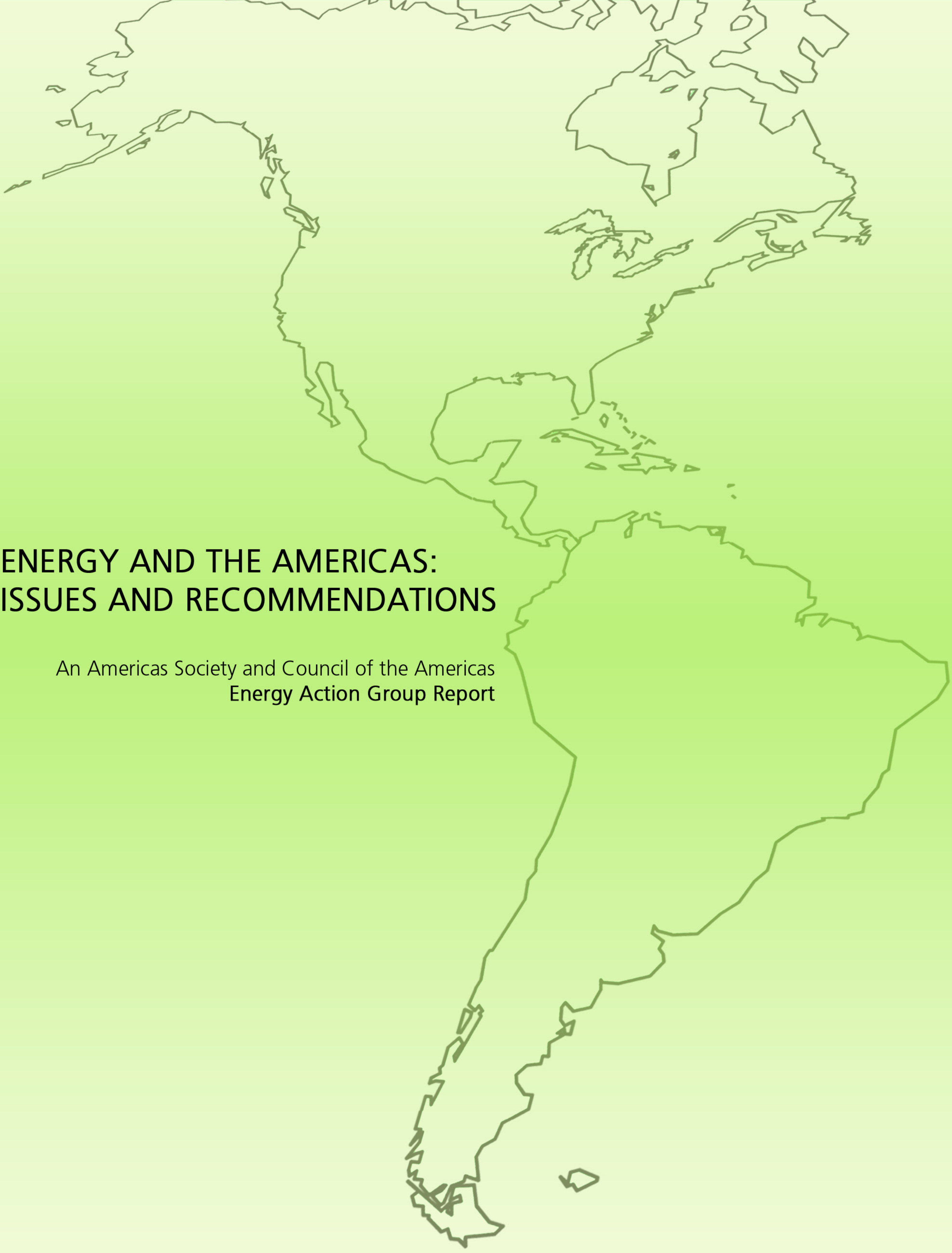

ENERGY AND THE AMERICAS: ISSUES AND RECOMMENDATIONS

An Americas Society and Council of the Americas
Energy Action Group Report

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Foreword

Energy is a topic that will only grow in importance in the Americas. It has significant political, economic, social, and environmental implications. It is an issue that has the potential to bind even the coldest of hemispheric relationships, such as the United States and Venezuela, preventing a complete break in relations. It also has the potential to cause friction between even the closest of friends, like the United States and Canada, or the United States and Mexico.

Americas Society and Council of the Americas have prioritized the investigation of energy issues to encourage sound policy choices across the region that will lead to sustainable energy sectors that are cost-effective, efficient, secure, environmentally and socially sensitive, generators of economic growth, and a means to bring the hemisphere closer together. Energy was one of the original agenda items of the Summit of the Americas, first held in Miami in 1994, and it was a key agenda item at the most recent Summit of the Americas in Trinidad and Tobago in 2009. President Barack Obama has made energy one of the top agenda items for U.S. policy in the region, and energy is one of the key drivers of the U.S. agenda with Brazil.

Sovereign nations will make sovereign decisions about energy production and consumption based on their own political and economic realities. We aim to ensure that, as relevant decisions are being made in respective capitals, leaders understand as much as possible the various alternatives available to them and the implications inherent in choosing certain paths to energy development. There is no reason the Western Hemisphere should not strive to be a global leader in energy issues such as clean energy, trade and investment openness related to products and services in conventional and alternative energy, and the universal access of citizens to energy resources. Doing so will require a vision for cooperation that includes the application of best practices, from wherever they arise. It is to these issues, among others, that we seek to contribute.

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Introduction

Since 2007 the Americas Society and Council of the Americas Energy Action Group (EAG) has hosted meetings with energy ministers and regulatory officials, organized public panel discussions, and conducted private roundtable conversations on key energy and climate issues in the Americas. In these sessions, we have brought together leading public officials, private executives, and experts in the energy and climate sectors. We have held programs and met with experts in Brazil, Canada, Colombia, Mexico, and Peru. The purpose of these meetings has been to identify best practices from the countries in the region so that we can share them with governments in the hemisphere, both to applaud the positive efforts as well as to provide examples for countries and other interested parties that seek to develop their energy sectors, enhance efficiencies, limit environmental impacts, and expand regional energy cooperation.

This paper is a synopsis of some of our key findings and recommendations from these events and meetings, and from additional research. It is not intended to be a comprehensive document, either of the issues or of our efforts. It is a survey of pertinent topics. But it does detail several primary themes that continue to run through hemispheric energy issues, and which should be foremost in the minds of policy makers. (For more in-depth exploration of the issues raised in this paper, please refer to the appendix, which includes a list of select EAG publications and meetings. To access papers and issue briefs as well as event summaries, opinion pieces, and blog posts on these topics and more, visit the Energy Action Group at:
www.as-coa.org/EnergyActionGroup).

As the EAG has analyzed the complicated political, economic, and social landscape of energy and environmental issues, there have been many lessons learned but there are at least four overarching themes whose importance should be highlighted for the achievement of our shared goals: a positive investment climate, environmental and social protections, the competitiveness of renewable with conventional energy sources, and the implications of the increasing presence of China in the region's energy sector.

Investment Climate Issues in Oil and Gas

The story of energy production in the Americas is about more than which countries have the most natural resources. The investment climate for developing these resources is paramount. Fundamental elements of a positive investment environment include an independent regulator for oil and gas, a state oil company that competes with private companies on a level playing field, competitive royalty and tax regimes relative to risk, and a stable regulatory regime that provides certainty for investors.

Ramón Espinasa of Inter-American Development Bank (IDB) has devised a useful framework for approaches to oil and gas management in the region. He places countries in two categories. In one are countries that have reduced government control by introducing an independent regulator and opening up the sector to competition. In the second, governments exercise a heavier hand over production and limit competition. According to Espinasa, countries in the first group, those with competitive investment climates, perform better than those in the second, which substitute the market with the state. From 2000 to 2009, Espinasa found that when oil prices increased, the countries in group one increased investment and production, while the countries in group two maintained investment levels and actually decreased production.

The countries the EAG has studied bear out this framework. Colombia and Peru, for example, show that a country doesn't need to have the largest reserves to dramatically improve production. Both countries turned around their oil and gas industries—Peru in the 1990s and Colombia in the aughts—by ending the monopoly of the state oil company, creating independent regulators, and revising contract terms to attract private investors. As a result, Colombia and Peru have seen substantial increases in investment and production in their oil and gas sectors. (In contrast, Venezuela's oil and gas resources dwarf Colombia's and Peru's, but its production has decreased in the past decade.) It remains to be seen whether Peru's new government will continue along the same path as its predecessor.

Canada also made significant changes to its energy investment model, beginning in the 1980s. Working within the confines of a constitution that divides responsibility for natural resources between the provinces and the federal government, Canada was able to open up the sector to greater foreign investment and reduce government ownership. This more market-oriented approach, and a change in the royalty structure for the oil sands, led to a huge boost in Canadian production, making it one of the world's largest exporters of crude.

Brazil, on the other hand, while often seen as a model for oil and gas management in the region, is now at a crossroads. After reforming the sector in the mid-1990s to allow greater participation of private companies and make state oil company Petrobras more competitive, Brazil passed legislation at the end of 2010 that aims to increase the role of the state in developing its oil wealth. This reversal in approach follows the 2007 discovery of huge "pre-salt" reserves in offshore fields. Much now depends on the regulations President Dilma Rousseff puts in place for the pre-salt. She must find a way to balance greater state control with a framework that will attract private capital or risk overwhelming Petrobras and reducing the appetites of Western investors. The ability to attract investment from international oil companies is the barometer of successful fiscal and regulatory regimes.

Mexico must also find a way to balance the role of the state with a competitive framework that attracts private investors. One of the largest oil producers in the world, Mexico's state monopoly has presided over a steady drop in production since the mid-1980s. A lack of capital, independence, and technological know-how has kept Mexican state oil company Pemex from tapping deepwater reserves in the Gulf of Mexico. Mild reforms passed in 2008 aim to attract private investors, but it's still too early to tell if the changes will help Mexico reverse its declining oil sector. Elections in 2012 may bring renewed emphasis to these issues. In the meantime, production continues to fall, and the impact to Mexico is two-pronged and unavoidable. Because Pemex funds about 40 percent of the federal budget, steadily diminishing production levels will trigger a drain on cash to run the government. Sustained decreases in production also accelerate the eventuality that Mexico will become a net oil importer, saddling its economy with the burden of paying global market prices for energy and altering its terms of trade.

Supporting Environmental and Social Protections

In addition to a management framework that attracts and facilitates investment, environmental and social protections are an essential component of sustainable oil and gas management. As countries have dramatically increased oil and gas exploration and production activity, the conservation of natural resources and the protection of indigenous and other social groups have become prominent issues, presenting a challenge for governments, companies, and communities. In Peru and Colombia, vast new tracts of land—including areas populated by indigenous groups and in the Amazon—have been opened for oil and gas development. In Peru, this has led to strife as indigenous groups have resorted to protests to make their voices heard. In Colombia, processes for community consultations are not always clear, and oversight of environmental laws and regulations are divided up among different state institutions, resulting in a cumbersome process for companies.

In Canada, the increase in development of the oil sands has caused concern about carbon emissions and the preservation of water, land, and wildlife as well as the protection of the rights of aboriginal and other communities. And the 2010 blowout of the Macondo well in the Gulf of Mexico showed that Brazil's production in deep water—much deeper than Macondo—is not without environmental risk. But while regrettable, the Macondo incident—and the response of industry and government to it—has provided important lessons and allowed for the continuation of deepwater development around the world.

Elements of strong social and environmental management include clear government policies for protecting the environment and socially sensitive areas. Ideally, these policies should be developed in consultation with all stakeholders and should balance environmental and social protections with oil and gas development.

But policies alone aren't enough. Governments must also monitor and enforce environmental and social requirements and, where necessary, work to keep conflicts from escalating into crises. And while companies may adhere to stricter practices for themselves than regulations require—and they should be commended for doing so—it is important that the private sector not replace the state as the primary provider of services to communities.

Expanding Renewable Energy Usage in Power Generation

As Latin America grows economically, overall energy demand will continue to rise. While conventional energy will undoubtedly form the largest share of the energy mix for the foreseeable future, for reasons of energy security and environmental sustainability, countries in the region are pursuing ways to increase the percentage of energy from renewable sources in their energy matrices. Technological advances will decrease the cost of renewable energy over time, but in the majority of cases, renewables today are still not cost competitive with conventional energy. This presents a challenge. How can governments promote investment in renewable energy without distorting the market or overwhelming their (tight) budgets?

While subsidies, feed-in tariffs, and other government incentives might attract investors in alternatives in the short term, such policies are often dependent on political will and therefore create uncertainty for investors over the longer term. They also put governments in the position of picking "winners," when, in a marketplace, cost competitive renewable energy technologies will rise to the top without government assistance. Establishing renewable energy quotas for energy producers and providers, without specifying the technologies or fuels that must be used to meet them, may be an effective way for governments to let markets pick renewable energy winners. An additional challenge to greater adoption of renewable energy is financing, which is set up for conventional sources of energy. New financing packages, by development banks in particular, have encouraged greater investment in renewables in the region. As more and more companies seek to integrate cost-effective renewable energy sources into the region's supply, and technology continues to evolve, additional financial institutions will follow the lead of development banks and offer competitive financing for renewable energy.

Small markets pose a particular challenge for the introduction of more costly renewable energy. The opportunity to supply a big market is more attractive to power companies because they can take advantage of savings that come with economies of scale. Creating larger markets through energy cooperation is therefore essential. With assistance from IDB and others, countries in Central America are close to completing the physical infrastructure for an integrated electricity system known as SIEPAC (*Sistema de Interconexión Eléctrica de los Países de América Central*, or Central American Electrical Interconnection System). While infrastructure is an essential component of energy integration, the next step for SIEPAC countries is to agree to a regulatory system that facilitates the sharing of power across countries. The Caribbean Basin is another area ripe for greater market convergence, once the political will develops to encourage such an approach.

With the growing attention to renewable energy, it is important to remember that improving energy efficiency is the most immediate way to reduce carbon emissions and energy costs. While renewable energy subsidies are difficult to sustain, government programs to support more efficient energy use can be one-time opportunities. For example, tax structures and programs such as performance-based contracting encourage efficiency improvements to buildings, factories, and equipment by allowing investors and energy users to "expense" improvements that usually require capital investments.

China: Changing the Energy Game

China's entry into the Western Hemisphere is having a significant impact on the energy agenda. Given its unabated global quest for resources projected into the foreseeable future, China is investing heavily in hemispheric energy from Canada to Argentina and many nations in between. There is nothing particularly concerning at this point about China's activity from a strategic perspective, so long as natural resources from Latin America, Canada, and the Caribbean Basin remain available to the global marketplace. Commercially, however, China's efforts are changing the face of energy investing.

In the first instance, China is simply able to outbid even the most deep-pocketed competitors for coveted assets; even though Chinese energy companies increasingly operate as private sector entities, with private sector financial constraints, they often have the full financial and political support of government institutions such as the Chinese Development Bank.

As a result, Chinese companies have built a record of acquisition in asset purchases across the region. The *quid pro quo*, however, is that, once investments are made, Chinese business practices are employed to own and operate the asset, and the positive multiplier effects on the local economy are minimal. In its record of investment in the region up to now, China has not exhibited an undue level of concern for Western business practices on labor, corruption, social development, and the environment. Nor has China shown a particular reluctance to do business in countries ruled undemocratically or at variance with global norms on human rights and social development (to be clear, China does not demonstrate a particular *attraction* to such regimes either—it's just business).

As a practical matter, this means that the ability of Western governments to leverage constructive changes in host nations through investment and business interactions is reduced. It also means that U.S. and other Western companies may increasingly find themselves at a disadvantage in competing for assets within the region. For example, the United States requires certain codes of behavior from its companies operating abroad, such as transparency and anticorruption. Because China does not apply the same standards, host nations can "arbitrage" investors, selecting those who bring the most financial resources and demand little in the way of conditions. Increasingly, this will impact not just Western investors, but may also reduce the means available to address social, environmental, and quality-of-governance goals across the region.

Recommendations

Countries in the Region Should Ensure a Long-Term Commitment to a Market Friendly Investment Climate for Energy Development

To reduce risk to investors, thus attracting the capital that is required to develop their resources, countries must demonstrate a long-term commitment to market friendly policies for energy development, including an independent regulator for oil and gas, a state oil company that competes with private companies on a level playing field, competitive royalty and tax regimes, and respect for contracts.

Countries in the Region Should Prioritize Effective Environmental and Social Management

As oil and gas development in the region increases, environmental and social protections must be strengthened. Countries should ensure they have clear policies that balance oil and gas development with protection of the environment and socially sensitive areas. Governments must monitor and enforce environmental and social requirements and, where necessary, work to keep conflicts from escalating into crises.

Countries in the Region should Reduce Market-Distorting Incentives for Conventional Fuels and Resist the Temptation to Subsidize Renewable Energy Sources

The market for renewable energy in Latin America has great investment potential, but policymakers need to address the constraints. By eliminating particular incentives and contract provisions, governments could level the playing field for renewable energy. Although government subsidies for energy consumption, particularly gasoline and electricity, are politically popular and difficult to reduce, these subsidies encourage overconsumption and are thus environmentally deficient. They also distort price signals, potentially making, for example, more environmentally friendly fuels less attractive. The true cost of energy should be reflected in consumer prices, inasmuch as this is politically possible across the region. In addition, because energy investments are long term, investors need secure and stable regulatory frameworks that allow for a long-term growth strategy that includes a mix of energy sources—conventional and renewable—to avoid overdependence on particular fuels and therefore enhance energy security.

The Region Should Seek to Further Regional Energy Cooperation as a Means to Strengthen Political and Economic Relations and Benefit from Economies of Scale

Energy cooperation, if done right, can help meet the needs of the region by creating more efficient markets. In addition, collaboration on energy can be an entry point for closer political and economic ties between countries. Recognizing that there have been false starts and missteps in the past, countries should nonetheless seek to further regional energy cooperation and connectivity as a means to strengthen political and economic relations as well as accrue the benefits of economies of scale. SIEPAC in Central America, while incomplete, is a good example of energy cooperation in the region. With the physical infrastructure nearly finished, SIEPAC countries must now agree to a regulatory regime—including transnational guarantees for companies to sell power from one country to another—and provide the regulatory certainty that will attract power providers and allow electricity to flow across borders.

Countries in the Region Should Prioritize Efficiency Measures to Help Reduce Emissions and Meet Demand

The most effective way to reduce emissions and meet demand is to use energy more efficiently, while ensuring universal access to energy resources. Smart-grid technology has the potential to improve transmission and distribution by better aligning supply and demand, introducing peak and off-peak energy prices, allowing consumers to track rates and moderate their use accordingly, facilitating greater intermittent renewable energy sources, and more. Other options for optimizing energy use include pre-paid electricity plans, which encourage conservation by explicitly linking cost to energy use. At the municipal level, there have been efforts by cities in the region to save energy and promote environmental sustainability by introducing modern public transportation systems, making available public bicycles, and limiting car use in city centers. Curitiba, Bogota, and Mexico City, for example, have all built bus rapid transit systems, large public buses with dedicated lanes that are more cost-effective than subways or trolleys and more efficient than smaller buses that mix with traffic. Cities in the region have also sought to make buildings more environmentally friendly. A Buenos Aires program is working to reduce energy use in city offices by 20 percent of 2007 levels before 2012. São Paulo has also mandated that all public buildings implement energy efficiency measures.

With China as a New Energy Actor in the Hemisphere, Western Investment Values Should be Prioritized

Sustainable investing in the Western Hemisphere requires a value set that Chinese investors do not typically bring. This is not surprising, since China's investments in the region are relatively new and are made to serve the Chinese market not regional development purposes. Still, this alternative investment model potentially undermines the positive externalities that tend to come with Western investment. These matters should be prioritized in all discussions between regional government and private sector representatives and their Chinese counterparts. As well, Latin American and Caribbean Basin governments—and Western nongovernmental organizations—should insist that Chinese investors abide by the same market and nonmarket requirements as their Western counterparts.

APPENDIX: Select Energy Action Group Publications and Meetings

Publications

Energy in the Americas: Building a Lasting Partnership for Security and Prosperity, October 2005

Energy and Climate Change in Brazil, November 2009

Energy in Peru: Opportunities and Challenges, June 2010

Colombia's Energy Renaissance, December 2010

Dilma Rousseff and Brazil's Oil Sector, March 2011

Meetings

Conference on Energy Issues in the Andes, September 28, 2004, Washington

Integrating North American Energy, December 9, 2004, Washington

Supplying the Demand: Hemispheric Energy Cooperation, March 15, 2005, Washington

Energy, Policy, and Politics: The Changing Energy Landscape in Latin America, February 26, 2009, Houston

Energy and Global Climate Change: From Port of Spain to Copenhagen, May 12, 2009, Washington

Energy Security and Global Climate Change: The Brazilian Perspective, June 10, 2009, Rio de Janeiro

Energy Security and Global Climate Change: The Andean Perspective, November 2, 2009, Lima

Global Climate Change After Copenhagen: What Comes Next? November 17, 2009, Washington

Global Climate Change: Making Sense of Copenhagen, January 25, 2010, Washington

Roundtable on Energy Issues in Colombia, June 17, 2010, Bogota

Energy in the Caribbean: Exploring Current Challenges and Opportunities, September 10, 2010, Miami

North American Energy Markets: Meeting Our Needs and Facing the Challenges Ahead, October 18, 2010, Mexico City

Spotlight on Cancun - REDD+: Our Chance to Achieve Low-Carbon Development? November 16, 2010, Washington

Oil and Gas in Latin America: Attracting Investment through Reform, February 10, 2011, New York

Investing in Energy in the Americas: Positive Frameworks for Renewable Energy, May 10, 2011, Washington

All EAG publications and meeting information can be accessed by visiting
www.as-coa.org/EnergyActionGroup

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The opinions expressed herein do not necessarily reflect the views of sponsors or participants.

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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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