important than that, is making the markets work for family farmers here, but also importantly small farmers in the developing world; that that's the focus. I think as Jason and K. Y. have both stressed, farmers, like anyone else, don't want to be dependent. They want to have opportunities.

I think the third in this notion of a level playing field, K. Y. has talked about that from the perspective of the world's poorest countries who want to be able to assert their right to compete, and I think Tom has added the importance and obvious importance of labor and environmental standings. I think that's critically important. I would only add one small footnote to that, which is that for the poorest countries in the world there's also an issue of achieving the capacity to meet those standards, so I think in most cases there's the will. The means is much more difficult.

I think finally, and going back to what certainly started this whole discussion – this program for us at the Center is this notion of the Doha development round is that we need to think about development as a challenge at home and abroad, and how we make the investments that we need to make to allow development to take (inaudible) for rural America or for West Africa, and that that requires significant additional investments.

Significantly, I think John referred to redeploying some resources. As K. Y. suggests, all the (signs are reading?) that the developing world is not going to accept a small compromise in the Doha round. They're going to look for serious movement on subsidies and tariffs. But we have, I think, before us an opportunity to redeploy those resources into a new sector that can in fact create markets here, develop technologies that will serve us at home, and importantly, serve our partners abroad.

So with that, I would like to end here and tell you what's going to happen next. We're going to take a 15-minute break and then we'll have another panel led by Todd Stern (ph), and I hope you will join me in thanking all of our panelists this morning.

(Applause.)

Panel II
Incentives for Innovation:
Agriculture, Energy, and the Private Sector

TODD STERN: All right, welcome to our second panel. I think we can start now. I'll give you a two-second introduction of who I am. My name is Todd Stern. I'm a senior fellow at the Center for American Progress and also practice law here in Washington at Wilmer Cutler & Pickering and got involved with these issues back when I managed the climate change issue for President Clinton between 1997 and 1999, and certainly issues of renewable energy and bioenergy were matters that we were starting to focus on back then.

I think that from what we heard in the first panel this morning there's potentially a moment coming together for bioenergy based on a growing awareness of three different policy challenges which can all be addressed in ways through bioenergy.

One is – and again, we heard about all of these in some depth during the first panel, but one of these is the growing awareness of the economic and national security downsides of our oil dependency. Second is an understanding and, again, growing awareness that the subsidy programs that we have both undermine any effort to combat global poverty and are, in all likelihood, politically not sustainable in the world trade system. And third, as John in particular addressed this morning, the growing awareness of the real peril that we all face from the danger of climate change. And each of these problems can be addressed in a quite powerful way through a concerted effort to develop bioenergy.

And so, again, I think it is an interesting moment here. In our second panel today; we are going to be focusing on the viability of biobased energy, on the opportunities that it presents, and some of the policies that need to be put in motion by the government in order to develop the promise and potential of this kind of energy.

We have a terrific panel. We have a superbly qualified panel to address these issues. Immediately to my right is Read Smith, a farmer from Washington state and a co-chair of the Ag Energy Work Group, which has put forth a very striking vision for agriculture to provide fully 25 percent of the energy needs of this country by 2025.

Moving down the row here, Ralph Grossi is a third-generation family farmer from Marin County, California. He is president of the American Farmland Trust, whose mission is to protect farmland and promote farming practices that are sustainable and lead to a healthy environment.

To Ralph's right is John Ranieri, vice president and general manager for biobased materials at DuPont, which is, without any question, one of the world's leading companies in the development of biobased products.

And finally, Nathanael Greene is a senior policy analyst at the Natural Resources Defense Council and the lead author of a comprehensive and excellent report in 2004 called "Growing Energy." And I want to thank all of our panelists for taking the time to come here and share your thoughts and perspectives with us today.

Read, let me start with you, if I can. You are a long-time farmer and this is certainly the kind of occupation that leads one to have one's feet both literally and figuratively on the ground, and yet I think many people might look at the "25 by '25" vision as being a kind of pie-in-the-sky notion. So what I'd like to see if you could do with us a little bit is tell us about that vision and the opportunities that you see for the development of energy from agriculture.

J. READ SMITH: Thank you, Todd. I guess I think back to the '60s when a president said "We're going to have a man on the moon in ten years," and I guess I don't see the "25 by '25" as quite that much of a stretch, but it's certainly going to require the stars to align and we are going to need some help from everyone in this room to make certain that happens.

But the fact of the matter is, for agricultural forestry to contribute 25 percent of our country's energy needs by the year 2025; it is going to be more than just biofuels. It's certainly going to be wind, solar, methane, geothermal, and perhaps some things that we haven't thought of yet to achieve that lofty goal. And it's certainly going to be combined with many other things – efficiencies, conservation and so on – because we have to lower the bar as we build up the amount of renewables.

But I think that, as Todd said earlier, there is a kind of coming together of a lot of very strong forces, and this "25 by '25" campaign and the whole idea of becoming more energy independent is certainly a worthy national goal. And I guess that is – what we would like to do is to have our nation adopt a vision that would allow us to make this happen.

Technologically, it is very possible to achieve this goal even though it is going to require a lot of changes, but I think with all your help and with the country focusing on renewables for a change instead of relying on the old fossil-fuel model, we could achieve much more energy security than we have today.

MR. STERN: Let me just ask you a short follow-up. What is the – what do you envision as the kind of coalition that you're – that you're looking to put together to try to achieve that?

MR. SMITH: Well certainly there is no single sector that will make this happen by itself and I think our vision, from our steering committee of about 20 leaders from across the country, is to develop a very strong agricultural base and to make certain that agriculture and forestry interests are leading the effort to make this happen. In addition to that, it is going to take a large coalition of corporate America, of the environmental community, of all concerned citizens, of government, of our leaders. Everyone needs to recognize the value of this vision and to move forward in that direction.

MR. STERN: Okay, thanks. Ralph, let me turn to you, if I could. The mission of the American Farmland Trust is, as I noted in the brief introduction – by the way, full bios for everybody up here can be found in your books. But the mission of the American Farmland Trust is to protect farmland and ensure a future for agriculture and improve environmental stewardship. And I'm wondering if you can tell us how the development of renewable energy and biobased fuels factors into that mission and – and fits into your vision.

RALPH GROSSI: I'll try to, Todd, but, by the way, by way of further introduction, my first career was as a dairy farmer in Northern California, which is now a cattle operation, but in 1980 we built a methane digester and produced our own electricity for seven years – enough electricity to heat and light 60 residential homes. What is discouraging to me is that this country has taken a two-decade timeout from the development of alternative energy, so I hope we are getting back on track now.

Our organization has spent the last 25 years promoting incentive-based conservation programs to provide more opportunities for farmers and ranchers to be better stewards of the land, to give them the tools to do so, and to help farmers protect their land and pass it on to the next generation.

Farmers keep the best land in agriculture. I noted Dr. Clay's comment earlier about making sure the production occurs on the good land on this globe, and I think that's something that we've lost sight of as a country and as a world. We continually are pushing agriculture off the most productive land, particularly in this country, because our ancestors were very bright people: they settled on the best farmland, and so many of our cities are growing and sprawling on the best farmland in this country, pushing agriculture off the most productive land and onto marginal lands and that can only have long-term, serious consequences both for the environment and for our competitiveness as an agricultural industry.

No matter what the new technologies are that come along, I think we'd all like to be able to apply those technologies on the most productive land rather than on marginal lands. But having said that, we concluded a couple of years ago, after the passage of the '02 farm bill, that the next farm bill was probably going to be different, that the likelihood of another bill like '02 was pretty low. Circumstances have changed: pressure from the international community, budget pressure, increased transparency of the programs and where the money goes and, most importantly probably, the increasing unmet needs of agriculture. Agriculture has tremendous needs to support and strengthen its institution in the areas of research, environmental protection, food safety, food security; and those are big ticket items that also need support and, we believe, will have public support if we address those needs in future farm policy.

So as we've gone about the country holding workshops for farm leaders and talking to farmers over the past year, what we've heard is farmers want a safety net, of course, but they want a cost-effective safety net that doesn't overstimulate production. They like the concept of green payments, of being rewarded for the many other amenities they produce: clean water, wildlife habitat, open space around our cities, these are all, by the way, farm products, but we don't have a very good structure for rewarding farmers for those products.

But one of the more exciting things we heard in these workshops with our producers around the country was the opportunities in the area of new markets for agricultural products and energy, renewable energy, was right at the top of that list. It came up in every workshop, as you might expect. We see it as one of a whole list of opportunities for agriculture to become more entrepreneurial, to be more market focused going forward, and maybe the time is right for a real renewable energy partnership with agriculture.

MR. STERN: Thanks very much.

John, we've heard a little bit about how the development of bioenergy could be a good thing for farmers, create new markets, could be a benefit for them. I wonder if you could tell us a little bit, give us a little bit of a business perspective, how business can benefit either, I would assume, either as a user of renewable biopower, biofuels, or as a producer of biobased products. And I wonder if you could tell us a little bit about what DuPont's doing, about what your vision of DuPont is going forward, and give us a business perspective from an industry leader.

JOHN RANIERI: It is a very interesting and really an important time that – we were talking in the hall – that we think is very much different than the late '70s when we had that same swing towards renewables. DuPont, ten years ago, (Chad Howard?), the chairman, made a commitment to have 25 percent of the revenues from non-depletable resources. And, if you look around, DuPont obviously is known for making – kind of the inventor of polymers and plastics, and all that is based on petrochemicals and chemistry and polymer science.

The next generation of polymers we see are coming from not petroleum, but from cornstarch, from sugar. You see in Brazil sugarcane being moved to ethanol and it being more of a use and less expensive than petrochemicals now, given the price points where they are, which you mentioned. The reason is, is that instead of using petrochemicals and chemistry, you use cornstarch which is converted to sugar or sugarcane. You feed a biological organism that would make ethanol or something else.

Now, just to give you an example, it's a much broader look at (then?), it's moving sugar, and sugar is a very good thing in that by definition it's renewable, and secondly, for sugar to be made by a plant, it takes in CO₂. That carbon is fixed. The sugar is made. You feed that sugar to a yeast that will make ethanol, it gets burned and the CO₂ goes back up. So it's a cycle. That's the whole difference.

Many people don't realize that – at least the general public, that what we are doing when we take petrochemicals out of the ground is, we pull out old carbon, we refine it, we make it into gasoline, we burn it, and that carbon goes into the atmosphere as CO₂. It's like a big tailpipe coming out of the ground. So the fact that we use agricultural crops, we have a cycle. By definition, it's the right thing to do.

The question is, is how do we use biology to feed these fermenters to make something of value. That's not an easy thing to do. It takes partners and, our example, and I'll just very quickly say this one, is we're making the first material from DuPont from renewable resources and were spending a \$100 million to build a fermenter in a partnership with Tate and Lyle, which is a sugar company.

They have a corn (inaudible) in Loudon, Tennessee, and we're building a 100-million-pound fermenter to make the first of its kind that will produce a chemical that will make – from sugar that will make flooring, that will make textiles, that moves us away from petrochemicals, and that took partnerships. We started 10 years ago – partnered with a biotech company to come up with the organism that could be – the software could be engineered to make the chemical that would then be used to make the product: the carpets, the textiles, and flooring. That took seven years and a lot of hard work to take this organism to make that valuable product.

We had 500-fold production improvement by being able to work the software within that bacteria. Then we partnered with Tate and Lyle to build a fermenter and now we are going to be producing that next year at 100 million pounds of volume. Now, what's interesting about that is, by using sugar instead of using petrochemicals, we avoid the equivalent use of ten million gallons of gasoline for a material alone.

Sugar can really make a difference and not only are you making a product that will be competitive in the marketplace, because we have to give a return to our shareholders, but it's the right thing to do. It's far more sustainable. And I think now that the paradigm that we talk to now is you have to come up with a product that really

has differentiable value, but at the same time be sustainable. You can't do one without the other.

And I think good policy would encourage those kinds of different programs to come about and I guess we'll (build?) a biorefinery later, which is really one that the government had very good foresight three years ago in allowing us to partner with the government – us as the lead – to start looking at coming up with a biorefinery that would use other fuel forefront, and I think later on it would be good to discuss that.

MR. STERN: John, just as a follow up, what do you expect to be the market for the products you're – that will be generated from the fermenter that you're talking about?

MR. RANIERI: Well, two areas. The first one – the one I was describing – is the latest innovation and introduction of a polymer that would be made for flooring. If you go to some of the flooring stores – we've partnered with Mohawk – you'll see a Serona (ph), which is a polymer from DuPont. And next year when the fermenter comes online, it will be made from renewable resources that were made with a biological process. So it will be carpeting, textiles, engineering plastics – all those can be made from this high-performance polymer, which its primary ingredient is, again, derived from the fermenter we're building with Tate and Lyle.

MR. STERN: Any issue of acceptance in the marketplace or –

MR. RANIERI: That's a good question. No, the interesting thing, DuPont knew of this polymer 50 years ago, but they could never make it at a price point that really would make sense in the marketplace. What's interesting about this one is biology can make propanediol, which is the primary ingredient, more effectively than chemistry, so not only do you get a high-quality product – the polymer – but you also get the environmental benefit.

So we think – and right now we're having good sales with Mohawk on the flooring that was just introduced; and secondly, we feel that we will get some type of green bonus, that consumers in America really are starting to care. There is a – I would never say that's the case looking at all the SUVs that are around. I mean, that's not the first thing you look at was, "how green is the product?" But America is really changing. People really are concerned. Europe and Japan probably were slightly ahead of the curve on that context, but we're having good pickup on the product, but we hope that we'll have even further pickup because of the environmentally green aspect.

MR. STERN: Great. Good.

Nathanael, let me turn to you for a minute. We've – all of the first three discussions we've had so far have been focused on – essentially on the economics of bioenergy. I wanted to see if we could talk with you for a minute about the energy and climate challenges that are facing the country. Again, John Podesta laid out quite well the real seriousness that I think people are increasingly understanding with respect to

climate change, and climate – really global climate disruption. What part can biofuels play in dealing with that issue and issues of energy security?

NATHANAEL GREENE: Well, that I think is a really crucial question and it's – sort of – one of the questions that came up on the last panel. What are the facts and where's the proof that this is good for the environment?

MR. STERN: Right.

MR. GREENE: We started asking that question at NRDC about five years ago after seeing a number of studies come out looking forward and projecting a sustainable energy future, and each one of those has a big wedge devoted to biomass and – sort of asking what's behind that wedge, what's in that wedge and how do you, given that the environmental community historically has had some sort of mixed feelings about biomass or particular types of biomass and so we're trying to figure out, really, how do you use biomass sustainably to get to these big projections that everyone seems to agree is needed?

And, so we partnered with a coalition of universities and national research labs on a project called “The Role for Biomass in America's Energy Future,” and really asked the question, “how can you get – how much can you get from biofuels in a sustainable way?”

And the answer that we found not just at sort of where the technology has been, which is sort of the traditional approach to this, but really trying to look at a dynamic picture forward. Not just what the – how the technologies will improve both on the production side and the feedstock side, but also looking at the whole context: how our demand will change over time and how our policies can change over time.

I think you really have to look at it that way, because if you just try to project from historic performance and current technologies, it is hard to get to see a large role. But we found you can make a really big impact if you're willing to make a national commitment.

Our analysis showed that by 2050, we could basically eliminate our demand for gasoline using a mixture of vehicle efficiency, smart growth, and advanced biofuels. I think it's crucial to understand that those two things – the demand side of the equation and the supply side of the equation – are really linked and linked through the environment most crucially. Because if we try to go out and – even using the best technologies on the supply side, and meet all of the oil growth – oil demand that we expect over the next 50 years or so, we are going to have a land use problem, whereas if we can improve the vehicle efficiency – double the vehicle efficiency, you double the yield, basically, from each acre of land.

We also found that the advanced technologies – building off the same sort of technologies that John was talking about, it takes – there's research and development to be done here, but this is not – there are no challenges here that we don't think we can

overcome. And these technologies move us to a biofuels industry that really has big environmental benefits: much greater carbon, or greenhouse gas emission reductions than current biofuels, which do produce greenhouse gas emission reductions, but we need more if we're really going to address our climate change problems. Feedstocks that can really sequester more carbon in the ground, reduce our fertilizer use, reduce erosion, reduce our draw of water from aquifers. So there's a real environmental win here. It's not just a good investment for America or a good investment for agriculture. It's a real crucial investment, we think, for the environment.

MR. STERN: Thanks. Let me just ask you a quick follow up. There was a point that Jason Clay on the panel this morning made, and I think you may have just addressed it, but I want to try to nail that down. He said that if you use cellulosic biomass, which is clearly what we're talking about doing and what's the centerpiece in the NRDC report, that you would actually increase the net loss of carbon that exists right now from farming. And you talked a minute ago about improving feedstocks so there would be greater carbon retention and things like that, but I wanted to just give you an opportunity to answer that concern which Jason raised this morning.

MR. GREENE: Yeah. I think it's crucial to recognize that there are major changes that are going on in the agricultural sector today. We see a tremendous trend toward no-till agriculture that is really changing the environmental footprint of the agricultural sector and allowing tremendous gains in productivity without corresponding increases in impacts, but the – moving towards evolving the industry to cellulosic technology really does offer sort of a next step – a much bigger step forward on reducing those impacts.

We happened to look, specifically in our work, at switch grass, which is a perennial grass. It's just one feedstock and I think that's important. We painted one path to a big impact – a sustainable path. I think there are many paths out there and once we start down it, we'll find there're other ones. But the fact that there is one out there that does, through using the perennial grass, where you have a root stock that holds the soil together over the winter. It, being perennial, doesn't need the fertilizer inputs, the pesticide inputs to start up each year; and it's also a native prairie grass so it's much more adapted to the water supply throughout particularly its primary growing areas, which are throughout the Great Plains and into the Southeast. So it's more naturally and better adapted to those climates. But I think we'll see sort of – again, and I think this a point that both Ralph and Read made, if we provide the farmers the right incentives, send them the signals on the environmental benefits that we want them to provide, that they'll provide it. They can do it. These are innovative and smart guys and they'll figure out how to do this. I think it's a question of setting the path right.

MR. STERN: Good. Thanks.

Read, let me come back to you for a moment now, and let me propose this from the perspective of people who might be skeptical. The promise, in one way or another, of biofuels or alternative fuels has been discussed at some level for quite a while, probably

since the first oil shocks back in the seventies and up until now it hasn't really taken off, although there's no question that there's been a significant growth in the use of ethanol. But I guess the question comes back to whether you think that there's a moment now that the case could be made to farmers in a way that hasn't been the case before, and whether whatever the underlying causes for the market not to have developed that much before, whether farmers are traditionalists or the price point didn't seem right or the market didn't seem to be there. Something leads you – leads everybody up here, but that leads you to think that a breakthrough is possible to be made now in going forward and I just wondered what you could just share what your thought is about that.

MR. SMITH: You know, it may come as a surprise to the people in this room – there are only a small handful of farmers in this room – but farmers don't want subsidies. We don't want to be at the public trough. We don't want to portray the image that we are part of the problem instead of part of the solution. We see the whole renewable energy sector as a way to redefine ourselves to you – to our public.

Most of you are probably two or three generations removed from the time when your ancestors or your family were once involved in agriculture. There's only 1 percent of us now; and, actually, of that 1 percent, probably 10 percent of that 1 percent actually produce most of what you eat; so we're talking about a very small community. Quite frankly, we're tired of what's been going on the last 60 years. We're sick and tired of it. If it hasn't worked, it's not going to work, so let's try something new.

We see energy and the production of energy as a tremendous historic opportunity for agriculture to become part of the solution instead of part of the problem. So I think all of us that have taken the time to look at the opportunity that's out there, are very excited about the future. Many of our peers at home are not, and so just bear with us as we transition into this new economy because it's not going to happen quickly. We're going to need a little help along the way, but we want to get there for the same reasons you want us there. So hopefully we'll get there, and we'll get there as soon as we can.

I would like to invite each of you that are here to come back here on the 7th and 8th of March and – actually it's in this very room, and we're going to continue the discussions of our renewable energy opportunities in agriculture and forestry, and hopefully many of you can help us get to the point where we can see this new vision.

Included in your packet was a brochure on ag energy and there is a section in there that includes an endorsement for this project. You could help us realize this vision by having your organization group endorse that vision; and it just broadens the base so that we can help our government, our president, our Congress grasp this as a national initiative.

Thank you.

MR. STERN: Good. Thanks.

John, let me skip to you. What kind of – first of all, I want to give you an opportunity to talk about the biorefinery, but in that context – in sort of a broader context, what from your perspective, from DuPont’s perspective, is the role that the government needs to play to help advance a biobased energy future?

It is – I think biomass technology has often been viewed as not ready for primetime. In order to get it to the point where it really is there and people see it being there, what’s the role the policy community needs to be to help business and farmers from your perspective?

MR. RANIERI: Well, I think we have a very good example – actually Read and Nathanael made two very good points in terms of this really is something that can happen; and, it really can transform. And, in reading the “25 by ‘25” plan, it’s interesting – I don’t know if your European counterparts have said 2020 is what their goal is and they’re actually, policy-wise, looking to see how they could also come up with alternatives, both from the biodiesel standpoint and ethanol.

What’s interesting, as I said three years ago, the DOE came up with a bid to say, “Hey, we’re trying to get at these biorefineries.” But, what’s a biorefinery? It’s what you’re saying, the switch grass – an energy crop. You see, right now we’re dependent on using sugar, whether taking cornstarch, the corn kernels off, converting that to sugar or sugarcane – you know, feeding the yeast and having ethanol made.

What really transformed and changed the game that Read is saying, is – again, everything is carbon, whether it’s oil you pull out of the ground, it’s cornstarch or sugar. Well, the stalks and the husks are cellulosic carbon, so why is that important? How is that related to energy? What we need to do is come up with the biological know-how, the technological know-how to be able to take this biomass that Read’s talking about and be able to convert that cellulose into sugar.

So right now we can’t get at the large opportunity that Read is talking about, of replacing a large part of the gasoline consumed today. Today, I think, biofuel is 3 or 4 percent of the overall total, and we might double that up to 7 percent is what the new energy bill, I think, says. But what would change the game is coming up with the know-how to be able to have an energy crop, take that, treat it with an enzyme that would convert that to a usable sugar, to engineer the organism that would make ethanol effective and to take all that sugar in, and allow for the volume that you’d need to replace the enormous amount of gasoline used, and at the same time lower the price point where you get the efficiency that you’re really looking for.

Now, what the government has done very smartly was to have a co-investment strategy where they – for every dollar we put in, they put in a dollar. We put partners together. We started with – you know, we have our own pioneer looking at the seed that would basically come up with the biomass that would be most suitable to be then broken down into sugar by enzymes. We’re working with Diversa in California involving

enzymes to move that cellulose to sugar. And then we're looking – internally looking at that ethanology (ph), as you say, to take that sugar and convert it into ethanol.

So putting those pieces together right from the seed all the way down to making the biofuel really is what's needed. And the government stepped up – and again, this is before oil prices went up dramatically, so there was some real foresight here. And we're, right now, putting that know-how – that biosoftware we call it – together to come up with a value chain that makes sense – that we can actually convert that biomass and then that could be used wherever. That know-how you can use equally as well in Iowa as Connecticut, for example, to convert biomass into ethanol and do it in a much more economically beneficial way. But it takes smart thinking about it. It's putting pieces together.

You brought up a point that I agree with, is that the pieces are here. It's not dramatic innovation. It's hard work. There is innovation that has to happen, but it's about putting those pieces together and having a desire and will to do it.

The “25 by ‘25” is something that is absolutely achievable. We just have to smartly direct the technologies so that we can meet those needs. And everybody wins because right now the high price of gasoline isn't exactly being reinvested in our country. And we're actually very favorably blessed with agricultural land that is probably some of the best in the world. And we're not taking advantage of it and probably could.

But the biorefinery is a very interesting example of how you could do that because you can then bolt on not only about moving the cornstarch, it's taking the stalks as well and then move that to sugar, another crop that a farmer than take advantage of and make a profit on – moving that to ethanol and using that. So it really is an exciting time, but the technology also is there to be able to do this and we can consider doing this.

We've taken a lot of the know-how that over the last 30 years – biotech is only 30 years old. It started in the farmer area. About 20 years ago it moved into agriculture. Now it's moving into the industrial spaces where we're taking the know-how of how to design, how to move enzymes, how to engineer organisms to make things of value, and taken the toolkits that were developed in the other two market spaces and moving them into industrial spaces. So it really is an exciting time and one that you can really see where putting the pieces together effectively will make them economically viable.

MR. STERN: John, do you – is it your sense that the government role now is about right or that there needs to be greater either government investment or government policy to incentivize this kind of investment on the part of the private sector?

MR. RANIERI: I think it's a smart investment and I think the biorefinery, again, is a very good example of a very smart – looking at the innovation that's needed and realizing that they're going have to really incentivize this because this is far out. I mean, these are going take several years. We're going have to build a pilot plant in about a year

and a half and the government has indicated that they're looking to assist and help in that matter.

On the market side, I guess it comes down to the question – it's a good question – is it's a mindset that we really have the mandate to really push and develop this technology that's needed to allow for these biological technologies to make it into the industrial space. And the more, I think, incentives that have been done on the back end, on the technology side, for example on the biorefinery, I think would be very helpful. And from the market perspective, encouraging preferential purchasing of these types of products I think would really help as well.

MR. STERN: Thanks.

Nathanael, let me turn to you and just kind of follow up on this policy question both from a perspective – whether it's from a perspective of increasing going to consumer market or any other policy perspective that you think is important. To some degree there obviously were positive measures adopted in the context of the energy act that was passed last summer.

Can you give us your perspective, both on the way in which that law might help, the way in which that law might not go far enough, and other kinds of policies that you think the government ought to be trying to pursue in order to really drive this?

MR. GREENE: Definitely. Let me just take a step back though, because I had the pleasure right before this of speaking at the Farm Journal Forum, which is an annual forum held by the Farm Journal, which is one of the major trade journals in the agricultural community.

And afterwards, a farmer from North Dakota came up and said exactly what we're hearing from Ralph and Read; that he is actually – he finds it humiliating to have to keep taking the subsidies that his industry has become so addicted to in the last six years. And his question to me was, "Do the politicians have enough guts to get us off these subsidies?" which I was, sort of, whoa, and I wasn't sure I had the confidence to say, "Yeah, they'll do it."

But what we both agreed is if we could light a big fire underneath them, then they would probably do it. And I think that that's – we are in a really kind of exciting moment where there is a potential for sort of new alliances to form around these ideas and to really reshape some of the politics. I think the Energy Policy Act that you brought up is a sign of sort of a congressional excitement around biofuels. In the growing energy (part?) you mentioned, we thought we were reaching pretty far in making recommendations that amounted to about \$2 billion dollars over 10 years in different types of policies.

The Energy Policy Act actually has \$4.2 billion, more than twice what we recommended, for advanced biofuels – not worth the paper it's written on unless it's appropriated. Those are all authorizations. So there's a lot of stuff in the Energy Policy

Act that reads pretty well on paper that really won't do anything unless we really follow up on it. I think the pieces that will do something, regardless of appropriations, are the mandates. So the renewable fuel standard, while not doing everything we would have liked to see in the area of protecting air quality, it did do quite a lot in that area and also, obviously, it's going to really drive the market substantially.

There's a specific component of the RFS that is devoted to cellulosic biofuels: 250 million gallons by 2013. There's also a new piece of legislation that was introduced in both the House and the Senate just before Thanksgiving with a very cumbersome name that I can't possibly remember, but it's based on a recommendation plan put forward by something known as a "Set America Free Coalition," which I think is a perfect example of these new alliances that I mentioned.

The "Set America Free Coalition" is a coalition of national security hawks and environmental groups. And the heart of the legislation is a mandate that the federal government save 2.5 million barrels of oil a day by 2015, and that that amount increase after that.

Politically, the sort of almost staggering thing is the spectrum of cosponsors. In the House, the vice chair of the Republican Caucus Conference, Representative Kingston, is the lead co-sponsor. In the Senate, you have Senator Lieberman and Senator Brownback, among others. It's really an impressive spread of conservative Republicans and Democrats getting behind the idea of oil savings as a national priority. And it put biofuels very clearly into that context, which I think moving forward on the policy question is really the crucial – a crucial step is to reframe biofuels from being an agricultural, rural economy issue, which has often created a lot of tension between the rural economies and the urban economies, and really reframing it in terms of a national priority, and Read has talked about that as sort of the goal of the "25 by '25" Coalition. I think that's exactly the right direction (and necessary?) broadness.

MR. STERN: Good.

Ralph, let me ask you one quick question and then we are going to take a few from the audience. This 2007 farm bill is actually just around the corner. Do you – what do you think about the timing – whether the timing is right politically for a real push in the way of renewables and biobased energy in the context of the farm bill?

MR. GROSSI: Well, I guess that the initial disclaimer is that none of us knows what it will be like in June and July of 2007 when the committees will be writing the farm bill and farm policy tends to be a second tier issue that often gets traded off against other priorities. So having said that, by then the Doha development round should be wrapped up, one way or another, so we'll know what the new international directives and constraints are.

Certainly, the budget situation doesn't look like it will be any better by then, given all the other priorities, so the timing looks pretty good to have a real national

discussion about the federal role in the farm economy. And I don't think we've had that discussion in a long time in this country; maybe not since Henry Wallace went to Congress in 1933 with the Agricultural Stabilization Act. Here we are seventy-some years later still talking about farm programs. Those, incidentally, were supposed to be temporary programs.

So the timing is good for a national discussion about it; certainly right for asking the question, "what is the role of the federal government in supporting private enterprise, farm economy?" We may have different answers than we had in 1933 or 1973 or 1981. And it's time for that kind of open discussion about what are the priorities, what are the principles around which we base future farm policy? And so I think the timing on that is very good.

I think there's another issue that's just below the surface here that I'd just like to throw out. I don't want to be the skunk at the garden party here, but I do want to raise this issue because we have an increasingly intense competition for land in this country; for urban purposes, for environmental purposes, for agricultural purposes, and now a new major use coming on the horizon: industrial purposes. We have to have a debate about land use, and it's a delicate thing to have at the federal level because land use planning, land allocation, if you will, is relegated to the states and local governments in our country, as it should be.

But, we do have to raise the question, is there a role for the federal government to at least promote a discussion, to provide incentives for communities to do a better job of land use planning, of how we allocate land as a society. We're going to have, instead of six billion people on this globe, maybe nine or 10 billion people by the middle of the century. We have to feed them all. We'll have to provide other industrial products. There's a major competition on the horizon for land and there is a question about is there a federal role in promoting better planning of land use?

MR. STERN: All right. Let me thank you very much, all of you. I think we have about ten minutes or so left; and let me open the floor. Could you please stand up, identify yourself, and if you have a question for one person, say so. If it's for the panel, say so.

Q: I'm Nick Berry, Foreign Policy Forum. I guess the audience has to come to the conclusion that the surge towards renewables is directly related to high oil prices, but you haven't dealt with the stability of high oil prices to sustain renewables. It seems that there are three factors that have produced high oil prices. India and China now, I think, account for 40 percent of new demand for oil; and, quite frankly, the Pentagon, which now consumes hundreds of thousands of barrels of oil a day. Do you see this as a long-term trend for the demand for oil and, therefore, very high prices that will sustain renewables?

MR. STERN: Do you want to take that, Nathanael?

MR. GREENE: I think it's a really crucial question. There was a great Resources for the Future study a few years ago that looked at renewables, looked at their cost projections over time and their deployment projections over time. And the great – first graph – the cost projections is wonderful. We keep beating the cost projections for renewable technology. They keep getting cheaper and cheaper.

Look at the deployment graph and it's abysmal. We never get actually into the market and it's because the fossil fuel technologies keep coming in cheaper and cheaper. They advance as well. So I think your question is really crucial. Oil could easily go down, become cheaper again, and that would really drop the market – the bottom out of the market if we aren't doing something to address that.

I think the renewable fuel standards are crucial policy tools for that reason, because they do mandate a certain level of use that pushes the infrastructure out there. I'm not a petroleum expert, but there seems to be relative agreement, even EIA says we'll pass peak oil production sometime in the next few decades, and they tend to be viewed as globally the most optimistic. So at some point we'll pass the point – we'll pass the period of cheap oil and into a period at least of great volatility, if not actual sustained high prices.

Either one, sustained high prices or sustained volatility, will drive the market for renewables, or particularly biofuels, eventually, but I think we need the policy backstop to get us to a point that we're ready to take advantage of it. And advanced technologies are studied to look at the cost and actually come in cheaper than oil except in the most extreme circumstances.

MR. STERN: Another one? Yes.

Q: I'm (inaudible) and I'm an environmental lawyer working for the International Union for Conservation of Nature on a model national law that promotes sustainable soils, and my questions go to Mr. Smith and Mr. Grossi on what you would most like to see in the upcoming farm bill. And I want to tell you what I most want to see and hear: your outrage. I interviewed more than 250 people for the project with a lot of help from the NACD and the state associations and found that all the states had – many of them – the model statute that the NACD drafted, but none of them enforced it. The state of Illinois did not have – which has got the most stringent law, doesn't enforce it.

What about putting in the farm bill a provision that after a certain date, allowing the states to build capability, that payments to farmers will not be made in states that do not enforce their soil laws? How about putting that in the farm bill? But then after you say “no way,” (laughter) tell me what you would like to see in the farm bill. (Laughter.)

MR. STERN: Do you want to take that, Read?

MR. SMITH: All right. I'll start if Ralph will back me up.

MR. GREENE: Well, that remains to be seen. (Laughter.)

MR. SMITH: I learned a long time ago, you can effect change with the farm sector a lot better with a carrot than a stick. And I've seen the stick tried before and it has failed every time because farmers are so inventive that they'll find a way to get around something. Conservation compliance is a perfect example of a good idea that didn't work.

In the farm bill, we have an underused tool that would really solve both of those problems, and that's a conservation security program. It's the first time there has ever been an incentive-based program that rewards producers for good stewardship. If you combined that with a new energy policy in the farm bill that would encourage and incentivize renewables, you'd have a wonderful team of incentives that will move us in the direction we can get us weaned off of those (amber like?) payments. And I'm not even going to suggest that we redirect things. I'll let the decision-makers decide on those, but there is a way to do this and there is a way agriculture will follow.

MR. GROSSI: I'll take a slightly different tack. I think you're – any good public policy needs both carrots and sticks. Incentives cost too much if you don't have the right regulatory framework in which they operate, and we've seen that many times over and in many cases. There's a real problem; I alluded to it in this issue that I raised earlier about competition for land. Clearly, there's environmental risk here if we intensify land use by bringing in new demand from industrial uses or products, but we're all for raising incomes in the farm sector and raising prices so they can make a decent income.

I do think that when you're asking the public to spend, this year, somewhere between \$30 and \$40 billion in the farm sector – in farm subsidies, in insurance subsidies, in conservation payments – it easily will exceed \$30 billion this year and if you really added it all up it's probably closer to \$50 billion with all the other infrastructure in place. We're asking the public to spend that kind of money on private-sector agriculture, and we're not really looking for accountability for the expenditure of those dollars. That has been a challenge in agriculture for a long time. We spread the money around. It's not well-targeted toward achieving real environmental benefit. I think that's a challenge in the next farm bill. We do have to have better accountability.

We might go down the track that you are suggesting, Bill, or at least we should put this idea on the table. It goes back to the cross-compliance issue. If a farmer is going to get a check from the government, shouldn't they at least be farming in a sustainable fashion? Shouldn't they at least be maintaining the land in good condition in order to qualify for that check? We have half a program right now in conservation compliance and it's not enforced.

MR. STERN: Good. I think I'm getting the – do we have time for another question or am I getting the cut sign? I can't find – I'm getting the cut sign. I'm sorry.

Let me thank all of our panelists here. I think this was terrific. I think what we have heard, in a nutshell, is that there is really tremendous potential here to develop an agriculture-based energy program and policy that can make a real major difference, and we need to make a major difference with respect to those challenges that we mentioned at the outset regarding the economy and national security on the one side, the subsidies that are such a significant problem with respect to tackling global poverty and our trade relations, and the environment. And that these are challenges that can be addressed through the development of bioenergy in ways that are really materially helpful to farmers and business and the environment. So I think that it is going to be critical for the right policy framework to be put in place. I think that, as our panelists have said, there is – there have been – were some steps in the right direction made in the Energy Policy Act that was passed last summer. There’s more to be done there and, again, I thank them all. Thank you all.

I’m told to tell you to stay in your seats and that lunch is coming soon, and Senator Lugar will speak at lunch and we’ll have panels in the afternoon. So thank you very much.

(Applause.)

***Luncheon Keynote Address:
The Honorable Richard Lugar,
United States Senator, Indiana;
Chairman, Senate Foreign Relations Committee***

MS. SMITH: I would just like to briefly re-introduce a friend and colleague, Senator Daschle, who will be introducing our luncheon speaker.

SEN. DASCHLE: Before I make the introduction, let me simply congratulate all of the panelists this morning. I thought we had some outstanding discussion and I appreciate everyone’s contribution. The questions were excellent and the answers were every bit as good, so congratulations and thank you for your participation this morning.

In my time in public life, I’ve had the opportunity to meet and work with some fascinating leaders. One of those leaders in my early days in the House of Representatives was a man by the name of Claude Pepper, who some of you may recall from your recent history. He served in the Senate and then was defeated, then came back to serve in the House and had a very distinguished career as the chairman of the Rules Committee and worked extensively on issues that I cared a lot about. I had the opportunity to commiserate with him on many occasions and one time as we were sitting across the desk from one another, we both remarked that we were strong Democrats and proud of it, but then he said at one point, “It isn’t really whether you’re an R or a D that matters as much as whether you’re a C or a D. And I, of course, was not as quick to the mark as he might have expected me to do, so he had to explain and he said it isn’t

whether you're a Democrat or a Republican necessarily that matters as much as whether you're a constructive or a destructive in the political and legislative process."

He said, "I hope you'll always remember that being a constructive person in that political and legislative process is far more important than your political label." I think of that lesson in politics with Claude Pepper as I've been called upon to make an introduction this afternoon.

I've had the good fortune to work with a lot of people in the Senate that I think could be recognized as constructive leaders, but I know of no one who has been more of a constructive leader than our luncheon speaker and guest. Not only is he constructive, but Barack Obama recently returned from a trip traveling with him to Azerbaijan and the Ukraine and Russia, and he said everywhere they went he was also viewed as a rock star. (Laughter.) Dick Lugar is the longest serving United States senator from the state of Indiana. In the course of his many years in the Senate, he's not only become chairman of the Agriculture Committee during the time when I had the good fortune to work with him but he is now, of course, the chairman of the Senate Foreign Relations Committee and one of America's premier statesmen.

Over the years, we've worked on a number of issues together. I think one of the most important was the one that we talked about this morning, The Renewable Fuel Standard. As I was looking for a legislative partner, the very first person who came to mind was Dick Lugar and the very first person to say, "Yes, I want to work on this with you," was none other than Dick Lugar. We introduced it in 1999 and ultimately, as everyone in this room knows now, it passed and is now law. I will tell you it would not have passed were it not for the advocacy and the credibility that the issue was given when Dick Lugar became a cosponsor. Whether it's energy or agriculture or comprehensive threat reduction, Dick Lugar has been a constructive statesman, legislator and leader.

Perhaps one of the most significant pieces of legislation having to do with comprehensive threat reduction bears his name, the Nunn-Lugar program, and I asked him before the program started today just how well it was going and enthusiastically he said it's moving right along. Well, whatever has happened in nuclear threat reduction in recent years in large measure can be attributed to efforts and the leadership of Dick Lugar. I am proud to call him my friend. I am proud to have served with him in the United States Senate. Will you welcome with me now the chairman of the Senate Foreign Relations Committee, Dick Lugar.

(Applause.)

SENATOR RICHARD LUGAR: Thank you. Thank you very much. I appreciate very much this invitation to visit with you today and it's been enhanced immeasurably by my opportunity to visit with Tom Daschle and his very generous introduction. Tom Daschle has been a leader in the Senate but a very good teammate. As he mentioned, our collaboration on the whole ethanol project that has taken off in the course of time that we kept offering the bill, again offering; another Congress would

come, rebound again, but finally this idea has happened in great extent because of the advocacy of Tom Daschle and constructive Republicans and Democrats working together. And I thank him for the definition of C and D, and the idea that all of us in this room hopefully land in the C category and are moving ahead.

Let me just say that it could very well be because of this meeting today that the *Washington Post* had such extraordinary advertisements this morning. Those of you who have been immersed in the conference may not have had the chance to read the *Post*, but the British BP – British Petroleum had a three-page ad in the *Washington Post*, which is not inexpensive, and they – this time with only a few words on the first page. It says “Cleaner electricity will rise,” and then you move on to the inner pages and there is nothing in text on the next one, and it says “365-days-a-year alternative energy powered by BP.” A fascinating way to spend advertising dollars, but nevertheless merited by their interest, as I will cite in a moment. And then further down in the *Post* today: energy for the 21st century: coal. Today’s technologies can convert coal into, quote, “clean electricity,” the power of growing cities; transportation fuels to keep our economy moving; natural gas to warm homes and families in winter; hydrogen to energize fuel cells, and, yay, coal can do it, and so forth.

Well, all of the goods and but likewise different, and this has not come about by chance. The advocacy that each of you have been involved in as well as some calculations, as are pointed out by, at least, the friends that all of us have in these companies, have led to some very significant gains.

I clipped from *Business Week* an article really now several weeks ago. They formed a panel in which they tried to at least award some recognition to companies that had made a significant difference, and the first prize went to DuPont. Now, there are lots of aggregate statistics there, but essentially DuPont as a company is using 7 percent less energy total with 30 percent more production, and they have done so through some of the ways in which we would want to foster this to alternative energy sources.

BP comes in second, interestingly enough, in the advertisement today – a very significant advocacy. In a much smaller way in my home state, the Cinergy energy company that also operates in other states has come forward with ideas about clean coal technology. But even more, a quote in a *Business Week* article by the president of Cinergy indicates that they are not doing it entirely out of altruism or a sudden green movement within the company, but simply because they anticipate that the requirements of city, states, and maybe finally the federal government will mandate certain changes as people come to a greater recognition, whether it’s a problem of carbon or problem of climate change generally with or without carbon, or however people come to this recognition that is likely to lead to firms that do not have this forward vision rather abrupt and expensive changes that could be existential for the firms’ continuation.

Without drawing farther and farther afield from where you have headed already or maybe want to head today, let me just say that the failure to make these kinds of changes, whether it be Cinergy or BP or Peabody Coal or what have you, could very well lead as

our friends have pointed out in the industries that are making the changes, to the sort of abrupt recognition of reality faced in my state and some others by the Delphi company in the automotive industry or perhaps by General Motors itself, formerly Delphi being a part of that, now separate.

This is the type of issue in which Republicans, Democrats, liberals, conservatives may have extraordinary differences of opinion in terms of economic justice and how people ought to handle things, but let me just outline the problems that faced the workers in Indiana with Delphi. There are at least 10,000 of them remaining; maybe a quarter to a fifth of the workforce of the company. That company is headed into Chapter 11 bankruptcy. It has also headed into a situation in which the courts or the management or the UAW have identified that a Delphi worker generally through wages, through healthcare, through pensions, through other perks that may come with that job may have grossed as much as \$65 an hour.

Now, the suggestion coming out of the bankruptcy court is that that amount of money per hour is going to turn out to be something like \$25 to \$30. Well, that is huge. And this calls probably for the entire problem of healthcare to be changed abruptly in terms of employees assuming most of those burdens, the pensions, probably being put off on the PBGC – the public arena – paid for by other corporations, but eventually by all of us as taxpayers. And now, some would say, “Well, the UAW will never stand for that. There’ll be a strike.” And there might be. At which point the Delphi people point out they’re in bankruptcy in any event and they will just go into bankruptcy totally. The whole thing will be wiped out – that the continuation of the firm perhaps is not the issue, but whether in fact the firm can exist at all.

Now, whether such abrupt changes are made in the lives of that many Americans plus the communities in which they are involved and so forth still remains problematical, but looking down the trail toward union negotiation 2007, the General Motors people think it’s pretty real and as a matter of fact similar negotiations might go on. I don’t advocate using Chapter 11 as a way of working out labor contracts. The dilemma for both General Motors and Delphi is that they have costs that are substantially greater than their competition. And beyond that some would say, in a value judgment, they have also tried to produce products that did not meet the competition or the expectations of modern Americans either in terms of style or energy or conservation or whatever may be the premium currently.

Coincidentally, in all – once again parochially in my state, I had word from the Toyota company yesterday that they will commence a substantial new production in West Lafayette, Indiana; hiring several hundred and eventually and perhaps thousands of additional workers to supplement the several thousand that are already in Southern Indiana producing vehicles there. And I mention this because clearly in terms of auto workers, in terms of jobs and so forth, there’s maybe no net change by the time we finish. But in terms of firms having advocacy for the future, there’s a big difference. And this is why each one of us in our own way need to work with our constituent firms, with people in labor and management and those who may advise any of them, to indicate that the

quest for energy independence, energy efficiency, clean coal, the movement, hopefully, toward biomass and cellulosic fiber, these are all no longer simply niche situations of a few persons who have sort of a bee in their bonnet and are confident they know how the world is working, but this is sort of mainstream. And we all had better be thinking in those ways because essentially the world does not owe us a living.

I saw a delegation, as I told Tom Daschle, from India today. Members of their parliament, likewise those who've been visibly involved in the summer conference between India and United States over nuclear issues, and those are serious, but a whole gamut of health issues, of food issues, of trade issues which are going to be very important given the size of India, its market, its dynamic growth, its demands upon the rest of the world.

I told the Indians that when I was in Libya, unexpectedly on a mission I had not really sought, I was in a hotel in Tripoli and it was heavily populated by people from India and China. Why in the world would they be visiting Tripoli at this particular time of year? Well, they were busy trying to pin down every last square mile of Libya in terms of options that might pertain to the drilling for oil; not that they are going to drill now, but looking ahead to the future. The Indian delegation admitted, not under heavy cross-examination, they have a very disturbing relationship with Iran for natural gas that may inhibit some of their ability to work with the United States and we're pressing them very hard to work with us and the IAEA to try to control the Iranian nuclear situation. And they're admitting that they're going to have to have some other ways of handling energy in India other than coal, which is dirty, Iranian oil or natural gas, which has political liabilities, and ditto it could be said for us and for every other country.

Each of these areas is worthy of considerable discussion and examination and I will not try to burden you with all of my thoughts or entertain yours today. I will just say in a broad brush stroke, we're talking about the future as constituents of our industries and our jobs and the way we make a living in America now. We're talking about our future in terms of international relations and our security, and recognition of the security of other countries.

Now, there are two basic areas in which at least the Congress and people in public life have been at work, sometimes with great deal of headway and sometimes not. One of these areas has been one that Tom Daschle has touched upon: our collaboration that more ethanol ought to be produced. I admit that I come into this issue as a corn farmer. I don't have a lot of corn – 200 acres – but nevertheless by Indiana standards that's a good bit, and 200 acres of soy beans, and the other 200 acres of my farm is now populated by largely black walnut trees, some other hardwood trees, most of which I and my son, Bob, have planted over the last 25 years in rows – plantation style with all the controversies as to whether this is the way agriculture works best. Now, so we have 600 acres. These are 600 acres unusually positioned. When my dad purchased this farm in 1931, it was clearly in the country. As I go out to prune my trees now in 2005, in is clearly within the city.

As mayor of Indianapolis, when we brought together the inner city and the suburbs into something called Unigov, the farm came into the city. It is now surrounded by city folk. There is an elementary school at the north farm gate and it's a very beautiful place. So here we have 600 acres serving almost like a state park for the residence of Decatur Township in Indianapolis, but still we're in farming operation. Now, my dad passed away in 1956, almost 50 years ago, sadly, and I've been in charge since and we have made money on the farm every year in the last 49. Sometimes not much, but even to point out to have made money is disturbing to most of my farm friends (laughter) who point out that that surely could not be, and therefore I lack compassion for the family farmer who doesn't make money every year.

I would just say, throughout this period of time that the amount of money made in agriculture on our farm or any other that some may be better managed than ours is roughly 3 to 4 percent on invested income. Now, one would say, why, then, are so many people still engaged in farming when you could have done this on Treasury bonds even at the low interest rates now quite apart from some other years in the last 50? And obviously there are all sorts of emotional reasons. Why do I still have the farm at this particular point surrounded by all these people? It's a sense of family heritage. It's a sense of something that is ours and that we have opportunities to do things on, and for me right now it's an opportunity to experiment and to bring other people to help us.

Specifically, for example, I had word in the last few days that my walnut trees have an immeasurable amount of carbon sink – carbon sequestration attached to them. The idea is that 100 of those walnuts, and we probably have 10,000 in the course of the farm – I'm going out to count them after all of this, but a 100 of these may sequester three tons of carbon a year.

Now there is – Tom will recall from our Ag Committee experience – the Commodity Futures Trading Corporation, CFTC, and recently they have gotten into some type of trading. And now it's not as active as a European trader would be in this sort of thing. For example, if you have a cap and trade situation in Europe as the countries try and meet the Kyoto treaty, why, a ton of carbon a year might be worth \$50. And now in the United States where trading is not nearly so active, I'm advised it's closer to \$2. The market is inhabited by people I spoke about like BP or others I cited today who for a variety of reasons see the future, they are trying to put together some type of cap and trade situation of a modest variety. So in any event, I don't have a fortune yet in carbon trading, but I'm interested in this.

And so I ask: can I as a farmer deal with the Chicago (market?)? Well, not exactly. Usually, this has been set forward by the Iowa Farm Bureau. They have a – it's really an aggregated trading position. But on the other hand, the fact is that people sort of curious as to how all these things work might someday let me trade there and see whether I can keep sequestering tons of carbon each year. Better still, at least indicate to the farmers all around me that there's something to all of this; that in fact the planting of trees and the cultivation of these trees, both for their beauty as well as a practical matter. Those of you who are into black walnut culture know that for the – for an 18 to 24 inch

stem – for a harvestable tree that has veneer quality, that’s probably a 60, 70, 80-year procedure. This is not just a grandfather type project. This is a great-great-grandfather type project and some would say, “How do you know that those trees will ever be there at the end of 60, 70 or 80 years?” Well, in the old days you really didn’t, but in fact – I don’t want to jump the gun, I’m going to get \$50 a ton out of a hundred walnuts each year, but if in fact there is even value, it comes from virtue in these situations.

And that’s, I think, the point that we’re trying to make to many farmers around the state of Indiana. We now have a situation prior to the Daschle initiative on ethanol coming into force now with the energy bill we just passed, in which about 11 percent of our corn crop this year will be involved in ethanol. And some would say, “Well, if you count, really, the crop coming in and so the transition may be 14 percent.” That’s a lot. That begins to approach – when you then double the amount of ethanol that now we’re going to be having – we’ve sort of moved from, say, the four billion gallons a year to 7.5, say, and get over 20 percent maybe; at least 19 by many calculations. And some would say, “Well, that’s about what has been our total export of corn abroad in trade markets.” It’s a big figure. It’s affected the price of corn, the livelihood of corn farmers.

Now, what if you had that export market plus the ethanol and the (eight?) figure is by no means the end of the trail, but it has produced some extraordinary figures all by itself. I saw an analysis, and I’ll not go into all of the details of that, the other day, but just for the sake of argument that just enacting this law itself this year will bring about \$6 billion of new investment into the United States building the additional ethanol plants that will be built. We’ve moved from roughly 93 to 125 and who’s sort of counting upward and that’s a lot of construction in America. There are tens of thousands of new jobs involved not only in the construction, but also in the plants.

Now, at the end of the day the skeptic will say, “Okay. You have corn ethanol here, but corn is after all a fairly expensive base.” It was easier to sell ethanol because you had a constituency of corn farmers, of agricultural people who saw some income coming in from the sort of thing and wanted to do good. But nevertheless, already I see in my office people who feed corn to poultry and they’re saying, “Why aren’t you thinking of us? You’re going to make a great deal for the corn farmer with all this demand for ethanol and if you ever got the Doha round going or even through Hong Kong now or so forth, you may in fact be exporting a lot more American corn and that means the price goes up and corn farmers do well but how about poultry farmers? What do they do in the process?” We are going to be plagued with these issues all the way through and I don’t demean them for a moment.

Tom Daschle and I served together on the Agricultural Committee for eons and we know many other persons – certainly not the two of us, but many sitting around the table are very constituent-oriented to a fault; in fact, to a very narrow constituency. They are not farmers. I think Chuck Grassley of Iowa still has a legitimate claim to be a family farmer. He gets up on a tractor when he goes out to Iowa and he has some sons running the place. And even more remotely, I claim to be a family farmer roaming around my

place and managing it for the family, but that's about it. (Laughter.) The others I wouldn't say are fronting for somebody else but nevertheless they do the best job they can. (Laughter.)

This leads to some unusual legislation and some cross-hatching here, which may not be the most statesmanlike thing, but this is democracy in action: people are heard. I wonder frequently how in the world these bills ever pass given the efficacy of what is involved in them. For example, we've gone through – without going back into old history – an exercise now in our reconciliation bill in front of the Congress, which may or may not happen, but we shall see. This is an attempt to cut spending at least on the Senate side by \$35 billion. Agriculture was assigned a goal of about \$3.5 billion of this; a fairly modest amount all things considered. And (inaudible) staff that shall remain nameless, maybe on both sides of the aisle, aimed for food stamps. Well, that caught the attention of the Associated Press and so it became a no-no, and food stamps are restored in a more humanitarian way, but while we were at that the dairy people said, "Now, listen, our program seems to wind up faster than some others and we want it restored." Now, we want to add a billion or two, more or less, for dairy. I said, "Well, listen, this is supposed to be a cutting bill, not an adding bill." (Laughter.) And they said, "Well, if you need our votes, you add, you don't subtract when it comes to dairy." Well, this is almost too much for some.

I raised an objection, and some of you have mentioned this, we've been visiting a little bit today, that somehow or other creeping into this cutting was also a little clause that said all these programs continue on to 2011, not to 2007 when the current farm bill comes to an end. I said, "How could this be?"

And they said, "Well, it's baseline. Baseline." You know, as if I understand all of these things. (Laughter.) But the point was that in the event that no action was taken for some reason, Congress just hogtied, why, somehow all of this just trundles along like the book until 2011. This led our chairman, Saxby Chambliss of Georgia, to assure us that there will be at least a discussion of a farm bill in 2007, and even Saxby can't promise if there'll be such a bill coming from all this, but there'll be some chance of examining all of these situations.

Well, they are not inconsequential and I cite these because even as we're thinking about energy conservation and ethanol and alternative fuels and so forth, we're also trying to think about the rest of the world. For instance, the Indian statesmen I talked to today have come to the conclusion that they're probably never going to get as they try to progress to 8 percent real growth a year, and that's a big figure on top of about a billion people. And begin to get 600 million people – they admitted they're not doing very well in the country now in villages. Add very subnormal wages into picture, and that's why this becomes even more trying, so of course they want to do a lot more to nuclear energy and that's ostensibly the reason we're engaged in that debate. But they also would like to trade signals with regards to renewable fuels and agriculture and how you gain energy through those sources. They would like for this not to be just a pact about nuclear situations and how to stop proliferation but, in fact, how to share trade and conservation

and some things in which we have done well and some things in which they might be able to teach us. I think that's a very important consideration, but it is also – in the same way we have trouble with farm bills – hogtied by the fact that trade agreements even on a bilateral basis are very hard to come by right now in the Congress.

Now, in part this is because there are considerations that are valid on the part of many Americans as to how we can free trade with countries that have very poor labor standards, have very poor environmental records. For example, take my Delphi workers out there. They would say, "Listen, we're trying to provide at Delphi healthcare for people. We're trying to provide good wages. We're trying to conform to all the environmental standards already set up by the United States government that are very expensive." In essence, we already have expensive labor contracts, but after all this is free, collective bargaining. It's part of democracy, of everybody moving in a democratic way towards some equilibrium of compensation. And why – why in the world should we be involved in other countries who do not have even rudiments of this sort of thing, or at least very, very modest that are likely to dilute our standards and our prospects?

In fact, this has been a topic that has led to a polarization on many trade treaties recently. As you will recall, the fairly modest Central America Free Trade Agreement had all kinds of dilemmas. Here, as I think Tom will recall, the Central American presidents came to the Lyndon Johnson Room in the Senate one day unexpectedly and then they said, "We have pretty well settled our age old agreements in which we have gone to war with each other. Quite apart from the fact we couldn't trade, we're going to trade with one another – there's going to be free trade within Central America, modest as that may be. We would like to extend that to Mexico, and because Mexico, the United States, and Canada are now involved in the North American Free Trade Agreement – like to bring it up to that standard."

Well, it seemed like a no-brainer to those sitting there but not so fast: the people said right away, "What about labor standards in Costa Rica? And what about the problems in Nicaragua, which now it seems that the edging back toward a government that's much less friendly?" And furthermore sugar people said very specifically, "Well, what about sugar? What about us?" And they said, "We want compensation for about every pound of sugar coming out of Central America. Even if there are not many pounds, we want to be compensated for every single one." And textile people are always there. They said, "Modest as it may be, it's going to hit us even further and we've all been badly hit by China already this year and the WTO and so forth."

So by the time we're finished, you're looking around the room and wonder who is left. Now you could say, "Well, fair enough. Wasn't much trade to begin with. Not really clear the advantages to the United States if the trade changes were that modest." The big advantage of the United States was potentially stabilizing some very, very tough political situations in Central American countries that may need some attention and stabilization right now. You make the same case for the Miami meeting and the South Americans and so forth who are really off the reservation altogether for the moment as we deal with the Andean Treaty.

So, frequently, we come down to very bilateral arrangements. Bahrain may make it across the finish line – a bilateral with Bahrain because largely there does not appear to be quite so much labor and environmental interests and no one really knows exactly why anyone should object to Bahrain, and so it may happen.

I mention this simply because the Europeans and United States have been cited very specifically on the agricultural subsidy issues starting with the disastrous meeting in Cancun, which was to lead up to a WTO success at the end of the trail, and in essence the so-called developing countries came in, probably aided and abetted substantially by Brazil and maybe even by China, and they said those agricultural subsidies in the European zone and the United States are intolerable. They make it impossible for us to get involved in agricultural free trade and we're not going to take it anymore and there will not be any agreement until somehow you've resolved these things much more in our favor.

And I suppose initially we said rather patronizingly, along with the Europeans, "Now, we're the people that sort of run this thing. We are the people that have the wealth, the trade, the emoluments that you want." You know, sort of, how dare you sort of step all over our toes here? But the developing countries were not mollified and so then came negotiations. And what has occurred essentially now is that the Europeans have gone a little ways, but not nearly far enough. We have suggested that the United States, through Rob Portman, our trade representative, that we would make some changes but as some sort of wags on the Hill would point out, not really sure Rob or Bob Zoellick who preceded him really told the chairman of the House Ag Committee or the chairman of the Senate Ag Committee quite apart from their cohorts, in essence back at the ranch members of Congress are saying, "These trade representatives may be way out there promising reform, but we haven't OK'ed that at all. As a matter of fact, we're still extending our bill to 2011." (Laughter.) And quite apart from all of this ruckus going on.

I mention this because in the international community, the going will not be easy with regard to the trade issues, nor with regard to the sharing of any of these other issues. And I mention this very specifically on the energy issue because we probably will come down to some (heartbeats?) that are not very good when suddenly it appears that as we get heavily into alternative energy other countries want to export some of their alternative energy to the United States. And we say, "Now, come on here. We're busy developing. We're busy reforming here. We don't need too many intrusions coming in from abroad." It will not be quite as blatant, perhaps, as President Chavez of Venezuela furnishing heating oil assistance to the people of Massachusetts presently. (Laughter.) Some people would say, well, this just shows how audacious a Latin American authoritarian government can be, but the beneficiaries in Massachusetts are indicating we wished the Congress has passed more low-income heating assistance, as a matter of fact. (Laughter.) It's going to be a cold winter and we got some real problems.

It all depends, once again, on sort of where you sit and stand on these issues. And I'm suggesting at the same time that we are making real progress in trying to think

through alternative energy situations that we need to cast a worldwide vision of this because at the end of the day, as we heard some strategic thinkers – my friend, Jim Woolsey appeared before the Foreign Relations Committee the other day along with some others that I thought were right on target, and they said the potential causes of worldwide conflict in the future could very well come because of the lack of the ability of countries to furnish energy supplies to their people. Before they allow massive unemployment or houses that are not heated or all the rest to happen, they will aggressively seek those situations.

Now, much of it may be obtained diplomatically and strong-arming others and recognizing bad governments and all sorts of things which occur in a way now in the quest maybe by the Chinese, and particularly in Africa. But worse still would be if countries decided they wanted military conflict to settle who in fact is going to have the energy to keep their countries alive. And long before we came to that kind of predicament, I would hope that those that are far-sighted begin to resolve it by finding ways, in fact, that through renewable resources in the agriculture of our own countries, wherever they may be, or through the sharing of them or even the exporting and importing of them, we find much better solutions.

In my own farm situation, I'm happy that corn is going to do better and I'm sure it will because of ethanol and we're just on the crest of that occurring. I saw an article in *Fortune* magazine and they were speculating down the trail on what will happen to energy and they said, you know, come the year 2040, oil is found, as a matter of fact, to be virtually redundant. It is an interesting idea, but no longer relevant. And by 2030 they predicted in the state of Iowa – and could have chosen Indiana or the Dakotas or wherever, they suggested by 2030 that entrepreneurial types, the big business types and what have you, will have invaded Iowa and they will be producing the energy for the country using all sorts of means in growth types of industries that could not be contemplated even as we look at the fledgling ethanol industry coming up presently. Well, maybe so, maybe not. That's not too many years down the trail.

My point is simply that in our Ag Committee hearings, and Tom will remember this well, we had a number of hearings of farsighted people about cellulosic fiber, about switch grass, ethanol from twigs and from about everything else. In addition to the corn on my farm, we've got a lot of other stuff. And in fact it doesn't have a market. It wouldn't offend the poultry growers that were using it for ethanol as opposed to feed for the chickens and the turkeys and so forth. We have in fact the possibilities for renewable energy in this country which are almost boundless.

Now, whenever you begin to make statements like that, let me try to quantify it about this way. Some analysis that I've gotten from think tanks and I like the sound of it is that about 67 percent of our needs for oil, for instance, now come from abroad. We import two-thirds roughly. The enactment of this new 7.5 billion standard of ethanol that we're going to get will reduce that 67 to somewhere around 62. Well, the skeptics will say, "Well, hurrah. You've come from 67 to 62, but by golly the demand in our country may rise in the meanwhile and take up all that gain – not a big factor." But not to worry.

Let's say that you take a look, generally, at surveys of how much cellulosic fiber is out there in our country that can be harvested each year. Well, this comes ultimately to a figure in terms of tonnage and the amount of ethanol that comes from it that is 20 times the amount that we are now getting from corn ethanol at the current rates.

Well, at this point, you will say, what's the cost of doing that? Surely, if you can get that much and you have all this utopian solution, you would have done it before now. Well, you don't understand politics in this country or the Congress or even the Ag Committee. The fact is the possibilities for cellulosic fiber have been out there for quite a while. It's not a new idea, but the infrastructure for harvesting it, for transporting it, the ways in which you finally get the stuff from the fiber in some sort of a plant, the distribution of all of this – this is daunting.

Furthermore, if you have a large number of Americans who are skeptical that it's even worth doing; namely, they sort of like the automobiles they have. They like the way they're fuelled. In the event that gasoline goes up, you can always find a scapegoat from some other country or some other catastrophe that caused all this, if not windfall profits of the oil companies themselves, and find some other problem that's involved in all of this. There is not going to be an impelling need for the groundswell. And some would say it really hasn't come now. After all, Katrina is over. The price of gas out here at the pumps in D.C. is approaching \$2 again, maybe even dipping below that in some places in the hinterland. You know, what was the problem? Well, thank goodness not everybody has dismissed it that rapidly. Thank goodness you have not. That's why you are conferring.

I'm suggesting that at least on one side of the energy equation, and that is just the transportation side or the oil side, that there are visible solutions available and I believe that they are economical and I believe they will also require government subsidies of various sorts, as corn ethanol has required for some years, although I think that is likely to diminish given the state of the arts as it continues and certainly the difference now between petroleum-based and the ethanol-based.

Finally, I just conclude by saying on the other side of the energy equation we talked about clean coal at the beginning and I think that's terribly important to consider, too. It may not come from farms. My state – once again in a parochial way – does have a lot of coal. That is dirty coal. We import a lot of coal from Wyoming which is slightly cleaner, but the fact is that the Cinergy company I mentioned earlier down near Vincennes in Southwestern Indiana is finally at work on a clean coal technology for a very substantial plant employing 1,000 people. That really is the forerunner of what I hope will occur in our state. Our state legislature and our governor passed legislation which offers considerable inducement to make the arithmetic work out right. The federal legislation has, likewise, a component. So this is not necessarily market-based at this point, but it's based upon the thought that we have the coal in this country. We have the corn. We have the switch grass, or whatever we're going to use the cellulosic fiber right here in America. Now you say, "Why is that so important?" Well, because all the calls

for energy independence are simply rhetoric without there being some basis in fact of what might bring it to pass.

And I would just say simply that if you visit a country – and Tom referenced Barack Obama and my wandering through Russia, Ukraine and Azerbaijan in early September. Well, visiting Ukraine was happy in one respect of, surely, the democracy that is there, the freedom of speech, the outburst in parliament, and all the rest of it. For any lover of democracy, this is great stuff. But when you get behind closed doors, what the president, Mr. Yushchenko, or the former prime minister, Ms. Tymoshenko or the Speaker Litvin, and all of them have but one message. You go to a map and they're drawing lines as to how natural gas or oil might come to the Ukraine from some other place – any other place than Russia.

Now, why would that be of a bother to them? Well, essentially, in the old Soviet system a lot of subsidies, some of them were obtained by Ukraine, some of them have been retained by Ukraine. But over this winter, some people who were involved in the Orange Revolution and noting some Russian hostility to their new government have a fright that the price is going to be raised, and if so, it will come at a time of almost zero growth in the economy of Ukraine. And furthermore, under the worst-case scenario that some of the spigots might just be turned off someday.

If you ever had a feeling that energy independence is unimportant, you ought to visit with people who have the stake of their country there and responsibility for continuity of life and understand it can be stopped. And we used to have conferences with Chancellor Schroder of Germany as to why he was so benign in his relations with Vladimir Putin, and he would say, "Forty percent of our natural gas comes from Russia – 40 percent for a country the size of Germany with all of its demands. We are going to have a very benign relationship under those circumstances. There isn't much alternative in terms of foreign policy."

All I'm suggesting is this is finally not just a question of economics, of farm prosperity, of a question of balance of payments improving, which it would, I think, under some circumstances – even international comity. It comes down to an existential question of the continuity of life as we know it in our country, and that's why it's extremely important to all of you and to me.

I deeply appreciate your giving me this forum and this chance to share these thoughts with you today. Thank you very much.

(Applause.)

MS. SMITH: The senator has graciously agreed to take some questions. I don't know if you had the same glare up there I did earlier, so if I can help you identify people I will, and we have microphones around the room. So, please, if you have questions if you'd just go ahead and raise your hand.

SEN. LUGAR: I can't. You know, if you could identify.

Q: Senator, I'm Reid Detchon with the Energy Future Coalition and we're a great fan of all the hard work you've done on biofuels. The Energy Policy Act gave the president quite powerful new authorities to advance the state of the art. I was wondering if you might encourage him to make a budget request that would make that happen.

SEN. LUGAR: I will encourage him. (Laughter.) But it's an important issue and it arises in other fora. I think of No Child Left Behind in education and this is an important quest by our government. But frequently those of us who are excited about what we might be doing here are disappointed by the follow-up in terms of the money, and that will have to be the case with this and so we will be alert.

Q: Hi. My name is (Kris) Shultz, a volunteer for the ONE Campaign and I know you support the Millennium Development Goals and I wonder what do you see as the prospects for helping end poverty in Africa in the issues you discussed.

SEN. LUGAR: Well, the prospects have to be good ones because not only the future of the African countries and individual persons depend upon that, but so does our own foreign policy objectives and they're sincere. The dilemmas are well known to you as a person actually dealing with those issues, whether it's the HIV/AIDS problem combined with hunger, the work of the World Food Program as well as our humanitarian aid or the Gates Foundation working on tuberculosis or various ways of immunizing people. These are sort of fundamentals so that there will be people around allowed to enjoy this prosperity that might come given the decimation of populations in so many countries.

But beyond that, why, this is going to require very great thoughtfulness by not only ourselves, but the Europeans – Tony Blair in Great Britain and others who tried to initiate this at the G8 meeting – this conversation more meaningfully – made some headway perhaps, but most of us feel not nearly enough in large part because when we got into our own activities, the United States – this attempt with the African Growth and Opportunity Act, AGOA, we have made some headway there in terms of African exports and the ability to move beyond grants, but it's been very small and in part once again opposition of not only of our textile industry but the textiles around the world or agriculture people – the things that come out of African countries are by and large in that area to begin with as they try to become self-sustaining. And so in each of these areas we – it's a tedious business sort of day by day, but I think that at least in our committee I've offered (this encouragement to?) each of the ambassadorial nominees for an African country. We asked in a very concerted way, "What do you know about AGOA? About hunger? About AIDS? About whatever the country is doing now in terms of its development?" And then usually they're much better informed than they used to be because they know those questions are going to come. They come on the scene with much greater sensitivity, more program, more liaison with other levels of government that may be helpful to them.

I wished I could be more informative or optimistic, but essentially this is the way I see it at the present time even while we have these goals ahead of us.

Q: Nick Berry for Foreign Policy Forum. Resources for Global Growth – a number of people think that nuclear power will make a comeback. What is your estimate on that resource?

SEN. LUGAR: Well, I don't know if it makes a comeback. I think it will be utilized by many nations much more extensively. You know, just having listened to this group of Indians this morning, I understand that's going to be the case in India – very substantial growth of these nuclear power for energy in the country. And others are suggesting the reasons why – and, you know, whether there may be specious reasoning by Iran, who has after all some fossil fuel resources there, but various other countries are saying, "We understand the impending problems of energy in the world and therefore we need to have a boost in our nuclear energy."

And the question for the IAEA and for all us that might be suppliers is under what conditions? What kinds of inspections and constraints? How well equipped are they to deal with the problems of a Chernobyl or some other accidental situation that comes if you are not thoughtful about the use of that sort of power.

And Ukraine itself I've already touched upon. Clearly, they are headed much more toward nuclear power and they have – at least the resources have come ironically, or maybe not ironically, but it's an unusual set of circumstances through the warheads taken off of missiles in the former Soviet Union. As the warheads are taken off, as you know, and the deconstruction occurs, why, the nuclear fuel is a part of that. The question from the beginning in our negotiations was what's going to happen to that? A lot of it has been sold by the Russians to the United States, in some cases to Ukraine or other countries who have downgraded the material so it's low enriched uranium or something even more benign, and it's utilized in nuclear industry and recycled in that way.

So those things, I think, are going to occur in much greater profusion provided there is the capital to bring about the proper reactors to begin with and the inspections, the treaties, the international agreements that surround them.

MS. SMITH: I think we have time for one more question if we're going to honor our obligations to you, sir.

Q: Hi. Thank you, Senator, for your comments. Joe Pure (ph) from RAND Corporation. How can we best help secure more reasonable funding for alternate energy research, including solar, geothermal, biofuels?

SEN. LUGAR: I think it's a quest each year by active legislators who see what needs to be done and ask for it who frame programs and try to be persuasive in their committees or with their colleagues on both sides of the aisle. And then, hopefully, are persuasive with whichever administration happens to be in office at that time. Sometimes

that's easier than others. I have a feeling we're at a time where those arguments are likely to be better received, better understood, and so I'm optimistic about the course of this, while being realistic about year by year how the job physically gets done through the committees, through the floor debates, through all the endless amendments that are non-involved and that it come in extraneously through the conferences, through negotiations with the White House.

But the research effort I think has paid off. I think the payoff that we're now seeing, for instance – and some would say, “Well, this is the very modest thing: the ethanol business, the corn plants that are going up in the Midwest and elsewhere. You know, the substitution that's occurring.” You know, it just shows how far away we are from everybody understanding this, whether it's the administration, the Congress, or the public. And just last July I went to a dedication of the first E85 pump in Indiana. It is a pump for 85 percent ethanol, 15 petroleum fuel for some of the cars. There are no more than four million of these in our whole vehicle fleet, I am advised, that can use E85 and many of those people don't know about it and have to be advised their car will do that. But in any event, this is the very first one of these. And the mayor of Terra Haute is there and members of the establishment. There was a Ford dealer there and he said, “I'm going to have cars on my lot next January that for sure will be able to use this.” And I said, “Well, please come over to the microphone and say that louder,” which he did and the people were surprised that physically in America this kind of thing can happen.

Now, this may be old hat for everybody involved in the debate, but we're a long way from sort of understanding the dimension. Now, since that time, there are 15 more of these, but that's just 15 pumps in a state of six million people that can use the E85 situation. I was heartened that Mr. Ford in one of the Ford magazine advertisements pledged that next year Ford will produce 250,000 cars that can use the E85 mixture – explicitly sort of pledging that.

I've introduced legislation, again with my cohort Barack Obama and some others, that will mandate that 10 percent of the cars in America that are produced by the year 2012 must use E85. Now, that doesn't get to your question exactly of research money, but I mention these things just to say that for the research advocates to be successful legislatively there has to be much more of a constituent base and understanding, of people that demand this, that really believe this is very important to do – more important than a lot of other things – and we'll finally prevail.

Well, thank you very much. I appreciate it. Thank you.

(Applause.)

MS. SMITH: And if you would like to take just a few minutes for, yes, even more coffee, we will shortly begin our final panel. Thank you all very much.

***Panel III:
Global Economic Development: Linking Agriculture, Trade, Energy
and Poverty Alleviation in the Doha Round and Beyond***

MS. SMITH: Good Afternoon. I would like now to introduce our final panel, which takes us back to where, in fact, this debate really started, which is in the developing world, as we heard from John Podesta this morning, with the move by cotton farmers in West Africa to really step up to the plate and ask that world trade negotiations reflect their aspirations for development.

Introducing the panel from my right and across, this morning I introduced John Podesta as my boss. I'd like to introduce a former boss and friend, Brian Atwood, who is known to many of you as the former administrator of the U.S. Agency for International Development under President Clinton. He has also served as a Foreign Service officer and the dean of the Foreign Service Institute. He was the first president of the National Democratic Institute, and he is now the dean of the Hubert Humphrey Institute for Public Affairs at the University of Minnesota.

To his right is Kim Elliott, who wears two hats as a joint fellow of the Institute for International Economics and the Center for Global Development. She is a real expert, and I really want to plug a second book of the day that she will have coming out after the first of the year. And now that it looks that the agreement in Hong Kong is going to be – that they will agree to agree to agree later, her book will continue to be extremely timely. It's called *Delivering on the Doha Development Agenda: Agricultural Trade in Rich and Poor Countries*.

And finally, last but certainly not least, is Sonal Shah who I've had the pleasure of claiming as a colleague twice, and a friend all the way through. Sonal is now a vice president at Goldman Sachs. She's the founder of a growing and very effective NGO called Indicorps, which takes volunteers to India to work on development programs there; has also served at the Treasury Department on international affairs at the Center for Global Development and with us at the Center for American Progress.

I'd like to start this panel with you, Brian. You have in your career been the point man on U.S. development policy. And I wonder if, given the issues at play here, you could address what we're really looking at from a policy prospective as we approach the Hong Kong meetings.

J. BRIAN ATWOOD: Well, thank you, Gayle, and I congratulate you and John Podesta and the Center for this initiative. It could not be more timely, obviously, as we await the Doha Round in Hong Kong. And, of course, the stakes are very high. As I look at this issue, of course I look at it from a perspective of someone who did have responsibility for development policy, and I see the problem the world faces as both a humanitarian issue and a national security issue. We have some 800 million people who are hungry every day, we have some three billion people who are living under the poverty

line, and that number is going to expand unless something is done about this. And some people project that by the middle of this century, we'll have three billion more people; 95 percent of them will be born and living in poverty.

Now it doesn't have to be that way, and it strikes me that these people could either be a market for our farm products or they could be a major liability to the international community and a source of violent conflict and possibly terrorism, and I think that's a major national security issue... The program, as I see it, is we have a development policy in one little box and we have finance policies in another box and then we have trade policies in yet another box and there's very little coherence in approach. And this issue is a perfect example of that: we spend something – we the OECD countries spend something like \$1 billion a year trying to help poor countries develop their agriculture sectors, which is their best hope really – maybe textiles and some other manufactured products, but in essence developing their agricultural sectors as their best hope for finding self sufficiency and economic development and economic growth.

If they can do that, the irony – and it's been proven over the years: when they do develop agriculture sectors they begin to purchase processed foods and other items from our farmers and from our agriculture sector here, so we have seen growth over the years as a result of economic growth in the developing world. So that is a challenge for us, and my view is that we're going to have to meet that challenge one way or the other. Either we're going to meet it as a huge national security threat, and a growing one, or we're going to meet it as a commercial opportunity. So I think that that coherence in our policies is really the key.

MS. SMITH: Strange to think that our policies may be incoherent.

Kim, when we talk about the trade debate that will really re-open in earnest next week, the conversation is always about developed countries and developing countries as though the developing world is, in fact, monolithic. And in your forthcoming book and your other work, you've done some serious looking at what the distinctions are and I wonder if you could maybe break that down for us and talk about the differing strategies that we need to bring to bear.

KIMBERLY ELLIOTT: Sure. If I could to start by building a little bit on what Brian just said about why agriculture is at the center right now of the Doha round negotiations. You put forward several reasons why it's in the U.S. interest to help developing countries and bring them along, including through agriculture.

Just to put a little bit of the political economy spin on it, it's also – there's going to have to be a substantial and ambitious agricultural package in which the rich countries – the United States, Europe, Japan and others – do significantly liberalization of agriculture in part because that's just what they have to contribute. The rich countries are relatively open on manufacturing; our tariffs are very, very low with the exception of textiles and apparel. In services, rich countries are relatively open. Agriculture are where the big remaining barriers are and that is just simply where the rich counties have

something to contribute in this round, so from a political perspective there is going to have to be a big package there.

As Brian said, it's an area of competitive advantage for many developing countries and so that's the reason that it's, A, this North/South element is that it is a comparative advantage for many.

And, then finally, most of the world's poor still live in rural areas, so if you're going to have a development round, you have to address world poverty and promoting agricultural sector is one way of doing that. But having said that, as Gayle mentioned, developing countries are not homogeneous. They are not all the same. There will be some that gain more: Brazil, Argentina, Thailand, the other competitive agricultural exporters will be the relative winners from broad-based agricultural liberalization.

There will be, potentially, some losers. There has been a lot of attention to this lately with these new World Bank analyses from – some of them from (preference?) (inaudible) – those who have preferential access – the least developed countries and some others – through the African, Caribbean, Pacific program and the European Union. (Inaudible.) Many developing countries are net food importing countries and the estimates are that agricultural liberalization will increase, at least in the short run, global food prices as northern subsidies come down.

So those are problems that will need to be addressed in conjunction with going forward on the trade liberalization side. I certainly don't think that they're reasons not to go forward. They can be dealt with. I think in many, many cases these potential costs actually have been exaggerated by some of these global models for a number of reasons. The preferences, for example, tend to be limited to a relatively small number of countries and a relatively small number of commodities; especially bananas and sugar, so those should be relatively easy to deal with through targeted programs.

In terms of the net food importing if you actually look at what the models say, the price effects on staple goods, the things that poor people are dependent on – wheat, corn, rice, these kinds of things – the prices, with the exception of rice which is sort of a special commodity because it is so – the markets are so distorted, the prices are not estimated actually to be that large. Again, it's a relatively small number of commodities. And the – on both of these in terms of the potential losses, although they're real, again I think the significance has been exaggerated because you have to – any agreement is going to be phased in and probably especially for agriculture, which is sensitive for a lot of countries, it's going to be phased in over a long period of time, anywhere from eight to 10 to 12 years.

So, again, it's important to have policies in place to pay attention to these things, but they're not – I think they're not going to be huge costs. They certainly can be addressed and dealt with. And then more broadly, there's the issue of – in a lot of the lower income countries, are they able to take advantage of whatever market access opportunities come out of this round? And there, a wide range of complementary

policies are needed to address infrastructure issues, are there roads to get their goods to market, are there ports to get them from southern to northern or to other southern markets in some cases. Are there storage facilities, you know, in terms of some of the commodities? The higher added value commodities may need specialized processing and refrigeration.

So there needs to be the aid for trade, which is also going to be addressed in Hong Kong next week for addressing these supply side issues. This also has to be a very important part of the package.

MS. SMITH: Thank you. Kim has mentioned a couple of additional things that need to be brought to bear in a final deal. And certainly this morning, K.Y. Amoako of the Economic Commission for Africa was talking about what's really on the agenda for the developing world. It is not just movement on subsidies, but the ability to start to transform their economies. And I wonder if you can – sort of wearing all your hats at once, if you will, and based on your experience, what you think we really need to be prepared to bring to the table over the long term if we want to avoid the kind of future that Brian describes as a potential of continuing poverty and all the instability and threats that that brings with it?

SONAL SHAH(?): I think it's looking at coherence of policy to some extent to bring growth into developing countries outside of just either trade policy or either development policy or looking at national security separately from each of these policies because all of these come together.

But from the economic perspective, for developing countries it means looking beyond raw commodity exports. What are value-added exports that countries should be thinking about? I think the first panel actually had a fairly robust discussion about this. You export oil, but then you re-import refined oil. You export cotton but then you re-import clothing. How can developing countries provide – and how can developed countries create those markets to allow developing countries to provide value added?

It means creating domestic markets also. I think many times we tend to talk about development as export markets only. While export markets are good short-term solutions, if you don't have a robust domestic market, it's not enough. The domestic market has to start absorbing and creating a market internally, whether it's financial markets which then come out of that, but it got to be a – there's got to be a domestic market, which is why some of the countries actually do well. India, China, Brazil – they have a large domestic market that's also becoming a consumer market.

It means attracting financing, not only large capital from the outside but also looking at domestic capital. In some of the African countries, there's more export of capital than there is capital staying in those countries, so how do you create projects – viable financial situations that – an economic market internally that allows capital to stay and earn a return that they can use in order to finance local development. And it means managing resources in a sustainable manner. Agricultural development is great in Brazil,

but then what happens to the rain forest, and how do you think about maintaining those resources so growth can happen in a sustainable manner over time?

MS. SMITH: Brian, let me come back to you because in all of these cases we are talking about different kinds of investment in agriculture on top, if you will, of the liberalization that Kim referenced. And I know you're very young, but I'm sure you remember that there was a time that a lot of our foreign aid and other aid instruments was invested in agriculture; that has shrunk dramatically. I wonder if you can talk about what's happened to the resources we used to put in agriculture, what we've lost, and what we need to think about moving forward if we really want to see changes in these agricultural economies that go beyond what might come in an initial Doha Round.

MR. ATWOOD: Yes, let me talk about that. We've certainly experienced some tremendous losses during the time that I was AID administrator, and I always had the feeling that people blame me for that, but now I have the opportunity to explain. (Laughter.) You know, when I came in here today and went to the speakers desk, they asked me to sign a paper that said that I can't be political in this discussion and I said, "What?" (Laughter.) I said you want me to discuss issues – any issue in Washington and not be political? Well, then they explained that I can't endorse a candidate today, so that's okay.

MS. SMITH: There are no elections.

MR. ATWOOD: I'm not ready to do that yet. (Laughter.) But this ultimately is a political issue. And this whole trade issue, I think, has become highly political. And I know there are some people here who represent farmers unions and associations and the like, and I think frankly people have sort of lost heart that the international trading opportunities are just not there any longer. Partially it's because under WTO laws, countries like Brazil and India and South Korea can self-designate themselves as developing countries despite the fact that they've become huge competitors in terms of trading agricultural products.

So to some extent it's these associations and these lobbies here in Washington who clearly have a tremendous amount of clout. All we have to do is listen to Senator Lugar discuss some of the issues to know where they're coming in and what they stand for. Had lost the faith that in fact that if developing countries can create commercial markets for their products that they're going to do very well. In fact, there are all sorts of studies that show that our agricultural community would do exceedingly well in a totally free trade environment, and yet that faith isn't there and it's very difficult – it's sort of like the subsidies are sort of part of their confidence building measures – it keeps people feeling, well, we are going to have stable farm prices and the like, but the fact of the matter is that our subsidies are really creating a bad situation for other parts of the world. We're depressing the prices of these commodities to the point where there really isn't the incentive to develop an agricultural system within a developing country.

Now, as I mentioned before and as Kimberly has explained, there is an awful lot of work that's being done by development agencies overseas; not as much as we could be doing if we had more resources, but an awful lot of work that's being done in creating extension systems, creating road to – farm-to-market roads, in creating the concept of what a privatized agricultural systems is all about, and basically encouraging people not only to create subsistence level farming, but to create cash crops that they can use to develop the global economy of the society.

It's a sad thing to look back. We often, at the University of Minnesota, are visited by Norman Borlaug; who is a graduate of the University of Minnesota. He won the Nobel Peace Prize for his contribution to the green revolution – a tremendous contribution working in partnership with the developing countries, and mostly in South Asia at that time, but in partnership because the green revolution would not have occurred if it had been just the United States. What we need today is to develop a real partnership with developing countries to help them develop, but also to bring them into the global economy.

We can't have that partnership so long as there is this divide over trade. It isn't enough just to go into the country and open an aid mission. You've got to have a relationship which says to farmers of those countries, "We want you to have the same access to the marketplace as the families in this country have. We want all farmers everywhere, basically, to get a fair price for their commodities." That doesn't exist today, and so long as it doesn't exist, our chances of achieving world economic growth and development and creating new markets for our farm products are not going to be very good.

MS. SMITH: Kim you've – again I want to go back to your book and again stress how important I think this is going to be to all of us moving forward. You've also looked at what other priorities need to be on the table in Doha. That it's – while subsidies and tariffs are important, that is, if you will, the tip of the iceberg and agriculture is really much bigger than that and trade much more complex than that. And I think there are probably a lot of us who are not aware of what those other priorities and, quite frankly, possibilities are and I wonder if you could explain those to us?

MS. ELLIOTT: Just the tip of the iceberg probably in the amount of time we have. I think one of the challenges in the trade negotiations, and we know this from what happened after the Uruguay Round, the last round of trade negotiations, is that the devil really is in the details. There is a lot of talk now about the broad numbers: how much subsidies will be cut, how much tariffs will be cut. In the Uruguay Round, in theory, both tariffs and subsidies were cut roughly in the range of 30 to 40 percent for the rich countries; 20 percent or so for the developing countries. In fact, what we observed as the agreement was implemented is that there were no real cuts in either trade barriers or in subsidies because of various ways that wiggle room was written into the rules.

And so I think one of the issues in this round is very much on, you know, what are the processes by which the subsidy cuts get defined and the tariff cuts get defined? You

know, what are the rules for – in the subsidies area for how different payments to farmers get allocated among these various boxes: the amber, the blue, the green? And that there really has to be a lot of attention to the details.

Going back to the idea of heterogeneity among developing countries and what are some sort key things to be looking at there, I think Sonal mentioned a lot of the poorest countries, and especially in sub-Saharan Africa, are still very dependent on basic commodity – (tropical?) commodity, raw commodity exports. These are things like coffee, tea, cocoa beans. Sugar is different; it is highly protected in rich countries, but some of these other products that a lot of these countries are still highly dependent on are not, in fact – the raw commodities are not heavily protected in rich countries. They have relatively free access. The problem is price volatility and the fact that they can't add value, because what we in the rich countries do is we have a zero tariff on coffee beans or cocoa beans. But we have a 10, 15, 20 percent tariff on the higher value-added processed products – on the cocoa powder, on the chocolate, on the roasted coffee.

And so one issue that has gotten very little attention so far in the negotiations, and it seems sort of technical and trivial, but it's not, is tariff escalation. That is, bringing down the tariffs on the processed products so that they're close to or no higher than on the raw products so that developing countries have a chance to move into these areas.

Another maybe somewhat complex but I think important issue that I'll just try and mention quickly is in this definition of the Green Box. And there is a part of the decision, I'm sure all of you probably have heard at least a little bit about the WTO panel decision, that U.S. cotton subsidies violated our obligations and were going to have to be reduced. Well sort of a little part of that decision that not a whole lot of people have picked up on said that these direct payments in the 2002 farm bill – we have these direct payments that are, in theory, decoupled from production and from prices that are paid to farmers based on their past planting history and there's – because they're decoupled from prices and production, they're supposedly not distorting of trade or production decisions and, therefore, they can go into the so called Green Box of subsidies, which is not capped. Those are allowable. That's a way of supporting farmers without being in violation of the international trade rules.

Well, under the cotton decision the panel said, “No, in fact those payments – those direct payments are not decoupled because farmers cannot collect them if they move from, say, planting cotton to planting fruits and vegetables. And the reason for that is that the fruit and vegetable producers in this country don't – are not beneficiaries of – I don't know how many of you are aware of that, but actually don't get the current subsidy payments. They don't benefit under the current farm programs, and so the idea was not to subject them to unfair competition.

Well, there are a variety of ways that the fruit and vegetable sector could respond to this challenge and that U.S. negotiators can respond to this challenge. One would be to negotiate changes in the rules of the Green Box, to expand it to allow these payments as

we currently have in structure. A second option would be, well, to start paying subsidies to fruit and vegetable producers and to start distorting that market.

A third one, and this seems to be the way, at least from what I'm hearing and reading, that the fruit and vegetable producers themselves are saying is they've always said, "We don't want these subsidies. We want some help in terms of extension services, research and development, maybe marketing." And that's what we – that's where we'd like to go going forward is to not restrict supplies or subsidize supply, but to increase demand for our products.

And, oh, by the way, this would have all kinds of health benefits. We need to be eating more fruits and vegetables. So why don't we have more fruits and vegetables in our school lunch programs? Why don't we have a healthy snack program instead of having vending machines in high schools? Under our food stamp programs, various ways marketing assistance – various ways of increasing demand for what are healthy, good products that all of us probably should be eating more of anyway. And, oh, by the way, these kinds of subsidies for the most part would be Green Box eligible. They would not distort trade. They would be - they would apply as well to imports as to domestic production. So it really is – it sort of points the way to an area of win/win/win. And I think it's sort of similar in a way to the ideas we talked about this morning with energy of providing – increasing demand rather than looking for ways to restrict supply to prop up prices.

MS. SMITH: It's really – It struck me that one of the facts is that, if I'm correct, fruit and vegetable farmers in the United States don't collect any subsidies?

MS. ELLIOTT: No.

MS. SMITH: So that's an area that's entirely a different mix, if you will, than most of the primary food commodities.

Sonal, let me come back to you. As American negotiators move forward, Senator Daschle pointed out this morning that any consensus on trade in this country has been shattered. And I think it's easy for a lot of people to conclude that while there may be a moral imperative to do the right thing in the Doha development round, that we really shouldn't be or don't need to be making sacrifices, if you will, on our side for the developing world. Either we can't afford to or we need to be more focused here at home.

And I think one of the things that people miss is that in the long term there is a net gain in this for us in terms of our own economic interests. You've worked a lot on the private sector side in your career, and if you could just talk briefly about what those economic and other gains are to us from a successful development round.

MS. SHAH: First, it's really too bad that there's always a trade-off between trade and development because it's not about trade or development; you need both in order to actually have development. You need to have trade, you need to have financing, you

need to have a lot of things and it's not a trade-off that takes place. And unfortunately the debate here tends to be as a trade-off. If we actually do trade, then we're hurting ourselves domestically and if we do development we're taking from the poor here to give to the poor in developing countries. And that's not – it's not a trade-off. It is a global market. Financing is moving globally, food is moving globally, everything – information is moving globally and we need to rethink that whole structure.

And how does that structure work? Why is it important? Because private sector is looking at the developing world as a market – one large market. India has a middle class of 300 million people. That is the population of the United States, if not larger. China has a middle-class of 600 million; that's double our population. Ethiopia has a population of – I mean – when I say population I mean a middle-class – Ethiopia has a population of 40 million, which is a huge market in Africa. It's not the middle-class, but it's a population that's there.

The developing – you know, Unilever, Procter & Gamble, all of the large manufacturing firms are looking at their growth market in the developing world, whether it's Brazil, whether it's Argentina, whether it's anywhere else. That's where they're looking to grow. So as those markets are beginning to open up, we need to have a real deal on the table that says “We understand that – we want access to your markets because that's where growth is.” There is not that much more growth for Procter & Gamble in the United States. There's only so many more boxes of cereal that you're going to sell here in the United States, but the developing world offers that market. That's where growth needs to take place if they want to see quarterly growth figures increase.

And the finance community or the private sector has already figured that out and they are moving in that direction. As policymakers, we need to think about that. If the private sector is already moving there, obviously they see something there and we need to think about how our policies are going to meet those needs. And I would say – go back to Brian's original point – his first point, actually, which was all of our policies need to be coherent.

But we need to look at all the institutions, the World Trade Organization, the World Bank, the IMF, and think about it from today's perspective. Those were created 50 years ago for the needs 50 years ago, but if we look at the world today, it's dramatically changed. Markets have changed, financing has changed, people have changed, and we need to think about how those institutions can be more coherent together and how they can meet the needs of today.

MS. SMITH: I think it's probably a significantly big challenge to figure out how to change the terms of the debate here because it's really very simplistic and I think we're very inclined to look at this in the short-term. What do we have to give up for a Doha round rather than what can we invest in the Doha round that's going to get us to a better place five, 10, 15 years from now?

What I would like to do now is to open it up to questions. I can kind of see you. I do have rather bright lights in my eyes. We've got a couple of microphones around the room, so if you would wave your arms wildly (laughter) and just let me know whether your questions are to a particular panelist or to all of them.

We've got questions over here.

Q: Dieter (inaudible) Foundation, a German research institute if you wish. I'd like to ask the panel, and particularly Brian, who comes from an agricultural state in the United States, about the possible use of renewable energy. It is related to agriculture. We know that a lot of technologies are available to create biofuels. It would be important, I guess, for developing countries, too. Kimberly spoke about developing domestic markets and so did Sonal. There is a possibility to do that. It could also help to create the partnership idea that Brian mentioned between developing countries and industrial countries, particularly those who are strong in renewable energy technologies, like the United States, Japan, little bit Germany too.

Could you please comment on that issue? Thank you.

MR. ATWOOD: Well, I think it's essential that we invest obviously in research in this area for a whole variety of reasons, but not least of which is the climate change problem. We had a conference out at the Humphrey Institute where we discussed the link between global climate change and sustainable development basically, economic development. And the consensus of the group, which was made up of private sector individuals, Dr. Pachauri, the UN representative, the intergovernmental panel; Frank Loy, who was our negotiator in Kyoto; and Gus Speth and others who were there.

And the essence of it was that you cannot have a viable development policy without linking it to the problem of climate change. And of course the same countries that seem to be adversaries in this trade debate for possibly valid reasons – Brazil, India, China – are the same countries that are now beginning to compete with us in the emission of greenhouse gases.

Now, we are still mostly at fault here. Over 25 percent of all of the greenhouse gases emitted come from the United States, and we've got to take action first before we can create a partnership. But given the record of innovation that our country has been responsible over the years, if we had a government policy that said we're going to invest in research in these areas, I know we can make progress. And we can join – this will be something; at least, will create a (page?) for the Europeans as well because this has been a major source of conflict between Europe and United States as well.

So the developing countries are suffering because of climate change. The agriculture – their ability to produce on this side has been badly hurt by droughts that are caused by – that we know the scientists may not have come to the conclusion that the expansion of the El Niño phenomenon has something to do with climate change, but I don't think we have to wait until they come to that final conclusion to know that. But the

droughts are happening more frequently. This means that it's much more difficult for them to create an agriculture sector that's productive. So I think for a whole variety of reasons we need to be investing in this area.

MS. SMITH: Yes, please?

Q: Chuck Riemenschneider with FAO. Kim, first of all, I'd like to plug in for another book that's coming out tomorrow (laughter) on trade and development by FAO. There's a press conference tomorrow morning at the Ronald Regan building, but it will be on the FAO website tomorrow.

Kim, when you talked about the loss of preferences by many developing countries, a lot of that in sugar, linking it back to the renewable energy issue there, there is a possibility of moving sugar production into ethanol quite easily in places like Fiji and some of the countries that are big losers are also big energy importers as well.

But you have the same – you have a problem here with domestic farm groups who wouldn't, I think, look too favorably on the development assistance to these countries to expand their ethanol industries as a possible competitor with ethanol industries here. And I'm wondering if you have any sense how the Europeans and others are looking at the possibility of converting some of this sugar into ethanol from the countries – from the ACP countries.

MS. ELLIOTT: I haven't heard a lot about that as a possible alternative for dealing with the preference erosion problem, and I think I don't know enough about the technology of the processing and so forth. I mean, clearly Brazil's been able to do it very cost efficiently, apparently environmentally efficiently, so I think it's definitely something worth looking at. I would think in the case of some of the preference countries that we're concerned about where they are net energy importers, I would think there's not a lot of risk of that ethanol being exported from there to here.

Maybe I'm wrong on that, but it seems to me that it's certainly worth looking at. I don't think I've heard of anybody – you know, I've heard maybe one of all – I've been going to weekly almost meetings on Hong Kong and the Doha ag negotiations and preference erosion and all these various issues, and I think I've only heard that come up at one meeting actually as a potential way of dealing with some of the problems of the preference erosion countries.

So it sounds like something at least worth looking at, but I'm not sure that anybody is. Maybe if the FAO does. (Laughter.)

MS. SMITH: Maria? I can't see you.

Q: I'm Maria Riley from the Center of Concern: International Gender and Trade Network. We are using the Doha Development Agenda without question in this meeting. Heterodox economists, feminist economists, and some economists from the developing

countries are very critical of the Doha Development Agenda; that it is very little about development, and a great deal about market access and greater liberalization.

I would invite anyone on the panel to respond to that critique.

MR. ATWOOD: I think it's a legitimate critique. I think that naturally in a Doha round you're going to be focusing mostly on trade issues, but as Nancy Birdsall and Dani Rodrik pointed out in an article recently in *Foreign Affairs* magazine, the poor countries aren't necessarily going to immediately benefit from liberalization and even more access. It's the issue that Sonal mentioned, which is that you've got to combine a strategy of development and access to markets and lower subsidies so that people are getting a fair price. You have to combine all those things if you're going to eradicate poverty, or if you're going to see economic growth in the developing world.

But that doesn't mean that one shouldn't focus on liberalization because it is a crucial part of the puzzle. And that's what people do in the Doha round. They're not the development ministers, they're the finance ministers and the trade ministers that go there. So trying to achieve coherence can't be done – I think the entire international system needs to be looked at and certainly the WTO process has to be looked at. The issue that I raised before, when people can self-designate as to what category of country they are in, and of course the need for a unanimous consent within WTO to get anything done – the whole system needs to be more transparent, more open to people so that people know what's going on. Otherwise, you're not going to have trust. You're going to think that people are making deals.

There is a tremendous amount of paranoia in the developing world about what we're doing especially in the trade area. They just don't know, and they suspect that when we impose things like TRIPS, the intellectual property rights requirements, that this is just another one of the conspiracies to fend and protect corporations. I mean, Joe Stiglitz very persuasively indicates that the IMF policy is perhaps more designed to protect the investments of corporations in developing countries than to help in the development process, and it's legitimate. And it contributes of course, as I know Joe wants to do, to the paranoia (laughter) of developing countries. (Laughter.)

MS. SMITH: (Inaudible), please.

MS. ELLIOTT: Yeah, sort of building on what – or reiterating something that Sonal said, there for awhile the mantra was “trade not aid,” as though sort of trade can solve everything. I think that's what Dani and Nancy and Arvind are really responding to in their *Foreign Affairs* article: trade liberalization alone is not going to do it for the poorest countries, but that trade is an important part of the package.

I think that one of the unfortunate things about the WTO and the way trade negotiations work is that it becomes – you know, trade liberalization, which often is in a country's own interest, but because of the politics it has to be put into this reciprocal package. And what it's doing, it is in our own interests, which is, you know, having a

competitive agricultural sector that – one that is not protected and subsidized is in our interest as consumers and taxpayers, but we will only give it up if we can trade it for something else. And it's a concession for us to do – to make reforms that are in our own interests, and the same thing for developing countries. All too often in a lot of the poorest developing countries – you know, the trade barriers and this whole issue of market access, it's really about them getting their own houses in order because these trade barriers are often not linked to any rational sort of pro-competitive industrial policy like we might envision or that many of us think is a part of the East-Asian miracle. It's really just the function of corrupt rent-seeking.

We have to remember that in many of these countries the governments are not – don't have the capacity to sort of put in place a very technocratic kind of an industrial policy that would – that is truly contributing to development. It's really just raising costs, including for poor consumers, and so I think certainly there is suspicion, and I think well grounded suspicion, about – and I think that the Uruguay round, in my view, there were many, many mistakes in terms of extending beyond sort of traditional trade issues actually into things like intellectual property where universal rules for all are not a good idea.

Intellectual property protection does need to vary depending on the level of development. And I think one of the – I think it was actually a good thing that the agenda got turned back in Cancun. That was when I think the developing countries standing up and saying, you know, "We're not sure, we're not prepared because we don't know what competition rules would be in our interest or what rules for investment." And that was probably a good thing to take those things out, but now I think that we're sort of back to a more or less traditional trade agenda where it is a distributive policy and so there will be winners and losers, but overall what both the theory and the evidence suggest is that the broader the liberalization, the greater the gains.

And so especially in these rules-based (areas?), absolutely there needs to be great care taken and the developing countries have a right to be suspicious, but I think actually the whole – these issues, especially (differential?) treatment and of least developing countries not having to undertake any commitments at all, there are some reasons where you have the governments for giving flexibility. And, again, this is the point of the *Foreign Affairs* article that Nancy contributed to. But the whole special and deferential treatment – I think developing countries have to be very careful because it's as much a trap as it is an opportunity.

MS. SMITH: Let's take one here.

Q: I'm Matthew Traum (ph), an environmental law consultant. In the past I've been a president of two national environmental organizations, and I keep up with what the groups are doing. There is a major commitment at the staff level across the board for a full-scale lobbying on the 2007 farm bill in a way that I have not seen with many other players in the past. My question is, even with many more players coming into the field to

support the agricultural agreement, what's the political viability in the Congress of the United States? (Laughter.)

Namely, the last year I have been interviewing on soil erosion and just in every – almost every county of the United States you've got the farm service agency next door to the NRCS office, next door to the county agent. There was a proposal to reduce by 20 percent by consolidating Natural Resources Conservation Service offices that lasted eight hours before the proposal was withdrawn. They did a press release. The Senate Ag Committee jumped in. The monolith of political power in the agricultural (community?) to me is astounding. It's something out of the former Soviet Union, so what's the political chance of anything happening?

MR. ATWOOD: Well, I despair, frankly. (Laughter.) I mean, I think that our own democracy is sick. I mean, we've got a professor on my faculty who has written a book called *Politicians Don't Pander*. What he meant by that is – and he's since done an American Political Science Association study of the inequality within our society – the American people don't have access to the decision-makers who are in Washington any longer. This is the problem. It's battling lobbyists. Who can pay for the most? Sorry I didn't – you should have asked Senator Lugar this question. He is of course –

Q: I asked him about the Law of the Sea treaty, which is never going to up for a vote.

MS. ELLIOT: I mean, I despair along with Brian, but I think there's a flip side to this and it's something we are very focused on and we hope that everyone attending here today will join us in. And it's one of the reasons, for example, that we produced this biofuels basics. It is that whatever may be happening on Capitol Hill, and however cynical politics may appear from the legislative perspective, I don't think the American people are either foolish or stupid. And I think that given the facts, whether it be the facts about alternatives to paying what they're paying for energy both in real dollar terms, but also in the security costs of our dependence on foreign oil – I think if there is an understanding of what Sonal talked about in terms of our interest in having markets, our interests from a very, very moral perspective in living in a world where we don't have hundreds of millions of people who can barely survive. I think we can move the public – an informed public in the right direction.

Now, whether that will mean that the 2007 farm bill will be the ideal, perfect piece of legislation that will satisfy everyone in this room and working farmers throughout the developing world I think is unlikely. But I do think that if we take a long-term perspective and put a vision out there that has relevance to family farmers here, to consumers here, to people here who care about how our own people live and how the rest of the people in the world live, I think we can put some momentum behind this. And I say that is a very idealistic note simply because I've found that to despair for too long makes you cynical and then – you know, I've worked in an eleventh floor office and if I jumped I could do some serious damage.

MR. ATWOOD: But that's why you're all here today. That's why this Center has put out this report. It's trying to influence the political process in a positive way. In the absence of leadership from the top, the only thing we can do as citizens is to do the kind of work you're doing here and to participate and try to make it work.

MS. SMITH: Please.

Q: I'm Nick Berry from Foreign Policy Forum again. I like the story of Sherlock Holmes who solved the case because the dog didn't bark. No one barked the word "Bush," and I know the Center for American Progress has to be nonpartisan, but the fact of the matter is – and by the way, no praise or no criticism of our president. Is this because his policies are irrelevant? He's not important? How can one – I've never been to a Washington conference where that word has been totally omitted. (Laughter.)

MS. SMITH: I can speak for the Center for American Progress: we are nonpartisan and we have no views at all on George Bush. (Laughter.) I think John pointed to it this morning. The critique here is the absence of leadership. What the U.S. has put forward in terms of a negotiating strategy for Doha, as Senator Daschle pointed out, was released in the pages of the *Financial Times*. It was not discussed beforehand with family farmers in the United States. It was a bit of a surprise to the Europeans, who are now playing ping-pong back, and issuing their latest round of proposals to us on the op-ed pages.

Nor did it have a plan for how we're going to build on the potential investment of Doha to get to the kind of economic transformation that K. Y. Amoako talked about this morning. So I think what we're talking about is the need for sustained leadership, a plan for the day after. I mean, we could get an agreement in March, but what's going to happen afterwards? What happens to family farmers here? What's the long term vision for development in the developing world?

And I think the critique is that that leadership has been absent. The administration has been very slow in coming to this game to issue the Portman proposal just weeks before the Hong Kong meeting, and again through an op-ed, is something less than a robust negotiating strategy.

That said, I think the focus of the conference today has been as much as anything on the issues and the elements of the visions, but also on the various stakeholders. What we've tried to do is bring to bear the perspectives of people who look at this from the trade perspective, developed world perspective, developing world perspective, family farmers, business, and so on and so forth.

So you can read some of our other publications. We do focus on the president from time to time, but I think here today we really wanted to focus on the vision and try to fill quite frankly what is a vacuum in terms of leadership on this issue. Does that cover the rest of you?

MR. ATWOOD: What is leadership on this issue? It's pointing out the national security issues that are at stake here. It's basically saying to the American farmer: you're not going to take all of the sacrifice here. Yes, we're going to reduce subsidies because we have to. We're responding to something that is really essential internationally, but we have some other ideas, such as the ideas that have been proposed here today. That's the kind of leadership that's needed. Otherwise you basically struggle within the morass of what is Washington that never gets out there to the people, so then politicians are only influenced by one group of people; people that have a more direct interest, and not the more general interests of the country.

MS. SMITH: I think we have time for one more question, and let me go over here.

Q: Thanks. Amy Christensen. I'm with CG Strategies. I have a question to build on that actually, which is the question about the importance of governmental leadership to cooperate with developing countries more broadly than just on the trade issues, but directly on these energy issues. In the '90s, there was a lot deep, substantive cooperation, sharing of strategies, technologies, operating principles across the energy spectrum and the electricity and transport area. A lot of those activities have stalled out over the last five years.

And I guess my question is, even as the markets have shifted – the financial flows have shifted from the public sector to the private sector – do you still think that government-to-government cooperation on these substantive issues to create these partnerships to open up a dialogue and help move these policies forward to help guide that private investment. Is that still an important piece that's now missing?

MS. SHAH(?): Absolutely. Absolutely would be the short answer, but proper regulation makes for a big difference in how transmission is done, how energy is priced. If you want to see viable alternative energy – renewable energy out there, there needs to be some level playing field on the pricing and not having a price for carbon makes carbon cheap. So, yes, the government needs to play a role and there needs to be a discussion at a global level. It can't be just national or regional level strategies; it's got to be a global level strategy on that.

MR. ATWOOD: I and Susan Rice, who is sitting down here, and Gayle all participating in a wonderful 12-day presidential visit to Africa, and the agenda was rich with discussions about what we could do together as partners – an education agenda, a trade agenda. It was wonderful and we need to see more of that. We can't just make a statement in a political campaign that Latin America is very important and not enough has been done, and then wait six years before doing anything.

And the next thing that happens is that the president goes to Latin America and he's got demonstrations and all kinds of problems and not much discourse and nothing positive accomplished. So we better engage the whole world; clearly the developed

world, but the developing world. We're all part of this planet, and we can't achieve anything with respect to the global issues.

What are the global issues? I mentioned climate change. Infectious disease. I mean, if we don't something about poverty, we're going to be suffering from more than just avian flu and HIV/AIDS, it's going to be some diseases we can't even tell – can't even name today.

So it's essential that we have a foreign policy that encompasses the entire world and that we have energetic leadership that's dealing with those issues. And I think probably the most important thing to do is to make sure that we have the institutional framework to address those issues. We need UN reform – positive UN reform, not just railing against the United Nations and blaming Kofi Annan for everything that happens, but getting in there and using our superpower status and our leverage to really get the UN changed so it's a more effective organization. The same with the World Bank and with other international institutions.

MS. SMITH: Thank you, Brian, and thank you to all the panelists. Before we close I want to try to summarize. It's not going to be easy and I'm not a technology expert so I will not attempt to be terribly smart about the renewable energy side. But I'm reminded as this discussion has unfolded today about the images of Katrina, which unfortunately have disappeared in this country. But what was driven home to me in looking at that was that poverty looks the same whether it's in the United States, in Africa, Latin America, in Asia – anywhere in the world.

And I came to this issue from the privilege of working for 20 years in Africa and a salient moment for me was when a good friend of mine was at a conference where all the donors were saying that you Africans need to get your act together because we're getting donors' fatigue. And he responded and said, "That's well and good. We're getting beggars' fatigue." And what he was talking about was a desire that K. Y. referenced this morning: to get away from dependence, and begin to transform economies so that they could be functional participating members of the global economy.

That same desire to abandon dependence is the same thing we have heard about from our representatives of family farmers here today. There is no desire to be dependent. There is a desire to see the markets actually work for agricultural producers wherever they may be. It's our view that it's in our interests to move forward in the way we've described today, but that it's also an enormous opportunity. Senator Lugar used an interesting phrase in his great remarks at lunch. He referenced the dangers of an abrupt collision with reality.

If you will look at the multiple challenges we're facing out there that we've heard about today – an energy crises of enormous proportions and implications on the environmental front, to climate change, but also significantly the security front – the cost of all – it may be born down a little bit, but fluctuations are enough that people aren't able to plan, whether they are here or in foreign countries. The need everywhere for

producers to have markets that work so that, again, they don't have to depend on subsidies on the one hand or foreign aid on the other hand.

And I think what we've tried to describe today, and I think our panelists have been very helpful in fleshing this out, is a strategy that is long-term, that is comprehensive, and that is not subject to the political whims. Now, that's a hard thing to propose and suggest in Washington, but I think it's really critical; that we're not going to be able to move forward if we get something that is only going to move forward if there is political merit in it. It is going to have to move forward because there's actual belief in it and support for it from the American people.

What does that mean for this development round coming up? Again, I don't think we're going to see an agreement next week in Hong Kong. Already they've agreed to agree, which is one of the spectacular things these high-paid, well-traveled negotiators get to do. But what we need out of Doha is more than just an agreement out of this round, we need a plan for the day after. I don't think at present we have one. Our proposal is that that plan have at its core the production of energy, and particularly liquid fuels from agriculture, as something that can help create domestic markets in this country; something that through technology development can be beneficial to the developing world and something that has the added bonus of helping us on the environmental front.

In the future, we're going to continue working on these issues and we look forward to working with all of you. There are a number of opportunities – challenges yes, but opportunities as well – that we're going to face in the coming months. There is the continuation of the trade talks. The current deadline is March to agree to agree to agree later. There is the 2007 farm bill, although I did think Senator Lugar's comments were interesting about the 2011 current legislation. There is energy legislation. As Reid Detton from the Energy Future Coalition pointed out to me earlier, there's tax legislation. There are a number of vehicles where we can bring these proposals to bear.

On our side, we have launched a website that is www.americanprogress.org/rgg, which stands for "resources for global growth." We've set this up as a facility for all of us. You are free to post reports on it; announcements, for example, of things like this book that the FAO will be releasing tomorrow. We want it to be a resource page for a broad range of stakeholders. So for people who are coming at this again from a trade perspective, an ag perspective, development, the perspective of small farmers in the United States, and so on.

And we hope after the first of the year, when we have recovered, to launch a blog on this website that it will serve as a research blog for us to all come together and see if we can't in fact build a broad network that is strong enough to overcome some of the political influences we've heard about today. And importantly, strong enough to get to the American people with a proposal that I think we can argue credibly is in their interests, and in fact the world's interests.

You are more than welcome to join us outside where there are more refreshments. As a final note, I want to thank all of our panelists throughout the day; my fellow moderator, Todd Stern; certainly Senators Daschle and Lugar, but also, and significantly, the team that put this together. We have Ana Unruh Cohen, Bracken Hendricks, Denis McDonough, Jake Caldwell, Carl Laney (sp). We have a whole team here from the Center for American Progress; our communications shop: Anna and Theo and Antoine and Danielle and others who are outside. Pete Ogden stepped up to the plate to put together and edit the book that is on your tables and did it with both skill and substance. But the person who really deserves the most thanks here today is a woman without whom either this conference would have happened or it would have been very, very, very bad: and that is Rebecca Schultz.

So I would like to thank all of you for coming and please join us as we move forward on this over the coming year. Thank you very much.

(Applause.)

(END)