# Energy and Development in South America: Conflict and Cooperation

Edited by Cynthia J. Arnson, Claudio Fuentes, and Francisco Rojas Aravena 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 Latinomericana 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

<b>49</b>	Energy and Bad Luck in Bolivia
	Humberto Vacaflor, Siglo 21

- 55 Oil and the Transformation of the Ecuadorian StateWalter Spurrier Baquerizo, Grupo Spurrier
- 61 Energy, Development, and Regional Integration David Mares, University of California, San Diego
- 73 Author Biographies

# Oil and the Transformation of the Ecuadorian State

Walter Spurrier Baquerizo

#### ECUADOR'S ENERGY RESOURCES

Ecuador's two main resources are oil and hydroelectricity. Oil was discovered in the late 1960s, and production began in August 1972. Production was initially 250,000 barrels per day, and today has increased to over 500,000 bpd. Oil production as a share of GDP peaked in 1974 (34 percent), and today makes up 20 percent of Ecuador's GDP.

Ecuador, like Mexico, is a country with considerable yet, relatively speaking, limited oil reserves. A significant portion of its production is allocated to domestic consumption. The country must anticipate that in a not-so-distant future, a decline in production could mean the end of exports. This fact distinguishes Ecuador from Venezuela; in the Venezuelan case, the economy is expected to revolve around oil exports so long as oil continues to be one of the principal energy sources in the world economy.

Crude oil for export by Petroecuador (the national oil company)—both the company's own production and the crude extracted by contractors—is sold by means of short-term contracts, destined for refineries in the Caribbean principally via intermediary trading companies.<sup>1</sup> Peru and Chile are regional customers, and oil has also been exported to South Korea in the recent past.

Hydroelectric power comes from the rivers that come down the Andes and which either form part of the Amazon basin or flow into the Pacific.

#### **ENERGY AND EXPECTATIONS**

Ecuador's key objective over the past 35 years has been to direct oil revenues towards the country's development. The main obstacle to realizing this goal has been the public's expectation of obtaining an immediate benefit from oil income,

coupled with the willingness of politicians to offer such benefits. The principal ways of addressing these immediate expectations have been through subsidies for fuel and other energy sources, increased public-sector employment, and wage increases unaccompanied by improvements in productivity, resulting in the loss of competitiveness for productive activities outside the oil sector.

As a result, there has not been a sustained increase in investment in relation to the size of the economy, or even a stabilization of the relationship between investment and the size of the economy. The peak periods of investment relative to the size of the economy were in the early 1970s (tied to the construction of the first oil pipeline), in 1987 (to reconstruct the oil pipeline destroyed by the earthquake that year), and 2001–02 (the construction of a second oil pipeline for heavy crude).

#### **ENERGY INVESTMENT**

With the discovery of oil, investment in the energy sector became a priority. Accordingly, the first oil revenues that came in were used to build a new refinery in Esmeraldas province alongside the terminal of the trans-Andean oil pipeline, and planning got underway for a large hydroelectric plant in the Amazon region. Although these projects were realized, problems persist. The refinery has not been properly maintained, new facilities have not been built, and today Ecuador is a net importer of fuel.<sup>2</sup> As for hydroelectricity, Paute—the large plant built with the first oil revenues—was constructed without sufficient attention to the other projects that would have halted sedimentation. As a result, Ecuador today imports hydroelectricity from neighboring countries. In large measure this is because neither the refinery nor the hydroelectric plant is profitable, due to the aforementioned subsidies.

#### **DEVELOPMENT STRATEGIES**

Between 1972 and 1982, the first period of Ecuador's development of its energy sector, the country adhered to the import substitution strategy then prevalent in Latin America. The result was a highly-protected industry, of little national value added. All oil revenues were squandered, along with available private financing. This model collapsed with the 1982 debt crisis.

From 1982 to 2007, policies proposed under the so-called "Washington Consensus" were only partially implemented. Short-term political interests prevailed at every moment: the 1992 elections resulted in large majorities for rightwing parties, yet they did not seek a readjustment of the policy program. It was a period of economic stagnation. In 2007, the government of Rafael Correa formally abandoned the policies dictated by the Washington Consensus, proposing instead a new kind of socialism emphasizing the empowerment of the poorest social groups. In contrast to "historical" socialism of the Soviet kind, which transferred ownership of the hitherto private means of production to the state, the socialism of President Correa proposes to gradually increase ownership of the means of production by unions, cooperatives, and communes.

This declaration of independence vis-à-vis the international community coincides with the return of oil to its price at the time of the 1982 crisis, when the strategy of economic opening was adopted.

#### OIL AND CONFLICT

Oil was found just east of the Andes where the Amazon jungle begins. At the time, the area was sparsely populated; the inhabitants were mostly indigenous communities with different levels of contact with the dominant culture. For that reason, there was no conflict between the local population and the central government over access to the resources generated by oil exploitation.

The discovery of oil witnessed the beginning of a disorganized process of settlement not very different from the settlement of the West in the United States. Institutions as well as the law arrived late relative to the growth of the population. While the population density in the area is low, settlers increasingly resorted to violence to obtain what they wanted both from the government and the companies. This has taken the form of occupying facilities (particularly in the oil regulation center in Lago Agrio as well as pumping stations); staging incursions in oil fields, often taking equipment; and sabotaging the pipeline. At times the settlers are suspected of committing acts of sabotage to collect compensation from Petroecuador.

Ever more, funds are pre-allocated to the Amazonian provinces. Yet it would appear that optimal use is not made of the funds; on occasion, there are suspicions of embezzlement. In addition, the funds tend to remain in the provincial capitals, and the communities near the oil fields do not consider themselves to be beneficiaries.

There is considerable opposition to oil activities by environmental NGOs. At this time, efforts are focused on halting the expansion of the oil frontier eastward. These NGOs work with the communities, trying to persuade them to oppose the oil companies. For their part, the oil companies also work with the communities, to get them to support economic programs. The government assumes a position that is essentially passive. The result is conflict among the communities. The relationship of the state to the private oil companies has been conflictive. The discovery of crude in the late 1960s took Ecuador by surprise; a new Law on Hydrocarbons was adopted and a state oil company established only a few months before the crude began to flow in the early 1970s. Immediately thereafter, the oil contracts were renegotiated. That conflictive relationship coincided with the first oil shock.

Midway through the current decade, when oil prices were once again on the rise, the conflict was played out again with the private oil operators. The Ecuadorian government believed that its share of the new oil revenues was insufficient. Ecuador adopted a law by which the state can determine what percentage of the revenues from the price increase will accrue to the state and what share will go to the private companies. This has led various oil companies, most importantly Repsol, to seek international arbitration.

At the same time, in 2006 the state determined that a transaction between Occidental Petroleum and the Canadian company EnCana<sup>3</sup> constituted a sale of rights that, under Ecuadorian law, cannot take place without prior authorization. (Along with Repsol, Occidental is the largest of all the private producers in Ecuador.) Accordingly, the Ecuadorian government declared that Occidental's rights to its concession had lapsed (prematurely expired) and therefore that its holdings reverted to the state, without compensation. Occidental has filed a complaint before the International Center for Settlement of Investment Disputes (ICSID) of the World Bank. Currently, Ecuadorian authorities are investigating whether a similar transaction between Petrobrás and the Japanese firm Teikoku also might result in a finding that Petrobrás' rights had also "lapsed."

#### **REGIONAL ENERGY INTEGRATION**

There has not been integration with respect to oil. The only exception worth noting is that when Ecuador lacked sufficient capacity to transport crude, it used the oil pipeline in southern Colombia. The first ambitious oil integration projects are those that have been announced by Presidents Correa and Chávez involving the construction of a new refinery that would process Venezuelan crude for export to Asia.

As for electrical energy, Ecuador is currently connected to the electrical grids of Colombia and Peru and buys electricity in the spot market. To generate electricity Ecuador also buys gas from a foreign-owned, offshore concession in Northern Peru.

#### CONCLUSION

Oil has transformed Ecuador in a number of ways. First, the import-substitution model in place from the 1950s until 1982 succeeded in attracting investment only when the discovery of oil augured the expansion of the domestic market. Second, the existence of oil prompted the settlement of the Amazon region as infrastructure for oil exploitation was built. Third, oil made it possible for the state to grow in size without having to adopt policies for the redistribution of national income. Fourth, oil caused social conflict, but the extent of conflict in Ecuador compared to the conflicts in other oil-producing countries is something to be studied comparatively. At first glance it would seem that Ecuador has suffered less conflict than, for example, Bolivia, which is rich in natural gas, or various other oil-producing countries of Africa and the Middle East. Finally, the existence of oil resources appears to have generated complacency regarding the need to design economic policies conducive to development. This phenomenon is known as "Dutch disease."

#### NOTES

- 1. A crude shipment may be sold two or three times before reaching port, so there is no certainty as to its final destination.
- 2. If one includes crude oil in this calculation, Ecuador is a net exporter.
- 3. EnCana is a private oil and gas company based in Calgary, Alberta. [Eds.]