



**Energy
Solutions**

We execute energy projects across multiple countries, with deep knowledge of local regulatory frameworks and operational realities. Our regional experience enables us to deliver technically sound solutions tailored to each market.

From Latin America to the world



**Learn more about
our projects.**

North America

MEXICO:

- We carried out a projection of the Mexican electricity market due to the opening of the electricity sector
- We advise multiple international companies and financial entities interested in the operation of existing and future generation assets.
- We conduct multiple Due Diligence studies for various investors in the area of conventional and renewable energy generation.

UNITED STATES:

- We collaborated on the valuation study of the La Rosita 1,100 MW combined cycle plant, operating on the USA-Mexico border sending half of the production to each of the two countries, for PA Consulting Group.
- We collaborated with the updating of GE-MAPS model databases for the ETCO, WECC-ISO and New England (NE-ISO) electrical systems, in order to analyze dispatches and energy price projections, for PA Consulting Group.

Europe

SPAIN:

- We prepared the study of the procedures of the Spanish system in generation and in particular for auxiliary services for the CC Escatron project.
- We carried out the study on the introduction of retail competition in Spain and Italy for electricity and gas for the French regulatory body (CRE).
- We conducted the Gas Market Study of Spain and Portugal, evaluating the alternative value of the gas price in both countries, based on the final user price for substitute fuel sources, for all consumption sectors for Rasgas of Qatar.
- We advise the Sevillana company on identifying its technical and non-technical energy losses, enabling the normalization of customers.

ITALY:

- We carried out the study on the introduction of retail competition in Spain and Italy for electricity and gas for the French regulatory body (CRE) and PA Consulting Group.

PORTUGAL:

- We conducted the Gas Market Study of Spain and Portugal, evaluating the alternative value of the gas price in both countries, based on the final user price for substitute fuel sources, for all consumption sectors for Rasgas of Qatar and PA Consulting Group.

Africa

NIGERIA:

- We evaluate the existing business plan to prepare the corresponding documents to make the tariff request based on the actual situation of the company, in order to adapt the PHED tariff to the CAPEX/OPEX needs of the actual company.
- We carried out the technical and economic evaluation of the feasibility of the loss reduction plan proposed by the KANN consortium, which was awarded the concession for the electricity service in the capital city of Abuja.

SOUTH AFRICA:

- We conducted a comparative study of PPA contract prices in the wholesale market compared to other Latin American countries.
- We participated as experts in the review of ESKOM's live-line work procedures.
- We act as experts in the development of reorganization and performance improvement studies for the largest electric company in the country.
- We act as experts in the development of energy loss studies in the networks of the largest electric company in the country.
- We act as experts in the development of Quality of Service studies associated with CAPEX and network type.
- We developed the business models for network activity and customer service that the Government tried to implement for 6 network companies.
- We advise the Government in the process of restructuring the electricity sector.
- We developed a resource model for the distribution and customer service activity for the largest electric company in the country.

UGANDA:

- We advised the electric utility company on the development of the seven-year investment plan and determined the impact on tariffs, enabling the company to discuss it with the regulator.

Asia

QATAR:

- We participated in the study of LNG supply and sales contracts with a Spanish company, working with the energy team of PA Consulting Group in Germany for Rasgas. The study involved the electricity and gas markets of Spain and Portugal.

VIETNAM:

- We conducted a technical and economic study to evaluate the inclusion of battery storage systems in Vietnam.

Central America

REGIONAL:

- Collaboration for USAID in the Clean Energy Program in the Regulatory Harmonization of the six Central American countries.
- Development of the methodology for calculating consumer surplus for the Regional Electricity Interconnection Commission (CRIE).
- Development of the institutional strengthening of the Regional Electricity Market Steering Council –CDMER.
- Assistance to potential investors in long-term tenders in the region, such as those held in El Salvador, Guatemala and Panama, among others.
- Advice on forecasting prices, shipments and revenues of various new investments planned in the region.
- We have been developing price projection work in the Wholesale Electricity Market in Mexico for more than 10 years, which allows us to better understand and project the exchanges between this country and Central America.

BELIZE:

- We develop the tariff charges and associated service quality standards for the provision of electricity service for the Regulatory Authority.

COSTA RICA:

- We conducted a study of the regulatory framework compared with others in Latin America.
- We develop the standards for the quality of electrical service.

EL SALVADOR:

- We analyzed the minimum production cost of green hydrogen, considering production, processing, transportation, and storage.
- We proposed a draft regulation for the regulation of distributed renewable generation and storage systems.
- We conducted a study on the development of a potential natural gas market for a major international company.
- We conduct studies on the potential gas demand of the Salvadoran and Central American electricity sector.
- We performed due diligence for 500 MW and 200 MW combined cycle power plants
- We advise various investor groups during the due diligence process of the country's electricity companies.
- We conduct feasibility studies for several hydroelectric projects.
- We conduct market studies in the short, medium and long term, for the purpose of setting generation prices in the long-term energy bidding processes.
- We analyze the impact on users and companies of the zonal exclusivity of the provision of the electricity distribution service.
- We have carried out more than 15 tariff reviews for companies in the electricity sector.
- We conducted the study for the improvement and monitoring of technical service quality indicators
- We designed and implemented the computer tools for monitoring the quality of the electricity service in the country.
- We collaborated in strengthening the Regulatory Body at the beginning of its management.
- We participated in the process of reforming

Central America

GUATEMALA:

- We designed and drafted the regulations to address New Generation Technologies, solar and wind power.
- We advise international generating companies in the context of electricity tenders from distribution companies.
- We conduct numerous due diligence processes for existing power plants and for new projects.
- We conduct audits of the Wholesale Market Administrator.
- We developed the technical coordination standard for energy exchanges between Central American countries.
- We perform the calculation of the Cost of Energy Not Supplied for the regulatory body (CNEE)
- We have conducted the Value Added Distribution Study for a major distributor on numerous occasions.
- We developed the institutional strategic plan for the state-owned electric company.
- We advise various investor groups during the due diligence process of electric companies operating in the country.
- We designed and implemented the computer tools for monitoring the quality of the electricity service in the country.
- We conducted a study to determine the expected service quality in order to propose a review of the current regulations.
- We participate in the development of the Service Quality standards for the Electric Power Distribution and Transmission activity.
- We collaborated in strengthening the Regulatory Body at the beginning of its management.
- We participated in the process of reforming the Electricity Sector for its privatization.

HONDURAS:

- Our team participated in the development of the bill for the implementation of a future wholesale market in the country.
- We advise international companies that manufacture generating units on the economic feasibility of new projects using their own technology.

JAMAICA:

- We provide technical assistance and build capacity to the Ministry of Science, Technology, Energy and Mining for the Promotion and Development of Profitable Small Hydroelectric Projects within the framework of assistance to the Government of Jamaica.

NICARAGUA:

- We conducted a feasibility analysis for Battery Storage Systems in Nicaragua
- We developed the regulations for fines and penalties applicable in the electricity sector.
- We participated in a forum presenting a critical analysis of the new distributed generation framework in Nicaragua, with an emphasis on billing and project viability.
- We advised the regulator on the development of the tariff calculation methodology for the electricity distribution activity and participated in the first tariff review.
- We developed a methodology and the computer tool for monitoring the wholesale electricity market.
- We collaborated in strengthening the Regulatory Body during the beginning of its management.
- We participated in the process of reforming the Electricity Sector for its privatization.

Central America

PANAMÁ:

- We participated in the diagnosis and discussion of the long-term National Energy Plan 2015 – 2050.
- We advise a major international manufacturer of generating units on the economic feasibility of new projects using its own technology.
- We conducted due diligence studies for the Fortuna hydroelectric plant.
- We developed an institutional strengthening program for the Regulatory Agency that included more than 500 hours of training covering water, sewage, and electricity.
- We carry out the analysis, compilation and evaluation of quality standards, proposing an update in accordance with new technologies and the experience of the results obtained.
- We remotely process the service quality indicators of the distributors; maintain the installed software and reprogram the system for the entry of force majeure justifications.
- We designed and implemented the computer tools for monitoring the quality of the electricity service in the country.
- We developed the Service Quality standards for the electricity sector.
- We advise various investor groups during the due diligence process of electric companies in the country.

REPÚBLICA DOMINICANA:

- We conducted a comparative study of PPA contract prices in the wholesale market compared to other Latin American countries.
- We determine the gas price structure for thermal power plants, evaluating the best Fuel Price structure delivered to the plant for natural gas-based generating companies. We conduct electrical feasibility studies for the expansion of the transmission and generation system.
- We advise multiple companies in the generation sector by conducting medium and long-term market studies.
- We determine distribution tolls and tariffs for isolated systems.
- We have prepared the technical tariffs to be applied to the three electricity distribution companies that operate in the country on multiple occasions.
- We developed the commercial strategy for one of the largest power generators in the country.
- We implemented the Single Accounting System and performance indicators for the Regulatory Body.
- We developed a management indicator control panel at the Regulatory Body.
- We developed computer systems for process optimization and control in the Consumer Protection office and the Regulatory Body.
- We designed and implemented the computer tools for monitoring the quality of the electricity service in the country.
- We developed the Service Quality standards for the electricity sector.

South America

REGIONAL:

- We evaluated the interconnection between the electrical systems of Bolivia and Chile, quantifying the economic and environmental benefits.
- We analyzed the business viability of implementing electric buses in Brazil, Chile, and Colombia.
- We compared the remuneration of the asset base of distribution companies in Chile, Colombia and Peru.
- We conducted the strategic study on the integration of gas and electricity markets for the Southern Cone of Latin America.

ARGENTINA:

- We developed a prospective study of the energy sector, strengthened sectoral institutional capacities, and developed the Energy Transition Plan to 2050
- We analyze the electricity sector for the feasibility assessment of multiple electro-intensive projects (industries, data centers and green hydrogen production).
- We participated in the development of the study for the Implementation of Renewable Energy Certificates
- We participated in the study for the Standardization of the Argentine Electricity Sector, including the organization of the regulatory and institutional system, to achieve the development of a competitive wholesale market, and modern and intelligent transmission and distribution networks.
- Development of a rating model for energy-stealing users using Artificial Intelligence, applying Big Data and Machine Learning techniques
- We conducted the study on the economic regulation and performance of the public electricity distribution service
- We participated in the development of a Greenhouse Gas Emissions Inventory
- We developed a market study of the Public Lighting consumption category, identifying potential beneficiaries of energy efficiency projects.
- We provide strategic assistance for improving the management of activities in the branches of distribution companies.
- We developed the implementation of a new regulatory framework for the Province of Santa Fe.
- We developed a proposed Electrical Asset Management Standard.
- We conducted several strategic studies on the integration of gas and electricity markets for the Southern Cone of Latin America.
- We advise various investor groups during the Due Diligence process of more than 20 Distribution, Transmission and Generation companies.
- We designed and implemented the computer tools for monitoring the quality of the electrical service.
- We developed and implemented service quality controls for the three companies that provide electricity service in Buenos Aires, La Plata and surrounding areas.
- We have carried out more than 30 tariff reviews for companies in the electricity sector.

BOLIVIA:

- We developed the Reference Plan for transmission and generation expansion for the period 2000-2008
- We evaluate the status of electricity distribution companies against the requirements for quality of service.
- We advise various investor groups during the Due Diligence process of distribution and generation companies.
- We carried out several tariff reviews for companies in the electricity sector.

South America

BRASIL:

- We advise numerous companies on understanding the gas and electricity market.
- We conducted a gas market study to analyze the possibility of expanding the services of one of the leading gas transportation companies in the region.
- We develop benchmarking programs for performance indicators of electricity and gas distribution and transmission companies.
- We advise various investor groups during the Due Diligence process of electricity Distribution and Generation companies.

CHILE:

- We conduct multiple due diligence processes for solar and wind renewable energy generation assets with batteries
- We identify and define the key indicators for the electricity distribution business by developing standard values and conducting performance evaluations of distribution companies.
- We conducted a strategic analysis study, process evaluation, and identification of improvements for a major transmission company.
- We evaluated the impact of the change in quality standards on the revenues of distribution and transmission companies.
- We provide advice for the clean energy electricity auction.
- We perform financial analyses for wind energy projects.
- We carry out projections for hydroelectric power plants.
- We advise various international groups interested in the electricity generation sector.
- We defined the regulatory strategy of one of the main energy groups.
- We developed a proposal to adapt the Law to include companies in the management of energy efficiency plans.
- We evaluate the current state of electric companies in relation to asset management.
- We carried out the diagnosis and proposed improvements to the processes of one of the leading transmission companies.
- We develop benchmarking programs for performance indicators of distribution and transmission companies
- We advise various investor groups during the due diligence process of more than 15 electricity distributors
- We developed the subtransmission tariff studies for SIC1 and SING.
- Since 2000, we have been carrying out successive tariff reviews for the electricity distribution companies in Typical Areas 2, 3 and 4.

COLOMBIA:

- We develop proposals for viable alternatives in the city of Bogotá for the provision of public lighting services, including developments in network modernization and energy efficiency.
- We conducted the benchmarking program for gas companies in Argentina, Brazil, Mexico, and Colombia.
- We conducted a comparative study of the regulatory framework with others in Latin America.
- Our firm conducted a market power assessment study of one of the major players in generation.

South America

ECUADOR:

- We developed the procedures for the control of the electricity sector and prepared the regulations for antitrust practices, guarantees, and procedures for the control of service quality
- We participated in the preparation of the bidding documents for the privatization of the electricity sector.
- We develop benchmarking programs for performance indicators of distribution and transmission companies.
- We advise various investor groups during the Due Diligence process of distribution, transmission and generation companies.

PERÚ:

- We developed an analysis of the electricity sector for the feasibility assessment of green hydrogen production projects
- We conduct studies on energy efficiency in the provision of public lighting.
- We prepare studies for the bidding of renewable energy resources.
- We conduct electrical studies to verify the technical feasibility of new generation projects.
- We provide technical and economic advice for the supply of electrical energy to multiple mining companies.
- We evaluate the impact of the electricity service quality standard on electricity distribution tariffs.
- We advise investors on the due diligence process for gas pipeline projects.
- We advise banks and investors in the technical-economic due diligence process of mini hydroelectric plants during the development and construction process.
- We advise various investor groups during the Due Diligence process of multiple distribution and generation companies.
- We developed the methodology to determine the Typical Distribution Sectors for tariff purposes.
- We made the second generation reform proposals for the Regulatory Framework of the distribution activity.
- We have been carrying out successive tariff reviews since 2000 for private sector electricity distribution companies.

URUGUAY:

- We carried out the supervision of foundations for 25 wind turbines of 2 MW each
- We acted as an independent consultant for the project during the due diligence process and for monitoring the construction of the 50MW wind farm.
- We carried out the diagnosis and proposed improvements to the organizational structure of the electric company UTE.
- We develop benchmarking programs for performance indicators of distribution and transmission companies.

VENEZUELA:

- We conduct tariff studies for the eventual privatization of distribution companies
- We developed a new management model for the main electricity distribution company, including the diagnosis and proposal for improvement of distribution processes, identifying savings of 25% in operation and maintenance costs.
- We develop benchmarking programs for performance indicators of distribution and transmission companies.
- We developed the Service Quality standards for the electricity sector.



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