ARGENTINA ENERGY ROUNDTABLE 2019

HUGE ENERGY POTENTIAL, BIG CHALLENGES – PART 2

REPORT

35 Years 1983–2018

INSTITUTE OF THE AMERICAS

Beyond Vaca Muerta: A Wealth of Resources

If any country is rich in energy resources, it's Argentina. Vaca Muerta, its largest shale play, has enough to export vast quantities of surplus oil and natural gas, and there are other unconventional plays yet to tap. If that wasn't enough, steady winds and sunshine abound, and there's a trove of lithium for rechargeable batteries.

"Argentina has endowments in almost everything," Gustavo Lopetegui, the country's secretary of energy, said at the Institute of the Americas' Argentina Energy Roundtable in Buenos Aires.

The resources are luring companies. Solar and wind parks will provide 10% of national power by the end of the year, Lopetegui said. That would be up from 2% when the country's president, Mauricio Macri, took office in 2015, a sign of a turnaround in energy supplies after more than a decade of populist rule left the country with shortages and a surge in the burning of fossil fuels for electricity, pushing up greenhouse gas emissions.

The next challenge is to meet a mandate to supply 20% of electricity demand from renewable sources by 2025.

The resources are there. Nicola Melchiotti, head of the Argentine operations of Italian energy major Enel, said the Pampas, a farming region in the country's center-east flatlands, has so much wind power potential that it could meet all of the country's electricity demand.

However, to develop this and other renewable resources, the conditions for doing business need to be improved, he said.

The first challenge is to pull the country out of an economic recession and financial crisis, which started a year ago and is showing few signs of abating. Regulatory stability also must improve, which is something the Macri administration understands. “There’s nothing more attractive for investment than to have clear, stable and transparent regulations that are fulfilled,” said Andrés Chambouleyron, president of the board at ENRE, the federal power regulator.

Still, there are doubts that the government can comply. Since the financial crisis, the government has reinstated the export taxes it had removed in 2016, for example. This worries investors that other changes could come just as suddenly, keeping them at bay, said Jorge Garnier, executive director of EY Law.

Nevertheless, Macri appears to be committed to meeting the renewable power target. He has kept Sebastián Kind, the country’s well-respected secretary of renewable energies, on board despite two changes in his top energy official, a sign he is “serious” about renewables, Garnier said.

Long-term Planning

Germán Chullmir, CEO of U.S.-based investment group Orel Energy Group, which is building renewable power plants in Argentina, said that when regulations are stable, companies can pursue long-term investment plans. While the conditions are not ideal yet, including with state intervention in power pricing and exports, he said the huge opportunities for growth in renewables were reason enough for his company to enter the business in 2014.

The next step is to build confidence in the continuity of energy policies, said Juan Carlos Villalonga, a national congressman. Companies need a “clear sign of what comes after 2025,” he said of the 20% renewables target, so they can plan for their own long-term growth.

Will the country’s future leaders support development of the renewable power sector?

Villalonga thinks so. He said it is a key for slashing the world’s greenhouse gas emissions in half by 2030 to try to rein in global warming, a target that is widely backed by politicians and citizens.

Regional Integration

Even so, Argentina, with a population of 44 million, is a small market relative to its resource potential, and this means the construction of new renewable power capacity could hit a limit unless export possibilities are expanded in South America.

“The goal should be to build a regional market with free-market prices” and cross-border contracts between private companies, said Chambouleyron. “We have to be able to sell our surplus generation to our neighbors.”

Martín Genesio, chairman and CEO of AES Argentina, a unit of U.S.-based power major AES, said that to expand exports it is crucial to not only build the infrastructure but also to put in place the regulations that make it easy to sell across borders. By way of example, he said that in 2001 his company built a 650 MW gas-fired power plant in Salta, Argentina and a transmission line across the border to northern Chile, which was used to export power until 2007. Energy shortages in Argentina halted sales, and the transmission line has gone largely unused since. The line could have been used to bring power in from Chile to meet rising energy needs in Argentina, but inadequate regulations prevented this, he said.

To make it easier to trade energy supplies, Genesio said the government has to end state involvement in the export business and leave the private sector "to do business."

The Future of Energy Demand

Another theme at the roundtable was the future of energy demand and how this could change the business. The younger generations, for example, may not want to own cars in the future, preferring instead to rent cars by the day or hour, or even share them, or just use public transport. Or they may snub oil-fueled cars for electric ones. Constanza Movsichoff, the coordinator of clean mobility in Buenos Aires, said it's not just a matter of consumer demand, but a need to cut greenhouse gas emissions. Her department is seeking to grow the use of electric buses, cars and trucks.

Carmakers and oil companies are starting to react. Japan's Toyota has started to rent cars at the service stations of YPF, Argentina's biggest energy company. And Nissan is bringing its Leaf EV into the country. "We are trying to be a motor of change of this transformation that is coming," said Gonzalo Ibarzabal, president of the Argentine unit of Japan's Nissan.

Another disruptor could be distributed energy resources, or technologies like rooftop solar panels, energy storage and micro-grids that make it possible to sell supplies all around the grid, instead of just getting supplies from power plants.

Rodrigo Vidal Maula, general director of Buenos Aires City Environmental Protection Agency, said distributed energy is ideal for cities. While cities cover only 2% of the planet, they consume 78% of the energy and account for 70% of CO2 emissions, of which 58% comes from energy consumption. To reduce this, Buenos Aires could install solar panels on its 12 million sq. meters of rooftops, which could generate 1,800 MW of power and reduce CO2 emissions, he said.

The Lithium Promise

With lithium, the story is much the same as renewables: huge resources and large challenges.

Argentina is part of the so-called lithium triangle with Bolivia and Chile, which holds some of the world's greatest riches of the silvery-white metal.

The problem is that lithium is abundant in the world, and so if Argentina wants to become a global supplier it must race to put the resources into production and cut its costs to be competitive on the global market — all in the next three years, said Mariano Lamothe, the country's secretary of mining development.

He said two projects are in production, another is under construction and 14 more are in the pipeline.

But not all may survive, warned José Luis Manzano, president of Integra Capital, a Buenos Aires investment company with interests in lithium. While Argentina has all the elements to become a competitive lithium supplier: resources, talent and adequate regulations, it lacks financing. "How can we finance projects in a country that is permanently in crisis?" he said.

The year-old financial crisis has made it hard for more than 50 juniors to raise financing for their projects as local interest rates hover around 70% and foreign investors look for safer havens for their money. Several companies have put their lithium assets up for sale.

"The industry is in total distress," Manzano said.

Gabriel Rubacha, president of South America operations for Canada-based Lithium Americas, which is preparing to go into production in Argentina, said a big challenge for financing lithium projects anywhere in the world is that "more have failed than have been successful," which deters investors.

This could lead to a future supply problem. Global demand for lithium could reach 1 million tons in 2025 and continue growing, as more people turn to EVs, Rubacha said. With production at 200,000 mt/year globally today, than means there must be 20% year-on-year growth through 2025, which equates to three to four new lithium plants going into production every year at around 25,000 mt/year each.

"It is a huge challenge and a huge opportunity," Rubacha said. "There are a lot of projects, but they don't have the capital to develop them."

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