

Testimony of David L. Goldwyn before the House Subcommittee on National Security and Foreign Affairs;
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“National Security and Latin America: Challenges and Opportunities on Energy Cooperation”

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Energy Security and US Foreign Policy

Mr. Chairman and Members of the Subcommittee, it is an honor to speak with you today about the importance of energy security for national security in Latin America and the world at large. US dependence on oil for transportation, and the dependence of our allies and friends, undergirds nearly every major foreign policy challenge the US faces today. The wealth oil provides our adversaries and competitors, the impunity they enjoy, the growing competition for energy resources by consuming nations, the competition for political influence with producers, and the growing threat to a free market for trade in energy, all undermine the ability of the United States to project its foreign policy, to advance our values, to deter terror and proliferation, and protect our economy. For too long the US has failed to integrate its approach to foreign policy and energy security, to the detriment of both interests. By tackling the issues of the role of oil in transportation and the intensity of carbon in energy demand at home, we can be empowered to transform the role of oil in the global economy abroad, and greatly reduce national security threats that range from Iran’s ability to sustain a nuclear program, to Russia’s ability to dominate its neighbors, to the ability of Venezuela to compete with the US for leadership in the hemisphere. Serious action on energy security is at the core of any viable national security strategy for the United States. I am grateful to the Committee for its attention to the issue.

In the Hemisphere, US influence on markets, democracy and security is declining fast. Most of our longstanding bilateral and multilateral energy dialogues are not functioning. We have no sustained strategic engagement on energy with two of the three key producers: Venezuela and Brazil. With this diplomatic neglect, we have seen overall investment decline, production flatten, and resource nationalism rise in some key producing nations. All of this is evidence that the US needs a fresh approach to energy diplomacy in the hemisphere. The United States will enhance its energy security by engaging the region on issues that concern its people: job creation, poverty alleviation, migration, and trade promotion. An asymmetrical approach, one that addresses a broad range of issues rather than just energy security, may pay dividends equal to or greater than one focused solely on energy. The US must also ensure that it has the flexibility to utilize sub-regional energy dialogues and that any new framework strengthens, rather than weakens the energy diplomacy mission of the Department of Energy. I will discuss the US’s growing energy security problem, domestic and international solutions to this problem, current energy trends in the Western hemisphere, their impact on US foreign policy, the status of existing energy security dialogues in the hemisphere, and the utility of a fresh approach.

I. The US’s Growing Energy Security Problem

The United States is more energy insecure today than it has been in nearly thirty years. We are insecure because the global oil market is more fragile, more competitive and more volatile than it has been in decades. Global demand for oil is strong, powered by global economic growth, especially in China and developing Asia. Global supply has been constrained, first by underinvestment by international oil companies, then by production restraints by OPEC following the crash of oil prices in 1998, and now due to restrictive economic frameworks in many producing nations and internal instability in others. The consequence of this market is that nominal oil prices are high, oil producers are earning enormous economic rents from these prices, and spare capacity of oil is only around 2 million barrels per day (bbl/d). In an 85 million barrel per day market every marginal producer of oil can command global headlines by threatening actions that could impact global oil prices.¹ Oil remains a strategic commodity primarily for transportation and we have failed to develop substitutes we can shift to. The future looks grimmer than the past. Absent a major change in transportation technology or policy, global oil consumption will nearly double by 2030 and dependence on OPEC supply will grow. The outlook for prices is bullish: so far we are consuming oil faster than we are discovering new supplies.

¹ <http://www.cia.doc.gov/emcu/international/oilother.html>

As dire as these projections sound, this is not the worst news. The worst news is that the energy dependency of the US, our allies in Europe and developed Asia, and the growing dependence of rising powers such as China and India is rapidly eroding US global power and influence around the world. US power is challenged in five ways.

First, the dependency of consuming nations on oil, or in some cases natural gas supply, or for access to exploration acreage in a producing country, makes them reluctant to join coalitions the US leads to combat weapons proliferation, terrorism or aggression. The most salient examples are long standing French, Russian and Chinese resistance to sanctions on Iran, or before the war, on Iraq; China's resistance to oil sanctions on Sudan; and of course long standing US tolerance of repression in the Middle East that we would have sanctioned in any non oil producing part of the world.

Second, when exporters have very high revenues, with earnings far in excess of that needed to finance their own budgets; they can act with impunity against their own people and also towards the US and their neighbors. It is costly for President Chavez to build support for his competing economic vision by providing subsidized oil and products to his neighbors or purchasing the bonds that finance their debt. It was a luxury for former Russian President Putin to renationalize his energy sector, restrict foreign access to his pipeline system, and see production flatten while demanding open access to Europe. It is costly for Iran to have paid down its international debt and increased its foreign reserves to withstand potential sanctions. None of these governments could finance their internal budgets – or their foreign policy approaches – if oil were \$25 or even \$50 per barrel. Even Saudi Arabia's economic reform movement, borne in the days of \$10 oil in 1998, evaporated when oil reached \$30 per barrel in 2000. Enrichment of our competitors or adversaries harms U.S. security interests in every part of the globe.

A third problem is that the restricted access to new oil exploration acreage impedes the ability for supply to respond to higher prices from increased demand. Most of the world's oil reserves (and nearly all of the low cost easy to access reserves) are controlled by governments, most of whom do not allow the free market access to develop and exploit it. The denial of foreign exploration for oil by Saudi Arabia and Kuwait, as well as new restrictions on access to acreage in Russia, limits the ability of high prices to attract new supply. Moreover, as oil prices rise, many governments that have been open to foreign investment (Russia, Venezuela, Bolivia, Argentina, Ecuador) are now far less receptive to foreign investment, curtailing the ability of supply to respond to market signals and driving prices higher. These governments need not use foreign capital to invest in production, they can use their own. But the fact is that other than Saudi Arabia, few in OPEC are making these investments and monopoly control of a strategic commodity impedes a rational market response to growing global demand for oil and poses a serious risk to the global economy.

A fourth and closely related problem is that this "tight" market is undermining the fluidity and fairness of the market for available oil supplies and exploration acreage. New competitors like China and India, are trying to negotiate long term supply contracts (at market prices) to ensure that they have supplies in the event of a crisis or supply disruption. These countries are not cornering significant amounts of oil at this time, but the trend is counter to the market system that operates so efficiently. In addition competition is also fierce because newly developing non-market economies that must import oil (China and India) are using government subsidies to compete with private companies for access to acreage. From an economic point of view it may not matter if China loans Angola \$3 billion at low interest to gain part of an exploration block if the oil is produced. But China gains an enormous geopolitical advantage by this act, which neither the U.S. nor international oil companies can compete with. During the past few years, China has demonstrated a willingness to deepen its oil trading relationships with countries whose ties to the United States are strained, such as Iran and Sudan, and previously Iraq, taking advantage of US sanctions policy and leading to fears that Beijing will form oil-for-arms, military-client relationships with nations under boycott by the United States. This has put China into a position of geopolitical rivalry with the United States. As Russia decides whether to build a new oil pipeline to China or to a port close to Japan, it influences the foreign policies of both nations in a way the U.S. cannot compete with.

A fifth issue is that oil dependency makes the US economy vulnerable to the price volatility that results from supply and demand shocks. The source of these price shocks in the global oil market is increasingly from internal disruptions: the Venezuelan strike of 2003, shut in production in the Niger Delta today, the Libyan and Iranian revolutions, insecurity and instability in Iraq. The system of collective energy security established through the International Energy Agency, including our own Strategic Petroleum Reserve, has effectively deterred producers

from attempting an oil embargo. But we cannot deter internally generated threats and disruptions, only manage them.

II. The Importance of the Western Hemisphere

Latin America is a strategic region for US foreign policy for many reasons. We are neighbors, trading partners, investment partners and we share deep familial and cultural ties. The hemisphere is democratic, with one notable exception. In the energy sphere, the hemisphere provides the US with a large portion of our diversity of oil and gas supply. For this reason, the failure of the hemisphere to realize its potential for growth is a serious concern for US and global energy security. Latin America is far closer to the US market than the Middle East. While the investment climate in key Latin American countries is deteriorating as state control increases, even in Venezuela access to exploration acreage remains superior to that in the Middle East. Additionally, the non-OPEC producers in this region exert counter-pressure on OPEC's monopoly power.

Mexico and Central and South American nations delivered just over 13% of global oil production in 2006², and possess approximately 8.7% of global oil reserves, with 6.1% in Venezuela and .9% in Mexico alone.³ The region is also a major refining center, with 9.7% of the world's refining capacity. Regional refineries are designed to serve the specialized needs of US markets. The most important exporters, Venezuela and Mexico, consistently rank in the top four sources of US oil supply along with Canada and Saudi Arabia. Venezuela averaged 1.42 million barrels per day (m/bpd) in 2006; Mexico averaged 1.7 m/bpd in that year⁴.

III. Energy Trends in the Hemisphere

In Latin America today we see two trend lines. One trend is towards rising state control of energy resources – in Venezuela, Argentina, Bolivia and Ecuador in particular. The concern here is that this trend will limit the growth of global supplies of oil and gas by undermining the value of existing investments, discouraging future investment or barring foreign investment altogether. The economic consequence of these trends is that the hemisphere will contribute less to the diversification of oil supply, thereby increasing the importance of OPEC supply and over time undermining economic development in the region. The political consequences of these trends in the short run are the decline of US influence in the region to competing ideologies and the erosion of democratic structures.

A second trend is towards creative fiscal regimes that welcome foreign investment and require state owned companies to compete with international companies, with independent regulators that promote fair and efficient regulation. Countries observing this model are increasing production or stalling the decline of existing reserves. Brazil, Colombia, Trinidad and Tobago and Peru are key examples of this creative model.

When we consider that Mexico so far continues to bar foreign investment in its upstream oil and gas sector, and the size of the reserves and production of the countries practicing the resource nationalism model, the net effect is negative. Foreign investment in the oil sector is shifting away from South America to North America, particularly to Canada's oil sands. When we compare 2006 to 2005, only Brazil and Trinidad managed to increase production significantly, while other countries faced decline or very modest gains⁵.

A. The Rise in State Control

Venezuela and Mexico are the most important oil exporters in the hemisphere. While Brazil, Colombia, Ecuador, and Argentina are important destinations for foreign investment, and helpfully produce enough oil to meet their own

² EIA World Production of Crude Oil, NGPL, and Other Liquids, and Refinery Processing Gain, Most Recent Annual Estimates, 1980-2006 <http://www.eia.doe.gov/cncu/international/oilproduction.html>

³ EIA World Proved Reserves of Oil and Natural Gas, Most Recent Estimates. PennWell Corporation, *Oil & Gas Journal*, Vol. 104.47 (December 18, 2006). Oil includes crude oil and condensate. Data for the United States are from the Energy Information Administration, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves. 2005 Annual Report*, DOE/EIA-0216(2005) (November 2006). Oil & Gas Journal's oil reserve estimate for Canada includes 5.2 billion barrels of conventional crude oil and condensate reserves and 174.0 billion barrels of oil sands reserves.

⁴ US Imports by Country of Origin http://onto.eia.doe.gov/dnav/pet/pet_mov_impens_a2_mus_cp00_in0_mbbldpd_a.htm

⁵ Brazil increased production by 127 thousand bpd, T&T increased by 9.3 thousand barrels. Mexico decreased by almost 77 thousand bpd and Venezuela decreased by 60.5 thousand bpd. As a region, Mexico, Central America and South America increased production from 2005-2006 by 10.8 thousand bpd.

domestic needs and make some contribution to the global export market, they are not strategic suppliers to the global market at this time. Only Mexico, Brazil and Venezuela produce more than a million barrels per day. Bolivia has enormous gas reserves, but exports mostly to Brazil and modestly to Argentina. Only Trinidad and Tobago is a key supplier to the world gas market.

From those countries now committed to increasing state control, the US faces two key challenges: the loss of production growth and diversity of supply from the region if new economic frameworks are unattractive to foreign investors and, most critically, the loss of US influence from well financed political competition.

The Economic Impact of Rising State Control

The recent wave of changes in contractual terms and dramatic changes in tax regimes in Venezuela, Bolivia, Ecuador and in recent years Argentina, threatens to slow new investment and eventually deepen instability and poverty in these nations as well as destroy shareholder value for the companies invested there. The deterioration in the investment climate for energy in these countries is primarily an economic threat, helping to lock in constrained supply and high prices. We are seeing the revision of economic terms at a time when producers rather than companies hold more market power.

Venezuela passed a hydrocarbons law that mandated a 51% share by the national oil company and a higher royalty rate. Operations, such as those under Operating Service Agreements, which may have stretched the legal interpretation of the law when they were begun, were subject to a strict and adverse legal interpretation when they appeared to be poor earners for the government. Taxes once renounced, like the export tax, have been revived so that the government can earn, in essence, a fixed 33.33% royalty. The impact, according to expert analysts like Deutsche Bank and Wood Mackenzie, is a massive flight of investment capital from Venezuela's heavy oil sector to Canada's oil sands, effectively freezing development of the hemisphere's largest oil reserves during one of the greatest oil booms in history. The forced restructuring of Venezuela's heavy oil joint ventures has led to serious commercial disputes. Some have been settled, others are in negotiation or arbitration. The net impact on Venezuela's credit and credibility are quite negative, again with serious negative long term consequences for the global oil market and Venezuela's own economy.

In Bolivia President Evo Morale's May 1, 2006 decree declared that the state would take control of all gas fields. Royalty payments to the Bolivian government at the largest gas fields, including San Alberto and San Antonio, will now increase from 50% to 82%. All producers are obliged to sell at least 51% of their holdings to the Bolivian government, with the value of that share to be assessed by audit and negotiation. The state will take 60% of production from other fields. Bolivia has left itself an open door through which it can compromise or retreat: details of new contracts are to be worked out on a case-by-case basis. But companies were given only six months to renegotiate contracts or be expelled. More respectful negotiations eventually ensued, and some companies signed new contracts. But Bolivia is reportedly now unlikely to meet its contractual commitments for gas supply to its neighbors and its prospects for greatly expanding gas exports is still highly uncertain.

In Ecuador, President Palacios sought to increase windfall revenues from 30% to 50% and to renegotiate production sharing contracts, while still embroiled in disputes over company claims for refunds of value added tax payments denied by the government. Ecuador has now seized and will attempt to operate an oil field developed by Occidental Petroleum. Argentina reversed a successful fiscal regime by imposing export taxes and other restrictions which have returned it to being a net oil importer.

The net effect of these developments is that new investment in these countries is virtually frozen at a time when prices should be driving new exploration and production. It is notable that even China, which is aggressively competing for exploration acreage worldwide, is not a major player in the hemisphere. As of 2006, China held less than 10% of upstream assets in the hemisphere, primarily recent acquisitions of Western assets in Ecuador and Peru, and enjoys no preferential access in Venezuela at this time. No new investment has been made under Venezuela's 1998 Hydrocarbons law. New investment is unthinkable in Bolivia until existing companies can determine the extent of their losses. Ecuador's investors are mulling legal action for expropriation and suspension of existing investments. The future growth potential of the hemisphere is being undermined and the region's economies risk a major contraction if oil prices drop significantly anytime over the next decade.

B. The Market Model

The hemisphere is not monolithic. We have seen remarkable success stories like Brazil, Colombia and Peru, which have created independent regulators and obliged their national energy companies to compete with outside companies for exploration rights. Such progressive cases provide bright spots in the region. Brazil has received enormous, and well deserved credit for the contribution that sugar based ethanol has made to its self sufficiency in oil. But equal credit should go to Brazil for a remarkable change in its terms for welcoming foreign investment, which made Brazil one of the most desirable destinations for exploration. Brazil's aggressive oil production strategy increased domestic oil production by 1 m/bpd over 10 years. In 1995, Brazil produced less than 700 m/bpd. In 2006 they produced close to 2.165 m/bpd. Their jump in domestic production has had as great an impact on reduction in oil imports as anything else.

Competition has also made Petrobras a better company and a fearsome global competitor. Peru is set to become a net gas exporter if plans to build an LNG terminal and production from the Camisea project by 2011 meet expectations. Peru has already agreed to export 500 million cubic feet of natural gas to Mexico when the project comes online. But these market based energy producers are not the dominant economic models in the hemisphere, are not major oil exporters and, with the exception of Brazil, do not operate in the countries with the greatest reserves. Colombia is battling a rapid decline of its reserves and production.

Mexico

Mexico has been a long time reliable supplier, but its upstream oil sector has been closed to foreign investment and it is projected to decline unless this policy changes or unless the Mexican government dramatically increases the amount of PEMEX earnings it can keep for capital investment. In 2004 PEMEX paid the government 60% of its revenues. Mexico has enormous oil potential on its side of the Gulf of Mexico and a change in policy could both change global oil markets and create a formidable source of wealth for development of the country itself. Mexico's new government, following a bitterly contested Presidential election, is poorly equipped politically to address the country's decline as an oil power. There are positive steps under way. PEMEX is significantly increasing its capital spending this year. There is legislation under consideration in Mexico which would allow limited partnership with foreign oil companies in the Gulf of Mexico. Any incremental step which Mexico can take would be helpful to the global oil market.

IV. The Impact of Hemispheric Energy Trends on US Foreign Policy

The most important challenge to the US from these hemispheric energy trends is political, not economic. US influence in the hemisphere is waning in key areas, support for liberalized markets and free trade is declining, and democratic structures are under stress as populist governing models reduce the space for political opposition. The November 2005 Mar De Plata Summit of the Americas could not produce a consensus statement. Military cooperation with nearly ten countries has been suspended for the failure of these neighbors to conform to US orthodoxy on the International Criminal Court. The US could not muster support for its candidate for Secretary General of the Organization of American States.

Much of this decline is self-inflicted. The hemisphere has not been a priority for US foreign policy for many years, other than as target for our counternarcotics policy. Bilateral relations are focused on whether the hemisphere supports US policy in other areas. The image of the US is declining in the hemisphere due to US policies in the Middle East and human rights issues raised by our treatment of detainees from Abu Ghraib to Guantanamo. Non-military aid for development assistance and child survival is declining for budgetary reasons. The US is widely perceived as insensitive to the region's concerns and our influence has been harmed as a result.

The Venezuelan Challenge

For the first time since the fall of the Soviet Union, the US now has an ideological and political competitor for political influence, arising primarily from Venezuela.

High oil prices have enabled President Chavez to maintain very high revenues for his government, allowing increased domestic social spending, high levels of foreign assistance, and modest reinvestment by PDVSA in

countries in South America and the Caribbean. President Chavez has a competing vision from that of the United States on a broad range of issues. He opposes the US on trade integration, our liberal (versus his Bolivarian) model of democracy, on Iran and Iraq, and seeks to exclude the US from regional economic energy arrangements in South America and the Caribbean. His economic policy is to raise taxes and royalties on foreign energy investment, demand majority control of projects, and in the non-oil sector to seize land or other underutilized industrial resources for the state.

Venezuela competes with the US in the hemisphere, offering aid for solidarity. Venezuela has capitalized on the different needs of the hemisphere's sub regions by creating PetroCaribe, PetroAndina and Petrosur to foster cooperation and joint investment on a sub regional basis. It has created an alternative trade grouping called ALBA, the Bolivarian Alternative for the Americas – which attempts to force nations to choose between trade agreements with the US and with Venezuela. Venezuela is also identifying places where trade liberalization has a negative impact and stepping in to provide redress. Venezuela purchased debt issues from Argentina and Ecuador, and when the Colombia free trade agreement with the US threatened Bolivia's soybean crop, Venezuela agreed to purchase it.

The jury is still out on whether the Venezuelan economic model is viable if oil drops back to \$60, but it is extremely unlikely. It is unclear whether Venezuela's neighbors support the Bolivarian vision and will really allow joint investment, or if they are just accepting President Chavez's assistance. But the political challenge to the US vision for the region is unmistakable –and so far unanswered.

The Venezuelan model has been an issue in every nearly every election in the hemisphere. In Bolivia, the mobilization of long disenfranchised indigenous forces – aided by years of US assistance in party building and election organizing – led to the election of President Evo Morales, who is following the Venezuelan model. In Peru, Alan Garcia defeated Ollanta Humala, a proponent of the Venezuelan model, in a close election. In Mexico, the PAN candidate Felipe Calderon closed a large gap with his PRD opponent Manuel Lopez Obrador when Obrador asserted he would follow the Venezuelan model if he was elected.

Given these mixed results we should be careful not to overstate the salience of the Venezuelan model or to dismiss too quickly the forces that gave rise to it in the first place.

The Roots of the Anti-markets Approach

It is important to understand what is behind the challenge to the US model. We are seeing the rise of state control and forced revision of contracts for two reasons. One is that trade liberalization and increased GDP growth have not led to poverty alleviation or inclusion of excluded minorities in countries like Venezuela, Bolivia, Ecuador and Peru, leading to a rejection of liberalized markets and the Washington consensus in many countries. Another is that growing populations have increased the pressure for governments to raise revenues in economies that are still resource dependent, so governments are appropriating the best available source of cash regardless of the long-term consequences. This latter trend has led to higher taxes and royalties all over the world, including the UK.

The US should protest violations of contracts or expropriations where these takes place and deny benefits such as bilateral trade agreements to countries that do not respect the agreements they have signed. The US suspension of free trade agreement talks with Ecuador is a good example of this. But the market will either tolerate or punish the economic actions of governments that raise tax and royalty rates or other fiscal terms adversely. If companies can make money under the new terms offered by Venezuela or Bolivia, they will pursue these opportunities. If companies cannot profit, they will close their operations, and if countries do not spend their own capital to develop their resources, then production will fall, their revenues will shrink, and the popularity of their programs will shrink with them. This may lead to higher energy prices, but foolish economic policy is not a basis for US government intervention.

The Need for a New Hemispheric Foreign Policy Approach

What the United States lacks is a positive agenda in the hemisphere, one that recognizes the need to improve education and infrastructure, addresses the negative social impacts of trade liberalization, and offers the respect and cooperation of the US to those countries that work with us. This will advance US interests no matter what the price of oil is. We need to address legitimate issues like poverty and advocate how our model can address them. Examples

of this are addressing trade barriers to agricultural imports, expanding educational opportunities in the US for future leaders, improving the visa application process, expanding military to military contacts, especially exchanges under the International Military Education and Training Program, dealing with migration issues with Mexico in a spirit of respect and fairness, supporting World Bank and Inter American Development Bank infrastructure programs in the hemisphere, supporting the development of civil society and the capacity of democratic institutions and treating our relations with our hemispheric neighbors as intrinsically important, not as litmus tests of loyalty to the US on Iraq or other issues external to the region itself. In countries where we face ideological competition, like Venezuela and Bolivia, it is crucial that we do not abandon the field. We need to increase our diplomatic engagement and defend our way of thinking.

I believe that Bolivia's 2006 actions marked the nadir of the turn toward repudiation of contracts in the hemisphere in countries other than Venezuela. Countries like Bolivia and Ecuador are too poor and frankly too insignificant to global energy markets to sustain the kind of behavior they are engaging in. Powers like Brazil can communicate this to Bolivia better than the U.S. can. The US should maintain dialogue with Bolivia and give it our best, even if unwelcome, advice and cooperate where we can.

Venezuela is a more complicated case. Venezuela is a competitor, but it is not likely to halt supply to the US as an act of political warfare unless we embargo them first. They have in fact remained reliable suppliers of oil and products, despite the heated rhetoric reported in the media. An act of energy aggression by Venezuela against its neighbors is also unlikely at this time. Any hope Venezuela has for regional leadership would evaporate if they used their oil wealth for acts of military aggression against a neighbor. Withdrawing oil supply from the market will harm their new friends and future markets as well as cut the government's supply of revenue. The US could, would and should use the Strategic Petroleum Reserve to redress the unlikely event of a production halt by Venezuela, or another (equally unlikely) strike by its workers. For now, the Venezuelan challenge to the United States is ideological.

Here too US policy has failed to understand what factors have led to President Chavez's enormous popularity. Venezuelan governments prior to the Chavez government governed poorly, practiced corruption, ignored poverty and excluded minority sectors of its society. The Chavez government came to power determined to return control of energy policy from the national oil company to the government ministry, to reclaim some of the oil rents held by the national oil company for the government's own account, and to change the economic terms of its acreage allocation from those set when oil was \$10. This is a policy the US would support in any other country. The government has spent lavishly and allegedly unwisely on social programs, but this is what we pray most African government would do with their own oil wealth. The famous strike of 2002-2003 was a battle between the national oil company and the government and the government won. I cannot imagine the US supporting the PEMEX in a battle against the Mexican Government for control of the PEMEX Board of Directors. The US rhetorical support for the coup that displaced the President for a day was foolish, destructive and devastating to our bilateral relations.

Where Venezuela has gone wrong economically is by changing contract terms with impunity and hostility rather than by negotiation with companies who have been its partners for decades, invested billions in its energy sector, and created the production that now enriches the nation. The manner in which the recent changes have taken place has been short sighted, destructive and unnecessary. Venezuela has changed its interpretation of its own tax laws, but it is provocative and disingenuous to accuse companies of being tax cheats as a consequence. Time will tell whether the attractiveness of Venezuela's tremendous oil and gas reserves overcomes the pain inflicted by the way these changes have been made. Oil companies tend not to be emotional about these issues as long as they are making money.

Where Venezuela has gone wrong politically is by using legal methods to restrict freedom of the press, prosecution to intimidate political opposition, and constitutional assemblies to unbalance formerly balanced institutions like the Supreme Court and national election commission. The regime itself, helped by the failure of a political opposition to mount a campaign describing what it was for, and high oil prices sufficient to fund the government and external programs at the same time, did not appear to need to use either tactic to win large majorities. The recent failure of a referendum which would have extended President Chavez' term demonstrate that the tolerance of the Venezuelan people for the current regime has its limits. These internal governance issues should be the focus of a regional policy, which includes, but is not led by the United States. We should have objective assessments as to whether Venezuela's actions are undermining any other important US security interests. The recent conflict over Colombia's

hot pursuit of FARC terrorists into Ecuador is a case in point. By letting the parties bringing a serious conflict to the OAS, and not making this a bilateral issue (despite Venezuela's attempts to do so) the conflict was defused and US interests have a better prospect of being advanced. Venezuela has positioned itself as an ideological competitor to the United States in the hemisphere. We need not and should not treat Venezuela as an enemy; we should, however, try to compete. We should also end our dialogue via the media and resume, at this point or in the next administration, the dialogue between our senior foreign affairs, commerce, energy and cultural officials. We should work with Europe and with hemispheric partners to reinforce a message of respect for democratic institutions.

V. The Status of Current Dialogues and the Need for a Fresh Approach

The US has had a number of bilateral and multilateral energy policy forums in the hemisphere over the years. Some are active, while others have lapsed or are stagnant. These forums are platforms to understand market dynamics, share best practices on energy efficiency and conservation, share understanding on ways to enhance energy production, and exchange views on how a nation's energy policies may be enhanced or reformed to promote the nation's own policy. These policy dialogues are also essential for building the understanding and relationships that are essential for trade promotion and conflict resolution.

The premier multilateral energy forum was the Hemispheric Energy Initiative (HEI), a multilateral meeting of the hemisphere's energy ministers, with many active subgroups, which was co-chaired by the US and Venezuela. The HEI is dormant due to the status of our relationship with Venezuela, leaving us with no effective forum at all. Bilaterally the US had a Principal Coordinators Energy Dialogue with Venezuela as well as a thirty-year technical cooperation agreement with Venezuela. The bilateral Venezuelan dialogues were suspended for political reasons.

The US has a trilateral energy policy dialogue with Canada and Mexico, which has addressed electric power, energy conservation, harmonization of standards and market outlooks. It has taken many forms, but it functions very well.

What remains of engagement is not adequate. A fresh approach, which engages the United States with all the region's producers and consumers, is sorely needed.

A Fresh Approach to the Hemisphere

The United States need to re-engage the hemisphere on issues that matter to its governments and its people.

Trade and Development. Underdevelopment remains the region's greatest economic and political challenge. The US needs to resume a dialogue on development and trade with regional partners that looks with humility on what policies have and have not worked in the past. The potential for hemispheric trade to lift living standards in Latin America and in the US is great. Bilateral trade promotion agreements, and eventually a regional agreement, are the best tools for binding the interests of our countries together and promoting internal policies in the region that will promote growth. The US can help its own energy security needs and support regional agricultural development by lifting the ethanol tariff.

Strategic Energy Dialogues. The US should resume a diplomatic dialogue with hemispheric partners on energy. We may have some of these on paper, but they need to have the diplomatic attention that has been lacking. The lack of a sustained high-level engagement with Brazil is a case in point. We also need a new Hemispheric Energy Cooperation Forum with a strong private sector forum. The US needs to engage producing countries with successful policies, such as Brazil, Colombia and Peru, as well as competitors like Venezuela. We need to engage the consuming countries as well, in the Caribbean and Central America, as well as the Southern Cone, to address policies that favor consumers. One lesson we have learned from the HEI is that different regions of the hemisphere have different needs – some focus on power generation, others on integration of their grids, still others on access to oil and gas. The United States may be able to forge stronger bonds, and frankly compete more effectively on an energy security vision for the region, if we can organize along sub-regional lines, and meet in plenary when the timing is right. I think we have to recognize that while there is a state of conflict among the producing nations, a hemisphere-wide forum will face great challenges in achieving any meaningful consensus.

Bolster Energy Diplomacy. We should also deepen the international energy diplomacy capacity of the Department of Energy. The Department of Energy's relationships with civil servants in ministries across the globe provide a

bridge across changes in government here and there. They can talk when the politics of non-energy issues obstruct dialogue among the foreign ministries. It is easier to get Energy Ministers together for regular meetings than Secretaries of State. Their staff should be expanded and serious program budget established to make our cooperation more than rhetorical. It is true that for true reform to be achieved, foreign ministers and heads of government will have to be involved, as this will be the key to integrating energy security into foreign policy. However, there should be flexibility on the bureaucratic leadership to allow the Department of Energy to take the lead in many of the substantive negotiations.

VI. A Strategic US Energy Security Policy

The US cannot address its energy related security challenges in this hemisphere, or any region, solely through a tactical adjustment in regional policies. We are not safe if our allies are still dependent on imports from our adversaries. For this reason any talk of energy independence is misguided and misleading. The United States need a strategic energy policy that addresses the degree to which we and others rely on oil as a transportation fuel, that sets us on a path to reduce the intensity of carbon in our economy, and that uses diplomacy to get us through the 20-30 years it will take make these transformations at an acceptable economic cost. I believe the US must lead at home to lead abroad.

I suggest ten steps to advance the US on this new course.

Lead at Home

1. Limit demand by significantly increasing automobile efficiency

75% of US oil imports go to transportation. We cannot reduce our vulnerability to oil exporters unless we set a course to change the transportation paradigm to one which uses far less oil as a transportation fuel. This will take decades but we need to start now. We cannot predict which path will take us there: hybrid engines, other advanced engines, cellulosic fuels, or plug in hybrids. Ideally the US would price gasoline and jet fuel at its real cost: one that properly reflects the external costs of gasoline use—from pollution all the way to security commitments to petroleum producers. In such a case market forces would produce the most efficient responses. Europe and Japan do this by tax policy and their per capita consumption and the rate of demand growth is far lower than in the United States. Their vehicles already get 35 miles per gallon or more. If this path is not viable for the US, even with price relief for the poor, we are left with second best responses such a fleet standards and fuel mandates. We should not rule out tax policy, however. While largely opposed to an additional gasoline tax over the past few decades, opinion polls indicate that Americans are now changing their minds and that they would be receptive to it if the proceeds were devoted to funding development of alternative technologies.

The recently passed Energy Independence & Security Act makes helpful, but not dramatic progress on fuel efficiency by raising the Corporate Average Fuel Economy (CAFE) 40% to 35 miles per gallon by 2020. It will reduce fuel consumption by 1 to 2 million barrels per day, depending on whose statistics you believe. But demand will grow by 2020, as will the number of cars on the road and perhaps the number of miles driven. These gains are important but will not make much of a dent in the magnitude of our oil consumption or our national security vulnerability. Europe already mandates 40 miles per gallon and is soon expected to raise that level to 49 miles per gallon. Japan is set to attain 47 miles per gallon by 2015.⁶

2. Adopt a national technology policy that changes the transportation paradigm, reduces GHG emissions, and breaks the bottleneck existing today in alternative fuels, alternative vehicles, and nuclear energy

The United States invests millions of dollars in energy research and development, and the Energy Independence & Security Act authorizes millions more, but for the most part these funds represent a political potpourri of programs rather than a focused energy strategy. A National Technology Strategy operated and funded without earmarking congressional funds could target the key bottlenecks in critical technologies, such as the high cost of breaking down cellulose to make ethanol, and the storage of hydrogen in vehicles and carbon sequestration. An ideal energy technology program would focus on deployment and commercialization of alternative fuels and engines

⁶ <http://www.technologyreview.com/Energy/20067/page1/>.

3. Remove bureaucratic hurdles and invest in infrastructure: gas pipelines from Alaska, deep conversion refineries, and a modern flexible power grid

We should make a priority of breaking the political impasse obstructing a new gas pipeline from Alaska to the Continental US. A new gas pipeline would bring plentiful supplies of natural gas from the North Slope to US markets. We should move quickly to modernize and expand our aging electrical grid into a decentralized smart grid with two way metering that can withstand human attacks and acts of God. Smart grids, which can quickly divert power around disruptions, can help us meet the power needs of this high-tech century. The Energy Independence & Security Act establishes a federal policy to deploy the smart grid, requiring the Department of Energy to report to Congress on its deployment and establish a Smart Grid Advisory Committee and Task Force. However, while the act mandates that the Department of Energy reimburse 20% of qualifying Smart Grid investment and allows utilities to recover their Smart Grid investments by raising rates, it does not allocate any substantial additional funding to what will be a major overhaul of the entire U.S. power grid.

4. Modernize our strategic energy defenses

Current US strategic reserve policy does not reflect recent changes in the oil market or new threats to energy supply. When the Strategic Petroleum Reserve (SPR) was created in 1975, refining capacity was abundant, private companies owned large inventories of crude and gasoline, and the United States feared an embargo overseas, not a loss of inventory at home. Three key steps need to be taken to update US strategic reserve policy. First, we should return to the fill target of 90 days worth of oil imports—established when the SPR was created in 1975—as opposed to the current 60 day target, as this is the optimal size for a 21st century strategic reserve. Second, the United States must expand its strategic reserves of crude to include gasoline, jet fuel, diesel and natural gas while redressing the risk of maintaining all US strategic reserve facilities in a centralized location near the Gulf Coast, which is far from major consumption centers like California, Chicago, New York, and Washington. Tax credits should be given to private companies to encourage them to maintain adequate oil inventories as well as a decentralized network of reserves in the US that can withstand a terrorist attack or natural disaster. Third, we need a formal process to use the reserve. As no relief was given during the Venezuelan oil strike of 2002 and barely any after Hurricane Katrina in 2005, the market must be reassured that strategic reserves will be readily accessible when needed. The Secretary of Energy must be empowered to recommend SPR decisions directly to the President through a coordinated and transparent process unhindered by political or bureaucratic resistance.⁷

5. Get serious about climate change and promote energy conservation and efficiency across the board

The only way that alternative technologies can compete with hydrocarbon based technologies on a commercial scale is if there is a cap on carbon that drives the price to \$25 or \$30 per ton in today's money. This is the only way that investors will put commercial scale money into commercial scale projects. Companies need to know that there is a long term floor price for carbon that will enable them to make money from changing technologies. Everything follows from this: investment in more efficient cars, carbon sequestration, and efficient buildings and appliances.

There is much government can do – from providing a legal and regulatory framework for carbon to building codes, appliance standards, combined heat and power systems, weatherization systems, and the federal Emergency Management Program. With rising oil prices, many energy saving programs have already become promising private sector initiatives that could be expanded even more through public funding. Indeed, the Energy Independence & Security Act creates new efficiency standards for residential and commercial appliances and lighting. The Act also includes a mandate requiring federal buildings to reduce their overall 2005 energy levels 30% by 2015. It requires a 55% reduction (from 2003 levels) in the construction and reconstruction of federal buildings by 2010, and a 100% reduction by 2030. However, the Act does not include a parallel mandate for commercial and residential buildings, which offer the biggest opportunity for energy and carbon emission savings. The Act encourages the increased efficiency of these buildings through DOE funded programs; however, a mandate did not survive the political process.

Lead Abroad

If the United State leads at home, we will have the political credibility to lead change abroad. But we must also accept that we will be dependent on hydrocarbons for the next two or three decades. In the interim we need to

⁷ David Goldwyn and Michelle Billig, "Building Strategic Reserves," *Energy and Security*, chapter 21.

maintain security and stability of supply, and engage oil producing and consuming nations, both to advance our security interests and to build a coalition for change.

1. Promote stability and conflict resolution in key producers: the Middle East, Africa and Latin America

The US needs to promote the domestic and regional security and stability of its key suppliers through its foreign policy, as they directly affect America's energy and national security. It is therefore in the US's best interest to help—in tandem with our allies and partners—resolve regional conflicts and to strengthen the capacity of our suppliers to counter terrorist or military threats. Addressing conflict in the Niger Delta could restore 600,000 barrels per day of oil production. A credible Middle East peace process could reduce the fear premium on oil by \$10. A secure Iraq, with a viable oil sharing law could add 2-3 million barrels per day of oil production to global supplies.

2. Modernize our collective energy security system

The US should create a broad energy security alliance for developing Asia in tandem with other regional powers. This alliance would resemble prior cooperation on nuclear technology with Japan by helping to solidify our alliances and secure stability in Asia with a broad program ranging from energy cooperation to nuclear proliferation.⁸ We should modernize collective energy security to reflect our growing interdependence by opening access to strategic reserves and the International Energy Agency's coordinated Emergency Response System to emerging power consumers outside the IEA like China and India. We should also include countries like Thailand, Singapore, and Indonesia in such a system in order to build an even stronger collective energy security system with consuming nations who will have common interest with us. By including countries like China and India as partners with a shared safety net, we can try to avoid allowing their energy insecurity to turn them into adversaries in the world energy market. We can also achieve security cooperation by collaborating on automotive and power technology projects and jointly pursuing gas, coal, and future energy alternatives.

3. Promote reform and transparency

To ensure the long term stability of oil producers, and to avoid the conflict borne of abuse of oil wealth, ensuring the security of domestic governance should also be a higher priority of US foreign policy. We must elevate the priority of anticorruption and transparency in our foreign policy, through programs such as the Extractive Industries Transparency Initiative, to promote long term energy security.

A new foreign policy strategy should prioritize candid and respectful engagement with energy producing countries on their internal policies as well. US leaders and policymakers should no longer fear publicizing their concerns about our suppliers, as this candidness will not “jeopardize the relationship.” On the contrary, the relative silence of the United States and other countries on Africa's kleptocracy, Russia's recent backpedaling on the rule of law, and political repression in the Middle East undermines reformers in those countries and foments resentment. The US doesn't need to impose reforms in an arrogant and unilateralist fashion, but it should work together with its partners and internal reformers to achieve transparency, economic opportunity, and rule-based societies in energy producing countries. It is unlikely that any state in this globalized market will cease to export gas or oil to punish the United States and its partners.

4. Promote a free market in energy and wield the “monopsony wedge”

The US market is one of the freest in the world; however, the majority of the most resource rich countries in the world significantly limit foreign investment in their energy markets. During its next round of talks, the World Trade Organization should prioritize rules of open access and fair competition in the energy sector. The US and EU have the obligation to enforce fair competition where they can, and they should offer the carrot of preferential access to their own energy reserves and markets to those countries that allow free market access. If these steps fail, the “monopsony wedge” stick should be considered, to deny unlimited access to energy market to those countries that deny consuming countries access to theirs. However, this option may be more effective as a threat than a course of action.⁹ We can also promote efficient use of energy abroad by encouraging reductions in energy subsidies abroad and by promoting the use of energy saving technologies in the developing world.

⁸ John Ryan, “APEC's Regional Approach to Energy Security,” *Energy and Security*, chapter 9.

⁹ “OPEC in Confrontation with Globalization,” *Energy and Security*, chapter 3.

5. Use energy as a tool of soft power

As a nation, America is more powerful militarily and economically than at any time in its history. However, its “soft power”—the degree to which other nations emulate its values, seek its alliance, and respect rather than fear it—has hit a low point. New powers like China and India are emerging, and they may endeavor to counter the enormous military strength of the United States. The US has boosted its national power and prestige in the past by using its power to rebuild nations, educate populations, and feed the hungry. As nearly a third of the world is without access to electricity, we and our partners could make huge developmental inroads through a global electrification program. High oil prices are especially taxing on developing countries reliant on the global energy market for fuel. US efforts to improve efficiency could have a positive impact on development. We should expand the US Agency for International Development’s (USAID) Energy Partnership Program because it has a proven record of bringing US best practices to utilities and government agencies in developing countries. We should use the World Bank and regional development banks to ensure that developing nations modernize and evolve into future economic allies, not foes. The United States does not have much leverage over most of the critical energy supplying countries, and so it needs to use the tools that it does have to promote energy security policies: a major stake in the World Bank and the International Monetary Fund; and membership in the Group of Eight (G-8), the OECD, APEC, and the United Nations. The US should work with its allies to use debt relief and trade and infrastructure financing as incentives to promote better governance.

Conclusion

Mr. Chairman as you can see from this lengthy analysis, there is much to be done to address America’s energy insecurity. It will require new approaches to energy and foreign policy. It will require fresh policy approaches, money, and creative diplomacy. But more than anything it will require leadership. As a citizen I thank the committee for its leadership on this critical issue.