

ALTEC Consultoria e Projetos Ltda.

Statement of Qualifications

ALTEC Consultoria e Projetos Ltda. is an independent consultancy and business development company operating in the Brazilian and Latin American energy industry since 1996. The company specializes in services in the natural gas and biomass sectors, including:

- **Market Studies for Natural Gas and Biomass Fuels**
- **Regulatory Development in the Downstream Gas Sector**
- **Technical Services**
- **Cogeneration Project Evaluation and Engineering**

ALTEC is headed by partners with extensive energy industry experience gained both in Brazil and internationally. Local resources are augmented by associations with external partners who are leaders in their respective fields; these include Energy Markets Ltd (UK), Power Team (Spain and Finland) and Wilcock Consultants (UK).

COMPANY PARTNERS

Graham Linsdell

Graduate of the University of Salford (UK) in Natural Gas Engineering, having also undertaken post graduate studies in Management and Total Quality.

Graham possesses more than 20 years experience in the energy industry in various roles which include engineering, operational management, planning, and consultancy. He has worked in the UK, United States and Pakistan in addition to Brazil and other Southern Cone countries.

His areas of expertise include mathematical modeling, infrastructure planning and design, market analysis and investment evaluation.

A brief selection of projects in which he has participated include: Evaluation of markets and investments for the Bolivia-Brazil pipeline project (BG-BTB Group); Market evaluation, regulatory studies and investment evaluation services in all the gas sector privatizations to date in Brazil (for various investors and State governments); Consultant to the State Energy Commission (CSPE) since it's formation assisting in market and investment evaluations and regulatory strengthening; Advisor to several investment houses during evaluation of investment and lending opportunities in the sugar / alcohol sector.

Mario Almeida

Graduate of the University of São Paulo in Chemical Engineering with post-graduate studies in Combustion Engineering (University of Leeds, UK) and Economics of Natural Gas (MIT, USA)

Mario possesses 20 years experience in the Brazilian gas sector within Comgás and has additional international exposure in the fuels and petrochemical sector having recently operated alongside PACE Consultants of the USA for several years.

Mario has expertise in industrial processes and energy demand evaluation in the industrial, chemical and petrochemical sector. He also has extensive experience in the evaluation of the use of alternative fuels in the industrial sector, including biomass and petroleum derivatives including petroleum coke.

AREAS OF EXPERTISE AND EXPERIENCE

Follows a brief review of ALTEC services, areas of expertise and experience:

Market Studies

ALTEC professionals have vast experience of market studies both in Brazil and internationally. Project locations include Colombia, Peru, Argentina, Venezuela, Pakistan and Brazil. ALTEC has undertaken detailed national and regional studies for international and national clients, including State government agencies, in the principal industrialized Brazilian States including São Paulo, Rio de Janeiro, Paraná, Santa Catarina and Minas Gerais.

ALTEC was responsible for the market evaluations and investment analysis for the successful privatization of the three gas distribution companies in the State of São Paulo, in addition to operating as adviser for a multinational consortium during the due diligence evaluation of CEG and Riogas in the State of Rio de Janeiro.

Services have also been provided in the evaluation of markets for fuels which include Ethanol, Wood, Sugar Cane Biomass, Petroleum Coke, Liquefied Petroleum Gas, Liquefied Natural Gas (small scale distribution) and Compressed Natural Gas.

Biomass and Cogeneration

ALTEC provides services in the technical and economic evaluation of cogeneration plants using both biomass and natural gas fuels, with in excess of 20 studies having been implemented in Brazil. Detailed engineering studies are undertaken in association with Power Team of Spain and Finland.

Ethanol

ALTEC provides services in support of investment or lending decisions in the Brazilian sugar and alcohol sector. These services range from market monitoring and market reports through to Due Diligence of asset acquisitions.

Infrastructure Project Evaluation

ALTEC provides services in the evaluation of natural gas projects from the dimensioning and pre-project analysis of gas pipelines through to economic analysis of investments in the residential, commercial, vehicular, generation/cogeneration and industrial sectors.

ALTEC works either in the principal role in the project evaluation or operates within multi-disciplined teams together with banks or other investor representatives.

ALTEC is one of the few companies in Brazil which is experienced in the mathematical modeling of gas pipeline and distribution systems. We are equipped with propriety software which permits steady-state modeling of system performance, evaluation of flow restrictions, pipe dimensioning, compressor requirements and performance.

Regulatory Studies

Within the area of regulation, ALTEC provides services for clients in the development of legislation and in the preparation of regulation studies.

ALTEC has provided services to the São Paulo State Regulator since its formation, assisting in the development of regulation in the gas distribution sector, with focus on the evaluation of market development and investments. For private investors and other entities ALTEC has elaborated regulatory studies in the gas, petroleum and electrical sectors relating to Brazil, Argentina, Peru and Bolivia

Clients and Experience

We present a selection of our clients and description of projects undertaken.

Clients

Inter-American Development Bank	NorAm / H.I. / CSN / AES
I.F.C. / Transierra Bolivie	Italgas / ENI
Total Bolivie	CEG / RIOGAS
TotalFinaElf (France)	Camargo Correa (CNEC)
Total / Exxon / YPFB / British Gas	UFRJ – Instituto de Economia
UNIBANCO	Various Industries - Cogeneration
State of São Paulo – Energy Secretary	STRAT Consultants / A.N.P.
State of São Paulo – Energy Commission	Energy Markets / F.T. Energy Unit
Arthur D. Little / Lehman Bros.	Energy Markets / Powergen U.K.
Exergia	Sithe Power / Marubeni
ABEGÁS	Grupo Powertec S.A.
PSR – Mercados de Energia	Powertecnics Oy
Enron Gás do Brasil Ltda. (GASPART)	Techint S.A.
Enron Engineering Ltda.	Texaco Energy Systems Inc.
University of São Paulo	Various U.S. and Euro Investment Funds

Experience

Follows a brief review of a selection of projects undertaken by ALTEC:

ETHANOL MARKETS

As interest in the Brazilian sugar and fuel alcohol markets increases, ALTEC has acted as advisor in this sector to numerous investment and lending houses. Services provided include:

- Vehicle fuel market studies
- Sugar / Alcohol production cost studies
- Internal and export market predictions
- Price modeling
- Acquisition Due Diligence support

BIOMASS FUELS

Contracted by a European energy company, ALTEC provided a study of biomass fuel availability and end use. The scope included rice husks, orange processing waste, sugar cane waste, wood fuel and the use of annual crops in the production of liquid fuels.

BIOMASS FIRED POWER PRODUCTION

Under several contracts with Brazilian energy companies and sugar/alcohol plants, ALTEC has provided front end evaluation through to basic engineering for several biomass powered cogeneration facilities, ranging in size from 5 MW_e to 65 MW_e installed capacity.

EVALUATION OF NATURAL GAS MARKETS IN SÃO PAULO

Contracted by U.S.P. ALTEC provided a detailed survey of thermal energy use in the State of São Paulo. The project scope ranged from in-field survey of more than 5,000 industries through to the evaluation of fuel pricing, price sensitivities, projection of future infrastructure expansion, and the analysis of opportunities for new distribution techniques, including liquefied natural gas and compressed natural gas.

MARKET EVALUATION – INDUSTRIAL AND COGENERATION GAS POTENTIAL IN BRAZIL

Contracted by STRAT Consulting, ALTEC was responsible for providing support in the evaluation of industrial and cogeneration markets in Brazil for a gas sector overview being undertaken by the ANP (National Petroleum Agency). This study has included modeling of gas demand in several economic and price scenarios and the development of estimates of rentable investment in system expansion.

EVALUATION OF NATURAL GAS MARKETS IN BRAZIL

Contracted by a consortium of banks and multi-national energy companies ALTEC developed a study on the evolution of natural gas consumption in Brazil and developed future gas demand predictions based on several scenarios. The study included evaluation of key drivers and obstacles to gas market development and the analysis of price sensitivities -vs- competing fuels.

EVALUATION OF THE MARKET FOR BOLIVIAN NATURAL GAS IN BRAZIL

Contracted by a consortium of multi-national energy companies ALTEC provided analysis of the future perspectives for natural gas consumption in the South / South-East of Brazil, with particular reference to the potential for Bolivian gas supplies. Reporting included evaluation of natural gas competitively in each market segment, (residential, commercial, industrial and cogeneration), economic price netbacks, system flows and performance, pipeline investment requirements and viability of alternative supplies with net forward gas pricing to the principal demand centers.

GAS DISTRIBUTION TARIFF REVIEW

Contracted by the State regulator, ALTEC provided expert support in the evaluation and project of natural gas markets, price sensitivity, gas demand and investment requirements for the 5-year tariff revisions of three gas distribution concessions in the State of São Paulo.

DUE DILLIGENCE – EVALUATION OF TWO GAS DISTRIBUTION COMPANIES

ALTEC assisted a European energy major in a due diligence exercise of two gas distribution companies in Southern Brazil, providing gas market analysis, evaluation of infrastructure design, capacity and expansion planning.

EVALUATION OF GAS MARKETS AND INVESTMENTS – MINAS GERAIS

ALTEC assisted a national bank in the evaluation of company value of GASMIG, the gas distribution company in the State of Minas Gerais, in preparation for the sale of shares. Responsible for market analysis, price sensitivity, margin/pricing and profitability considerations and assistance in modeling of company asset value.

REGULATORY LEGISLATION – STANDARDS FOR PLANNING, RENTABILITY AND INVESTMENT BY THIRD PARTIES

ALTEC was contracted to provide consulting services in the following areas relating to investment by third parties in gas infrastructure expansion:

- Definition of gas concessionaire requirements for medium term planning
- Client training in aspects of gas distribution system planning
- Modeling and standardization of investment contribution

- Draft legislation of appropriate returns for system expansion
- Draft legislation on the division of financial contribution by consumers

AUDIT OF GAS COMPANY PLANNING AND OPERATIONS

ALTEC was contracted by a company shareholder to provide consulting services in the technical audit of Santa Catarina Gas and Compargas operations and planning, which included the following:

- Evaluation of short term and medium term planning
- Analysis of gas markets, pricing and sensitivity
- Evaluation of expansion investment rentability
- Re-dimensioning of planned gas infrastructure
- Evaluation of safety procedure and recommendations on revisions
- Reporting on company technical capacity

EVALUATION OF NATURAL GAS MARKETS, SÃO PAULO INTERIOR

ALTEC was contracted to provide the following services:

- Diagnostic of the potential market for natural gas in conventional market segments
- Study of cogeneration potential in the projected gas supply area
- Reporting on gas infrastructure construction costs
- Pre-project design of gas supply infrastructure
- Compilation of projected investments, including rentability analysis
- Gas pricing sensitivity analysis
- Projection of operating and maintenance costs for gas supply infrastructure
- Compilation of gas supply targets and medium term planning

SERVICE 'B' – PRIVATIZATION OF THE SOUTH AND NORTHEAST GAS DISTRIBUTION CONCESSIONS IN THE STATE OF SÃO PAULO

ALTEC was contracted as a service provider during the privatization process of two natural gas distribution concession areas, providing the following;

- Field research of potential industrial gas demand
- Statistical evaluation of commercial, residential and vehicular markets
- Dimensioning and planning of infrastructure requirements
- Compilation of investment requirements
- Compilation of operation costs
- Support in minimum price evaluation for the share offer

SERVICE 'B' PRIVATISATION OF COMGÁS

ALTEC was contracted to assist in the Service 'B' privatization process of Comgás gas distribution concession, including the following services:

- Evaluation of gas markets and future growth
- Verification of gas network expansion planning
- Verification of investment estimates
- Compilation of operating costs
- Evaluation of existing asset value
- Preparation of material for the 'Data Room'

DUE DILIGENCE - CEG E RIOGAS

ALTEC was contracted as advisor to a multi-national consortium to provide service during the Due diligence evaluation of CEG and RIOGAS; ALTEC was responsible for:

- Market studies, including field research
- Investment estimates
- Verification of infrastructure capacity and operation
- Cost estimates for system reinforcement to support future growth
- Assistance in modeling of company value

CONCESSION CONTRACT EVALUATION

ALTEC was contracted to assist in the evaluation of the value of the gas distribution contract in the State of Minas Gerais, prior to decisions on the possible privatization of the concession. ALTEC was responsible for the evaluation of the gas market, future growth predictions, gas system design and investment planning and assisting in the analysis of gas pricing and business modeling.

NATURAL GAS FIRED COGENERATION

Contracted by a European engineering company, ALTEC provided market analysis, identification of opportunities and business development for the engineering and construction of cogeneration projects. ALTEC has provided consulting services and studies for some 20 gas fired and biomass cogeneration projects in Brazil.

EVALUATION OF MARKETS FOR FUEL CELLS

ALTEC was contracted by an energy major to provide reporting on the viability and markets for residential / commercial scale fuel cells in Brazil.

GAS PRICING PROJECTIONS FOR THERMAL POWER PLANTS

Contracted by a multi-national energy major ALTEC provided a study of natural gas pricing to thermal electric power plants in Brazil, based on net forward pricing from various gas sources.

GAS INFRASTRUCTURE AND MARKET ANALYSIS – PERU

ALTEC was sub-contracted to provide services to an energy major to provide services in the evaluation of markets, infrastructure design and project rentability for a Greenfield gas supply project in Peru.

SECTOR REPORTING

ALTEC has provided several Energy Sector Panoramas for energy journals, investors and other entities.

Additional Information

This document provides an overview of selected areas of expertise and projects undertaken by ALTEC. For additional information on our capabilities please contact:

Graham Linsdell, Company Partner

graham@altec-cp.com

ALTEC Consultoria e Projetos Ltda.

Avenida Santo Amaro 6238

Conjunto 106

São Paulo – SP

04702-002

Brazil

Tel/Fax + 55 11 5182 3134

Mobile + 55 11 812 88 974

www.altec-cp.com