

RISING OIL PRICES, DECLINING NATIONAL SECURITY?

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

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RISING OIL PRICES, DECLINING NATIONAL SECURITY?

WEDNESDAY, MAY 22, 2008

HOUSE OF REPRESENTATIVES,
COMMITTEE ON FOREIGN AFFAIRS,
Washington, DC.

The committee met, pursuant to notice, at 10:06 a.m., in room 2172, Rayburn House Office Building, Hon. Howard L. Berman (chairman of the committee) presiding.

Chairman BERMAN. The committee will come to order. Americans are literally paying for our country's reliance on imported oil. Global oil prices reached another record high yesterday. Prices rose dramatically at the pump, but relatively few Americans are aware of a potential hidden cost: The dependence on foreign oil has brought ramifications to our foreign policy and energy security.

Several forces complicate the picture: The drop in the value of the dollar overseas; the rising energy needs around the world, unfriendly regimes using energy resources for geopolitical gain, and the preponderance of other global crises, such as food shortages now experienced in several countries, that are linked to transportation costs. Clearly, the world faces increasing competition for the fossil fuels that drive global industry, transport, and economic growth.

Rising powers, such as China, India, and Brazil, have a growing appetite for energy. To satisfy their thirst for oil, some are looking to buy energy from regimes that the United States finds problematic. China, for example, has been supporting the oil industries of Iran, Sudan, and Burma. Such energy deals can undermine the international community's influence on these countries in matters ranging from nuclear proliferation to genocide to political freedom. In addition, many sources of fossil fuels on the world market are in parts of the world that are either unstable or politically unfriendly to the United States.

This provides leverage for those who control these energy supplies, enabling them to challenge U.S. foreign policy objectives. We have seen examples of this in recent years: Russia cutting off gas supplies to the Caucasus, the ever-more brazen, rhetorical attacks against the United States by Venezuelan President Hugo Chavez, and the flow of petro-dollars from the Middle East supporting extremism, sometimes even terrorism.

Finally, the linkages between energy security and other international security challenges, whether it be global warming or the current food crisis, have prompted many to take a look at alternative energy sources. But as the food crisis has shown, picking

winner can have unintended consequences. When you see energy companies competing with food companies for corn on the commodities exchange, U.S. policy objectives to promote both energy security and food security can become compromised.

Whatever alternatives we pursue in order to sustain them, we will need to avoid creating competition among global priorities.

These are just some of the challenges we face when examining energy security policies. I look forward to hearing the testimonies of our three distinguished witnesses about what we can do in the foreign policy realm to address these issues.

With that, I am going to recognize the gentleman from New Jersey for 1 minute for an opening statement.

Mr. SMITH OF NEW JERSEY. Mr. Chairman, thank you for holding this important hearing. I, like most Americans, am extremely concerned about the shocking rise in oil prices we have seen all over the country. In 2003, a barrel of oil cost \$30. This spring, as we all know, it has topped \$135.

I hear from my constituents all the time who are struggling to keep up with rising gas prices. A gallon of gas in my own home State of New Jersey averages \$3.71 for regular. New Jersey's gas prices are not even the highest, as we find in other states, but it is still having a deleterious effect on my constituents.

So, Mr. Chairman, we need to continue to work tirelessly to find solutions to this challenge, one that hits our people every day.

I am glad we are having this hearing. It will examine another aspect of this issue, the national security implications of rising oil prices. These issues are often overlooked and are critical to consider when evaluating overall foreign policy.

Control of global oil resources, Mr. Chairman, is becoming concentrated in fewer and fewer countries. Fourteen of the world's top 20 oil companies are state owned. The recent report revealed that western oil companies now control less than 10 percent of the world's oil and gas reserves. Many of the remaining oil reserves are, of course, concentrated in the Middle East, but Venezuela and Russia, the largest non-OPEC producers, also play important roles.

As more and more money flows, American money, to these countries, how will it affect the world's geopolitical balance? How will it affect the strategic interests of the United States? How will it affect our ability to stand with the oppressed in defense of human rights around the world? Rising oil prices have already strengthened our enemies overseas.

I would ask unanimous consent that my full statement be made a part of the record.

Chairman BERMAN. Without objection, your full statement will be included as part of the record.

[The prepared statement of Mr. Smith follows:]

PREPARED STATEMENT OF THE HONORABLE CHRISTOPHER H. SMITH, A
REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. Chairman, thank you for holding this important hearing today.

I, like most Americans, am extremely concerned about the shocking rise in oil prices we have seen all over this country. In 2003 a barrel of oil cost \$30. This spring, prices have topped \$135.

I hear from constituents all the time who are struggling to keep up with rising gas prices. A gallon of gas in my home state of New Jersey averages \$3.71—and

that's regular! New Jersey's gas prices aren't the highest in the United States, but I can assure you that they are hitting our people very hard.

And so, Mr. Chairman, we need to continue to work tirelessly to find solutions to this challenge—one that affects our people every day.

But I'm glad that you have called this hearing today that will examine another aspect of the issue—the national security implications of rising oil prices. These issues are often overlooked—and are critical to consider when evaluating our overall foreign policy.

Control of global oil resources is becoming concentrated in fewer and fewer countries. Fourteen of the world's top twenty oil companies are state-owned. A recent report revealed that Western oil companies now control less than 10% of the world's oil and gas reserves. Many of the remaining oil reserves are, of course, concentrated in the Middle East, but Venezuela and Russia (the largest non-OPEC producer) also play important roles.

As more and more American money flows to these countries, how will it affect the world's geopolitical balance? How will it affect the strategic interests of the United States? How will it affect our ability to stand with the oppressed in defense of human rights around the world? Rising oil prices have already strengthened our enemies overseas.

As oil demand rises in these oil-exporting countries, will they be able to maintain current levels of distribution abroad? Will we eventually find ourselves begging, hat in hand, for a few drops of oil sold to us by foreign powers?

I'm looking forward to hearing the testimony of our witnesses today on these crucial issues, and welcome the opportunity to examine energy issues in a wider context.

These are complicated topics, but in my opinion, one thing is certain: we must continue to invest in renewable energy sources. No one can predict the future, but it's hard for me to believe that we will be able to break the dangerous trend of energy dependency on foreign sources without significant advances in this area.

Chairman BERMAN. The gentleman's time has expired. The gentleman from Texas is recognized for 1 minute.

Mr. GREEN. Thank you, Mr. Chairman. I would like to ask unanimous consent to place my full statement in the record.

Chairman BERMAN. So ordered.

Mr. GREEN. I could not agree with the chairman more that the need for oil and our relationships in the Middle East have been affecting our foreign policy, but I also know that we have the same goal that every other country in the world does, which is to have a strong domestic economy with reliable and affordable supplies of energy.

The problem is, we do not have affordable or reliable supplies now to fuel the economic growth, and I think what we are going to see is just like with one of our airlines yesterday. They are going to raise prices and cut service because the high price of fuel is affecting everything in our economy, not just airlines. It will affect delivery of groceries. It affects everything.

Of course, Congress did not do any benefit last year when we upped the amount for corn from ethanol because we also see food prices going up on a double reason. Energy prices are part of raising crops, but also, when there alternatives for ethanol, then we are going to see those go up.

I am glad to have this hearing, Mr. Chairman. I was reading your article about the Senate hearing yesterday, and it is real easy to talk about how bad the CEOs are of the major oil companies, but the solution is either to conserve, use alternatives, which our effort with corn ethanol has not worked out, or to get more product onto the market and more product domestically so we can actually lower the world price of oil because it is a world price, and, with that, I will yield back my time.

Chairman BERMAN. The time of the gentleman has expired. The gentlelady from Florida, the ranking member of the committee, is recognized for 5 minutes.

Mrs. ROS-LEHTINEN. Thank you so much, Mr. Chairman. As always, thank you for holding this timely hearing because it seems that every day the newscasts lead with yet another story on the skyrocketing cost of gasoline and other sources of energy, and there is much that we can do here at home, both in the area of conservation and in developing new sources of energy.

America has a tremendous innovative capability to produce more energy-efficient technologies. I am a strong supporter of expanded investment in alternative energy sources, such as wind, solar, biomass, and hydrogen fuel cell power, and, earlier this year, I voted in favor of domestic energy legislation to reduce America's dependence on foreign oil and increase our use of clean energy technologies. But measures that we take here at home are only part of the solution.

Given that so much of our energy comes from abroad, our foreign policy must increasingly focus on ensuring a stable supply. An unfortunate fact is that many of the sources of imported oil are concentrated in areas ruled by autocracies, some of which are openly hostile to U.S. interests.

Iran's ambition to dominate the Gulf and beyond is the greatest of the threats, but Russia has demonstrated its willingness to use energy as a tool for applying political pressure on other countries, such as Ukraine and Georgia, and Venezuelan strongman, Hugo Chavez, is spending that country's oil wealth to promote an anti-United States agenda throughout Latin America, including undermining the governments of neighboring Colombia.

In addition to the political uses of energy is the threat posed by artificial restrictions on its supply, especially the many attempts to create monopolies of one type or another. OPEC is, of course, the most prominent example, and its malign influence on the global economy has long been established, but there are others as well, including the new effort by several major natural gas-exporting countries to set up a similar cartel that has been termed as a "gas OPEC."

When reports appeared that this plan was actively being considered by several of the major producers in an April 2007 meeting of the Gas-exporting Countries Forum, several of us warned the administration of the dangers of sitting back and allowing the creation of yet another global extortion racket.

To bring greater attention to this threat, I was joined by a bipartisan group of Members in introducing House Resolution 500, which was passed unanimously by the House in July of last year. The bill classified the establishment of a gas-OPEC as prejudicial to our nation's security. It called for the United States to work with our allies to prevent this gas cartel from coming into existence, and at this year's annual meeting of the Gas-exporting Countries Forum, it was announced that considerable progress had been made toward setting up a gas cartel.

Some experts have dismissed the idea of a cartel in natural gas due to the structure of the industry, but Hugo Chavez and Iran's Ahmadinejad disagree. They have repeatedly stated their strong

support for the creation of a gas-OPEC that they hope to use for the resulting leverage and political-strategy purposes.

Another area of concern, Mr. Chairman, when discussing energy issues and national security, is the expansion of nuclear power around the world and the risks that it will lay the foundation for the proliferation of the means to make nuclear weapons. The most troubling region in this is the Middle East, where several countries with troublesome issues involving Islamic militants and extremists have announced their intention to establish a nuclear power program.

This has been accompanied by an eager willingness, on the part of nuclear-exporting countries, to provide the necessary facilities, the technology, and the know-how, and the most aggressive nuclear merchants are France and Russia. Unfortunately, the United States has joined this rush. Just last weekend, the secretary of state and her Saudi counterpart announced an agreement to establish nuclear cooperation between the United States and Saudi Arabia.

Saudi Arabia, which has the world's largest deposit of hydrocarbons and is home to violently anti-U.S. Islamic militants. The director general of the International Atomic Energy Agency has stated that for these Middle Eastern states concerned about Iran, it is enough to buy yourself an insurance policy by developing a potential nuclear weapons capability and then sit on it.

So, at a minimum, the U.S. should not enter into any new agreements before there has been a thorough review of the potential consequences of this policy, and we must press countries eager to sell the range of nuclear facilities, technology, and know-how to hold off.

Thank you, Mr. Chairman. I look forward to our testimony today. I appreciate it.

Chairman BERMAN. The time of the gentlelady has expired. I thank her for her statement. Now, one more opening statement, and then we will go to our panel. I recognize the gentleman from Indiana, Mr. Burton, for 1 minute.

Mr. BURTON. You know, Mr. Chairman, sometimes I think I am listening to people who are on the moon. We have enough oil in this country to make ourselves almost energy independent, and not one speaker so far has talked about domestic oil production.

We could drill in the ANWR and get up to 2 million barrels of oil today. We can drill off the continental shelf and get up to 2 million barrels of oil a day. In Florida, right now, 60 miles of the coast, the Chinese are drilling in our oil reserves in Cuban waters and getting oil that they are selling to China, and yet we are talking about all kinds of other things around the world, the new technologies, which we want, but the American people want some results now, and we are sticking around here not doing a darned thing.

We have not created a new refinery in the last 30 years. We are not drilling for oil in our country, and we have got great resources. We have got a 500-year supply of natural gas, and we are walking around with our finger in our ear talking about all of the problems around the world and why we are not getting energy.

I am telling you, by November, you mark my words, the American people are going to be questioning every politician, saying, "Why in the hell aren't you drilling here in America? We have got the oil. Why don't you use it instead of worrying about the rest of the world?"

Chairman BERMAN. The time of the gentleman has expired.

Mr. BURTON. I am expired. I think everybody is nuts in this place.

Chairman BERMAN. No argument there.

We have an expert panel of witnesses today. First, we will hear from David Sandalow. David is currently a Senior Fellow at the Brookings Institution. Mr. Sandalow has served as assistant secretary of state and a member of the National Security Council under President Clinton. His recent book, *Freedom from Oil: How the Next President Can End the United States' Oil Addiction*, offers a detailed plan for weaning us from oil in a generation. I look forward to hearing his insights on this critical issue.

Next, we will hear from Anne Korin. Ms. Korin is co-director of the Institute for the Analysis of Global Security and editor of the periodical, *Energy Security*. Ms. Korin is also chair of the Set America Free Coalition, an alliance of national security, environmental, labor, and religious groups promoting ways to reduce America's dependence on foreign oil. Ms. Korin is well-versed on the issues confronting U.S. energy security objectives, and I look forward to her testimony.

Finally, we welcome Mr. Paul Saunders, who is currently the executive director of the Nixon Center. Mr. Saunders also served in the Bush administration from 2003 to 2005 as senior adviser to the under secretary of state for global affairs. Mr. Saunders is a prolific writer, having contributed numerous newspaper and journal articles on the topics of United States foreign policy toward Russia and energy-security issues. Mr. Saunders, we are happy to have you here.

Mr. Sandalow? Your entire statement will be part of the record.

STATEMENT OF THE HONORABLE DAVID SANDALOW, SENIOR FELLOW, BROOKINGS INSTITUTION (FORMER ASSISTANT SECRETARY OF STATE)

Mr. SANDALOW. Thank you very much, Mr. Chairman, Ranking Member Ros-Lehtinen, and the members of the committee.

Last year, more than 96 percent of the energy in our cars and trucks came from oil. Now, this seems normal to us. We grew up in a world in which oil is the only fuel used to move cars and trucks. So did our parents. So did our grandparents. But I believe it is fundamentally abnormal for the entire global transportation system to rely on a single commodity.

If I am thirsty and do not feel like this glass of water, and I can have soda or orange juice. If I am hungry, and I do not want a hamburger, I can have a hot dog or pasta. But if I want to go anywhere on this planet today of any significant distance, and I do not want to use petroleum, I am basically out of luck.

The overwhelming dependence of the global transportation system on this one commodity creates a national security threat that we ignore at our peril.

Today, I will identify four such threats, noting, in particular, ways in which rising oil prices exacerbate them. I will conclude with recommendations for the single most important step that I believe we can take to solve this problem.

The first threat: Oil dependence strengthens al-Qaeda and other Islamic terrorists. As you have already said in this hearing, Mr. Chairman, for more than 50 years, the need to protect oil flows has shaped U.S. policy and relationships in the Persian Gulf. These steps to secure oil flows have come at a cost. By making us central players in a region torn by ancient rivalries, oil dependence has exposed us to resentment, vulnerability, and attack. Osama bin Laden's first fatwa, in 1996, was titled "Declaration of War against the Americans Occupying the Land of the Two Holy Places."

Today, deep resentment of the U.S. role in the Persian Gulf remains a powerful recruitment tool for Islamic fundamentalists, but we are constrained in our capacity to respond to it because of our dependence on oil. Compounding these problems, the huge money flows into the Persian Gulf help finance terrorist networks. The sharp increase in oil prices in recent months deepens these problems, further enriching those who fund terrorists committed to our destruction.

A second threat: Oil dependence strengthens oil-exporting nations that oppose U.S. interests. Several leading oil exporters pursue policies that threaten the United States. Today, the most serious threat, I believe, comes from Iran, whose nuclear ambitions could put terrifying new weapons into the hands of terrorists, yet efforts to respond to this threat with multilateral sanctions have often foundered on fears that Iran would retaliate by withholding oil from world markets.

In short, three decades after the first oil shocks, and a quarter century after the humiliating capture of U.S. diplomats in Tehran, we remain hostage to the world's continuing dependence on oil.

Other oil-exporting nations pose problems as well. President Hugo Chavez, as the ranking member has already said, fans anti-American sentiments throughout Latin America.

Third, and this is a point I would like to emphasize because it is not often appreciated, oil dependence endangers our men and women in uniform. Oil dependence jeopardizes the safety of our troops. In Iraq, during the past 5 years, many brave men and women have died in fuel convoys, which are often vulnerable to attack. Diesel generators display a heat signature easily detected by some enemies. Rising oil prices here put a budgetary strain on the Pentagon, a leading purchaser of petroleum product. A \$1-a-barrel increase in global oil prices increases the Pentagon's fuel cost by \$124 million a year.

Finally, oil dependence undermines democracy and good governance around the world. Oil wealth corrodes democratic institutions. As oil prices have climbed in recent years, both Vladimir Putin and Hugo Chavez, for example, have moved away from democratic institutions and toward more authoritarian rule.

So what can we do about it? There are many solutions. We could talk about biofuels, conservation, and domestic drilling. In my short time today, I want to highlight one that I think is the most potent: Plug-in electric vehicles. To reduce oil dependence, there is

nothing that would do more good than putting these cars on the roads soon.

The U.S. has a vast infrastructure for generating electricity, with plugs and outlets in essentially every home and business, but it does us almost no good today in reducing oil dependence because our cars and trucks cannot connect to them. Plug-in electric vehicles are a game-changing technology, and here is the good news: These cars are on the way to market soon. General Motors says that its plug-in Chevy Volt will be in showrooms by 2010. Toyota, Mitsubishi, Ford, and other automakers are close behind. Nissan is working with visionary entrepreneurs to convert the entire nation of Israel to plug-in electric vehicles.

Yet Congress needs to act to pick up the pace of this transition and address the security threat from rising oil prices. Tax incentives for the purchase of these vehicles would quickly build the market. The Federal Government should use its enormous purchasing power to help bring these cars to market as well.

Mr. Chairman, I drove to work today in a plug-in electric vehicle. Each night, I go home, and I plug it into a regular outlet in my garage. It gets 30 miles on a charge, which means I use almost no gasoline driving back and forth to work each day. After 30 miles, when the battery runs out, the car automatically switches over to its gasoline engine so I get all of the driving range I need, and here is some good news in this era of rising oil prices. Driving on electricity costs me the equivalent of 75 cents a gallon.

Thank you, Mr. Chairman. I would be delighted to answer your questions.

[The prepared statement of Mr. Sandalow follows:]

PREPARED STATEMENT OF THE HONORABLE DAVID SANDALOW, SENIOR FELLOW,
BROOKINGS INSTITUTION (FORMER ASSISTANT SECRETARY OF STATE)

Chairman Berman, Ranking Member Ros-Lehtinen and Members of the Committee—

Last year, more than 96% of the energy in our cars and trucks came from oil.

This seems normal to us. We grew up in a world in which oil was the only fuel used to move cars and trucks. So did our parents. So did our grandparents.

But it is fundamentally abnormal for the entire global transportation system to rely on a single commodity.

If I'm thirsty and don't feel like a glass of water, I can have soda or orange juice. If I'm hungry and don't feel like eating a hamburger, I can have a hot dog or pasta. But if I want to travel any significant distance in the world today and don't want to use petroleum, I'm basically out of luck.

The overwhelming dependence of the global transportation system on this one commodity creates national security threats we ignore at our peril.

Today I'll identify four such threats, noting in particular ways in which rising oil prices exacerbate them. I'll conclude with a recommendation for the single most important step we can take to solve this problem.

First, oil dependence strengthens Al Qaeda and other Islamic terrorists.

The United States is in a long war. Islamic fundamentalists struck our shores and are determined to do so again. Like the Cold War, this struggle has many causes and will last for generations. Unlike the Cold War, oil dependence plays a central role in the struggle.

For more than 50 years, the need to protect oil flows has shaped U.S. policy and relationships in the Persian Gulf. During the Cold War, we supported the Shah of Iran in part to keep oil flowing from the region. In 1980, President Carter declared that attempts by outside forces to gain control of the Persian Gulf would be "repelled by any means necessary, including military force." In 1991, with Saddam Hussein in Kuwait, President George H.W. Bush told Congress that war was necessary because "[v]ital economic interests are at risk . . . Iraq itself controls some

10% of the world's proven oil reserves. Iraq plus Kuwait controls twice that." After removing Saddam from Kuwait in 1991, U.S. troops remained in Saudi Arabia where their presence bred great resentment.

These steps to secure oil flows have come at a cost. By making us central players in a region torn by ancient rivalries, oil dependence has exposed us to resentment, vulnerability and attack. Osama bin Laden's first fatwa, in 1996, was titled "Declaration of War against the Americans Occupying the Land of the Two Holy Places."

Today, deep resentment of the U.S. role in the Persian Gulf remains a powerful recruitment tool for Islamic fundamentalists. Yet the United States faces severe constraints in responding to this resentment. With half the world's proven oil reserves, the world's cheapest oil and the world's only spare production capacity, the Persian Gulf will remain an indispensable region for the global economy so long as modern vehicles run only on oil. To protect oil flows, the U.S. policymakers will feel compelled to maintain relationships and exert power in the region in ways likely to fuel Islamic terrorists.

Compounding these problems, the huge money flows into the Persian Gulf from oil purchases help finance terrorist networks. Al Qaeda raises funds from an extensive global network, with Islamic charities and NGOs playing an important role. Saudi money provides critical support for madrassas with virulent anti-American views.

The sharp increase in oil prices in recent months deepens these problems, further enriching those who fund terrorists committed to our destruction.

Second, oil dependence strengthens oil-exporting nations that oppose U.S. interests.

Several leading oil exporters pursue policies that threaten the United States. Today, the most serious threat comes from Iran, whose nuclear ambitions could put terrifying new weapons into the hands of terrorists. Yet efforts to respond to this threat with multilateral sanctions have often foundered on fears that Iran would retaliate by withholding oil from world markets.

Indeed Iran does not even need to withhold oil from world markets to play its "oil card." The mere fear it might do so can cause oil prices to climb, as traders build a "risk premium" into the cost of every barrel. This puts pressure on governments around the world to minimize "saber-rattling" against Iran, in order to help control oil prices. The result—an emboldened Iran, more confident in its ability to pursue policies that threaten U.S. national security.

In short, three decades after the first oil shocks—and a quarter-century after the humiliating capture of U.S. diplomats in Tehran—we remain hostage to the world's continuing dependence on oil.

Other oil-exporting nations pose problems as well. President Hugo Chavez of Venezuela—the world's eighth largest exporter—fans anti-American sentiments throughout Latin America. Oil revenues not only help maintain his grip on power, they allow him to finance policies that put U.S. assets at risk in countries such as Bolivia and Argentina.

Here again, rising oil prices enhance the wealth and power of those who wish us ill, putting all Americans at risk.

Third, oil dependence endangers our men and women in uniform.

Oil dependence jeopardizes the safety of our troops. In Iraq during the past five years, many brave men and women in have died in fuel convoys, which are often vulnerable to attack. Diesel generators display a heat signature easily detected by some enemies.

In July 2006, Major General Richard Zilmer, commander of coalition forces in western Iraq, made a "Priority 1" request for combat-ready renewable energy systems. Maj. Gen. Zilmer noted the need for frequent resupply convoys, in particular for petroleum, and wrote that without renewable energy systems:

" . . . personnel loss rates are likely to continue at their current rate . . . [with the] potential to jeopardize mission success."

Rising oil prices also put budgetary strains on the Pentagon, a leading purchaser of petroleum products.

Finally, oil dependence undermines democracy and good governance around the world.

Oil wealth corrodes democratic institutions. This dynamic is not inevitable, but it is widespread. A growing body of scholarly work explores this topic, concluding that oil wealth is strongly associated with corruption and authoritarian rule. New York Times Foreign Affairs columnist Tom Friedman has written about the "First Law of Petropolitics"—that the price of oil and pace of freedom move in opposite directions.

A few examples underscore these trends. Bahrain, the Persian Gulf country with the smallest oil reserves, was also the first to hold free elections. As oil prices climbed in recent years, both Vladimir Putin and Hugo Chavez moved away from democratic institutions and toward more authoritarian rule. In Nigeria, oil abundance contributes to widespread corruption.

So what can we do about it? There are many solutions. In my short time today, I'll highlight one—plug-in electric vehicles.

To reduce oil dependence, nothing would do more good more quickly than making cars that connect to the electric grid.

The United States has a vast infrastructure for generating and distributing electric power. However, that infrastructure is essentially useless in cutting oil dependence, because modern cars can't connect to it. If we built cars that ran on electricity and plugged into the grid, the potential for displacing oil would be enormous.

Plug-in electric vehicles are a game-changing technology. They can break our oil addiction, cut driving costs and reduce pollution. To help end the United States' oil dependence, there is no higher priority than putting millions of plug-in electric vehicles on the road soon.

And here's the good news—these cars are on the way, soon. General Motors says its plug-in Chevy Volt will be in showrooms by 2010. Toyota, Mitsubishi, Ford and other automakers are close behind. Nissan is working with visionary entrepreneurs to convert the entire nation of Israel to plug-in vehicles.

Yet Congress needs to act, to pick up the pace of this transition. Tax incentives for the purchase of these vehicles would quickly build the market. The federal government should use its enormous purchasing power to help bring these cars to market as well.

Chairman Berman, Ranking Member Ros-Lehtinen and Members of the Committee,

I drove to this hearing in a plug-in electric vehicle. Each night I plug the car into a regular outlet in my garage. It gets 30 miles on a charge, which means I use almost no gasoline on a normal day driving back and forth to work. After 30 miles, the car automatically switches over to its gasoline engine, giving me all the driving range I want at any time.

And here's some good news, in this era of rising oil prices—driving on electricity costs me the equivalent of 75 cents per gallon.

Thank you, I'd be delighted to answer your questions.

Chairman BERMAN. Very interesting. Thank you very much. Ms. Korin?

STATEMENT OF MS. ANNE KORIN, CO-DIRECTOR, INSTITUTE FOR THE ANALYSIS OF GLOBAL SECURITY

Ms. KORIN. Ten years ago, bin Laden stated his target price for oil, and that target price is \$144. At the same time, he said that, in the United States, every American owes a back payment of \$30,000 to every Muslim because we have stolen their oil at cheap prices.

When I submitted my written testimony 2 days ago, I said, "We have \$20 to go until we hit bin Laden's target." Well, yesterday, oil futures hit \$140, and spot was at \$130.

I would like to emphasize to this committee that hitting bin Laden's target will strike a major blow to the prestige of the United States, and it will be perceived as a victory for the Jihadist movement and, specifically, a victory for the economic-warfare component of their war against the rest of the world.

Now, at a time of war with radical Islam, we are, in effect, financing both sides. Let us be clear: The reason that our President went to Saudi Arabia to, once again, kowtow to the Saudis and ask them to open the spigot and offer them nuclear cooperation is because we are fundamentally held hostage by our dependence on these countries, and the Saudis are the lead country in OPEC. Saudi Arabia is making an extra \$1 billion a day, if you just look at the delta in oil price since 9/11, \$1 billion every single day.

Every single foreign policy objective that this country holds, from fighting radical Islam, nuclear proliferation—you name it—poverty alleviation; all of these are tied back to the oil issue.

What I want to emphasize to this committee is OPEC has undergone a deliberate campaign to keep oil prices high. OPEC production today, if you look at the graph on page 2 of my written testimony, you will see that while the global economy has grown, and non-OPEC production has doubled over the last 30 years, OPEC has kept production constant. OPEC's production today is the same as it was 30 years ago, and, specifically, over the last year, OPEC has stolen essentially, and I use that word advisedly, 2.4 million barrels a day off the world oil market.

This is how it happened. OPEC added Angola and Ecuador to its roster of members, but it did not increase the net OPEC production quota, and, therefore, it removed the equivalent of Norway from the global oil market, and this is part of the reason that oil prices are so high. This is a deliberate campaign.

Now, David said very accurately, oil has a monopoly in the transportation sector, and that monopoly is what gives oil its strategic status, and what we need to do is strip oil of its strategic status, and I agree that this country has plenty of resources, but let it be clear, drill anywhere you want. We have just over 3 percent of world conventional oil reserves. Neither drilling nor efficiency will strip oil of its strategic value. The marginal barrel of oil will always be cheaper in the Persian Gulf.

In order to strip oil of its strategic value, we need to do to oil what technology did to salt. Salt was once a strategic commodity. Wars were fought over salt. The geopolitical stature of nations was determined by their control of and access to salt. Well, with canning and electricity and refrigeration, you no longer need salt to preserve meat, and salt lost its strategic value.

So we need to do the same thing to oil, and we need to do that by focusing on the sector from which oil derives its strategic value. We no longer generate electricity from oil. Solar, wind, nuclear power; all of these are very valuable technologies, but they will do nothing to reduce our dependence on oil. What we need to do is focus on the transportation sector from which oil's strategic value derives, and we need to focus on fuel choice.

I agree with David that plug-in hybrids are an extremely promising technology, and tax credits would be very useful. The lowest-hanging fruit that this chamber and the other chamber have the ability to make happen in the very near term is flexible-fuel vehicles. For \$100 extra per car, \$100 extra, automakers can make a car that can run on gasoline and a variety of alcohols. Alcohol does not just mean ethanol, and ethanol does not just mean corn. You can make the alcohol methanol from coal, as China is doing. You can make the alcohol ethanol from sugar, as Brazil is doing.

Flex-fuel vehicles provide a platform on which fuels can compete, and, by doing that, they enable us to strip oil of its strategic value, and we can layer other technologies on top of them. We can have flex-fuel plug-in hybrids and so forth.

I would like to emphasize to you that each year that passes without Congress passing an open-fuel standard to require new cars to be flex-fuel vehicles is another year in which 17 million cars start

their life on America's roads. They will be on these roads for 17 years, and they will only be able to run on gasoline. Every year that this open-fuel standard does not pass is a year that binds us tighter and tighter to the world's petro-dictators. This country cannot afford to do that. We will not win the war on radical Islam as long as this is the case.

[The prepared statement of Ms. Korin follows:]

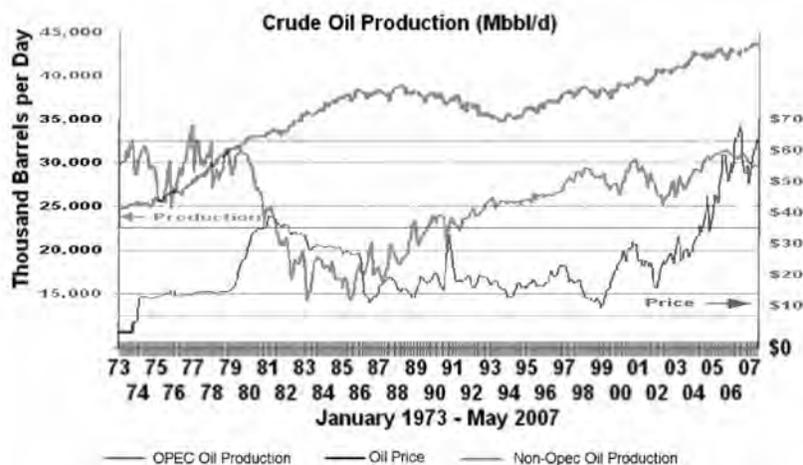
PREPARED STATEMENT OF MS. ANNE KORIN, CO-DIRECTOR, INSTITUTE FOR THE ANALYSIS OF GLOBAL SECURITY

Mr. Chairman, Members of the Committee, about ten years ago, Osama bin Laden stated that his target price for oil is \$144 a barrel and that the American people, who allegedly robbed the Muslim people of their oil, owe each Muslim man, woman, and child \$30,000 in back payments. At the time, \$144 a barrel seemed farfetched to most. Today, bin Laden is a mere \$20 a barrel short of his target and there is little doubt it will be attained. I would like to impress upon this Committee that \$144 a barrel oil will be perceived as a victory for the Jihadist movement and a reaffirmation that the economic warfare component of its campaign against the West is a resounding success. There is no need to elaborate on the implications of such a victory in terms of loss of U.S. prestige and our ability to prevail in the Long War of the 21st century. It is therefore imperative that the U.S. Congress do its utmost to forestall such a setback.

Deeply embroiled in a struggle against radical Islam, nuclear proliferation, and totalitarianism, the U.S. faces a crude reality: While its relations with the Muslim world are at an all-time low, more than 70 percent of the world's proven oil reserves and over a third of production are concentrated in Muslim countries. The very same Shi'a and Sunni theocratic and dictatorial regimes that most strongly resist America's efforts to bring democracy to the Middle East are the ones that, because of the market's tightness, currently drive the world oil economy. While the U.S. economy bleeds, oil-producing countries like Saudi Arabia and Iran—sympathetic to, and directly supportive, of radical Islam—are on the receiving end of staggering windfalls. In 2006, the United States spent about \$260 billion on foreign crude oil and refined petroleum products. This year, with oil hovering over \$125 a barrel, the figure could surpass \$500 billion, the equivalent of our defense budget. At today's prices, foreign oil producers are extracting a tax of more than \$1,600 a year from every American man, woman and child.

While we in the U.S., which enjoys a per capita income of over \$40,000 a year, are feeling the sharp pinch of high oil prices, we should all consider the impact of these prices on the world's poor. People throughout the world who live on \$2 a day are suffering far more than we can imagine as their economies hemorrhage. This has profound implications for global security, driving regional unrest, increasing poverty, and nipping in the bud progress towards democracy. Countries that are still carrying debts from the 1970's oil shocks, are being now looted by OPEC price fixing. In fact, we are witnessing a tremendous transfer of wealth from the world's poorest to the world's producers of oil.

OPEC, spearheaded by Saudi Arabia, is deliberately keeping oil supply tight to prop up prices. Not only is Saudi production lower today than it was two years ago, despite the increase in demand, but the cartel has effectively deleted 2.4mbd from the global oil market in what amounts to an accounting scam. In 2007, OPEC expanded its member roster to include Ecuador and Angola—together the two had accounted for nearly 2.4mbd of non-OPEC oil. Yet, total OPEC production remained constant, allowing existing members to reduce production. This translates into a net reduction in non-OPEC supply with no equivalent increase in OPEC supply. This is equivalent to the production of Norway disappearing off the market. Further, while non-OPEC production has doubled over the last thirty years, as the graph below shows, OPEC production today is virtually identical to its production thirty years ago, even as the global economy has grown and with it demand for oil.



Source: WTRG Economics

The flow of petrodollars from consuming economies to the coffers of producers not only casts a large shadow over America's prospects of winning the war on terrorism but it also limits U.S. diplomatic maneuverability on central issues like human rights and nuclear proliferation. Perhaps the most powerful statement of the impact on America's ability to accomplish its foreign policy goals came from Secretary of State Condoleezza Rice, who in April 2006 told the Senate Foreign Relations Committee: "We do have to do something about the energy problem. I can tell you that nothing has really taken me aback more, as Secretary of State, than the way that the politics of energy is . . . "warping" diplomacy around the world. It has given extraordinary power to some states that are using that power in not very good ways for the international system, states that would otherwise have very little power."

One of these states is Iran. With 10 percent of the world's oil reserves and the world's second largest natural gas reserve, Iran's President Mahmoud Ahmadinejad seems unfazed by the prospects of international sanctions against his country as a result of its efforts to develop nuclear weapons. At high oil prices, leaders of human-rights violating countries like Azerbaijan, Chad, Sudan, Turkmenistan, and Uzbekistan, too, can persecute their people with impunity. Another setback to democracy was delivered last May when Kazakhstan's leader Nursultan Nazarbayev declared himself president for life. The control over a large part of the world's oil and gas market allows Russia to bully its European neighbors, to play "hard to get" on Iran, and to undermine democracy in former Soviet republics like Ukraine and Georgia. Should Russia and other major gas producers like Iran go forth with plans to create an OPEC like natural gas cartel, we can expect further consolidation of power among the energy producers. Oil also lubricates the so-called Bolivarian revolution led by Venezuela's President Hugo Chavez, who is using Venezuela's oil wealth to buy political influence in the Western Hemisphere and to consolidate an anti-U.S. bloc in the region.

U.S. diplomacy is further complicated by the indefatigable thirst for energy of emerging countries like China and India, which are becoming increasingly dependent on the very same countries the United States is trying to rein in. The growing appetite of developing Asian powers not only plays into the hands of the aforementioned rogue producing nations, but also feeds what could become a global competition for control of energy resources. Rogue nations like Iran and Sudan can now buy themselves the support of a third of humanity—not to mention the protection of Chinese veto power on the U.N. Security Council—by signing energy deals with China and India. India now stands at a crossroads. As its electricity demand grows it faces three options. It can tie itself to Iran, the holder of the world's second largest natural gas reserve, via the proposed 1600 mile long Iran-Pakistan-India pipeline. Last month, Iran's President Ahmadinejad visited India and Pakistan in an effort to seal the deal on this project. The implications of such a pipeline should be very clear: decades long dependence of one billion Indians on Iran. Alternatively, India can continue to develop its coal reserves and expand coal power generation.

This is a sound approach from an energy security perspective; however, India has been coming under global pressure—including that of the U.S. government—to curb its greenhouse gas emissions. India's third option is to expand nuclear power development, in collaboration with the U.S. At this point, foot dragging in Delhi is delaying ratification of a nuclear agreement with the U.S. It appears that the Iranian option may hold sway. As the largest democracy in the world, India is a vital ally to the United States. Congress should explore all options—including encouraging India and Pakistan to pursue an alternative pipeline route from Turkmenistan via Afghanistan—to ensure that India does not tie its economic future to Iran.

STRIPPING OIL OF ITS STRATEGIC VALUE

The unique strategic importance of oil to the modern economy—beyond that of any other commodity today—stems from the fact that the global economy's very enabler, the transportation sector, is utterly dependent on it, with 220 million cars and trucks in the United States alone (today, contrary to popular belief, only 2 percent of U.S. electricity is generated from oil, and conversely only about 2 percent of U.S. oil demand is due to electricity generation.) With 97 percent of U.S. transportation energy based on petroleum, oil is the lifeblood of America's economy. America is poor in oil relative to its need. It consumes one of every four gallons in the world but has barely 3 percent of the world's proven reserves of conventional oil. The United States now imports over 60 percent of its oil, more than twice the ratio of imports before the 1973–74 Arab oil embargo.

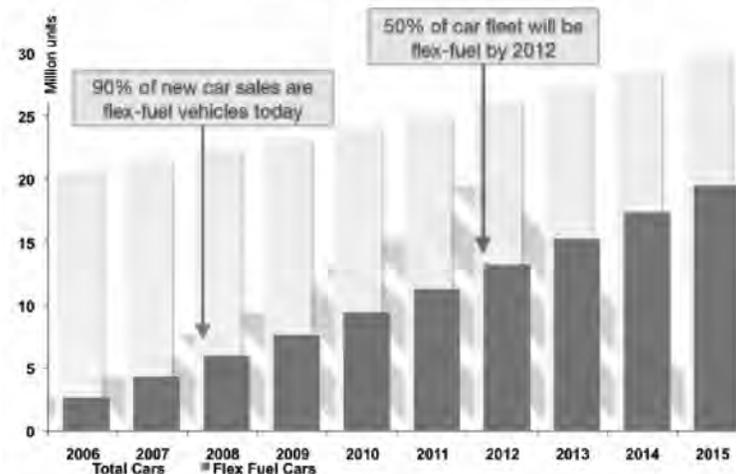
Neither efforts to expand petroleum supply nor those to crimp petroleum demand will be enough to reduce America's strategic vulnerability anytime soon. When the British Navy made the shift from coal to oil, then Lord of the Admiralty Winston Churchill famously remarked, "safety and certainty in oil lies in variety and variety alone." To diminish the strategic importance of oil to the international system it is now critical to expand the Churchillian doctrine beyond geographical variety to a variety of fuels and feedstocks.

Oil's strategic value derives from its virtual monopoly on transportation fuel. This monopoly, which gives intolerable power to OPEC and the nations that dominate oil ownership and production, must be broken. Not long ago, technology broke the power of another strategic commodity. Until around the end of the nineteenth century salt had such a position because it was the only means of preserving meat. Odd as it seems today, salt mines conferred national power and wars were even fought over control of them. Today, no nation sways history because it has salt mines. Salt is still a useful commodity for a range of purposes. We import some salt, so if one defines independence as autarky we are not "salt independent." But to most of us there is no "salt dependence" problem at all—because canning, electricity and refrigeration decisively ended salt's monopoly of meat preservation, and thus its strategic importance. We can and must do the same thing to oil.

17 X 17

Today's vehicles have an average lifespan of 17 years and, for the most part, can run only on petroleum. Every year 17 million new cars roll onto America's roads. For a cost of less than \$100 extra as compared to a gasoline-only vehicle, automakers can make virtually any car a flex fuel vehicle, capable of running on any combination of gasoline and a variety of alcohols such as ethanol and methanol, made from a variety of feedstocks, from agricultural material, to waste, to coal. (Alcohol does not just mean ethanol, and ethanol does not just mean corn.) Flex fuel vehicles provide a platform on which fuels can compete and let consumers and the market choose the winning fuels and feedstocks based on economics. In Brazil, where ethanol is widely used, the share of flex fuel vehicles in new car sales rose from 4 percent to 67 percent in just three years, and this year stands at about 90 percent. These cars are manufactured by the same automakers that sell to the U.S. market and entail no size, power, or safety compromise by consumers. The proliferation of flex fuel vehicles in Brazil has driven fuel competition at the pump to the point where the Brazilian oil industry has had to keep gasoline prices sufficiently low to compete with ethanol in order not to lose more market share, so low that it actually just received a government subsidy to do so. Competition in Brazil is working so well that a big Brazilian sugar and ethanol firm just bought out the distribution assets of Exxon in Brazil.

Flex Fuel Vehicles in Brazil



Source:UNICA

Expanding U.S. fuel choice to include biofuels imported from developing countries has significant geopolitical benefits at a time when U.S. global standing is eroding. Sugar, from which ethanol can be cheaply and efficiently produced, is now grown in one hundred countries, many of which are poor and on the receiving end of U.S. development aid. Encouraging these countries to increase their output and become fuel suppliers, opening our fuel market to them by removing the protectionist 54 cent a gallon ethanol tariff, could have far-reaching implications for their economic development. By creating economic interdependence with biomass-producing countries in Africa, Asia, and the Western Hemisphere, the United States can strengthen its position in the developing world and provide significant help in reducing poverty.

At this point, the fallacy that increased use of biofuels in general, and corn ethanol in particular, is driving world hunger must be addressed. The primary drivers of price increases for food commodities spanning the spectrum from fish to rice (neither of which are used to make fuel) and beyond are the massive increases in oil prices—raising the cost of distribution, labor, packaging and so forth; commodity speculation driven by a weak dollar and increased calorie demand from hundreds of millions of people in China and India who have risen out of poverty and bare subsistence. Further, despite corn ethanol production, the U.S. corn food and feed product has increased 34 percent over the last five years, and U.S. food exports overall have increased 23 percent on the year. America is clearly doing its share to feed the world.

The International Energy Agency has reiterated that biofuels are key to keeping the lid on an overheated transportation fuel market. According to Merrill Lynch, without the increase in biofuels production, oil prices would have been 15 percent higher, which at current oil prices translates into a savings of over \$80 billion a year to the U.S. economy. The much derided biofuels program which has facilitated this \$80 billion saving, costs the taxpayer \$4 billion a year. By any reasonable standard it is a far better deal to send money to America's farmers than to various petro-dictators.

Since we hardly generate any electricity from oil, using electricity as a transportation fuel enables the full spectrum of electricity sources to compete with petroleum. Plug in hybrid electric vehicles (PHEVs) can reach oil economy levels of 100 miles per gallon of gasoline without compromising the size, safety, or power of a vehicle. The key is changing our thinking from miles per gallon to miles per gallon of oil-based fuel—it is not the total energy consumption of the vehicle which is the problem, it is the portion of that energy that comes from petroleum. If a PHEV is also a flexible-fuel vehicle powered by 85 percent alcohol and 15 percent gasoline, oil economy could reach over 500 miles per gallon of gasoline. Ideally, plug-in hybrids would be charged at night in home or apartment garages, when electric utili-

ties have significant reserve capacity. The Department of Energy estimates that over 70 percent of the U.S. vehicle market could shift to plug-in hybrids without needing to install additional baseload electricity-generating capacity.

THINKING OUT OF THE BARREL

A nationwide deployment of flex-fuel cars, flex fuel plug-in hybrids, and alternative fuels could take place within two decades. But such a transformation will not occur by itself. In a perfect world government would not need to intervene in the energy market, but in a time of war, the United States is taking an unacceptable risk by leaving the problem to be solved by the invisible hand. This is especially true since the energy market is anything but free. It is manipulated by a cartel, heavily rigged in favor of the status quo, and, as the case of the ethanol tariff shows, riddled with protectionism.

Every year that passes without Congressional action to ensure that new cars sold in America are flex fuel vehicles is another year in which 17 million gasoline-only cars start their 17-year life on U.S. roads, further binding us to foreign oil. On the grounds of national security and in the interest of stemming the hemorrhaging of our economy, Congress should take swift action to require that new vehicles sold in the United States are flexible fuel vehicles. Such an Open Fuel Standard would level the playing field and promote free competition among diverse energy suppliers. Choosing not to embrace an Open Fuel Standard, is choosing to preserve oil's monopoly in the transportation sector, and with it OPEC's growing stranglehold over the global economy.

Chairman BERMAN. Mr. Saunders?

**STATEMENT OF MR. PAUL J. SAUNDERS, EXECUTIVE
DIRECTOR, THE NIXON CENTER**

Mr. SAUNDERS. Thank you very much, Mr. Chairman. Thank you also to the ranking member and the other members of the committee for organizing and participating in the hearing today. In the interest of time, I will also summarize my written statement.

From my perspective, the United States faces three interconnected problems in global energy markets: One is high prices, one is high demand, and the third is high earnings. I will talk about high prices first.

No one here needs me to talk about the impact of high prices on American families. I think there has been ample discussion of that very important topic. But in thinking about our foreign policy and the challenges that we will face in our foreign policy, it is important to remember that many other countries around the world are facing exactly the same dilemmas and confronting slow or negative growth that could contribute to political instability, especially in poor countries and in transitional economies, and could, in turn, lead to security challenges for the United States.

Additionally, as the ranking member already mentioned, high energy prices have fueled a growing interest in nuclear power around the world, with the attendant risk of nuclear proliferation.

The second problem is high demand. Changing patterns of demand can have a profound impact on global and regional dynamics. We see this around the world in the increasingly close relationship between China and Saudi Arabia, and China is quite likely, in the coming decade, to overtake the United States in imports of oil from Saudi Arabia; growing European dependence on Russian natural gas; competition between China and Russia for Central Asia's natural gas; and India's relationship with Iran, also driven by India's need for natural gas.

One key question as we move forward is whether we can continue to count on international energy markets to function as mar-

kets, or alternatively whether markets become an extension of politics. It is encouraging in the case of China that a couple of recent reports increasingly show Chinese national oil companies actually selling the oil that they acquire in foreign countries on international markets rather than trying to bring it back to China, showing a clear response to commercial incentives on their part.

Unlike oil, however, natural gas is not really traded extensively in the global market and most importers have many fewer options. As a result, there is a strong temptation among some gas exporters to try to create a gas OPEC. I think it is unlikely eventually that that will succeed, but the attempt, in itself, will be a problem for the United States.

The third problem that we face in energy markets today is the problem of high earnings, and high earnings, of course, as has already been mentioned, for countries that oppose the current U.S.-led, international order. There has been discussion already of Russia, of Iran, of Venezuela, clearly, all three countries that would like to see the United States role in the world significantly diminished and have much greater resources to pursue that objective.

Developing policy options for the United States to deal with these challenges is going to be a difficult and long-term task. My colleagues on this panel have already mentioned some of the steps that we can take domestically to reduce our consumption on oil. That is a very important goal for us, but we also need to maintain a clear sense of perspective about the level of effort that is going to be required.

People talk about a Manhattan Project or talk about putting a man on the moon, and that is an appropriate way of thinking about the problem but does not necessarily convey the right time scale. If we are serious about addressing the problems of not just oil but also natural gas and many of the other dependencies that we face in the international system, we need to be thinking about a level of effort and, frankly, a level of bipartisan cooperation on a sustained basis akin to fighting the Cold War because that is the amount of time that is going to be required. It will take decades to make fundamental changes in the way that we produce and use energy.

I would be happy to amplify any other points later.

[The prepared statement of Mr. Saunders follows:]

PREPARED STATEMENT OF MR. PAUL J. SAUNDERS, EXECUTIVE DIRECTOR, THE NIXON CENTER

The United States faces three interconnected problems in global energy markets: high prices, high demand, and high earnings. Each has significant consequences for our security and prosperity, some of which are already painfully apparent to most Americans. But some consequences are less easy to see and understand, and cost of failing to recognize them, or failing to act appropriately, is likely only to grow.

HIGH PRICES

I will address high prices first. No one here needs me to explain the impact of high energy prices on American families, who are paying considerably more to drive their cars and heat or cool their homes. The wider impact of high energy prices on food prices, inflation, and economic growth are likewise clear, as is the effect on our trade deficit. Especially disturbing is the fact that consumers, businesses, and even governments at the local, state, and federal level must spend so much more on energy without getting anything new—diverting large sums from other necessary and more productive activities.

In thinking about U.S. foreign policy, however, it is essential also to recognize that many other nations are facing the same challenges simultaneously. The United Nations recently predicted that global economic growth would be cut in half—from 3.8% to 1.8% between 2007 and 2008 due to the combination of a weakening U.S. economy and high global energy prices. The same study warned that global growth could fall as low as 0.8% if the trouble in U.S. credit markets spreads further in developing and transition economies.

And even as global growth slows, inflation—driven by energy and food prices—is increasing, almost certain to outpace growth on a global basis. This will lead in turn to declining real incomes in many parts of the world and could contribute to political instability, especially in poorer countries and those with weak political systems, such as new democracies. The 1990s was a decade of the expansion of democracy, but it was an expansion that built heavily on global prosperity. A sustained global economic downturn that threatens these new governments could lead to significant reversals.

Ironically, high prices may also prove to be a problem for some of the world's major energy exporters, especially those with weak government institutions. In Russia, for example, the government has been fighting fairly hard to slow inflation by controlling government spending. However, the longer prices stay high, the more the Russian public expects from its government. Holding the line on public spending risks discontent due to disappointment—but opening the spigot risks rapid inflation that delays discontent but cannot prevent it. This is a particular problem in countries like Russia, with a socialist legacy, or Venezuela, with a socialist present, where publics are simultaneously concerned about official corruption and social justice.

A final effect of high prices for fossil fuels is renewed global interest in nuclear energy. Nuclear power's virtually non-existent greenhouse gas emissions are also important, but it is high prices for oil and gas that change the economics of nuclear power and make it attractive to many who might not otherwise consider nuclear. This in turn raises the specter of non-proliferation, for any country that seeks to develop nuclear energy has the potential of becoming a new Iran if it should decide to pursue fuel cycle technology, something fully permitted under the non-proliferation treaty. Even setting aside the possibility of state-driven proliferation, a wave of nuclear power projects across the developing world will create widespread new problems in securing nuclear fuel and nuclear waste.

HIGH DEMAND

The second problem is high demand for energy. High demand may be the first problem in a certain sense, in that it is a major factor—but not the only factor—in high prices. Despite this, it is clear that high demand has many consequences beyond high prices.

One of these is the exacerbation of the climate change. China is already widely believed to have overtaken the United States to become the world's leading emitter of greenhouse gases and its economy could double in size in the next decade if it continues to grow at 8–10% per year. This in turn could mean that China's energy consumption will double—or more than double, according to some estimates. So even if the United States became a zero-emission economy by 2018, a seemingly impossible feat, new emissions from China alone could offset the entire U.S. reduction. And China is not alone in its rapidly increasing consumption.

Growing energy demand and changing patterns of demand may also have a profound impact on global and regional dynamics and could challenge U.S. leadership. Many have already written about the increasingly close relationship between China and Saudi Arabia as China's energy demand grows. This relationship is likely only to deepen as China's consumption further increases. Perhaps more important—and perhaps less frequently discussed—is the fact that China's oil imports from Saudi Arabia will soon overtake America's. This raises the possibility that Beijing could have more leverage over the most important swing producer in global energy markets than Washington. And that the more we succeed in reducing our oil dependence, the more we will accelerate this trend. We have done far too little serious thinking about this looming reality.

In Europe, demand for natural gas is expected to grow by approximately 200 billion cubic meters as early as 2015, creating a 23% “demand gap” that European energy companies are already working to fill. Many energy experts agree that only two countries can provide the necessary volumes of gas on a commercially-viable basis: Russia—which already supplies about 40% of Europe's gas—and Iran. With this in mind, so long as the United States and Europe agree on isolating Iran, Europe has little alternative but to increasing its already high degree of reliance on Russian

gas. More broadly, the European Union is Russia's largest investor and the two are developing increasingly close economic relations. As a result of these and other important interests, Europe is already much less willing than some Americans to take a harder line toward Moscow.

Moving eastward, Central Asia is increasingly becoming an arena for competition between Russia and China. Because of growing domestic demand and declining domestic production, Russia needs Central Asian natural gas to meet its export commitments to Europe. But China needs Central Asian gas too, to supply its continuing economic growth, and China's success in making deals has already forced Moscow to pay higher prices for the gas it buys. Uncontrolled competition between China and Russia could further destabilize Central Asia and threaten U.S. interests there. But so could Sino-Russian condominium in the region. Navigating the space between these two ends of the spectrum will be an important challenge.

South of Central Asia, India's growing energy demand has led New Delhi to cultivate ties with Iran as the world's second-largest holder of natural gas reserves after Russia. Iranian President Mahmoud Ahmadinejad's recent visit to India highlighted the development of this relationship, which many Americans find troubling. For its part, however, India is hard pressed to find other sources of the gas it needs and does not welcome American advice on its foreign policy. As the Indian foreign ministry said in its official statement "India and Iran are ancient civilizations whose relations span centuries. Both nations are perfectly capable of managing all aspects of their relationship with the appropriate degree of care and attention and neither country needs any guidance on the future conduct of bilateral relations."

Japan, a key U.S. ally in Asia, has thus far resisted similar pressures but is clearly interested in a deeper energy relationship with Iran if it becomes possible. Dependent on imports for nearly 90% of its energy needs, Japan is highly vulnerable to instability in global energy markets and reluctant to pursue policies that complicate its relationships with key suppliers. While the Japanese government plans to increase sharply its reliance on nuclear power to strengthen energy security, in a world of rising demand—driven by Asian economic growth—Japan seems likely to be drawn into competition with China and others to secure access to essential oil and natural gas imports. This may strengthen the U.S.-Japan bilateral security relationship even as it further limits Japan's ability to support the United States elsewhere.

Japan also illustrates a broader impact of high demand: the fact that in a sellers' market, energy suppliers increasingly strive to play off the buyers against one another. Japan's almost unique dependence on imported energy has made Tokyo especially vulnerable to this and Japan has made a number of economic concessions to maintain its access to energy supplies from the Middle East. Russia has also sought to stoke competition between Japan and China, on one hand, and between Europe and Asia, on the other.

When combined with the natural instinct of energy exporters to increase government intervention in the energy sector during the present period of high prices, this kind of behavior ultimately raises a fundamental question about international energy markets, namely, can we count on the continued functioning of energy markets as markets rather than an extension of politics when national oil companies control the vast majority of global reserves. Encouragingly, many NOCs remain predominantly commercially-motivated. For example, according to two recent reports, China's national oil companies are increasingly focused on selling the overseas oil they control on international markets rather than seeking to ship it to China—a clear response to commercial incentives.

Unlike oil, however, natural gas is not yet extensively traded in a global market and tends to be sold regionally. As a result, importers generally have fewer options—and exporters are increasingly tempted to enhance their influence by developing a so-called "gas OPEC." In my view, gas exporters' interests are ultimately too divergent to make this a successful enterprise. This is my view, however, and leaders in major gas exporters like Russia and Iran may well have different assessments. More important, even if efforts to establish a "gas OPEC" are not successful, they could undermine the effective functioning of markets and increase prices for consumers.

HIGH EARNINGS

In addition to high prices and high demand, high earnings for the world's energy suppliers can also create problems for U.S. foreign policy. Broadly speaking, the suppliers fall into two categories—those generally satisfied with the existing U.S.-led international system and those who would like to see something else. To my mind, the generally satisfied group currently includes countries like Mexico, Can-

ada, Norway, Kuwait, the United Arab Emirates, and Saudi Arabia. The group who would like a different international system, with a less dominant role for the U.S., includes Russia, Iran, and Venezuela.

These latter three presented challenges for U.S. foreign policy even when energy prices were low and their resources were limited. Today, with considerably more money at their disposal, they have more options. Russia is in the strongest position as a major power with nuclear weapons and a United Nations Security Council veto in addition to its new-found energy wealth and influence. Thus far, Moscow has sought to expand its influence primarily in its immediate neighborhood and has become involved in issues further removed, such as Kosovo, mainly to defend rather than expand its influence. However, because all of Russia's neighbors except China are relatively weak, and many are dependent on Moscow, Russia is in a good position to increase its influence. This is not inherently a problem for the United States and depends mainly on how the Kremlin decides to exercise its power. We have yet to see whether and how President Dmitry Medvedev's entry into office might affect Russian policy.

Thus far, despite some of the rhetoric in the press, Russia has been relatively cautious in dealing with Europe proper. To the extent that Moscow has been heavy-handed, it has generally done so either with countries like Ukraine and Georgia, which are members of neither the EU nor NATO, or with Poland and the Baltic States, which have themselves at times taken tough positions vis-à-vis Russia in the not always justified expectation that they would receive EU support. In my view, Russia is unlikely to attempt similar tactics in dealing with major Western European countries that provide the gas monopoly Gazprom with approximately two-thirds of its profits, according to some sources. At the same time, however, governments like Germany's have become less and less willing to support the United States when U.S. leaders seek a tougher approach to Moscow. In fact, some Europeans tell me that the more assertive Russia becomes, the harder it may be for Washington to find support vis-à-vis Moscow.

On a global level, Russia's UN veto is likely to play a growing role in U.S. foreign policy calculations. In the 1990s, when Russia was relatively weak and Boris Yeltsin depended on American support to receive International Monetary Fund loans to fund the Russian federal budget, Moscow was reluctant to use or even hint at using its UN veto. Today, however, when Russia has paid off many of those same debts ahead of schedule with its energy wealth, the Kremlin is more willing to block openly measures that it opposes, such as tougher sanctions on Iran. Russia is also more willing to pursue other policies that it knows the U.S. would oppose, such as arms sales to Iran and Venezuela.

The real issue for America, and where the policy debate is now appropriately focused, is whether or not the U.S. and Russia could develop a more constructive relationship that would build on our common interests in fighting terrorism and preventing nuclear proliferation. If such a relationship is possible, it could be vitally important to the United States at a time when the most serious danger to our way of life is a nuclear weapon in the hands of anti-American terrorists. If it is not, Washington will need to focus on managing the relationship that avoids the worst possible outcomes, such as active Russian support for American adversaries.

In Iran's case, energy wealth has buttressed a regime that otherwise faced eroding popular support as a result of ineffective domestic economic policies and has provided new resources to pursue the government's nuclear ambitions and to support Shia allies in Iraq, Lebanon, and elsewhere across the Middle East. Iran's support of terrorism in particular has been and continues to be a major destabilizing factor in the region, threatening American soldiers and civilians as well as U.S. allies.

One of America's dilemmas in dealing with an apparently hostile major energy supplier like Iran is that high demand (and the weak dollar) are not the only forces pushing prices higher. In fact, there is widespread agreement among experts on energy markets that political risk adds a significant premium to today's prices and that tight supplies amplify the impact of any disruptions. Thus instability in Iraq or Nigeria, which each generate 2–3% of global oil production, can result in significant price spikes.

In the case of Iran, if one assumes that the chance of a U.S. strike on Iran adds just one dollar to the price of a barrel of oil, it adds over \$4 billion per year to the price of American imports just to have a public discussion about an attack. Given Iran's apparent aims, it may well be worth it. But we should have no illusions that talk is cheap—it isn't. And an actual attack on Iran could cost considerably more: some top energy experts suggest it could drive oil prices as high as \$200 per barrel. That could add nearly \$300 billion to our imports over the course of a year beyond what we are already paying.

Venezuela, for its part, is keen to export not only oil but its populist socialist political model—and has used its new wealth and visibility to support leftist governments in Cuba and Bolivia and leftist terrorists seeking to overthrow the government of Colombia, an important U.S. ally in Latin America. Caracas has also sought greater attention to its perspectives on the global stage. Fortunately for the United States, the Venezuelan leadership's talents lie more in colorful anti-American rhetoric than effective geo-political strategy. Nevertheless, Venezuela's support for terrorism and anti-Americanism threaten American lives and American security and economic interests in the region. Venezuela's nationalization of its energy sector also harmed a number of U.S. companies active there. Notably, however, Venezuela has remained committed to supplying the American market, largely due to the lack of commercially-attractive alternatives.

Of course, many major energy exporters are more satisfied with the U.S.-led international order than Russia, Iran, and Venezuela. Nevertheless, even in these cases vast transfers of wealth to energy producers raise serious questions about U.S. interests, especially American economic interests. The most notable effect here is the rise of the sovereign wealth funds, a topic I understand was addressed in hearings yesterday. While I believe it is generally better for the United States to attract foreign investment than not, large-scale investments in sensitive or high-profile enterprises inevitably generate political attention and debate—and deserve appropriate scrutiny by the executive branch and the Congress.

WHAT TO DO?

Developing American policy options to deal with the foreign policy consequences of high energy prices will be a difficult and long-term task. The realities are that the United States has vast and growing energy requirements and that changing our consumption patterns will be slow and costly.

With this in mind, the essential first step is to shape a sustainable and therefore bipartisan energy policy that confronts these challenges head-on. Some have called for a “Manhattan Project” or a “Man on the Moon” commitment to energy technology. This is appealing rhetoric and it is true that new technology could make a real difference. But the time scale is misleading. It will take more than five or ten years to change America's energy realities—it will take decades, and a level of political commitment and bipartisan collaboration comparable to the fighting the Cold War. Delays and zig-zags resulting from partisan approaches will only increase the cost and slow our success.

Reducing America's consumption of fossil fuels is an obvious central component of any energy policy and can also help to address climate change. This means a greater focus on both conservation and energy efficiency as well as developing new technologies with the potential to replace fossil fuels. I personally believe that nuclear power should also be part of the answer, though this is clearly still a controversial issue. High prices alone will encourage some of these steps, but uncertainty about prices still limits necessary investment. The Congress can play an important role in fostering innovation by increasing the incentives for companies and consumers to conserve and to adopt new technologies.

I would like to draw special attention to how we define our goals because I believe that it is much more desirable to reduce consumption than to reduce imports or become “independent.” Energy prices are fixed in global markets and it is overall U.S. consumption, not our level of imports, that has the most impact on prices. Similarly, in a world of high prices and global markets, it is an illusion to think that we can deny energy profits to a particular exporter by changing our import habits. Increasing U.S. domestic production of fossil fuels may help to reduce prices, but is ultimately a short-term solution. Many experts now believe that global production capacity is likely to peak at around 100 million barrels of oil per day in the next twenty years and that demand will surge well beyond this point.

We must also remember that there are two components to high prices other than demand—the weak dollar and uncertainty in energy markets. We will clearly seek to strengthen our economy and the dollar on their own merits. But Americans should also think about what we can do through our foreign policy to reduce uncertainty in markets. One element of this is institutional: finding ways to draw major new energy consumers like China and India further into key institutions like the G-8 and the International Energy Agency can help in sharing information, strengthening forecasting, and improving crisis management capabilities. Another element is to think in advance about the energy implications of major foreign policy decisions. This does not mean that we should decide in advance not to take a particular course because of its possible impact on prices. But it does mean that when we

make key decisions, we should make them in an informed way that incorporates the best thinking on the full range of potential consequences.

Greater dialogue with other major consumers, especially with China, can also help in blunting efforts by energy exporters to play off the consumers against one another. America, China, European countries, and Japan will naturally think first of their own national interests in dealing with suppliers and this is not likely to change. But regularized discussions of our objectives and plans could help somewhat to blunt the suppliers' leverage. It could also contribute to international collaboration in technology projects and infrastructure development.

Engagement with suppliers can also be useful, but must have two parts: a combination of clear communication that the United States supports and will act to defend the effective functioning of international energy markets with efforts to engage to develop more systematic rules of the game that would aim to prevent disruptive disputes, such as Russia's conflict with Ukraine, minimize further redefinition of the terms under which international energy companies operate by the supplier countries, and maximize investment in new production.

Energy touches Americans' lives in a way that few other foreign policy issues do— affecting how they drive, what they can afford to buy, where they live, and many other judgments, both major life decisions and day-to-day choices. As a result, energy policy is both crucially important and politically challenging. But looking ahead at the twenty-first century, it is readily apparent that the United States needs new energy policies and needs them quickly. Putting off these crucial decisions will only magnify the problems we already face.

Chairman BERMAN. I am going to defer some of my questions to the end of the hearing, and I am going to recognize the gentlelady from California for questions. The gentlelady is recognized for 5 minutes.

Ms. WOOLSEY. Thank you, Mr. Chairman. I was not at all waiting to go first, so I am thrilled. Thank you very much.

Chairman BERMAN. I just decided.

Ms. WOOLSEY. How nice of you.

Thank you for your testimony and your passion, all three of you, particularly you, Ms. Korin. It was very clear where you are coming from.

One thing we talked about, security. We look for alternatives, of course, to oil, and we have seen an unprecedented hype here in the United States around corn-based fuels, like ethanol, and throughout the world we are seeing a drastic food crisis and the skyrocketing price of food costs. Could you tell us what you think the effect on the global food market will be if we do not weigh the value of corn ethanol versus what it is going to cost us in the long run?

Ms. KORIN. I want to emphasize that there has been a campaign of disinformation against corn ethanol. Just so you know where I am coming from, I support repealing the 54-cent-a-gallon tariff on ethanol imports. I do not think corn ethanol should be the exclusive fuel, but it is one of many solutions. But there has been a campaign of disinformation against corn ethanol orchestrated by a public relations firm known as Glover Park Communications, which you may want to bring here and ask who exactly is sponsoring this campaign beyond the GMA.

First of all, these are the factors that are driving world hunger: Number one, a good thing. Hundreds of millions of people in China and India have risen out of poverty and beyond a subsistence diet, and so they are putting more calorie demand pressure on the market, especially because they consume more meat. It takes 18 times more grain to produce a calorie of meat than it does if you just ate grain.

Second, and this is bad news, the rise in oil price. The Kansas Fed estimates that every 1 percent increase in oil price drives a .52-percent increase in retail food price because oil feeds into transportation and labor and packaging.

Third, speculation. As capital flees the dollar, it is going into other commodities and putting pressure on every food commodity. So when you look at commodities like fish, nobody is making biofuels out of fish or rice. Nobody is making biofuels out of rice. In fact, China has a ban in place against making biofuels out of food grains. All of these are drastically increasing. It is not driven by corn ethanol.

Now, when you look specifically at the numbers for corn ethanol, net U.S. corn food and feed product—remember, most of our corn does not go to feed people; it goes to feed animals—has increased despite the corn ethanol program. Net U.S. corn food and feed has increased 34 percent in the last 5 years. Now, you may think, well, maybe we are planting corn where we were planting other things before. Not so. The net U.S. food exports have increased 23 percent on the year. Food plantings of soybean, wheat—everything is increasing.

Remember, we have a lot of farmland, but only 30 percent of our farmland is actually used for farming. We actually pay farmers not to farm. So as price goes up, one of the things that happens is that farmers plant more. So it is not the case that corn ethanol is driving hunger.

Ms. WOOLSEY. I have just a second. Mr. Sandalow?

Mr. SANDALOW. I think the role of corn ethanol in food price increases is real, but it has been wildly overstated in some of the media accounts, and I agree with Anne that a set of other factors is more important, including rising oil prices, increasing demand in developing countries, weather problems, and speculation.

That said, corn-based ethanol, which I support, is a transitional fuel, and the real reason to support corn-based ethanol, at this point, in my opinion, is to build up an infrastructure so that as we develop cellulosic ethanol and even more advanced biofuels, like algae-based ethanol and biofuels, we will have the infrastructure in place in order to have a real alternative to oil.

Ms. WOOLSEY. Mr. Saunders?

Mr. SAUNDERS. I will defer to my colleagues.

Ms. WOOLSEY. All right. I will yield, Mr. Chairman.

Chairman BERMAN. The time of the gentlelady has expired, and the gentlelady from Florida is recognized for 5 minutes.

Mrs. ROS-LEHTINEN. Thank you so much, Mr. Chairman. I would like to yield my time now to Congressman Burton of Indiana, and I will ask questions at the end.

Mr. BURTON. Thank you very much. First of all, Mr. Sandalow, you drive an electric car that is partially powered by gasoline, isn't it?

Mr. SANDALOW. Yes.

Mr. BURTON. How much did that car cost?

Mr. SANDALOW. This is a Toyota Prius, which costs about \$25,000, and the conversion is about \$8,000.

Mr. BURTON. So it cost you about \$33,000. We have millions and millions and millions of internal-combustion engines that are run-

ning our cars across the country, and it is going to take a fairly long time for a transition to these kinds of electrical cars, if we just went with that one approach, to get that done.

In the meantime, we need energy, and the thing that bothers me is, right now, gasoline is close to \$4 a gallon, food prices are going up as a result of transportation costs that are added to the cost of the product, airlines, right now, are adding \$5 a bag and charging for curbside service because the fuel prices are so high, they have to figure out some way to make up the loss that they are feeling because of energy prices.

So I guess the thing that bothers me—I really like to listen to you learned people because you obviously have long-term solutions, but there has to be a transition period, and that is the thing that bothers me. Everybody is talking about the new technologies that are needed, and I agree with that. We were talking about these back in the 1970s, when I first entered politics.

Jimmy Carter was the President of the United States, and he said, when we had gas lines around three blocks and people carrying gas cans to the stations, we have got to be energy independent. That was almost 40 years ago, and you know what? We have not done a darned thing about it.

Now, we are at the point where we are saying, we have got to do something about it, and I could not agree more. But it is going to take a transition period. In the meantime, the one thing that my colleagues and nobody seems to be talking about is the resources that we have available to us here in this country.

Now, granted, it is going to take some time to get some of those resources to the market, but we have the ability right now, right now, to get 4 million or 5 million barrels of oil a day into the marketplace in a relatively short period of time. We have a 500- or 400- or 330-year, depending on which geologist you talk to, supply of natural gas, which we could drill for and get up to the market even quicker in the transition from the internal-combustion engine relying on oil. It could be transferred to gas. We could have companies creating machinery that would convert a car from the gasoline power to gas power, which would be cleaner-burning fuel, in a relatively short period of time.

But people are not talking about that, and they are not talking about it in the Congress because of environmental concerns. The environmental lobby in this Congress has blocked real progress in dealing with these problems for a long time because they want to see us go to energy sources that do not pollute the atmosphere, and I agree with that.

I agree with that, but it ain't going to happen overnight, and, in the meantime, we have got people driving around who cannot get to work, who cannot pay for their kids' transportation, who cannot buy food and a whole bunch of things, cannot make their house payments, because the gasoline costs \$4 a gallon.

So I guess I am giving a little speech here because I feel so frustrated. The American people, in my opinion, this year, are going to start asking the question, Why aren't we using our natural resources? Why are we talking about Saudi Arabia and Iran and talking about Chavez in Venezuela and Mexico and talking about

all of these other countries when we have resources right here in America?

They are going to hold politicians accountable. It is going to cross party lines because I guarantee you, this is going to be an issue this fall, and all of us talking about the environment and cleaning up the thing and going to transition kinds of vehicles and new sources of energy; everybody is going to say, Hey, that is great, but I got to get to work tomorrow, and I got to pay \$4 a gallon for gasoline, and why in the heck aren't you guys in Congress doing something about it instead of having these meetings with everybody talking about what we ought to be doing to make ourselves energy independent over the next 10 years?

They are not concerned about 10 years from now. They are concerned about right now, and for us to sit back and only talk about, you know, these clean air programs and the new technologies and everything else, that is all important, and it is good. We ought to be doing it, but, in the meantime, we have to look at the realities of today, and the realities of today say, if we have an energy supply here that we are not tapping, we ought to tap it. There needs to be a balance between the ecology and the economy.

I am for cleaning up the environment and the ecology of this country and this world, but, in the meantime, the American people do not want to go down the tubes economically. Thank you very much.

Chairman BERMAN. The time of the gentleman has expired. The panel's response to that would be very interesting, and one day a member will say, Could you take my time to answer his questions? But I am not sure we will be alive to see it.

I recognize the gentleman from New York, Mr. Crowley, for 5 minutes.

Mr. CROWLEY. Thank you very much, Mr. Chairman.

Firstly, let me just say, Ms. Korin, I found your testimony, in particular, to be intriguing in terms of how you viewed this current crisis, not necessarily in the context of the last 30 or 40 years but in terms of a much broader picture, in terms of what it took to take people's reliance off salt toward other means of preservation of meats and other foods as an example. It was, to me, very opening in terms of, I guess, stepping back and looking at this maybe a bigger picture.

But I also note that, in order to make that transition, an awful lot of energy had to be created, electricity, et cetera, in order to really provide for that opportunity to make the ice as opposed to just relying upon saws and cutting ice out of big lakes in Upstate New York, et cetera, and transporting those down to areas where they had no means of producing ice for preservation purposes, and then electricity that ultimately afforded for air conditioning and ice production. That is also part of the reason why we are in the mess we are in today is because of the cost of producing energy into producing electricity for those purposes.

But I still think, in terms of the big picture, you are right. There is a crisis—because of our dependence on one substance when there are multiple options available to us that we have not yet sufficiently used.

Mr. Sandalow, I know you talk about plug-in vehicles primarily as a means by which we can shift and should be focusing on, but that, too, would have, in the same way, the same effect as going from salt to refrigeration, in that it would also put a heavy reliance on electricity.

So has there been any thought in terms of what impact that would have—you know, you need coal or oil or natural gas in order to produce that electricity—what effect that would have on the global issue of global warming?

Mr. SANDALOW. It is a very important question, Mr. Congressman, and the good news is that we will need to build almost no new additional power plants in order to power tens of millions of plug-in cars, and there are two reasons for that.

One of them is we can recharge these off peak. We only use about 60 percent of our electricity at night, as compared to what we use during the day. So if you provide the incentives for recharging at night, like I do in my garage, we really do not need additional power-generating capacity.

The second is these electric motors are so much more efficient than the traditional gasoline engines we drive. If you think about it, the engine you have been driving your entire life, if you drive it on a cold, winter day for more than a mile or two, it gets too hot to touch. That is all wasted heat and wasted energy. Electric motors are much more efficient, so driving electricity overall is going to save energy as compared to driving on gasoline.

Mr. CROWLEY. Let me just switch real quickly because my time is running out, and that is that some have suggested that we should be looking to utilize natural gas as a means of transportation as well.

I am suggesting now, and maybe I will get a response from you all, that the equivalent of a barrel of oil in natural gas, and I do not know what the measurements are, the equivalent thereof, but that it is about a quarter, actually more than a quarter—at one time, it was a quarter of the cost but now maybe like a tenth of the same cost—so that transferring from oil or gasoline or diesel to natural gas as a means of transportation and focusing, in terms of energy needs, on using the wind corridor north and south from Texas to the Canadian border and the solar corridor from California to Texas as a means to substitute for our energy needs. Could anyone give a comment on that? Ms. Korin?

Ms. KORIN. I think it would be a huge error to increase a low-value use of natural gas, specifically, in the transportation sector. Our situation with natural gas is not that different than oil. We account for a quarter of the global consumption. Including everything, we have just 3 percent of world reserves, and if you look where world natural gas reserves are distributed, other than Trinidad, it is all in the same nasty places as oil is distributed: The Middle East, Russia, and so forth. So we do not want to increase low-value uses of natural gas.

Already, our chemical industry has suffered very much because we use so much natural gas to generate electricity, it has driven up the price of gas, and, therefore, our chemical industry is no longer competitive because natural gas, unlike oil, is not fungible.

What we need to focus on is not one particular thing; it is choice in the transportation sector. I think we can learn a lot from the example of Brazil. Ninety percent of new cars sold in Brazil this year are flex-fuel vehicles. They went from zero to 70 percent of new cars being flex-fuel in 3 years. The price pressure on gasoline is so high that the Brazilian oil industry just had to receive a subsidy from the Brazilian government to keep the gasoline price low enough to compete with sugar cane ethanol.

So when you have choice at the pump, when you can choose amongst a variety of fuels—alternative liquid fuels from coal, from agricultural waste, electricity at home—when you have choice, then the market works.

Chairman BERMAN. The time of the gentleman has expired.

Mr. CROWLEY. I appreciate your answer. Thank you.

Chairman BERMAN. The gentleman from Illinois, Mr. Manzullo.

Mr. MANZULLO. Thank you. Mr. Chairman, thank you for putting together this marvelous panel.

I note that the topic today is the shortage of energy and our strategic ability to be a world power. Yesterday, this committee had a hearing on sovereign wealth funds and examined the fact that the people that have all of the money in sovereign wealth funds are the OPEC countries. We also learned that OPEC countries have enough in gas and oil reserves to equal all of the liquid monetary assets of the rest of the free world, and as a result of record crude oil prices, it continues to increase.

So as the Saudis hold us hostage, they accumulate incredible wealth, and then they are going to try to come over and then buy all of our power systems. I am very much concerned about that. I am also impressed with the statement of Ms. Korin on stripping oil of its strategic value.

We have to shove it in the face of the Saudis and the others involved in OPEC, which is an international, criminal cartel. In fact, if OPEC were allowed in this country, those bandits would be in prison for 30 years or more. We have to let them know we no longer need them, and we do not want what they are pumping out of the ground. They obviously use it as a political ploy because their goal is to buy us with the money that they are making off hijacking the price of oil.

I saw an article in the Chicago Tribune magazine 2 Sundays ago on vehicles that run on combustion air. Atada is making them in India. They cost \$2,000. There is no fuel. The power generated from the brakes fills this big bladder of air in the vehicle, and it just pushes the vehicle. Then you do not have to worry about anything. There will always be plenty of air, especially hot air here in Washington.

But my question is, in the interim between when we become self-sufficient and no longer have to rely upon the Saudis, isn't it wise for us to tap as many of our natural resources as possible? For example, the Chinese are drilling off the coast of Cuba, and tapping into our Florida gas and oil reserves. Wouldn't it be wise, during that interim until we become sufficient off petroleum, to have more exploration in this country, at least to satisfy our needs until then? Ms. Korin?

Ms. KORIN. I think we need to tap into all of our resources. We have a quarter of the world's coal reserves. We need to tap into that to generate liquid fuel. We have massive amounts of agricultural material. We need to tap into that. Our electricity is not generated from oil, so that is nuclear, little bit of solar and wind, coal, and so forth. We need to tap into that.

Specifically, when it comes to oil, yes, we need to expand our access. What we need to keep in mind, though, is because we only have 3 percent of world oil reserves, and we will always need oil, especially for the petrochemical industry, for uses where it is not easily replaceable—if we switch to flex-fuel vehicles, we shift to plug-in hybrids, we have easy alternatives to oil, but in petrochemicals you do not, it is oil or natural gas—we want to make sure that generations after us, we have not tapped out everything. So there needs to be a balance here where we do not use all of the easily accessible oil in this country, where we leave some for future generations.

I think the primary focus on the transportation sector has to be pass a flex-fuel vehicle requirement so we can tap into the vast array of our domestic energy resources, all of them, to generate transportation fuel; commercialize plug-in, hybrid vehicles—Congress can help with tax credits—and then remove the tariff on ethanol imports so we can share in the global market of alcohol fuels. We need to basically do all of these things. If we do not do them, we will not strip oil of its strategic value.

Mr. MANZULLO. Very quickly, there is an issue here with getting gasoline out of coal, the Fisher-Tropsch process.

Ms. KORIN. Look, what we are seeing companies do now, because we do not have flex-fuel vehicles, the easiest liquid fuel to make from coal is the alcohol, methanol. What they are doing is they are converting coal to methanol, then they are taking an extra, and very inefficient, step to convert that methanol into gasoline since they do not have this \$100 feature on cars that lets them use the methanol directly.

If new cars were flex-fuel vehicles, we would not just see ethanol; we would also see methanol from a variety of feedstocks: Agricultural waste and coal. They would not have to go through the more expensive and difficult Fisher-Tropsch process to make gasoline from coal.

Mr. MANZULLO. Thank you.

Chairman BERMAN. The time of the gentleman has expired. The gentleman from New Jersey, Mr. Sires.

Mr. SIRES. Thank you, Mr. Chairman, and thank you for your courtesy of allowing me to ask a question.

You know, I have been hearing for years how the China economy has grown and India, and that is the reason why there are the gas prices, but that has been going on for years. How do you explain the sudden spike in the last 6 weeks? Their economies have been growing for the last few years, and there was not such a spike. Why now? Let us assume that there is such a spike.

Ms. KORIN. I think that the fact that 2.4 million barrels a day were actually removed from the oil markets between 2007 and today has a significant, significant impact on that. You have removed supply. Demand has increased. China and India are still

growing, and so it has made the market much tighter. You also have attacks against oil infrastructure around the world that is building in concern. You certainly have some speculation going on.

I would urge you to think about who is doing the speculating, who has the money to speculate. You had a hearing yesterday about sovereign wealth funds, but, beyond that, the OPEC countries have an enormous amount of wealth that they can throw around to push up the price of commodities. U.S. companies cannot buy their own product to push up the price of their product, but OPEC certainly can do that. They can invest in futures and drive up the price, and I would be very surprised if they are not doing that.

Mr. SANDALOW. I would just add to that that prices always rise around this time in the summer driving months, and, I think, when you add that to the speculative pressures and the other tensions in the global oil market, that has fed this type of rapid rise.

Mr. SAUNDERS. There is also a fair amount of uncertainty in the international system, and that is certainly a component to think about, too, when you have a strike in Nigeria, or we have the level of uncertainty that we have in Iraq, and we have a tense relationship with Iran. When we are importing approximately 12 million barrels a day of oil and the price of oil goes up a dollar a barrel, that is \$4 billion over the course of a year, in terms of additional money, strictly because of uncertainty.

So we should also be thinking about some of the steps that we can take to reduce a little bit of the uncertainty in the system, and one way, actually, that I would suggest there is really to engage more with China, to engage more with India, and some of the other major consumers and to try to bring them in to many of the global institutions that we already have, like the International Energy Agency, for example, where people share information on their consumption, they share their projections, they make common plans to deal with crises, to manage emergencies. And it could be very useful to work with a number of the other major consumers in the world that are currently outside many of these institutions like the G-8.

We also have to think, frankly, about some of the things that we say because when leaders in this country make some of the statements that they make it contributes very much to anxiety in global markets that oil in particular countries may not be available in the global market, and that drives up the price.

Mr. SIRES. Can you just talk a little bit about sugar cane ethanol because it seems that everybody talks about corn? Is there a drawback to sugar ethanol as compared to corn?

Ms. KORIN. Look, nothing is perfect, but there are some 100 countries around the world that have a suitable climate for growing sugar cane. Many of these are poor countries on the receiving end of U.S. development aid. It is eight times more efficient to make ethanol from sugar cane than from corn, so it is quite a bit cheaper.

Mr. SIRES. How come we are not talking about sugar ethanol here in this country as much?

Ms. KORIN. Well, we have a sugar quota and tariff system that keeps the U.S. sugar price twice the world's sugar price, so we are

certainly not going to be using any of our sugar to make ethanol—though the Farm Bill does have subsidies to do that, which, if we want to do, I know it is very, politically, hard to do, given the particular family that is involved.

What we need to do is open up the market, basically, by removing the tariff on ethanol imports. I realize that would be politically impossible to do until we have an Open Fuel Standard in place that requires new cars sold in this country to be flex-fuel vehicles and thus creates a potential demand for alcohol that is much, much bigger than the domestic market can supply.

Mr. SANDALOW. Also, sugar only grows in tropical climates, and we just do not have that many places in the United States where sugar can grow very well.

Mr. SIRES. Thank you.

Chairman BERMAN. The time of the gentleman has expired. The gentleman from Texas, Mr. Poe.

Mr. POE. Thank you, Mr. Chairman. Thank you all for being here.

I represent Southeast Texas, and it is a little different maybe than other parts of the country. People down there, they could not spell a “Prius,” you know. They do not drive those kinds of cars. The people I work for represent blue-collar people. They work the land. They are rice farmers, and they drive pickup trucks, F-150s—they are everywhere—because that is their office. They load the back with all kinds of gear, and they are off to the refineries, and that is what they do.

Of course, like everybody else, they cannot afford diesel, and those trucks, those dualies—I am sure you know what a dualie pickup is—do you? It has four wheels in the back; that is why it is called a “dualie.” That is their office, and they have a difficult time working.

It is ironic because a lot of them work at the refineries. Twenty-two percent of the nation’s refineries are in my congressional district.

You all mentioned about dependence on oil. I think the real answer is dependence on oil from foreign countries, like OPEC. I am embarrassed, as an American citizen, that the President of the United States has to go and beg the OPEC minister to produce more crude oil so that we can have it in this country, and, of course, they, in their arrogance, said, No, we are not going to do it.

That is a bad state of affairs for this country to be in. We have two issues.

One, I think that we should drill offshore, where we have crude oil. We can do so safely. When Hurricanes Katrina and Rita came right through my congressional district, 700 oil rigs in the Gulf of Mexico were damaged or destroyed, but we did not hear anything about oil seepage from the bottom of the Gulf of Mexico because those valves shut down. We can drill safely offshore, but because of the environmental fear lobby, we do not do that, and it seems like we need to drill offshore, we need to drill in ANWR, but we need to have the second component.

We have to have refineries. It would not do us any good to have more crude oil in this country if we cannot refine it, and the refin-

eries are running at capacity because we have not built a new one in 30 years in this country because of too many unnecessary Federal regulations.

Unless we deal with those two issues, we are still going to be begging the OPEC ministers and that nut dictator, Chavez, for crude oil. An immediate solution would seem to be, to me, to open up the outer continental shelf, to drill, take care of ourselves, and then move in a direction where we can use other alternatives.

I am not so sold on corn-based ethanol, for the reasons you mentioned. It is too expensive, and we cannot till up enough land to produce enough ethanol to fuel our cars. But right now is the problem. Those guys are still trying to get to work down there in Texas today, and they cannot afford the \$4.87 it costs to pay for diesel gasoline.

So it would seem to me that that makes a little common sense. But I want to ask you one question that we have not talked about. What about the devaluation of the dollar? As the dollar continues to plummet on the world market, it costs us more dollars to buy that crude oil from OPEC. Doesn't that have an effect on the cost of gasoline, and, if it does, what is your solution to stabilizing the dollar?

Mr. SANDALOW. Well, Congressman, the answer to your first question is, yes, there is no question that the devaluing of the dollar has had an impact here. In fact, there were some weeks earlier in the year where the price of oil was not moving against the euro, and it was moving against the dollar.

The answer to your second question, sir, is beyond my expertise. I do not know the answer to how we stabilize the dollar.

Ms. KORIN. But let us be clear. We are not going to be able to stabilize the dollar as long as the people that are in the driver's seat of the world economy are Saudi Arabia and its cohorts. You hear already—Iran certainly talked about it, Chavez certainly talked about it, and I guarantee you are going to see the Saudis talk about it within a few years, if they need to—that they want to shift oil trades from dollar to euro and yen. That will strike a very severe blow against the dollar. That is a weapon, in and of itself, that kind of threat, and the fact that they could do that is because we have left our economic jugular completely exposed by being so dependent on foreign oil.

I would add, drilling is important, but, keep in mind, if we drill more, they are going to drill less. They are just going to reduce their supply. I do not think it will have an impact on price. What it will end up doing is what the International Energy Agency said. We deplete our reserves much faster than OPEC countries do because they produce according to a quota. In two decades, you get into a situation where the economic well-being of the world is in the hands of five or six countries in the Middle East, and that is a direct quote from the International Energy Agency.

So we can use drilling as a stopgap solution, but only to buy us time to focus on fuel choice in the transportation sector.

Mr. POE. Our time is up. Thank you, Mr. Chairman.

Chairman BERMAN. The time of the gentleman has expired. This is fascinating. Legislation relating to the outer continental shelf, ANWR, tax credits does not come to this committee—I just want

to remind everybody—although the idea of them coming to this committee is not such a bad idea.

The gentleman from Texas.

Mr. GREEN. Thank you, Mr. Chairman. I guess those go to the Natural Resources Committee.

Let me follow up on the question of my neighbor from Texas. What he does not have in refineries, I have in our district in the Houston area. When you mentioned that we would have a two-decade ability, we do need electric cars, and I know Mr. Sandalow's testimony, but we are still going to have to build power plants to be able to plug in those cars, and since 50 percent of our electric comes from coal, and we are nowhere near, as far as I know, clean coal, so are we going to do like China does and build coal plants that would still contribute to global warming, or are we going to do something else?

If we had a two-decade window where we could actually make an effort on our own country to diversify, like I said, I consider corn a political fuel. I found out, in the 2005 Energy Bill, that there were more corn farmers in the Midwest than there ever are energy producers in Houston, Texas, because of the effort that was made in 2005, and, of course, we saw it even right before the last year, when we plussed up the amount of corn production for ethanol.

During those two decades, if we had that, where we could produce domestically, sure, oil is a world price. If Saudi Arabia has a barrel of oil or Venezuela, or if you drill one in your backyard, are you going to take less than what the market price is, \$135 today, or whatever it is now?

So that is the issue, but we would, at least, be able to control our own destiny in our own country. But we need that two decades where we can do alternatives, and I would love to be able to have an electric car, but we are not there. The price of lithium batteries is just so outrageous. They are not economical. Now, maybe after a period of years, we can do that, but there are some successes, and I would be glad for a response, both from either Mr. Sandalow or Ms. Korin.

Mr. SANDALOW. Thank you, Congressman. Anne makes the key point. There may be reasons to drill here, but they are not to affect the price. If we drill more, they can drill less.

Let me point out this example. In the year 2000, in England, diesel truckers went on strike because gasoline prices were rising, diesel prices were rising. At the time, the United Kingdom was energy independent. They were exporting oil and gas into world markets. The fact that they were energy independent did not protect their truckers from rising world oil prices. So drilling off the coast of Texas may create jobs in Texas, but it will not affect gas prices here in America.

Mr. GREEN. We are already drilling everywhere in Texas we can and even more. We are talking about other areas that have been taken off—the West Coast and East Coast, even ANWR and other parts of Alaska—and I also include the eastern Gulf of Mexico for natural gas.

Mr. SANDALOW. There are jobs to be created, but that will not affect the world price in any significant way.

Mr. GREEN. Well, let me throw in, and I would like both of you, it has been estimated, and the other committee I serve on, Energy and Commerce, talks about, that \$40 of that barrel of oil is probably speculation, but if OPEC and Venezuela understood that we are going to start producing ours, even at that price, you do not think some of that speculation would go down if, all of a sudden—I heard one member yesterday say, “Mr. Chairman, if the President just said, ‘We have 700 million barrels of oil in the strategic petroleum reserve. We are going to start releasing that. We are not going to tell you when,’ maybe those speculators who are driving up that price of oil would, all of a sudden, say, ‘Wait a minute. We had better unload what we have because it may not be \$135 a barrel; it may be \$95.’” You win some, you lose some, if you are speculating. That is the way it is.

You do not think that if we had more domestic production, it would get the attention of the other producers in the world.

Mr. SANDALOW. Sir, as long as 96 percent of the world’s transportation fuels are oil, it is not going to work. We need to tap into our electricity reserves, which are enormous, and our biological reserves, which are enormous. That is what gives us the leverage.

The strategic petroleum reserve is a good thing, but it cannot compete against the type of production decisions that OPEC can make. It just will not work.

Mr. GREEN. You are right, but it could have an impact on a short-term period of time. Ms. Korin?

Ms. KORIN. I would also like to add that lithium-ion batteries, if you look at Chinese and Korean technology, you are talking about a premium of \$2,500 for a 10-kilowatt-hour battery. That is a battery that is sufficient to take a car 20 miles on a charge.

So we are going to see BYD and Cherry that are Chinese companies coming out to market in China with plug-in hybrids probably around 2009. They have a \$10,000 basic vehicle platform for a family sedan, so their plug-in hybrids, on top of that, add 100 bucks to make it a flex-fuel vehicle so you have liquid fuel choice, you have an under-\$17,000 family sedan coming soon to a Wal-Mart near you, which is going to just simply decimate further the U.S. auto industry.

Mr. GREEN. Thank you, Mr. Chairman. I know I am out of time.

Chairman BERMAN. The time of the gentleman has expired. The gentleman from California, Mr. Rohrabacher.

Mr. ROHRABACHER. Thank you very much, Mr. Chairman. It is, obviously, something that is complicated, but it is also obvious that our country is in a fix right now. We are in a jam. When we see our President of the United States begging unelected leaders in Saudi Arabia and elsewhere for them to increase their production, obviously, that is degrading and something that the American people feel upset about, and we all feel upset about.

We have to look at, number one, why we are in this fix. I would suggest that what has not been addressed here, in terms of why, is that, for 30 years, we have had an influence, a major influence, on American policy of radical environmentalists. The radical environmentalists have prevented the building of new refineries. They have prevented us from developing our own resources, in terms of oil and gas. They have prevented the building of nuclear power

plants. Some of them have even prevented windmills from being put up when they destroy somebody's view. We have not had any hydroelectric plants built.

These are 30 years of the effect of radical environmentalism on the United States, not responsible environmentalism, which is totally defensible, but radical environmentalism that has prevented us from developing our own resources and put us in this fix.

We have not had nuclear power plants built in 30 years. Thank you, Jane Fonda and the people who produced "Three-Mile Island." We have a new type of nuclear power plants that can be made very safely, the high-temperature, gas-cooled reactor, which they have only built one of them, in Japan, which I went over to see myself, which produces no plutonium as a byproduct meaning they cannot build bombs with what is left over.

So why should anyone be surprised that we are now so dependent on foreigners for oil and energy that we see our President begging and basically kowtowing to these foreign despots? I would suggest that we do need to move forward dramatically in developing our own oil and gas. I do resent the idea that simply because we produce more, that means they will produce less.

There is a benefit to us producing more of our own oil and gas, and that means we will have more resources here from which to work. There is a positive side to that. It may not be the long-term solution, but it is a short-term solution, and, in the long term, we do have, Mr. Chairman, lots of options in front of us, if we can free ourselves from the political bondage that has been put on us by radical environmentalism.

I would suggest that we can move forward in the transportation area, specifically. There is no reason why our trains going across this country all should not be working on electricity, and we can produce our own electricity.

We have, right now, in California, Elon Musk and others involved with the Tesla auto project. They are going to build, and are in the process of building, commercially, I would say, competitive automobiles, and I would say, once they do, they will set the trend for our larger auto industry components. It is just unfortunate that Ford and the rest of these people have to wait for an independent, like Elon Musk and Tesla, to come up with a product.

So we need to free ourselves from the bondage of radical environmentalism and get on with it. The market will work if we permit the market to work, and we would not be in this jam if it was not for all of those restrictions that have been put on us. That is my statement. Please feel free to comment.

Mr. SANDALOW. Just a quick comment, sir. I am glad to say it is not just Tesla that is working on these electric cars. General Motors says it is going to have its Chevy Volt out on the market in 2 years. I hope they do it. It turns out, we discovered your panel is three people who grew up in the great State of Michigan, so we are all very excited about the fact that good American car companies are in the lead on this technology. I think there is a lot of potential here for these plug-in electric cars.

Mr. ROHRABACHER. I agree with that, and I think that we have reached a time when the market will sustain that and promote it, and I am not so worried about utilizing our oil and gas because we

have got enormous reserves of this that we have untapped offshore in Alaska and throughout our country, but, again, we have not been permitted to utilize that. Thank you very much, Mr. Chairman.

Chairman BERMAN. Thank you. I do remind everyone that the panelists have several times said that increased utilization of oil and gas will be accompanied by a reduction in production by the OPEC countries.

The gentleman from American Samoa, Mr. Faleomavaega, is recognized for 5 minutes.

Mr. FALEOMAVAEGA. Thank you, Mr. Chairman. I want to associate myself with the gentleman from California and also Mr. Poe and Mr. Rohrabacher on the fact that our President literally is begging, especially dealing with the OPEC countries. I think it is a little embarrassing for us to be in that kind of a situation.

So my questions and thoughts and observations are closely related to the subject matter this morning: Energy security versus U.S. foreign policy. I note with interest that Mr. Saunders made comment that I was at an Energy Summit conference recently where our foreign policy toward Southwest Europe was to discourage as many of our allies, like Greece, from not getting into oil agreements with Russia, a containment policy, if you will.

Well, Greece went ahead and signed a pipeline oil agreement with Russia for the simple fact that these European countries, our European allies, need the oil. They are importers; they are not exporters.

I wanted to ask Mr. Saunders that you made mention of the fact that Central Asia is a region that is hardly noticed by many of our fellow Americans and the fact that the amount of oil and gas and other mineral resources in this region, up and coming, could very well be another Middle Eastern supplier of oil for the rest of the world, and I wanted to ask you, what should be our foreign policy toward this region because it seems that nobody ever talks about it except China, India, and Russia are very, very well aware of this tremendous resource that is in this part of the world?

Mr. SAUNDERS. Absolutely. Thank you. There are, certainly, very considerable oil and gas resources in Central Asia. It does not quite rise to the level of the Middle East, but it is still quite significant.

Thus far, Russia has really been the principal beneficiary of, especially, the Central Asian gas because of, essentially, monopoly control of the pipeline routes, and, actually, Russia has been, in the past, in a position to force Central Asian exporters to accept, actually, quite low prices for its gas, which Russia would then use domestically and turn around and export its own gas to Europe at substantially greater profit.

This is becoming increasingly difficult for Gazprom, the Russian gas monopoly, to sustain because China's energy companies have been more and more involved in this part of the world and signing a number of agreements, especially with Turkmenistan, which is really the key gas reserve holder in Central Asia, and one of these recent deals between—

Mr. FALEOMAVAEGA. Mr. Saunders, my time is very limited. Could you just kind of give me a bottom line?

Mr. SAUNDERS. Yes. Absolutely. It is an important region for the United States to become involved in. I think it is going to be difficult for us to compete with China and Russia, which are both right there. We really need to get the energy to Europe. That is the best we can do.

Mr. FALEOMAVAEGA. All right. Two things I want to ask also, Mr. Sandalow and Ms. Korin.

Last week, there was a Senate hearing where one of our former colleagues, a former chairman of the Natural Resources Committee, Jim Hansen from Utah, testified to the effect that we have enough oil in shale in the States of Utah, Wyoming, and, I believe, even Montana that could supply oil for this country for the next 100 years. We would be utterly independent. We do not need oil if we go through the development of shale oil. That is one question.

Thirdly, about 3 weeks ago, we had all of the top executives of our major oil companies come before the Congress. There was a lot of finger pointing, who is at fault, why there is so much profit they are making, and the response, if I am correct, in layman's terms, the response from our oil executives was, Do not blame us. It is the world market pricing of oil that is causing all of these problems. It is not our fault that we make so much money.

Those are the two questions I would like to raise with you.

Ms. KORIN. I think it is easy and populist to point fingers at "Big Oil" because we see them at the pump, but the fact is that the international oil companies only control 6 percent of world oil reserves. Real Big Oil is OPEC. International oil companies, like Exxon or Chevron-Texaco, only have access to less than 20 percent of world oil reserves. They are now price-takers, not price-makers, on the market. They are not even allowed to go in and explore, let us say, in Saudi Arabia. Aramco is not going to let them play.

Regarding shale, there is certainly a lot of potential, but there is also a lot of hype. Until you see a commercial-scale demonstration project where they are actually producing oil at prices that are competitive, and, certainly, at \$130 a barrel, you know, you are getting to a point where it is fairly straightforward to be competitive. But shale is still a very difficult technology, producing oil from shale. It is not like producing oil from tar sands.

You have to remember, the marginal barrel of oil will always be cheaper in the Persian Gulf. As long as oil is the currency, OPEC wins.

Mr. FALEOMAVAEGA. By the way, Mr. Sandalow, I agree with the four points that you indicated in your statement. I am sorry. My time is up.

Chairman BERMAN. The time of the gentleman has expired. The gentleman from Indiana, Mr. Pence, is recognized for 5 minutes.

Mr. PENCE. Thank you, Mr. Chairman. Thank you for this very timely hearing and an energetic and interesting panel. I am grateful for all of these good citizens' time.

I have supported alternative fuels. A lot of what our witnesses, for the majority, make reference to resonates with me, alternative technologies, wind, solar, but we have a pretty serious problem in Columbus, Indiana. We are \$3.99 a gallon right now, and Memorial Day weekend is usually when people hitch up the boats and head to the lake, and I know we are going to blow past \$4.00 a gallon,

and I think that the shockwave that is going to resonate across America is going to break glass when that happens.

So I am going to continue to support legislative efforts to come up with alternative sources of energy, but I do want to explore what is beyond the jurisdiction of this committee. I want to concede that to—

Chairman BERMAN. Why should it be any different?

Mr. PENCE. It is this oil business, but, Mr. Chairman, with respect to—one of our witnesses has repeatedly said that the United States of America has 3 percent of the oil reserves.

Ms. KORIN. Conventional.

Mr. PENCE. Okay. I will use your term: Three percent of the conventional oil reserves. Well, oil reserves are estimated quantities of crude oil that are claimed to be recoverable under existing operating conditions and economic conditions. Okay?

Now, maybe, at \$65 a barrel, the fact that we have a 110-year supply of oil in oil shale in this country is not economically feasible, but I think, last Friday, we were at \$133 a barrel. You said it is a difficult technology, and it is expensive, but, by recent estimates, which are not particularly disputed, the Bureau of Land Management says we have 2,500 giga barrels of potential recoverable oil in the United States of America. U.S. demand for oil, at current rates, would be met for 110 years.

The other thing, too, is, remember—I say with respect to our witness, particularly the extremely energetic and persuasive witness in the center of the table—aren't oil reserves proved and unproved, and on what basis do we assert that the United States categorically only has 3 percent of the oil reserves in the world? I do not know what is under ANWR. I do not know what is offshore. I, with respect, do not think this panel does either.

The truth is that I really do believe we have got to, as a nation, have an honest conversation about this.

I am also quite struck, number one, of the witnesses' understanding of what the unproved oil reserves are in the United States. It is rather striking to me.

The other thing is to understand how OPEC would respond if we announced we were going to begin to drill in environmentally responsible ways in ANWR and offshore, or if American companies decided it was economically feasible to move into the oil shale market.

Mr. Sandalow, you just made the comment that it would not affect world price at all. I respect your opinion. I do not know how you would know.

Ms. Korin, you said, "We are going to drill more; they are going to drill less." That is an interesting hypothesis. Maybe that is true. I am sure we do not know. But it strikes me that the American people, particularly the people of Columbus, Indiana, who are waking up this morning to \$3.99 on the signs, would like the American people to have more access to American oil.

So I yield the balance of my time to either one of our witnesses. I mean no disrespect, but I want to understand these broad conclusions about how our competitors would respond on the global stage and understand, on what basis do we categorically dismiss 110

years of oil shale reserves and unproven reserves in America? I yield.

Chairman BERMAN. Because I am so interested in the answer, I will ask unanimous consent to give the panel an additional minute to answer this.

Mr. PENCE. Thank you, Mr. Chairman.

Mr. SANDALOW. Thank you, Mr. Chairman. I am in favor of environmentally responsible domestic drilling. It is not going to solve the problem you are talking about, however. The world price of oil is not going to be affected by the type of drilling that you are talking about. What will affect the world price of oil is breaking the back of oil's strategic choke hold on the global transportation system. That means electric vehicles. That means biofuels. That is what we need to do.

Ms. KORIN. Yes. You will not hear any objection to drilling from me. Let that be clear. What I have said about shale, and I will say it again, I hope we see a commercial-scale demonstration program. We have not seen it yet, and, until we do, it is worth exploring, but we cannot bank on it. We cannot bank on it.

I will draw your attention to the graph on page 2 in my written testimony, where you see that OPEC has changed its supply in response to prices and in response to supply from other countries. It has specifically rigged its supply, over the past 30 years, to keep prices high. So it is not unreasonable to expect that they will do the same.

I just want to remind everybody, we do not generate electricity from oil. You may have all sorts of reasons to favor solar, wind, nuclear. It has nothing to do with reducing oil dependence. The focus has to be on the transportation sector: Flex-fuel vehicles and plug-ins.

Mr. SANDALOW. Until we get plug-ins into the fleet. Once we get plug-ins into the fleet, then these alternative energy technologies, like solar and wind and nuclear, that produce electricity can help us. Until then, they do not help us at all with oil.

Ms. KORIN. But already, you know, when we are driving on electricity, we are driving on coal and nuclear, not on oil. Okay? So it is a separate issue.

Chairman BERMAN. The time of the gentleman has expired.

Mr. PENCE. Thank you, Mr. Chairman.

Chairman BERMAN. The gentleman from Massachusetts, Mr. Delahunt.

Mr. DELAHUNT. Thank you, Mr. Chairman. I am listening to the questions that are being posed.

Is it a fair statement to say that oil, as a commodity, has no nationality?

Mr. SANDALOW. Yes.

Mr. DELAHUNT. So there is not anything such as an American oil or, you know, a Zimbabwe oil. In other words, I think we are losing our understanding that this is a world market. It is not an American market.

Is it a fair statement to say that all of this 110 years of oil developed from shale; to do it economically would require a sustained level of price per barrel in the stratosphere somewhere? Is that an accurate statement?

Mr. SANDALOW. Yes.

Mr. DELAHUNT. So, economically, it is not feasible. Can we expect, if American companies do this extra drilling, that they will give it to Americans more cheaply?

Mr. SANDALOW. No.

Mr. DELAHUNT. Right. I mean, we have got to, I think, understand what we are talking about. I would like to go to a point made by Mr. Saunders.

In terms of the price per barrel of oil today, is there such a thing as a "risk premium"?

Mr. SAUNDERS. Absolutely.

Mr. DELAHUNT. How much? Give me an estimate.

Mr. SAUNDERS. I think the estimates are pretty broad, and it really depends on who you talk to.

Mr. DELAHUNT. Okay. I am talking to the three of you. One of you tell me what the estimate is.

Ms. KORIN. It is a \$15- to \$20-terrorist premium. That is concern about terrorist attacks moving significant supply off the market because we have seen—

Mr. DELAHUNT. And political volatility.

Ms. KORIN. Yes, but I would say the key concern is about physical removal of supply from the market because we have seen a Jihadi campaign of attacks against oil infrastructure because they understand that oil is our Achilles Heel.

Mr. DELAHUNT. Mr. Saunders, you made the point that leaders, we do a lot of talking, ranting and raving, and that impacts the oil price. Is that a fair statement?

Mr. SAUNDERS. I believe so, yes.

Mr. DELAHUNT. Okay. So every time we talk about the Saudis or Chavez, or wherever, it creates an atmosphere, if you will, in the marketplace that there is such volatility that that risk premium, which you estimate, Ms. Korin, to be somewhere between \$15 and \$30, escalates.

Mr. SAUNDERS. I think, personally, it depends on what people say.

Mr. DELAHUNT. So if we say that there is a likelihood that we are going to invade Iran, if that appears on the front page of the New York Times, what does that do to the oil market?

Mr. SAUNDERS. It absolutely increases perception of risk and increases the price.

Ms. KORIN. But let me add, it is a very humiliating position for America, the world's superpower, to be in, where it has to guard its words and kowtow in front of various petro-dictators and thugs around the world—

Mr. DELAHUNT. I agree.

Ms. KORIN [continuing]. Because of the strategic value of oil.

Mr. DELAHUNT. It says something about oil and our need to become independent.

The reality is, if we look to Brazil, how did they do it, and why can't we, and what is preventing us? Can I ask a question about Brazil?

They mandated—they had the political courage to mandate—their Congress. They said, "You have got to use biofuels. You cannot just go on oil."

Mr. SANDALOW. And here is a lesson from Brazil: Consistency counts. They have maintained their support for their program over the course of 30 years, from the 1970s, in good times and bad. We, as has been said, have had a bipartisan failure in this country for the past 30 or 40 years, and if there is a silver lining in this crisis, maybe we can move toward a bipartisan success in the decade ahead.

Mr. DELAHUNT. And in terms of the car manufacturers, are the Japanese doing better than we are in terms of putting on the market flex-fuel vehicles, hybrids, whatever?

Ms. KORIN. In flex-fuel vehicles, the U.S. automakers are actually in the lead. It is only a \$100 feature.

Mr. DELAHUNT. I understand.

Ms. KORIN. It is a little thing for the car. The CEOs of the Big Three have already said that they are willing to commit to make 50 percent of their new vehicles flex-fuel vehicles by 2012. When an industry tells you that, you do not have to argue with them and make it—

Mr. DELAHUNT. Okay. But it is true to say that, in Brazil, every car that comes off, and there are American manufacturers that are producing flex-fuel vehicles, every single car that they manufacture is a flex-fuel vehicle.

Ms. KORIN. Ninety percent of new cars sold in Brazil—GM, Ford, Volkswagen, you name it—they are flex-fuel vehicles. Toyota may say here, We do not like flex-fuel. In Brazil, they are selling flex-fuel vehicles.

Mr. DELAHUNT. But that is not happening in the United States.

Ms. KORIN. No. So Congress needs to pass a law requiring new cars to be flex-fuel vehicles.

Mr. DELAHUNT. Thank you.

Chairman BERMAN. The time of the gentleman has expired. The gentleman from Colorado, Mr. Tancredo.

Mr. TANCREDO. Thank you, Mr. Chairman. I do not know when I have enjoyed a committee hearing more than this one. It has been fascinating, Ms. Korin, especially your responses. Although I do not agree with everything, the directness of your responses is just exemplary.

Mr. Delahunt's question to your earlier in the comment about the nationalization of the concept of oil, the fact that oil does not have a nationality, and your answer is perfectly accurate. A question that could have been posed, and should have been posed, yesterday to the Senate committee, where Mr. Delahunt's colleagues continue to beat up on the American oil companies, as if they had any control over this whole process of worldwide oil demand, worldwide oil demand, and that is the real issue that we are dealing with here, not the price of oil set by any of the "American companies."

At any rate, the focus of this hearing is supposed to be on our foreign policy options with regard to the oil crisis in the United States. We have addressed a lot of the issues about domestic policy options—flex-fuel vehicles, I absolutely agree with, and even mandating them. I believe I would go along with that.

But in terms of the foreign policy implications. Countries like Mexico and Venezuela, where we have some degree, perhaps a degree, of influence, certainly with Mexico more than Venezuela, and

Mexico is as close to a failed state right now as we can see around the world, in terms of the narcotrafficking, the cartels that have impacted the country's ability to actually control its own destiny. What do you suggest we do with countries with which we have some degree of influence in the hemisphere, in terms of oil policy?

Ms. KORIN. Regarding Mexico, specifically, one of the biggest problems is that they are basically destroying their oil reserves. They need to open up Pemex to foreign investment, and what we need to do, in the context of NAFTA, is demand a bit of reciprocity, demand that they open up to foreign investment. That will also help deal with some of the corruption because it will provide some sort of transparency and oversight.

Another foreign policy option that is very important: We made a huge blunder by letting a huge free-trade abuser, which is Saudi Arabia, join the World Trade Organization. Now, there are a number of other OPEC countries that would like to join the World Trade Organization, and we need to not let them join the World Trade Organization until they remove themselves from OPEC and commit to free trade, and the same for countries that are about to build a natural gas cartel.

If I can mention something that is a little bit different but very important, not when we look at oil but when we look at gas, India is about to tie itself to Iran by signing a huge pipeline deal. Ahmadinejad was just recently in Delhi to help move this deal forward, an Iran, Pakistan, India pipeline deal. We cannot allow this to happen.

We have already offered them nuclear cooperation. They need to supply the electricity somehow. It is either the coal, but we are complaining we do not want them to use their coal; it is either nuclear, or we can go to another option. We can urge our ally, Pakistan, because Pakistan is a transit state, and let them know that we would prefer to have that gas from Turkmenistan, Afghanistan, Pakistan, and then India.

Mr. TANCREDO. Thank you. How about the fact that we passed a bill here, the other day, that would allow lawsuits in Federal courts against OPEC under the Sherman Antitrust Act? Is that going to be of any value in the long run?

Ms. KORIN. I think it has a strong symbolic value. Okay? They are certainly behaving in a monopolistic and cartel-like way, so it has a strong symbolic value, but it was vetoed before, and it will likely be vetoed again because the fact is—I cannot think of a nice way to say it, but they are holding us by—

Mr. TANCREDO. I got you. Go ahead.

Ms. KORIN. You know, so we do not really have very much leverage against them.

Again, we have to focus on stripping oil of its strategic value. This is the leverage that we have against them, and we have to start today because every new car that goes on the road is going to be there for 17 years. We cannot afford to have that car only be able to run on oil. That ties us to them even further.

Mr. TANCREDO. Thank you very much. Thank you, Mr. Chairman.

Chairman BERMAN. The time of the gentleman has expired. The gentleman from Oregon, Mr. Wu.

Mr. WU. Thank you, Mr. Chairman. I have heard from many different sources, and just to cite two relatively knowledgeable ones, both the CEO of Exxon and this professor of energy flows at Stanford, their estimate is that sort of current, if you will, natural price of a barrel of oil should be about \$60 a barrel and that it would be at about \$60 a barrel for the foreseeable future. The question is, what accounts for the differential between what these different authoritative sources say is the natural price of oil, \$60 a barrel, and roughly \$120 a barrel?

My quick analysis of this, and I would like to hear from the panel, to the extent that you agree or disagree, is that the differential is due primarily to three sources: A war tax, a weak dollar, and pure financial speculation in the markets.

We went into Iraq. I do not think it was purely because of oil. There are some folks who do, but I think that one of the results of this administration's drive to go to war in Iraq was instability in the Middle East that has driven up the price of oil. That is one of the three contributing causes.

Secondly, this administration has followed, intentionally, a weak-dollar policy. I do not know of any great economy ever in world history that has done well over the long term with a weak-currency policy, but that has been the policy of this administration, and that has contributed to the increase from \$60 a barrel to \$120 a barrel.

Thirdly, in two steps, we permitted pure financial speculation in all commodities futures, not just oil but food and everything else.

One of the pieces of legislation was signed in the year 2000, in the Clinton administration, and passed by a Republican Congress.

The second piece of legislation was passed by a Republican Congress and signed by George W. Bush, and that permits Wall Street hedge funds to speculate in everything from food to oil to every other commodity that is traded.

One of the things that we will be looking at in this Congress is whether to roll that back a little bit and require that anybody making a play in commodities futures not be pure financial speculators but that they actually be players in that market; that is, they can actually take delivery of the futures that they are speculating in.

I would like the comment of our learned panel on these three factors and how much they might, or might not, account for the differential between \$60-a-barrel oil and \$120-a-barrel oil.

Ms. KORIN. Look, increased demand from China and India, terrorist attacks that remove supply from the market—they have removed about 2 million barrels a day of physical supply from the market; all of these things contribute to the fundamental, the natural price of oil. What makes oil \$60? Okay?

The difference between \$60 and where we are today is because we are not dealing with a free market. We are dealing with a cartel that is rigging supply and keeping it artificially low and not increasing supply to match increases in demand, not increasing supply when terrorists remove supply from the market. That is the difference between what the price of oil would be in a free market, even with all of these disruptions, and what the price of oil is today.

It is the fact that we are dealing with a cartel, and until we break OPEC, and the only way we can break OPEC is by stripping

oil of its strategic value, breaking its monopoly in the transportation sector; until we break OPEC, we are going to keep seeing very, very high oil prices for the foreseeable future.

Mr. SAUNDERS. I agree that the three factors do point there. They are exactly right. My only cautionary note would be not to get too wed to any particular number, like \$60 a barrel. That will change over weeks and days and the facts on the ground as they change. But your fundamental point is exactly right.

Mr. WU. The \$60-a-barrel prediction was made 5 years ago by the Stanford professor, and it was repeated by the Exxon CEO just within the last week or 2.

Mr. SAUNDERS. I would add only that the oil market is not unlike the stock market, in that it has a certain fundamental base in economic principles, but it is also a little bit of an index of psychology, and there are good days and bad days, and good times and bad times, and I think the prices in markets now are clearly a reflection of very significant anxiety here and in a lot of other places.

Mr. WU. I yield back the balance of my time.

Chairman BERMAN. The time of the gentleman has expired. The gentleman from South Carolina, Mr. Inglis, is recognized for 5 minutes.

Mr. INGLIS. Thank you, Mr. Chairman.

Ms. Korin, are you available to run for President?

Chairman BERMAN. Let me just interject. I am told, notwithstanding the absence of lights, there is a vote. We have about 12 minutes. So we will probably have a chance for two people.

Mr. INGLIS. Good. So I need her answer as to whether she is available to run for President.

It is amazing, the clarity with which you are speaking. I also find it amazing, our inability to hear and receive it. I wonder if we are sort of like the guy that goes out on the beach, and he thinks he is doing all right, except he is one of these guys like me that turns into a lobster at the beach. Along comes this most unfortunate event when the lifeguard starts pulling down the stand, and he is an incredibly fit, you know, tanned fellow, and we are now feeling like wimps because we have got 3 percent of the world's known oil reserves, and it hurts our feelings.

Apparently, I think that is what is going on here. It just hurts our feelings that we are found out to not have but 3 percent. We have got these little bodies, but the guy that turns into a lobster at the beach may be a fabulous baseball player, not in my case, and so you change the game. You get off the beach, and you say, "Come on, fella. Let us go to the baseball diamond, and let us compete there."

So rather than go to the baseball diamond, we keep slugging it out on the beach, hoping, I guess, to put on more sunscreen and get the shirts on. Could everybody put shirts on here on the beach? And so then we could cover up our problem.

So it is amazing to me, the resistance that we are finding to this incredible triple-play of the next American century. If we could get to the baseball diamond and say, "We are going to create jobs with new technology. We are going to save the automobile industry in Michigan with GM bringing in the Volt. We are going to clean up the air, and we are going to improve the national security of the

United States,” we can knock it out of the park if we would just get off the beach and get to the baseball diamond.

So Jim Woolsey sat there, a while back, and said, “You know, do you want to ruin the day of the Iranian oil minister? Announce a \$500-mile-per-gallon, plug-in hybrid. You will ruin his day.”

So it is amazing to me, this resistance we have. I wonder, on the national security point, folks on this side of the aisle believe in markets, and I believe that we have the solution to this, if we were but bold enough to say it and to stick to our market principles. The question, though, is whether the market accurately reflects the security risk that the United States is running by this dependence on oil. Does anybody have a response to that?

Ms. KORIN. I do not think the market is accurately reflecting the security risk. Many people in this country cannot buy a loaf of bread or go to the doctor without getting into their car. We are incredibly, incredibly dependent on oil for the very structure of our economy and our way of life, and so the market does not reflect that because people cannot take into account catastrophic risk. They can take into account some disruption, but not two-thirds of Saudi oil supply being removed off the market by a terrorist attack. They tried, and, at some point, they will succeed.

So we are not taking that into account, and that is why we need to act very, very swiftly to change the game, to change the terms of the debate, and get fuel choice into the transportation sector—the lowest-hanging fruit is flex-fuels, then plug-in hybrids—so Americans can buy a loaf of bread, go to the doctor, take their kids to school with competitive fuels that are not oil based.

Mr. SANDALOW. We pay one way or the other. We pay something at the pump, but we also pay with entanglement in foreign wars. We pay with pollution, and we pay with a variety of other ways. Absolutely, Congressman, we do not pay the full price of oil at the pump.

Chairman BERMAN. I am going to cut the gentleman short just because of the vote. I have seen him swim. He is a shark not a lobster.

The gentleman from Georgia, Mr. Scott, is recognized for as much time as he is willing to risk—the vote.

Mr. SCOTT. Thank you so much, Mr. Chairman. I cannot think of a more important hearing than this one.

You have touched upon several areas, but I think the question is this: We have reached rock bottom here. When the President of the United States has to go over to the Middle East and Saudi Arabia with his hat in his hand, begging for oil to go down, begging for more production, and not only that, but being refused, after all we have done for Saudi Arabia, after all we have done for them, the billions and billions of dollars in trade that we have done there.

This is totally unacceptable. It needs to be a wake-up call. It needs to be a Patrick Henry call. I am convinced, if we do not move very quickly to do something about this, we are looking at the beginning of the cause of World War III. There have been world wars that have been fought behind that, but I am telling you, this is very serious, if we allow ourselves to be continually dependent upon oil in this way.

I do believe also that now the fundamental question is, How do we deal, on the short term, with this? I believe that we cannot allow six or seven nations who have the oil capacity production to hold the world hostage, and I believe that we have got to do two things that I would like to get a response to.

First of all, I think we have a weapon we are not using, and that is we are giving tons of billions of dollars' worth of weapons to these very same countries. Why are we continuing to do that? Why can't we use our leverage to stop selling weapons to these countries until they agree to increase their oil supplies and lower the prices of it?

Then, secondly, no, we are not tropical in all of our areas, we are not Brazil, but we can learn from Brazil. Brazil has their sugar cane. Well, we have got our pine trees. We have got our wood stocks. We have got our switch grass. Lord knows, we have got kudzu. We have got stuff that we can make oils. So we need to set a fire underneath this country to move forward to that.

So I want to get your response to what we have done in the Farm Bill to move? Do you feel that that is enough? As you know, corn; it was just a no-brainer. We cannot fulfill our ethanol needs off of corn and then get upset about the food prices going up. We could put things in the Farm Bill that I think are very significant in that drive, and I want to get your comments on this to see if it is enough.

One is we reduce the tax credits for corn-based ethanol, which, I think, is going to increase the tax credits for cellulosic-based ethanol. We put \$4.2 billion into this bill for the construction of cellulosic ethanol plants. I am wondering if this is sufficient. What do you think of what we are doing there? Those two points, and your response to, do we have an option here? What impact will it be on our foreign policy and our energy policy to bring gas down if we move that stick of refusing to give them weapons? Those two points, please.

Ms. KORIN. The Farm Bill on the biofuel provisions is helpful. Also, the fact that it looks beyond ethanol to other alcohols, such as methanol because methanol is actually the easiest alcohol to make from wood chips and other agricultural waste, not ethanol.

What I would like to emphasize is the Farm Bill focuses on the supply side of alternative fuels. Until you pass a law that says new cars sold in this country need to be flex-fuel vehicles, you are not doing anything for the demand side. So it is very, very important that that happen because when you do that, you send a very strong signal to the market, to investors in alternative fuel.

You say, "As new cars enter the market, your potential demand is growing year to year. Now, go off and compete. You choose the feedstock. You choose the fuel, whatever alcohol, whatever feedstock: Biomass waste, coal, corn, sugar cane. Go forth and do it. We do not care."

Mr. SCOTT. Which is what Brazil did. They passed a law that mandated the flex-fuel. Okay.

Ms. KORIN. Yes.

Mr. SCOTT. We will move with that.

Chairman BERMAN. Mr. Scott, the risk premium is getting very high on making this vote.

Mr. SCOTT. Well, thank you, Mr. Chairman. I had better move. Thank you very much.

Chairman BERMAN. You have been a great panel. It has been a very interesting hearing, as others have said, and thank you very much for being with us. Thank you.

[Whereupon, at 11:57 a.m., the committee was adjourned.]

A P P E N D I X

MATERIAL SUBMITTED FOR THE HEARING RECORD

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

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

Rising energy costs and our dependence on foreign oil, especially from the most volatile countries, are some of the most pressing issues facing our nation.

With global oil prices at all time highs, our national security is left vulnerable both here at home and abroad.

Today, families must make the tough choices between driving to work and putting food on the table. Businesses must decide between paying their energy bills and laying off employees.

A strong domestic economy requires reliable and affordable supplies of energy to fuel our economic growth.

This is not just a U.S. goal; it is the goal of China and India as well.

Unfortunately, both global and U.S. oil supplies have not sufficiently increased to meet the rising demand from rapidly developing economies like China and India, creating new competitors for already tight supplies.

Oil is a global price reflecting supply and demand worldwide, so while some oil companies do make more money with higher prices, they cannot set the global oil price—now over \$135 a barrel.

Most of the world's oil reserves are owned not by private oil companies but by state-owned oil companies in producing nations like Saudi Arabia, Russia, and Venezuela.

Currently, 58 percent of the crude oil consumed in the United States is supplied by foreign nations, and this over-dependence on foreign oil makes us vulnerable when the OPEC-cartel or other nations conspire to reduce production.

Prices have also increased in recent years due to political tensions with Iran and instability in Nigeria, both large global oil producers.

The Iraq War also contributes to global instability, which makes oil prices high, and insurgents often sabotage Iraqi oil exports.

Unfortunately, there is no easy answer to immediately reduce our dependence on foreign sources of energy.

Limiting our dependence on foreign oil and strengthening our national security will require a multi-pronged approach of more alternative sources, more efficient uses, and just as importantly, more environmentally responsible domestic production.

Even with increases in renewable energy, the Energy Information Administration (EIA) found that oil, natural gas, and coal will continue to make up the large majority of U.S. energy use in 2030 and beyond.

We must continue to responsibly develop America's domestic energy resources.

We should invest our energy dollars here at home, not in unfriendly foreign nations.

Let me be clear on this point: I do not believe we can drill our way to energy independence.

But more domestic production in the Gulf, on the coasts, and in ANWR will provide a buffer to hurricanes in the Gulf, instability in the Middle East, or other disruptions in our oil supply.

I believe that Congress should continue these hearings to help understand and address the fundamental energy and national security issues facing our nation.

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

PREPARED STATEMENT OF THE HONORABLE DONALD A. MANZULLO, A
REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. Chairman, thank you for calling this important hearing regarding the implications of rising energy costs and national security. America's dependence on foreign sources of energy has reached such a critical level that our own economic security hangs in the balance. With oil costing \$130 a barrel, and forecasted to go much higher, hardworking Americans are seeing a real reduction in their livelihood as a result.

Over the past year, the cost of oil has increased sharply from \$65 per barrel in April 2007 to over \$132 per barrel yesterday; this represents a jump of almost 104 percent. Compare this to the fact that the average income in America has only climbed only 14 percent from 2001 to 2006, we can see that each dollar earned is worth less and less. This situation is simply unacceptable.

Congress' first priority must be to find immediate relief for the surging gas prices, because too many Americans are suffering at the pump. As we head into the summer driving season the price of gas is only going to increase. The combination of outrageously high energy costs, rising food prices, and the strength of foreign currencies vis-a-vis the U.S. dollar is a textbook recipe for inflation. This situation also ensures that more and more of America's hard earned wealth is transferred to the Middle East rather than being invested at home.

Furthermore, if the cost of energy continues to grow, broad segments of American industry will pay dire consequences as out-of-control input and transport costs make "Made in America" goods more expensive. America's export competitiveness will suffer unless we take care of this situation. Unlike China, the U.S. does not offer direct fuel subsidies so our unit cost of production and transport will only increase.

Lowering energy costs and ridding our dependence on foreign oil requires a course of action that includes conservation and increasing domestic supplies of energy. Let me repeat, relief from our energy woes lies in finding common sense solutions that incorporates the best ideas from both sides of the aisle. Thus, I released a comprehensive 12 point plan earlier this month that is heavy on conservation and smart about domestic production. For example, my plan calls for tax incentives to encourage Americans to lower consumption by purchasing environmentally-friendly automobiles. It also calls on Americans to provide adequate maintenance on current cars so more fuel is saved. My plan calls for smart increases in the domestic supply of energy through production of alternative energy, such as nuclear energy, and through renewable energy, such as harnessing tidal energy.

This Committee must also take a critical look at real ways to encourage OPEC members to increase production to meet the gap between supply and demand. In 2007, global demand for oil topped 85 million barrels per day, and with demand projected to grow by over 1.2 million barrels per day for every year thereafter, getting OPEC to increase its surplus production should be a top priority. Saudi Arabia alone has enough capacity to meet much of the projected demand increases.

I recently wrote a letter to the Saudi Ambassador, which I would like to submit for the Record, to urge his country to go beyond the 300,000 barrel output increase promised last week so that the American people can find relief from these outrageous prices. It is not surprising to me that some members of the Organization for Petroleum Exporting Countries (OPEC) are delighted oil is at \$132 a barrel. The Governments of Iran and Venezuela must be laughing all the way to the bank! This undermines our national security.

Mr. Chairman, I hope for OPEC's own sake that they reduce the cost of oil, because in the long-term this policy is doomed to hurt their own business model. New technology and non-carbon based energy sources will become increasingly attractive the longer prices are so high. When that happens, OPEC will no longer hold such sway over the rest of the world.

The future of energy policy in America must focus on pragmatic solutions that a majority of Americans can support. The only way to solve our energy problem is to focus on a combination of actions that attacks the root sources that got us here in the first place. No single "silver bullet" solution exists for our dependency, and it is impossible for America to simply conserve or drill our way out of this problem. The answer lies in a smart combination of the two.

Addressing domestic demand and supply is only half of a comprehensive energy plan. Encouraging China and India to temper their domestic demand must be a top priority for the U.S. For example, it is well known that China and India are highly

inefficient in its use of energy, particularly among state-owned companies. We should share with China and India best practices on conservation. China also subsidizes its state-owned energy companies to explore and produce oil and gas for domestic consumption. Thus, the oil and gas used in China costs less than the oil and gas we use in America. The Administration must address this subsidy. Recently, the Administration changed its policy to allow countervailing duty trade cases to be brought against non-market economies, such as China, to combat unfair government subsidies of industries. I believe we should include the difference in the price of oil in China versus the rest of the world as an unfair government subsidy that our companies use in countervailing duty trade cases.

Finally Mr. Chairman, today we are voting on the National Defense Authorization Act of 2008. It is my understanding that there are several amendments in the bill that aim to reverse a poorly written provision of the 2007 Energy Act that may adversely affect America's ability to import oil from Canada for use by the federal government. The U.S. military alone consumes 340,000 barrels of oil a day or 1.5 percent of all the oil used in the country. I urge my colleagues to support the Hensarling and Bishop of Utah amendments. It makes no sense to reduce supply, which will only push oil prices higher.

I look forward to hearing from our distinguished witnesses.

PREPARED STATEMENT OF THE HONORABLE SHEILA JACKSON LEE, A REPRESENTATIVE
IN CONGRESS FROM THE STATE OF TEXAS

Thank you, Mr. Chairman, for convening today's important hearing. There is an undeniable consensus on the importance of America achieving energy independence in the 21st century. It is critical that we terminate our dependence on foreign sources of oil, the majority of which are located in regions of the world which are unstable and in most circumstances, opposed to our interests. Accordingly, there is no issue more essential to our economic and national security than energy independence.

Let me also thank the Committee's Ranking Member, and welcome our distinguished panel of witnesses: the Honorable David Sandalow, Senior Fellow, Brookings Institution and former Assistant Secretary of State; Anne Korin, Co-director, Institute for the Analysis of Global Security; and Paul J. Saunders, Executive Director, the Nixon Center. I look forward to your informative testimony.

Mr. Chairman, as my colleagues are aware, global oil prices have more than tripled in the past five years, rising from \$30/barrel in 2003 to \$134/barrel this week. This includes a doubling in price in the last year alone. This is an extremely important issue which has daily personal ramifications for families across America, with gas prices surging to an all-time record high, averaging \$3.807 a gallon across America. It also has unavoidable implications for U.S. national security. Under current conditions, the oil market is extremely sensitive to a number of factors, some of which are beyond the control of U.S. policy.

The energy security of our nation is, right now, tied to oil, the remaining reserves of which are increasingly concentrated in fewer countries. The geographic location of critical energy reserves continues to be cause for significant concern, with 60% of the world's proven oil reserves concentrated in the Middle East. It is also the only region with spare production capacity, as well as the source of the world's cheapest oil. Fourteen of the world's top twenty oil companies are state owned, and western oil companies now control less than 10% of the world's oil reserves.

Currently, a large percentage of the world's oil comes from Organization of the Petroleum Exporting Countries (OPEC) nations. Top OPEC exporters include Saudi Arabia, Iran, Venezuela, and the United Arab Emirates. Outside of OPEC, Russia and the United States are the two largest oil producers. As a nation, we import the majority of our oil from Canada, Saudi Arabia, Mexico, Nigeria, and Venezuela.

Mr. Chairman, there are many indications that OPEC nations are deliberately under-producing, keeping the oil supply low to ensure that prices stay high. The United States, together with other nations dependent on foreign oil, infuse a consistently large flow of cash into the Persian Gulf, funds which, according to some reports, may be used to fund terrorism.

Energy is the lifeblood of every economy, especially ours. Producing more of it leads to more good jobs, cheaper goods, lower fuel prices, and greater economic and national security. Bringing together thoughtful yet distinct voices to engage each other on the issue of energy independence has resulted in the beginning of a transformative dialectic which can ultimately result in reforming our energy industry to the extent that we as a nation achieve energy security and energy independence.

In addition to being a representative from Houston, Texas, the energy capital of the world, for the past twelve years I have been the Chair of the Energy Braintrust of the Congressional Black Caucus. During this time, I have hosted a variety of energy Braintrusts designed to bring in all of the relevant players ranging from environmentalists to producers of energy from a variety of sectors including coal, electric, natural gas, nuclear, oil, and alternative energy sources as well as energy producers from West Africa. My Energy Braintrusts were designed to be a call of action to all of the sectors who comprise the American and international energy industry, to the African American community, and to the nation as a whole.

Mr. Chairman, the United States remains the world's largest consumer of gas and oil, and we have many miles to go before we achieve energy independence. In fact, U.S. gasoline demand has grown steadily over the past four years, averaging approximately 1.5% growth per year. Demand in other nations is also rising rapidly, with China, India, Russia, and countries in the Middle East consuming record quantities of crude oil to fuel industrialization. Of particular note is China, whose growing economy and global influence, together with an opaque politico-economic system, have led to some analysts to express concern about a growing potential for conflict over energy.

Because I represent the city of Houston, I realize that oil and gas companies provide jobs for many of my constituents and serve a valuable need. The energy industry in Houston exemplifies the stakeholders who must be instrumental in devising a pragmatic strategy for resolving our national energy crisis. That is why it is crucial that while seeking solutions to secure more energy independence within this country, we must strike a balance that will still support an environment for continued growth in the oil and gas industry, which I might add, creates millions of jobs across the entire country.

I am willing, able, and eager to continue working with Houston's and our nation's energy industry to ensure that we are moving expeditiously on the path to crafting an environmentally sound and economically viable energy policy. Furthermore, I think it is imperative that we involve small, minority and women owned, and independent energy companies in this process because they represent some of the hard working Americans and Houstonians who are on the forefront of energy efficient strategies to achieving energy independence.

I look forward to the testimony of our witnesses today, and to working together with my colleagues in Congress to work to decrease our dependence on foreign oil. As Ms. Korin notes in her testimony today, it is unacceptable that, at a time when U.S. relations with the Muslim world are at an all-time low, we are so dependent on the Middle East to power our nation.

Thank you, Mr. Chairman. I yield back the balance of my time.

PREPARED STATEMENT OF THE HONORABLE JOE WILSON, A REPRESENTATIVE IN
CONGRESS FROM THE STATE OF SOUTH CAROLINA

Thank you, Chairman Berman, for holding this hearing on the rising price of oil and its ramifications on our national security.

When we talk about energy independence we are more often than not talking about energy security. Our national security, for better or for worse, is tied to our energy resources. Dependence on oil from unfriendly nations threatens our strategic interests. It burdens our military which has to power a vast array of military equipment using oil. And, rising energy prices put a strain on our vital transportation sector and on American businesses which directly undermines our economic competitiveness in a growing global market place.

This dialogue on the national security ramifications of oil dependency—in particular foreign oil dependency—is further impetus for this Congress to take proactive steps towards investing in alternative energy sources like nuclear energy, promoting conservation, and recognizing the strategic advantage we gain by investing in energy exploration here at home. I welcome that dialogue, and I look forward to the testimony from our witnesses today.

We need a cooperative and strategic plan to lower oil prices and decrease our dependency on foreign oil. I hope today's hearing will focus on realistic immediate and long-term solutions to this important issue.

Again, I wish to thank Chairman Berman and my fellow committee members for this opportunity.



CONGRESSMAN DON MANZULLO'S 12-POINT PLAN TO REDUCE SURGING GASOLINE PRICES IN AMERICA

"Gasoline prices are at record high levels primarily because of a huge increase in the worldwide demand for oil, and the foreign oil producers' unwillingness to increase production combined with an insufficient utilization of domestic resources. We need a comprehensive energy policy that balances conservation with new incentives for research and production of renewable and alternative fuels, as well as increased domestic extraction and refinement of oil and gasoline. In 1973, during the first oil crisis, America imported 35 percent of its oil and today we import 59 percent. We must end our dependence on costly foreign oil for our own national security so we no longer have to rely on outsiders who often don't have our best interests at heart."

— Congressman Don Manzullo (IL-16)

Immediate relief

1. **Eliminate federal mandate for "boutique fuels" in Illinois during summer** (HR 2493) – In the Chicagoland area — including McHenry County — gas prices are about 20 cents higher than other northern Illinois counties from May 1 to October 1 because the U.S. Environmental Protection Agency (EPA) requires cleaner-burning Reformulated Gasoline to be sold during the peak driving season. These more expensive "boutique fuels" were first required in the 1990s to offset smog in areas with heavy pollution. However, the EPA never took into consideration that the Chicago area has always blended its basic gasoline with clean-burning ethanol and now is marketing super-clean-burning E-85 to Flex Fuel vehicles in northern Illinois. Illinois should receive an "ethanol credit" because it is already burning cleaner fuel and be relieved from the boutique fuel requirement. Furthermore, the other areas of northern Illinois not required to burn boutique fuels still see price increases during the summer because the process of making the boutique fuels also increases the cost of making basic gasoline. *HR 2493 would maintain the standards of the Clean Air Act while limiting the number of boutique fuels required in a given area, reducing the price of gasoline. Effect – Reduces gas price by 20 cents per gallon from May to October.*

2. **Stop filling America's Strategic Petroleum Reserve** – Our nation's Strategic Petroleum Reserve currently stands at an all-time-high of 701 million barrels of oil. This meets the reserve goals of the International Energy Agency. Although our nation's stated goal for the Strategic Petroleum Reserve is to reach 1 billion barrels, it is unnecessary at this time and would waste taxpayer resources by requiring the government to pay an extremely high price to fill the reserve right now. *HR 6022 was signed into law by the President on May 19, 2008. Effect – Halting purchases for the Strategic Petroleum Reserve would reduce gas prices by 5 to 10 cents per gallon.*

3. Reduce exorbitant taxes on gasoline in Illinois – Each gallon of gasoline in Illinois includes an 18.4-cent federal gas tax (federal tax on diesel is 24.4 cents), a 19-cent state gas tax, a 1.1-cent state environmental tax, a 6.25 percent sales tax (about 22-cents-per-gallon when gas is at \$3.50), and various local taxes, totaling more than 60 cents per gallon in most areas of the state. Congress and the Illinois General Assembly should consider reducing this excessive amount of taxation at least temporarily during this crisis. Illinois is one of a handful of states in our nation that levies a sales tax on gasoline on top of a state motor fuel tax. **Effect – Could reduce gas price by up to 60 cents per gallon.**
4. Encourage motorists to conserve fuel – In addition to saving money, motorists can reduce our nation's demand for foreign oil by practicing the following driving tips from the AAA Motor Club:
- Start your car properly by not racing a cold engine to warm it up or allowing it to idle for an extended time.
 - Maintain a steady speed; quick starts and sudden stops waste fuel, are harder on vehicle components and increase the odds of a traffic crash.
 - Facilitate routine maintenance, such as tire, air filter, oil and fluid checks, and engine tune-ups, to ensure maximum fuel efficiency.
 - Use the air conditioner conservatively, using your vehicle's "economy" or "recirculation" setting, which reduces the amount of hot outside air that must be chilled.
- Effect – Proper car maintenance and sensible driving could lower gasoline bills by up to 30 percent for motorists while reducing America's demand for expensive foreign oil.**
5. Provide tax incentives to encourage motorists to save fuel
- Support legislation that would increase or remove the cap limitations on the tax credit of up to \$3,000 for consumers who purchase alternative powered motor vehicles. Currently, only the first 60,000 hybrid vehicles of a particular make and model sold after January 1, 2006 qualify for the tax credit. For many of the most popular hybrid vehicles, the tax credit has expired or will expire at the end of this year. *HR 76 would increase the number of hybrid vehicles eligible for this tax credit to 250,000.*
 - Support legislation to help offset the cost of idling reduction devices that allow truck drivers to control temperatures in their sleeping cabs while the ignition is "off." *HR 139 would allow a tax credit up to \$1,000 for the purchase of the devices, which are estimated to save 960 million gallons of diesel fuel annually if adopted by all truck drivers.*
- Effect – Providing tax incentives to encourage motorists to save fuel would lower gasoline bills for motorists while reducing America's demand for expensive foreign oil.**

Long term relief

6. Avoid tax increases on oil and gas that will be passed on to motorists – On several occasions the past year and a half, the Democrat-led Congress has brought various bill to the floor of the House that would significantly increase taxes and regulations on the oil and gasoline industry. Imposing these burdens will only cause the companies to pass along their extra costs and raise prices at the pumps. A "Windfall Profits Tax" that taxes profits above a certain level was tried in the 1980s and failed miserably because it prompted the oil and gas industry to halt exploration and production in the United States and move it overseas to avoid the cost increases; as a result, our reliance on costly foreign oil increased 13 percent during that time. While oil and gas companies have reported record profits, they have also made record investments of \$1.25 trillion in long-term energy initiatives over the past 15 years. **Effect – Avoiding tax increases would keep gas prices down and encourage gas and oil**

companies to continue exploration and production in America, reducing our reliance on costly foreign oil.

7. Scrutinize earnings and profits of oil companies; eliminate energy speculation – With most major oil companies again reporting double digit profits this year, federal and state authorities should redouble their scrutiny of the oil and gas industry to ensure price gouging is not occurring. From 1973 to May 2007, the Federal Trade Commission (FTC) conducted approximately 190 oil industry investigations that resulted in at least 44 enforcement actions. Most notably, the FTC investigated gasoline pricing following Hurricane Katrina but found no evidence of manipulation. At the same time, we need to encourage oil companies to reinvest more of their profits into exploration and production of gasoline and R&D of alternative fuels in United States. We must also crack down on energy traders that have excessively speculated on the price of a barrel of oil. *Title XIII of the Food, Conservation, and Energy Act of 2008 (H.R. 2419), which passed the House on May 14, 2008, gives the Commodity Futures Trade Commission (CFTC) the authority to monitor energy trading behavior and prevent manipulation, particularly when these oil contracts are being used to establish a price reference for other contracts.* **Effect – Reinvesting oil profits into domestic production and alternatives research would help eliminate America’s dependence on costly foreign oil. Eliminating excessive energy speculation will restrain rapid price increases.**

8. Hold OPEC countries accountable for failure to support reasonable oil prices – Major oil producing nations have the power to reduce oil prices by increasing supplies. Unfortunately, the OPEC cartel is taking advantage of the United States’ dependence on its oil and refuses to turn on the spigot and produce more oil. The U.S. should take action to reduce, suspend, or terminate bilateral assistance and arms exports to major net oil exporters engaged in oil price fixing as part of a concerted diplomatic campaign with other major net oil importers to bring about the complete dismantlement of international oil price fixing arrangements. The U.S. should also prosecute the anti-competitive conduct committed by international cartels like OPEC by removing foreign-state immunity (HR 6074). *HR 6074 passed the House on May 20, 2008. Congressman Manzullo also sent a letter on May 20th to the Saudi Arabian Ambassador protesting their decision to not significantly increase production.* **Effect – Increasing foreign oil production would reduce the price of oil.**

9. Allow more domestic exploration and development of oil and gas – The United States has limited control over the price of gasoline because it relies too heavily on expensive foreign oil. Our nation has vast oil resources that are not being extracted for various reasons. We need to do a better job of extracting the estimated 112 billion barrels of U.S. oil reserves, which could power 60 million cars for 60 years:
 - Using environmentally sound practices, we can produce an estimated 1.5 million barrels of oil a day on a tiny portion of the Arctic National Wildlife refuge (exploration would occur on 2,000 of the 19 million acres of the ANWR) in Alaska. The oil from the ANWR would increase America’s onshore oil reserves by over 50 percent. *HR 3089 would allow oil extraction from ANWR.*
 - During exploration in 2006, Chevron found a deep well offshore in the Gulf of Mexico capable of producing up to 15 billion barrels of oil. China recently partnered with Cuba to drill offshore in areas near the Florida Keys that American companies are banned from exploring. *HR 3089 would end the offshore drilling ban America has had in place for many years to open up 14.3 billion of barrels of oil off the Atlantic and Pacific coasts for extraction.*
 - The U.S. Geologic Survey just released a new assessment of production estimates for the massive Bakken Oil Formation in Montana and the Dakotas. The government now estimates 4.3 billion barrels of oil can be extracted from those fields with existing technology. We should encourage environmentally sound exploration and development of these oil resources.

- Experts estimate billions of barrels of oil exist in the United States underground in abandoned oil fields. Energy companies should explore ways to extract these resources in an environmentally sound manner as soon as possible.

Effect – Allowing for more domestic extraction of oil would reduce our dependence on expensive foreign oil and bring down gas prices in America through increased supply.

10. Encourage the continued development and production of alternative and renewable fuels

– Although widespread use of alternative and renewable fuels is many years away, we must continue to research and develop the fuels of the next generation. We tried natural gas to power our vehicles but the rise in its price made it uneconomical except for larger vehicles such as delivery trucks and buses. Currently, corn-based ethanol helps to keep gas prices down by about 54 cents per gallon; however, it has matured enough as a technology to merit a gradual reduction of the direct benefits ethanol producers receive from the government (i.e., *the ethanol tax credit is reduced by 6¢ per gallon in Section 15331 of HR 2419*). Congress must pass legislation that provides new incentives to develop other promising energy alternatives:

- *Coal to liquid technology that provides diesel fuel (HR 2208).*
- *More environmentally sensitive extraction methods for oil shale (HR 2652).*
- *Extraction of oil from tar sands and heavy oil.*
- *Further refinement of biodiesel (HR 3781).*
- *Cellulose-based ethanol, made from switchgrass and other non-corn sources (Title LX of HR 2419).*

Effect – Alternative and renewable fuels will reduce the demand for costly foreign oil and reduce gas prices in America.

11. Encourage the continued development and production of alternative vehicles

– We must accelerate the development of the Freedom Car initiative at the U.S. Department of Energy that is exploring the viability of plug-in hybrids, fuel cells, hydrogen-powered cars, and clean diesel vehicles. We can fuel the electric hybrids through the development of additional nuclear and other “clean” power plants in America and by conserving electricity in other ways (if all Americans installed energy-efficient light bulbs in their homes, we would save the equivalent of electricity produced by 20 nuclear power plants). **Effect – Alternative vehicles will save motorists money, conserve energy, lower greenhouse gas emissions, and reduce America’s dependence on costly foreign oil.**

12. Provide incentives to encourage development of new refineries in United States

– American oil refineries are operating at or near capacity. Legislation that Congressman Manzullo voted for in 2005 is making modest progress in increasing operating refining capacity, but more still needs to be done. New refineries are needed to speed up production and reduce the price of gasoline. EPA’s regulatory framework for reviewing and processing refinery applications must be streamlined. *HR 3089 permits tax exempt bonds to be used for oil refinery construction.*

Effect – Development of new refineries in the United States would increase supplies of gasoline, lowering the demand and reducing the cost to motorists.

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Congress of the United States
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May 20, 2008

His Excellency Adel Al-Judbeir
Ambassador
Royal Embassy of Saudi Arabia
601 New Hampshire Avenue, NW
Washington, DC 20037-2405

Dear Mr. Ambassador:

As a senior Republican of the House Foreign Affairs Committee, I value the relationship between the United States and Saudi Arabia. We have numerous ties that have stood the test of time, going back 75 years to when diplomatic relations were first established before oil was discovered and shortly after the unification of the modern-day Kingdom of Saudi Arabia. The United States and Saudi Arabia share a common concern about regional security, oil exports and imports, and sustainable development. America aided your country's defense in 1990 with Operation Desert Shield when then Iraqi dictator Saddam Hussein invaded Kuwait and threatened the territorial integrity of Saudi Arabia with a possible strike against the Hama oil fields. If Saddam Hussein was successful in this attack, he would have gained control of the majority of the world's oil reserves.

Several times in the past, emissaries from the United States requested an increase in oil production from Saudi Arabia in response to rapidly rising gas prices and the resulting economic trouble within the United States. Saudi Arabia graciously responded positively in the past, greatly increasing production to help ease the economic crises in many oil importing countries in order to prevent a deeper recession that only hurts everyone, including Saudi Arabia.

That is why I am perplexed at the most recent response of Saudi Arabia to a personal request from the President of the United States. According to media reports, Saudi Arabia agreed to increase production by only 300,000 barrels a day, which was a week-old response to commercial customers. This increase would bring Saudi Arabia's production to 9.4 million barrels a day but the Kingdom's production capacity is 11.3 million barrels.

I realize that we have our own political troubles in the United States. I have been trying for years to convince my colleagues to open up more of U.S. oil and gas resources

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to further exploration and extraction. Unfortunately, the votes in Congress are not there in either the House or the Senate to open up the Arctic National Wildlife Refuge (ANWR) or the Outer Continental Shelf (OCS) to oil and gas drilling. Yet, the constituents I represent in northern Illinois are facing record gas prices exceeding \$4 a gallon and need immediate relief before the summer starts or else our economic turmoil could spread more deeply around the world. As you may know, the price of crude oil comprises 72 percent of the cost of a gallon of gasoline in the United States. Thus, any change in the supply of crude oil becomes the overwhelming factor that affects the price of a gallon gas.

Mr. Ambassador, if our economy falters, it will only result in a decreased purchase of petroleum products by American consumers. I believe it is in the interests of both our countries for Saudi Arabia to increase production beyond the 300,000 barrels a day already promised to commercial customers. In addition, as more and more Americans grow increasingly frustrated with the price of gas, they will purchase alternative fueled vehicles. I predict that if current trends continue over the next 20 years, the majority of Americans will no longer care about the price of gas as they purchase plug-in hybrids, fuel-cell, or hydrogen powered vehicles. Once that happens, other aspects of the U.S.-Saudi relationship will emerge and Americans will remember the day when they were turned down in their hour of need. Thus, I respectfully request a re-evaluation of the decision to increase oil production by only 300,000 barrels a day.

Thank you for your kind and urgent attention to this matter.

Sincerely yours,



Donald A. Manzullo
Member of Congress

