

ALFARO
ABOGADOS



ARGENTINA

OIL & GAS AND POWER GENERATION

2015



Carlos E. Alfaro
Managing Partner
ALFARO - ABOGADOS

Relevant factors

- Argentina is the second largest producer of natural gas and the fourth largest producer of crude oil in Central and South America.
- It has the second largest unconventional reserves of natural gas in the world according to the Energy Information Administration (EIA) of the United States.
- As a result of the increasing demand and actions taken by the Argentine regulatory authorities to support domestic supply, exports of hydrocarbons, declined steadily over the last decade. At the same time, Argentina has increased hydrocarbon imports (including natural gas and LNG).
- Significant investments in the energy sector are being carried out to attain self-supply in the production-consumption of oil & gas, and to support continued economic growth, as the industry is currently operating near capacity.

Unconventional E&P – “VACA MUERTA”

- There would be 803 Tcf (trillion cubic feet) of technically recoverable unconventional gas resources, in contrast with the current proved conventional reserves of no more than 12 Tcf.
- The US EIA estimates total recoverable hydrocarbons from this *Vaca Muerta* formation to be 16.2 billion barrels (2.58×10^9 m³) of oil and 308 trillion cubic feet (8.7×10^{12} m³) of natural gas.
- *Vaca Muerta* could produce between US\$ 62,200 and 67,800 million per year for the increase of the GDP, and also the recovery of energy self-supply by 2020.
- The percentage that oil & gas production represents in the GDP is expected to grow from the current 3% to 9% by 2035.

Stimulus Programs

- Under certain Incentive Programs for Additional Gas Injection, producers receive US\$ 7.50 MM BTU (state subsidized) for all product over certain 2012 production thresholds. Yields below those thresholds range from US\$ 2.30 to US\$ 4 MM BTU. Deadline for applications to participate in those programs, but there will be new ones.
- Argentina highly depends on incentivizing domestic production in order to avoid to any possible extent incurring in the expensive imports of gas from Bolivia (US\$ 10 MM BTU) or of LNG from various providers worldwide (more than US\$15 MM BTU). Even if future international prices were to decrease, there will still be plenty of room for subsidizing domestic production to prevent costlier imports.
- Local price of crude oil (“Medanito”) is set at US\$ 77 p/b, departing from lower international prices, to incentivize domestic production (particularly unconventional).
- The energy policies of Mauricio Macri (new administration) will boost production.

Goals of the New Administration

- Financing and foreign participation in the oil and gas exploration and maintaining local prices to boost consumption and avoid inflation is the challenge
- Argentina's capacity to obtain international financing is currently limited in the international traditional capital markets as a result of the hold out decision of the US Courts.
- Access to financing from China, Russia, IDB, World Bank may be available and is the preferred option.
- However, as soon as the dispute with the holdout creditors is solved, Argentina will come back to financial markets as the foreign debt of Argentina is under 11% of its GDP.
- Since 2011, the government has implemented a number of policies limiting the access to foreign currency and the inflow and outflow of funds from the Argentine financial system. The new administration has committed itself to end with these restrictions, and so it is likely that the Peso will be devaluated.

YPF as a development tool:

- In 2012, 51% of the share capital of YPF was expropriated from Repsol YPF S.A. pursuant to the Nationalization Law. Since then, the Company has tripled its investments.
- In comparison with 2011, the Company has 200% more equipment working, for the production of 45 million cubic meters of gas, which allows it to be the first producer in Argentina. It produces 34% more gas than in 2011, and 10% more oil, with 250,000 barrels per day. The Company has now reached a 163% reserve replacement ratio.
- YPF participates in 42 exploration and 34 production joint ventures and contractual arrangements in Argentina. As an example, it has E&P partnerships with Chevron, Dow Chemical Company, Petronas under which hundreds of fracked wells have been and are being drilled.

Other Players

- Pan American Energy (PAE) is the second major oil company in the country, controlled by Bidas (Bulgheroni and the Chinese CNOOC)
- Behind YPF, the companies that have achieved better performance in Argentine unconventional production are Total (French) and Shell (Dutch).
- Total lost the first place as a gas producer after YPF acquired Apache. Total operates in the Carina-Aries fields, the biggest offshore complex in Argentina, which produces over 18 million m³ of gas per day.
- Petrobras is offering all of its Argentine assets for sale, to obtain funds for healing its sore financial situation, hit by the impact of a Brazilian corruption scandal.
- Sinopec is another Chinese operator with 23 concessions

Tight Gas

- Similar to what happened in the USA several years ago, tight gas is being looked upon by E&P players as the entry point into Argentine unconventional reservoirs.
- Tight gas is an option requiring less capital investments than shale, thus being used as an option to learn, and being available to a wider range of players.
- It also allows the producers to move forward gradually, controlling the levels of investments, which are less than the required for shale production.
- Most of the companies (other than YPF, which as a market leader invests in all types of projects) try to invest primarily in tight gas projects, to dose the investments. Estimated investments in tight gas projects for this year range are around US\$ 500 million, which should represent the drilling of at least forty wells.

The Wholesale Electricity Market (WEM)

The WEM consists of: a) generators, b) transportation and c) distributors with prices determined at a spot and term market with special contracts for large consumers.

- A spot market, where originally prices were established on an hourly basis, reflecting the supply and demand in the wholesale electricity market at any given time. Nowadays, a maximum artificial spot price has been set at AR\$120/MWh.
- A term market in which generators, distributors and large users can enter into long-term agreements on quantities, prices and conditions.
- In addition, large users can only purchase energy directly from CAMMESA, at wholesale prices set by CAMMESA, virtually eliminating the original term market.

Generators

- As of December 31, 2014, there were 111 generation companies 24 auto-generation and 3 co-generation companies in Argentina, most of which operate more than one generation plant, and Argentina's installed power capacity was 32,121 MW:
 - 1) 59% was from thermal generation,
 - 2) 35% from hydraulic generation,
 - 3) 6% from nuclear generation and
 - 4) 0.6% from non-conventional sources of energy.
- No specific regulatory authorizations are required for the construction of thermal and renewable energy power plants, but its operation requires authorization of the Provincial Secretariat of Energy if the power plants are not connected to the National Grid.
- The construction of large scale hydroelectric power plants and nuclear power plants is reserved to the Government and requires special concessions from the different authorities involved, mainly for the use of water and for the construction of the facilities. Hydroelectric power plants above 500 kW require a concession for their exploitation.

Transmitters

- Electricity is transmitted from power generation facilities to distributors through high voltage power transmission systems. Transmitters do not engage in purchases or sales of power. In Argentina, transmission is carried at 500 kV, 300 kV, 220 kV and 132 kV through the national interconnection system.
- The majority of the national interconnection system, including almost all of the 500 kV transmission lines, has been privatized and is owned by Transener, which is indirectly co-controlled by Pampa Energía, the largest integrated electricity company in Argentina. Regional transmission companies, most of which have been privatized, own the remaining portion of the national interconnection system.
- Transmission is considered a public service and operates as a monopoly. Therefore, the operation of transmission facilities requires a concession of the Government. Rates and conditions of service are entirely regulated by the enforcement authorities.

Distributors

- The distribution sector is composed of:
 - Two distribution companies, Edenor and Edesur, that operate in the federal jurisdiction.
 - Provincial distribution companies operating in each of the 23 provinces.
 - Minor scale distributors called *cooperativas*, many of them operating within the municipalities' jurisdictions.
- Each distributor supplies electricity to consumers and operates the related distribution network in a specified geographic area pursuant to a concession. Each concession establishes the quality of service required, the tariffs paid by consumers for the distribution service and an obligation to satisfy demand.
- Enlargement of distribution networks is primarily carried out by distributors, and no specific authorisation is required. In the case of large-scale expansions, the Regulatory Framework recommends prior authorisation from ENRE, a public hearing and the issuing of a Certificate of Public Need by ENRE.

Opportunities

- The country still has a large untapped hydroelectric potential. Also, the prevailing natural gas-fired thermal generation is no longer at risk, considering that the country has the second largest unconventional reserves of natural gas in the world according to the EIA.
- A new integral tariff regime will be developed under the Macri's new administration.
- Faced with rising electricity demand (over 6% annually) and declining reserve margins, the government of Argentina is in the process of commissioning large projects, both in the generation and transmission sectors.
- To keep up with rising demand, it is estimated that about 1,000 MW of new generation capacity are needed each year.
- Generation occurs in a competitive and mostly liberalized market in which 75% of the generation capacity is owned by private utilities. In contrast, the transmission and distribution sectors are highly regulated and much less competitive than generation.

Renewable Energy Promotion

- Wind and solar energy production do not require previous authorisation from the Federal Government. Capital investments destined for the installation of wind power and solar power plants or equipment can benefit from 15 year value added tax (VAT) deferral. Additionally, the law foresees a fiscal stability regime for a 15 year term.
- The generation of electricity from renewable energy sources for the supply of public services is of national interest. Therefore, new capital investments have the following fiscal benefits:
 - Anticipated reimbursement of VAT;
 - Accelerated amortization of capital assets purchased for the project.
 - In addition, assets associated to these activities do not qualify as a taxable asset for Minimum Income Tax purposes.
- A feed-in-tariff system is applied to renewable energy, consisting of a payment of an additional price per each MWh generated.

Recent Provisions of Law 27,191 (October 2015)

- Large users must replace a portion of their electricity supply with renewable energy to reach the objectives provided by the law: 8% in December 31, 2017, and 20% in December 31, 2025.

This new regime establishes a maximum price of US\$ 113/MWh.

- CAMMESA is also compelled to diversify its sources, in order to achieve the same objectives, without being subject to the maximum price mentioned above.
- Until December 31 2017 the generators that make use of energy renewable sources will be exempt from paying import duties in the case of capital goods and special equipment.
- A Fund for the Development of Renewable Energy (FODER) was created, with resources from the Treasury, in order to provide financing to these kind of projects.

ALFARO
ABOGADOS



Carlos E. Alfaro
ALFARO-ABOGADOS
calfaro@alfarolaw.com

Alfaro-Abogados is a full corporate services law firm with practice, among other areas, in government relations, compliance, corporate governance, regulatory issues, mergers and acquisitions, project finance, aviation and aircraft financing, automobile, investments funds, capital markets, trade finance, banking, energy, public concessions, infrastructure, real estate, trade, insolvency, restructuring, arbitration, labor and international transactions.

Avenida del Libertador 498, Piso 3°
(C1001ABR) Buenos Aires
Tel: (54-11) 4393-3003

WWW.ALFAROLAW.COM