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PDVSA Court Order Suspended

Paul Walker, a London high court judge, suspended a court order that froze PDVSA assets valued at 12 billion dollars. Following the court order that was issued in early February, PDVSA issued a statement instructing its traders to deposit oil receipts in UBS bank in Switzerland, a move that was no less than strategic. The London high court judge has been under significant pressure to resolve the issue and return the assets of PDVSA to their pre-February rates of liquidity. Exxon has lost a major precedent setting case against PDVSA, and pressures from the British banking sector may have helped determine this decision.

Special Edition: Energy in the Americas

Can Local Communities Benefit from Energy Development?

Kathryn Hewlett-Jobes

Over the past decade, important progress has been made to improve the positive contribution that resource development can make to human, social and economic development. Macro-economic impacts are far better understood than when the term "Dutch disease" was first coined, and governments now have ready access to a wealth of advice.

Numerous international organizations have established codes of conduct and companies have accepted a new level of responsibility — one would be hard pressed to find any firm in the oil and gas or mining sectors that did not overtly embrace the importance of improving the environmental, social and economic impacts of resource development.

A cadre of NGOs and other civil society groups play an active role in challenging both public sector and private firms to strive for increased sustainability and accountability, and there is a full calendar of events promoting better understanding of sound resource management.

Nonetheless, the "resource curse" is real. It is difficult to translate resource wealth into broadly based economic growth. It remains inherently challenging to map out specific ways to ensure that resource development significantly benefits the local community.

(Continued on page 3)

Note from the Guest Editor

The current FOCALPoint Special Edition on Energy coincides with a growing concern over energy security and sustainability in the Americas. Global energy prices persist in their upward trend, surpassing the previous inflation-adjusted record highs of the 1980s. A heightened understanding of the importance of climate change adds urgency to the issue of energy sustainability, while growing world demand outstrips the development of new energy sources.

In the Americas, political tensions involving Venezuela, changing relations between energy companies and governments, growing interest in the Organization of Petroleum Exporting Countries (OPEC), new trade agreements and change brought by recent energy discoveries, all add complexities to global trends.

In December of 2007, Ecuador rejoined the OPEC and Brazil has been expressing similar desires over the past year. Tensions between Colombia and Venezuela, the two dominant oil-exporting nations in Latin America, recently hit a new peak in a diplomatic crisis that involved Ecuador, another significant producer and exporter of oil. Chile and Argentina have faced disruptions to energy supply and rationing.

In addition, a number of international oil companies (IOCs) have been forced to renegotiate their oil production contracts and/or replace them with service contracts that provide more favourable conditions for national oil companies (NOCs). As one example, Exxon has entered into a legal battle with PDVSA of Venezuela that could set a precedent for future negotiations between IOCs and NOCs.

The governments of Mexico and Venezuela both increased the percentage of revenues generated by PEMEX and PDVSA, respectively, to finance social programs and their government's political engines. There is increasing pressure for NOCs to reinvest in both upstream and downstream infrastructure in order to build up their reserves of oil.

Mexico's president is hinting at reforms of the nationally controlled energy sector and has had to build up security following a number of terrorist attacks on the nation's pipeline infrastructure in 2007. Oil discoveries in the Gulf of Mexico and off the shores of Brazil have temporarily diverted attention away from the energy shortages that plagued the southern cone during the winter. However, the issues underlying those shortages remain. Alternative energy sources and nuclear power have gained ground as options for diversifying the energy mix, but it is unclear how much these alternatives will meet actual needs.

Peru recently negotiated Free Trade Agreements (FTA) with the United States and Canada and continues to experience a bonanza of exploration in the oil and gas sectors. However, many of these activities affect indigenous populations, and concerns have been expressed that their needs have not been adequately addressed. Increasingly, governments in Latin America will be called upon to accommodate the rights of Indigenous Peoples in order to minimize the risk of future conflicts.

IOCs are also under increased pressure to invest in the host communities where they operate. Corporate Social Responsibility (CSR) has become a focal point in discussions on how IOCs can improve the tarnished image and environmental track record of the industry. Incorporating voluntary frameworks for environmental and social sustainability into projects has become the latest trend in the private sector.

As the year progresses, the pressing issues related to energy in the Americas will include cross-border cooperation, energy security, reinvestment in infrastructure, and support for community development. As these themes will be at the forefront of the policy debate this year, it is our hope that this edition of FOCALPoint will contribute to understanding some of the major issues shaping the politics of energy in 2008.

Jean Pierre Chabot

Local Communities *(continued from page 1)*

The Role of Communities

A resource left 'in the ground' can be seen as an appreciating asset – particularly in these times of rising energy prices. Communities can easily view resources as a "bank account" and its development as being a series of withdrawals with little or no benefit accruing to the rightful owners.

Changing this requires a series of specific steps to ensure that communities not only receive benefits but also are convinced that resource development is in their interest. If not, development is often hindered or even stopped. However, there are important hurdles to overcome.

One does not need assistance from one of this year's crop of Hollywood film noirs to understand why there is distrust of the outsider who arrives to develop energy resources.

Resource development means that communities must suddenly sort out who shall speak for others in a new and complex area of interest. Local persons are thrust into negotiating with a better-informed, skilful company that has done this many times before. Language, culture and ethnic differences must be bridged. Government decisions may be seen as out of touch with the community's needs or may be tainted by perceptions of corruption. Levels of distrust can easily escalate.

Yet communities also readily appreciate the potential offered by resource development. New job opportunities, the chance to develop new technical and management skills, and improvements to local social, health and educational facilities and infrastructure are all highly attractive outcomes – if only they can trust that they will actually occur.

Are there practical ways to make it all a bit easier?

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CSR Experience

Canadian energy firms have been leaders in implementing Corporate Social Responsibility (CSR) programs. Enbridge, Talisman, Petro-Canada and Nexen are all members in good standing of the UN's Global Business Compact. Many other firms also have active social responsibility programs and take justified pride in their environmental, labour and safety results. Community involvement has been a central element of many of these efforts. While not all experiences have been positive, there is a strong record of success on which to build. Increasingly, a well executed CSR program is seen as a normal part of doing business.

However, for communities in many parts of Latin America and the Caribbean, it is very difficult to assess the validity of any firm's CSR promises. This can result in all firms being viewed with equal distrust - regardless of their individual performance elsewhere.

This poses a serious issue. Firms expect that an active CSR program will lead to stronger relationships with communities, an enhanced 'licence to operate' reflecting a positive reputation, and clear recognition in the marketplace. If this does not happen, it weakens a key element of the business case for investing in a substantial CSR program.

All major CSR programs recognize the importance of ensuring that firms have a business reason to support CSR efforts. The OECD Guidelines for Multinational Enterprises, the United Nations Global Compact, the Equator Principles, and World Bank, IFC and regional development bank guidelines all promote a socially responsible business culture by recognizing firms that comply.

However, the high-level objectives of these various programs are difficult to translate into what a community should expect at the local level. Therefore, compliance with an international program does not always nurture increased trust at the community level.

Access to information on what a firm has done elsewhere is also problematic. While it is straightforward to find out which firms are compliant with the major international guideline programs, one must go to companies themselves for information on specific actions taken at the community level.

Time for the Next Step

There is a need for a credible, simple way for communities to assess the relative merits of firms' CSR performance.

An industry-led initiative could develop sector-specific guidelines specifying verifiable CSR actions that firms would deliver to a community when developing an energy resource. It would provide a one-stop shop for communities to access information and would be made credible by its transparent and specific nature, thus avoiding the need for a formal credentialing process. Most importantly, it would address one of the root causes for distrust in the community.

Canada has extensive experience and expertise in developing resources to benefit communities. As a responsible energy development partner, it is time to take the next step.

Kathryn Hewlett-Jobes is a consultant on private sector development and a former senior advisor at the Inter-American Development Bank.

Indigenous Peoples and Energy Development: A Matter of Respect

David Lertzman

Energy companies worldwide have long had development interests in the territories of Indigenous Peoples. As conventional energy resources dwindle, petroleum companies are expanding into more remote areas, increasing their interactions with and effect on indigenous communities. A significant quantity of Latin America's energy resources lie within the territories of Indigenous Peoples. As healthy ecosystems are the basis for Indigenous Peoples' ways of life, the environmental, social and cultural impacts of such industrial resource extraction are an ongoing concern.

From Canada's boreal forests to the Amazon jungle, Indigenous Peoples have voiced their concerns and are becoming increasingly effective at doing so. Pressure for improved social and environmental performance has also been placed on energy companies by NGOs, civil society and in some cases, government.

Some efforts have been made to include Indigenous Peoples' perspectives through various forms of public consultation and environmental assessment. Although a step in the right direction, such processes are based largely in Western development paradigms and institutional mechanisms typically not congruent with the cultural values, social practices and environmental needs of Indigenous communities. The result is that Indigenous Peoples often feel their needs are not met and that the system is stacked against them. Moreover, their knowledge and values are often misunderstood, disregarded or circumvented. Indigenous Peoples are still frequently seen as obstacles to development rather than as participants. Furthermore, Indigenous communities are typically more negatively affected by energy development projects and do not reap the same degree of benefits as do other communities.

Yet not all interactions between Indigenous Peoples and energy proponents have been negative. Growing public expectation for improved

President Kirchner visits Venezuela

In the midst of the Andean crisis Argentinean President Cristina Kirchner travelled to Venezuela to discuss and sign agreements on trading agricultural products for oil. Argentina has been experiencing energy shortages for a number of years. Former Argentinean President Nestor Kirchner also signed similar agreements with Caracas in 2004. The energy crises of 2004 and 2007 have had similar impacts on Argentina's ability to export energy to Chile. Cristina Kirchner has also expressed a deep interest in having Venezuela join as a full member of MERCOSUR, which would secure access to the region's largest energy source. Venezuela would also benefit from these arrangements, since it is currently experiencing food shortages. These were highlighted during the crisis with Colombia, as the latter is a major exporter of food to Venezuela.

environmental and social performance in petroleum companies' interface with Indigenous Peoples has compelled companies to improve their abilities to engage more effectively with indigenous communities. There is a reasonable business case to be made. Project opposition causes costly delays that negatively affect a company's bottom line. Accessibility to electronic communication, supported by NGOs and other networks, has aided such opposition making it easier for local people to publicize their views. The attempt to deal more effectively with Indigenous communities therefore is a prudent risk mitigation strategy. This has led not only to improved forms of impact compensation but also to advances in the quality of public consultation.

Some companies have been more proactive in furthering relations with indigenous communities, recognizing that above ground business operations present considerable complexity and nuance that require special skills development and social innovation. Hence, where some see challenges, others see opportunities. Actively developing the capacity to work more effectively with Indigenous communities can drive innovation, which then translates into new organizational capability, competitive advantage and ultimately an improved social license to operate. As a result, while some companies enter the topic through the doorway of risk mitigation, they may find themselves walking out the door of corporate social responsibility (CSR) and sustainable development (SD).

Stakeholder engagement is a key arena for CSR practices in the SD business model, and public consultation has received growing attention in the oil and gas industry. In Canada, for example, it is expected that companies adopt a 'cradle-to-grave' approach to consultation. In other words, companies should begin their consultation plans from the moment an area is considered for development, following through the life of the project until post-reclamation. It is recognized that notification is not consultation and that creative methods are necessary in adapting techniques to each unique situation. How much more effort is needed for proper consultation practices, therefore, when dealing with indigenous cultures whose social institutions and worldviews differ considerably from those of industry?

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Using the Canadian example, it is relatively easy to make the case that Indigenous Peoples are not "just another stakeholder." Their long-standing history (prior occupancy), distinct cultural traditions, sense of identity and relationship with the land, land-use and traditional ecological knowledge — bolstered by unique collective and treaty rights and *sui generis* (special) constitutional status and an increasingly effective ability to exercise the above — place Indigenous Peoples in a unique and strategic position in Canadian society. This is especially the case where natural resources and land-use planning are concerned. A greater level of cultural due diligence is required for meaningful and effective consultation with indigenous communities.

Another key area of innovation for corporate best practices relating to indigenous communities is cross-cultural learning and communication. It is difficult for engineers and other technicians to appreciate the differences between their worldview and that of Indigenous Peoples. But Indigenous ways of life are organized upon very different philosophies than that of industrial society. This is most profoundly witnessed in Indigenous Peoples' relationship to the land. Therefore, leading companies are fostering human resource capabilities through cultural training programs, often delivered by indigenous trainers, to develop capacity in this field.

Some innovative companies have moved into formalized co-management and other types of agreements with indigenous communities. This may include partnerships and joint ventures, employing local people with traditional ecological knowledge and social skills for impact monitoring and assessment, active hiring of local people to management levels, and working within traditional governance structures. Other examples include supporting the development of independent community foundations and development corporations.

Sustainable development likely provides the most ethically sound, philosophically fruitful and practically effective framework for energy industries to engage with Indigenous Peoples. This is not without its caveats, as Indigenous Peoples may have very clear and different understandings about what constitutes development. In the final analysis, the fundamental issue is one of respect.

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Dutch Disease: A Threat to Latin America's Current Growth Spurt?

Albert Berry

Latin American economies have, for the most part, always had primary products as an important component of their exports. Eventually, the initially relatively open and commodity-based economies became less so as the region imposed more protectionist policies after the Second World War. The Import Substitution Industrialization (ISI) period saw the fastest extended growth spurt Latin America had ever seen, at about 5.5 per cent from the end of the war until the debt crisis of the early 1980s. From the onset of the debt crisis to the early years of the present decade, regional growth has been discouragingly slow: just two per cent between 1980-2003 (marginally above population growth of 1.85 per cent). Further, the last quarter century has seen a tendency towards increasing income inequality.

From the onset of the debt crisis to the early years of the present decade, regional growth has been discouragingly slow: just two per cent between 1980-2003.

But in terms of overall economic growth, Latin America turned a corner beginning in 2004, reaching an average of 5.5 per cent between 2004-2007. This turnaround is widely attributed to the commodity price boom combined with fast world growth in general, creating strong markets for the products of the region. Even with a recession now threatening the U.S., fast growth in China, India and other countries may sustain the commodities boom for some time. Most prominent among those commodities are the fossil fuels that provide energy – oil, gas and coal.

One of the great questions now surrounding Latin America's medium-term economic future is whether a continued boom in fossil fuels and other commodities will bring with it some of the undesirable effects associated with "Dutch disease", a problem named for the negative after-effects of a gas export boom experienced by the Netherlands in the 1970s. The most obvious of the worrisome effects of such booms is that they discourage the production of other "tradables"– a category made up of the goods and services that can be traded internationally (in contrast to "non-tradables" that cannot, such as construction and personal services). Tradables are mainly agricultural products, minerals and manufactures, together with certain services.

When a country exports more oil (or gets a higher price for the oil it exports) this raises the country's foreign exchange earnings and makes it less important to export other goods and services in order to be able to import items not easily produced at home. The mechanism whereby the boom discourages production of other tradables is, in most countries, the exchange rate. An export boom appreciates the country's exchange rate, which in turn makes it less profitable to export other items and cheaper to bring in "importables."

Why should the discouragement of the production of other tradables be a source of concern? This depends partly on whether retaining strength in some of the discouraged sectors matters to the country's successful growth in the future. There are two main mechanisms through which it might.

The first is related to the possible volatility of export revenues. Suppose that the current commodities boom lasts another decade, not too long but long enough to weaken some other tradables sectors. Then, when the commodity boom is over and the countries once again need those other sectors, their capacity has been diminished, the resources have shifted elsewhere and it may be difficult and costly, if possible at all, to restore them to their former productive levels. This may be called the "instability" cost of Dutch disease.

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A different sort of damage is done if one or more of the sectors that shrink have a special role in the overall growth process. Many economists feel that manufacturing sectors, (or some key types of manufacturing such as the production of capital goods) play that role because their presence helps to increase productivity in other sectors (i.e., produces "externalities" in economic jargon). When they shrink, whether permanently or temporarily, the economy's future growth potential is impaired.

Historically, employment and the weight of manufacturing in Latin America's output rose over most of the 20th century, especially during its high-growth third quarter, and had reached around 25 per cent and 16 per cent respectively by 1980. But since then, these figures have plunged to about 18 per cent and under 12 per cent, respectively.

Dutch disease can also hurt overall employment and income distribution when, as is often the case, the production of the booming exportable creates very few jobs and the sectors that shrink, or whose growth is discouraged by the boom, are more labour intensive. Thus oil, gas and coal production creates virtually no jobs but their export discourages agriculture and manufacturing, sectors that create many jobs. So the net effect on the demand for labour can be negative even as total GDP is rising.

In concrete terms this "employment problem" manifests itself in some combination of higher unemployment and underemployment, lower wages, and a large informal sector of micro enterprises and the self-employed. Latin America is famous for its level of income inequality and the large share of people engaged in low productivity, informal sector jobs.

The distributional effects of commodity export booms depend greatly on who controls the export. If it is a crop produced by a few large farmers (e.g., soybeans in Paraguay) an increase in poverty is an unsurprising result. When it comes from many small farms (e.g., coffee in

Costa Rica and Colombia) the distributional effects would normally be positive. When the revenues go largely to the state (e.g., state-owned oil) the distributional outcome can go either way depending on how the state behaves.

Who undertakes oil and gas production (public or private sector) in Latin America depends on the country, as do the regulations guiding private sector exploitation. Although good offsetting policies could counteract the negative Dutch disease effects mentioned here, such policies have seldom, if ever, been much in evidence in Latin America, especially those that would help keep the demand for labour high.

Dutch disease constitutes at least some degree of threat in Venezuela, Bolivia, Ecuador, Mexico, Colombia and Brazil. The threat is currently greatest in Venezuela and Bolivia. In fact, Venezuela's stagnation in the wake of the previous oil price hikes of the 1970s qualifies it as a classic victim of this disease: slow growth as manufacturing and agriculture are hamstrung by the appreciated exchange rate; low employment creation in productive sectors; and the resulting high levels of "informalization" and inequality. Bolivia's level of inequality still shows Dutch disease's impact on tin from earlier times. Mexico (now) and Brazil (when its oil becomes a major export) are less likely to suffer ill effects from energy exports because they are bigger, more diversified countries, and probably also because their decision-makers will have a better handle on how to deal with the problem.

Colombia and Ecuador are intermediate cases. Both suffer rather severe employment problems, albeit for a variety of reasons, and this means that energy exports bring a threat of negative effects along with their benefits. All these countries would do well to reflect on how Norway has managed its energy bonanza — it is perhaps the only country in the world that rates high for its performance in that regard.

At this point, it is too early to tell whether the current commodity boom is bringing strong Dutch disease effects. In-depth analyses of the impacts of current energy exports on manufacturing and other tradables, as well as on labour market outcomes and inequality, tend to come with a substantial lag.

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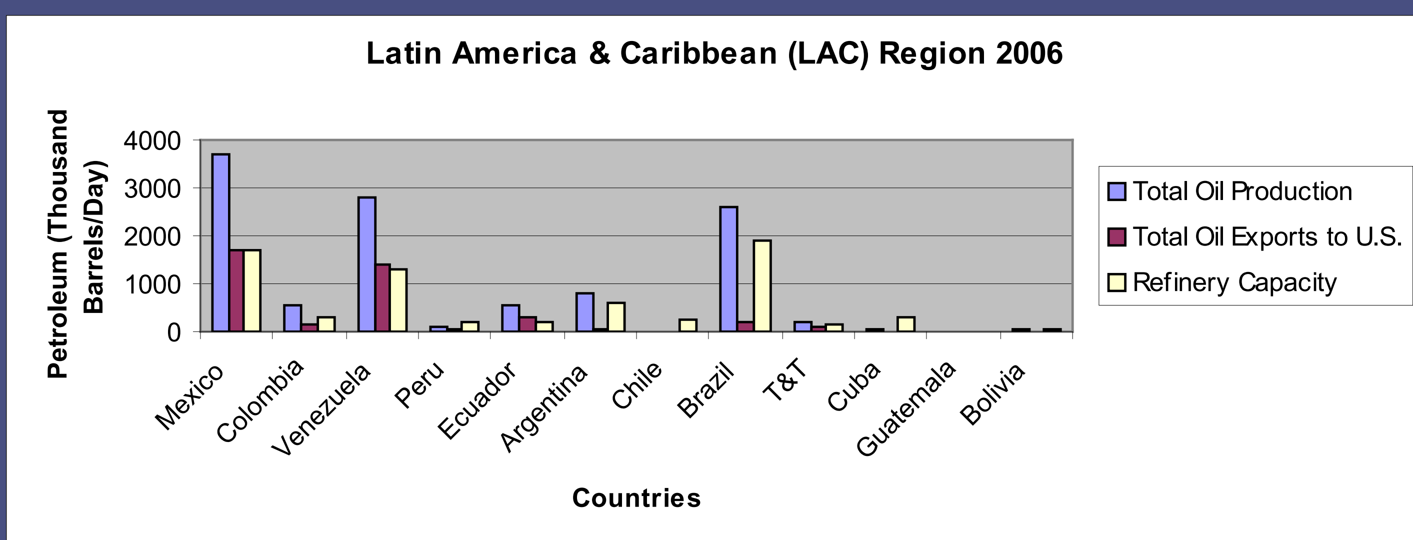
Oil Production and Capacity



Source: Energy Information Administration

Cuba’s Green Gold

Jorge R. Piñon

“…pero sé que de eso (el azúcar) no va a volver a vivir jamás este país. Eso es de la época de la esclavitud y de un pueblo lleno de semianalfabetos, y desempleados que hacían el trabajo animal”…

-Fidel Castro, March 15, 2005.

The political and economic Achilles’ heel of a future transitional government in Cuba could very well be energy and its lone dependency on Venezuelan oil.

Two thirds of the island nation’s petroleum demand relies on imports, and today Venezuela is the single source of these imports under heavily subsidized payment terms.

This petroleum dependency, valued at approximately $2.6 billion (U.S.) per year, could be used by Venezuela as a tool to influence a transitional Cuban government in maintaining a politically antagonistic and belligerent position toward the United States.

Cuba has learned from past experiences and is very much aware of the risks and consequences of depending on a single source for imported oil.

Cuba has learned from past experiences and is very much aware of the risks and consequences of depending on a single source for imported oil. The collapse of the Soviet Union and the 2003 Venezuelan oil strike taught Cuba very expensive lessons. It was partly as a result of these experiences that the Cuban leadership conceived the “Revolución Energética” and its zealous energy conservation and efficiency measures.

Nonetheless, Cuba has the necessary natural resources potential to become energy independent. According to the United States Geological Survey, Cuba’s deepwater in the Gulf of Mexico has probable hydrocarbon reserves in excess of five billion barrels.

After a three to five year development period by international oil companies such as Spain’s Repsol, Norway’s Norsk-Hydro, Malaysia’s Petronas and, most recently, Brazil’s Petrobras, among others, proven reserves could generate oil production of about 525,000 barrels per day, placing Cuba within the ranks of other large regional producers such as Colombia, Ecuador and Argentina.

Sugarcane ethanol also deserves high consideration and focus within Cuba’s future national-energy policy. This would bring considerable economic benefits with new investments and employment creation, support the national balance of payments by reducing the demand for imported oil, and create a new source of export revenue. This would then promote economic and political stability in a transitional government.

Within a five year period of a land-reclamation development plan and the recapitalization of the island’s sugarcane processing industry under a free-market agricultural economic model, Cuba has the potential to produce 60 million tons of sugarcane. At current sugar and ethanol prices, this could generate revenues of approximately $2.5 billion a year.

In 2002, in what was a myopic strategic decision that did not consider long-term implications and possible market and technological changes, Cuba began a drastic overhaul of its sugarcane industry. The country went from 80 million tons of sugarcane production and over 150 operating sugar mills in 1990-91, to the current levels of barely 10 million tons of sugarcane production and about 45 inefficiently operating sugar mills.

The outlook for returning to past levels of sugarcane production is therefore bleak, unless the Cuban government undertakes substantial reforms of its agricultural economic model.

Cuba's future leadership's decisions on this subject will also be constrained by Fidel Castro's disapproving views on ethanol and the role of the sugarcane industry in the island's economic and social development. It has become political dogma in Cuba to substantially and deliberately phase out the sugarcane industry.

It is true that the economic, social and environmental merits of ethanol and other bio-fuels will still be debated. We know, however, that among all available bio-feed stocks, sugarcane has certain advantages, particularly over corn-based ethanol.

For example, sugarcane is the most efficient source of fermentable carbohydrates. Other ethanol feed stocks require as much energy to grow and process as the actual energy they produce. In comparison, sugarcane production results in a net energy gain of approximately eight to one, output to input. Fuel ethanol serves as an oxygenate to reduce carbon monoxide and ozone; bagasse and field debris are used as fuel to generate electricity and/or as a feedstock for cellulosic ethanol. The transformation process of sugarcane is also greenhouse-gas neutral, since the CO_2 fuel emissions equal the amount of CO_2 consumed by the sugarcane plant.

Also, Cuba's well-established arable land for sugarcane would not have to compete with other agricultural food products and/or forests as in countries where land use and habitat biodiversity are a challenge.

Brazilian President Luiz Inacio Lula da Silva's recent visit to Havana underscores Brazil's role in the development of the oil and sugarcane (ethanol) sectors in Cuba, which could very well provide a future transitional government with the much-needed breathing room to reassess its current political and economic models, free from Venezuelan influences.

The anticipated investments by Brazil in developing Cuba's black and green gold potential should be welcomed by the United States and objectively debated within the possible political scenarios that could develop in Havana, Caracas or Washington.

For the island's successful political and economic transition it is of paramount importance to develop a long-term, comprehensive national energy plan that promotes three key factors: first, a balance between hydrocarbon, bio-fuels and other alternative sources of energy; second, energy conservation; and finally, the protection of the environment.

Jorge R. Piñon is an energy fellow at the University of Miami's Center for Hemispheric Policy and a former president of Amoco Oil Latin America.

Improving the Energy Industry in Mexico

Mexican President Felipe Calderon plans to continue talks with opposition parties this March on how to improve investments in Mexico's energy industry. As it stands, the country's national oil company, PEMEX, cannot form joint ventures with the private sector. President Calderon and the current Energy Minister, Giorgina Kessel, would like to see reforms that would open up the energy industry to private sector joint ventures in deepwater exploration as well as the easing of PEMEX's monopoly on storage and distribution of petroleum products. In 2006 and 2007 PEMEX paid for close to 42 per cent of the Mexican state's total budget. Proponents of reform argue that under current conditions PEMEX will find it increasingly difficult to cover the costs associated with developing new oil reserves in the Gulf of Mexico. President Calderon faces fierce opposition to his reform plans from opponents such as Andrés Manuel López Obrador, former presidential candidate for the Party of the Democratic Revolution (PRD).

Sources of Financing, Risks, and Premiums: Funding Options for Energy Projects

Carlton Osakwe

Over the next 25 years, the amount of investment capital projected to be demanded in the Latin American energy sector is considerable. Between 2005 and 2030, the International Energy Agency (IEA) estimates that the cumulative investment in the energy sector needed worldwide will be over $20 trillion (USD in real terms) with roughly nine per cent (or $1.8 trillion) of this investment needed in Latin America, including Mexico.

However, IEA estimates of current and planned investments in energy supply infrastructure show that underinvestment in the region is likely, and much of this can be blamed on the region's incapacity to attract foreign private capital. Mexico, in fact, officially bans foreign investment in its energy sector.

In terms of recent economic performance, Latin America lags behind other emerging economies, most notably Asia and Eastern Europe. As energy production and consumption is vital for economic progress, the ability to efficiently finance the needed investments in the energy sector – not just in fossil fuels, but also in biofuels and other alternative energy technologies – will hinder or help the region's development. Efficient financing depends crucially on choosing the appropriate source of financing and type of financial instrument. Inefficient financing can not only lead to higher financing costs, which put the base economic viability of an investment in jeopardy, but can also limit future operational flexibilities known in academia as "real options." It is the lack of real options that has been blamed for the limited ability of the Latin American oil and gas industry to take full advantage of recent energy price increases by scaling up production.

Selection of the type and source of financing will depend, among other things, on the nature and expected return of the investment, the operational risks involved, the regulatory environment (including the tax environment), and the availability of capital. Latin America's projected capital demand far outstrips what can be supplied locally, indicating an increasing reliance on international sources of financing.

Signs of this are already visible. For example, in 1995 the percentage of oil and gas production in Latin America financed by foreign investors was nine per cent. By 2005, this had doubled to 18 per cent. International sources of financing include international financial institutions, foreign banks, venture capitalists, private equity funds, and public debt and equity markets. Beyond operational risk and return, foreign investors are additionally concerned with exchange rate risk and with their "exit" strategies.

Who's Who: The Energy Sector in Peru

While Perupetro, the state oil company operates the oil refineries and petrol stations, 90 per cent of Peru's oil output is controlled by four companies: Occidental Petroleum (US), Pluspetrol (Argentina), Petrobas (Brazil), and Petrotech (Peru). Depletion of existing oil fields in 2003 has shifted the focus of the Peruvian hydrocarbon sector towards the vast natural-gas deposits, particularly the Camisea gas fields discovered by Shell (Netherlands-UK) in 1987. State auctions granted rights to production and transportation and distribution to two distinct consortiums. Production of gas is controlled by Pluspetrol (40 per cent), Hunt Oil of the US (40 per cent), and the SK Corportion of South Korea (20 per cent). Transport and distribution is controlled by Argentina's Techint (30 per cent), Pluspetrol and Hunt Oil (19.2 per cent each), Grana y Montero from Peru (12 per cent), Sonatrach from Algeria (10 per cent), and SK Corporation (9.3 per cent). As leader of the Camisea project, Pluspetrol has announced it will invest $600 million to develop new gas fields through the drilling of 10 wells. Norberto Benito, general manager for the company, said they expect work to begin this year and to extend until 2010 or 2011 at the latest.

For foreign investment in the energy industry, financing is available primarily in the form of equity capital. The reason for this is that the energy industry itself tends to be highly risky, compounded by the fact that cross-border financing of energy investments has increased adverse selection and moral hazard problems. All of this tends to discourage debt financing (bank loans and bonds). Furthermore, if the investment is a greenfield, it will usually not have the proven cash flows or necessary collateral that lenders generally require, further discouraging debt financing. Foreign bank debt financing did increase in the Latin American energy sector over the last few years, but this was primarily due to a $17.6 billion bridge loan obtained by the Brazilian mining company Compania Vale do Rio Doce (CVRD) to acquire the Canadian mining company Inco.

A "proximity preference," along with NAFTA, implies that U.S. and Canadian stock exchanges represent obvious choices for raising foreign equity capital. European and Chinese stock markets are playing a greater role in the Latin American region, but in an influential paper in the 2004 *Review of Financial Studies*, Sarkissian and Schill show that geographic proximity and other trade affinity factors are major determinants in the choice of the foreign equity-listing venue. With the weakened U.S. dollar and deteriorating political climate between the U.S. and many Latin American countries, Canada has become more attractive as a source of the foreign equity capital needed in the region.

Aside from the increased access to capital, other benefits to raising capital on Canadian stock exchanges include a lowered cost of capital, reduced capital raising costs, reduced exchange rate risk, and a well defined exit strategy. The lower cost of capital comes about because of the liquidity available in the Canadian stock markets and because of the smaller equity risk premium applied by investors. The equity risk premium is defined as the return on equity minus the risk-free rate of return, and represents the return investors require for bearing one "unit" of risk. Recent estimates (in local currencies) have the Canadian equity risk premium at about 4.4 per cent while those of Argentina, Brazil, Chile, Mexico, and the USA are about 11.5 per cent, 7.8 per cent, 5.8 per cent, 6.3 per cent and 5.6 per cent, respectively.

The costs associated with capital raising are direct cash expenses including regulatory costs and underwriter commissions, and the indirect underwriter discount that usually accompanies initial public offerings (IPOs). The total sum of these costs can be substantial, ranging from about 15 per cent of the total value of the capital raised to more than 75 per cent for smaller amounts. Most studies, however, show that capital raising costs are generally lower in Canada than in the U.S.

For smaller amounts of capi-

Who's Who: The Energy Sector in Colombia

Improved security and better contractual terms led to a boom in Foreign Direct Investment in Colombia's oil sector, lifting proven reserves to 1.5 billion barrels at the end of 2006. Additional discoveries are required if Colombia is to avoid becoming a net oil importer in the long-run. Ecopetrol announced a joint venture with ExxonMobil (US) and Petrobas (Brazil) to explore offshore basins along the Caribbean. Empresa Colombiana de Gas (Ecogas), which handles the 5,632-kilometer network of gas pipelines, was sold to Empresa de Energia de Bogota (EEB, a municipally-run holding of investments in power and gas companies) for $1.4 billion in December 2006. The Cusina-Capiagua field, which contributes to more than 60 per cent of national oil production, is operated by BP Amoco of the UK. The Cano Limon field is operated by Occidental Petroleum (Oxy). Together Oxy and BP-Amoco operate the largest oil pipelines in the country. Colombia's natural gas production, which exceeds 900 million cubic feet per day, is mostly carried out by foreign nationals in association with Ecopetrol. Colombia is the fifth largest producer of coal in Latin America. Production is carried out exclusively by foreign companies, including BHP Billiton (UK and Australian-American).

tal, the Canadian junior equity exchange – the TSX Venture Exchange – offers a way of reducing these costs even further. This is the Capital Pool Company program where experienced financiers are allowed to create a shell company and inject it with seed capital. The company is then listed on the TSX Venture Exchange through an IPO and the resulting public company then has up to two years to invest its capital in a qualified growing business. The program has always permitted qualified businesses to be foreign business entities in the resource sector. But ever since a 2005 amendment, it now allows for the inclusion of non-resource foreign business entities, making it possible for smaller investments in biofuel and other alternative Latin American energy businesses to be financed inexpensively and efficiently with Canadian equity capital.

All of this means that, to maximize its full potential, the Latin American energy sector should avail itself of the opportunity provided by Canadian stock markets. With benefits including geographic proximity, low risk premiums, good liquidity, as well as innovative capital raising programs, these stock markets represent access to comparatively cheap and abundant capital while allowing foreign investors a means of diversifying into the Latin American energy sector through a more stable institutional environment.

Dr. Carlton Osakwe has a Ph.D. in Finance from McGill University and currently teaches at Mount Royal College and also has his own consulting practice.

Unlocking the Potential of the Canadian Energy Industry in the Americas

Phil Gonzalez

Despite global energy prices posting record highs, national oil companies (NOCs) within the Americas have failed to properly develop the industry's infrastructure and capability. Latin America is estimated to hold 13.5 per cent of the world's proven oil reserves but accounts for only six per cent of the total output. A huge growth potential exists for the region's energy resources, and this emerging market presents a valuable opportunity for Canadian energy companies.

Canadian small and medium sized enterprises (SMEs) certainly have the necessary experience and knowledge to address their development gaps. Several challenges within the region, however, impede this agenda. NOCs have been notoriously reluctant to embrace foreign involvement, and SMEs often lack the ability to compete for NOC contracts. Increased government participation both at the federal and provincial level have provided (and will continue to provide) a greater understanding of these hurdles while continuing to help Canadian SMEs gain easier access to this sector.

To meet the challenges of reforming the energy sector, national oil companies must import expertise.

Yet reclaiming energy resources has not come without its development costs for NOCs. Mismanagement in particular has produced a growing decline in production. In order to address these problems, some NOCs seek greater international collaboration in matters of infrastructure development in enhanced oil recovery. As a result, Canada has a considerable opportunity to help reform the sector, given the sufficient logistical and human capital to do so.

To meet the challenges of reforming the energy sector, NOCs must import expertise. This pressure for many NOCs is as political as it is economic — the urgency to modernize is met with the added weight to do so locally. The shortcomings of infrastructure development in the energy sector throughout the Americas opens opportunities for joint operations in knowledge transfer. This type of agreement outlines a framework for collaboration in areas of research, training, production and oil and gas exploration. With the aim of developing the sector to increase local capacity, both parties benefit by using this relationship to broaden the ties between SMEs and NOCs. Simultaneously, this process builds links and trust for Canadian companies to play a larger role in the region.

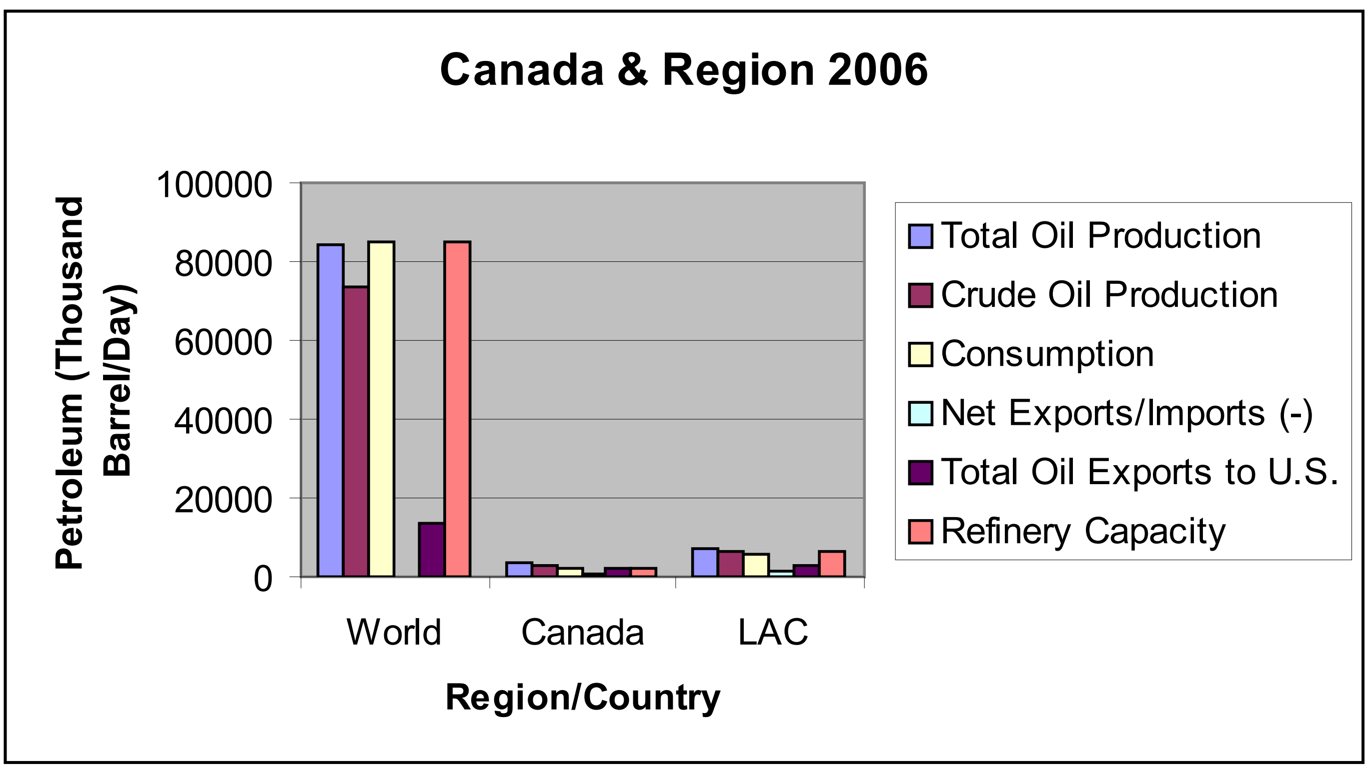
Nexen, for example, was the first Canadian company to approach the issue of sector reform in Mexico. Their agreement was in part devised to exchange and share Canadian-Mexican best practices and should be used as an example for future partnerships in the region. The intention of these partnerships is to actively transfer technology and skills for these NOCs to develop their own expertise. In this competitive market place, it is this willingness for technology and expertise transfer that might just win Canadian SMEs a larger share of energy contracts in the Americas.

Indeed, Canada has significant expertise in the area of building sustainable future "models of development" that are transferable to the energy sector. While it is important to remember that each country requires a distinct policy approach, the Canadian International Development Agency (CIDA) has experience in implementing this type of model. In fact, CIDA's Industrial Cooperation Program (CIDA INC) might serve as an interesting case study in this endeavour.

The Canadian federal government, however, has failed to allocate sufficient resources to fully assist in market analysis and dissemination of information of the region for Canadian SMEs to compete in the energy sector. The positioning of more human capital in the field to assist companies in tailoring their approaches to regional energy producers is a positive and essential step forward. SMEs usually lack the resources to conduct ongoing campaigns for contracts with NOCs and as such are restricted to easier trade options, narrowing their potential markets.

Though NOCs are more open to importing knowledge, these contracts remain difficult to negotiate. Negotiations are resource draining and time consuming, demanding several years in some instances, with

Latin America and the Caribbean: Status of Oil Production



Source: Energy Information Administration no guarantee of success. This business climate is prohibitive for many Canadian SMEs who could benefit from regional support and advice to get a proverbial foot in the door.

Indeed, Canada's energy industry will certainly benefit from a focused engagement in the region. Alberta has shown leadership in promoting its energy companies by signing a Declaration on Cooperation between itself and the Mexican Energy Secretariat. This has facilitated greater industry involvement and linkages with the Mexican government. The two parties also established the Alberta-Mexico office, specifically equipped to provide advice on matters of business culture and processes in the energy sector. It provides lessons learned from the field to interested Alberta energy companies, determining market niches and capability – not to the extent of picking winners, but certainly by outlining market demand and relaying this information to SMEs.

This initiative requires long-term investment in resources that ultimately translates into expertise in business facilitation programs. At the federal level this means more funding and resources for Canada's Trade Commissioners in the region. Resources are vital for SMEs that have technical expertise but lack contacts and local market analysis to inform business decisions. Correspondingly, government support is important as it dismantles and demystifies logistical challenges for SMEs, creating opportunities for those with a desire to engage in the region.

> To date there has been significant engagement by the Canadian government in the region, but continued focus in the energy sector is required.

To date there has been significant engagement by the Canadian government in the region, but continued and concentrated focus in the energy sector is required – a clear focus that Alberta has best exemplified. SMEs will benefit from the expertise and assistance offered by government through institutions whose genesis is the promotion of Canadian business and trade. Finally, renewed and continued support will boost the chance that SMEs will profit from their experience as global leaders in energy services.

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Brazilians Protest against Hydroelectric Dams

Nearly 250 people marched in Porto Alegre on the International Day of Action against Dams to demonstrate against flooding caused by dams and the high price of electricity. Hydroelectric projects have displaced more than one million people in Brazil over the past 30 years. Activists from the Movement of Dam-Affected People (MAB) have denounced the fact that in most cases only big firms benefit from the large-scale projects. The movement presented declarations of families who, despite consuming less than 160 kilowatts/hour a month and therefore qualifying for the "social rate," have not received the discounts promised.

This act topped a week of protests in nine of the 27 Brazilian states, which included a blockade of the country's main mining company and the occupation of government offices, highways, hydroelectric dams and plants under construction. At least one concrete success came from the demonstrations: the Brazilian environmental institute (Ibama) agreed on Thursday to listen to affected populations and revise its evaluation of the Tijuco Alto plant, 300km from São Paulo. Ibama had previously deemed the project viable, a first step in the construction of the dam that would flood 53 km² of the Mata Atlántica reserve that has already lost 93 per cent of its original forests. Two thousand peasant, indigenous and afro-descendant families would be evicted from their land should the project continue. Detractors say that it would lead to the construction of three other projects on the same Ribeira River and the energy produced would only serve the export of aluminum. According to the Social Environmental Institute, Brazil lacks a strategic energy plan that looks at environmental and social aspects as well as economic ones.

EVENTS & ANNOUNCEMENTS

Canada and the Americas: Defining Re-Engagement

FOCAL is pleased to announce the completion of a very successful conference presented in partnership with the Centre for Trade Policy and Law, the Canadian Journal for Foreign Policy, and the Department of Foreign Affairs and International Trade (DFAIT). The conference, entitled "Canada and the Americas: Defining Re-Engagement" took place on March 13-14 at DFAIT headquarters in Ottawa and included many prominent government officials, academics, NGO representatives, students and members of the private sector. Selected papers from the conference will be published in an upcoming issue of the Canadian Journal for Foreign Policy. Foreign Minister Maxime Bernier's keynote speech can be accessed at **www.international.gc.ca.**

FOCAL Leads Presentation at OAS Headquarters

Racquel Smith of FOCAL and Catalina Delpiano from Corporación Participa led a successful presentation at the OAS on March 12 on the project *Active Democracy: Citizen Network for the Implementation of Summit Mandates.* This presentation was attended by delegates from the Canadian and Trinidad & Tobago missions as part of the week "Partnering with Civil Society" from March 10 - 14, 2008 at the OAS headquarters in Washington, D.C. Director of the Summit Secretariat, David Morris, called the project " a timely and innovative initiative."

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