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

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

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

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

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

Not all countries are the same

I was asked to testify today as to the production profile and investment climate of the major oil & gas producing nations in Latin America. In order to do so, it is important to distinguish between above ground and below ground issues. That is to say, in many cases, a country's oil & gas potential, its actual oil in the ground, may be less important than what is occurring above ground in the halls of government and in the geopolitics of the day. In many cases, poor policy planning, regulatory hurdles, changing rules of the game and other issues can be

more important than the geology of a given country. Or, as I like to say, not all countries are the same. Let me quickly run through, in alphabetical order, key aspects in several of the most important producer nations in Latin America.

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

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

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

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

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

September 2008. Colombia is perhaps an example of significant efforts in the above ground realm in order to stimulate and reverse severe issues and concerns below ground.

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

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

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

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

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

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

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

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

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

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

The region's short term outlook

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

Such as:

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

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

The region's long term outlook

The major oil & gas producing nations of Latin America do not lack potential or the requisite reserves to greatly aid the entire hemisphere's energy balance. As recent discoveries in Brazil underscore, the status quo is changing. It is not just a question of the region's potential, but rather how all countries – and companies – can best work in a cooperative, collaborative manner to assure the long term development and sustainability of oil & gas from the Hudson Bay to Tierra del Fuego.

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

Final thoughts

Focus on the positives:

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

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

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

a key for Chevron's Latin America portfolio and critical to Venezuela's desire to export natural gas.

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

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

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

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