

Energy and Development in South America: Conflict and Cooperation

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With Jessica Varat*

First South American Energy Summit © Eduardo Morales/epa/Corbis
Front Row L-R- Colombian President Álvaro Uribe, Chilean President Michelle Bachelet,
Bolivian President Evo Morales, Venezuelan President Hugo Chávez,
Brazilian President Luiz Inácio Lula da Silva

Back Row L-R- Uruguayan Vice-President Rodolfo Nin Novoa,
Ecuadorian President Rafael Correa, Guyanan Prime Minister Samuel Hinds

Oil Rig in Stormy Sea © Steve Bloom/Getty

Contents

- 1 Introduction**
Cynthia J. Arnson and Jessica Varat, Latin American Program, Woodrow Wilson Center
- 9 Energy and Development in South America**
José Miguel Insulza, Secretary General, Organization of American States
- 13 Energy Integration in Latin America: Limits and Possibilities**
Francisco Rojas Aravena, Secretary-General, Facultad Latinoamericana de Ciencias Sociales (FLACSO)
- 19 The Crisis in the Argentine Energy Sector and its Regional Impact**
Thomas A. O’Keefe, Mercosur Consulting Group
- 27 Chile’s Choices: Securing Supplies and Maintaining Growth**
Oscar Landerretche, Universidad Técnica Federico Santa María
- 35 Venezuela: Energy, the Tool of Choice**
RoseAnne Franco, PFC Energy
- 41 Diversifying the Energy Matrix: The Case of Brazil**
Sergio Trindade, SE2T International

- 49** **Energy and Bad Luck in Bolivia**
Humberto Vacaflor, *Siglo 21*
- 55** **Oil and the Transformation
of the Ecuadorian State**
Walter Spurrier Baquerizo, Grupo Spurrier
- 61** **Energy, Development,
and Regional Integration**
David Mares, University of California, San Diego
- 73** **Author Biographies**

Energy Integration in Latin America: Limits and Possibilities

Francisco Rojas Aravena

Strategic natural resources such as energy in all of its forms have always been central to a nation's foreign policy design and its insertion in the international arena. Energy can make an essential contribution to the development of cooperative policies, just as it can constitute a crucial element of conflict. In Latin America over the last decade, energy has served both as the impetus for integration initiatives and as a source of tension and conflict. As in no other region, energy in Latin America is inseparable from politics. In the words of European parliamentarian and president of the European Energy Foundation Rolf Linkohr, "energy nationalism, together with long-standing territorial conflicts and the lack of investment, creates difficulties for what should be a long-term objective—the strengthening a common energy market. Some alliances exist, but much remains to be done."¹

Latin America accounts for 12 percent of world production of natural gas, and the largest reserves are concentrated in the Andean nations of Bolivia, Peru, and Venezuela. The region is a net exporter of oil and energy in general, but the distribution of resources is highly unequal: Venezuela (PDVSA), Brazil (Petrobrás), and Mexico (PEMEX) together account for 90 percent of oil reserves in the region. Developing energy resources requires long-term strategies; for such long-term strategies to be viable, trust is an intangible and decisive asset.

Energy projects require investments of great magnitude in such areas as prospecting, production, transport, and storage. Both the state and markets play essential roles in defining viable long-term energy strategies that contribute to national development and foster mutually-beneficial international cooperation. In Latin America there is no shared regional energy strategy. There are linkages, but no shared vision or a mutually-beneficial collaborative plan. For such a thing to exist would require a strategic political plan that identifies integration as way to leverage national and regional growth and development.

In the absence of regional coordination on energy, there are various initiatives that are not connected one to the other. None of the initiatives being promoted as part of Plan Puebla Panamá, Petrocaribe, or the design of “energy rings”² takes into consideration what is happening in other arenas; thus, each initiative appears to be competing with the others. This lack of inter-connectedness increases uncertainty and reduces trust among various actors, at the same time limiting opportunities for shared benefits.

To create complementary or integrated systems, and for participants to engage in the process of creating them, all must obtain an economic or other significant benefit. In the case of energy, “the movement towards integration... implies complex strategic and political coordination and commitments by the participating countries. It is not enough to pay attention to geo-economic considerations alone; geopolitics and the strategic interests of the leading participants are of paramount importance.”³

The Western hemisphere is a region of sharp contrasts regarding energy cooperation. There is wide-ranging cooperation as well as complementarities between the United States and Canada. In contrast, there is scant cooperation among the South American countries. It should be noted that government policy varies from case to case regarding the roles assigned to the state and private enterprise.

Cross-border cooperation in all areas, including in energy of various forms, brings about important savings and cost reductions. Conflict, by contrast, increases costs across the board. The use of energy as an instrument of foreign policy is extremely sensitive and requires highly-skilled management of both politics and diplomacy. Miscalculation creates major opportunities for conflict and impacts the level of trust among different actors. Recovering trust is a lengthy and difficult process, at times more costly than the energy itself, given that the impacts of energy policy are global and extend beyond a particular country, region, or sub-region.

There have been different kinds of linkages on energy matters in Latin America. Initial projects were associated with tapping the surpluses generated in one country to cover deficits in other nations. This was the rationale underlying major investments and the construction of large-scale hydroelectric projects in shared river basins. Examples include Itaipu between Brazil and Paraguay; Salto Grande between Argentina and Uruguay; and Yacyretá between Argentina and Paraguay. More recently, other types of linkages—between Colombia and Venezuela, Ecuador and Colombia, and Bolivia and Argentina—have been established for the sharing of both electricity and natural gas.⁴

The models of energy integration in Latin America put into practice over the last 15 years have varied with respect to their components, objectives, and expected scope. Despite such efforts, however, there has been little progress toward establishing and implementing an effective plan for energy cooperation and integration in the region. There have been limited advances, with ups and downs on a binational basis, but there is no comprehensive proposal.

At present, the region is experiencing the effect of the high prices for hydrocarbons, something that is positive for producers but highly negative for importing countries. High prices have led to a renewed awareness of the impact of energy on the region as a whole. Latin America could be self-sufficient in energy if it were to combine and construct an energy market based on regional reserves and a scheme of investment in infrastructure for transport and storage, using appropriate technologies that allow both for greater yields and environmental protection. This would mean coordinating the production of electricity with that of gas, oil, biofuels, and other forms of renewable energy, all of which generate a market for production, supply, consumption, and demand within the region.

Nonetheless, there are no energy integration policies in Latin America and the Caribbean. There are only “connections.” The great political challenge is to transform the energy needs of both producers and consumers into an instrument that fosters integration. For this to be possible requires high levels of trust among political, military, business, and civil society actors to guarantee supply and investment, reduce uncertainties, and establish an interdependent market. Interdependence is essential, as dependency gives rise to areas of tension. Interdependence contributes to agreements for mutual benefit; dependency opens up spaces for energy nationalism.

Energy demand will continue to increase in the world, including in Latin America and the Caribbean. If economic development continues at its current pace, and especially if growth increases and becomes more stable, the demand for energy will only go up. This means it is necessary to increase the levels of investment in the energy sector; such investment must necessarily have worldwide demand as a reference point.

The International Energy Agency (IEA) estimates that Latin America will need \$1.3 billion in new investment in the energy sector before the year 2030 in order to meet new demand. The regional outlook has changed in important ways in recent years. Brazil has discovered major oil and gas reserves that will make the country not only self-sufficient, but capable of exporting energy as well. The consequence will be that over time Brazil will have less of a need to import gas from Bolivia. Argentina is facing a major gas shortage which, at least initially, could be

resolved based through investments that make the exploitation of resources more efficient. A large part of Peru's reserves are already committed for both domestic use and export to Mexico and the United States. Ecuador, an oil-exporting country, is in the process of defining and establishing the rules of the game in a Constitutional Assembly that will set out the course that the country takes. Meanwhile, the war in Colombia continues turning oil pipelines into military targets.

Trust is essential to these energy integration processes, as much to build markets (for both supply and demand) as to establish the necessary complementarities that make networks of energy interdependence possible. Such networks govern, for example, the relationship between electricity and gas, or electricity and biofuels, or electricity, biofuels, and oil. Trust makes it possible to imagine and design new forms of complementarities, generating certainty, reliability, and confidence in the integration process itself.

Energy is also linked to questions of democratic governance in Latin America and the Caribbean. Energy issues contributed to the inability of two Bolivian presidents to complete their mandates and served as a major source of tension as Ecuador's Constitutional Assembly was inaugurated. Oil has conferred on the Venezuelan government vast economic resources to carry out its domestic policies, as well as to undertake significant international initiatives such as Petrocaribe. Throughout the region, energy crises have immediate political repercussions.

Two issues are particularly weighty for Latin America in the near future: biofuels and nuclear energy. Biofuels derived from sugar cane constitute one of the pillars of Brazil's energy program, in contrast to the United States, where biofuels are corn-based. There are major concerns over the impact of biofuels production on areas such as food production and deforestation. The increased production of corn, sugar cane, and sorghum displaces the production of other food crops, creating scarcity and pushing prices up. Other impacts are felt through changes in land use, including the clearing of forests for agricultural purposes. Some analysts believe that biofuels can have devastating effects on the price of basic foodstuffs. This is especially true for "those countries that suffer food shortages and import oil"—precisely the situation for the world's poorest countries.⁵

Nuclear energy stands out more and more as a possible alternative for addressing energy deficits worldwide. Europe is in the process of evaluating the renovation and construction of new nuclear power plants. Experience accumulated in Latin America over the years might permit the expansion of nuclear energy. It is much "cleaner" than oil and has less of an impact on global warming. However, the specter of Chernobyl hovers over all those who make policy decisions, especially in countries with a major potential for seismic activity.

The challenge for Latin America is to establish a shared strategic plan that would facilitate the region's greater insertion into the international system for the benefit of the population as a whole. Building a strategic political project of integration is an ever more pressing need. Constructing a shared vision is the starting point for overcoming the obstacles that processes of integration currently face.

Opening a path to greater integration requires putting forward a vision of cooperation and coordination that would allow various governmental, private, and civil society actors to agree on joint courses of action. This task presupposes establishing a specific agenda that makes it possible to overcome conflict, reduce asymmetries, and establish opportunities for negotiation toward the realization of shared goals. The coordination of policies will make it possible to reduce uncertainties and advance along a shared path to mutual benefit.

Energy has become a key issue on the Latin American agenda. It has inspired and spurred a variety of initiatives and proposals. If these initiatives and proposals can be structured into a coordinated project that brings together producers and consumers, then it will be possible to make a qualitative leap in the direction of greater cooperation and regional interdependence and, hence, strategic integration.

NOTES

1. Rolf Linkohr, "La política energética latinoamericana: entre el Estado y el mercado," in *Nueva Sociedad*, No. 204, July–August 2006, pp. 90–103.
2. "Energy rings" refer to a variety of initiatives to increase natural gas exports to consumer countries in the region, as well as explore opportunities for natural gas liquification. [Eds.]
3. Ricardo Sennes and Paula Pedroti, "Integración energética regional: viabilidad económica y desafíos políticos," in *Foreign Affairs en Español*, Vol. VII, No. 3, July–September 2007, pp. 31–46.
4. One initiative advanced by Venezuelan President Hugo Chávez is the building of the *Gran Gasoducto del Sur* (Great South American Gas Pipeline) to transport gas from Venezuela to Argentina, passing through Brazil, Bolivia, and Uruguay. [Conceived of as a contribution to the integration of the countries of MERCOSUR with those of the Andean region, the project has widely been considered to be unworkable. Eds.]
5. C. Ford Runge and Benjamin Senauer, "Cómo los biocombustibles pueden matar de hambre a los pobres," in *Foreign Affairs en Español*, Volume VII, No. 3, July–September 2007, pp. 75–90.