

**Statement of Lisa Viscidi
Energy, Climate Change and Extractive Industries Program Director
Inter-American Dialogue**

**House Committee on Foreign Affairs
Subcommittee on Western Hemisphere
Hearing on Energy Opportunities in South America
May 17, 2017**

I would like to thank the Committee and Subcommittee Chairmen and Ranking Members and the other committee members for the opportunity to be here today.

My testimony today will focus on the energy landscape in South America, the importance of US investment in oil and gas and clean energy in the region, and opportunities for energy policy engagement between the United States and South American countries.

The investment landscape for South American energy sectors

South America is an important destination for energy investment due to abundant natural resources, growing markets and favorable policy frameworks in many countries. The continent holds massive oil and gas reserves, from the Orinoco heavy oil belt in Venezuela to the deepwater presalt zone in Brazil and the Vaca Muerta shale play in Argentina. South America holds 20% of global proven crude oil reserves, or 330.1 billion barrels, and Venezuela has the largest proven oil reserves in the world. There is also abundant potential for renewable energy. The region has an estimated 430GW of unexploited hydropower potential. Brazil is the third largest country in the world for hydropower potential, only one third of which has been developed.

Additionally, South America has large domestic markets with rapidly growing consumption of oil for transportation and soaring demand for electricity. With strong economic growth and growing middle classes, Latin America overall is expected to see primary energy demand increase by 110 percent between 2000 and 2040, including a 183 percent rise in electricity demand and a 52 percent rise in oil demand.

Many countries have recently become more open to energy investments, enacting market-friendly policies and regulatory reforms to attract private capital and international expertise. New opportunities have opened up for private investment as more market-oriented leaders have come to power in Brazil and Argentina since late 2015. Since the collapse of global oil prices in mid-2014 many South American governments have offered increasingly favorable terms to draw investment after international oil companies cut exploration budgets.

Several South American countries also offer strong incentives for investment in renewables, such as wind and solar auctions, renewable portfolio standards, and favorable financing. South American countries have sought to expand non-hydroelectric renewable energy in response to numerous droughts and growing opposition to large hydroelectric dams because of social and environmental concerns. Wind and solar energy costs have fallen dramatically, reaching grid parity in multiple markets in the region. Legislation has also been approved in some countries to allow distributed generation.

In Brazil, President Michel Temer's government has opened opportunities for private investment in oil exploration and production by removing a requirement that Petrobras be the sole operator in all presalt fields and easing local content requirements. After virtually freezing oil licensing rounds for the last decade, Brazil is planning 10 oil and gas tenders over the next three years, including four in 2017. In the power sector, Brazil's development bank offers favorable financing for renewable energy projects, particularly solar.

In Argentina, investment in the oil and gas sector has accelerated since President Mauricio Macri took power in December 2015. Macri has taken steps to dismantle many of the long-standing barriers to private sector investment in Argentina, reducing subsidies for residential electricity consumers, eliminating currency controls and renegotiating labor costs with unions. Argentina also held its first two renewable energy auctions late last year under renewable energy program RenovAr.

Chile joined Brazil as one of the top ten renewable energy markets globally in 2015, almost doubling its share of renewables investment from 2014 and increasing installed capacity by 580 MW. In 2016, Chile attracted 84 participants to its renewable energy auction, resulting in the lowest price for solar PV projects globally at \$29.10/MWh.

Colombia, seeking to maintain current levels of oil production and reserves despite the drop in prices, has offered very favorable investment terms. For example, the government has cut taxes on the oil sector, allowed companies to extend exploration and production periods, and reduced minimum investment requirements.

There are, however, exceptions to this generally more favorable investment climate in South America. Venezuela, marred by political upheaval and an economic crisis, has seen a sharp decline in investment in recent years. State oil company PDVSA has held majority stakes in oil projects since the industry was nationalized under former president Hugo Chavez, and the company controls operations and marketing for the bulk of its projects. PDVSA's joint venture partners have been frustrated by their inability to control operational decisions and to access their share of profits from oil sales. Private company partners have also seen their profits tumble because of exchange rate controls. Underinvestment has led to a steep decline in oil production -- output declined by 235,000 barrels per day in the first three quarters of last year and will likely drop below 2 million barrels per day before the end of the year. As a result, countries in Latin America and the Caribbean that have relied on imports of crude oil and refined products from Venezuela have turned to alternative oil suppliers and replaced oil with natural gas and renewable energy. Exports of Venezuelan oil to key partners such as Jamaica, the Dominican Republic, and even Cuba, have declined considerably.

In Ecuador, oil investors have largely pulled out since President Rafael Correa nationalized the industry in 2010 – with the notable exception of Andes Petroleum, a consortium of Chinese state oil companies. Ecuador's President-elect Lenin Moreno has yet to define his energy policy, and it is unclear whether he will reverse his predecessor's policies.

Even in countries such as Brazil, Colombia and Argentina, there are uncertainties over future energy policy. Brazil and Colombia will both elect new presidents next year, and Macri's energy policies have been unpopular and could come under threat.

The role of US investment in energy in South America

US investors and companies are key partners in developing energy resources and supplying markets in South America. US companies, which benefit from the human, technological, and financial resources of rapidly growing oil and renewable energy industries, as well as proximity to other countries in the hemisphere, have been at the forefront of the investment wave. US companies play an important role in bringing capital and expertise to produce oil and gas, generate power and build related infrastructure in the region.

US investment in energy brings multiple benefits to both the United States and South America. For South American governments, oil exports to the US market provide a critical source of revenue, and the development of energy resources is an economic driver for prosperity in the region. Investment in renewable energy brings environmental benefits. South America has the cleanest electricity matrix in the world, although several large cities face severe local air pollution due to heavy traffic and weak fuel efficiency and fuel quality standards. For the United States, energy investment in South America also has the potential to generate investment revenue and employment within the country.

Foreign investment also facilitates energy trade integration between the United States and its neighbors in South America. Despite the shale boom, which led to a 75 percent increase in US oil production over the past ten years and a drop in imports, the United States still relies on South America for about 20 percent of crude oil imports. Foreign investors are critical to developing oil resources in South America and to building midstream and downstream infrastructure to enable the flow of oil across the hemisphere. South America has also emerged as a key market for global LNG demand. The United States is projected to become a net natural gas exporter in 2018. A large number of US LNG export projects have already been approved by the Department of Energy but their ability to access financing and reach a final investment decision will depend on securing access to markets. US investment in energy infrastructure, such as power plants and natural gas pipelines in South America, can help create markets and spur demand for US natural gas.

However, US companies are by no means the only players, and if the United States cuts energy ties with South American countries, other actors will likely gain influence. China is a leading investor in oil and gas in many countries and is making inroads into hydropower and other renewable energy development. The China Development Bank and China Export-Import Bank have made more than \$135 billion in loan commitments in South America since 2005, almost three quarters of which are focused on energy. China is second only to the United States as Latin America's largest source of greenfield FDI, and between 2011 and 2015, almost 40 percent of Chinese mergers and acquisitions investment in Latin America was in the oil and gas sector. Russia is also increasing its stake in Venezuela's oil industry. Chinese and Russian engagement in South America is largely viewed as driven by geopolitical as well as commercial interests.

Energy policy engagement between the United States and South America

While most US investment in South America's energy sectors has been market-driven, policy has also played a role in promoting energy integration and cross-border investment. A host of US government initiatives has been established over the past decade to assist other countries to develop regulatory standards that are in line with those of the United States. These initiatives

have helped improve investment climates, create commercial opportunities for US companies and facilitate clear and consistent investment rules.

Collaboration on energy issues in turn helps bolster broader economic, political and security relations with South American countries, many of which serve as key allies for the United States and cooperate on a range of issues from immigration to counter-narcotics. The United States is also deeply integrated economically with South America; it is the top export market for many countries in the region, and South America is also a destination for many US goods and services.

Therefore it is important that the US government engage with Latin America on energy policy issues as part of broader bilateral relations. Strong diplomatic and economic ties, including free trade agreements, provide the foundation for energy trade and investment between the United States and South America. Within the energy sector specifically I would highlight two important areas of engagement.

First, in the oil sector, the United States should engage in regulatory cooperation and support reforms that enable private investment, such as the energy reforms in Brazil and Argentina. The United States should continue to engage in technical cooperation on regulations for shale oil development in Argentina and offshore exploration in Brazil and Colombia. Brazil and Colombia may also look to US assistance on best practices to develop their shale resources in the future. A critical aspect of this technical cooperation is on environmental regulations. The lack of a robust and efficient environmental regulatory process is a major obstacle to developing oil and gas resources in South America, and US experts in the Departments of Energy and the Interior as well as state regulators can share best practices on addressing this challenge.

Second, in clean energy, the United States could explore the creation of a working group on clean transportation with countries like Colombia, Brazil, Argentina and Chile. Reliable and sustainable transportation is one of the greatest challenges for many South American countries given the large degree of urbanization, rapidly growing transportation needs and critical problems with air pollution. The working group could share best practices in promoting higher fuel quality, fuel efficiency, urban mass transportation and electric mobility, which would be particularly beneficial in South America because of clean electricity generation.

In conclusion, given the importance of US energy relations with South America and indeed the rest of the hemisphere, it is critical to maintain energy policy engagement with US allies in the region. I look forward to the opportunity to respond to any questions or comments you may have.