

ENERGY IN THE AMERICAS

HEARING
BEFORE THE
SUBCOMMITTEE ON
THE WESTERN HEMISPHERE
OF THE
COMMITTEE ON FOREIGN AFFAIRS
HOUSE OF REPRESENTATIVES
ONE HUNDRED TENTH CONGRESS
SECOND SESSION

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ENERGY IN THE AMERICAS

THURSDAY, JULY 31, 2008

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON THE WESTERN HEMISPHERE,
COMMITTEE ON FOREIGN AFFAIRS,
Washington, DC.

The subcommittee met, pursuant to notice, at 10:45 a.m. in room 2172, Rayburn House Office Building, Hon. Eliot L. Engel (chairman of the subcommittee) presiding.

Mr. ENGEL. A quorum being present, the Subcommittee on the Western Hemisphere will come to order.

It is my pleasure to welcome everyone to today's hearing entitled, "Energy in the Americas." I am pleased to have Assistant Secretary of State for Economic, Energy, and Business Affairs Dan Sullivan here with us. We have met several times. I appreciate his good work in so many different areas. And I look forward, Mr. Sullivan, to your testimony.

The New York Times columnist, Thomas Friedman, recently wrote an article entitled, "9/11 and 4/11." In this column, Friedman argues that since 2000, the United States has faced two major crises, 9/11 and 4/11. We all know what 9/11 is. Unfortunately, I was just in my other committee, Energy and Commerce, and we were having a Health Subcommittee hearing on 9/11 with Mayor Bloomberg and others talking about persistent health problems that first responders and others have as a result of the tragedy of 9/11.

But what is 4/11? Well, that, says Mr. Friedman, was when gasoline prices in the United States crossed \$4.11. Friedman contends that history judges us on how we respond to crises and whether we will respond to the energy crisis today.

With gas prices so high, even though it has dropped a pittance in the past week or so, and consumers demanding answers, I decided to hold this hearing to look at the role of the Western Hemisphere in the production and supply of energy and whether the region holds any of the answers we are seeking.

The most obvious feature of the energy profile of the Western Hemisphere is that it is the leading energy supplier to the United States. Most people think that we get most of our oil from the Middle East; it is not true. It comes right from the Western Hemisphere. Canada, the number one exporter to the United States, supplies us more oil than Saudi Arabia, who is number two on the list. Numbers three and four are Mexico and Venezuela, respectively, and they round out the list of nations which send the United States over 1 million barrels of oil per day. Combined with other

countries, our region supplies just above 50 percent of our total oil imports. That is right: Contrary to popular opinion, as I just mentioned, the majority of our imported oil comes from the Western Hemisphere, not the Middle East.

Our region also leads all others in the amount of natural gas imported by the United States. While the United States has the largest share of proven natural gas reserves in the hemisphere, Canada supplies more than 80 percent of imported natural gas, and Trinidad and Tobago supplies the majority of our liquefied natural gas, or LNG. Our subcommittee just within the past year took a trip to Trinidad and Tobago to speak with officials there about energy.

But traditional hydrocarbons are not the only energy problems where the hemisphere is in the lead. Between the United States and Brazil, we produce the majority of the world's biofuels in the form of ethanol. While there are questions about what is the right feedstock to produce ethanol and other alternatives, the future for bio-fuels is bright. And, once scientists unlock the door to cellulosic ethanol, production could increase dramatically.

Unfortunately, as we look at Energy in the Americas, there are many areas with which we should be concerned. According to an excellent series on energy in the Washington Post this week, output from existing oil fields around the world is falling by as much as 8 percent per year.

In our hemisphere, oil output is dropping substantially in two of the major suppliers to the United States, Mexico and Venezuela. In Mexico, oil output fell 9.7 percent in the first half of this year, compared to the same period in 2007, while second-quarter profits fell 56 percent. At a time of record oil prices, this was very shocking to me. In April, President Felipe Calderon proposed reforming PEMEX, the Mexican state-owned oil company, to give it more flexibility in hiring foreign and private companies to explore, produce, refine, and transport oil. Although Calderon's bill seems stuck, there is hope that a compromise might still be found.

Like Mexico, Venezuela supplies more than 10 percent of United States oil, but unlike Mexico, our relations obviously with Venezuela are not close these days. Venezuela needs us and we need Venezuela, so despite lots of rhetoric, we continue to march in lock-step. As I mentioned at the recent hearing that we had—the hearing just before this one on Venezuela—I would like to see improved relations with Venezuela, but in the meantime we must be wary of heavy dependence on a country which apparently considers itself an opponent of the United States. Furthermore, the increasing nationalization of oil reserves by the Chavez government is causing some multi-national energy companies with the expertise to maintain Venezuela's oil infrastructure to flee, leaving Caracas without the ability to keep production of over 3 million barrels per day.

Just as problems are mounting in the Mexican and Venezuelan sectors, Brazil is lining up to take their place. The Tupi oil field, recently discovered off Brazil's southeastern coast, is thought to hold between 5 through 8 billion barrels. While it will take up to a decade to exploit this resource, in May of this year Brazil was actually one of the ten largest oil suppliers to the United States, beating out oil emirate Kuwait. Yet, unlike Mexico and Venezuela, Brazil is not burdened with a poorly managed and legally restricted

state-owned oil company. Petrobras is widely recognized as one of the best energy companies in the world.

But when you talk energy and Brazil, it is in biofuels and energy independence where Brazil leads the world. Our subcommittee traveled to Brazil last year. I have said many, many times that Brazil made itself energy independent—decided 30, 35 years ago—that it would set itself on a course of energy independence, and has essentially achieved that goal. The United States can learn a lot from Brazil in this regard. And I would hope that the United States and we in Congress would make a commitment so that the United States could follow Brazil's lead and be energy independent. Everybody says it wants to be independent. We want to be independent, but somehow or other with bickering and partisan politics, we never quite get there. And it is time, I think, to put partisan politics aside, and as Americans we can follow Brazil's lead in terms of being energy independent, because I just believe that we can talk all we want about truly being free in our foreign policy, but as long as we are dependent on oil from hostile and questionable regimes, we are never totally independent and free. And, that is why it is so important that the United States become energy independent like Brazil.

So I take my hat off to Brazil, which made far-reaching decisions 30 years ago to develop a domestic bio-fuel industry which allowed it to become energy independent. Imagine today what the United States would be like if we were not addicted to oil from Saudi Arabia, Venezuela, Nigeria and anyplace else. Imagine further if the world could simply say to Russia and Iran, thanks but no thanks, we do not need your oil. We could actually stop pouring money into the coffers of unstable and unfriendly nations.

We have a great deal to learn from our friends in Brazil because in the end the only real alternative for the United States is alternatives. We must follow Brazil's lead into alternative energy if we are going to break our addiction to oil and slow the production of greenhouse gasses.

Still, if we have it bad, countries in the Caribbean and Central America have it even worse. In fact, 17 countries in our region are 100 percent dependent on foreign sources of oil, most in the Caribbean and Central America. It is really shocking.

The U.S.-Brazil Memorandum of Understanding on Biofuels is just the kind of policy to help promote alternatives to oil. And, I was delighted when President Bush and President Lula signed the MOU. With Brazil, we have selected four countries, the Dominican Republic—I just came back from the Dominican Republic the other day meeting with its president, President Fernandez—so we have four countries, the Dominican Republic, El Salvador, Haiti, and St. Kitts and Nevis, where we are trying to stimulate the development of a domestic biofuels sector. Now, more than 1 year into the program, I am concerned that this process is going much slower than we had hoped. And I look forward to Secretary Sullivan's update on our joint efforts.

In particular, I would like to hear more about the efforts to help Haiti promote biofuels, in particular the potential for *Jatropha* as a feedstock for producing biodiesel. *Jatropha*, which has historically been viewed as a weed, is now seen a possible "trifecta" for Haiti.

It would provide domestic energy help, it would help reforest barren hillsides, and employ thousands of people; all things that Haiti desperately needs. This opportunity must be explored aggressively, and I would like to hear what we are doing to promote this resource for Haiti.

There are opportunities throughout the hemisphere, and I am glad that we are working with Colombia, Peru, and other countries on biofuels. We need to break our addiction to oil, and as co-chair of the House Oil and National Security Caucus, I think there is no better place to promote the search for alternatives than right here in the Western Hemisphere.

So in conclusion, as we strive to deal with the crisis of \$4.11, let us not forget the importance of the Western Hemisphere to our country's energy profile. I hope that we continue to work with our friends to the south as we strive to diversify our energy sources and, most importantly, develop clean alternatives to oil for the U.S. and the region.

I am now pleased to call on Ranking Member Burton for his opening statement.

[The prepared statement of Mr. Engel follows:]

PREPARED STATEMENT OF THE HONORABLE ELIOT L. ENGEL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK, AND CHAIRMAN, SUBCOMMITTEE ON THE WESTERN HEMISPHERE

A quorum being present, the Subcommittee on the Western Hemisphere will come to order.

It is my pleasure to welcome you to today's hearing entitled, "Energy in the Americas." I am pleased to have Assistant Secretary of State for Economic, Energy, and Business Affairs Dan Sullivan here with us. We have met several times, and I look forward to your testimony.

New York Times columnist, Thomas Friedman, recently wrote an article entitled, "9/11 and 4/11." In the column, Friedman argues that since 2000, the United States has faced two major crises, 9/11 and 4/11. We all know what 9/11 is, but what is 4/11? That's when gasoline prices in the United States crossed \$4.11. Friedman contends that history judges us on how we respond to crises and whether we'll respond to the energy crisis today.

With gas prices so high and consumers demanding answers, I decided to hold this hearing to look at the role of the Western Hemisphere in the production and supply of energy and whether the region holds any of the answers we are seeking.

The most obvious feature of the energy profile of the Western Hemisphere is that it is the leading energy supplier to the United States. Canada, the number one exporter to the United States, supplies more oil than Saudi Arabia, number two on the list. Numbers three and four, Mexico and Venezuela, respectively, round out the list of nations which send the U.S. over one million barrels of oil per day. Combined with other countries, our region supplies just above 50% of our total oil imports. That's right: Contrary to popular opinion, the majority of our imported oil comes from the Western Hemisphere, not the Middle East.

Our region also leads all others in the amount of natural gas imported by the United States. While the U.S. has the largest share of proven natural gas reserves in the hemisphere, Canada supplies more than 80% of imported natural gas and Trinidad and Tobago supplies the majority of our liquefied natural gas or LNG.

But, traditional hydrocarbons are not the only energy products where the hemisphere is in the lead. Between the United States and Brazil, we produce the majority of the world's biofuels in the form of ethanol. While there are questions about what is the right feedstock to produce ethanol and other alternatives, the future for bio-fuels is bright. And, once scientists unlock the door to cellulosic ethanol, production could increase dramatically.

Unfortunately, as we look at Energy in the Americas, there are many areas with which we should be concerned. According to an excellent series on energy in *The Washington Post* this week, output from existing oil fields around the world is falling by as much as 8% per year.

In our hemisphere, oil output is dropping substantially in two of the major suppliers to the United States: Mexico and Venezuela. In Mexico, oil output fell 9.7% in first half of this year, compared to the same period in 2007, while second-quarter profits fell 56%. At a time of record oil prices, this is shocking! In April, President Felipe Calderón proposed reforming Pemex, the state-owned oil company, to give it more flexibility in hiring foreign and private companies to explore, produce, refine, and transport oil. Although Calderon's bill seems stuck, there is hope that a compromise might be found.

Like Mexico, Venezuela supplies more than 10% of U.S. oil imports, but unlike Mexico, our relations with Venezuela are not close. As I mentioned at a recent hearing on Venezuela, I would like to see improved relations with Venezuela, but, in the meantime we must be wary of heavy dependence on a country which considers itself an opponent of the U.S. Further, the increasing nationalization of oil resources by the Chavez government is causing some multi-national energy companies with the expertise to maintain Venezuela's oil infrastructure to flee, leaving Caracas without the ability to keep production of over 3 million barrels per day.

Just as problems are mounting in the Mexican and Venezuelan sectors, Brazil is lining up to take their place. The Tupi oil field, recently discovered off Brazil's southeastern coast is thought to hold between 5–8 billion barrels. While it will take up to a decade to exploit this resource, in May of this year, Brazil was actually one of the ten largest oil suppliers to the United States, beating out oil emirate, Kuwait. Yet, unlike Mexico and Venezuela, Brazil is not burdened with a poorly managed and legally restricted state-owned oil company. Petrobras is widely recognized as one of the best energy companies in the world.

But, when you talk energy and Brazil, it is in biofuels and energy independence where Brazil leads the world. I take my hat off to Brazil which made far-reaching decisions twenty to thirty years ago to develop a domestic biofuels industry which allowed it to become energy independent. Imagine today what America would be like if we were not addicted to oil from Saudi Arabia, Venezuela, and Nigeria. Imagine further if the world could simply say to Russia and Iran, thanks but no thanks—we don't need your oil. We could actually stop pouring money into the coffers of unstable and unfriendly nations.

We have a great deal to learn from our friends in Brazil, because in the end, the only real alternative for the United States is alternatives. We must follow Brazil's lead into alternative energy if we're going to break our addiction to oil and slow the production of greenhouse gasses.

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In particular, I would like to hear more about the efforts to help Haiti promote biofuels, in particular the potential for Jatropha as a feedstock for producing biodiesel. Jatropha, which has historically been viewed as a weed, is now seen as a possible 'trifecta' for Haiti. It could provide a domestic energy source, help reforest barren hillsides, and employ thousands of people—all things Haiti desperately needs. This opportunity must be explored aggressively, and I would like to hear what we are doing to promote this resource for Haiti.

There are opportunities for alternatives throughout the hemisphere, and I'm glad we are working with Colombia, Peru, and other countries on biofuels. We need to break our addiction to oil, and as Co-Chair of the House Oil and National Security Caucus, I think there's no better place to promote the search for alternatives than in the Western Hemisphere.

So, as we strive to deal with the crisis of \$4.11, let us not forget the importance of the Western Hemisphere to our country's energy profile. I hope that we continue to work with our friends to the south as we strive to diversify our energy sources and most importantly develop clean alternatives to oil for the U.S. and the region.

I am now pleased to call on Ranking Member Burton for his opening statement.

Mr. BURTON. Thank you, Mr. Chairman.

Mr. Chairman, you are absolutely correct, we get 14.5 percent of our oil from Saudi Arabia. We get 4.8 percent of our oil from Iraq.

We get 4.4 percent of our oil from Algeria. We get 10.8 percent of our oil from Nigeria. And if you add all that up that means from that part of the world, from Africa and the Middle East, we are getting 39.5 percent of our oil. If you add into that the 11.5 percent that we are getting from Venezuela, which is not a friend of the United States, at least that is what we all think, and Mr. Chavez seems to reinforce that, that means that 51 percent of our oil either comes from Africa, the Middle East, or from a hostile regime in Latin America, 51 percent.

You know, Mr. Chairman, I am for biofuels and I am for wind and I am for solar and I am for the transition to all these forms of energy. But while we are doing that we need to drill for oil in the United States and off the continental shelf and elsewhere. Now, you are absolutely correct, we are not going to get everything done unless we have bipartisan support for a program. My colleague down at the other end of the dais here, he and I and Neil Abercrombie and Mr. Peterson, we are working on a piece of legislation which is bipartisan in nature.

One of the things that has been controversial in this body has been whether or not we drill in the ANWR. And in the legislation that we, this bipartisan group, drafted we left the ANWR out. And the reason we left the ANWR out was because that was a controversial area. But we did support drilling off the continental shelf. And while you talk about drilling off the continental shelf there is a controversy about how far out you go and who should have control. So 25 miles out from the continental shelf we have prohibited in our legislation the drilling for oil. Then from 25 to 50 miles out we have said that the governors in the states that are in question can also prohibit drilling in that area.

So if a state says they do not want drilling off the continental shelf in their area they can stop it from up to 50 miles out. And it will be a minimum of 25 miles out before there will be any drilling whatsoever. Now, people are concerned about looking at our oil derricks. You cannot see them 10 miles out. And you sure cannot see them 25 miles out. And there are huge reservoirs of oil 25 miles out from the United States on the continental shelf.

The technology that we had 10, 15, 20 years ago which would only allow us to drill maybe 2,000, 3,000 feet under the surface of the ocean, now they can go down 5,000, 6,000 feet and maybe even further. And the oil derricks which cost \$2 billion for platforms out there to construct they are very safe. When Katrina hit there was not one drop of oil spilled. And so it can be done in an environmentally safe way.

Mr. Chairman, this is one of the most contentious issues we are dealing with right now. And while we are dealing with it the American people are suffering. Brazil's economy is booming. It is booming in part because of what you said, because of their transition to all kinds of other fuels. But they are also drilling off of their shores. And because of that their economy in part because of that is because they are doing very, very well. Their economy is booming and it is really good because Latin America needs that kind of enterprise and that kind of economic expansion. But here in the United States we are really suffering.

People are going out, Mr. Chairman, and they are spending \$80, \$90, \$100 for one tank of gas. And while they are doing that we are sitting around here fiddling. And it really bothers me. If you go out to any gas station, Mr. Chairman, and we talk to anybody filling up their gas tank they are going to be ticked off. I will tell you an example, Mr. Chairman.

I went to get gasoline the other day and there was a guy that pulled up in a pickup truck. He did not know who I was and I was standing there putting my gas in. And I heard him talking to his son, and here is what he said: "You want to help me pump the gas? It is paying for part of your—taking away from your college education." And this was a guy that had a pretty nice pickup truck in a pretty nice area of this country.

The people of this country want us to drill in the United States while at the same time they are very much aware that we should transition as much as possible to alternative types of fuel and new types of energy. They want us to do that. They understand that there is a limited amount of fossil fuels in this world. But at the same time they do not want us to be dependent on the rest of the world, particularly the Middle East, Africa, and our friend in South America for 51 percent of our energy. Anything could disrupt that.

In the Straits of Hormuz over off of Iran if two ships are sunk over there we could have serious problems.

I know the chairman took a little extra time so you have to forgive me for going on. But I think it is extremely important on a bipartisan basis, my colleagues on the other side of the aisle, as well as us on our side of the aisle, that make some concessions to one another. This bipartisan group headed by Abercrombie, democrat of Hawaii, Peterson, a Republican of Pennsylvania, about 15 or 20 of us have gotten together and we worked out a bill. And I sincerely hope when we come back in September that we will move that bill to the floor. And I hope everybody will take a hard look at that bill and talk to the Speaker about bringing it to the floor because it is bipartisan. And if we do that, and there may be some disagreement on this, I believe that the price of oil will start to drop, the speculators, there will be a movement on the part of the speculators to start dumping some of their acquisitions, and I think you will see the price of oil drop and the price of gasoline drop.

When the President decided to do away with the prohibition on offshore drilling from the executive branch, the price of oil dropped pretty rapidly. And I think if Congress takes action it will help here as well.

I love you guys, let us get together and solve this problem. And I look forward to the testimony.

[The prepared statement of Mr. Burton follows:]

PREPARED STATEMENT OF THE HONORABLE DAN BURTON, A REPRESENTATIVE IN
CONGRESS FROM THE STATE OF INDIANA

To begin, I would like to thank the Chairman for holding today's hearing on the crucial topic of energy and its impact on the Hemisphere.

The Western Hemisphere has a rapidly unfolding energy problem. However, this is not due to a lack of resources.

- The United State has the largest reserves of coal in the world
- Canada is a very stable supplier of oil and natural gas

- Brazil is the world's largest producer of sugar-based ethanol—a superior form of ethanol based on fuel efficiency and emissions cleanliness, while the United States is the largest producer of corn-based ethanol
- Mexico, Venezuela, and the United States all have oil reserves that are not being utilized for reasons specific to each country's energy policy and political climate

Within the United States alone, we have oil shale deposits, which could yield between 1.8 trillion and 8 trillion barrels of oil. In the Midwest, we have a coal supply with more energy capability than Saudi Arabia and Kuwait combined, and if it were fully utilized through currently available coal-to-liquid technology, it would equate to 5 million barrels of oil per day by 2030.

There is no doubt within Washington, and it is felt across the Hemisphere, that removing dependency on oil is a matter of not only national security, but regional security as well. These security concerns come as China, India and Iran have sought to bolster their energy security by engaging in efforts to expand their influence in Latin America. These developments lend further credence to those of us who seek alternative energy solutions.

Unfortunately, our dependence on oil will not disappear as quickly and somewhat painlessly as ripping off a band-aid.

What we must address is how, as a Hemisphere, we can work together to utilize our oil resources while pursuing alternative energy development. We should look at Brazil's revolutionary use of ethanol and biodiesel as a prime example of how our Hemisphere can transition away from oil. The United States' pact with Brazil to work together to promote and expand sugar production in the Hemisphere specifically for ethanol use is a way to tap into our Hemisphere's resources, while creating mutually beneficial partnerships.

Switching from oil to alternative energy sources will not be easy, and it may pose unforeseen consequences, like those we have experienced as a result of ethanol policies in the United States. We must be cautious when enacting policies that could bring significant change in the commodities markets, and do our very best to mitigate sharp increases in food prices and livestock feed.

Meanwhile, new scientific improvements embodied in alternative energy production will not only improve the environment, but will provide more jobs. Creating opportunities and strengthening the economies of Latin American nations will have a positive trickling down affect across a variety of current obstacles in the region—namely poverty and immigration.

The United States economy can also benefit as alternative energy and energy efficiency technologies have the potential to be major export industries that would benefit the American economy for generations. We must use our nation's resources and ingenuity to respond to the growing demand for clean and green initiatives. There are no losers in the production of more efficient machines.

As we move forward it is essential that we focus on establishing energy security for our Hemisphere while keeping in mind the goal of those countries working toward U.S. decline.

I look forward to hearing from our distinguished panelists on this important topic.

Mr. ENGEL. Well thank you, Mr. Burton. And I certainly think that we should do this on a bipartisan basis and also look into why the oil companies have plenty of areas where they can drill now and they have not. I think that should be in the mix too. And the oil reserves, we have seen gas can drop when price of gas when the oil reserves are released. And I hope the President can be persuaded to do that as well. But, I do agree that we need to work in bipartisan fashion.

Mr. Sires, any opening statements?

Mr. SIRES. Thank you, Mr. Chairman, for holding this hearing. I am also interested in working together so we can solve this issue. But I also interested in knowing why there is such a reduction in output in some of these countries in South America, Central America. Is it purposely done? Or is it that there are a dwindling number of barrels coming out of these wells?

And I am also interested in this new field that was discovered by Brazil in the southern part of Brazil close to Uruguay. And I

wondering if they would this why is it going to take us 10 years to get the oil out of there? Obviously they have to drill. Everybody is talking about drilling. But here we are known reserves, and before we get a drop out of it is going to be 10 years. So obviously we are in the same predicament here in this country if we start drilling now.

And also I want to learn a little bit about natural gas. We had a meeting yesterday and I understand we have a large, large number of cubic feet in this country, one of the largest in the world, as an alternative fuel for cars.

And I thank you very much for having this hearing, Mr. Chairman.

Mr. ENGEL. Thank you very much.

Mr. Delahunt.

Mr. DELAHUNT. Mr. Chairman, let me commend you for suggesting that we closely examine what Brazil has done. And to remind ourselves that oil is a world commodity. One does not go in and shop for Saudi Arabian oil or oil from Canada or Venezuelan oil; you know, "Give me 5 quarts of Mexican oil." But the price is because of the reality that it is a world commodity and that in terms of Brazil they, I think you indicated it was a 30-year plan, I think we all can regret that in the aftermath of the embargo back in the 1970s when the price of oil came tumbling down that the political will just simply evaporated. And we cannot let that happen this time as we see the beginnings, hopefully, of a significant decline over the course of the past several weeks in the price of oil.

I would put forth the concept that oil is a commodity in terms of particularly transportation fuels that has no competition, or real competition at this point in time. So the answer from my perspective is to provide those options in terms of how we produce energy to move our trucks, our planes and our cars. And I think if we do that we will really have in place an opportunity for the law of supply and demand to operate.

And I want to commend the ranking member, too, for his call for bipartisanship to solve this problem. And I look forward to working with him and my ranking member over there, Mr. Rohrabacher.

With that I yield back.

Mr. ENGEL. Thank you.

Mr. Klein.

Mr. KLEIN. Thank you, Mr. Chair. And I appreciate the fact that you and the ranking member have called this hearing today. This is a very important hearing.

I think that we have heard from some of our members and I look forward to Secretary of State Sullivan's comments. And we are intrigued I think nationally in the United States by Brazil and by their interest and by their perseverance in following through on something that was important to them at that time and of course we also recognize important here.

I also echo the sentiments of a solution that American people are looking for. And it is frustrating, though, when the debate goes into this, oh well, if we drill we have solved the problem. You know, we have all been sort of listening to T. Boone Pickens a little bit and his "cannot drill out way out of this problem." He is absolutely right. Absolutely we need to drill more, we need to create more con-

sumption—excuse me, more supply. But that is not the long-term answer based on our reserves in the United States and based on all the other reasons we already know.

And I am from Florida, and it is particularly annoying when I hear people talk about, oh, we are going to drill off, why are we not drilling off Cuba or off the coast of Florida because Cuba is drilling through China? That is not true. It has been debunked. So let us make sure we keep the facts on the table because we can work this out in a very logical, common sense. Let us get the true facts on the table, recognize we are going to have to drill more.

But our national policy needs to be very much tied to incentives, tax incentives, incentives for business and entrepreneurs, incentives for consumers to help develop and commercialize these other alternatives. Part of it will be natural gas and the use of natural gas. Part of it will be any number of other things that the market will help dictate to us and we will be successful at.

And I also just want to add though the fact this is an international environment we are working in here. So we need to think that way. We cannot put up walls around the United States and say this is just our problem or when we make decisions this is going to be limited by what happens within the 50 states. We cannot control that. We can control the fact that we do consume 25 percent of the world's energy on a daily basis right now, oil energy, but we can certainly recognize we have to do more, both for transportation and power and energy sources.

So I thank the gentleman for being here today and for helping us understand what is going on in our hemisphere so we can make sure that we make policy that is based on facts and will help us both short-term and long-term. Thank you, Mr. Chairman.

Mr. ENGEL. Thank you, Mr. Klein.

Mr. Green.

Mr. GREEN. Thank you, Mr. Chairman. And I appreciate my colleagues' comments about the need for energy. And first of all, Mr. Sullivan, Secretary Sullivan, I appreciate what our State Department does all over the world, having spent the 4th of July in Pakistan, Afghanistan, but also in Latin America with our chair in Ecuador and Bolivia and Argentina talking about energy over the February break.

Coming from Houston, energy is what we do. And I think Brazil is a great example. They are the world leader in ethanol from sugar-based ethanol. But they are also a big explorer and have found some of the largest deposits of oil off their coast. And coming from Houston I guess this meeting is so important, this hearing, because our relationship with Latin America is so intertwined in our country. And I will give you an example in the oil industry. There are refineries in my district, Lyondell Petrochemical (PDVSA), the Venezuelan oil company, invested \$2 billion in the 1990s to handle heavy Venezuelan crude. That project is still ongoing until 2011. There had been some dust-ups, you know, 5 to 8 years ago but there is no problem now.

And PEMEX, the oil company from Mexico, invested in the Shell refinery in our district and to handle crude from Mexico. And those tankers coming in the Houston Ship Channel for Lyondell and Shell Refinery, so it is Mexican oil. Although we do send refined

product to Mexico, a few weeks ago we heard how terrible it was we are sending refined product. Well, when you invest \$1 billion in a refinery you get a contractual relationship, you can get some of that refined product back to your country.

And the last thing, though, and congratulate Brazil, one of my refineries, the Pasadena refinery, is actually expanding, expanding the refinery in a partnership with Petrobras. From what I understand it will be the first effort in our country and will handle Brazilian crude. So we are so interrelated, and that is not even talking about Colombia and natural gas and everything else that the chairman talked about. So it is important.

And we do need everything. But I also believe, like the ranking member on our subcommittee, we have to also drill in our own country because I do not like the idea of going to Saudi Arabia or even telling President Chavez, we want you to drill more, and yet we will not. And if we are going to use hydrocarbons we need to also produce them like we expect our trading partners to, or we are subject to whatever they are going to do.

So, Mr. Chairman, I would like to have my full statement placed into the record. And you know I appreciate this hearing today, particularly from the district I represent.

Thank you.

Mr. ENGEL. Without objection, Mr. Green, so ordered.
[The prepared statement of Mr. Green follows:]

PREPARED STATEMENT OF THE HONORABLE GENE GREEN, A REPRESENTATIVE IN
CONGRESS FROM THE STATE OF TEXAS

Thank you, Mr. Chairman, for holding this hearing, and I would like to welcome Secretary Sullivan to our committee today.

Few issues we debate here in Congress are as personally felt by every consumer and business in the U.S. as energy prices.

We need work to improve America's energy efficiency standards, reduce energy consumption, support new and innovative energy technologies, and create a "smart" electricity grid system. These are all worthy endeavors that both sides can agree deserve immediate attention.

Countries in the Western Hemisphere comprised 50% of U.S. crude oil imports in 2007, but our economies are intertwined.

In our district in Houston, PdVSA (Venezuela's oil company) invested two billion dollars to expand a Lyondell refinery to handle heavy Venezuelan crude oil. Pemex of Mexico invested in the expansion of a Shell refinery and as we speak Petrobras (the Brazilian energy company) is investing in a Pasadena refinery to handle Brazilian crude.

Clearly, the United States has a stake in how Latin America adapts to the economic reality of \$125 for a barrel of oil, although that price is down from \$144 a barrel ten days ago.

These high prices have spurred a rise in resource nationalism throughout Latin America.

The majority of the world's oil reserves are owned not by private oil companies but by state-owned oil companies in producing nations like Mexico, Bolivia, Ecuador and Venezuela.

While it is understandable that these countries want a piece of the pie, I am concerned about how this affects our energy security and our American companies' interest abroad.

It is well known fact that PdVSA's production is down due to a lack of investment in their infrastructure, whereas countries like Brazil and Colombia continue to follow a free-enterprise model for energy investment that allows foreign companies to own and operate energy concessions.

Is there a way that we can promote fair, transparent, market rules to level the playing field?

Given the decline in Mexico's oil reserves and production levels, and Venezuela's decrease in production, what does this mean for our energy security?

Limiting our dependence on foreign oil, especially from the most volatile countries will require a multi-pronged approach of more alternative sources, more efficient uses, and most importantly more domestic production.

Thank you again, Mr. Chairman, for holding this hearing, and I look forward to the testimony of our witnesses.

Mr. ENGEL. Mr. Rohrabacher.

Mr. ROHRABACHER. Mr. Chairman, first of all I would like to thank you for the courtesy of allowing me to sit in on the subcommittee. And as a member of the full committee I have a keen interest in these areas and I appreciate that.

Mr. ENGEL. Well, let me just say as a classmate of mine 20 years ago, it is a pleasure to have you here.

Mr. ROHRABACHER. All right. And with that said, I am a senior member of the Science Committee as well as being on the International Relations Committee, and one of the arguments that I have found to be very disturbing about why America should not be moving forward with full steam ahead in developing our oil and gas resources, as well as all the other options I might add, is that it is going to be a long journey, so why are we taking the first step? In other words, it is going to take 10 years to develop this, so it is stupid to start talking about it as a solution to our problems. That is an absurd argument. The fact is that everything we do will take time and there is no reason to say that because something that is valuable but it takes time to do that you do not move forward and start doing that.

If 10 years ago we would have started our oil and gas development offshore, the crisis that we are now in that is dramatically impacting in a negative way on the well-being of the American people, would be reduced, the negative impact would be reduced. The supply would be higher of our own oil and natural gas and the prices would, the pressure on prices would be less.

We did not do it 10 years ago. Well, we should make sure that 10 years from now America is not suffering because we did not do today what we should be doing. We are the only country in the world that I know that has significant offshore oil and gas natural resources that have not put a full effort out to try to develop those resources so they could be put to use for the benefit of their own people, rather than sending vast amounts of our treasury overseas to buy that oil or natural gas and to have it shipped in ships by the way, the tankers, which are more likely to have a spill than if we get it from our own offshore oil resources.

I represent a coastal district and I am a scuba diver as well as a surfer. I am in the water a lot. We have not had any—we have offshore oil wells off my district, had them all the last 30, 40 years, there has never been a spill from those offshore oil wells. But I can tell you we had a spill 15 years ago from a tanker that befouled the entire beach.

So what we have had is an energy policy in this last 30 years that has been dictated by radical environmentalists so we have not developed hydroelectric, nuclear weapons, and not our offshore oil and natural gas or any of these alternatives that we have got. In fact, right now solar energy projects are being stymied by radical environmentalists who are insisting on such high level of environmental impact reports that the Bureau of Land Management has not issued one permit for even a solar energy project.

So we need to make sure that we free ourselves from this political bondage we have had to radical environmentalists who are not watching out for the interests of the American people and developing the policies that keep us even this day from moving forward with our natural resources, offshore natural resources.

I am looking forward to the testimony today. I would like to hear about the details in terms of Cuba and their leasing. I hear that, I do not know, I have just been told by a member here that that is a myth, that they have not started leasing with China, so that we might—so that in a relatively short period of time we might wind up seeing the absurdity of having Chinese offshore wells within 45 miles of our coast. And, you know, is that true? Are the Chinese talking to Cubans about doing this? And if we then do not develop those offshore oil resources, how absurd is it that the oil and gas is going to end up with the Chinese?

So I am looking forward to the testimony. And this is, as I say, an important hearing and it is an important issue because our people, their lives, their standard of living is going down. Our enemies are receiving vast amounts of wealth from the stupid policies we have had for the last 30 years which always said, Well let us not step forward now because it is going to take 10 more years to have a benefit. That is a crazy argument.

Thank you very much, Mr. Chairman.

Mr. ENGEL. Thank you, Mr. Rohrabacher. And I would now like to introduce our first witness.

Dan Sullivan is assistant secretary of state for Economic, Energy and Business Affairs. And it is an honor to have you with us, Dan. And, you know, one of the wonderful things about testifying is we get to hear your words of wisdom. And one of the terrible things from your part is you have to listen to all of us before you can talk. But here is the time. And I look forward, Mr. Secretary, to hearing your testimony.

STATEMENT OF THE HONORABLE DANIEL S. SULLIVAN, ASSISTANT SECRETARY, BUREAU OF ECONOMIC, ENERGY AND BUSINESS AFFAIRS, U.S. DEPARTMENT OF STATE

Mr. SULLIVAN. Thank you, Mr. Chairman and Ranking Member Burton, honorable committee members. It is a pleasure to be here today to testify on these important issues. And to the contrary, Mr. Chairman, and I say this in all seriousness, I often learn as much I think from testifying as the members do, and so I plan on taking a lot of this back with me as well today.

But we are very pleased about the attention to these issues that this committee has focused on. And we welcome and appreciate the continued support of this committee in our efforts in the hemisphere on energy issues.

I has already been said, it is noted, but the United States is facing record high energy prices, a drag on the economy, a drag on consumer well-being. And the administration is very concerned about this and I know that the Congress is as well. And this challenge also extends to our partners in the hemisphere and, Mr. Chairman, as you noted, particularly those in Central America and the Caribbean. And this is of significant concern to us as well.

Now, the challenge of energy prices is rooted in very much a tight global energy market with regard to the fundamentals of supply and demand. Simply put, the world economy, with its global demand for oil, has been growing rapidly and the supply of oil has not kept pace. And as you noted, Mr. Chairman, the Washington Post laid this out in a series of articles this week I thought in a quite well-documented way. It is important to recognize one element of that demand side rising price aspect has been related to a positive development, and that has been the significant global economic growth that we have seen throughout the world over the last 6 to 7 years. For much of that period the U.S. has been the driver of that growth. And it has extended, you read about China and India, but it has extended to Latin America in a significant way, 5.6 percent GDP growth for the region last year. And so that in some ways that is a positive story.

So on the demand side we recognize the need to address demand, heed the President's call for great conservation, and take further steps to improve energy efficiency and acknowledge the important work of the Congress in the recent Energy Independence and Security Act in that regard.

My testimony, however, today—and, Mr. Chairman, I would like to submit my written testimony for the record—is focused more on the supply side, increasing supplies and diversification, which is what we see as one of the critical elements of our energy security in the hemisphere. I will not go through the numbers, Mr. Chairman, because you already did, but I was very pleased to hear you and Congressman Burton note how much of our energy we do get from the hemisphere. And that is an important, very important element of our policy, and it is something that I think you are very correct in noting, Mr. Chairman, that most Americans do not know this.

And so you laid out some of the numbers. Our top suppliers, Canada, Mexico, Venezuela, all in our top four total global producers. But given these significant volumes, a starting point of our diplomacy is maintaining and expanding these traditional sources of energy in the hemisphere. And in this regard my testimony, written testimony does this, but I would briefly like to highlight the importance of our growing relationship with Canada in this regard.

Faced with static production by OPEC and generally struggling non-OPEC production, Canadian oil, which is significantly increasing, is becoming an increasingly important component to United States and global energy security markets. And the administration, the State Department, the Department of Energy has a very intensive dialogue with the Canadians on a number of energy issues.

But as you also noted, Mr. Chairman, we are increasingly focused on developing alternative energy supplies in the region, and particularly biofuels. And in this regard we have focused significant diplomatic efforts, from the President, Secretary of State, to many people in the State Department, USDA, on our biofuels partnership that we have launched with Brazil. And we are very appreciative of this committee's interest in support for this initiative. And I would agree with you, Mr. Chairman, the future of this initiative in biofuels in general is bright.

And one of the reasons I mention that is the numbers are starting to reveal the positive aspect of this. Since 2005, biofuels have contributed 1 million barrels, the equivalent of 1 million barrels of oil per day to supply. That is just the biofuels that would be produced in Europe and the United States, not even Brazil. And the International Energy Agency has stated that given the poor performance of non-OPEC production and relatively low spare capacity, clearly much higher petroleum prices would be in place now if these biofuels had not been available. So it is an important aspect of our overall energy mix.

As you know, our biofuels partnership is focused in three areas: Bilateral cooperation in the area of R&D with the Brazilians, multilateral engagement, and joint cooperation in third countries. And I would be glad to go into different aspects of this partnership if the committee members are interested.

Finally, Mr. Chairman, I wanted to just mention one final thing, and that is to note the importance of looking at energy policy in light of broader economic policies. Effective energy policies in the hemisphere do not exist in a vacuum. They are most effective when integrated into broader economic policies, transparent and open markets that are free from corruption, and reinforced by strong protections for investment. This we think will ultimately help producer countries in the hemisphere as well as consumer countries to benefit from lower energy costs.

As I mentioned earlier, the United States-Canadian relationship is an important example of the mutual benefits that can occur from open markets, integrated markets, and how free trade can help that efficient energy market and reliable supplies of energy. But contrast, some countries have emphasized status and non-transparent populist economic policies and output has suffered and declined.

So this administration, with the strong bipartisan support of Congress, has made keeping our overall economic engagement with the hemisphere a top foreign policy priority. We think continuing that in different areas, one example with regard to the passage of the Colombia Free Trade Agreement, will have a positive effect with regard to our other free trade agreements, our bilateral investment treaties, and other economic initiatives with regard to more efficient energy markets in the hemisphere and will help both with increasing production and consumers.

So, Mr. Chairman, we are going to maintain our focus on energy diplomacy in the hemisphere. I just want to give one final quote, Secretary Rice's recent meeting at the OAS General Assembly in Panama where she stated energy is a vital part of our hemispheric agenda and that we will work together to address the challenges of energy security, climate change, environmental stewardship and sustainable development. In short, in the hemisphere we seek to promote the democratization of energy in the Americas, increasing the number of energy suppliers, expanding the market, and reducing supply disruptions.

I would like to thank the committee for its focus on these vital issues. And I look forward to the opportunity to answer questions and also learn from the committee members. Thank you.

[The prepared statement of Mr. Sullivan follows:]

PREPARED STATEMENT OF THE HONORABLE DANIEL S. SULLIVAN, ASSISTANT SECRETARY, BUREAU OF ECONOMIC, ENERGY AND BUSINESS AFFAIRS, U.S. DEPARTMENT OF STATE

ENERGY ISSUES IN THE WESTERN HEMISPHERE

Mr. Chairman, Ranking Member Burton, honorable committee members, it is a pleasure to be here today to testify on energy issues in the Western Hemisphere. We welcome the attention being paid to the key issue of energy by the Committee, and appreciate its support of our efforts to advance U.S. and regional energy security throughout the Hemisphere.

The United States, along with many other countries, is facing a stiff challenge in rising energy prices. The escalating price of oil is a drag on American consumers' pocketbooks and on the U.S. economy and is adding to inflationary pressures. Rising energy prices also are hitting many developing countries hard, including many in our Hemisphere. I know this Committee shares our deep concerns in this regard.

Addressing these challenges requires continued robust engagement, long-term commitment and patience. As President Bush recently noted, global fundamentals are driving the long-term price of oil: "Demand for oil has increased, and supply has not kept up with it."

These hard facts and fundamental imperatives are driving our active diplomacy in the Hemisphere. In this region, we have maintained a sharp focus on furthering our national energy policy goals of diversifying our energy suppliers, increasing the flow of energy from traditional suppliers, promoting alternative energy sources such as biofuels, and fostering energy conservation and efficiency, promoting environmentally sound use of energy, and ensuring the stability and security of the international energy supply system.

Conditions exist within the Hemisphere to enable this long-term strategy to succeed. A "revolution of expectations" has lifted the political and economic sights of the citizens of the Western Hemisphere. With a few exceptions, the Americas enjoy shared democratic values, and there is broad support for free markets and economic integration. The region's economies have been growing for the past six years, and all countries in the Hemisphere have a vested interest in developing the capacity needed to fuel further economic growth. A key challenge in meeting burgeoning expectations is to help governments distribute the gains of economic growth to people who are anxious for democracy to provide greater prosperity.

In this context, the Administration has deepened its energy diplomacy in the region. The Western Hemisphere is a region blessed with bountiful energy resources, but also one that is characterized by energy haves and have-nots. We are working to help our hemispheric partners who do not have ready access to hydrocarbons, and are working to encourage responsible economic and environmental stewardship among those that do.

Of course, there is also a legitimate element of self interest in our work. What happens in hemispheric energy markets deeply affects us at home. Nearly half of our total crude oil and petroleum imports, and virtually all of our natural gas imports, come from Western Hemisphere countries. I think many Americans would be surprised to learn that three of our top four oil suppliers are in the Americas. Canada is our largest oil supplier, meeting nearly 20 percent of our daily oil imports. Mexico is our second largest supplier, at about 11 percent, and Venezuela is our fourth, providing 10 percent of our oil imports. Trinidad and Tobago is our top supplier of liquefied natural gas (LNG). The region is also home to the world's two largest biofuels producers, the United States and Brazil, which have begun active cooperation in this field.

Our energy diplomacy in the Hemisphere extends from the Arctic to the Straits of Magellan. To our North, for example, we are working to bring more energy to market from Alaska and Canada. Throughout the region, we are playing a key diplomatic role in encouraging the Organization of American States to make energy an essential area of focus. We have launched a promising biofuels partnership with Brazil that has the potential to transform the energy prospects of many of our neighbors.

While our efforts are wide-ranging, what I would like to cover this morning are four key objectives: 1) maintaining and expanding traditional sources of energy, 2) developing new sources of conventional energy, 3) developing alternative sources of energy, and 4) using diplomacy to address the Hemisphere's energy challenges.

I. MAINTAINING AND EXPANDING TRADITIONAL SOURCES OF ENERGY

Our starting point in the Hemisphere is to maintain and expand traditional types and sources of energy. We are focused on ensuring that our traditional suppliers are

bringing as much energy to market as possible. I would like to address our efforts with respect to three of our most important energy suppliers: Canada, Mexico and Venezuela.

Canada

Canada remains our leading supplier of imported petroleum, natural gas, and electricity. Ours is an integrated market, supported since 1988 by a bilateral Free Trade Agreement and since 1994 by the North American Free Trade Agreement, facilitating the flow of all energy commodities in both directions. It would not be an exaggeration to say that the United States and Canada enjoy the largest bilateral energy relationship in the world. The Canadian energy sector is developing its oil sands reserves, with production now at 1.2 million barrels per day and projected to reach 3 million barrels per day by 2015. These oil sands reserves are anchoring Canada as a pillar of hemispheric energy security.

Faced with static production by OPEC and generally struggling non-OPEC production, Canadian oil is increasingly important to U.S. and global energy markets. According to the International Energy Agency (IEA), Canada accounted for over half of the increase in non-OPEC oil production last year. In 2003, for the first time, the *Oil and Gas Journal* recognized Canada's oil sands as "proven reserves." With this important delineation, Canada's proven crude oil reserves are now estimated at nearly 180 billion barrels, making it the world's largest holder of oil reserves after Saudi Arabia. We realize, of course, that development of Canadian heavy oil reserves is more energy and capital intensive than the traditional reserves of the Persian Gulf, but their proximity to the United States makes engagement with Canada on energy all the more crucial to our energy security.

As Canada's oil production grows, so does the need for enhanced energy supply routes between the United States and Canada. The Department of State has the responsibility of issuing presidential permits for trans-border petroleum pipelines. As a way to increase the diversity of energy supply routes, this Administration has moved to streamline and modernize the permitting process. Under an Executive Order signed by President Bush, we are affording our neighbors greater consultation, setting a reasonable 90-day interagency review period, and strengthening environmental protection by instituting a comprehensive review process, including vetting by the EPA. Our efforts come at a key juncture, just as we prepare to receive greater volumes of Canadian oil. This is an important recent example of how we are increasing energy integration and supply route diversification in North America.

I want to assure you that we also are mindful of the importance of Canada's oil sands being developed in an environmentally sensitive manner, and that we are aware of the concerns that the oil sands have raised. The environmental footprint of heavy oil development has been improving. For example, the amount of energy and water used in extracting these reserves is trending down, and we are engaged in a dialogue with Canada to encourage continued progress.

These and other issues were thoroughly discussed at the annual U.S.-Canada Energy Consultative Mechanism, which I recently co-chaired with senior Department of Energy and Canadian officials at the State Department. I also visited Ottawa earlier in the year and Department of State and Energy officials stay in close contact with Canadian officials on energy issues. This regular engagement enables us to raise bilateral issues and concerns, and to manage our very broad, important and stable energy relationship. As in any complex energy relationship, there are areas where we disagree, and we have expressed our concern that Canada has not cooperated fully in the maritime assessment of proposed LNG projects in Maine which would require LNG tankers to transit the Head Harbor Passage between Maine and New Brunswick, Canada.

Mexico

Mexico traditionally has been another of our leading energy and trading partners. Energy trade with Mexico is not a one-way street. We import crude oil, about 1.3 million barrels per day thus far this year, and some electricity from Mexico, but we also supply Mexico with nearly 20 percent of its refined petroleum products needs and we remain a net natural gas exporter to Mexico.

Mexico's oil production is declining, and aging fields like Cantarell have already passed their peak. The International Energy Agency projects that production will fall from current levels of 3.2 million barrels per day at present to 2.6 million barrels per day by 2013. Under the Mexican constitution, foreign control and upstream investment in oil resources are prohibited. As the first clause of the NAFTA energy chapter states, we respect each of our partner's constitutions, and they respect ours.

Mexico will make its own decisions on whether or how to reform its energy sector. Mexico has taken some steps to liberalize transportation, distribution, and storage

of natural gas, and has successfully attracted domestic and foreign investment to that sector. In recent years, integration has increased at the border, with the addition of more cross-border gas pipelines, and LNG terminals in Mexico. U.S. companies are participating in some of these projects, which will help Mexico increase its natural gas supply gas in the medium-term, and contribute to its goal of becoming an exporter of gas to the United States in the longer-term.

Venezuela

Venezuela is another country that has been experiencing a decline in output, with production levels falling from 2.52 million barrels of crude oil a day in 2004 to 2.39 million barrels a day in 2007. This decline has been due largely to declining investment in the energy sector. Historically, the United States and Venezuela have enjoyed a mutually beneficial energy relationship. Venezuela, through *Petróleos de Venezuela, S.A. (PDVSA*, the Venezuelan state-owned petroleum company) and its subsidiary *CITGO*, owns refineries, asphalt, and petrochemical plants, and a sizable distribution network in the United States. Annually, Venezuela is among our top five foreign oil suppliers. On the other hand, we are also Venezuela's principal customer and largest trading partner by a factor of two. While Venezuelan exports make up 10 percent of U.S. crude imports, over 60 percent of Venezuela's crude exports go to the United States. Accordingly, the State Department seeks to keep open diplomatic channels with the government of Venezuela in an effort to sustain our energy relationship, and we stand ready to work with Venezuela on issues of regional energy security.

II. DEVELOPING NEW SOURCES OF ENERGY

Encouraging increased production of oil and gas is one element of our hemispheric energy strategy but given supply and demand dynamics more needs to be done. In order to address the Hemisphere's growing energy needs, we also have to develop new sources of energy. I want to highlight three general areas of promise in this regard, including: oil from Brazil and Colombia, natural gas from Canada and Alaska, and a range of potential energy from the Arctic.

Brazil and Colombia

Oil production in Brazil has risen steadily in recent years, climbing from 800,000 barrels a day in 1990 to nearly 2 million barrels a day in 2006, about 200,000 barrels a day of which are exported to the United States. The Department of Energy (DOE) estimates that with current consumption and production, Brazil will become a net oil exporter in the near future. In 2007, the Government of Brazil announced that the Santos basin, located off the country's southeast coast, could contain 30–40 billion barrels of oil—three to four times current proven reserves—potentially putting Brazilian reserves in the top 10 in the world. Bearing in mind that production from any new finds would be several years away, the discovery of billions of new petroleum reserves in our Hemisphere could greatly enhance our energy security, especially considering the market-oriented approach that Brazil has taken thus far.

Colombia is a net petroleum exporter, registering 1.45 billion barrels of proven crude oil reserves in 2007, the fifth-largest amount in South America. Half of Colombia's oil production is exported abroad, with the bulk of those exports, about 155,000 barrels per day going to the United States. In 1999, the Colombian government implemented a partial privatization of state oil company *Ecopetrol* in an attempt to revive its upstream oil industry. These measures contributed to creating an attractive oil investment regime, generating \$2 billion in investment from foreign oil companies in 2006.

As members of this Committee know, there are a number of economic and foreign policy reasons to support the Colombia Free Trade Agreement (FTA). One economic rationale that has not been frequently discussed is the potential impact of the FTA in encouraging further development of Colombia's energy sector. For example, the FTA could increase foreign direct investment in Colombia's energy sector, which could boost Colombia's energy production.

Canadian and Alaskan Natural Gas

Canada holds vast natural gas resources in its Mackenzie Valley. Similarly, the state of Alaska holds vast untapped natural gas resources. Bringing these reserves to market will enhance energy security throughout North America. As an Alaskan resident, I am well aware of the promise that Alaskan reserves hold for that state and for the entire United States. Alaska has been in a decades-long negotiation with producers to harness this gas, and is now productively engaged in negotiations on the development and transport of that gas. Successful conclusion of these negotia-

tions will be followed by an application to the Federal Energy Regulatory Commission, and also the need for an understanding with Canada on the transit of this gas through its territory, if that is the route chosen. Working with the Office of the Federal Coordinator, the State Department would play an important role in paving the way for a gas pipeline through Canada. We have made clear to our Canadian counterparts that we are ready to move swiftly on this front, and our sustained diplomacy with Canada will help to ensure that this process moves expeditiously. Today, Alaskans are generating significant momentum towards the development of their natural gas. We welcome this and urge all parties to do what they can to advance the day that these much-needed clean, conventional supplies can be tapped to benefit all Americans.

Other Arctic Resources

Finally, I would like to mention potential energy exploration in the Arctic. The U.S. Geological Survey recently estimated that the area north of the Arctic Circle holds about 22 percent of the undiscovered, recoverable oil and natural gas resources identified so far in the world. Indeed, very significant amounts may be discoverable under the continental shelf off Alaska. It is important that we tap these resources in an environmentally safe way.

The United States is not a party to the Law of the Sea Convention. The other countries bordering the Arctic Ocean, which are all parties to the Convention, are busy maximizing the international recognition of their extended continental shelves beyond 200 nautical miles from their shores. As a party, the United States would be in the best position to maximize the legal certainty and international recognition surrounding its extended shelf. Furthermore, as President Bush has noted, joining the Convention “. . . will serve the national security interests of the United States . . . [and] . . . will secure U.S. sovereign rights over extensive marine areas, including the valuable natural resources they contain.”

III. DEVELOPING ALTERNATIVE SOURCES OF ENERGY

In addition to focusing on traditional hydrocarbons, we are working to develop alternative energy in the Hemisphere.

Biofuels

The IEA recently released an oil market report which nicely summarizes why biofuels are important to the overall liquid energy supply. The IEA states: “[B]iofuels have helped to diversify energy supply. Compensating for the additional supplies that have been met through ethanol and biodiesel supply growth in Europe and the United States since 2005 would require around 1 million barrels per day of crude oil to be processed. Given the poor performance of non-OPEC production and relatively low spare capacity, clearly much higher petroleum prices would be in place now if those biofuels had not been available.”

In March of 2007, Secretary of State Condoleezza Rice and Brazilian Foreign Minister Celso Amorim launched an important initiative to advance cooperation on biofuels in the Hemisphere. As the world’s two largest producers of biofuels, the goal of this partnership is to highlight the importance of biofuels as a transformative force in the region, diversify energy supplies, catalyze the use of biofuels in the region, bolster economic prosperity, advance sustainable development, and protect the environment.

The initiative seeks to accomplish these objectives in three ways. First, we are seeking to advance bilateral U.S.-Brazilian cooperation on biofuels research and development. Second, we are working with developing countries in the Hemisphere to support feasibility analyses and technical assistance aimed at stimulating private sector investment in domestic biofuels production for local consumption. Third, we are working multilaterally to advance commoditization of biofuels on a global basis. Since the launch of this initiative there has been progress in each pillar and our work is ongoing. We appreciate the Chairman’s words of encouragement about this initiative, including calls to deepen and broaden it. A U.S. team will visit Brasilia in August to look for mechanisms by which to do so.

I would like to review progress in each of the three areas on which our partnership focuses.

Bilateral

In September 2007, a Brazilian delegation of biofuels scientists visited U.S. Department of Agriculture (USDA) and Department of Energy (DOE) biofuels research centers in the United States and the two teams have stayed in contact, collaborating as scientists do best. In May 2008, a U.S. delegation of USDA and DOE biofuels scientists visited top Brazilian universities, public laboratories, and private sector

research and development facilities. These visits have facilitated exploration by our respective scientific communities of several areas for joint cooperation. These include possibly sharing biomass samples to unify bilateral research opportunities, and facilitating scientific exchanges to strengthen Brazilian analytical methodologies. The scientists are preparing a follow-up plan that will include a list of priority research areas and a work plan for future collaboration.

Our two countries have also benefited from a candid exchange of views on biofuels through other channels, including the U.S.—Brazil CEO Forum, and meetings of business people, academics, and citizens groups. With Assistant Secretary of State for Western Hemisphere Affairs Tom Shannon, I co-chair an Economic Partnership Dialogue with Brazil. Other members of the economic team at the State Department also have traveled on numerous missions to Brazil to talk with government and business groups about the whole range of our economic engagement, including biofuels. The Deputy Secretary of Energy departs for Brazil shortly to continue this broad and deep engagement.

Third Countries

With respect to third countries, President Bush and President Lula met at Camp David on March 30, 2007 and announced that the United States and Brazil would work initially with El Salvador, Haiti, the Dominican Republic, and Saint Kitts and Nevis to help diversify their energy supplies by promoting biofuels. The United States looks forward to expanding this initiative to other countries in the region in cooperation with Brazil. We are engaged in ongoing discussions with Brasilia on this topic.

In March of this year, the State Department hosted a Steering Committee meeting, followed by a Ministerial that brought together ministers from our partner countries, the President of the IDB and Secretary General of the OAS, along with private sector advisors from Brazil and the United States. We welcome the priority IDB is giving to biofuels and renewable energy.

In order to strengthen the foundation for investment in these countries, U.S. and Brazilian environmental and agronomy consultants were hired. They have completed economic analyses in four of the target countries and land use assessments in three. Agronomy work is nearing conclusion in Haiti, where a Brazilian team just completed a return visit. The teams identified specific opportunities to develop local capacity for biofuels production. Working with our funding partners, we have arranged for funds to be reserved for eight projects to date.

We are pleased that, during the course of our partnership, the Dominican Republic published the final regulations for a renewable energy law which includes biofuels. El Salvador is in the final states of preparing a law for Congressional consideration. Last week, at a Caribbean sustainable energy conference that the State Department hosted in the region, the OAS announced a stream of technical assistance to the Dominican Republic and El Salvador to help them implement and evaluate their biofuels regulations. In addition, they announced a feasibility study for a pilot ethanol project at an existing sugar mill in El Salvador. We are working to identify a similar feasibility study in the Dominican Republic. The OAS stands ready to put out for bidding a technical assistance package for the new Haitian government as it considers the biodiesel potential of the island. Additionally, the U.S. Trade and Development Agency is standing by to sign a grant agreement with a new Haitian government for a feasibility study to grow jatropha for biodiesel in Haiti. In St. Kitts and Nevis, we have completed land use and detailed agronomy studies to help that country make the political decision to return some portion of now fallow sugarcane fields to biofuels production. Our initiative has also assisted countries in applying to the IDB for financing for projects identified under this partnership. The IDB is amplifying our efforts by making available grants and financing for biofuels projects. In these countries, we have also been active in public diplomacy.

Multilateral

In order to advance the commoditization of biofuels globally, the United States, Brazil, and European Commission, working through the International Biofuels Forum (IBF), recently worked with their respective standards organizations to improve the compatibility of bioethanol and biodiesel standards. An important milestone was achieved in January 2008 when the collective standards organizations identified compatibility results and recommendations. Next steps include evaluation of the work done to date with the other members of the IBF (China, India, South Africa); further work toward harmonizing testing methods; and more closely aligning standards, subject to further consultations with industry.

Additional Steps to Advance Biofuels

Beyond the initiative with Brazil, the United States is independently conducting outreach on biofuels to many countries in the Americas. With USDA, we continue to sponsor visits by regional biofuels experts to U.S. biofuels labs and conferences, and to send U.S. experts throughout the region. For example, with the USDA, we are sponsoring a group of biofuels scientists from Argentina, Colombia, Chile, Peru and Uruguay to work with biofuels experts at the University of Minnesota and the National Renewable Energy Lab in Colorado in August. We also are building stakeholder buy-in throughout the Hemisphere by sponsoring public meetings, and sending biofuels experts and academics, State Department and Embassy officers, to meet with civil society groups in the region. We also have sponsored visits by regional government officials to U.S. ethanol facilities in the Midwest.

Last week in the Caribbean Basin, State Department and Brazilian officials engaged with partner country officials to sustain the momentum we have begun. We are confident that our efforts have helped to: spotlight biofuels opportunities in these countries; advance biofuels legislation, which is critical to their eventual market penetration; and improve the investment climate so that private investment will follow. Biofuels did not take root in the United States nor Brazil overnight, and they ultimately were advanced both by a solid investment climate, a forward-looking agricultural sector and by federal legislation. Our work is therefore focused on encouraging the legislative progress and on improving the investment climate. We are confident that we are planting the seeds for a more diverse and sustainable energy future in the Hemisphere.

Biofuels Sustainability Issues

While we work with Brazil and independently to advance the production and use of biofuels, we also recognize the need to address the issue of biofuels sustainability. Earlier this month, G8 Leaders underscored the importance of sustainable biofuel production and use, and the work of the "Global Bioenergy Partnership" (GBEP). They invited the GBEP to work with other relevant stakeholders to develop science-based benchmarks and indicators for biofuel production and use. We actively participate in sustainability discussions in the GBEP and sent a high-level delegation to the most recent meeting last month in Brazil. The United States co-chairs GBEP's work to develop a common methodological framework to quantify biofuel GHG emissions. Additionally, we participate in GBEP's efforts to develop ways to achieve sustainable bioenergy and are beginning to work through GBEP to develop voluntary science-based sustainability criteria, indicators, and benchmarks.

At a recent high-level meeting of the UN Food and Agricultural Organization, the United States along with all other FAO nations also endorsed a declaration that calls for addressing the "challenges and opportunities posed by biofuels," and we are doing just that.

Another important way we are addressing sustainability is through the Energy Independence and Security Act (EISA). This legislation sets ambitious biofuels targets but the legislation ensures that biodiesel and cellulosic sources, such as switchgrass, are a key part of the increase. In fact, by 2022, more than half of all fuel ethanol must be derived from non-corn starch sources. Under EISA, the U.S. Government also is investing in R&D on next-generation cellulosic biofuels, which can both minimize food security concerns and reduce GHG emissions. Next-generation biofuels made from plant fiber (not food or feed crops) can potentially lead to overall life-cycle GHG reductions of 80 percent or more. Our R&D effort is intended to make next-generation technology cost-competitive by 2012.

Including the FY2009 Budget, the Administration has dedicated more than \$1 billion for research, development, and demonstration of cellulosic biofuels technology. DOE studies show corn ethanol results in 19 percent fewer GHG emissions, on average, than petroleum. Cellulosic ethanol derived from inedible vegetation, has the potential to reduce GHG emissions by up to 86 percent. This is why it is so important that U.S. and Brazilian scientists continue to work on these new technologies and to cooperate in the process we have started.

North American Energy Initiatives

We also are developing alternative energy sources through our work with Mexico and Canada under the North American Energy Working Group, part of the President's Security and Prosperity Partnership (SPP). This Working Group is focused on reducing barriers to the deployment of clean energy technology, continuing with efforts to align energy efficiency standards in key products and standby power consumption, cooperating in the development of a biofuels outlook for North America, exploring opportunities for enhancing vehicle fuel efficiency, and streamlining markets for liquefied natural gas.

The Group is also working to complete a joint modeling effort that includes supply and demand forecasts for oil, gas, coal and electricity to 2030, as well as technology-improvement scenario cases, and it has agreed to explore cooperation in carbon capture and storage as suggested by Canada, and enhanced electricity networks as proposed by Mexico.

IV. USING DIPLOMACY TO ADDRESS OPPORTUNITIES AND ENERGY CHALLENGES

While diplomacy is a large component of all the efforts I have just described, there are some areas where diplomacy is at the forefront. These include putting energy issues high on the regional political agenda and addressing the challenges of resource nationalism.

U.S. OAS Energy Diplomacy

Over the last several years, for example, we have broadened our diplomacy at the Organization of American States to include energy. For the OAS General Assembly in Panama in June 2007, we negotiated, with all democratic states in the Hemisphere, the "Declaration of Panama: Energy for Sustainable Development." Despite rhetoric from some corners of the Hemisphere, our diplomacy helped find much common ground on energy in the Hemisphere, and we helped foster a united call for greater energy efficiency and conservation, for renewable energy, including biofuels, and for greater investment in all forms of energy. As Secretary Rice told her OAS Counterparts in Panama, "The Declaration of Panama drafted here demonstrates that energy is a vital part of our hemispheric agenda and that we will work together to address the challenges of energy security, climate change, environmental stewardship, and sustainable development. These four challenges are indivisible and we must tackle them together. In short, we seek to promote the democratization of energy in the Americas, increasing the number of energy suppliers, expanding the market, and reducing supply disruption."

We are demonstrating and sustaining leadership on energy diplomacy through the OAS process. I led our delegation to an OAS Hemispheric Energy Officials meeting on March 3 that was designed to promote the use of renewable energy. To sustain the momentum, we announced at that event that the State Department would sponsor, through the OAS, four sub-regional conferences on energy, which will bring expertise and shared best practices to each corner of the region.

The first of these conferences took place July 11 in Santiago, bringing together all Southern Cone countries, along with a U.S. delegation and the Secretary General of the OAS. This was one of the few times that all of these countries gathered together to view their energy challenges as a sub-region, and it has begun an important dialogue on many shared concerns, particularly the need for greater renewable energy in this region, as well as for dependable intra-region trade in commodities like natural gas.

Just last week, we held the second such regional seminar. Through the OAS, a senior inter-agency U.S. delegation met with all CARICOM member states and a wide array of Caribbean energy officials in Nassau to focus on those renewable energy sources appropriate for island states, which are disproportionately dependent on oil for land, maritime and power generation needs. We broadened our engagement by bringing in other external donor states, such as the EU and Canada, and international financial institutions like the World Bank and the Inter American Development Bank, to harmonize all of our efforts. We will continue this active hemispheric engagement with a workshop in Peru after the APEC summit in November, and another workshop in Central America in the fall.

In addition to the OAS process, we participated in excellent DOE-led events in Trinidad in May, which advanced the need for infrastructure security, as well as other DOE-led events in Central America. Finally, Trinidad and Tobago will host the next Summit of the Americas in April 2009. Energy and environmental sustainability are key themes of the Summit, and we have begun to consider how we might deepen U.S. engagement in these areas.

Addressing Resource Nationalism

Another issue we are addressing is the rise in resource nationalism in the Hemisphere. Spurred in part by record high energy prices, some countries are demanding to renegotiate existing contractual agreements, while others are nationalizing foreign-owned energy assets. We believe that resource nationalism, by concentrating resources in the hands of the state, can undercut important strides made in the Hemisphere on transparency, on anti-corruption, and in the efficient production of natural resources. When resources are not brought to the market in the most efficient manner, and when, for example oil production falls, then consumers in the Hemisphere suffer from higher prices.

In the case of investment disputes involving U.S. firms, we forcefully advocate for just, adequate and fair compensation to affected investors. Our embassies in the Hemisphere have been a very effective component of this work. We welcome Ecuador's recent move to abide by an international arbitration and to settle one dispute with an American company, and we have underscored to Ecuador the importance of an independent judiciary in the ongoing legal dispute with another U.S. firm. More generally, our work in previous years to negotiate free trade agreements and bilateral investment treaties is helping to preserve American investors' interests in this region.

Conclusion

I have described for you the breadth of our bilateral, multilateral, and regional energy engagement but it is important to recognize that energy policies are most effective when they are integrated into broader economic policies. Open, and transparent markets, free from corruption and reinforced by strong protections for investment, ultimately help producer countries to enhance output, and consumer countries, particularly those in our region most hard hit by high oil prices, to benefit from lower energy costs. The U.S.-Canada relationship is an important example of the mutual benefits of open and integrated markets and how free trade agreements help promote more efficient energy markets. By contrast, countries that have emphasized statist, non-transparent and populist economic policies have seen their output decline despite high oil prices, which adds to the burden on the most oil import dependent regions of our Hemisphere.

The Bush Administration—with the strong bipartisan support of Congress—has made deepening economic engagement in the Hemisphere a top foreign policy priority. Our Free Trade Agreements, our aviation liberalization agreements, our Millennium Challenge Corporation compacts, and our broader economic dialogue with major emerging economies like Brazil, are helping to lay a regional economic foundation that will advance our mutual economic, energy and foreign policy interests. Congressional approval of the Colombia FTA would further advance these efforts and contribute significantly to ensuring the future prosperity, stability, and security of the Hemisphere. We will continue our vigorous engagement in this Hemisphere, and thank the Committee for its focus on and support of these vital issues.

Mr. ENGEL. Thank you very much, Mr. Secretary. I appreciate your testimony. And as I said before, I appreciate your good work. And, I am glad we have gotten the chance to know each other. And, I look forward to hearing the answers to some of the questions.

I mentioned in my opening statement the United States-Brazil MOU. I am really very bullish on it. I think it is something that we need to continue and enhance. And, as I mentioned, I was delighted in March 2007 when the United States and Brazil signed a memorandum of understanding on biofuels. It was a very important development politically between our two countries and raised hopes for expansion of alternate sources of energy in Caribbean and Central American nations which have no domestic energy supplies.

But, if we look at what has happened since then it appears that progress with the agreement has been very slow. The United States and Brazil I am told have only now exchanged visits of scientists—that is about it—more than 1 year after the signing. And, to date we have spent only a few million dollars to conduct a feasibility study. I am not sure if any production of biofuels, either ethanol or biodiesel has begun since the signing of the landmark agreement.

So, I would like to ask you about that. Do you think that the agreement to promote biofuels production in Latin America will prove effective? Why has it been so slow in getting off the ground? What investments is the U.S. Government making in support of the agreement? And what obstacles exist to greater Brazil-United States cooperation in the area?

And, let me add that it is my understanding that in the Dominican Republic and El Salvador, who are both, as I mentioned, participants in the United States-Brazil MOU, and they are both countries with established sugar sectors, that it has been difficult in both the D.R. and El Salvador to entice sugar producers to use some of their production for ethanol. Their sugar contracts are secure and predictable, whereas switching to ethanol carries some risks. So I would like to hear, you know, your opinion about it. Is it true? And is there anything that the United States and Brazil can do about this?

Mr. SULLIVAN. Yes, sir. Thank you, Mr. Chairman.

And first again I in all sincerity want to express our appreciation for your support of this initiative. And I can assure you that we want to move on this initiative as fast as we can and in as comprehensive way as possible. And the committee's interest, the committee's even prodding on this issue is important. And we will be responding to that. But also we are committed to this.

Just a few points on that. We think we have made significant progress, although as I mentioned, we are committed to making more progress and really in many ways accelerating progress. I am not trying to make excuses at all because it has been a huge focus of the State Department, this initiative. However, the initiative is about 18 months old. It is new, we think rather innovative. It involves a number of different partners which sometimes is not always the best way to accelerate things. And but we do think that significant progress has been made.

And as I mentioned, there are three areas. The R&D bilateral cooperation, as you have noted we have had an exchange of scientists. That is a physical exchange. But there has been a lot of discussion both from the diplomatic side, private sector interest. So it is broader than just simply the two exchanges. But when the physical changes occurred we have been working through the International Biofuels Forum to work on standards and codes between us, the E.C. and Brazil. And, again, this is a process that brings our standard bodies together to identify where we have similar standards and codes where there is divergence. And we have actually made a—it sounds technical, Mr. Chairman, but as you know that is an important element to the overall global commoditization of biofuels. And we have made significant progress on that, looking at areas where there are similarities and differences and starting to move forward in that regard.

And then finally, as I know you are very interested, is the work that we have been doing with the third countries, the first tranche of third countries. And in that regard, Mr. Chairman, one of the things that I wanted to emphasize here is that a lot of the work that has been the focus of our efforts has been with regard, in cooperation the Brazilians and the OAS, on technical studies that look at the legal and regulatory framework of these four countries. And although that sounds somewhat technical and at this juncture has not led to a dramatic increase in biofuels production, we think that helping these countries get that right, get the investment policies right is very, very important to move forward on future progress.

And so that has been where the focus has been. And we think that focusing on that now will pay dividends in terms of future production. But, Mr. Chairman, I appreciate your sense of urgency on this; we hold it as well. And we will be looking forward to updating the committee on ways that we can do that in the future.

Mr. ENGEL. Thank you, Mr. Secretary.

Let me ask you a question on the ethanol tariff. I get asked this question all the time and I am absolutely concerned about it. As you know, the United States imposes a tariff on the import of ethanol by imposing a 2.5 percent duty, plus 54 cents per gallon on the fuel. I personally think this is a serious mistake. We have no tariff on the import of oil but a heavy duty on the import of ethanol. This, in my opinion, only deepens our addiction to oil by blocking a key alternative.

So I would like to ask you what is the administration's position on the ethanol tariff and is it time to eliminate the tariff?

Mr. SULLIVAN. Thank you, Mr. Chairman. AS I noted in my testimony, and I do want to note this again, the importance, and this is obviously a very important question, I can say we have a very close working relationship with the Brazilians on biofuels. They have raised it with us, not surprisingly. Although I do want to emphasize that the kind of government support that we have in the United States with regard to development of a biofuels industry is not unlike what you see, what you have seen, what you have seen in other countries, including Brazil which has over the years had significant billions of dollars of government support in terms of getting their industry up and started to a mature level. Similarly, the EU has significant support, has had significant government support with regard to its industry.

That being said, as you mentioned it is an important issue. And for right now the administration's position is that it is respectful of where the Congress is on this. It knows that the ultimate decision on this issue will be made by Congress on whether to extend the tariff, whether and how that is going to play out. And right now will as an administration respect that decision that will be made by Congress.

That being said, it will be important as the industry matures, as the globalization and global trade of biofuels continues, as the mandate of the Energy Independent and Security Act, the outlook of meeting that mandate becomes more apparent. Obviously there will be opportunities to reassess that position.

Mr. ENGEL. Well, let me reiterate my position that I think we should absolutely eliminate the tariff. I think the time has come to shift and eliminate that.

Let me ask one last question before I turn it over to Mr. Burton, and that is about Haiti. And I mentioned this also in my opening statement. As you know, Haiti is the poorest country in the Western Hemisphere. I believe that we have an opportunity now to save Haiti. If we do not, I think Haiti will once again become a failed state, and it might be another 20 or 30 years before we can even do anything. That is why I think it is so important to help Haiti now.

But it is one of the countries in the Western Hemisphere which has no domestic energy resources. And because it is so impover-

ished we should do everything possible to help them develop a biofuels sector. I think that could be very important in helping them go away from poverty. And it would not conflict with food growing, I believe, if we do it correctly.

As I mentioned, there is great excitement about the possibility that oil from *Jatropha* can be used to produce biodiesel for Haiti. As you know, *Jatropha* is a native plant in Haiti which was considered a weed before its biofuel potential was recognized. It does not require much water. It can be grown on barren hillsides and will not, therefore, conflict with food growing. And cultivation and industrialization, its industrialization and cultivation can employ thousands if not tens of thousands.

So while we have funded a few studies, I am not convinced that enough is being done to promote a biofuel sector in Haiti based on *Jatropha*. So let me ask you about that. Let me ask you about what will be needed in Haiti to make this sector work? Have there been any projects that the United States and Brazil has funded in Haiti on biofuels under our United States-Brazil agreement? Is the OAS, the IDB, any other group funding biofuels in Haiti? And how long will it take to develop the biofuel sector in Haiti?

Mr. SULLIVAN. Yes, sir, thank you, Mr. Chairman. As you know, the administration shares your concern about the economic and social, political development of Haiti. And we have been very focused on that, as you also know. Where the United States is the largest bilateral donor to Haiti, we also recently contributed significant emergency food aid to Haiti during its recent and continuing problems with the increase in food.

And to answer your question directly, the answer is yes, we are looking at Haiti. As you know, it is one of the four countries with the third party, the third countries in the United States-Brazil biofuels partnership. One bit of a short-term challenge right now is some of the activities that we are interested in beginning and focusing on there have been difficult to cement given the transition of the government. But I wanted to lay out two areas that we stand by in terms of readiness to fund both from the U.S. side and the OAS side.

One, with regard to what I mentioned earlier, is the legal regime, technical assistance with regard to how the legal regime within Haiti can be set up to help spur the development of biodiesel in Haiti. And that is a standby study that is being prepared in terms of technical assistance for about \$300,000 from the OAS. That is one.

The second is another \$300,000 project that would come from the USTDA that would focus in the area that I know is of interest to you and is of interest to the administration which is with regard to *Jatropha*. And it would be, and again we are ready for this. And we have just our dealing with the short-term challenge of the government in transition in terms of signing this study and moving forward with what we think would be a study that would reveal some of the potential in Haiti with regard to *Jatropha*.

And as you mentioned, we do see potential. Although in terms of cultivation yet it is not a large element of what they are trying to do yet, but we think, as you noted, there is significant potential

and we stand by ready to fund a study through the USTDA as part of the United States-Brazil biofuels partnership focused on Haiti.

Mr. ENGEL. Thank you, Mr. Sullivan.

Mr. Burton.

Mr. BURTON. You know, one of the things that kind of bothers me about this place as I go to committee hearings that really do not amount to a darn and the media is there. This is probably one of the most important hearings talking about energy and the future, the security of the United States from an energy standpoint that I have been to, and there is nobody here. Well, there are a few media people here but the T.V. people are not here. I just do not understand them. And you will watch all these television shows tonight and they will be talking about somebody's child that was kidnapped or something. The whole country is suffering from energy and the media is talking about kids someplace. I mean I hate to see those kids kidnapped, you know, and put on a boat and sent someplace by their father but we have, what, 300 million people here who are suffering because of energy and there is no media here except that young lady over there. I do not understand this place.

At the dawn of the 1973—and I hope my colleagues will listen to this—at the dawn of the 1973 global oil crisis Brazil, whom we are talking about today, imported nearly 80 percent of its oil and as much as 40 percent of their annual exchange income went out of the country. Forty percent of what they made was being spent for imported oil. Today they are exporting oil. And while oil remains a dominant source of transportation, and right now even though we are talking about biofuels and these other things that are very important, oil now remains the dominant source of transportation energy in Brazil. And while ethanol production has helped offset oil imports, so too have a major overhaul of the domestic petroleum industry and a massive, get this, massive increase of production of oil from offshore drilling.

We are facing today the same thing that Brazil faced in 1973. One of the things when we had those oil problems back when they had the gasoline three and four blocks long because of OPEC. My grey-headed friend down there from Massachusetts, we remember that. But because we had such a resilient economy we were able to survive that.

Brazil suffered much more than we did because they did not have as vibrant an economy as we did. So they decided back then they were going to do something about it. And they looked at biofuels and alternative sources of energy but they also said we have to drill, because the predominant source of energy is oil and while this transition is being made we are going to have to get energy.

We are not doing that. Everybody in this whole place knows that we ought to look at alternative sources of energy. We have to look at wind. I agree with T. Boone Pickens, we have to look at wind, we have to look at solar, we have to look at biofuels, we have to look at cars that use all kinds of energy, hydrogen and gas and electricity. We need to look at all those. But at the same time we cannot keep our heads stuck in the sand like an ostrich and let this country go down the tubes.

Does anybody realize that we are paying over \$4.00 a gallon for gasoline and that the people of this country are suffering, they cannot afford it, and that the cost of food is going up and the cost of everything else is going up because it is being transported by oil? And it is not going to change overnight.

And I just do not understand why this body cannot understand it. It is something that is kind of academic to me. I just do not understand it.

Anyhow, now that I have vented my spleen let me talk to you, Mr. Sullivan, real quickly what time I have left about, and I talked to Mr. Rohrabacher about this a while ago, about the intrusion into our hemisphere, if you want to use that term, may that is not the right term to use, of China and India in gobbling up as much as possible our energy resources in this hemisphere. How extensive is it? Mr. Rohrabacher and I were talking, is there a contract that has been signed or do we anticipate there is a contract that has been signed between Cuba and China to do oil exportation, no, exploration off the coast of Cuba?

So if you could give us some kind of an insight into whether or not we have a real problem down the road with China, India and other countries that are very growing economies in taking our energy resources to other parts of the world?

Mr. SULLIVAN. Thank you, Congressman Burton. And I wanted to first make a comment with regard to your earlier comments about the need to increase hydrocarbons and transition to alternatives. I think in many ways that is the essence of what we are trying to do in the hemisphere, and I tried to lay that out in my written testimony. And so that is kind of the focus of what we are trying to do, at least internationally in the hemisphere.

And with regard to China and India, I think I would like to first note a few things. One is, in some ways they find themselves in a similar situation that we are in terms of significant, China, for example, is still a significant producer like we are but also a significant consumer of oil, of coal, gas just the way we are. So in many ways our interests on working together align. So one of the things that we have done, not necessarily within the hemisphere but in the International Energy Agency which is focused on consumer country interests, we have deepened our engagement with them in these organizations because there are some common interests. And I think that is an important point to note.

In the hemisphere, to the extent for example that there is Chinese investment in the hemisphere that is helping produce increased supplies of energy for global markets, that is helping to increase employment in the hemisphere and it is done in a transparent manner, which is something that we have emphasized with our Chinese counterparts when they have made investments in places like Latin America, then that can actually in some ways be constructive in terms of bringing more hydrocarbons to market. These are global commodities, if there is more on the market it benefits us.

With respect to your specific question of Chinese engagement in the Cuba energy sector, we have noted media reports on this as well. However, we have no indication that China or Sinopec is engaged in such operations. We do note that the Chinese National Oil

Company, Sinopec, has rights to an onshore block in western Cuba, but that is the extent—I know there was interest here—that is the extent of the information that I currently have on that situation.

Mr. GREEN [presiding]. Our colleague from Massachusetts.

Mr. DELAHUNT. Thank you, Mr. Chairman.

I would like to focus for a moment on the problem. I would like to try to diagnose it, Mr. Secretary. Am I accurate when I say that of the oil that we import, somewhere between 2 and 3 percent goes to generating electricity, the remaining 96 to 97 percent is used in transportation fuel; is that accurate?

Mr. SULLIVAN. Congressman, I do not have the exact numbers on that but our power generation sector, as you note, is not primarily driven by oil.

Mr. DELAHUNT. Right.

Mr. SULLIVAN. It is natural gas, it is nuclear, it is other things.

Mr. DELAHUNT. I feel rather confident in those.

Mr. SULLIVAN. And we can get you the exact numbers if you would like them.

Mr. DELAHUNT. No, I am rather confident in those figures, at least as reasonable estimates.

So that, as I said in my opening remarks, is that it is transportation fuel in terms of our national interests and our dependence on oil that is of concern. And that is why I find the Brazilian experience very informative. For example, in my home state of Massachusetts we have about 6 million motor vehicles on the road today. Eighty thousand out of those 6 million are so-called flex-fuel vehicles, 80,000 out of 6 million.

Now, it is my understanding that in Brazil at this point in time every car that is produced maybe the figures are now 80 to 90 percent are so-called flex-fuel vehicles. If I am correct in those estimates, and I feel rather confident that I am, it is not just simply the energy source that is problematic, but it is also the vehicle itself.

And here we have American automobile manufacturers, Ford, General Motors, that are producing in Brazil—and I am directing this to my friend to my left—that are producing flex-fuel vehicles in Brazil so that they can use E-85, E-90, E-100, and yet we do not have a similar production here in the United States in terms of that kind of capacity.

Now as I travel and I go from my home in Quincy down to the Cape I see more and more Priuses. Now, I understand that that is a motor vehicle, a hybrid that is produced by Toyota, a Japanese company. When the other day I took a cab ride, it was a Prius, I took the cab ride in and I asked the cab driver, “What are you getting?” He said, “About 60 miles a gallon.” I mean it is a broader problem.

I guess what I am looking at from you in terms of the Brazilian experience, did they utilize mandates in creating this diversity in terms of their transportation fuels? In other words, did it automatically happen that they produce these kinds of vehicles and we have failed here? Mr. Sullivan, Secretary.

Mr. SULLIVAN. Thank you, Congressman. My understanding, and we can provide you with actually more details on this what they actually did, but is that they did do that. And I do want to make

a point though that what we are doing domestically in some ways, and again the Energy Independent and Security Act that was passed by this Congress, signed by the President at the end of the last year, has very, very significant mandates on the production of biofuels. And the likelihood of that helping to drive the market is probably pretty strong.

Mr. DELAHUNT. Right.

Mr. SULLIVAN. So, but the direct answer is yes. And we can provide more details to you on exactly what they did.

[The information referred to follows:]

WRITTEN RESPONSE RECEIVED FROM THE HONORABLE DANIEL S. SULLIVAN TO QUESTION ASKED DURING THE HEARING BY THE HONORABLE BILL DELAHUNT

When the "oil-shocks" of the 1970s hit the rest of the world, the Brazilian government instituted the Pro-Alcohol program in 1975 to substitute alcohol for gasoline. The first step was the requirement for all motorcar races in Brazil to be run on alcohol, which was immediately followed by the introduction of tax incentives for vehicle fleets, including taxis and police cars, to switch to alcohol in 1976. Between 1982 and 1990, more than 90 percent of cars on the roads in Brazil ran on fuel ethanol mixed with gasoline. To ensure consumers had access to alcohol, the GOB passed a law that every gas station in the country had to offer both alcohol and gasoline, a law that is still in effect today. When rising world sugar prices drove production away from ethanol, the market for alcohol-fueled cars fell to the point that only 10 percent of new vehicles sold ran on alcohol. Flex-fuel technology that allows car owners to fill up with any blend of gasoline and alcohol emerged in the early 1990s, and when sugar prices fell again in 2000, car manufacturers began offering cars with the total-flex technology. Flex fuel vehicles (FFVs) today represent 23 percent of Brazil's vehicle fleet, but approximately 87 percent of new vehicle sales. In addition, Brazil maintains a blending law of 23–25% ethanol, so that every car runs on at least 23% ethanol, and FFVs allow consumers to decide at the pump their desired blend of ethanol and gasoline.

Mr. DELAHUNT. And, Mr. Secretary, I dare say that that act clearly, I concur, I think will serve as the catalyst in terms of achieving diversification. And I think that is the target that we need. We need to have options to oil. I mean in the end we are going to have motor vehicles that are a hybrid, they are plug-ins, and hopefully they have the capacity to be flexible in terms of the fuel that they use.

I would like to just address the concerns expressed by the gentleman from California and the gentleman from India about Cuba drilling off of the coast of Florida. It is my understanding—did I say India?

Mr. BURTON. Yes. It is Indiana, not India.

Mr. DELAHUNT. I see. Well, I get confused once I get outside of New England.

But actually the nations, the corporations that are exploring in the offshore waters off of Cuba, it is my understanding that it is India, it is the Dutch, it is the Spanish, and also it is the Norwegians. And I do not know whether they have had any success. One keeps reading that it would appear that there is a likelihood of oil reserves there. But it is not my understanding about the Chinese.

With that I will yield back and I thank the chair.

Mr. GREEN. Congressman Rohrabacher.

Mr. ROHRABACHER. Thank you very much for 5 minutes, Mr. Chairman. About the point that my colleague just made I noted the wording that you used in answering Mr. Burton's question. Do we

have any indications that there have been contracts with the Chinese by Cuba to do offshore development in Cuban waters?

Mr. SULLIVAN. Congressman, the latest information I have is what I mentioned earlier which was—

Mr. ROHRABACHER. We know there is not—the answer you gave I listened to the wording very closely.

Mr. SULLIVAN. Not engaged in such operations.

Mr. ROHRABACHER. Not engaged in operations does not mean contracts.

Mr. SULLIVAN. Yes. No, and again we can get back to you with a more detailed answer.

Mr. ROHRABACHER. All right.

[The information referred to follows:]

WRITTEN RESPONSE RECEIVED FROM THE HONORABLE DANIEL S. SULLIVAN TO QUESTION ASKED DURING THE HEARING BY THE HONORABLE DANA ROHRABACHER

We are not aware of any Chinese state-owned or affiliated businesses that have contracts to drill offshore in Cuban waters. We do know that the Chinese have one leased block onshore. Chinese rigs are used to drill onshore and near shore wells (usually directionally drilled from land).

In 2004, Spanish energy company Repsol began deepwater drilling in Cuban waters. In June of this year, the government of Cuba granted Repsol an extension into 2009 to continue drilling in their deepwater blocks. Other deepwater blocks have been leased by non-Chinese firms, and they are currently conducting seismic testing in their deepwater blocks. We will continue to track Chinese investment in the Cuban energy sector.

Mr. SULLIVAN. The answer I have presently is that a Chinese national oil company has rights to an onshore block in western Cuba. If it is rights I would imagine there was some kind of contractual arrangement but I do not know.

Mr. ROHRABACHER. Right. But that is not encompassing the question, of course. And you are going to look into that, whether or not there have been contracts with the Chinese for offshore oil drilling in Cuban waters. Because again, whether or not they have a contract for onshore does not answer that. And whether or not they are engaged in current operations does not answer that. What answers that is, do the Chinese have a contract with the Cuban Government to do it in the future?

Mr. SULLIVAN. No, and I think what I—

Mr. ROHRABACHER. Okay.

Mr. SULLIVAN [continuing]. What I was trying to give you was the latest information I have. That is the extent of the information I have.

Mr. ROHRABACHER. Okay.

Mr. SULLIVAN. So I do not know anything right now about an offshore contract.

Mr. ROHRABACHER. Okay. Let me suggest that if we are—that that issue has been around now for a few months and that perhaps you should know about that because that is an important item. I disagree with my colleagues that it is the same as the Indians or the others. I see China as a potential adversary if not enemy of the United States in the long run. Now, perhaps they will have some liberalization of their political system someday and I will not say that, because the Chinese people are our friends, it is just that their government is, you know, it is the worst human rights abuser in the world. And it is stamping out their democratic elements and

their people who believe in religion, etc. So that would make a difference to me.

But let me note economically that my colleague is correct, economically it makes no difference whether it is the Chinese or the Norwegians or the Indians or anybody else, it is a travesty to have other countries drilling within eyesight or 45 miles off the coast of the United States because they happen to be Cuban waters in that area but American companies are not permitted to do that. And, of course, that oil and natural gas that they are drilling for is bound to be coming from a pool that actually Americans should be participating in. That will have a negative impact on our economy no matter what. We are giving it to another country's companies. So that would be a travesty.

Mr. DELAHUNT. Would my friend yield for a moment?

Mr. ROHRABACHER. Certainly.

Mr. DELAHUNT. I think if there was a policy change in terms of the United States' policy vis-à-vis Cuba that would allow a commercial relationship that we would be more than welcome to come into that area. But that is an area I will discuss with Mr. Burton at some point.

Mr. ROHRABACHER. I think the gentleman's point is well taken. And as soon as there is some democratic reform in Cuba I am sure we will move forward with that type of cooperative effort.

Mr. DELAHUNT. I agree. And I would hope for democratic reform in Kazakhstan, Saudi Arabia, Nigeria and elsewhere in the world. I appreciate that.

Mr. ROHRABACHER. We will discuss that in greater detail at some time.

One last note, and I know my time is running out, let me identify myself with Chairman Engel's comments about the biodiesel development, not as to Haiti however, I would suggest that the *Jatropha*—I guess that is how you pronounce it—plant which I have looked at would indeed be and offers a tremendous opportunity for the production of energy in Latin America and especially in countries that do not have their own oil and natural gas resources. I would suggest not only Haiti but throughout Latin America where, and Central America in particular, this plant can be squeezed right into diesel fuel, clean diesel fuel, and the production of that plant and that diesel fuel then could be done by thousands and thousands of people would have jobs and employment as well as the benefit to their economy of producing their own clean fuel right there in their own country.

So and let me just recommend, you mentioned studies, I would hope that the study, countries do not need studies, what they need is investment and what we also need in this particular project is perhaps some research money into making sure that this plant that already offers a great deal promise if genetically altered could even do tremendous more for these countries.

And I would suggest that studies as to how to market it, you do not need that. \$350,000, that study may be, you know, not something that would be as valuable as trying to actually help a situation where they genetically altered the plant, and finding ways of getting that invested. There are people ready to invest in this throughout Latin America. We should be encouraging them.

Your reaction, and that is all. Thank you, Mr. Chairman.

Mr. SULLIVAN. Thank you, Congressman. Just a quick point on that just to reemphasize the point I made earlier. I know the word "study" sounds a little bit bland but what they are really trying to do is look at the legal regime in these countries in terms of the best way to help set up and structure policies that will promote private sector investment. So that we think is an important first step.

But we agree with you fully that the focus has to be creating the environment to bring in the private sector. And that is why we have had also outreach in our initiative with the private sector as well. So the studies, I know it sounds a bit bland but it is focused on a much larger, more important objective, and that is to increase private sector investment, to increase domestic production.

And you are also correct, Congressman, when you note the transformative nature of what can happen with regard to biofuels in the hemisphere. And that is why we are very excited about this initiative. That is why you have seen support from the President to the Secretary of State on down. We are very, very focused on this diplomatically. And, again, we are just starting but we see it has a tremendous future, and not only in the four countries that we are talking about but, as you note, there are countries throughout the hemisphere, particularly in Central America and the Caribbean, but once we move on to cellulosic, the potential for this in the hemisphere and even other countries beyond the Caribbean basin, is going to be significant. So we really see this as a transformative way to move to the alternatives while also working on increasing traditional sources of hydrocarbon.

Mr. GREEN. Thank you, Mr. Rohrabacher.

Mr. Secretary, PDVSA outlined recently a very aggressive new business plan that counts massive investments of more than \$77 billion according to recent presentations and increased crude oil production of more than 5 million barrels per day by 2012. Moreover, PDVSA, the Venezuelan oil company, has committed itself to development of the region's largest natural gas reserves and availing itself of the opportunity of the potential for LNGs similar to their neighbor Trinidad. Can you talk a little bit about whether you see this happening given PDVSA's at least the public numbers as compared to the actual production that we know of to have been shrinking in Venezuela?

Mr. SULLIVAN. Yes, sir, Mr. Chairman, I would be glad to talk about that.

I think at least from the public numbers we have seen and the International Energy Agency has cited these numbers, and I think it was already cited earlier by one of the members of the committee, we have seen the production declining in Venezuela. And again from a global energy security standpoint we would welcome a dramatic increase in terms of Venezuelan production. It would have a moderating effect on prices and it would also help some of the countries in the region that are particularly, as Chairman Engel noted, are particularly vulnerable given their 100 percent dependence on imported oil.

However, the other, on the more or less positive side is what the policies that have been undertaken in terms of resource nationalism, I noted in my opening statement policies that are focused on

state control, non-transparency, it does not bode well for a dramatic increase in production. Those kind of policies have typically led to inefficiencies, declining investment, and not surprisingly, declining production.

So while we would welcome that kind of significant increase, the policies, at least what we are seeing in Venezuela with regard to the industry, do not bode well for such a dramatic increase in production.

Mr. GREEN. And I know the same situation with Mexico and PEMEX. In my opening statement you heard that I have refineries who have contractual relationships with both PDVSA and PEMEX for refinery production and they invested in those refineries. In the case of Mexico, which is the third largest supplier of crude to the United States, accounting for about 14 percent, oil continues to be so important for the Mexican economy and accounted for almost 16 percent of the overall exports. PEMEX contributes more than a third to the national budget in Mexico, yet PEMEX debt is increasing, the country has registered an annual loss since 1998, annual operating loss. There are concerns that Mexico's proven reserves are declining because of insufficient funds for maintenance and exploration.

Given the constitutional constraints Mexico has in considering private investment in oil and gas, and yet there is potential in the deep waters of the Gulf of Mexico, and the Calderon administration is taking on the challenge of reforming PEMEX, do you see that reform passing? And because I know there was just a referendum literally in Mexico City that was overwhelmingly opposing it, what do you see in the progress of that reform of PEMEX, not for our own country as much but also for the people of Mexico?

Mr. SULLIVAN. Yes, sir, Mr. Chairman. Congressman, as you note, you are correct, production is falling in Mexico. One of its largest fields, Cantarell field in Campeche Bay, represents a very significant source, and that is a field where there are waning reserves. That is one of the reasons for the production declines.

As you also know, we have a strong relationship given NAFTA and others with regard to the Mexicans on a number of economic issues, including energy. And you correctly point out that there is a reform process being debated in Mexico. However, I do not think it would be helpful as a U.S. Government official to speculate on where that process may or may not go. That is something that is going to be solely decided by the Mexican Government. And with all due respect, I would rather not comment on that.

Mr. GREEN. Well, let me talk about the differences in one last question before I turn it over to the real chairman. Energy-producing countries in Latin America, Brazil and Colombia, have followed typically the free enterprise model for energy investment that allows foreign countries to own or operate energy concessions. And when you compare the nationalized oil companies like PDVSA and PEMEX with the continuing loss of investment in infrastructure to continue what I call you do not want to kill the goose that is laying the golden egg, what can the United States do to address the disparities that arise when our American companies are forced to compete with these state-owned companies?

Mr. SULLIVAN. Well, I think in some ways, and it was noted earlier that, or you noted that certain countries are open to investment. And Brazil is an example of one where they are managing their resources well. And so one of the things that we have done and focused on quite a lot throughout the hemisphere, and I mentioned it in my opening statement, is we have been very focused on trying to set the legal framework bilaterally through trade agreements, whether it is free trade agreements. And we have under this administration increased those significantly in the hemisphere, or even bilateral investment treaties. We have a number of existing bilateral investment treaties, and we have signed an additional one over the last 2 years in the hemisphere, we think those are very important both in terms of creating the open market environment that is important that can lead to investment, but also with regard to protecting investment and American interests with regard to resource nationalization that does occur.

And we, the State Department, takes any kind of disputes under those treaties or those bilateral investment treaties or free trade agreements very seriously. And we think that they both help protect investments but also help the opportunities to increase production. And so that is an area where we focus with our colleagues at USTR and the Commerce Department, and we do think it helps.

And so that is another reason why I mentioned the Colombia Free Trade Agreement in my opening statement because it is hard to separate energy policy from broader economic policy in the hemisphere. And the more we engage on deepening our economic engagement through agreements, through bilateral investment treaties, I think the better for U.S. interests, efficient energy markets, and increased production in the hemisphere.

Mr. GREEN. And again, my time has expired, but I appreciate again what I said not only about our embassies and consulates in Latin America but throughout the world because knowing those they actually help United States businesses to both invest and for the benefit of not only their own profit but also for those countries. So I appreciate that effort.

Mr. SULLIVAN. Thank you very much.

Mr. GREEN. Mr. Chairman, I turn back the chair to you.

Mr. ENGEL [presiding]. Mr. Secretary, let me just ask you one final question. Let me ask you a question about alternative energy crops as replacements for coca. In Peru, there have been some efforts to replace coca with ethanol-producing crops. And that is interesting to me. This process has multiple purposes, including reducing the amount of coca cultivated in the region obviously, improving the livelihood of poor farmers, and promoting alternative energy. What can you tell us about what the United States is doing in supporting efforts in Peru or other Andean countries to help create biofuels industries in coca-producing regions?

Mr. SULLIVAN. Thank you, Mr. Chairman. As you, I know as you know as part of our United States-Brazil biofuels partnership our focus, at least for the initial tranche of third countries, has been in the Caribbean basin. So we have not focused in terms of that partnership in the Andean region. Nevertheless, as in my exchange with Congressman Green, we see that the potential for biofuels throughout the hemisphere is significant. And one of the things

that we, one of the reasons why we believe it is so significant is because, and Secretary Rice has used this term, because we see it as the possibility to be transformative beyond just energy issues but with regard to economic development, employment, increasing production in agriculture sectors.

And so it is a very interesting question that you raise. And given though, however, that my bureau does not directly deal with the coca production issue in the Andean region that is quite an important one to the State Department and the administration, what I would like to ask permission is to be able to return with a more detailed response to your question from our INL bureau that focuses on this issue on a daily basis.

[The information referred to follows:]

WRITTEN RESPONSE RECEIVED FROM THE HONORABLE DANIEL S. SULLIVAN TO
QUESTION ASKED DURING THE HEARING BY THE HONORABLE ELIOT L. ENGEL

A key pillar of U.S. energy policy is diversification of supply, which includes the promotion of alternative fuels such as biofuels. The U.S. encourages all countries to increase local production and consumption of renewable energy and improve energy efficiency in order to reduce their dependence on imported oil and promote economic development.

We concur that biofuels production offers opportunities for licit crop cultivation to poor farmers. We welcome the Governments' of Colombia and Peru who have expressed their commitment to advance biofuels, to advance domestic energy production, promote rural economic and agricultural activity, and offer alternatives to illicit crop cultivation.

The United States cooperates bilaterally with Colombia and Peru on energy issues, including biofuels. Through exchanges, visits, and seminars our governments consult regularly on market conditions, investment and regulatory issues, biofuels sustainability, and global developments on standards and codes. Our objective is to facilitate scientific, technological, and business collaboration and research, while strengthening each country's capacity to develop and use biofuels locally and sustainably.

For example, in August 2008, we supported the visit of Colombian and Peruvian officials to the United States to visit Department of Energy and Agriculture renewable energy labs to advance cooperation on biofuels. The United States also supported biofuels activities and funded expert speakers to Colombia, Peru, and other countries to discuss ongoing international efforts to advance biofuels sustainability.

USAID in Colombia also supports biofuels projects, working to facilitate private sector African palm oil alliances for biodiesel production. USAID estimates that it has invested approximately \$20 million in these alliances, which leveraged approximately \$190 million in private investment, and benefited 5,000 families and created 20,000 jobs.

Mr. ENGEL. Thank you. Mr. Payne, did you want to?

Mr. PAYNE. Since I did not hear the testimony, I have not had a chance to look over it, I will pass. Thank you.

Mr. ENGEL. Okay, thank you. And Mr. Burton tells me that he is done with his questions as well. So, Mr. Secretary—oh, Mr. Smith, I am sorry. I did not notice you. How could I not notice you, Mr. Smith?

Mr. SMITH. Thank you, Mr. Chairman.

Mr. ENGEL. You have a larger-than-life presence.

Mr. SMITH. I want to welcome our distinguished witness. Regrettably I missed his testimony, like my friend and colleague Mr. Payne, so I will have to read it and maybe submit some questions if I could.

Mr. SULLIVAN. We would welcome that.

Mr. SMITH. I appreciate that.

Mr. ENGEL. Okay. Well, both of our New Jersey colleagues are helping us along this morning.

Mr. Secretary, let me thank you for your testimony. And, as always, it is a pleasure to work with you. We appreciate everything. And anything that you could submit to us in writing would be very much appreciated. Thank you very, very much.

Mr. SULLIVAN. Thank you, Mr. Chairman. And thanks again for your interest. It is very, very important, and the members of the committee, to the work we do. And we feel strong support from this committee and that is very helpful for us.

Mr. ENGEL. Okay, thank you very, very much.

We will have about a 1-minute break and then I will call our second panel.

[Recess.]

Mr. ENGEL. All right. I will introduce our second panel. We note that Dr. Johanna Mendelson Forman is senior associate at CSIS, the Center for Strategic and International Studies; Jeremy Martin is director of the Energy Program of the Institute of the Americas at the University of California at San Diego; and James L. Martin is chairman of the National Defense Council Foundation.

So, Dr. Mendelson Forman, let me say you are surrounded by Misters Martins, Messrs. Martin both. So let me call on Dr. Mendelson Forman first.

STATEMENT OF JOHANNA MENDELSON FORMAN, PH.D., SENIOR ASSOCIATE, CENTER FOR STRATEGIC & INTERNATIONAL STUDIES

Ms. MENDELSON FORMAN. Thank you, Mr. Chairman and Ranking Member Burton and members of the committee. I am very pleased to be here today. And I certainly was impressed by the dialogue that I just heard with our Secretary Sullivan about the issues of energy, energy security in the Americas and the importance of this issue.

I also want to commend the committee, and particularly the chairman, for his longstanding interest in this subject related to the Caribbean, to Haiti and to the tireless work that he has done to promote something so important to our own security and the security of the region.

I would like to request that my written statement, which I have submitted, be entered in the record.

Mr. ENGEL. Without objection. Let me add to all of our witnesses that if you would summarize and just have your written statement entered into the record we would be happy to do that and I think it would be the most efficient way of moving along. So without objection, so ordered.

Ms. MENDELSON FORMAN. Yes, thank you. And I want to make sure in doing the summary that we do not repeat many of the important facts which have already been said, not only by the chairman and the ranking members and other members, but I want to go forward to some of the specific questions that you raised when you were kind enough to ask me to appear before you.

But I must just on a personal note say that 30 years ago when I finished studying Latin American agrarian history I had the honor of doing something related to sugar and sugar plantations.

And I did not think that 30 years later that the same croplands that I worked on in Colombia would be the source of biofuels. I was recently asked to return to the scene of the crime, to Cali, to see the same haciendas that I had worked on now being one of the largest ethanol producers in the country of Colombia. So things come full circle. And I think just the way we learn from the past we can also apply it to the future.

So let me start with just a few facts that we know. We have already heard from the chairman and other members about the importance of the Western Hemisphere in supplying the United States with our oil. I also want to mention that because of the diversity of biomass, 40 percent of the world's diversity comes from Latin America, it is an extremely important area not only for petroleum but for other biomass energies, geothermic, eolic and solar power.

But specifically since you requested that I talk about renewable energies I wanted to make a few other points that I think were omitted and would enhance the record. One is that this is also an opportunity for clean energy sources at a time of increased concern about climate change. This is very important as we look at alternatives to think about the carbon footprint. And particularly in countries of the Caribbean, small island states that are so close to our own border, these clean fuels are a very important source because they can relieve the countries of fossil fuel dependence at a time when high petroleum costs are bankrupting many of these governments in the region. We know that with the population growing and the number of people being thrown into poverty because of the high petroleum costs that we must do something.

And as far as providing the long-term and sustainable alternatives, something that members of this committee have talked about, PetroCaribe is certainly not the answer to this problem. Even though right now there are 16 countries that subscribe to it and get a reduced rate on oil, we cannot look at that in any way as a way to solve the energy security of the region.

Latin America is really emerging, and this is great, as a key producer of biofuels. The region itself has invested \$8 billion in biodiesel just in 2007. And as we mentioned here earlier in the statement of Mr. Sullivan and then in the questions, Brazil's 30-year experience, its use of 12 percent of all transport fuels are sugar based, it produces 23 billion liters already between 2007 and 2008, and I should add that it only uses for all its biofuel production 1 percent of its arable land, this is a clearly a success story in a country as large as the United States that certainly can be emulated. And obviously the cost is very reasons, and we know that this is one of the reasons why the rising economic power of Brazil is continuing to rise.

The front page of the New York Times today had a wonderful story about this progress. And I think we know that part of the answer comes from renewable energy.

Now, you raised a few questions about the United States-Brazil energy partnership. And rather than repeat the details of the memorandum of understanding I think it is important to add a few other points because the requirements of the 2005 Energy Act and then the 2007 Energy Act which say that by 2022 we have to have

36 billion gallons of renewable ethanol coming into the United States, it is very important that we end the tariff that we have on Brazilian ethanol. I share the chairman's concern. Because even if we were to meet the, if we want to meet the goals of the Energy Security Act we have to have other sources, and we are going to need all the ethanol we can get, not only from our own domestic producers but from the Caribbean and from Brazil. So it is extremely important that we do that and not prejudice any source which affects our own security.

Now, we know that Brazil has used its ethanol diplomacy in a very effective way. President Lula has been busy running around the hemisphere and also Europe, signing agreements with Peru, Colombia, Argentina, Panama, Cuba. And for the Brazilians, Cuba is a particularly strategically important place. And they are gaining an advantage because they are taking the technology that they learned in Brazil and helping the other large sugar producer in this hemisphere, Cuba, be able to convert an industry into something that could down the road be a very important platform for United States energy security if the politics changed and we had a more open policy related to our trade with Cuba.

But right now even the predictions are that Cuba could eventually produce 3 billion gallons of sugar-based ethanol annually. And most of that could be exported to the United States because they do not have many cars there for many years due to the embargo. So that it is a really important platform.

Let me just go a little further on Cuba, on the Caribbean, on Central America policies just 1 second to note that a lot of Brazilian ethanol enters the United States under our favored trade arrangements known as the Caribbean Basin Initiative and also the CAFTA DR Program which is another way in which the ethanol coming from Brazil goes into the Caribbean and then is re-exported into the United States.

Now, energy for development and the chairman other members' concern for Haiti needs just a moment in the time I have remaining. The development of biofuels, as everybody has correctly noted, is an extremely important dimension for development. It provides jobs, it is an appropriate technology in places that do not have large scientific opportunities to invest money. Communities can use the alternative fuel. And it really creates an exit from dependence on oil. We know what has happened in Haiti recently with the tremendous escalation of food prices, most of it resulting from transport costs. And if we give countries that are so oil poor a chance, I think that we can see a tremendous improvement in the reduction of poverty rate and self-sufficiency.

Now, in *Jatropha*, one of the non-food crop feedstocks used I think there is promise. And as other members of the committee noted, not only for Haiti, but also in Mexico, for Brazil and Colombia, for areas that have arid land where you can not only do large-scale *Jatropha* plantations but you can also help communities. And I know that many members addressed the State Department's Mr. Sullivan about the speed at which this can happen. But I want to assure you that because the chairman held a hearing last year on Haiti and there was mention of this, many small producers are try-

ing to work within the context of the United States-Brazil framework and develop their own independent sources of diesel oil.

And I think the entrepreneurship and the development without the support of external sources is also a testimony to the needs of Haitians, but also to the skills which they have to create and use this fuel for the immediate need. And I think that while this should not negate the importance of the biofuels accord, it is very important to note that it is already being done even without U.S. Government support.

Mr. ENGEL. Doctor, let me ask you to sum up please.

Ms. MENDELSON FORMAN. Okay.

Mr. ENGEL. Excellent testimony, but please.

Ms. MENDELSON FORMAN. Okay. And I just want to make a few concluding remarks.

We know it is an important source for energy. I think we need to know that it has the potential in Central America, we need to continue that. And we have to see Haiti and the Dominican Republic as an opportunity and to congratulate the United States and Brazil, but they need to make this policy of the memorandum of understanding a basis for our energy security, and it should not just end at the end of this particular administration, it needs to go on.

So thank you very much.

[The prepared statement of Ms. Mendelson Forman follows:]

PREPARED STATEMENT OF JOHANNA MENDELSON FORMAN, PH.D., SENIOR ASSOCIATE,
CENTER FOR STRATEGIC & INTERNATIONAL STUDIES

Most Americans are unaware that the Western Hemisphere supplies the bulk of U.S. energy needs. According to the Energy Information Administration, the US imported 28.3 per cent of its oil from Latin America and the Caribbean in 2007, far surpassing the 16.6 per cent imported from the Middle East. Latin America is poised to increase its importance as a supplier of fossil fuels to the U.S, thanks to the recent discovery of potentially 40–50 billion barrels of oil and natural gas in Brazil. In addition to the world's third-largest proven oil reserves, Latin America has significant natural gas reserves (mostly unexplored), abundant hydro-electric power potential, and a substantial capacity for other alternatives such as biomass energy (40 percent of the world's biodiversity is in this hemisphere), geothermic, aeolic and solar power.

Renewable energy development in the Americas offers the region an important opportunity for the development of clean energy sources at a time of increased concern about climate change. But renewable energy development also affords small island states so close to our third border with a source of power that can relieve the dependence on fossil fuels at a time when high petroleum costs are bankrupting governments and throwing more of the region's population into poverty. Low-income oil-importing countries have seen their fuel bills increase by US\$40 billion over the last year as a result of the doubling of crude prices. In the first quarter of 2008, Costa Rica and Guatemala spent close to one billion dollars each, an amount 88 per cent and 63 per cent higher than for the same quarter of 2007, respectively¹.

Today I want to focus on energy cooperation and on biofuels, in the Hemisphere. Even in oil-poor countries in the Caribbean and Central America who have signed on to Venezuela's Petrocaribe oil diplomacy the long-term outlook for sustaining such support is not promising. Alternatives to fossil fuel and policies that promote effective use of wind, solar and biomass energy are in the long-run what must be developed to ensure reliable energy in the region.

The good news is that Latin America is emerging as a key global producer of biofuels as nations across the region use their competitive advantages such as fertile land and tropical weather. The region invested more than US\$8 billion in biodiesel and ethanol in 2007 and has already launched new projects set to increase global

¹ Humberto Marquez, "Oil-Caribbean: PetroCaribe Building 'Anti-Crisis, Anti-Hunger Shield'", *Inter Press Services News Agency*, July 16th 2008.

biofuels production as demand for hydrocarbons from emerging-market economies outstrips production².

The Case of Brazil:

Brazil, whose ethanol industry started thirty years ago, has greatly helped alleviate its dependence on fossil fuels for transport. In 2007 12% of all transport fuels were sugar-based³. This shift away from hydrocarbons has been favored by an extensive distribution infrastructure and the use of advanced flex-fuel engines in Brazil that allow the consumer to switch between gasoline and ethanol, or a combination of the two.

Brazil is the world's leading producer and exporter of bioethanol with ethanol mills expected to produce up to 27.5 billion liters in the 2008/09 season, up from 23 billion liters in 2007/08⁴. It is also the most efficient, using hybrid sugar cane that yields high energy ethanol, but also uses the waste or bagasse to generate electricity that runs the production facilities and supplies the communities where the ethanol is produced.

According to the World Bank's *Biofuels: the Promises and the Risks*, the U.S. ethanol industry currently uses 10 million hectares, while Brazil only uses 3.6 million of such terrain and produces eight to ten times more energy than that produced from corn. Brazilian-produced ethanol, generated from sugarcane, emits between 80%–90% less carbon than gasoline, while U.S. corn-based ethanol reduces greenhouse gas emissions by only 10%–30%⁵.

As long as oil prices remain over \$40 dollars a barrel Brazil's ethanol will remain competitive. This is comparatively lower than bioethanol made from corn in the United States which costs \$65 per barrel.⁶

In March 2007 the U.S. and Brazil signed a memorandum of understanding to jointly develop biofuels in the hemisphere. The agreement launched a series of technical missions with experts from Brazil and the U.S. for a targeted approach to biofuels development directed at countries in oil-poor states such as the Dominican Republic, El Salvador, Haiti, and St. Kitts and Nevis (There were the first beneficiaries of joint support.). Both countries used this collaboration to help promote the use of ethanol as an alternative renewable energy resource, with specific programs of action that would help advance a broader regional biofuels market. To date this effort has yielded important results starting with greater cooperation between the U.S. and Brazil around hemispheric energy needs. It also helped solidify a regional strategic relationship between the two largest nations of the hemisphere. While it is too early to determine the ultimate outcome of the agreement, there is a consensus among experts in the field and among regional governments that this approach of both nations should endure beyond the current administration, and should become a foundation for energy security relationships in the Americas.

What has not been resolved, however, is the continued U.S. policy of imposing a 2.5 percent duty, plus 54 cents per gallon on Brazilian ethanol imported into America. While much Brazilian ethanol enters the U.S. through the Caribbean under the terms of the Caribbean Basin Initiative (CBI) and the Central American Free Trade Agreement (CAFTA) that includes the Dominican Republic, given the requirements of the 2005 Energy Policy Act and the Energy Independence & Security Act of 2007 which requires the use of 36 billion gallons of ethanol in the U.S. by 2022, it is folly to continue this tariff in light of the escalating fossil fuel prices.

The significant public criticism that is being generated by the use of a food crop—corn—for production of fuel, combined with the devastating impact of the recent flooding in central U.S. corn-growing states, has led 51 House Republicans to ask the Environmental Protection Agency to reduce this year's ethanol production requirements, in late June 2008. The House initiative was soon followed by a letter to EPA Administrator Stephen Johnson from 24 senators, urging the EPA to reset

²“ANALYSIS-Politics aside, Latin America biofuels loom large”, *Reuters*, July 21st 2008.

³“Balanço Energético Nacional—Resultados Preliminares, ano base 2007”, Empresa de Pesquisa Energética, 2008.

⁴“ANALYSIS-Politics aside, Latin America biofuels loom large”, *Reuters*, July 21st 2008.

⁵“Biofuels: The Promise and the Risks”, *Agriculture for Development Policy Brief*, World Bank, 2008.

⁶While Brazil does not subsidize sugar, which helps sustain global sugar prices, the corn-ethanol sector in the US receives a total of some \$6 billion in support each year. This heavy subsidization combined with the fact that a quarter of U.S. corn production is being used to produce ethanol, has generated criticism in view of the recent food price hike, as many believe that biofuel production can explain up to one third of the price increase. Sugar, however, is not really a food crop; it is more a food additive and its expansion has not displaced the production of other food crops in Brazil. Stephanie Holmes, “Bioenergy: Fuelling the food crisis?”, BBC News, June 4th 2008.

ethanol targets. The EPA is expected to announce a decision in August 2008. Instead of revising the standards, the U.S. should revisit the tariff it is imposing on ethanol imports from Brazil and support second-generation biofuels. These fuels are made from biomass like straw, agricultural by-products and forestry wastes⁷.

Brazil's success story has generated considerable interest in biofuels across Latin America, but no other industry in the region has yet approached the size or sophistication of Brazil's. Brazil is now actively conducting ethanol diplomacy with neighbor countries, signing technology exchange agreements with Peru, Colombia, Argentina, Venezuela, Panama and Cuba. Benefiting from fast improving relations, President Lula da Silva signed in mid-January 2008 several agreements with President Raul Castro to bolster economic ties, focusing in several areas, including the sugar industry⁸. In exchange for know-how, the Brazilians are obtaining a significant strategic advantage in the development of a sugar-based biofuels industry on the doorstep of the U.S. Agricultural experts have estimated that Cuba could eventually provide more than 3 billion gallons of sugar-based ethanol annually; perhaps even more when new technologies for extracting energy from sugar cane waste come online—placing the island third in world ethanol production, behind the U.S. and Brazil. Given the relatively small demand for auto fuel in Cuba, nearly all of that ethanol would be available for export⁹.

Many countries in Latin America have ample farmland available for cultivation of energy crops. The Caribbean and Central America, but especially the Dominican Republic, Cuba, Guatemala, Costa Rica, and El Salvador, which once relied on sugar exports to support their economies, are now ripe for conversion of that commodity to ethanol. Given the absence of fossil fuels in this part of the hemisphere the advent of biofuels offers these countries a much needed alternative source of fuel for domestic consumption and, in some cases, a source of export revenues. Under the Caribbean Basin Initiative (CBI), countries in Central America and the Caribbean have had duty-free access to the United States since 1989 for ethanol produced from regional feedstock. Access for ethanol derived from non-regional feedstock has been limited by a CBI quota equal to 7 percent of total U.S. ethanol consumption. Above that 7 percent quota, another 35 million gallons of Caribbean ethanol can come into the U.S. duty-free if it has 30 percent local sugarcane content. Beyond the additional 35 million gallons, it is duty-free only with 50 percent local feedstock.

Costa Rica, El Salvador, Jamaica, and Trinidad & Tobago are the only countries that have ever exported ethanol under the CBI quota. In 2007 they exported 230 million gallons of ethanol to the US, which was about half of all ethanol imports in that year¹⁰. A large share of this ethanol was Brazilian ethanol that was merely reprocessed, or dehydrated to remove excess water in the Caribbean. Cargill and Brazilian partners are reportedly investing in ethanol processing plants in Jamaica, building the world's first dedicated ethanol shipping terminal at the Brazilian port of Santos, and buying Brazilian sugar mills and ethanol plants. In 2006, word got out that Cargill planned to build an ethanol dehydration plant in El Salvador to process Brazilian ethanol for duty-free import into the U.S. under the CBI preference.

The current ethanol production capacity in Central America and the Caribbean is limited by lack of government support, poor infrastructure, and absence of or a weak regulatory framework. The U.S.-Brazil Biofuels Agreement was also targeted at supporting those Central American and Caribbean states that would benefit from assistance on legal-regulatory frameworks that Brazil had developed in its biofuels industry. This support, however, is still new and will take more time to develop. In addition, sugar lobbies in El Salvador and the Dominican Republic, who still receive subsidized sugar prices on their crop from the U.S. sugar quotas, are still reluctant to transform their sugar industries into biofuels operations until that benefit ends. There is also the uncertainty of the relationship of oil prices to ethanol development, though it is highly unlikely that we will ever see cheap oil again.

Were the current duty on Brazilian ethanol imports to be eliminated, reprocessing Brazilian ethanol in CBI countries would lose its appeal. The CBI countries that have been investing in reprocessing facilities would then have to shift their focus to developing their own ethanol industry, to cover Caribbean needs and exporting to the U.S., possibly resorting to Brazilian expertise but also to U.S. and Indian

⁷Suzanne Hunt, "Biofuels, Neither Savior nor Scam—The Case for a Selective Strategy", *World Policy Journal*, Spring 2008, pp. 9–17.

⁸"Brazil's Lula offers Cuba oil knowhow, credit", *Reuters*, January 15th 2008.

⁹Chuck Squatriglia, "With Fidel Gone, Will Cuba Become a Global Ethanol Player?", *Wired.com*, February 19th 2008.

¹⁰"U.S. fuel ethanol imports by country (millions of gallons)", International Trade Commission, 2008.

technology. As technology for second generation biofuels like cellulosic ethanol becomes available, CBI countries can move beyond sugar-based ethanol in the mid- to long-term and use their vast biomass, which can be converted into cellulosic ethanol to alleviate their significant fossil fuel dependency. Although the region's production capacity would never be able to reach Brazil's—due to land and weather constraints-, shipping costs for ethanol produced by CBI countries would still be cheaper than for Brazilian ethanol. That plus the fact that at least half of the CBI ethanol quota typically goes unused bodes well for the expansion of ethanol production in CBI countries.

Energy for Development:

Development of biofuels also offers an important social dimension. It is a source of increased jobs not only in the agricultural sector, but also in the other industries that have grown up around the emergence of bioenergy production. In a region where the gap between rich and poor is most pronounced (35 percent of the region still lives in poverty, in spite of improved growth rates) renewable energy development offers an industry that will positively impact the region's most vulnerable populations. It is appropriate technology that can be used for large-scale production, but also lends itself to small farmer solutions as well. There is also growing evidence that rural development could be sustained by the creation of segmented biofuels markets to provide communities with fuel for cooking, transport and electricity generation, especially since a significant percentage of Latin Americans do not have access to electricity, particularly in rural areas. In Nicaragua, for example, less than half of the population has access to electricity¹¹.

In some poor countries like Haiti, it is clear that using refined biomass sources that are renewable and sustainable to produce energy may well offer an exit from the dependence on oil imports for transportation and on wood for cooking. Haiti not only imports all its oil but an estimated 8200 tons of wood is harvested annually for fuelwood, while approximately 700 tons of wood is being converted to charcoal. The environmental consequences of this practice have become apparent in recent years, where deforestation has led to devastating soil erosion and severe flooding. The smoke from thousands of charcoal fires has led to widespread respiratory infections and the aquatic life in the oceans surrounding Haiti has been degrading¹². In Haiti's case there is not enough land for ethanol but reprocessing is a possibility. The use of a non-food crop, *Jatropha*, which can be made into biodiesel, promises a new beginning for Haitian rural farmers.

Jatropha, which is an indigenous crop in the Caribbean and Central America, also offers the most promise as a non-food feedstock for biodiesel in Mexico, Brazil, Colombia and the Caribbean. *Jatropha* is a valuable multi-purpose crop to alleviate soil degradation, desertification and deforestation, which can be used for bio-energy to replace diesel and jet fuel, for soap production and climatic protection. The shrub compares favorably with other plant sources because the seed cake is an excellent fertilizer, the seeds are inexpensive and have high oil content, the shrub can grow on both good and degraded soil and in low and high rainfall areas, without large quantities of fertilizers. Finally, *Jatropha* oil was estimated \$43 per barrel in 2007, which is much lower than the current price of diesel.

Jatropha can help to increase rural incomes, self-sustainability and alleviate poverty for small farmers by providing them with an additional source of income. In remote areas of Latin America, where electricity is always in short supply and fossil fuels are not readily available, *Jatropha* oil can power generators, lights and farm equipment as well as cars. Pure *Jatropha* oil can even be used directly in the electrical generators used to power telecommunications towers in rural areas. This gives incentives to rural communities to grow oil seed crops and process them locally since cellphone providers who run the towers are a ready market for this oil. Such a win-win situation for both local farmers and cellphone providers offers great new opportunities to create new markets with sustainable local production of oil and increase access to information in remote communities.

In addition to *Jatropha*, biodiesel can be made from soybeans, African palm, coconut, castor, other oil seeds and also from animal fat. Brazil, Argentina, Paraguay, Colombia and Guatemala have been the main centers of biodiesel production. But other countries in Central America and the Caribbean are also picking up production, though the volumes are quite small.

¹¹ Sarah Wilson, "More heat than light", *The Guardian*, October 28th 2007..

¹² Kara Newman, "A greener charcoal—How a team of MIT students will help (profitably) solve Haiti's cooking-fuel crisis", *Fortune*, November 28th 2007. Gerthy Lahens, "Fuel From the Fields: An alternative energy to reduce deforestation in Haiti", *World Bank 2007 first prize winner*, 2007.

Brazil has enacted laws that require mandatory percentages of biodiesel in its diesel supply and the “Selo Combustível Social”, a stamp that is provided to biofuel producers when they purchase feedstock from ‘certified’ small farmers. When over 50% of the feedstock has the stamp, biodiesel producers receive a significant reduction in their taxes. Brazil’s main source of biodiesel is soybeans but since the beginning of 2008, Petrobras and other biodiesel producers have been looking for alternatives, following the significant increase in the price of soybeans and the food for energy debate.

Colombia, Latin America’s second-largest biofuels producer, is increasing output through new investment in sugar production and palm oil, which can also be turned into fuel. Colombian officials say abundant grasslands are ideal for biofuels development since crops can be grown without cutting down rainforests. Colombia expects to produce 1 billion liters of ethanol per year by 2010, more than doubling current output, and plans to have enough production by the end of the year for export. In 2007 there were 300,000 hectares planted with African palm trees and the country’s goal is to reach a million hectares within the next few years. In addition, seven palm processing plants were under construction in 2007 in different sections of the country, at a cost of approximately US\$100 million. African palm has been recently criticized because the crop consumes great amounts of water. Furthermore, reports have been surfacing linking growing demand for the crop to forced evictions, intimidation and even murders in Colombia. This has increased pressure on retailers, food companies and biofuel producers to ensure that the palm oil they buy comes from legal and sustainable sources.

In March 2006, El Salvador opened Central America’s first biodiesel plant with financial support from Finland to produce 400 liters a day. The project, still in its early development phase, is part of a public-private partnership between Finland’s Environment and Foreign Affairs Ministries and 34 Central American companies and institutions to cultivate renewable energies and combat climate change. They are feeding the plant with seeds from the Higuierillo (castor) tree and the fruits of the *Jatropha* bush, both native plants. El Salvador’s potential is significant because it has a favorable climate, good quality land, and six months of rain a year. In addition, only 70 percent of the country’s arable land is currently in use¹³.

Guatemala is seen as one of the emerging model for sustainable biofuels development for the region and for the world. In addition to four ethanol plants that are already in production, using the country’s mature and sophisticated sugar industry for feedstock, the country has been investing in biodiesel production. Guatemala has more than 1 million acres available for the planting of *Jatropha* developed by Octagon and 47,000 hectares of palm planted, with a potential yield of 187,000 metric tons of oil. The country’s first biodiesel plant is expected to open later in 2008. Operated by Palmas del Ixcán, a Guatemalan company, the venture is beginning with 10,000 hectares of palm oil, with plans for 100,000 hectares under cultivation by 2017. Most of this production is expected to be used domestically, as a substitute for the more than 600 million gallons of diesel consumed annually in Guatemala.

Opportunities looking forward:

Looking forward, the Kyoto Protocol has provided an additional impetus to biofuels development as industrialized countries seek to meet their emissions reduction targets. The advantages offered by biofuels, such as lower carbon emissions and competitive production techniques, rely on existing technology. Latin America is second only to Asia as a location for Clean Development Mechanisms (CDM) projects, with 47% of the projects in 2006. There is interest in investing in these types of projects in the region, and there are parties already experienced in the CDM process.

Colombia and Peru, which have negotiated free trade agreements with the United States, (though Colombia’s is still pending Congressional approval), have a potential advantage because of that access to the US market. Indeed, Colombia is planning a major expansion of its palm oil production as a biodiesel feedstock, with an eye to the export market. Similarly, Mexico, with its proximity to the United States and open access to the US market under the North America Free Trade Agreement (NAFTA), has strong external incentives to produce biofuels, including reducing air pollution, promoting rural development, and potentially supplementing its declining oil reserves through biofuels production and use.

Conclusions:

Biofuels are an important complement to the energy matrix of the hemisphere

¹³Eliza Barclay, “Stuck in the Middle with Fuel—As its neighbors back biofuels, Central America gears up for business”, GRIST, December 14th 2006.

Latin America's potential to produce all forms of energy—from fossil fuels, to biofuels to other renewable resources is very promising. With rising oil prices, and a long experience in the production of ethanol from sugar cane in Brazil, biofuels are becoming a major and growing component of the regional energy matrix. Their importance will grow with the development of second generation biofuels (cellulosic). Biodiesel production will also increase as the expansion of non-food based feedstock such as *Jatropha* and *Castor* create a steady supply of this fuel.

The biofuel potential of the Caribbean and Central America is a window that gives oil-poor countries a choice.

In countries whose agriculture was based on sugar-cane cultivation the advent of sugar-based ethanol has given the oil-poor nations of the Caribbean and Central America a new economic opportunity to produce fuel for transport from a crop well-adapted to the region. What is needed, however, are the appropriate legal-regulatory frameworks that will encourage the transition from fossil fuel vehicles to flex-fuel vehicles. Legal regulatory reforms will also be needed to create incentives for producers to develop this important industry. The benefits, however, will provide important relief to the economies of countries now suffering from the economic strains that the high price of fossil fuels are causing to regional budget priorities.

In the immediate future, PetroCaribe has become the solution. It is NOT sustainable. Biofuels in oil-poor states is a better long-term solution.

Sixteen countries in the Caribbean and Central America are now beneficiaries of Petrocaribe, the highly subsidized oil program that Venezuelan President Hugo Chavez has used to leverage influence in the region. At the most recent meeting of Petrocaribe in Caracas earlier this month recipient nations welcomed the continued support and discounts on oil. But in the long-run getting oil from Venezuela to off-set price hikes is not a sustainable solution to the energy needs of the Caribbean and Central America. The U.S. should continue to support and increase assistance to ensure that alternative energy sources are developed, both in biofuels and other forms of renewable energy, that give these small island states and other oil-poor countries a chance to maintain energy supplies without a dependence on Venezuela.

Haiti and the Dominican Republic: An Opportunity

The island of Hispaniola where two nations co-exist is ripe for an intense effort to develop sustainable renewable energy programs. On the Haitian side the potential for biodiesel production based on cultivation of *Jatropha*, and ethanol from sweet sorghum can provide some immediate relief in isolated villages that require energy for lighting, cell phone towers and for transport. Haiti's grid does not extend outside the key cities. Creating renewable energy farms from crops that are local, and do not compete with food supply could generate employment, provide energy, and save the remaining soil from further erosion. The U.S. Biofuels Agreement has started to look at these issues, but additional cooperation from the private sector and from a wide range of donors is needed to ensure that Haiti has a reliable source of diesel fuel.

The Dominican Republic, a country whose growth rate continues to climb, is also in dire need of reliable energy supplies. Most electricity today is produced from imported diesel fuel. A strong biodiesel industry could offset the demand for fossil fuels and also run the electric system with a form of clean and sustainable energy. Sugar cane cultivation, which is an important industry in the country, should also be converted to the production of ethanol for domestic use and for export. The recent passage of a new alternative energy law could help advance this effort. However, the country also receives subsidies for sugar and U.S. sugar quotas make export of sugar cane a more lucrative operation that conversion to biofuels. An incentive program to change the dynamic of sugar imports to the U.S. could encourage a more aggressive approach to renewable energy development. The benefits in jobs created and employment generated for both small states is also another advantage that could help the development of these countries.

Brazil and the US are biofuel giants: The benefits of cooperation outweigh the energy relationship itself.

Advancing the relationship between the U.S. and Brazil on biofuels is important not only for the technical advantages that each country brings to the region, but also for important geopolitical reasons. Brazil is South America's most populous and economically powerful state. With the U.S. it can certainly de-

velop enduring types of positive assistance to other nations who require energy, and also want to reform their energy matrix toward more sustainable sources. Congress should work with U.S. government agencies—the Department of State, Department of Energy and U.S. AID to create a single home for biofuels development that can be applied to the socio-economic need of the region. Cooperation with the OAS and the UN around renewable energy diplomacy can also advance the underlying principles of the agreement—support for sustainable renewable energy sources to the poorest countries of the region, and technical assistance to those countries with the capacity to convert their sugar industries to export oriented fuel suppliers.

Mr. ENGEL. Thank you. And I am sure we will ask you some questions on some of your testimony.
Let me call on Mr. Jeremy Martin.

STATEMENT OF MR. JEREMY MARTIN, DIRECTOR, ENERGY PROGRAM, INSTITUTE OF THE AMERICAS

Mr. JEREMY MARTIN. Thank you very much, Mr. Chairman. Appreciate the honor and the privilege to be here with you this morning and, too, would like to offer the congratulations and commendations for your attention to these issues. And I think I am going to skip through and, as you have noted, we will go ahead and submit my full written statement for the record and I will try and summarize as best as possible and skip some of the details.

But I think let me jump right into it and emphasize that I think it has been very eloquently noted this morning that Latin America is indeed a central piece to the United States' energy puzzle, energy supply puzzle. And what I would like to do quickly right now is offer some further insights on several of the most important producing nations in the region, their production outlook, geopolitics, future trends. And I want to do this through three main points.

The first point is that not all countries are the same. It is important to distinguish between above ground and below ground issues.

Secondly, the region's short-term outlook is one of pervasive uncertainty and turbulence in several key countries. But on the other hand, any my third main point, the region's long-term outlook is a glass that I would say is at least half full.

So let me start getting into a little bit of what I call "not all countries are the same." When I was asked to testify today as to the production profile and investment climate of the major oil and gas producing nations in Latin America I thought about it a bit on how I could try and quickly summarize this. So in order to do so I think it is important to distinguish between above ground and below ground issues. And that is to say in many cases a country's oil and gas potential and its actual oil in the ground may be less important than what is occurring above ground in the halls of government and in the geopolitics of the day.

In many cases poor policy planning, regulatory hurdles, changing rules of the game and other issues can be more important than the geology of a given country, whereas I like to say not all countries are the same nor do they act the same way. So let me quickly run through some of the countries that I think we should call attention to in Latin America. And I will do it in alphabetical order so no one's nose gets put out of shape, bent out of shape here.

And I will start with Brazil, and I think we have gotten into that a little bit this morning, but it is accurate and important to note over 30 years ago they made a bet, a large bet on offshore deep

water oil and gas exploration and production. The strategy has paid off as the country became oil self-sufficient in 2006. However, and I would like to add this to the discussion this morning, it is important to note when we talk about Brazil's oil self-sufficiency vis-à-vis the United States the difference in market size. Brazil's daily consumption is just over 2 million barrels a day. So extremely important what has happened in Brazil but I think you have to note the difference in size of market vis-à-vis the United States. So tremendously important everything they have done but I did want to make that point before I went forward.

And moving back to the success and where they, how they got to where they were or are is Petrobras has become one of two largest companies in Latin America, and certainly one of the largest companies, oil companies in the world and an increasingly dominant player in our hemisphere for oil and gas.

And I also want to reiterate the statements earlier today about the potential for Brazil. The Tupi field, 5–8 billion of barrels equivalent, as well as the Jupiter gas field and the Carioca field which they are analyzing now to determine the potential of those fields. Tupi looks like it will be the largest offshore discovery in the Americas since the Cantarell field in Mexico in 1976.

So while tremendously important for the region's energy balance, these huge discoveries have in fact caused an increasing debate in Brazil on how to move forward with increasing or additional oil and gas exploration blocks. There are a myriad of opinions and ideas within the government, but changes to the current market-friendly, risk contract bidding process do seem possible down the road, or at least some reconfiguration of the way the system is run now for concessions.

So again my point: What occurs above ground may be just as important as the huge news coming out of Brazil in terms of its discoveries and potential ascension to the ranks of one of the world's largest oil producers.

And let me also now move to Colombia. We have not really talked much about Colombia in terms of one of the nation's producing oil in the hemisphere. And I would like to also call the attention of a success that is happening in Colombia, some successful moves by the government. Faced with declining production, Colombia began a major revamp of their oil and gas sector in 2003 under President Uribe. The reorganization of government agencies in Colombia has been touted and created some of the most attractive investment terms in the region.

Investment has more than tripled since 2003, reaching almost \$2 billion in 2006. Moreover, oil production has slightly recovered in recent years to about 534,000 barrels a day. And this is effectively pushing out the timeline for Colombia's switchover to an energy importing nation. But I think it is also important to note, this is significantly still down from the 821,000 barrels a day that they peaked at in 1999.

But also I want to call attention to the efforts in Colombia as part of this government reorganization ECOPEPETROL, the national oil company. ECOPEPETROL, quite in contrary to what is going on elsewhere in the region, had an initial public offering in late 2007 that raised over \$2.8 billion for the company. And they have also

announced in September they will go to an ADR and the New York Stock Exchange.

That brings me to Mexico. And I think we have spent a good bit of time this morning again in focusing on Mexico's production. But I think the point is that Mexico's production is declining. And that is the key element to look at in terms of what is happening in Mexico. And since a peak in 2004 of 3.4 million barrels a day, Mexico's production looks like it will drop to about 2.8 million barrels a day by the end of this year. And that is largely due to the decline in the massive Cantarell field. And the fact is that Mexico's oil exports to the United States have dropped by 19 percent from June 2007 to June 2008. And, again, that is because their Cantarell field is declining by something like 35 percent.

And I think it is also important to note in Mexico the role of PEMEX, the national oil company. And I think somebody mentioned the golden goose, and that is exactly what PEMEX is in Mexico, it accounts for about 40 percent of the Federal budget and largely takes care of the Federal treasury. And that is in fact why—the issues at PEMEX are at the core of reform legislation introduced by President Calderon's government this past April and being furiously debated currently in Mexico. And it looks like there is no exact outcome yet as to how that reform proposal will be handled by Congress, what it will finally look like. And in fact it is very unclear as to the role of the private sector eventually in Mexico and the reforms that PEMEX will undergo. But it is very obvious that the evolution at PEMEX and their future role is linked into Mexico's long-term energy health.

And coming back to my point, I think that nowhere else in the hemisphere is it more emblematic than Mexico as to the role importance of above-ground issues. And, in fact, the above-ground issues in Mexico date back over 70 years.

I think we talked about the role of Trinidad and Tobago. They are our number one LNG supplier. They are a tremendous success story in how they have turned a commodity into an added value in terms of developing LNG industry in the country for export. I will leave my written testimony or statement for more on that.

Let me go through just Venezuela real quickly. And I just want to make the point that there are lots of different numbers on the table as to the production. And I will leave that in my written statement as well. But let me just say that nowhere is the intersection of politics and energy more acute than in Venezuela. President Chavez has been very clear as to the role of the new PDVSA vis-à-vis the nation's social and development agenda, as well as in terms of regional geopolitics. The "misiones" funded by PDVSA aimed at education, healthcare and basic food provision, and PetroCaribe, a bilateral effort on the part of Venezuela to offer cut-rate financial terms for oil importers across the Caribbean and Central America are but two examples of the trend for Venezuela and PDVSA in terms of domestic and regional relations and their approach to a new above-ground paradigm for oil-producing nations and national oil companies.

How Venezuela balances its tremendous below-ground potential with the above-ground issues facing its oil and gas sector will be critically important for the long-term outlook of our hemisphere.

The continued certification process of the Orinoco heavy oil belt is also important, and we should follow that over the medium to long term. If fully certified, the Orinoco would push Venezuela up to the holder of the world's largest oil reserves.

Let me make a couple quick points as to how I see the region's short-term outlook. And I think just for the sake of an analogy the best way to sort of look at it is a rollercoaster. And there are several issues causing the up and down ride of the region's energy rollercoaster: Political and economic crises, the trend in some countries to greater state control and participation in the energy sector, renegotiating energy contract terms, changes in government. This idea of an energy rollercoaster refers to the current and short-term situation facing the region. And while Mexico, Bolivia, Ecuador and Venezuela seem to be a close fit for the rollercoaster analogy in today's Latin America, the in-ground potential of each nation is significant and demands a long-term outlook and view.

So, indeed, I think the long-term outlook and view is that Latin America does not lack potential or the requisite reserves to greatly aid our entire hemisphere's energy balance. As recent discoveries in Brazil underscore, the status quo is changing. It is not just a question of the region's potential but how all countries and companies can best work in a cooperative, collaborative manner to assure long-term development and sustainability of oil and gas. Without question, the opportunities are complex, but given the potential the Latin American energy glass is at least half full over the long term.

And some final thoughts I would like to say are coming back to this discussion earlier about national oil companies and what we can do. And I would like to suggest we focus on the positives: Partnership and cooperation, not competition. There should be a shift in focus, I think, in how we work and how we work in concert, how to partner and how to find win/win opportunities. And I will give some examples that I think point to how this can be done.

In Colombia, ECOPETROL, which I noted is undergoing an important evolution, has teamed up with Shell to win a block in the U.S. Gulf of Mexico. Offshore in Colombia, ECOPETROL is teaming up with Petrobras and Exxon-Mobil to develop an offshore project in their waters. And there are myriad examples of Petrobras working in Brazil with foreign oil companies, international oil companies to develop their massive reserves.

And even in Venezuela, Chevron's partnership with PDVSA remains strong and a key for Chevron's Latin America portfolio and critical to Venezuela's desire to export natural gas.

And perhaps most stunning is the possibility for Mexico's PEMEX to move outside of Mexico for exploration and production of oil and natural gas. They have been approached by Petrobras with an offer for a percentage of a project in the U.S. Gulf of Mexico.

So again, Latin America is a region with huge needs in investment and energy and infrastructure, and importance for our United States market I think is ripe with opportunities and too critical for us not to fully engage. I think the success so far of the United States-Brazil biofuels agreement underscores the potential for cooperation under the right circumstances as well as the national oil company examples I just noted.

I would like to thank you all for your time and hope that my remarks have been useful and look forward to any questions at the end of the panel.

[The prepared statement of Jeremy Martin follows:]

PREPARED STATEMENT OF MR. JEREMY MARTIN, DIRECTOR, ENERGY PROGRAM,
INSTITUTE OF THE AMERICAS

Good morning Mr. Chairman and members of the Subcommittee. Thank you for the privilege to be with you to discuss a topic of such relevance and importance for the United States and our entire hemisphere. I am pleased to be here on behalf of the Institute of the Americas as we celebrate our 25th anniversary as one of the hemisphere's leading policy centers examining issues from energy to regional integration to economic development.

Not that we needed the affirmation, but last week's Wall Street Journal/NBC News Poll confirmed that energy is the economic issue voters say affects them the most personally. I would suggest that this is also the case across Latin America. Examples abound from Mexico to Venezuela to Argentina and in between. Suffice to say that the term "energy security" is not just a buzzword for a few select countries any more.

But for the sake of today's hearing, let me discuss what is occurring across the region in terms of its importance for the United States. Latin America is home to three of the US's largest suppliers of Petroleum: Mexico, Venezuela and Brazil and our largest source of Liquefied Natural Gas (LNG): Trinidad & Tobago. The region accounts for roughly 2.5 million barrels/day (MBD) of United States oil imports or more than 10% of our daily consumption; Mexico and Venezuela are our 3rd and 4th largest suppliers.

Latin America is a critical piece to our nation's energy supply puzzle and in my brief time this morning, I would like to offer some further insights as to oil & gas and look quickly at several of the most important producing nations in the region, their production outlook, geopolitics and future trends. In doing so, I would like to offer three main points:

- Not all countries are the same—it is important to distinguish between above ground and below ground issues;
- The region's short term outlook—pervasive uncertainty and turbulence in several key countries;
- The region's long term outlook—the glass is at least half full.

Not all countries are the same

I was asked to testify today as to the production profile and investment climate of the major oil & gas producing nations in Latin America. In order to do so, it is important to distinguish between above ground and below ground issues. That is to say, in many cases, a country's oil & gas potential, its actual oil in the ground, may be less important than what is occurring above ground in the halls of government and in the geopolitics of the day. In many cases, poor policy planning, regulatory hurdles, changing rules of the game and other issues can be more important than the geology of a given country. Or, as I like to say, not all countries are the same. Let me quickly run through, in alphabetical order, key aspects in several of the most important producer nations in Latin America.

Bolivia: The landlocked Andean nation holds the second largest natural gas reserves in the region with over 24 trillion cubic feet of proven reserves according to DOE's Energy Information Administration. The issue of natural gas and its benefits for the nation are a lightning rod issue. The Evo Morales government has taken an aggressive stance toward private investors and sought to have the national oil company, YPF, take a majority stake in the country's gas sector. These efforts have had the obvious effect on investment and have also begun to impact production. Bolivia is having trouble meeting its international natural gas supply commitments with its neighbors Brazil and Argentina, effectively forcing both to turn to LNG as a short term solution.

Brazil: Over thirty years ago, the nation made a large bet on offshore and deep water oil & gas exploration and production. The strategy has paid off as the country became oil sufficient in 2006, though it is important to note that their market is just over 2 MBD. The evolution of the national oil company Petrobras into one of the world's largest oil companies and a dominant player in our hemisphere is an important part of Brazil's oil & gas profile.

I would also like to underscore Brazil's long term potential as critical energy player in the hemisphere based upon three recent discoveries: The Tupi field, which may hold 5 billion to 8 billion barrels of oil equivalent and two additional announcements: the Jupiter gas field and Carioca field, which may approach similar quantities of natural gas and oil as that of the Tupi field. The Tupi discovery is the largest in the Americas since the 1976 discovery of the Cantarell field in Mexico and may ultimately become one of the world's largest offshore fields.

While tremendously important for the region's energy balance, these huge discoveries have caused an increasingly ferocious debate in Brazil about how to move forward with additional oil & gas exploration blocks. Opinions and ideas within the government vary, but changes to the current market-friendly risk contract bidding process do seem possible down the road. Again, what occurs above ground may be as important as the huge news of Brazil's possible ascension to the ranks of one of the world's largest producer nations.

Colombia: Faced with declining production, Colombia began a major revamp of the country's oil & gas sector in 2003. The reorganization of government agencies in Colombia has been touted as a developing success and created some of the most attractive investment terms in the region—investment has more than tripled since 2003 reaching almost \$2 billion in 2006. Moreover, oil production has slightly recovered in recent years to about 534,000 barrels/day. While this has pushed out the timeline for when Colombia might become an energy importing nation, it is significantly down from their peak production of roughly 821,000 barrels/day in 1999. Of particular note in Colombia are the efforts focused on the national oil company ECOPEPETROL, who held a domestic IPO in late 2007 that raised over \$2.8 billion. ECOPEPETROL also announced that they will create a listing in New York in September 2008. Colombia is perhaps an example of significant efforts in the above ground realm in order to stimulate and reverse severe issues and concerns below ground.

Ecuador: The country counts roughly 4.5 billion barrels of proven oil reserves, the third largest in South America and it is the fifth largest producer in the region. Those are the upsides. The downsides are that Ecuador's production has declined in recent years and since assuming office in early 2007, the Rafael Correa government has taken an aggressive stance toward renegotiating contracts with private oil companies and made for a less than attractive energy investment climate.

Mexico: The most critical issue for Mexico and the U.S. is declining production. Since a peak in 2004 of 3.4 MBD, production in Mexico will drop to about 2.8 MBD by the end of 2008; largely due to sharp decline at the massive Cantarell field. Cantarell is the world's third largest oil field but its production declined by 35% from June 2007 to June 2008. Mexico's oil exports to the United States dropped by 19% over that same time period. Meanwhile, Mexico's fuel imports have jumped from \$2.4 Billion in 2003 to \$15.8 Billion last year. And the country continues to deal with onerous fuel subsidies that will cost the government roughly \$20 Billion this year. It is no secret that Mexico's national oil company, PEMEX, is the golden goose—it provides almost 40% of the Federal budget and the company has to operate with approximately a 60% tax rate. In 2007 PEMEX revenue was \$105 Billion, taxes were \$52 Billion while salaries and operating costs were \$53 Billion. The company ran at over a \$1 Billion loss last year.

These issues are at the core of the reform legislation introduced by the Calderon government this past April and being furiously debated in Mexico today. Given Constitutional constraints, Mexico is effectively closed to private investment in oil & gas, but the country's potential in the deep waters of the Gulf of Mexico are large and the Calderon administration has taken on the challenge of reforming PEMEX. If approved, the reform measures currently being debated may help address some of PEMEX's inefficiencies, though it is unclear yet as to the role the private sector may be allowed to play. PEMEX's evolution is the linchpin to Mexico's long term energy health.

Mexico's above ground issues, dating back over 70 years, may be the most complex in the hemisphere.

Peru: Peru has the 5th largest natural gas reserves in the region and the country's Camisea project has proved a boon with tremendous benefits for the entire nation and diversification of the country's energy matrix. The LNG export component of the project will also be important for the entire region as a large portion of the natural gas has been contracted for in Mexico by the state power company. As with Colombia, Peru has made great efforts to revamp its country's oil & gas investment framework and it too now has some of the most attractive terms in Latin America. Given the strides in developing its natural gas reserves, many analysts believe that the country may be able to move to energy exporter status within a decade.

Trinidad & Tobago: Trinidad's energy evolution is a historical example of the possibilities, particularly when it comes to natural gas developments and exports. The country continues to be the number one LNG supplier to the United States and has recently announced plans for exploration blocks and tax incentives for companies to move into gas exploration in deeper waters to maintain their level of reserves and production. A recent audit of the nation's natural gas sector placed reserves at 30.8 trillion cubic feet and noted that their proved reserves from 2006 to 2007 were unchanged thus pointing to a virtual 100% reserve replacement ratio; excellent news for the country.

Venezuela: The founder of OPEC has long been a critical source of oil for the United States, and even more so with the Venezuelan government's acquisition of CITGO in the 1990's. Venezuela is the United States' fourth largest supplier of crude oil with just over 1.1 MBD according to DOE's Energy Information Administration. But, as with the case of Mexico, Venezuela's production has declined in recent years. According to OPEC's Monthly Oil Report for July, Venezuelan production in 2007 was 2.392 MBD and their production in the second quarter of 2008 was 2.343 MBD, which represents a decline in production of roughly 52,000 BD since the fourth quarter of 2007. The Venezuelan government and PDVSA assert that oil production is currently 3.15 MBD based upon an audit of PDVSA done by KPMG.

PDVSA has outlined a very aggressive new business plan that counts massive investments—more than \$77 billion according to recent presentations—and increased crude oil production to more than 5 MBD in 2012. Moreover, PDVSA has committed itself to development of the region's largest natural gas reserves, and availing itself of the opportunities and potential for LNG across the hemisphere.

Yet nowhere is the intersection of politics and energy more acute than in Venezuela. President Chavez has been very clear as to the role of the new PDVSA vis a vis the nation's social and development agenda as well as in terms of regional geopolitics. The misiones funded by PDVSA aimed at education, health care and basic food provision; and, Petrocaribe, a bilateral effort on the part of Venezuela to offer cut rate financial terms for oil importers across the Caribbean and Central America (essentially Venezuela's unilateral effort to update the San Jose Accord from the 1980's) are but two examples of the trend for Venezuela and PDVSA in terms of domestic and regional relations and their approach to a new above ground paradigm for oil producing nations and NOC's.

How Venezuela balances its tremendous below ground potential with the above ground issues facing its oil & gas sector will be critically important for the long-term outlook for the hemisphere. The continued certification process of the Orinoco heavy oil belt is also an important factor to follow over the medium to long term. If fully certified, the Orinoco reserves would push Venezuela up to the holder of the world's largest oil reserves.

The region's short term outlook

A useful analogy for several of the major producing nations in the region in the short term is that of a roller coaster. There are several issues that make up the bends and turns and up and down ride of the region's energy roller coaster.

Such as:

- Political and Economic crises;
- The trend in some countries to greater state control and participation in the energy sector, what the press has taken to calling "resource nationalism"—in effect, what it is, is an effort for countries to gain a larger slice of the proverbial pie;
- Based upon the desire to increase the government take, many countries in the region are seeking to or forcefully re-negotiating energy contract terms;
- And also there are and have been corresponding changes in Government and thus different outlooks for their country's energy sector;

I do want to make one point clear: I am using this parallel to refer to the current and short term situation facing the region. While Mexico, Bolivia, Ecuador and Venezuela seem to be a close fit for the roller coaster analogy in today's Latin America, the "in the ground" oil & gas potential of each nation is significant and demands a long term outlook and view.

The region's long term outlook

The major oil & gas producing nations of Latin America do not lack potential or the requisite reserves to greatly aid the entire hemisphere's energy balance. As recent discoveries in Brazil underscore, the status quo is changing. It is not just a question of the region's potential, but rather how all countries—and companies—can

best work in a cooperative, collaborative manner to assure the long term development and sustainability of oil & gas from the Hudson Bay to Tierra del Fuego.

Without question the opportunities are complex, but given the potential, the Latin American energy glass is at least half full over the long term.

Final thoughts

Focus on the positives:

- Partnership and cooperation not competition—there has been an abundance of press coverage over the swing to a more nationalistic posture across the region, and it is a valid point and concerning vis a vis short term energy outlook, but over the long term it does not completely eliminate the role of the private sector.

I would suggest that this is particularly true with regards to the role of National Oil Companies or NOC's and based upon the increasing role of NOC's, there should be a shift in the focus to how to work in concert, how to partner and how to find win-win opportunities.

There are examples such as ECOPETROL and Shell teaming up to win a block in the US Gulf of Mexico; Petrobras, ExxonMobil and ECOPETROL developing an offshore project in Colombia; as well as the numerous partnerships between private firms and Petrobras in Brazil; and even in Venezuela where Chevron's partnership with PDVSA remains strong and a key for Chevron's Latin America portfolio and critical to Venezuela's desire to export natural gas.

And perhaps most stunning is the possibility for PEMEX to move outside of Mexico for additional investment in oil & gas exploration and production; they have been approached by Brazil's Petrobras with an offer for a small percentage of a project in the U.S. Gulf of Mexico.

Latin America is in need of massive investments in energy and infrastructure and long term stability for attracting large scale investment in energy is crucial. The region's huge needs and importance for the US market are ripe with opportunities.

Moreover, the region is too critical for the US not to fully engage it, particularly the largest oil & gas producing nations. And the success of the US-Brazil biofuels agreement underscores the potential for cooperation under the right circumstances.

Thank you for your time. I hope that my remarks have been useful and I look forward to any questions that you might have.

Mr. PAYNE [presiding]. Thank you very much. And now we will hear from the other Mr. James L. Martin. Thank you.

STATEMENT OF MR. JAMES L. MARTIN, CHAIRMAN, NATIONAL DEFENSE COUNCIL FOUNDATION

Mr. JAMES MARTIN. Thank you, Mr. Chairman. And I am here as the newly elected chairman of the National Defense Council Foundation which I just took over. I am more readily known as the head of a senior citizens group, the 60-Plus Association. But I am wearing my foundation hat today because, quite frankly, I think the energy crisis we are facing now has shifted from an economic issue to a national defense issue. And I want to thank you for holding this hearing, very important hearing. As the ranking member mentioned earlier, it is probably the most important hearing I have covered. And for the record I have some comments. Let me just paraphrase those.

Looking around this room I recall I came here in 1962 as a newspaper reporter covering Congress. Could not help but notice Dante Fascell's picture up there; I used to interview him and Clem Zablocki and others. But and I have covered many hearings. And, yes, I covered that tragic moment in our Nation's history when we lost a President in the prime of his life. But I have also covered many hearings and I have great respect for this body and what you do. I was almost tempted to say that you are vastly underpaid and overworked, but I know that would be a minority view probably around the country, but I do believe that, quite frankly.

I have got to tell you this is, this dependence on foreign sources of oil from unstable countries, you know, Mr. Pickens I agree with him, we cannot drill our way out but drill we must. There are other solutions, of course, whether it is wind and solar, coal—I grew up in the mountains of Kentucky where King Coal is; it is clean now, much, much cleaner than it was 50 years ago—nuclear and others.

But let me just give you a little bit more historical perspective. Nineteen seventy-three Arab oil embargo, we all remember that. A couple of your colleagues named Gerry Ford and John Rhodes appointed another one of your colleagues, Congressman Roger Zion from Indiana as the Republican Task Force chairman on Energy. I mention that because Congressman Zion, age 87, hale and hardy, he is our honorary chairman of 60-Plus. But I remember Roger used to always say to me, Jim, remember too what President Carter said when he took over, he said we are at 37 percent dependency on foreign sources, my goal is to see it does not rise another percentile. Now, if Mr. Boone Pickens is right and it is near 70 percent and growing, that is danger, that is a clear and present danger to our country.

And whether you are talking about the \$700 billion that goes out and all these jobs, that is an economic issue. But again I stress the fact that the national security is at stake here. I think it is time to drill. The public demands it. Sixty percent is now favoring it. And by the way, when I was wearing my 60-Plus Association hat 3 years ago we were ahead of the curve. We mailed a letter to our seniors, 150,000 of them throughout Florida, my home state, some off the coast of New Jersey, some of our seniors in New Jersey. I have testified in your great state on the need to move ahead, and also here in Virginia where I now live. We were stunned when over 6 percent responded to our message. In direct mail 1 to 2 percent is basically a pretty good return, it was over 6.6 percent. We had 9,750 people write in and say let us get on with it. And then by a 60:40 ratio they favored going ahead and drilling.

Then I mentioned to them that we are not talking about off the coast of Ft. Lauderdale where I grew up. Mr. Klein was here earlier. We are not talking about an ugly oil rig a few yards off the coast. Someone said, "Well, Jim. I said it would get so far out you cannot see it." They said, "Well, Jim, at your age you cannot see very far anyway." I said I would take issue with that. But the fact is you can put on binoculars; you cannot see more than about—because of the curvature of the Earth—more than about 10 or 12 miles anyway. And we are talking about 50 miles or more out. So when I told them that, our seniors said, "Well, why are we not doing it?"

And then we mentioned Cuba. And that has been mentioned here today. I will not even go about the business of whether China is helping finance it or not, I think that they are helping explore. But just the fact that Cuba, we have this great treaty with Cuba off of our coast that 90 mile area, down the middle, you stay on your side, we will stay on ours. The Cubans, forget whether China is helping or not, they are right now actively exploring for resources there. I told some of my senior citizens that, some of my military retirees especially, and they say, "Well that is nice, why are we not doing that?"

I said, "Well, why do you not ask your Congressperson about that?" The truth of the matter is they are not happy about it because they say what a quaint or what a novel approach, developing their own resources.

I would point out too that often it is mentioned that it takes 10 years to get anything to market. Okay. Let us use that as the barometer. I would recall that in 1995 President Clinton vetoed drilling in the ANWR. Well, that was 13 years ago. If my math is right that is 3 years of production at 1 million barrels of day; that is an awful lot of oil.

I will conclude in this manner: I think that those who are wearing the environmental mantle they have to get together with those who are charged with energy production, we have got to find common ground here. Quite frankly, I think we do because whether we are talking \$4.00 a gallon, we could be talking \$10 a gallon or more, the fact is our national security I believe is at stake.

One further point, in this town, I know you do not like labels but in this town the Washington Times is considered a conservative paper, the Washington Post a liberal paper. But it was not the Washington Times that recently said, "Let us have a vote at least on drilling." That was the Washington Post. And a columnist there named Robert Samuelson at the Post, syndicated columnist, I am not even going to quote his 800-word editorial, but the headline on it, two words, sums it up, "Start drilling."

I see my time is up. I thank you most sincerely for yours.
[The prepared statement of James L. Martin follows:]

PREPARED STATEMENT OF MR. JAMES L. MARTIN, CHAIRMAN, NATIONAL DEFENSE
COUNCIL FOUNDATION

My name is Jim Martin and I am here today as the newly elected Chairman of the National Defense Council Foundation. I am more readily identified as the 15-year Chairman of the 60 Plus Association, a senior group that is also dedicated to providing energy security to all.

The Foundation has been ahead of the curve of this dilemma we find ourselves in today. I refer to our website www.ndcf.org for numerous studies on the energy crisis.

NDCF commends you for convening this important hearing focusing on the lack of adequate energy supplies and the resulting high energy costs. NDCF respects the law of supply and demand.

This nation has the wherewithal to fulfill energy supply right here where we live . . . but we only seem to be willing to let the demand increase.

Gasoline to drive our cars, heating oil to keep our homes warm, electricity to power the stores we shop in . . . everything is on the increase, cost-wise.

America's rising and I might add dangerous oil import dependence imposes drastically on the domestic economy. The hidden cost of imported oil lies within high defense expenditures, loss of domestic investment, and cost of supply disruptions. Defense expenditures to protect foreign oil have been high since 1945 when President Roosevelt agreed to provide Saudi Arabia security in exchange for access to its oil.

It was clearly understood by the Second World War when, on Valentine's Day in 1945, President Franklin Roosevelt met with King Ibn Saud aboard the USS Quincy and reached an agreement whereby the U.S. would guarantee Saudi Arabia's security in exchange for access to its oil. This commitment has been reaffirmed by every President since.

As we purchase our oil from other states, we help build their strength and prosperity while we lose jobs domestically. Funneling money into states like Venezuela only helps to "put meaning" and "monetary strength" behind the words of leader Hugo Chavez, as former Special Forces Major F. Andy Messing pointed out in his 2006 op-ed "Showdown with Chavez?" Major Messing preceded me as Chairman of NDCF and is currently a Board Member.

As of 2006, NDCF determined that the direct loss of economic activity arising from U.S. oil import dependence amounted to \$117.4 billion. Importing oil eliminates more than 2.4 million American jobs. Some portion of every dollar we spend on foreign oil lands in the hands of individuals that wish to do us harm. Oil money funds groups like Hamas, Hezbollah, and Al Qaeda.

We have the resources to become energy independent. It will not be easy, but it can be done. If we do not, America will see the hemorrhage of cash for oil imports grow and its enemies strengthened.

At the NDCF, we estimate that within five years, oil imports could be reduced by 40 percent. Within 15 years, they could be reduced by 75 percent, and within 25 years, oil imports could be eliminated entirely. Moreover, these goals can be met without discovering a technological breakthrough. It is first necessary to dispel one of the most persistent myths about our energy dependence: the United States lacks energy resources.

According to the U.S. Geological Survey (USGS), the United States has almost 175 billion barrels of oil reserves. These include 21.9 billion barrels of "proved oil reserves"—oil that has been discovered and can be produced right now—and more than 150 billion barrels of "undiscovered" reserves.

According to the U.S. Department of Energy, the United States has some 320,222 trillion cubic feet of natural gas in the form of methane hydrates, the equivalent of 51.1 trillion barrels of oil. The bulk of our undeveloped energy resources are found on federal lands or federally controlled areas offshore. Since the 1970s these areas have increasingly become foreclosed to natural resource exploration and development.

During the 1973 Arab oil embargo, two of your previous colleagues, Gerald R. Ford of Michigan and John J. Rhodes of Arizona appointed Indiana Congressman Roger Zion to lead the House Republican Task Force on Energy. Today, Roger is Honorary Chairman of the 60 Plus Association at a hale and hearty 87 years young; he's still fired-up about foreign energy, and for good reason. President Jimmy Carter once cautioned when oil imports were at 37%, that they must not rise another point. Today, it's over 70%! Where do we stop this rising dangerous dependence on foreign oil?

It is clear that America's continuing reliance on imported oil is imposing an enormous financial burden on the nation's economy—a burden that is a threat to the nation's economic and more ominously, its national security. Eliminating this dangerous dependence must be an urgent national priority.

President George W. Bush made his intentions very clear in a speech at the White House on June 18 of this year when he announced he was lifting the executive ban from the 1980's that prohibited drilling in the Outer Continental Shelf (OCS). He had challenged Congress about a month ago to lift its own ban and promised he would do the same. As the President said in the Rose Garden, a month has gone by and Congress has been silent about drilling. The President has made his position on OCS drilling clear and it is time for Congress to do the same. If Congress does not respond, there's going to be not only pain at the pump but pain at the polls come November and that's bi-partisan pain depending on where each Member comes down on this issue.

Here's why I make that assertion. In 2005, the 60 Plus Association mailed a letter to 150,000 seniors in Florida, Virginia, and New Jersey. We asked them to send a postcard to the Minerals Management Service urging exploration of the OCS. Our 60 Plus seniors responded to this request at a 6.5% rate, producing 9,750 letters and postcards to MMS. In the direct mail world, a 1 to 2% return rate is considered a successful campaign; I daresay 6.5% is nothing short of phenomenal! While 60% favored exploration, that number jumped to an amazing 90% for two reasons: 1) When told that oil rigs would be so far out that someone with binoculars could not see them and 2) More powerfully, these seniors were incensed when told that Communist Cuba, with aid from Communist China, was exploring for oil some 40–60 miles off the coast of Florida but Congress will not allow American exploration of the OCS!

Were these retired veterans ticked off? You bet. But they were further infuriated when learning that Venezuela was selling gas for 20 cents a gallon. How can they? Two reasons: 1., Venezuela develops their own resources—what a quaint approach—bringing to market their own energy and 2., Hugo Chavez seized a lot of American energy resources, billions of dollars worth in order to heavily subsidize gas and oil.

And now, in 2008, polls suggest that 57% of the American public supports OCS drilling. Many criticisms to this percentage were that the majority of supporters must not be representative of states in which drilling would take place. Contrary to that perception, an even greater percent of residents in my home state of Florida

supported drilling at an amazing 61%. And the Miami Herald came up with the same results.

Today the national average for a gallon of gas is \$3.96. That's an increase of \$1.63 per gallon since Democrats took the majority. Republicans today chide their Democrat peers just as Democrats did some years back when the GOP held the reigns of Congress. But enough of that! We must move away from political grandstanding.

But this is very real . . . and very telling: Senator Barack Obama and his supporters claim that drilling would not benefit the US for another 10 years. Well, as you all know, President Clinton decided to ban drilling 13 years ago with the same comment, results will take 10 years. If he had allowed drilling, let's concede it takes 10 years, then we would now have three years of production; these resources in 2005—right as prices began to skyrocket and the numbers talked about are 1 million barrels of oil per day—that's 365 million barrels a year. For 3 years, that's 1 billion, 95 million barrels of oil. I defy you to tell me that wouldn't make a difference. As columnist Robert J. Samuelson recently wrote in the Washington Post, "We're almost powerless to influence prices today because we didn't take sensible actions 10 years ago."

It is true that drilling is not the only solution to this problem we face. Renewable resources such as ethanol, biomass, and geothermal technologies are important as well. However, we must stop gasping when we hear the term "fossil fuels" because fossil fuels will be one of the leading sources of energy for the next 30–50 years. Nuclear power is another great route. France currently gets 80% of its energy from nuclear plants. Our military uses nuclear energy, and has done so for 60 years without incident.

In the end, here's what I think:

As Chairman of both the National Defense Council Foundation and the 60 Plus Association, I'm certain that seniors and our proud military veterans have long memories. We fondly recall cheap gas and boundless energy supplies. I, for one, am proud to be the son of a Kentucky coal miner and vividly recollect the sight and smell of my dad's carbide light many mornings as he left before dawn for the coal mine. His industry way back then is nearly unrecognizable today. Now, we have sound technologies that ensure energy exploration and production with diminished environmental risk. The \$50,000 question is: do we have the will to roll up our sleeves and do it?

1. We need all forms of domestic energy that we can produce and this includes coal, natural gas, nuclear and renewables such as wind and solar.

2. Any limits to domestic exploration (whether offshore, drilling in the Arctic National Wildlife Refuge, etc) at a time when international supplies are so uncertain is not good for this country. We must wean ourselves from our dangerous dependence on oil supplies from unstable foreign sources.

3. In re-assessing this country's energy policies, NDCF with its proud 30 year history and with our supporters veterans of military service, now considers this not only an economic issue but a national security issue following 9/11 and the war we're engaged in.

4. Finally, I believe the environmental movement simply cannot continue opposing domestic energy production at every opportunity. The Santa Barbara oil spill of 40 years ago simply will not occur in today's advanced technology. Good old Mother Nature is more at fault with oil oozing up from the ocean floor. We must bridge this divide between those who claim the environmental mantle and those who are responsible for providing our energy needs.

We need more domestic energy, more sources of domestic energy and senior citizens as well as our great men and women of the military and all Americans will benefit. On behalf of NDCF, I strongly support efforts to ensure reasonable energy prices through access to our nation's abundant offshore oil and natural gas resources in all areas of the U.S. Outer Continental Shelf (OCS).

I thank the President for lifting the executive ban on drilling in the OCS. We couldn't agree more. This is not just an economic issue. This has become an issue of national defense. I repeat, those who do not support drilling, Republicans and Democrats alike, will feel political pain at the polls come November, in this old Marine's opinion.

Thank you again for this important hearing.

Mr. PAYNE. Well, thank you very much. I will allow the ranking member to open with questions at this time. Mr. Burton.

Mr. BURTON. Thank you, Mr. Chairman. I am sorry, Dr. Mendelson, I did not catch all of yours, I had a phone call I had to go out to. But your feeling, I presume, is that we ought to at

least move toward some form of energy independence, and if not energy independence at least where we do not have to rely quite so much on foreign oil resources and energy resources; is that right?

Ms. MENDELSON FORMAN. That is correct, sir. And I think in your statement earlier I think I certainly share your view and members of the committee that we need a diversified base of energy, we need all sources of energy in order to ensure that in the future the United States can be secure. And the most important thing is our security has always been tied to the Western Hemisphere. And I think we are moving to a moment of great diversity in the Western Hemisphere, what I would call multipolarity to be sort of academic about it, where there are many centers of power with many types of resources.

I think the good news for our security is that there are multiple sources of energy that can be used so that the goal now is to have greater energy cooperation among our states, as you have emphasized and other members have emphasized, to emulate good examples like the case of Brazil where they have been able to develop it, but recognize that we are still going to be dependent on fossil fuels even with a large supply of ethanol. The challenge will be how we get these sources to us in a timely fashion.

I think our greatest interest also, just to respond to you, is with the oil poor countries of the region. We do not want these countries to be forever dependent on one source, whether it is United States or whether it is Venezuela, we want them to become fully independent with the biomass resources, the solar and the eolic energy that can be used. And I think our policies should clearly be able to support in a faster matter the transformation of sugar ethanol in the Caribbean, we should be taking advantage of solar so that countries do not need to join PetroCaribe, they can make, develop their own energy sources.

Mr. BURTON. Mr. Martin, I was looking at your statement as you made it and I noted that Venezuela's production has gone down, there are several countries whose production have gone down from whom we buy oil, which is another indication that there needs to be more production whether it is down there or here. And since the other Mr. Martin pointed out that this is not only an economic issue but a national security issue do you not think or do you not—and I will ask this of all of you—do you not think that from a security standpoint as well as an economic standpoint we should not be completely or as dependent on foreign oil as we have been and should we not be doing more drilling here off the continental shelf or wherever so we can move toward, at least toward energy independence while we look at these other sources of energy and try to transition to those? So I will start with you, Mr. Martin.

Mr. JEREMY MARTIN. Absolutely, yes sir. I would agree with what I think has been made, the point that has been made several times that no options should be off the table. I think this is a problem, today's oil crisis, energy crisis is a problem. It has taken 30 years. It is something that cannot be dealt with with a silver bullet. All options should be on the table. So to answer the question, offshore drilling should be one of those options on the table.

I think one thing I would also like to suggest is we be careful as we talk about energy independence. I think as I noted, the difference between Brazil and the United States is stark in terms of size of markets. I think we sometimes fall prey to this idea that we can be energy independent. Brazil is not energy independent, they are oil self-sufficient. So I think I would like to distinguish between those points. But, yes, all options should be on the table. Off-shore drilling is an important option. Consumption or reduction of consumption is an important option. We could go through the list and we have already, so I will stop there.

Mr. BURTON. Mr. Martin?

Mr. JAMES MARTIN. Yes, thank you.

Mr. BURTON. Turn your mike on, please.

Mr. JAMES MARTIN. Oh, I am sorry. Thank you, Congressman.

Clearly we need to wean ourselves away from this dependence. The fact is let us take Iran. Everybody is talking about Iran now. And I was at a meeting the other day and someone said, "Well, what if we"—meaning the United States—"bombed Iran?" I said, "Well, I don't think we are going there but Israel might do that. And then what might happen?" I know it was mentioned here earlier, I think Iran might sink a ship or two in the Strait of Hormuz and then we have big problems.

And there is no question we have got to find more oil. And again I want to emphasize, all the others have to be taken into account. But oil right now, fossil fuels are here for the next 20, 30, 40 years until we get these other developments. But I would point out you mentioned Brazil here. They now are importing—or they are exporting oil. I got mixed up there for a minute because I made a note to myself. Indonesia, where I lived for almost 3 years at one point, Indonesia used to export oil. Now they are leaving OPEC; why? They are now starting to import oil.

So there are problems around the globe. We need to start I think developing. We used to say carefully explore for oil. I notice everyone nowadays because of the shift here now they talk about drilling. That used to be a bad word to use. Now they say drill not just explore for oil. We have got to get on with this task.

Mr. BURTON. Mr. Chairman, let me just say I have seen, I have been to a lot of hearings, there have been almost no hearings where everybody agreed. I have not seen any of the panelists today say that we should not do further oil exploration off the continental shelf and at the same time move toward other forms of energy and move toward not being so reliant on foreign energy sources.

I just hope you are one of the leaders in the Black Caucus and one of the leaders in the Democratic Caucus, I hope you will look at Mr. Abercrombie's and Mr. Peterson's compromise bill that has bipartisan support. We took ANWR off the table because that was one of the controversial issues. Even though I am for it, I understand that we have to get the votes necessary to pass a bill, therefore the other forms of exploration. There is a lot of compromise in that bill and I would hope that the Democratic Caucus and the Democratic leadership would look at it. And I am going to talk to our Republican leadership. Because this is an issue, as Mr. Martin, both Mr. Martins and Ms. Mendelson said, is a national security issue as well as an economic issue. And if we do not get on with

this before too long I am really worried about not only the economic impact but also the security impact this is going to have on the United States.

With that I yield back the balance of my time.

Mr. PAYNE. Thank you very much.

Let me ask a question. I have heard for those of us who feel that at this time drilling at this particular time should not be the new policy, there has been discussion about the fact that there are many, what am I thinking of a word, sort of areas where drilling can happen that licenses that the companies are not drilling with now. Does anyone know about that issue? And if so, why are not the oil companies maximizing the licenses that they have already before talking about opening up new areas?

Mr. JEREMY MARTIN. Unfortunately I will pass since I focus on Latin America energy policies. So I will pass for that reason.

Mr. JAMES MARTIN. I would take a crack at it. I think if there was a lot of oil there to be brought to market they would be doing it at the price of oil today. I do not think there is a lot of oil there that is available. Certainly on the short term there is not. And it has taken 4 to 5 years to get through the regulatory malaise that they face to develop some of those lands.

Mr. BURTON. Mr. Chairman, would you yield briefly?

Mr. PAYNE. Sure.

Mr. BURTON. We have had a number of meetings on this issue with experts from the industry. And they say that if the geological and studies show that there is oil there and the test wells show there is oil there they will drill. It costs about \$2 billion for each one of those platforms to be built, and so they have to make sure it is economically feasible before they will start that kind of drilling. So if there is oil there, as Mr. Martin just said, they want to get it. And they just feel like there are not enough areas that are being explored right now where they can invest that kind of money.

Mr. PAYNE. Okay. Also there is, and it is up in North America, Canada, so that may even be further away, but there has been the talk about shale or the tremendous amount of oil that can be extracted out of stone or shale that is up there. And I wonder if any of you have any views on that process? There is now developing a, you know, controversy about the, I guess the amount of negative impact on the environment that this process does. And I do not know if any of you have any expertise in that area either?

Mr. JEREMY MARTIN. I would just say, and I also bring into that discussion the oil sands, the tar sands in Canada. And I think, and again I am not as conversant on Canada as perhaps I should be, but the fact is the price of oil, where it has been and how it looks like it will stay there, enables these kinds of projects, these kinds of extremely capital-intensive, long-term projects to actually be feasible in economic terms. So I would add that.

And I would also add there is the issue of the carbon footprint that has to be looked at as those kinds of projects are brought forward. And I think that is sort of the dilemma that is going on in Canada when it comes to the oil sand development.

Mr. JEREMY MARTIN. I would just concur that the pricing of these types of extractions, you know, get higher and higher and, of course, as the price of oil gets higher and higher it makes it profit-

able. But I think there are other alternatives short of that, for example electric to use cars is a far more efficient way, and perhaps the infrastructure much less expensive in the short run.

Mr. PAYNE. Great. Well, I am very glad to hear someone talk about the fact that, you know, perhaps we need to really invest seriously in alternatives. I am one who does not believe that you can drill out of it either. I mean we can have drilling all up the Atlantic coast and finding nothing or spills coming up on our Jersey shores and Florida shores. Of course Indiana does not have any shore so they do not have to worry about it. But, you know, there is a question about drilling out of it. And so I think that some of these alternatives need to be explored.

In Latin America, maybe some of you might want to tackle this one, there is this whole question of oil palm that USAID is kind of doing a lot of potentially investing in. And in Colombia though, particularly the Afro-Colombians feel that this, there is a concern that has been raised about the cultivation of African oil palm. And I wonder if any of you are familiar with the controversy and what do you think that the U.S. should do before getting into a great development of oil palm cultivation and the impact that it might have on the area?

Ms. MENDELSON FORMAN. It is a very good issue. I think that initially people looked at the oil palm as a very good alternative source of vegetable-based oil that could be used for diesel production. The problem as I understand it is that it uses a large amount of water and it affects the water table. And that is one of the reasons that even a country like Colombia, which is where the African palm industry is most developed, is actually switching toward *Jatropha* which is much less water intensive but produces the same kind of seed oil crop. So that is one issue.

Honduras, another country by the way that did African palm as a source of biodiesel, has also converted. They are actually in some cases using the remains of fish from their tilapia industry to create an oil-based product which is also being used. So there is tremendous creativity.

But, yes, African palm is a very water-intensive crop and it has an effect that could eventually affect the environment and other growing cycles.

Mr. PAYNE. Do any of you believe that alternatives to growing cocoa—not cocoa but coca with the commodities prices as high as they are and with the need for biofuels do you think that we are at the stage where government in Peru, for example, or Bolivia can seriously introduce an alternative to the crop there or whether the amount of money made off of coca is too high to replace it with these alternative crops?

Ms. MENDELSON FORMAN. Could I just respond to that quickly? I am sure my colleagues have some comments as well.

But 2 years ago a colleague of mine, Professor Norman Daily, and I wrote an article precisely recommending this, it was in the Washington Times, suggesting that as a crop alternative we look at renewable energies as a beginning of a replacement for crop substitution. Now, it never got a lot of traction though a lot of people think it is an interesting idea. It certainly cannot compete, as you suggest, Mr. Chairman, with the price that peasants get to cocaine,

particularly because when you grow it planes come in and pull it out.

But in the course of the need that you all have described of energy, if we could begin a viable crop substitution using alternative fuels, one, you could give marketable crops to peasants who are growing the cocaine, and they would have not only a domestic market but alternatively they would have a larger market as well because everybody needs fuel.

So I think it is a valid idea and it needs to be explored certainly with our development agency and our agricultural experts to see how we start it.

Mr. JEREMY MARTIN. I would concur and I would emphasize a point I made in my testimony about the success of Trinidad and Tobago when it came to natural gas and the concept of value added, instead of simply exporting a raw commodity they added the value and export the liquified natural gas, as well as developing a massive industry in Trinidad and Tobago for the byproducts of natural gas.

So I think the idea of value added from a commodity is extremely important. And I would tie that to what my colleague just said. Local production for domestic consumption which can offset some of the importation would also drive some value added and hopefully drive some employment which is a critical issue and which, quite frankly, drives the populism in many of the countries, especially along the Andes.

Mr. PAYNE. That is a very good point. That is something that I think has been lacking in developing countries, the value added process. They will take dirt out with the ore in it and take it to some European country or the United States and do the extractive processes.

I guess just almost finally since I am not sure if I want to make this my last question or not but I probably will. Just used to be chairman, right, when I was down there and look at what happened in Venezuela. But I have a question about Venezuela. You know, with the U.S. you know they do not like the government there. However, what I have heard is that Chavez sort of discovered that there was a lot of profit in oil. I guess it was not as great then as it was now but it was already doing okay. But the previous government that, you know, we had good, great relations with did very little with the profits to assist the people.

Now, I wonder, you know, if a person from what I have read about Chavez is that they have opened some health clinics, brought a lot of Cuban doctors, opened up schools and so forth using some of the petromoney for those purposes. Do you have any idea why their government would not do that when it seemed like a real populist kind of thing to get the people behind you and whether the policies that he is starting with these social agencies is gaining support for his leadership in the country?

Mr. JEREMY MARTIN. Obviously this is a sensitive type question and I will, so I will approach it as same. I would like to suggest not so much how or why the previous government did not do this or certain things. But I would say the reason President Chavez was elected and has been reelected and stays in power is because of some of the faults and shortcomings of those previous governments.

And as we see in other countries around the region, the election of some of these what we are calling populist leaders is in fact because of shortcomings and failings of previous administrations. And so, you know, these things do not happen in a vacuum, they do not happen overnight. And Evo Morales in Bolivia and Hugo Chavez in Venezuela their ascension to power has been because of, as you noted, some of these issues.

There have been hundreds of millions of dollars spent by the Chavez government. And I will not pass judgment on the efficacy of those expenditures. But I think it is very interesting to look at what has happened in Venezuela and PDVSA, the national oil company, because it is being set up as a new paradigm for how a national oil company should operate. And that is to say that President Chavez uses PDVSA to do everything. There is literally nothing that occurs in Venezuela that PDVSA is not involved with. And that, we could have an entire—well, you had a hearing on Venezuela. So we could have three more hearings to debate the upsides and the downsides of how PDVSA is used. But the bottom line is that is how his government has chosen to use it.

Now, there was a referendum last December that cast some doubt on his continued popularity. But I think this is a choice the Venezuelans have made in electing Hugo Chavez. He is their President. It remains to be seen in the long term the efficacy of this kind of shifting paradigm for the national oil company because at the end of the day it is a national oil company and it does need to explore, produce and refine petroleum, gas, etc. So thank you.

Mr. PAYNE. Are they doing exploration? Are they putting money into, you know, new equipment or is it just going along?

Mr. JEREMY MARTIN. No, they are. And I think there was reference to the presentation. And there has been a tremendous amount of investment. There continues to be a tremendous amount of investment. There have been some hiccups that have been noted by the departure of a couple of international oil companies. But there have been in recent months announcements of new deals being signed. And so I think, you know, the short term is, as I noted, a rollercoaster, it is up and down. And I think it is pervasive uncertainty. But I think we cannot discard the long-term potential, especially as they move forward certifying the Orinoco reserve which is going to be potentially tremendous for our energy balance in this hemisphere.

Mr. PAYNE. And we love Mexico, they have the same kind of national oil company, are they building schools and opening up, you know, health centers and are they putting the money into the people? Because, you know, they must be doing the right thing since the United States is, you know, we love Mexico and we hate Venezuela, so I guess the leader is doing the right job.

Ms. MENDELSON FORMAN. I would just make one comment. Forty percent of the budget of Mexico comes from the income of PEMEX, the Mexican oil company. And I think that the problems that Mexico faces down the road in the short and medium term, given the drying up of the Cantarell field, is a very serious problem. Also, Mexico needs to invest more in its oil industry. And as Secretary Sullivan said, there are impediments politically because of the Mexican constitution and obstacles that prevent the introduction of

foreign companies into the country for exploration. So, frankly, that is an issue.

Mexico has, like other countries in the America had, social support programs to help its poor. And we certainly know that they are effective. But they could be, you know, people could always invest more. The bigger challenge, to rephrase some of your issues, Mr. Chairman, is what do you do in the medium- to long-run if you do not have further exploration and production, given that we are starting now and we are looking at a 10-year process? I think that is what worries many of us.

Mr. PAYNE. Yes, that is a real problem. I guess some of the places that really have a tremendous amount of funds, like Dubai, they, you know, they are making plans for when they run out. But of course that is really kind of an anomaly with a small population, fantastic amount of profits and so forth, but Mexico is a larger population. I just, though, have been kind of shocked that with the great spike in the oil price, although it has only been a year or so, we have not seen a tremendous improvement in the social. The only thing I heard about Mexico is that I think we are going to buy them a lot of guns and tanks.

What is that program, yeah, that you are supporting that Mexico.

Mr. JEREMY MARTIN. Mr. Chairman, if I could make a couple follow-ups to that.

Mr. PAYNE. Yes.

Mr. JEREMY MARTIN. Because I think you are on to something.

Mr. PAYNE. Oh yes, go ahead.

Mr. JEREMY MARTIN. Let me give you a couple of numbers, please, sir. Mexico as noted, PEMEX, the national oil company has a tremendous tax burden. It cannot operate as a normal company would and it is operating at a net loss.

And also, at the Federal level you have \$20 billion this year that will be spent by the Federal Government on fuel subsidies that is to maintain their price at the pump below market. So, you know, you have the fact that PEMEX is being sapped of any kind of extra resources to do what it should be doing as an oil company and then you turn to the Federal treasury you have about \$20 billion this year being rediverted to basically subsidize fuel at the pump.

So these issues and the fact that their main field of Cantarell is declining, you mix all this stuff up and, you know, the perfect storm, the rollercoaster, choose your metaphor or analogy, that is why you do not see necessarily the returns on the price of oil.

Mr. BURTON. Would you yield, Mr. Chairman?

Mr. PAYNE. Certainly. Sure.

Mr. BURTON. I was looking through my notes here. I think you, Mr. Martin, testified that the production in Venezuela and Mexico has dropped. I think Mexico—or Venezuela is down 155,000 barrels a day. Is that right? I cannot find my notes here. But when a government nationalizes the industry generally the success of the industry starts to wane and the production of the industry starts to fail.

And I think that one of the reasons why Venezuela's production has gone down is not necessarily because the resources are not there; it is because the government cannot run an oil industry as

efficiently as the private sector can. And I think the same thing is true in Mexico. I do not know if you want to comment on that or not, but I appreciate you yielding to me, Mr. Chairman.

Mr. PAYNE. Sure. Go right ahead.

Mr. JEREMY MARTIN. Let me just say, sir, in the abstract, absolutely I agree that the private sector can be much more efficient at the oil business than a state-run enterprise. But I think what we need to get to is one of the points I made, and that is not all countries are the same, nor do they act the same way. And I think we need to look at how this happens. Well, we can get into the myriad details, but the fact is that each case is very, very unique.

Mr. PAYNE. Yes?

Mr. JAMES MARTIN. I would like to comment there on President Calderon in Mexico, of course, and I am quoting from Chairman Engel's earlier remarks which I agree with here, he said that he is offering some reforms to the state-owned oil company and he is trying to induce foreign and private companies to come in and help out the state-owned oil company to offset this lower production.

On the other hand, in Venezuela, while it is working right now, quite frankly Mr. Chavez kicked out some of the foreign elements there. And as Chairman Engel says here, they are starting to flee, other countries do not want to go in there now, whether it is the United States or others. And I think, I cannot remember the oil company, it might have been big, bad Exxon that was thrown out of there, everybody says a lot of their infrastructure. And the truth is I think that sums it up. In Mexico's case they are saying come on in and help out. In Venezuela's case they are looking around and saying I do not want to go there because they grabbed everything.

Mr. PAYNE. Well, this whole oil business is really something that we are definitely going to have to look at. You look at a place like Sudan where you have PetroChina that is run by the government. I do not know if they hire private people to run their government, I mean it is government run, and they are pumping oil everywhere they can. And so and even it seems as though, and I do not know how the lease companies work but they are kind of owned by, you know, some families, not necessarily shares on the stock exchange, you know, from what they tell me in Dubai or Saudi Arabia. So this whole industry I guess I say each country is different, much of it seems to be the same, though but I guess these other places hire and Exxon to come in to run it even though they get the money. Do you want to respond, Mr. Martin?

Mr. JEREMY MARTIN. Yes, if you do not mind, sir, I would like to add a little something I think could be useful in terms of an example from Mexico. I think perhaps there is a misperception among the Mexican populace about privatizing PEMEX which is, quite frankly, not what President Calderon is suggesting. He is in fact suggesting through his reforms to make it a more efficient and a much more agile company. And one of the arguments is that, you know, this is the national oil company we cannot have any foreigners. But point of fact, Schlumberger and a slew of other private oilfield services companies are winning jobs left and right to provide services to PEMEX.

So the fact is that there are several private companies working in Mexico for the national oil company in a service capacity. Where you start to see differentiation, and I think this gets to the point you were just making, is in terms of the going off of the risk contract. And this is where the international oil companies find Mexico, the reform legislation coming up a short, because it does not suggest, as is the case in Brazil, concessions or terms for offshore or blocks that would allow for risk contracts which an international oil company is seeking out. So I think, and I may be a little bit convoluted in my statement here, but there are a lot of different points along the chain. Oilfield services companies have a role to play, the international oil companies have a role to play and, obviously, the national oil companies have a role to play. And I think, you know, we need to look at all of those in concert and see how they all interact.

Mr. BURTON. If the gentleman would yield?

Mr. PAYNE. Absolutely.

Mr. BURTON. This is not related to our panel. But I would just like to say you mentioned in your comments that you were concerned about oil rigs off the east coast that might pollute the beaches of your state. In the last 5, 6, 7 years even with Katrina and all there has not been one drop of oil that has been spilled from the offshore drilling. And yet just last week in the Mississippi River, or 2 weeks ago, a tanker that was going there split in two and oil went everywhere.

The main threat to environmental problems as far as oil is concerned and pollution is concerned right now is the tankers bringing oil in from other parts of the world. When you have a huge storm at sea those tankers have a tendency to either founder or break up. Whereas the oil rigs even in Katrina, as bad as it was, did not spill one drip of oil, drop of oil. I just wanted to mention that. Thank you.

Mr. PAYNE. Okay. Any other panelists have any other statement they would like to make?

Well, let me thank you very much for this very interesting—oh. Oh, he came back. I was really I was stalling for him, to be truthful, but although I do find this interest. And so I yield back to the chairman.

Mr. ENGEL [presiding]. Thank you, Mr. Payne.

Let me first tell the panelists I am sorry that I am rushing back and forth between this hearing and a hearing on my other committee which deals with the New York City September 11 health crisis. And obviously since I represent a district in New York City and its suburbs, I am very concerned about that. So I do apologize.

Let me just wrap up a couple of questions. Let me first ask Dr. Forman because you mentioned Haiti in your testimony and you referred to some of the things that I had said in my opening statement about Haiti. So in your written testimony you suggested that U.S. sugar quotas make export of sugar cane to the U.S. a more lucrative operation than conversion to biofuels and that an incentive program could change this dynamic of sugar imports to the U.S. to encourage renewable energy development. So I am wondering if you could just expand on that point and tell us if you have any suggestions for Congress in this regard.

Ms. MENDELSON FORMAN. Yes. Thank you very much. It is an important point that came out of a study we did looking at the Dominican Republic in particular which has vast sugar holdings. Because we give a preferential price treatment to sugar that comes into the United States, I was told by several mill owners that they preferred to grow sugar than convert their mills into ethanol.

I think there could be a happy middle ground in this because there is more sugar that is produced that could also go for domestic industry. And perhaps one policy recommendation would be to encourage for the current time, given that a place like the Dominican Republic has already passed a legal regulatory framework for renewable energy, to give incentives for local production of ethanol for use within the country so they would not have to get their oil from PetroCaribe. And then too when the sugar quota ends, which I think is in 2012 if I am not mistaken, to then really perhaps enforce a stronger conversion to ethanol for domestic as well as export use.

Mr. ENGEL. Thank you. Let me ask one last question, and anyone who cares to answer it, I would appreciate it.

I know there has been a lot of talk about Venezuela and some of the rhetoric by President Chavez in Venezuela. But I want to ask some specific questions about that. Hugo Chavez has periodically threatened to cut off oil supplies to the U.S. He does not because he, frankly, needs us the way we need him, so we continue to have a partnership. But he has also threatened to build refineries in China and ship his heavy oil there.

So I would like to hear from any of you of what concerns do you have about these periodic threats by Venezuela's present to cut exports to the United States? What concerns do you have, if any, about Venezuela's efforts to increase its oil exports to China? We had a hearing with this committee about China and China's interference in the Western Hemisphere, so this is directly tied to that. Can a decision to build refineries in China and ship oil to China from Venezuela be economically efficient? What is your assessment of the outlook for Venezuelan oil production? And, finally, Venezuela Oil Minister Rafael Ramirez yesterday rejected an increase in OPEC production quotas. Ramirez says it would be, and I quote him, "a mistake to inundate the market with oil" in order to increase supply and lower prices. So I am not sure how it would be possible to inundate a market already squeezed by skyrocketing demand from China and India, but I would be interested in hearing any comments that any of you might have on this.

Mr. JEREMY MARTIN. Well, I would in terms of the creating, Mr. Chairman, a market in China I think, you know, we have to look at oil as an international commodity. I think the key is actually if Venezuela will be able to do what it has said lately in presentations and that is get to 5 million barrels a day production by 2012, that is a good thing.

In addition, as part of that PDVSA business plan as I understand it they are talking about increasing refining capacity in Venezuela, which is a good thing for our entire hemisphere. So I would like to focus on hoping that the PDVSA business plan comes to fruition in terms of going up to 5 million barrels a day in 2012. I tend to be the eternal optimist, so let us hope. I mean the numbers obvi-

ously point otherwise when you look at the OPEC numbers. But let me stop there.

Mr. ENGEL. Yes, Mr. Burton?

Mr. BURTON. Let me just say that Venezuela I think has a vested interest right now in not going along with the OPEC price production or price reduction because if the price of oil goes down per barrel they are going to make less money. And they do not like the United States and they want to put as much heat on us as they possibly can by keeping the price of oil at the higher level. So they have a twofold reason in my opinion to keep the price of oil up: One, it helps them because they get more revenue coming in for Mr. Chavez to use; and number two, it keeps the heat on us. As long as we do not have the independent production and we have to import oil and the price stays up there and OPEC does not, you know, collectively lower the price then it is going to hurt us and our economy. And he does not like us very much.

Mr. ENGEL. Well, if there are no other comments let me—yes, Mr. Martin?

Mr. JEREMY MARTIN. Mr. Chairman, pardon me for one final comment.

Mr. ENGEL. Yes.

Mr. JEREMY MARTIN. And I just want to make that. We like to talk a lot about Venezuela. Venezuela is extremely important for the United States in our hemisphere. But I think we really need to focus in the short term on Mexico. Mexico is going through a tremendously difficult period. They could in the very short term or the nearer term become an energy importing nation in terms of their oil production. So I would just like to enter in the record that as much as we should talk about Venezuela let us please also keep our eye on Mexico and what is going on there.

Mr. BURTON. If you would yield one more time.

Mr. ENGEL. Yes.

Mr. BURTON. I agree with you. But we ought to focus more on the United States and production here so we do not have to worry so much about Mexico, Venezuela, Saudi Arabia, Nigeria or any of the rest of them. The more we produce in the United States the less dependent we are on other foreign sources. And I know that you guys are for more drilling as well as looking into other sources of energy, so we all agree on that, but while we are concerned about Mexico and Venezuela I think the number one focal point right now for production ought to be the United States of America because we are just too darn dependent on the rest of the world.

With that, thank you.

Mr. ENGEL. Well, thank you, Mr. Burton. I do not know if I should let that be the last word or not but you certainly got your point across at this hearing.

Let me thank our panelists. And, I do absolutely agree with you on Mexico, not only in terms of being our partner in terms of oil but in being our partner in so many things. You know, this subcommittee has had hearings on the Merida Initiative. On the the whole situation of drugs and crime and everything else, I think that Mexico is just such an important partner. And the bilateral relationship that we have with Mexico is just so important for us to sustain and nurture. And it not just something that happens there

that only affects people there, what happens there affects us here and vice versa.

So I want to thank the three of you very, very much. And we usually agree pretty much. We do. I want to thank all of you for excellent testimony. And the hearing is now adjourned.

[Whereupon, at 1:23 p.m., the subcommittee was adjourned.]

A P P E N D I X



MATERIAL SUBMITTED FOR THE HEARING RECORD



Elli P. Forsworth
 Vice President
 Washington

July 30, 2008

The Honorable Eliot Engel
 Chairman
 Subcommittee on the Western Hemisphere
 U.S. House of Representatives
 2161 Rayburn House Office Building
 Washington, DC 20515

The Honorable Dan Burton
 Ranking Member
 Subcommittee on the Western Hemisphere
 U.S. House of Representatives
 2308 Rayburn House Office Building
 Washington, DC 20515

Dear Chairman Engel and Ranking Member Burton:

On behalf of the Council of the Americas, thank you for your decision to hold a hearing on "Energy in the Americas." As an organization dedicated to understanding and promoting the policy and commercial issues of the Americas, the Council of the Americas realizes the strategic role energy plays in the political and economic relations of our hemisphere.

As the energy discussion continues to take center stage nationally and globally, we would like to offer several action items to help frame your discussion.

Energy as a Key Element of U.S. Hemispheric Policy: Securing access to energy resources will continue to be a major component of our international relations. As the world's number one energy consumer, the United States has little choice but to make energy a key element of its foreign policy. In particular, energy relations can be an entrée to developing closer ties with countries in the hemisphere and lead to cooperation in other areas which directly support our own economic and security interests.

Importance of North American Energy Market: North America remains the most important energy market for the United States. Canada and Mexico are consistently among the top three suppliers of oil to the United States. There is also significant trade among the three countries in natural gas and electricity. Still, greater progress must be made and we urge additional steps to harmonize regulations and standards, improve infrastructure, and increase energy integration in North America.

Secure the Investment Climate: Foreign direct investors provide capital and infrastructure improvements necessary for the development of energy resources in the region. However, some governments have taken steps recently to exert greater control of key resources and, in some cases, nationalize the energy sector while expelling foreign investors. This has adversely affected energy production as governments lack the expertise and capital to sustain production. This has also caused a re-think among non-energy investors for making further investments in certain countries. Ultimately, it is the people of the region and national development which suffer most.

Hemispheric Energy Meetings: The Western Hemisphere has abundant energy resources that, if efficiently produced, could not only increase energy security in the region, but also be a means for fueling growth and development. We encourage the renewal of a senior level energy dialogue among willing

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hemispheric nations as called for in the 1994 Summit of the Americas. Regular high-level energy meetings would bring together producer and consumer nations in the hemisphere to discuss investment, infrastructure development, alternative fuels, and market access.

Elimination of Tariff on Ethanol: As ethanol demand continues to increase as a percentage of the U.S. energy matrix, it is important to open the U.S. market to all affordable ethanol sources. Outside of domestic production, Latin American and Caribbean countries are the top suppliers of ethanol to the United States. We would renew our call for the elimination of the \$0.54/gallon tariff on imported ethanol.

To address these and other important energy-related issues the Council of the Americas will soon launch a series of forums on energy issues in the Americas. The forums will bring together policymakers, industry leaders, and government officials in the United States, Canada, Latin America, and the Caribbean to address relevant and timely topics in energy policy. We are dedicated to advocating for greater hemispheric energy cooperation and we will continue our efforts to build a regional consensus on this important topic.

Thank you again for your leadership on these issues.

Sincerely,

A handwritten signature in black ink, appearing to be "W. J. ...", written over a faint circular stamp.

Cc: Members of the Subcommittee on the Western Hemisphere



July 31, 2008

Dear Senator/Representative:

On behalf of our millions of members and all American consumers suffering from high energy prices, we urge you to allow the current restrictions on much-needed American energy resources to expire as scheduled under current law. Unless Congress acts affirmatively to prevent it, October 1st, 2008 will be a day fittingly described as "American Energy Freedom Day" as those restrictions expire.

According to estimates from the Department of the Interior, the Outer Continental Shelf contains 86 billion barrels of oil and 420 trillion cubic feet of natural gas, and there is an additional 800 billion barrels of recoverable oil locked in oil shale in Colorado, Utah, and Wyoming.

Now that President Bush has lifted the executive branch moratorium, the only thing prohibiting development of these energy resources is a temporary ban that is set to expire at the end of this fiscal year. On October 1, 2008, domestic energy resources will no longer be held off-limits by the federal government.

We urge you to oppose the creation of any new moratorium for fiscal 2009, even if it is attached to what some people in Washington consider "must-pass" legislation. We further urge you to sustain a presidential veto of any measure to impose a new moratorium.

A strong majority of the American public sees drilling expansion as necessary to reduce fuel prices now and in the long run. Creating new restrictions on domestic energy development would fly in the face of public opinion and exacerbate the pain every American citizen feels at the pump.

Sincerely,

Tim Phillips President Americans for Prosperity	Susan A. Carleson Chairman & CEO American Civil Rights Union	Hamilton R. Hanson President Committees of 1000's (St. Petersburg, Florida)
Jim Pfaff State Director Americans for Prosperity-Colorado	George Landrith Co-Chair American Environmental Coalition	John Hallman President Florida Taxpayers Union
Adam Guillette State Director Americans for Prosperity-Florida	Dick Patten President American Family Business Institute	U.S. Senator Malcolm Wallop (ret.) Founder & Chairman Frontiers of Freedom
Grover G. Norquist President Americans for Tax Reform	Ryan Ellis Executive Director American Shareholders Association	Jon Caldara President Independence Institute
Dave Ryan Executive Director American Solutions for Winning the Future	Amy Ridenour Vice Chairman Americans for the Preservation of Liberty	Michelle D. Bernard President and CEO Independent Women's Voice
Fred Smith President Competitive Enterprise Institute	Barney T. Bishop III President & Chief Executive Officer Associated Industries of Florida	Andrew Langer President Institute for Liberty
David A. Keene Chairman American Conservative Union	Terrence Seanlon President Capital Research Center	J. Robert McClure, III President and CEO The James Madison Institute
Thomas Schatz President Council for Citizens Against Government Waste	Andrew F. Quinlan President Center for Freedom and Prosperity	David A. Ridenour Vice President National Center for Public Policy Research
Duane Parde President National Taxpayers Union	Jeffrey Mazzella President Center for Individual Freedom	Lew Uhler President The National Tax Limitation Committee
Morton Blackwell Virginia Republican National Committeeman	Doug Bandow Vice President Citizen Outreach Project	Will Pitts Republican Liberty Caucus of Florida
Cathie Adams President Texas Eagle Forum Texas Republican National Committeewoman-elect	Joe Andrews Vice Chairman Citizens for Responsible Government	William Haygood Shaker President Rule of Law Committee
Jim Martin President 60 Plus Association	Dave Bossic President Citizens United	Karen Kerrigan President & CEO Small Business & Entrepreneurship Council
Brian M. Johnson Executive Director Alliance for Worker Freedom	Joel Mandelman Chairman Clean Oceans Technology Coalition	Jim Sims President/CEO Western Business Roundtable
	Andrew B. Roth Director of Government Affairs The Club for Growth	

