# Will Opposition to Mega Projects Worsen Chile's Energy Woes? Featured Q&A

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## FEATURED Q&A

## *Will Opposition to Mega Projects Worsen Chile's Energy Woes?*

**Q** **Chile's Supreme Court last month unanimously rejected the $5 billion Castilla power project, ruling that the 2,100-megawatt plant could "harm the constitutional guarantee that one can live in an environment free of pollution." Meanwhile, industry leaders, particularly in the mining sector, have warned that the country's shaky electrical grid is hampering growth and investment. Does the rejection of the Castilla plant represent a major blow to Chile's energy future? How serious are the country's energy woes? Will solar, wind and other cleaner energy sources become more prevalent and help make up some of the shortfall or are they too economically infeasible on a larger scale?**

**A** **Craig Kelly, former U.S. ambassador to Chile and vice president of The Cohen Group in Washington:** "If there is any country that needs an 'all of the above' energy strategy, it is Chile. Endowed with few hydrocarbons, but facing rising energy needs driven by one of the region's most successful economies and a world-class but energy-thirsty mining sector, Chile has developed an energy strategy that calls for development of all practical sources. These include hydro (already a key part of Chile's electricity matrix), domestic and imported gas, increasing oil exploration in the southern region of Magallanes, geothermal, coal and increased non-hydro renewable energy. Several of these projects—especially large hydro and coal—have drawn criticism on environmental grounds. But critics who fault the Chilean government's plan on environmental grounds underestimate what Chile is already doing in renewables (including a successful renewable energy conference in Santiago last week and a growing array of solar and wind projects that draw on domestic and foreign expertise) and overestimate the capacity of non-hydro renewables to address the shortfall in Chile's power needs. Even under the most opti-

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## Brazil's Rousseff Cuts Power Rates to Stimulate Economy

President Dilma Rousseff on Tuesday outlined additional plans to cut energy costs through lower taxes and the renewal of generation and transmission concessions in a bid to revive the economy. See story on page 2.

*File Photo: Brazilian Government.*

# Inside This Issue

## ENERGY SECTOR BRIEFS

### Indian's GAIL Eyes Repsol Assets in Trinidad, Peru and Canada

India-based **GAIL Ltd.** is considering buying liquefied natural gas (LNG) assets put up for sale by Spain's **Repsol** in Canada, Peru, and Trinidad, Reuters reported Tuesday. GAIL is looking for additional LNG supplies to meet rapidly growing global demand, chief executive Rajeev Mathur said. Headquartered in New Delhi, GAIL is India's largest state-owned natural gas processing and distribution company.

### Chilean Startup Plans $400 Million IPO for Wind, Hydro Projects

Energy startup **Latin America Power**, a firm backed by Brazilian billionaire Andre Esteves, is considering an initial public offering in Santiago as it seeks to raise $400 million for projects in Chile, Peru and Panama, Bloomberg News reported Monday. The company plans to raise the funds within two years to develop hydroelectric dams and wind farms in the three countries, CEO Roberto Sahade said. He also noted that economic growth and the resource-intensive mining sector have strained their electricity supplies. "It's a fantastic opportunity for us."

### Petrominerales Finds Oil in Colombia's Deep Llanos Basin

Canada's **Petrominerales** said Wednesday it found oil in one of its wells at the Corcel Block in Colombia's Deep Llanos Basin, Reuters reported. The oil and gas producer said it would drill three more wells in the area. Production averaged 25,235 barrels of oil per day last month. August production was eight percent lower than the July average primarily due to repairs and what the company called "natural declines."

# Power Sector News

### Brazil's Rousseff Cuts Power Rates to Stimulate Economy

Brazilian President Dilma Rousseff on Tuesday outlined additional plans to cut energy costs through lower taxes and the renewal of generation and transmission concessions, Reuters reported. The moves could result in cutting power costs for residential and industrial customers by 16 percent and 28 percent, respectively. As the country struggles to stimulate the economy, the measures are intended to be a boon for Brazilian industry. With an average electricity cost of $180 per megawatt hour, only Italy and Slovakia have higher energy costs, according to a 2011 study by the Getúlio Vargas Foundation. "Cheaper energy means lower production costs and more resources for investments," said Rousseff, Reuters reported. Brazilian stocks rose Tuesday on the news, with the Ibovespa gaining 1.7 percent, its fourth straight advance. While shares of Brazilian power producers, including **Cia. Energetica de Minas Gerais** and **Eletrobras**, fell on the news, analysts suggested the measures weren't as severe as expected. "Company results could fall a bit, but nothing that is outside their investment plans," said Marcos Severine, a utilities analyst at **Banco Itaú**.

> "Cheaper energy means lower production costs and more resources for investments."
>
> — *Dilma Rousseff*

### Cuba Restores Power After Massive Blackout

Power was restored in Cuba on Monday after an outage hit 10 of the country's 15 provinces, including Havana, the Associated Press reported. Though blackouts are fairly common due to an aging electrical infrastructure, it was one of the worst in recent memory and called to mind the energy shortages following the collapse of the Soviet Union. The Ministry of Basic Industry said in a statement that the outage was caused by an "interruption" to a power line between the cities of Ciego de Avila and Santa Clara. It also indicates that the country will likely struggle to meet energy demands as it plans to liberalize the economy and sees an uptick in consumption, UPI reported. Critics of the government partly blame mismanagement of the sector, while the administration cites the barriers imposed by economic sanctions, which make it difficult to get spare parts. According to analysts, modernizing the system could cost several billion dollars.

> *Modernizing the system could cost several billion dollars.*

# Oil & Gas News

### Outgoing Mexican President Calls for Major Pemex Reforms

Outgoing Mexican President Felipe Calderón on Saturday called for constitutional changes that would allow foreign oil exploration companies to have access to the state oil monopoly historically run by **Pemex**, Reuters reported. "I hope that the new government will have not only the political will but also political support ... to make such an important change in our law and in our constitution," Calderón told a briefing at an Asia-Pacific Economic Cooperation (APEC) summit in Russia. While Pemex is among the top ten oil producers in the world, its output has fallen steadily in recent years. Currently, Mexico's oil output is 2.5 million barrels per day. "Is that enough for the country? I don't think so," said Calderón. "I still believe that Mexico requires an important reform in order to allow Pemex to modernize its processes, to modernize its technology, to modernize its know-how, getting the experience of global companies." State ownership of the nation's oil resources has long been a contentious political issue in Mexico and reform has been elusive. One of the main problems is that much of the company's resources are diverted away from investment, chief executive officer Juan José Suárez Coppel said this week. "Even with the increases in recent years, Pemex invests relatively little," with a tax rate over 80 percent and subsidized prices. Suárez also noted several options to reform the company, including making it a more independent institution, like the country's central bank; operating like a private company in similar ways to state-run companies like **Saudi Aramco**; or modeling it after the public-private ownership of Brazil's **Petrobras**. [Editor's note: see related Q&A about reforms to Mexico's oil sector in the July 9-13 issue of the *Energy Advisor*.]

Calderón

*Photo: Mexican Government.*

## Peruvian Indigenous Groups Occupy Nine Maple Energy Oil Wells

Nine oil wells run by **Maple Energy** in Peru's Amazon have been taken over by indigenous groups claiming to have halted production, Reuters reported Tuesday. Maple Energy told Reuters that the action has slowed its production of low sulphur crude oil from the Maquia oil field near the Ucayali River in Loreto, Peru's northernmost region. Lizardo Cauper, a leader of the Shipibo indigenous people in the Canaan de Cachiyacu community, said some 400 locals occupied the nine company wells on Sept. 2. He said they will continue to hold them until the government forces Maple Energy to clean up a series of oil spills, the last of which happened on July 23, they say. Maple Energy did not provide details or comment on Cauper's claims, however. Disputes over natural resources have sparked violence across Peru in recent years. The administration of President Ollanta Humala is seeking to double the maximum penalties for polluting companies and is moving the process for approval of environmental impact studies from the mining to the environment ministry, Reuters reported. [Editor's note: See related Q&A in the March 13 issue of the Dialogue's daily *Advisor*.]

**Featured Q&A**
*Continued from page 1*

mistic scenarios, non-hydro renewables will make up no more than 20 percent of Chile's electricity matrix by 2030. It is a mistake to view Chile's energy dilemma as a choice between the social goals of environmental stewardship and the economic goal of growth. Continued poverty alleviation and increased social inclusion are also vital social goals, and they require economic growth—and increased energy. To address multiple, overlapping and at times conflicting priorities, a national debate involving all stakeholders is valuable in achieving consensus that addresses all priorities and eschews false dichotomies. Chile's strong democratic institutions and vibrant press are well-suited to this debate."

**A** **Miguel Schloss, president of Surinvest in Santiago:** "The Supreme Court's decision is symptomatic of prevailing weaknesses in the power sector, and a solution will need to address its underlying problems. Chile has tended to react with the necessary gradual reforms when it has been jolted by crises. In the 1980s, it set up a fairly resilient and competitive power generating system that served the country well. The price signals, however, provided incentives aimed at minimizing costs, with limited attention to: first, energy security, which thus resulted in investments concentrated on a single source (low-cost natural gas); and second, environmental implications. The cancellation of gas export contracts from Argentina in 2007, combined with a significant drop in hydro flows, made the underlying vulnerability of the system evident. The crisis brought about further liberalization in pricing, which facilitated investments that diversified energy sources. The recent ruling against the Castilla project may well be the harbinger for much needed strengthening of the environmental framework, either on the regulatory or the pricing side. Until this is done, we will continue seeing the pulling and pushing between environmentalists and energy producers, which reflect institutional inability to reconcile such conflicts in an effective way. In any event, the current system has put the country under stress, and no amount of alternative energy can replace 2,100 MW in an affordable and technically reliable manner. Reliance on renewables would be desirable, but for now they represent only some 2 percent of global supply and are comparatively costly. If renewables are going to be a significant part of the solution to energy needs in Chile and around the world, their costs must be brought down. Accordingly, policymakers must focus on affordability and enabling conditions for environmentally friendly energy development, which cannot be established without assessment of their implications. Future efforts will inevitably have to be directed toward: (i) improving the use of existing technologies; (ii) introducing market-based instruments that price externalities and can change environmental behavior; (iii) providing funding and support for 'public goods' including R&D for technological development; and (iv) designing policies that factor implementation and enforcement."

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## Overhaul of Ecuador's Esmereldas Refinery Delayed

**Petroecuador** will begin a key upgrade to its Esmeraldas refinery, which would have entailed a reduction in production, a year later than originally planned, the state-run company said on Monday, Reuters reported. According to Petroecuador's refining manager, Carlos Pareja Yannuzzelli, the investment and stoppage will be the same as originally planned, but will begin next September instead of this month. "There's no delay ... We've simply decided to do it in September next year because we think it'll be better," he said. Expenditures to overhaul the facility are expected to total $1.35 billion as the company seeks to increase efficiency, reduce pollution and produce fuels of a higher quality.

# Political News

### Venezuela: Top Capriles Aid Fired Over Bribery Allegations

Venezuelan opposition presidential candidate Henrique Capriles on Thursday kicked a top aide off his campaign after corruption accusations by government officials threatened to derail his run for office, Reuters reported. Juan Carlos Caldera is shown in a grainy videotape circulated by pro-Chávez legislators accepting an envelope that they said contained cash ostensibly to finance the campaign or pay bribes. Caldera, himself a lawmaker in Venezuela's congress, is heard discussing a meeting with Capriles on the tape. In a news conference Thursday, Caldera said Capriles is not tied to the case, the Associated Press reported. He said the money was for his own election campaign in the Sucre municipality and that the video is a trick by pro-Chávez lawmakers ahead of the Oct. 7 vote. Caldera identified the man in the video as Luis Peña, an aide to Wilmer Ruperti, a shipping magnate who had previously supported President Chávez, according to the AP. Capriles moved quickly to distance his campaign from the mess and fired Caldera, who has also been expelled from his Primero Justica party. "My grandma used to tell me that the most important thing is our good name. That's why I've always been an open book and I won't allow anyone to get privileges for personal benefit," Capriles told the media. [Editor's note: See election analysis in Wednesday's issue of the Dialogue's daily *Advisor*.]

Caldera

*Photo:* El Nacional.

### Peru's Humala Rejects Talk of Peace With Shining Path Rebels

Peru's president said Wednesday that his administration will crack down on the political wing of the Shining Path guerrillas and destroy what remains of the armed terrorist movement, Reuters reported. President Ollanta Humala dismissed the notion of holding peace talks with the rebels, distancing himself from recently announced talks between the Colombian government and the FARC guerrillas there. Peru's Maoist insurgency nearly toppled the state in the 1980s but was severely weakened after its founder, Abimael Guzmán, was captured in 1992. According to the report, Peru's government fears the Shining Path's political arm, known as Movadef, is trying to rebuild by infiltrating labor unions and environmental groups.

# Advisor Q&A

## *Is Brazil Caught in the 'Middle Income Trap'?*

*Excerpted from the Sept. 13 issue of the Dialogue's daily* **Advisor**

**Q Facing a faltering economy, the Brazilian government has announced a $66 billion stimulus plan, including major infrastructure projects, and on Sept. 4 said it would increase import tariffs on 100 goods in a bid to protect local industries. Second quarter growth of 1.6 percent picked up from the previous quarter of 0.4 percent, but some analysts are skeptical that it will translate into a full-fledged recovery. Will the government's stimulus measures take hold and put Brazil back on a faster growth track? Does the slump indicate that the country's economic growth has been unsustainable? What effects will the tariff hike and other protectionist measures have? Is the country stuck in the so-called "middle-income trap?"**

**A Pablo Fajnzylber, lead economist and sector leader for Brazil at the World Bank:** "While the recently announced plan to stimulate private investments in transportation infrastructure will probably have a positive impact on Brazil's medium-term growth outlook, its short-term effects are likely to be limited and mostly indirect. That said, the plan is an important signal that the government is increasingly emphasizing the importance of stimulating investment (not just consumption) as a means to accelerate the economic recovery. Moreover, it indicates that the government is increasingly open to further private involvement in infrastructure. To a large extent, Brazil's ongoing economic slump is a cyclical phenomenon, accentuated by the global economic outlook. Going forward, the various stimulus measures are likely to lead to a moderate recovery in the remainder of 2012 and 2013. Achieving stronger growth in the years ahead will depend on the government's ability to implement more structural reforms that could help reduce the so-called custo Brazil and enhance the competitiveness of the private sector. The recently announced tariff hikes reflect the government's strong concern over the short-term performance of the industrial sector, which has been stable or declining since early 2011. They are meant to complement other short-term stimulus and help broaden the recovery. Over the medium- to long-term, however, their impact could become negative, as increased protection could lead to reduced efforts to increase productivity. The good news is that the government has signaled its intention to complement short-term stimulus measures with a broader structural reform agenda. Over the past decade, Brazil made important progress while increasing social and environmental sustainability. Pre-crisis annual growth averaged close to 4 percent, twice its performance in the previous decade. Social progress was also very rapid, with poverty falling by 40 percent and extreme poverty by 52 percent between 2003 and 2009. Brazil is well-placed to achieve further increases in social inclusion and long-term growth, thus avoiding the so-called 'middle-income trap'. This, however, will require significant efforts to increase the country's relatively low saving and investment rates as well as the competitiveness of the private sector, while continuing to expand its ambitious programs to eradicate extreme poverty and increase human capital."

# Economic News

## Moody's Raises Ecuador Credit Rating on Support from China

Ecuador's credit rating was raised Thursday by New York-based **Moody's Investors Service**, Bloomberg News reported. More than $7 billion in loans from China have helped to shore up the government's finances, according to the ratings agency, which raised Ecuador's sovereign credit rating one step to Caa1, seven levels below investment grade. Although the Andean nation is facing a $4.23 billion budget deficit this year, the benefit of rising oil prices and tax increases have helped to fund government spending that has more than doubled since 2007, Bloomberg News reported. The loans from China and multilateral lenders should be enough to cover shortfalls, Moody's stated. President Rafael Correa defaulted on $3.2 billion of international bonds in 2008 and 2009, claiming they were negotiated illegally by earlier administrations, a move that had limited his government's access to international capital markets. The yield on Ecuador's benchmark dollar bonds due in 2015 on Thursday fell 15 basis points to its lowest level since June 2008, according to data compiled by Bloomberg.

## Argentina Raises Inflation Estimate, Increases Child Welfare Benefits

Argentina's government said Wednesday that inflation increased sharply in August, Dow Jones reported. State statistics agency INDEC said the August consumer price index was up 0.9 percent on the month and up 10 percent on the year. Economists had expected the government to report a 0.7 percent rise on the month. Private economists suggest that rates of inflation in Argentina are more than twice the official INDEC rate. Last year, President Cristina Fernández de Kirchner's government levied heavy fines against numerous economists for publishing inflation estimates that were higher than the official data. However, on Wednesday President Fernández said her government will increase benefits for universal child allowances, the government's conditional cash transfer program, by 25.9 percent, a margin in line with private inflation figures instead of her government's data, local daily *Clarín* reported. Speaking at a ceremony at the Casa Rosada, Fernández acknowledged that there has been "a flawed system" for adjusting the amount of universal allowances, which she said now benefit some 3.8 million children.

## Jamaica 'Could Collapse' if IMF Negotiations Fail, Former PM Says

Jamaican opposition leader Andrew Holness said Monday the country "could collapse" if the government fails to negotiate a new agreement with the International Monetary Fund, the *Jamaica Gleaner* reported. Speaking on a local television program, the former prime minister accused the government of using a "delay strategy" to deal with the IMF, asserting that the tactic is negatively affecting Jamaica's credibility and stability in the financial market. Holness suggested the ruling party must act now to address the country's structural weaknesses, including the tax and pension systems. **Standard & Poor's** in August raised the short-term sovereign credit rating on Jamaica to 'B' from 'C' while holding the country's outlook as 'negative,' *Caribbean Journal* reported. The negative outlook reflected the "likelihood of a downgrade" if Jamaica fails to increase its primary surplus and meet other requirements necessary to receive IMF funding. "Our view is that the government's room for fiscal maneuvering is narrowing," the ratings firm said. "If the government fails to stabilize both the external and fiscal accounts, we would likely lower the rating." In related news, the Jamaica Confederation of Trade Unions said Monday it is endorsing the initiative of the government of Prime Minister Portia Simpson-Miller and the Jamaica Chamber of Commerce to create some 40,000 jobs. Last month Jamaica's unemployment rate rose to 14.3 percent, the highest it has been in 12 years.[Editor's note: See related Q&A about mounting debt burdens in the Caribbean in the Aug. 30 issue of the Dialogue's daily *Advisor*.]

## POLITICAL & ECONOMIC BRIEFS

### Violence Erupts at Protests Over Anniversary of Chile's 1973 Coup

Riot police clashed with demonstrators marking the anniversary of Chile's 1973 coup on the streets of Santiago Wednesday, AFP reported. One police officer was killed and 26 wounded, and 255 people were arrested, including 83 children. There was widespread looting through the night, and 58,000 homes were left without power.

### Brazilian Bank Workers Threaten to Strike Next Week

Brazilian bank workers will go on strike next week to demand higher pay, Reuters reported Thursday. Banking employees in the country's two largest cities and in as many as nine different states agreed to stop work on Sept. 18 for an indefinite period, according to a statement by industry union Contraf. Banks have offered to increase pay by 6 percent, which workers complain is only 0.58 percent when taking into account inflation. Last year, a collective-bargaining agreement, finalized Oct. 20 after a 21-day strike, gave all Brazilian bank workers a 9 percent pay raise.

### Carmakers in Brazil Face New Fuel Efficiency Requirements

Brazil's government will demand that carmakers improve fuel efficiency by 11 percent next year or lose a substantial discount on their tax bill, Reuters reported Monday. The rule change is aimed at bolstering investments in local engine plants. The government already gives a tax advantage to cars made with a minimum amount of local content. Carmakers who do not meet the local content requirements would see their tax bills rise 30 percent, Reuters reported.

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**A** **Rodrigo Fernández Hirsch, project manager at Energética:** "The Supreme Court unanimously rejected the project last month. It is a strong verdict that changes the country's perception of future coal projects and will probably change the future development of the Central Interconnected System (SIC). There are still three coal fired plants with environmental approval that will likely be constructed; however the energy from these plants won't be enough to meet future demand. How Chile will meet energy demands is the question that haunts the electricity sector. Alternatives exist; however all of them imply higher energy prices than currently expected using coal. LNG looms as the most probable solution, but high gas prices necessarily will be translated to energy prices around $130 per MWh for industrial consumers. Major mining projects are proposed, but they require competitive energy prices. Notwithstanding the supply situation and high prices, not everyone is upset. Non-conventional renewable energy (NCRE) developers see an opportunity for the sector. Wind and solar projects in Chile need energy prices around $110-120 per MWh to be constructed and it could be easier to achieve them without new coal-fired plants. Almost all big consumers that are asking for supply offers are receiving spot market pass-through schemes. Particularly in the third region (Atacama), due to transmission constraints, spot market energy prices are expected to be high for at least eight more years. Coincidentally, it is the best location for solar power. In this scenario, solar power comes out as a good option for mining companies to put a cap on energy prices, at least to meet a part of their demand. The SIC will have to develop gas-fired combined-cycle units, making energy prices high. This situation is the perfect incentive for NCRE development because their prices are competitive and combined-cycle units are very flexible in their operation. This makes the operation of wind and solar power plants easier, so large scale NCRE plants (greater than 100MW) are more likely to be constructed."

**A** **Nelson Altamirano, associate professor of economics at the School of Business and Management at National University:** "The rejection of the Castilla project by the Supreme Court certainly delays a needed energy supply expansion, but we have to wait to know if this rejection killed the project or not. The Chilean government's objective is to double its energy generation capacity by 2020, and this is only possible with mega projects and small projects that combine traditional and non-traditional fuels and technologies. HidroAysén in the south and Castilla in the north would add 5,000 megawats, but are facing local environmental challenges and major delays. I don't see how Chile would meet its energy goals by 2020 without these two mega projects, so I expect there will be additional efforts to meet environmental requirements and social demands. If Castilla is definitely terminated, it may open an opportunity for the Bolivian and Chilean governments to re-evaluate exporting natural gas to the northern part of Chile and create the conditions for a private mega project based on natural gas instead of coal. But given the current political and social conditions in both countries, it is more likely that institutions will prevail in Chile and Castilla will be modified to meet constitutional environmental rights."

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*— Nelson Altamirano*

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