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GAS ENERGY LATIN AMERICA (GELA) is an energy consulting company (natural gas, oil, power and petrochemical) operating throughout Latin America and the Caribbean since 2008.

Technical Offices:
Bolivia, Perú and Venezuela: Servicing Argentina, Brazil, Chile, Colombia, Mexico, Ecuador, Uruguay and other countries in Latin America and the Caribbean.

Senior Partners
In each country.

Specialized Senior Consultants:
All energy sectors.
Multi-client Prospective Reports

- Prospective Multi-Client Energy Reports with special focus on natural gas
  (Presented Quarterly)

  ✓ Multi-Client of Peru available since 2011
  ✓ Multi-Client of Venezuela available since 2013
  ✓ Multi-Client of Bolivia available since 2015
  ✓ Multi-Client of Brazil available since 2016
  ✓ Multi-Client of Argentina available since 2017

Characteristics of the reports

- Current and prospective energy conditions in each country.
- Quarterly Power Point virtual and/or presential presentations.
- Access to calls or specific questions during subscription period.
Specialized Reports and Monthly Bulletins

- **Market Report** - In-depth analysis research reports of the energy sector in Latin America
  - Catching the privatization wave: Latin America has launched and is launching new laws and regulations to encourage investment, privatizations and divestments of assets in its energy sector.
  - Report available November 2017 that brings relevant and detailed information on existing business and investment opportunities in Latin America
  - Argentina, Brazil, Bolivia, Ecuador, Peru, Venezuela, Colombia y Mexico are analyzed in detail

- **Monthly Bulletins**
  - Monthly analytical bulletins of current topics performed by GELA senior analysts, distributed at no cost through our social networks.
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| Gas Energy Latin America     |                      |

CLIENTS
GELA’s new Market Report

Catching the Privatization Wave
Identifying and valuing Latin American energy assets and taking advantage of key government incentives

2017

Hydrocarbon sector
- Incentives
  - Description
  - Justification
- Privatizations and asset sales (current and futures)
- Main business opportunities in the country

Electric sector (including renewables)
- Incentives
  - Description
  - Justification
- Privatizations and asset sales (current and futures)
- Main business opportunities in the country

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Latin American overview

- Most Latin American countries, as a result of high commodity prices, moved into a nationalist process, practiced subsidies, changed rules to capture more rental income and closed doors to private investments, allowing the state companies to do much of the necessary investment.

- The drastic fall in oil and natural gas prices and other factors such as a drop in reserves and production, supply deficits, deteriorating infrastructure, reduced fiscal income, negative balance sheets and debt in the energy state companies, has made countries and governments to become pragmatic.
Latin American overview

- Most Latin American countries are making deep adjustments in their legal and regulatory framework to attract private investment.

- In addition, they have begun privatization processes and assets divestments throughout the energy value chain.

- Gas Energy Latin America is finalizing its new Market Report “Catching the privatization wave” which will be available at the end of the year for the international energy community.

- In this Market Report, GELA performs an in depth analysis of the incentives approved and under study to encourage investments.

- Also, the report lists and details assets that are currently under privatization or for public private partnerships.

- Following a brief summary of this Market Report which will be available at the end of the year.
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Argentina - Country overview

- Argentina for the past decade has not been interesting for private investment.
  - Strong subsidies.
  - Labor regulations.
  - Exchange rates.
  - Default.
  - Became a net importer of energy.
  - Deteriorated infrastructure.
  - Shortages of energy.
  - Many other......

- However, under Macri´s administration, strong changes are been implemented.
Argentina - Incentives to encourage investment

- Labor agreements in Vaca Muerta and other basins and provinces.
- Clear objectives for the introduction of renewable energy and back up conditions to secure private investment.
- Gradual lifting of subsidies in the natural gas and electric sector.
- Oil parity with international prices.
- Favorable pricing for Vaca Muerta production.
- Introduction of used equipment to encourage exploration activity.
- This in addition to many macroeconomic solutions to convertibility, default and other.
- Macri’s recent approval will certainly encourage investment.
Argentina - Privatization and disinvestment of assets

- YPF is releasing a serious of farm outs mainly in Vaca Muerta.
- Provincial state companies are also trying to farm out areas with less carry over.
- A few assets in the power sector belonging to the state are considering for privatization,
- Natural gas transportation and distribution systems are also in line for further study for association or transfer to the private sector.
Argentina - Business opportunities

• GELA believes that Brazil investment model will be developed with strong private participation.

• Investment and business opportunities are in the whole energy chain.
Argentina - Business opportunities

- Argentina presents investment opportunities in upstream and downstream activities.

- Infrastructure needs major improvements and new developments and with the new tariffs this is a prospect area for investment.

- Argentina still has risks for investment, however it is becoming one the most interesting countries for considering investments.
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Bolivia - Country overview

- Bolivia due to natural gas reserves discovered over 12 years ago, has monetized this reserves into the Argentina and Brazil markets.
- Bolivia has nationalized its hydrocarbon industry and created new taxes at the well head that has brought large income into the country and brought economic and social prosperity.
- However exploration has not kept up with production and some of its major gas fields are starting to decline.
- Its national oil company has reduced drastically its incomes due to reduced prices and volumes.
- Most of the investments have to be done by its national oil and power companies, with exception of exploration & production activity in which there is important private participation.
- The main two demand markets for natural gas (Brazil & Argentina) are undergoing profound changes and Bolivian gas will have to turn competitive.
Bolivia - Incentives to encourage investment

Law and regulations to encourage investments in exploration activity.

- Higher remunerated prices for crude oil and condensates have been approved to encourage investments in exploration.

- Exploration in protected parks/areas have been open for exploration activity.

- Compensation and timing mechanisms have been approved to compensate communities and environmental approvals.

- An arbitrage Law has been put in place to secure investments.

- The government is continuously announcing the approval of a new hydrocarbon and electric Law.
Bolivia - Privatizations & investment opportunities

- Bolivia to date is not considering any privatization process or asset divestment.

- However, some of the reserved areas for its national oil company are being promoted to the international community.

- Similarly, in the electric sector some ideas are being generated in order for the national electric company to partner in future export developments with the private sector.

- GELA considers that investment and business opportunities in Bolivia are in the exploration side due to drop of reserves, high productivity of the fields and markets with infrastructure in Brazil & Argentina.
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Brazil - Country overview

• Brazilian economy has been in recession and is trying to recuperate.

• Political instability in Brazil.

• Petrobras and Electrobras are highly in debt.

• Brazil has practice a state and monopolistic type of industry in the energy sector.

• Brazil in going through a strong reform to capture private investment.
Brazil - Incentives to encourage investment

- Regulatory changes are been implemented to end Petrobras and Electrobras monopoly in the energy sector.
- New terms for exploration activity have been put in place.
- Lifting of subsidies has taken place.
- Gas to Grow Program is under study in implementation.
- Flexibilization on local content.
- ANP a more independent regulator to promote many other investment.
Brazil - Privatization and disinvestment of assets

- Brazil is going through a massive privatization and assets divestment process.
- Natural gas assets.
- Petrochemical assets.
- Power assets.
- Refinery assets.
GELA believes that Brazil investment model will be developed with strong private participation.

Investment and business opportunities are in the whole energy chain.
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Chile - Country overview

- Chile is turning strongly to renewable energy due to laws (20% RER by 2020).
- Supply is not a concern due to oversupply in generation because of weak economic growth.
- There are many social and community problems that are delaying projects.
- Three instances are needed to deployed a project (environmental permits, environmental courts, ordinary justice).
Chile - Incentives to encourage investment

There are and will be strong incentives to develop renewable energy:

- Objectives.
- Bid with time blocks.
- New transmission law recently approved.
- New electric distribution law under study to encourage private investment in renewable energy.
- Electricity distribution law for distributed generation
Chile - Business opportunities

- Most opportunities are in the renewable sector.
- No privatizations are foreseen as Chile has one state oil company that works as private.
- Partnerships in future projects with ENAP in the power and hydrocarbon sector are foreseen.
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Colombia - Country overview

• The Achilles heel of Colombia is geology.

• However, an effort has been made in exploration in the Caribbean that could change this perspectives.

• Despite these discoveries in natural gas and oil reserves and production are decreasing.

• Colombia economy is been hurt by lower oil prices.
Colombia - Incentives to encourage investment

- For E&P activities flexibilities have been introduced to keep companies with their contracts.
  - Cuts exploration deadlines.
  - Adjustment of guarantees and/or commitments have been introduced to delay projects and this doesn’t affect in the continuity contracts.
  - Allocation of areas directly versus rounds.
  - Studies are been made to cut royalties.
  - Efficiency programs for exploration projects.
- Environmental regulations and fiscal systems are been studied to encourage future fracking production.
Colombia - Privatization and disinvestment of assets

- In generation projects, normally tenders according to its projections, medium-term projects are foreseen.

- Privatization of Electricaribe, ISAGEN and other power assets may continue depending on countries income.

- Ecopetrol is strongly opened to farm outs and reduce risk.

- Polypropylene assets (CENIT) possibly for sale.

- Transportation company may also become for privatization depending on the price of oil.
Colombia - Business opportunities

- GELA foresees opportunities in fracking and farm out opportunities.
- Also natural gas activities such as small LNG are and will be developed.
- Power sector development will be minimal due to recent additions.
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Macroeconomic conditions in Ecuador are quite critical.

Most investments in the past decade have been performed by the state and/or energy state companies.

Ecuador is highly in debt and part of its future oil production is compromised.

The country under the current administration is immersed in restructuring conditions to encourage private investment.
Ecuador - Incentives, privatizations and business opportunities

- A new model for exploration and exploitation activity is being studied to encourage private investment.

- PPP strategy is also an alternative to manage some of the electric assets.

- PPP or assets sales are studied to manage some assets with technical difficulties.

- A few gas stations have been sold and some other downstream assets will become available in the future.

- Investment opportunities will start appearing starting 2018 mainly through PPP’s and flexibilization of E&P activities.
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Mexico - Country overview

- Mexico is having strong political difficulties and NAFTA negotiations with U.S.A. are complicated.

- New elections with a leftist government may slow private investments.

- Mexico is one of the largest producers of oil and gas in Latin America, however has declining production.

- Mexico energy reform has been so far successful with the compromise of ending PEMEX’s* and CFE’s monopoly.

- Renewable energy is becoming widely introduced.

* Petroleós Mexicanos (The state-owned oil company)
Mexico - Incentives to encourage investment

Mexico instituted significant energy reforms to increase investments in the energy sector.

✓ New contract models for E&P (licenses, production-sharing, profit-sharing, and service contracts).

✓ Oil & gas sector:
  • Several tenders have been relatively successful.
  • Many tenders will become available in future years.
  • More flexible terms are introduce depending on the areas.

✓ Electric sector:
  • Two tenders in 2016.
  • Regulatory bodies are allowing investment in this sector.

* National Hydrocarbon Commission.
Mexico - Privatization and investment opportunities

• Pemex has made small partnerships to encourage joint investments.
• Pemex has also farm out areas that were originally awarded.
• Most likely Pemex and CFE will continue to being private sector to develop the Energy sector.

Similarly to Argentina and Brazil, there are strong business opportunities in the whole energy chain.
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Peru - Country overview

- Stable conditions for private investment.
- Stable macro economical conditions.
- Little governance for a few administrations.
- Environmental permits and previous consultation has been detrimental for investment.
- Oversupply in the electric sector.
- Renewable Energy was introduced with a preferential conditions.
- Several meaning projects, Gasoducto Sur Peruano are postponed.
Peru - Incentives to encourage investment

- Peru has tried to implement better conditions for environmental permits and previous consultation and successfully.
- Fiscal modifications are being studied to the hydrocarbon law.
- Some flexibility in the importation of equipment for exploration activity has been put in place.
- Perupetro has finally started awarding areas without bids.
- Peru is giving cross subsidies for massive utilization of natural gas.
- Petrochemical incentives are been studied.
- Also the penetration of renewable energy without preferential conditions in been studied.
Peru - Privatization and disinvestment of assets

- Peruvian energy sector is mostly in private hands.

- Pertroperu and Electroetropetrolom will not privatize any assets as they are profitable.

- Petroperu may have some of their assets for concession to the private sector such as storage facilities, pipelines and others.
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Venezuela - Country overview

- Venezuela has large gas and oil reserves, however has strong energy deficits.
- The country has deep economical, social and political problems.
- Due to the lack of investment, there is a drop in hydrocarbon production.
- Strong energy subsidies discourage investment and do not allow the introduction of competitive renewable energy.
- Oil revenues are being allocated for debt payments.
- PDVSA investment is minimal.
Venezuela - Incentives and hidden privatizations

- Freedom for gas exports in spite of internal deficit.
- Service companies are studying incremental production mechanisms under an account and to collect past debts.
- There are no laws to encourage investment, only individual agreements with the private sector.
- Some oil blocks are given away to international companies as promise for debt and future loans.
Venezuela - Business opportunities

• PDVSA offers businesses opportunities to service companies and a number of international oil companies.

• LNG exports are being studied by a few major companies.

• Venezuela will sooner or later require massive investment similarly to Argentina.
Thanks for your attention!

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