IHS Markit assists energy clients and their counsel with tackling challenging legal issues. IHS Markit has a strong track record in delivering independent and credible expert witness and dispute resolution support service. We have experience working with engineers, economists, regulators, business executives, attorneys and other advisors. We are a partner of choice to understand what issues are relevant to the dispute and how they can be best presented. We can serve as independent experts or can assist in formulating strategy, developing analysis and data during the entire dispute resolution process.

Our key offerings for energy clients include:

- **Litigation strategy and question formulation**
- **Economic impact assessment**
- **Expert witness and arbitration reports and testimony**
- **Cost/benefits analysis**
- **Contract dispute and arbitration support**
- **Asset/business valuation**
- **Border dispute support**
- **Resource/reserve evaluation and audit**

Benefits of IHS Markit services:

- **In-house experts**: Our global team includes subject-matter experts and leading industry specialists with comprehensive and diverse energy experience.

- **Proprietary data**: Our content and data enables smarter, more efficient workflows by providing a single point of access to a diverse range of technical information, proprietary data across Energy, Chemical, Economics, Risk, Automotive and Life Sciences sectors.

- **In-house research and analysis**: A one-point rigorous research, analysis and insights
IHS Markit dispute resolution support services are drawn on:

- World-renowned expertise in energy industry, including leading and highly credible experts. IHS Markit has over 1700+ energy experts globally, led by Dr Daniel Yergin.
- Knowledge across all segments of the energy industry - oil, natural gas, refining, nuclear power, coal, midstream infrastructure and logistics, electric power, renewables, chemicals and energy end-use.
- Reputation for independence and objectivity.
- Proprietary technical and market data - IHS Markit is the foremost source of data on energy – ranging from subsurface, supply outlooks and costs, regulations, markets, and pricing dynamics.
- Understanding of federal, state and local regulatory policy and legislation and its impact on companies and markets.
- Deep knowledge of energy industry structure and dynamics, as well as industry players and their strategies.
- Leading economic insight, models and data; deep understanding of market design, structure and how markets work; commercial practices and commodity pricing.
- Financial analysis and data, including the leading source of information on asset and company valuations.
- Expertise on energy assets’ operations, technology, and yields associated with business interruption claims and valuation/damage assessment.
IHS Markit utilises a wide range of methodologies and tools to offer an extensive range of services in the field of dispute resolution support.

**Methodology/Tools Employed:**
- Technology assessment
- Competitiveness evaluation
- Comparable analysis
- Cost assessment
- Supply chain analysis
- Product pricing analysis—historical and forecast
- Market dynamics—supply/demand balances
- International trade analysis and values

**Services Offered:**
- Expert witness and arbitration testimony
- Expert witness and arbitration reports
- Resource/reserve evaluation and audit
- Economic impact assessment
- Litigation strategy/question formulation
- Asset modeling and cash flow analysis
- Preparation of document retrieval lists
- Documentation review
- Identifying, screening & preparing the testifying experts
- Historical research and analysis
- Literature retrieval and research
- Deposition support
- Damage assessment - lost profits
- Negligence determination
- Cost/benefit analyses
- Asset/business valuation, fair market valuation
- Contract dispute/arbitration support
- Border dispute support
Case Study

Asset Valuation
An independent audit of a deep water hydrocarbon licence block in African country as part of an ongoing legal arbitration process

Situation
The client is an International Oil Company, holding significant amount of oil and gas reserves. As part of an ongoing legal arbitration process at International Centre for Settlement of Investment Disputes with an African country Client required an independent ‘fair market valuation’ of a deep water licence block.

Solution
IHS Markit experts:
- Reviewed company’s subsurface technical data in order to assess hydrocarbon volumes in place and potential recovery factors for discovered fields, as well as potential for additional commercial reserves in several identified prospects. We identified a credible field development plan and design concept for the production, processing and hydrocarbon transportation systems. Estimated a realistic investment profile.
- Validated the estimated project costs through benchmarking of analogue deep water projects.
- Created a cash flow valuation model for the licence block, performed sensitivity analysis and determined the block’s NPV.
- Identified and analysed recent comparable market transactions for deep water reserves to validate the bottom-up cash flow valuation.
- Assessed “fair market value” of the block.

Result
IHS Markit provided a technical and commercial evaluation and determined the “fair market value” of the licence block. IHS Markit experts defended their evaluation in front of the tribunal on behalf of the legal team of the client towards a request for settlement or compensation in the Arbitral Tribunal.
Case Study

Expert Witness Report
An expert witness report and testimony for a tax case

**Situation**
Client, a major International Oil and Gas Company, had an ongoing tax dispute with the US tax authorities regarding treatment of its tax liabilities abroad. Client was preparing to stand a trial in court and required expert witness testimony in support of the case. IHS Markit experts were contracted to prepare an expert witness report for submission to the hearing.

**Solution**
**IHS Markit experts:**
- Conducted an extensive historical research and prepared an independent expert witness report that synthesized the analysis of historical developments in contracting by international oil & gas companies in the Middle East and the subsequent evolution of foreign tax credits in Western jurisdictions.
- The report provided a research on the history of the role of different elements of the governments in the Middle East in promulgating taxation laws.

**Result**
IHS Markit prepared an expert witness report that was presented to the US State Tax Authorities. Based on this report and further negotiations the dispute was finally settled without court hearings. The project saved the Client ~$100 million.
Contract Dispute
Independent view on a hydrocarbon exploration licence value in support of the claim pursued via the US Department of State Espousal process

Situation
IHS Markit was commissioned to provide an independent view on the value of oil assets in a Middle Eastern country in support of a claim being pursued via the US Department of State Espousal process. The fields were originally covered by an exploration licence, awarded and cancelled by the Middle Eastern government in the 1950s.

Solution
IHS Markit experts:
- With the aim of establishing the value of the assets conducted research, engaging its internal databases, tools (such as proprietary IHS Markit cost estimation tool QUE$TOR) and experts, as well as extensive external literature research.
- IHS Markit established the value of the assets using two approaches both of which were based on the assets’ estimated cash flows over the assumed exploitation licence duration. Inputs into the cash flow valuation were established using actual historical data where available, or IHS Markit estimations and assumptions for the most likely scenario.

Result
As a result of the extensive research and analysis, IHS Markit developed an independent view on the oil assets, enabling the Client to build a claim.
Case Study

Border Dispute Support
Valuation of production from border straddling hydrocarbon fields between two African countries

**Situation**

An African Government commissioned IHS Markit to develop a greater understanding of hydrocarbon discoveries and production which occurred during a period of time when the boundary was disputed. The aim was to discover if any production royalties were owed now that the boundary had been agreed by both countries.

**Solution**

**IHS Markit experts:**

- Analysed development of fields at the current boundary between the two countries from a historical and current context focusing on the following aspects:
  - History of the dispute and Exploration & Production activity
  - In-depth study of key cross-boundary fields
  - Calculation of estimated production which could have been gained from each side of the boundary
  - Historical value of estimated production

- For this assignment, IHS Markit leveraged in-house reports, tools and experts as well as conducted research of external sources

**Result**

IHS Markit assessed the attractiveness of each field in terms of current and historical resource and production potential, enabling the Client to gain an insight into any claim to historical production. The report contained robust analysis that equipped the Client with an independent view for the discussions with the other country.
Expert Testimony

Expert testimony on behalf of US Department of Justice: estimate of cumulative volume of oil released from Macondo well.

**Situation**

The US Department of Justice (DoJ) retained IHS Markit to perform various technical tasks directed by attorneys in connection with the judicial action for determining spill volumes from the Macondo well in the Gulf of Mexico based on geologic analysis, reservoir engineering/modeling and wellbore modeling.

**Solution**

IHS Markit experts:

- Reviewed open hole logs and correspondence regarding best practices for cementing depths in relation to hydrocarbon intervals.
- Used two methodologies to estimate the spill volume; analytical and numerical approaches.
- The flow and resistance equations were developed analytically for reservoir, wellbore and wellhead blowout preventer (BOP) and Capping Stack components.
- Constructed numerical models which represented variations on the reservoir/wellbore/BOP system.
- Conducted sensitivity studies, using a wide range of parameters that contribute to reservoir, wellbore, BOP and Capping Stack flow resistances.

**Result**

It was determined the cementing point was incorrectly identified using best practices. It was determined that a number of reservoir/wellbore/BOP scenarios could be defined that provide a good match of measurements during the integrity test and final shut-in period. The input parameters vary significantly for the models which provide good history matching of the measurements. IHS Markit assisted the US DoJ by providing technical responses to the critique by the defendants’ experts during the Rebuttal and Depositions stages of the trial.
A list of IHS Markit Experts can be found here:

ihsmarkit.com/experts/index.html

About IHS Markit

IHS Markit (Nasdaq: INFO) is a world leader in critical information, analytics and solutions for the major industries and markets that drive economies worldwide. The company delivers next-generation information, analytics and solutions to customers in business, finance and government, improving their operational efficiency and providing deep insights that lead to well-informed, confident decisions. IHS Markit has more than 50,000 key business and government customers, including 80 percent of the Fortune Global 500 and the world’s leading financial institutions. Headquartered in London, IHS Markit is committed to sustainable, profitable growth.

Our consultants are a part of IHS Markit’s Upstream Insight team, delivering actionable commercial and strategic advisory services to help decision-makers maximize their opportunities for value creation through investments in the global E&P sector. Our team of industry experts analyze the interplay of geopolitical structures, government priorities, corporate strategies, and global markets and technologies to deliver forward-looking insights and solutions that lead to more informed and efficient decisions. Upstream Insight’s and solutions are available via recurring reports.

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