

Gaffney  
Cline

Experts in Korea



## GaffneyCline

GaffneyCline is a global consultancy that has been offering technical, commercial, and strategic advice to the oil and gas sector since 1962. GaffneyCline's reputation demonstrates that the advice delivered, together with its industry insights, is of high-quality, impartial, technically based, and commercially astute. GaffneyCline is well known as one of the leading suppliers of Reserves and Resources assessments, which are required for many purposes including statutory reporting, stock exchange listing, development planning, project finance, and asset valuation.

In addition, GaffneyCline offers a full range of upstream, midstream and downstream technical and commercial consultancy services. These range from seismic interpretation, static and dynamic reservoir modelling, field development planning, facilities and pipeline engineering, gas monetization, LNG/GTL, mergers and acquisitions, economics and project finance, unitization & redetermination, expert witness work, exploration prospect assessment, fiscal & regulatory advice, negotiation support, strategic consulting on energy matters, carbon intensity assessments, new technology assessments, and site visit assessments.

GaffneyCline operates worldwide from three main offices located in London, Houston and Singapore, and supported by offices in Buenos Aires, Sydney and Dubai.

## Korea

GaffneyCline has been undertaking technical and commercial studies and Reserves reviews for Korean clients for over 25 years. The projects consist of various Market studies, Technical projects, Reserves assessments, Acquisition/Divestment Due Diligence and support, Downstream projects, and Training.

Partial summaries of selected projects that GaffneyCline has completed for Korean clients are outlined on the following pages.



## Korea

**Acquisition Assistance:** GaffneyCline was engaged by a Korean company to provide advisory services for the possible acquisition of an upstream oil and gas company or asset(s). The work included an initial screening of approximately 30 targets given certain criteria, followed by a more detailed technical and financial evaluation of a short list, and advice on a possible approach.

**Resources Assessment, Kazakhstan:** GaffneyCline was retained by a Korean company to conduct an independent Resources assessment of 2 oilfields located in the Atyubinsk Region of Kazakhstan.

**Technical Review:** GaffneyCline was retained by a Korean company to assist in the review of 3 Blocks offshore Turkmenistan. The review covered a review of regional geology, dry hole analysis, reservoir/source/seal analyses, and play types with the aim of recommending potential areas for further work.

**Technical Review/Farm-in Opportunity:** GaffneyCline was commissioned by a Korean company to provide a technical review of a Prospect, offshore Australia with a view to possibly taking an equity position.

**Due Diligence review and Valuation of CSG Blocks:** GaffneyCline was retained by a Korean company to provide a due diligence review and fair market valuation for 2 CSG Blocks in the Bowen Basin, Australia. The work was in support of a decision-making process on whether or not to farm-in to the two Blocks.

**Licensing Round Review, Papua New Guinea:** GaffneyCline was retained by a Korean company to provide an opinion on the general prospectivity of the license areas on offer in the Gulf of Papua. GaffneyCline's report provided an overview of the Blocks on offer as compared to those already held, and commented on prior drilling successes, source kitchen and play types likely to be found.

**Gas Condensate Discovery:** For a Korean company, GaffneyCline provided an Independent Resources estimate of discovery situated in the Ullueng Basin, offshore Korea, with a view to assisting in the assessment of its possible commerciality. To this end, GaffneyCline conducted the following activities: geophysical interpretation of the existing 3D seismic data; petrophysical analysis of the discovery well; analysis of the fluid properties, well test and recovery mechanism; static modelling to support deterministic cases; and probabilistic volume assessment.

**Tank Terminal Feasibility Study, Malaysia:** GaffneyCline was retained by a Korean company to conduct a feasibility study for the construction of two tank terminals in Malaysia. The scope of work included the following:

- Determination of the optimal terminal layout, tank capacities, and capabilities.
- Assessment of utilities access to the chosen location.
- Determination of the key permits required to build and operate the terminal
- Assessment of terminal layout
- Provide estimates of investment and operating costs
- Analysis of competition based on the "Five Forces" framework.

**Farmout Assistance:** GaffneyCline assisted a Korean company in a farmout process of an interest in its block in the Ullueng basin, in the East Sea, Korea. GaffneyCline provided a market analysis, prepared an investor list using its global contacts, prepared marketing material including a teaser and IM, contacted potential investors, advised on the SPA and bid structure, and prepared and ran the virtual data room process.

**3D Seismic Interpretation:** GaffneyCline was commissioned by a Korean company to provide seismic interpretation services in relation to a discovery offshore Vietnam. The work included surface mapping/map generation, creation of new velocity model/depth maps and integration of the interpretation and time-depth conversion and rerunning the client's volumetrics.

## Korea

### Prospect Review:

GaffneyCline was retained by a Korean company to assist in the review of 3 Blocks in the Okhotsk Sea, offshore Russia. The work entailed a review of the clients' evaluation, preparation of Prospect Evaluation Sheets (PES) covering associated risks and volumes, preparation of a cashflow model for the relevant fiscal/contractual terms and associated Economic Evaluation Sheets (EES).



### Preliminary Feasibility Study for a Di-

**Methyl Ether (DME) Plant:** GaffneyCline was retained by 2 Korean companies interested in the construction and operation of a DME plant outside of Korea. The plant, to be built in Thailand, Vietnam or Turkmenistan was to be supplied with natural gas from a field located nearby. The objective of the study included the selection and evaluation of gas fields, technical feasibility study of the project, market analyses for DME as an LPG substitute, project economic/financial modelling and a review of project implementation issues.

**Exploration Training Course:** GaffneyCline was retained by a Korean company to provide training on exploration processes. The course included an overview of key exploration concepts such as Reserves and Resources definitions, prospect maturation process, geological risk analysis, volumetric calculations and economic evaluation. consider.

**Resources Assessment:** For a Korean company, GaffneyCline provided an Independent Resources estimate of discovery situated in the Ullueng Basin, offshore Korea, with a view to assisting in the assessment of its possible commerciality. To this end, GaffneyCline conducted the following activities: geophysical interpretation of the existing 3D seismic data; petrophysical analysis of the discovery well; analysis of the

fluid properties, well test and recovery mechanism; static modelling to support deterministic cases; and probabilistic volume assessment.

### 3D Seismic Interpretation/Training:

Following work for a Korean company on the seismic interpretation for a discovery offshore Vietnam, GaffneyCline was retained to conduct a similar exercise on two further prospective areas. The expanded scope of work included mentoring the client's staff and controlling the workflow/ reporting on progress to management.

**Investment Strategy:** A Korean company engaged GaffneyCline to identify, evaluate, assess, investigate and devise an investment engagement strategy and plans for new LNG regas project opportunities around the world. GaffneyCline conducted a global screening of all existing, planned and proposed LNG import terminals (focusing on offshore terminals). GaffneyCline then generated an initial list of potential targets and proceeded to evaluate and refine this into a top 10 list, then generated an associated Business Investment Strategy for each of the top 10 targets projects. Finally, GaffneyCline recommended the top investment targets in order of priority that might be a suitable fit for the client to consider.



For more information about GaffneyCline's integrated services, please contact your local GaffneyCline office.

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