

Brazil's Energy Agenda: The Way Forward

A Working Paper of the Americas Society/Council of the Americas Energy Action Group



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INTRODUCTION

Brazil is blessed by an abundance of natural energy resources. In 2007, the country discovered the pre-salt layer of oil, which put the country on the path to becoming one of the world's top oil producers. However, developing the pre-salt layer will be a challenge for both technical and non-technical reasons. Among these is the

Petrobras may be stretched too thin by having to operate that many projects across the pre-salt "polygon." requirement that state oil company Petrobras be the sole operator with a minimum 30 percent stake in each project. Petrobras may be stretched too thin by having to operate that many projects across the pre-salt "polygon." Moreover, international companies wishing to invest may be put off

by stringent local content rules, which increase the costs of investment. Investor certainty remains to be fully developed.

On the power generation front, Brazil's existing electricity matrix is the cleanest in Latin America and one of the cleanest in the world, consisting of around 75% hydropower, compared to the world average of 16%, according to the International Energy Agency. While hydro is a renewable resource, the sector remains at high risk of prolonged periods of drought, as evidenced in late 2012–2013, leading to higher tariffs and a need for other energy sources to fill in the gaps. Furthermore, environmental concerns surround some large hydro projects including disruption of local wildlife and communities. For example, the controversy surrounding the Belo Monte dam demonstrates that striking a balance between development of electricity resources and consideration of environmental factors can be difficult and politically fraught.¹ Likewise, potential gaps in electricity production due to drought should be carefully considered by the Brazilian government — thermal energy should be treated as a country's key competitive advantage, and as a priority of planners, given hydro's low cost, endurance and clean energy profile.

¹ "The rights and wrongs of Belo Monte." *The Economist.* May 4, 2013.





Brazil continues to be a pioneer in terms of ethanol production and consumption, but the national program has been exposed to setbacks due to lack of competitiveness and government price-setting on gasoline. In fact, Brazil has had to import ethanol to meet its consumption needs. The share of ethanol consumption in the fuel mix has declined, due to the price of ethanol being higher than gasoline. While the Brazilian government has boosted the sector through tax deductions and cheap credit, it risks being lulled into complacency as other countries develop their biomass production capabilities.

Wind and solar energy are two additional areas where Brazil has much potential to develop its capabilities. At this point, wind is ahead of solar in terms of installed capacity given its competitive strengths, but both sectors are relatively well behind where they could be. Wind power is hampered by recurring changes and gaps in regulation and several companies have withdrawn their projects because execution and returns have proved to be cost-prohibitive.

Brazil's abundance of natural resources — oil, gas, water, wind, and sun — reflects the country's diversity, size, and favorable geography. Much has been done right with regards to energy production, but challenges remain in providing a favorable environment for both domestic and foreign investment. Brazil's competitiveness is not guaranteed, and an appropriate policy mix is vital in ensuring that it remains an attractive investment destination.

BACKGROUND

In partnership with the Inter-American Development Bank, the Council of the Americas' Energy Action Group (EAG) seeks to convene high-level representatives of the private and public sectors to develop strategic energy and climate policies for the Americas. In June 2013 the EAG brought together a high level group of experts in Brasilia to discuss opportunities and challenges in Brazil's energy sector. "Brazil's Energy Agenda: The Way Forward" brought together approximately 40 representatives of energy companies, regulators, consulting firms, law firms, construction companies, multilaterals, banks, and export facilitation firms, and government officials. The discussion was structured across two

Nevertheless, several stumbling blocks to foreign investment exist in the sector.

panels: one on oil and gas and one on renewables. This meeting of the EAG followed on successful meetings in São Paulo and Rio de Janeiro in 2009 which led to a report entitled "Energy Security and Global Climate Change: The Brazilian Perspective." Given Brazil's role as an economic giant and an emerging energy superpower, the Council anticipates a continued emphasis on these issues in the weeks and months ahead.

OIL AND GAS

Energy analysts point to two major landmarks in the recent history of Brazil's oil and gas sector. Self-sufficiency in the production of oil was reached in the 1990s. The second major landmark was the discovery of the pre-salt fields in 2007.

Petrobras enjoyed a monopoly for 50 years, which was broken in 1997. Until that year, Petrobras had full control over the extraction and production of oil. However, from 1999 until the present, 11 international auctions have been held, resulting in over 900 contracts and \$100 billion to the Brazilian government.

Nevertheless, several stumbling blocks to foreign investment exist in the sector. First, the tax system is highly complex. In addition, rules with regards to royalties and local content vary per auction and may limit the interest of foreign companies. Furthermore, looking forward, Petrobras will be the sole operator of the projects, with a minimum 30 percent stake, which may dissuade certain foreign investor participation.



Despite much positive press regarding the oil and gas sector in Brazil, crude oil production has actually been stagnant or slightly declining at 1.9 million barrels per day in April 2013, down 5 percent from the year before.² The bulk of investment in the sector has been directed towards maintaining production, not increasing it. Petrobras has implemented an ambitious production target of 4.2 million barrels per day by 2020.³ Nevertheless, an indicator of the current situation is that Brazil has had to import gasoline and sell it at below cost to contain creeping inflation.

Still, proven reserves are impressive, and investor interest is very high to the extent that policy and fiscal environments are transparent, effective, and certain. The pre-salt layer of oil reserves is estimated to contain between 50 and 150 billion barrels. [It is called pre-salt because the reserves are trapped beneath a layer of salt which lies five kilometers beneath the surface of the ocean.] The find tripled the amount of proven reserves in Brazil, and was the largest find in the hemisphere in 30 years.

² Blount, Jeb. "Brazil April oil, natural gas output falls for 13th straight month." Reuters. June 4, 2013.

³ "Petrobras announces US \$236.7 billion business plan for 2013–2017." *Drilling Contractor*. March 20, 2013.



Referred to as one of the "elephants" of pre-salt, the Libra field is as big as any Middle Eastern field. It is one of the largest oil fields ever discovered, and most expensive to develop. The National Agency of Petroleum, Natural Gas and Biofuels (ANP) estimates that the prospect holds recoverable reserves of between 8 and 12 billion barrels of oil equivalent, and may cost at least \$174 billion to develop.⁴ However, compared to the Middle East, the cost per barrel of extraction in the pre-salt is reasonable — around \$15 per barrel.⁵ Therefore, as long as the price of oil stays above \$15 per barrel, the economics of drilling in the pre-salt remain attractive.

The Libra field is not alone. In the "pre-salt polygon," which includes 12 fields including the Lula field, there are proven reserves of some 18 billion barrels of oil equivalent, yet the ANP expects that the recoverable volumes could reach twice the actual proven reserves. Four of the largest fields in the world can be found in the pre-salt polygon.

⁴ Fick, Jeff. "Brazil's Oil Field May Be the World's Most Expensive to Develop." Moneybeat - *The Wall Street Journal*. August 8, 2013.

⁵ Ibid.

Production-sharing agreements (PSAs) are one of the notable characteristics in the pre-salt round of auctions. These agreements are used in certain cases instead of concessions. In a concession system, the host country grants companies title to their properties, which then pays the government royalties and taxes upon production. With a PSA, oil remains the property of the state, and the company keeps a percentage of profits.

Since exploration efforts are often unsuccessful, concession agreements are typically employed when there is high exploration risk. Because the Brazilian authorities had already drilled wells in the pre-salt area and found oil in more than 70 percent of them, they determined that a PSA would be the most appropriate contract system.

It remains to be seen whether the Brazilian people will put pressure on the government, considering the huge investments being made in the pre-salt, in terms of their demands for health and education spending. The PSAs may stretch Petrobras too thin. While the company does possess the expertise, as it has already successfully drilled tens of wells and installed production facilities that produce 300 thousand barrels per day, it may not have the resources to operate a large number of fields in the pre-salt.

It remains to be seen whether the Brazilian people will put pressure on the government, considering the huge investments being made in the pre-salt, in terms of their demands for health and education spending. It is notable that in the aftermath of the Brazilian demonstrations, President Rousseff followed through on her plan to divert all profits from the oil industry into health and education spending, with Congress passing the bill in June of 2013.⁶

As of August 2013, legislation is making its way through the Brazilian congress that would liberalize the legal framework where Petrobras acts as the sole operator

⁶ Falcão, Márcio and Flávia Foreque. "Em 'agenda positiva', câmara destina 75% dos royalties para educação e 25% para saúde." *Folha de S. Paulo.* June 26, 2013.

in the pre-salt.⁷ Certain members of Congress believe that the sole operator framework puts an undue burden on Petrobras. Ultimate prospects for passage of this legislation are uncertain.

Additionally, analysts are optimistic about the potential production of tight oil and shale gas onshore in Brazil. The first auction for unconventional resources will take place in November 2013, with blocks being offered in the Parana, Parecis, Parnaiba, Reconcavo, Acre and Sao Francisco sedimentary basins. The mechanics of the auction will be the same as the previous bidding rounds.



MAP OF UNCONVENTIONAL BASINS

⁷ Fick, Jeff and Gerald Jeffris. "Brazil Bill Could Reduce Petrobras Stake in Pre-Salt Oil Fields." Dow Jones Newswires. June 5, 2013.

With a potential of 500 trillion cubic feet, shale gas would boost Brazil's proven gas reserves to almost double the 226 trillion cubic feet of reserves known so far.⁸

In order to extract tight oil and shale gas, a pressurized fluid — usually water, sand, and chemicals — is pumped into the shale formation, thus fracturing the rock and releasing oil or natural gas, a procedure called fracking. International expertise and best practices will be required.

Natural Gas

The national energy agenda has not emphasized the production of natural gas, yet it is seen as a primary fuel for new power generation. The electricity grid is overwhelmingly reliant on hydropower, an intermittent power source, and Brazil has had to implement a quota system to avoid rolling blackouts. Natural gas is a compelling, cleaner feedstock for the future.

Petrobras' Strategic Plan 2030 focuses in part on developing onshore conventional and unconventional gas. Petrobras plans to invest \$10 billion in natural gas production from 2013–2017. Domestic production of natural gas is approximately 65 million cubic meters per day, with a projected increase to 98 million cubic meters by 2015 and 178 million by 2020.⁹ This volume is not sufficient to meet domestic demand and the country imports 30 million cubic meters/day of natural gas from Bolivia.

ANP estimates that the country has sufficient onshore natural gas reserves to boost supplies by 360 percent over the next decade. Along with the exploitation of onshore sources of natural gas, the infrastructure must keep up with the growing supply. Fortunately, between 2007–2011, natural gas pipeline capacity expanded from 6,000 kilometers to almost 10,000 kilometers.¹⁰ In addition, two LNG terminals were built, one in Rio de Janeiro and one in the state of Ceará.

⁸ Petrova, Lora. "Brazil to hold 1st shale gas auction on Oct 30–31, 2013." See News Energy. April 17, 2013.

⁹ "Natural Gas." Brazil.gov.br portal. Accessed July 3, 2013.

¹⁰ Ibid.

Refineries

Brazil has the potential to turn energy infrastructure from a weakness into a strength. There are four large refineries under construction, in Recife, Rio de Janeiro, Maranhão, and Ceará. Petrobras owns three of the refineries while the Recife With 48,000 kilometers of transmission lines, electrifying the country presents a major challenge.

refinery is a joint venture between Petrobras and PDVSA. These projects total some 1.3 million barrels per day and will represent 60 percent of refining capacity. This in turn will reduce the need to import gasoline.

Labor Needs

Well-trained, skilled labor is necessary to staff a growing energy industry. In order to train skilled labor, companies must invest in education programs. Secondary training should also be provided for high level professionals. Petrobras sends 100 people overseas for training every year, and it has relationships with universities abroad. Bringing in professionals from overseas requires flexibility, as international skilled labor fills a short term gap. The manpower base has not yet been developed considering Brazil's ambitions for the next ten years in the energy sector.

POWER GENERATION

With 48,000 kilometers of transmission lines, electrifying the country presents a major challenge. Brazil depends very little on fossil fuels to produce electricity. For the next five years, Brazil's electric power generation industry will receive investments of \$60 billion, according to federal energy planning company EPE. At the same time, the government has pledged to reduce power prices by 18 percent for households and 32 percent for industry.¹¹ However, taxes and charges still represent around 35% of the full energy cost to consumer, impacting available household income. Investments will amount to approximately 33GW between 2013 and 2017. Furthermore, Brazil expects to auction five hydroelectric plants in the next four years.

¹¹ Place, Michael. "Brazil's power generation industry set for US\$60bn investment boost." BNAmericas. February 6, 2013.

Hydroelectric Power

Hydroelectric power is a mainstay in the Brazilian electricity sector, representing 81.6% of the total electricity matrix. According to the Brazilian Electricity Regulatory Agency (ANEEL), 1,025 hydropower plants were in operation in 2012. The Itaipú power plant alone generates 14,000 MW, approximately 20 percent of electricity consumption in Brazil. During the first quarter of 2013, over 2,000 MW of new generating capacity of the 8,500 MW expansion planned for 2013 had been added.

Large events such as the Confederations Cup, held in June of 2013, or the 2014 World Cup and 2016 Olympics, require a tremendous investment in energy, and power generation is critical. Non-hydro power, such as natural gas, will be used as needed to complement a heavy focus on hydroelectric power.

The heavy concentration in hydro reduces Brazil's generation costs compared to other electricity matrices that are spread out across different sources.



Furthermore, hydro is a clean source of power that has a lower impact in terms of global climate change issues than thermal energy. Nevertheless, given the growing demand for electricity from the household and commercial sectors, there are vulner-

In these circumstances, other energy sources, such as natural gas, are needed to fill in the gaps, putting pressure on tariffs.

abilities for supply shortages during periods of drought especially because most plants have no capacity to store water. In addition, critics of hydroelectric dams contend that the dams flood areas of rainforest, leading to a loss of biodiversity and the displacement of indigenous communities.

The Belo Monte dam is an example of the pull between development and environmental factors in the construction of hydroelectric dams. The installed capacity of 11,233 megawatts would be among the world's largest. However, opposition for environmental reasons has delayed the project, which was originally conceptualized in the 1970s. The conflict over the dam's construction has been highlighted by several legal proceedings and protests. The dam has finally passed through the myriad approval processes and is expected to be completed by 2019. With around 80,000 MW of Brazil's 180,000 MW of hydro potential remaining in protected regions, the country will have to weigh the costs of developing dams with the potential opposition to these projects.¹²

Furthermore, from late 2012 to early 2013, reservoirs were depleted across Brazil.¹³ Water levels fell to a third of their capacity during the hotter than usual summer with a lack of rain. A similar situation occurred in 2001. In these circumstances, other energy sources, such as natural gas, are needed to fill in the gaps, putting pressure on tariffs. In 2012, despite Brazil's reduced GDP growth and President Rousseff's efforts to reduce power tariffs, the average short term liquidation tariff was the highest ever, revealing the real cost of past planning to consumers.

¹² "The Rights and Wrongs of Belo Monte." *The Economist*.

¹³ Barrucho, Luis. "Brazil drought stokes worries over energy shortages." BBC Brasil. January 18, 2013.

RENEWABLES

In addition to oil, hydro, and electric power, Brazil has one of the best renewable programs in the world, in terms of the percentage use of renewables in its energy matrix and the variety of feedstocks that are employed. Renewables made up 44 percent of the energy matrix in 2011, with a projected growth to 45 percent by

Renewables made up 44 percent of the energy matrix in 2011, with a projected growth to 45 percent by 2021. 2021. Nevertheless, fossil fuels will still be needed in the medium and long term. Brazil is fortunate to have the choices that it has in its energy matrix — and it is a country that considers itself heavily committed to the environment.



Source: Balanço Energético Nacional e Plano 2021

Ethanol

Brazil is a world leader in the production of sugarcane ethanol. The biofuel is produced from bagasse, which is the byproduct of crushing sugarcane. However, production of ethanol is very much dependent on the price of sugarcane — production takes place when the price of ethanol is higher than the cost of sugar. This means that production can be volatile.

Production of ethanol is now low, and Brazil is currently unable to export. Some flex-fuel vehicles now operate on pure gasoline. Some would argue that this is due to a lack of long-term planning by the government with regards to its ethanol policy. Likewise, fossil fuels have taken on greater importance due to new oil and gas finds.

These issues are reflected in the consumption of ethanol. According to the bank Itaú, the percentage of flex-fuel vehicles that primarily consumed ethanol dropped from 80 percent in 2009 to 27 percent in 2012. In addition to ethanol consumption falling from 18 billion liters to 11 billion

More than 40 sugar mills were shuttered between 2008–2012, a time when credit was scarce for ethanol projects.

liters in the same period, gasoline consumption increased from 25 billion liters to 40 billion liters. The financial crisis also hit the ethanol industry hard. More than 40 sugar mills were shuttered between 2008–2012, a time when credit was scarce for ethanol projects.

However, Brazil has waived all ethanol taxes, and subsidized credit lines were made available to build up the sector. Sugar millers may direct cane to the production of ethanol because rains are delaying the harvest and limiting ethanol supplies. 53 percent of sugarcane was diverted to making ethanol in the 2013–14 season. Moreover, the ethanol market is tight — rains have interrupted the harvest and the price of ethanol has risen. Due to excess supplies of sugar, prices have decreased due to the attractiveness of producing ethanol. According to the International Sugar Organization, for the 2012–2013 season, there is a sugar surplus of some 10 million metric tons in the world.

Second Generation Biofuels

Second-generation biofuels convert non-edible materials into fuel and are gradually increasing in size and scope. The Ministry of Agriculture of Brazil estimates national production of second-generation biofuels will reach 100 million liters per year by 2015.¹⁴ However, these fuels are actually being exported to countries that promote the production and distribution of second-generation biofuels. Brazil lacks a national policy on second-generation biofuels, while there is guaranteed demand

The Ministry of Agriculture of Brazil estimates national production of second-generation biofuels will reach 100 million liters per year by 2015. in the United States and Europe. The U.S. EPA's Renewable Fuel Standard 2 calls for the introduction of 21 billion gallons of advanced biofuels by 2022, an ambitious target which must be supplemented by sources such as Brazil.

Brazil has yet to develop an effective strategy to promote second-generation biofuels. Such a policy is necessary given that Brazil imports most of its gasoline and sells it at a loss. The recent weakening of the real has accentuated the difference between fuel prices and domestically produced biofuels. The demand for fuel will double in the next 10 years and first-generation ethanol may not be able to meet the demand.

Wind Energy

Brazil's wind power sector has been growing steadily in the last few years. According to Bloomberg New Energy Finance, Brazil is the fifth-biggest market for wind turbine installations worldwide after China, the United States, Germany, and India. There is a high potential for financial returns in the sector, which has led to much domestic and foreign investment. The bidding system for rights to build wind farms has gone smoothly, which has been attractive for investors.

Indeed, according to the Brazilian Wind Energy Association, wind power generation increased by 73 percent in 2012 to 2,500 MW, due to the opening of 40 new wind farms. Installed generation capacity is expected to grow by 141 percent in

¹⁴ "Brazil startup to export ethanol made from sugar cane's cellulose." Reuters. June 27, 2013.

2013. Capacity has grown from less than 300 MW in 2006 to 2,500 MW in 2012. Wind electricity reached almost 8 million people and investment in the sector was \$1.77 billion, resulting in the creation of 15,000 jobs. Thanks to wind farms, Brazil avoided emitting 1.2 million tons of carbon dioxide in 2012.¹⁵

Even so, recurring changes in regulation, strict local content rules, uncertainty regarding access to the grid, ever changing auction rules, and inefficiencies in project financing concessions and environmental licensing

Despite being a tropical country, with consistent sun from January to December, Brazil's solar energy sector is not yet competitive.

have all been postponing new investment decisions. In particular, local content rules have been impeding production. Turbine makers must buy or make their parts domestically to be eligible for Brazilian Development Bank (BNDES) financing on favorable terms. Up to half of the 13 suppliers active in the country may opt out as margins become tighter and new wind turbine generator production capacity is unfeasible. A globally diversified supply chain tends to be cheaper than domestically produced parts, which leads to turbines costing up to 20 percent more.

Solar Energy

Despite being a tropical country, with consistent sun from January to December, Brazil's solar energy sector is not yet competitive. This is perhaps due to the fact that there are no specific incentives for solar energy production, making Brazil less attractive to solar investors than other countries. Solar provides less than 1 percent of Brazil's energy matrix. Compared to Chile, which has plans to install 1,000 MW of solar panels, there are just 67.5 MW of installed capacity, according to Bloomberg New Energy Finance. High local and import taxes have limited development, and local content requirements have also stunted the industry's development. Developers are required to purchase photovoltaic equipment locally, making it impossible for some foreign based equipment makers to sell. The domestic parts are too expensive to make some projects viable. Additionally, competition from other clean sources such as hydro and wind make solar competitiveness still far from a reality in Brazil.

¹⁵ "Brazil's wind-power generating capacity soars 73 percent." Agencia EFE. April 26, 2013.

Nevertheless, the sector is poised to grow as Brazil will hold its first bidding rounds in October 2013 for solar and waste to energy projects. Winning projects should be operational by 2016.

In 2011, Brazil saw its solar matrix grow to 37 MW from 27 MW. During the World Cup, there are plans for several stadiums to be powered by solar energy, in cities

Electricity use will grow by 5% yearly by 2020, and energy efficiency of facilities is underdeveloped, despite high concentration of renewable sources in the energy matrix. such as Brasilia, Rio de Janeiro, Belo Horizonte, and Recife. In fact, the Mineirão Stadium in Belo Horizonte has a 1.4 MW rooftop installation, in part due to Germany's economic cooperation agency, which provided financing for the project.¹⁶ The partners plan to use

the facility as a demonstration site to encourage similar projects throughout the country.

Energy Efficiency

In 2008, then-President Lula signed a National Plan on Climate Change. The plan's focus was on deforestation in the Amazon, but also had several provisions on energy efficiency. The program aims to save 109 TWh of electricity by 2030, which is equivalent to 1.06 billion tons of greenhouse gases eliminated. The plan would replace one million old refrigerators per year for 10 years, and aims to improve energy efficiency in industry, transport, and buildings. The plan to decrease gas emissions by 40 percent by 2020 would consist of 7 percent efficient energy use, the rest through reforestation.

In 2009, the average efficiency of thermal power generation was 42 percent, 7 points higher than the world average, thanks to rollout of new gas combined cycle power plants. Electricity use will grow by 5% yearly by 2020, and energy efficiency of facilities is underdeveloped, despite high concentration of renewable sources in the energy matrix.

¹⁶ Tsagas, Ilias. "Solar scores goal at Confederations Cup semifinal." *PV Magazine*. June 26, 2013.

Companies that specialize in energy efficiency are increasing their profile in the country. Certain cities, such as Belo Horizonte, are partnering with organizations

like the World Bank to evaluate their energy use and identify opportunities for energy efficiency. Sectors such as transportation, public lighting, buildings, power and heat, waste, and water and wastewater, are being analyzed to extract recommendations for potential energy savings. In addition, the

In addition, the Inter-American Development Bank has also been investing in energy efficiency projects in Brazil for the past several years.

Inter-American Development Bank has also been investing in energy efficiency projects in Brazil for the past several years. In particular, its new \$50 million Energy Efficiency Finance Facility looks to finance companies that are investing in energy efficiency projects in the region.

Nano-technologies are also being explored that improve energy efficiency. For example, certain types of windows employed in buildings can reduce heat transfer and reduce energy use. These types of technologies that flow from established companies in different countries can be readily deployed in the Brazilian market given appropriate regulatory and market conditions.

RECOMMENDATIONS

1. In order to increase certainty for investment in the pre-salt oil fields, production sharing contracts must balance the right amount of risk and profitability potential in order to incentivize companies to bid on blocks and develop the fields. As well, local source requirements must be realistic in terms of the ability of the domestic market to contribute effectively to the sector.

2. Brazil has the potential to be a significant exporter of natural gas. Substantial shale plays exist and will be auctioned off during the 12th bidding rounds in November 2013. Brazil should prioritize development of the natural gas sector, which has a large growth potential.

3. Ethanol continues to be a mainstay in the Brazilian renewable matrix. There is also increased development of second generation ethanol. Brazil should pursue policies favorable towards the development of both sugar-based and second-generation ethanol, including continued tax relief and access to credit.

4. Hydro power remains the main source of electricity. Brazil should optimize the use of reservoirs to regularize plants in the Amazon region. Hydropower should be supplemented with thermal power as necessary to fill in reliability gaps. 5. Wind and solar can maximize their potential in order to further diversify Brazil's clean power matrix. Brazil's capacity to combine hydro and wind can be a consistent element of power expansion. Energy efficiency should also be pursued aggressively in parallel to the development of renewable energy sources.

6. Government must commit to a stable and long term regulatory policy for the entire energy sector. Infrastructure investments including transmission facilities are urgently needed for sustainable growth. There should be a pragmatic relationship between government and companies, focused on results. Americas Society (AS) is the premier forum dedicated to education, debate, and dialogue in the Americas. Its mission is to foster an understanding of the contemporary political, social, and economic issues confronting Latin America, the Caribbean, and Canada, and to increase public awareness and appreciation of the diverse cultural heritage of the Americas and the importance of the inter-American relationship.

Council of the Americas (COA) is the premier international business organization whose members share a common commitment to economic and social development, open markets, the rule of law, and democracy throughout the Western Hemisphere. The Council's membership consists of leading international companies representing a broad spectrum of sectors, including banking and finance, consulting services, consumer products, energy and mining, manufacturing, media, technology, and transportation.

Energy Action Group (EAG) The Americas Society and Council of the Americas EAG brings together the public and private sectors to develop strategic energy policies for the Americas. The EAG hosts forums in cities across the Americas and publishes working papers and recommendations on key energy and climate topics.

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