

Merger & Acquisition

Due Diligence for Gas Matters



Gas Industry



Forecasts



Insight

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Gas Mergers & Acquisitions Assistance

Ziff Energy is recognized for its independent and unbiased expert views on natural gas business matters including:

- operating practices
- upstream operating costs
- expected gas pipeline flows
- pipeline toll forecasts
- gas markets
- gas for power generation
- gas storage issues
- short and long term gas price outlooks
- North America conventional gas supply
- Shale Gas, Tight Gas, CBM outlooks
- Alaska, Mackenzie offshore
- LNG.

Included in this Booklet

To help you better understand our experience and depth, this booklet presents:

- Acquisitions & Due Diligence Project Examples
- Short Bios for Leading Consultants.

Ziff Energy Group, founded in 1982, is a leading North American international energy consulting firm. We provide operational and business analysis, and specialized consulting to the energy industry. We have offices in Calgary and Houston, the two principal oil and gas centers in North America.

Our focus areas are:

- **Gas:** Ziff Energy Group is recognized for its in-depth analysis of North American gas markets, gas and liquids supply, transportation, midstream, storage, regulatory affairs, and gas pricing.
- **E & P:** more than 100 world-wide upstream producers have been involved in field level operating cost and finding and development cost studies, as well as follow up field performance improvement projects around the world.
- **Greenhouse Gas Emissions Benchmarking:** Ziff Energy Group is partnered with Shell on a sole source basis, with exclusive commercial licence to benchmark international GHG emissions.

We are ready to assist you and can initiate discussion to determine how our specialized knowledge adds value. A briefing on complex issues, with understandable and compelling graphics, is available to help you.

For more information contact:

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Gas
Business
Specialists

More Than
25 Years
Experience



Acquisitions & Due Diligence Project Examples

Price Forecasts

Long Term Gas Price Outlook

Provided a long-term price forecast for natural gas for NYMEX Henry Hub and AECO C, and a detailed analysis of the key drivers/factors that will influence natural gas prices in North America.

Long Term Gas Price Outlook

Prepared a long-term gas price forecast for an electrical generation client. The assessment included a discussion of gas supply and demand fundamentals and potential impact of each factor on gas price.

Long Term Price Forecast

Prepared a long-term price forecast for a client considering a fertilizer feedstock acquisition. Included a detailed discussion of all fundamental supply and demand drivers for both Henry Hub and Western Canada.

Long Term Basis Forecast

Basis forecast to 2035 for AECO, Dawn, Boston, Dracut, and TransCanada EDA for potential investor in a North American LNG regas facility.

Future Canadian E&P Gas Opportunities

Provided an independent overview of future Canadian upstream opportunities, primarily natural gas and frontier oil, for the next 10-15 years for a world-wide explorer.

North American 20 year Gas Supply Outlook

Reviewed traditional gas supply basins and unconventional North American gas supplies over the next 20 years. Identified key issues.

Gulf of Mexico Shelf Outlook

A long-term view of the gas supply potential for the Gulf of Mexico Shelf.

Pre-acquisition of Producers

Pre-screening of gas producer assets. Identified major locations of facilities, production, and production strategy.

Due Diligence Review

Pipeline transmission client sought a due diligence review of a study regarding North American markets, supply, and gas transportation in a level of detail that provides insight, clarity, and a thorough outlook to 2030.

Growth Opportunities for an Existing Pipeline

Examined the production potential for three gas producing regions and identified producers with shut-in gas for tie-in. Examined the productivity of shut-in wells.

Pipeline Acquisition Toll Analysis

Provided a professional opinion regarding the pipeline toll outlook for a North American gas pipeline and identified significant issues that would influence overall profitability for a potential pipeline acquisition.

Gas Drivers and the Pipeline Business

Assessed the gas supply and market influences on the pipeline business, and the relationship of factors influencing the pipeline coating business.

Supply

Transportation



Due Diligence for a Gas Gathering System

Provided an assessment of strengths and weaknesses (SWOT analysis) for a gas gathering system acquisition.

Gas Marketing and Transportation Contracting

Assisted with the business formulation of a new gas marketing entrant. Included structured interviews with producers, end users, gas transporters, and existing gas marketers.

Factors Impacting a Major Gas Storage Acquisition

Analyzed and presented various market factors that could influence a gas storage acquisition or an investment in a new greenfield gas storage facility.

Sale of Gas Storage Assets

Preparation of marketing plans (California, eastern North America) that would assist with identifying potential purchasers of underground gas storage assets.

Gas Storage Capacity, Withdrawal, and Injection Requirements

Analyzed LDC gas supply portfolio and developed structured scenarios for determining gas storage capacity, withdrawal rates for peaking needs, and corresponding injection limits.

Prescreening of Intermediate Producers

Developed a supplemental analysis for a major producer to assist with an internal decision to acquire an intermediate producer.

Screening of Oil and Gas Operators for Potential Acquisition

Developed company profiles for junior to intermediate oil and gas companies. Acquisition pros and cons were identified.

Analysis of Engineering Firms for a Potential Acquisition

Identified a dozen engineering firms for a client for a potential acquisition. Brief profiles for each target were prepared.

Market Influences on a New Pipeline

Prepared and presented an overview of gas markets, supply, and inter-regional influences on a newly constructed pipeline.

Development of Business Plan for a New LDC Merchant

Identified a supplier of natural gas for the residential market and developed a business plan to support the residential gas marketing program in an existing deregulated market region.

Analysis of Supply, Demand, & Transportation Fundamentals

Analyzed supply, demand, and transportation fundamentals for a potential participant in a North American LNG liquefaction facility.

Analysis of North American Natural Gas Markets

In depth analysis of long-term North American gas supply, demand, transportation, and prices for investors in an offshore LNG liquefaction facility.

Transportation

Storage

Demand/
Markets

LNG



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Our Leading Consultants include:



Paul Ziff - CEO, a specialist on the upstream natural gas sector, and corporate performance in oil and gas exploration and producing industry. He has conceived and directed a wide range of top class studies on gas supply, markets, and E&P corporate performance, in many countries. Mr. Ziff has provided Expert Testimony before North American Regulatory agencies and Courts.



Bill Gwozd, P. Eng. - Vice President, Gas Services, leads gas consulting, multi-client studies, Finding & Development benchmarking, litigation projects, Expert Witness services, M&A advisory support, and the long standing North American Natural Gas Strategy Retainer Service. He has three decades of experience in gas supply, gas storage, pipelines, gas price & basis differential analysis, and NGL projects and has testified in both the U.S. and Canada.



Juan Carlos Alba – Vice President, International E&P, is an energy and international business development specialist with 15+ years of experience in Latin America. Mr. Alba leads a wide range of international E&P studies for governments and companies. He has participated in several Latin American oil and gas Engineering Procurement and Construction projects including pipelines, compressor stations, production, and processing facilities.



Edward Kallio, B.A. – Director, Gas Consulting, has over three decades of gas industry experience in trading, marketing, portfolio management, supply, forecasting, and policy analysis in the private and public sectors. Mr. Kallio's experience includes analysis of pipeline rate applications, economic analysis of major domestic and cross-border gas transactions and contracts, and negotiation of storage, transportation and supply arrangements.



Simon Mauger, P. Geol., Director, Gas Services, focuses on supply assessment, and cost of new gas supply for multiclient studies and custom consulting to clients. Simon has 30 years of experience in the oil and gas industry as an exploration and development geologist. He has a broad background in planning, economic and resource evaluation, gas supply planning, and participates in regional and North American gas strategy studies.



Cameron Gingrich, B.Sc., B.A. – Manager, Gas Services, has a decade of natural gas experience at Ziff Energy. Primarily responsible for analytical support and in-depth customized data analysis, trending, and modeling for the Gas Services team, Mr. Gingrich brings a wealth of insight, creativity, and economic knowledge.

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Chris Phillips, B.Sc. (Honors), MBA, CMC – Executive Associate, has over 35 years of industry and management consulting experience, predominantly relating to the petroleum business. Working in the Americas, Asia, and Europe, he has held significant managerial and client leadership responsibilities, focusing both on enterprise and operations strategy with a view to leveraging technology and strengthening business performance, and on energy policy and regulating development.



Jan Olthof, P.Eng. - Senior Associate, has over thirty years of experience in operating, optimizing and managing oil and gas producing properties throughout Western Canada for several leading E&P companies. He has completed various customized consulting assignments, and litigation issues.



Gordon Clarke, P. Eng., MBA - Senior Associate, has 4 decades of experience including operations, engineering and marketing in the upstream, processing, and downstream sectors with E&P companies and consulting. He has benchmarked oil and gas operations of companies both domestically and internationally with Ziff Energy for over 15 years, as well as provided other consulting services to clients world-wide. Prior, he worked for a super-major.



Dave Vetsch, P.Eng. - Senior Associate, has 3 decades of experience in gas consulting and management covering gas supply, transportation, storage, deregulation of gas retail markets, regulatory litigation and intervention, hedging strategies, and economic evaluations. He has managed all functions for junior oil and gas companies, and worked many years for a large LDC.



Plus a strong supporting team of Directors, Managers, Analysts, and Associates who will contribute their expertise on your issue. Plus a strong Graphics Team, numerous templates & desktop publishing experience.