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**Customize Your Research** (Email alerts and saved content)

**Contact Us**
Connect Login Instructions
Connect Login Instructions

Go to connect.ihs.com and log in with your Username and Password.

Click on ‘Forgot Password?’ to reset your password.
Connect New User Registration

Go to connect.ihs.com and request access.

Follow 4 steps for Connect registration

1. Enter your corporate email address.
2. Complete your profile. (Enter Connect in the Product Used field)
3. Accept the terms of service.
4. Complete Your Registration

Once you are provided with access, you will receive an email confirmation from customercare@ihsmarkit.com with your login instructions.
Oil & Gas Risk
Oil & Gas Risk Deliverables

- **Research Notes and Briefs:** Ongoing monitoring and timely analysis of changes to energy policy, investor relations and operational risks tied into OGRS risk factors. *Ad-hoc*

- **Special Reports and Quarterlies:** Detailed analysis of emerging trends affecting investors on a regional, thematic and country level. *Quarterly*

- **Country Profiles:** Analysis of government policy and decision making, energy fundamentals, and competitive environment in top hydrocarbon producing countries. *Ongoing basis*

- **Risk Commentaries:** Overview and analysis of the country-level drivers for each of the risk rating components. *Ongoing basis*

- **Webinars:** Delivered by the best IHS Markit energy thought leaders. *Ad-hoc at least 4 per year*

- **E&P Ratings and Rankings Tool:**
  - Customizable tool to visualize and evaluate risk for 130 countries over the immediate and five-year time-horizons, focusing on 21 upstream risk factors.
  - Captures metrics relating to existing investor success and experience in access, approvals, contract stability and government relations.
  - Adjustable weightings enable clients to create a customized view to focus on relevant risks to support new country entry, project or portfolio assessment.
Oil & Gas Risk in Connect
In Connect, hover over the Energy menu > Upstream Oil and Gas > click on PEPS Oil & Gas Risk.
Access the E&P Ratings and Rankings data tool under Tools. Click here to access.
Oil & Gas Risk Page Navigation

Research and Data are organized within **topical tabs** to instantly narrow down your search.

Keyword search and relevant filter options.

View and quickly access research and insights.

Relevant Data tools, Charts, and other Resources.
E&P Ratings and Rankings Tool

In the **Primary Tools** section, click on **E&P Ratings and Rankings** to visualize, customize and export IHS Markit Oil & Gas Risk Ratings and Rankings.
E&P Ratings and Rankings Tool Functionality

- **Toggle between Map, Table and Chart View.**
- **Adjust your time period with an interactive slicer.**
- **Select your countries of interest.**
- **Reference the featured Traffic Light Methodology for Upstream Investment Risk Assessment.**

**E&P Ratings and Rankings**

**Table View**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Geography</th>
<th>Overall Rating</th>
<th>Last Change</th>
<th>E&amp;P</th>
<th>Fiscal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Canada</td>
<td>7.20</td>
<td>Q3 2019</td>
<td>8.39</td>
<td>4.04</td>
</tr>
<tr>
<td>2</td>
<td>United States</td>
<td>6.66</td>
<td>Q3 2019</td>
<td>7.44</td>
<td>5.56</td>
</tr>
<tr>
<td>3</td>
<td>United Kingdom</td>
<td>6.66</td>
<td>Q1 2019</td>
<td>5.50</td>
<td>5.24</td>
</tr>
<tr>
<td>4</td>
<td>Guyana</td>
<td>6.65</td>
<td>Q3 2019</td>
<td>6.97</td>
<td>6.02</td>
</tr>
<tr>
<td>5</td>
<td>Papua New Guinea</td>
<td>6.10</td>
<td>Q3 2019</td>
<td>6.39</td>
<td>6.33</td>
</tr>
<tr>
<td>6</td>
<td>China (mainland)</td>
<td>5.17</td>
<td>Q1 2019</td>
<td>6.87</td>
<td>5.16</td>
</tr>
</tbody>
</table>

**Map View**

- **Toggle between IHS and Custom Weights.**
- **Save your selected region or countries; Export your data to excel.**
Costs and Technology
Costs & Expenditures
Oilfield Equipment & Services
Technology & Innovation
Costs & Expenditures Deliverables

- **Upstream Capital Costs**: Quarterly workbook update and CAPEX market review. Semi-annual Upstream Costs workshop and ad hoc insights.

- **Upstream Operating Costs**: Quarterly workbook update and OPEX market review.

- **Global Upstream Spending & Industry Trends**: 4x/year report updating 5-year spending outlook and 2x/year overview of supplier markets outlining key industry drivers.

- + Regional industry trends reports (APAC, Middle East, North Sea, North America, Latin America)

- **North America Costs & Expenditures**: 4x/year report updating detailed regional 5-year spending outlook and 4x/year index workbook and review tracking and forecasting region/play cost escalation.

- **Latin America Costs & Supply Chain**: 4x/year cost index and periodic strategic sourcing analysis & ad hoc insights, 1x/year workshop.

- +Upstream Innovation Index

- +Downstream Capital Costs Index

- **Webinars**: Delivered by the best IHS Markit energy thought leaders. Ad-hoc at least 4 per
Oilfield Equipment & Services Deliverables

- **Market Segment Analysis**: Reports are updated 3x/year across more than 30 individual Upstream Market segments covering Engineering & Fabrication; Subsea & Capital Equipment; Rig Markets and Offshore Services & Vessels. Each report analyses and forecasts supply, demand, market balance and cost developments, providing regional breakdowns and competitive analysis.


- **Supply Chain Company Profiles**: for 90+ oilfield service & equipment vendors. Each Profile provides valuable insight into vendor capabilities and performance, looking at both project activity and financial data.

- **Supply Chain Company Online Search Tool** provides basic capability details for 800+ supplier and contractors. Searchable by vendor name, region, equipment or services segment, capabilities and market position in each segment.

- **IHS Markit IQ Reports** provide detailed analysis & outlook of:
  > play-by-play details of NAM rig counts, well completions, wells frac’ed, frac stages, and stimulated length/WellIQ.
  > US proppant supply, demand, and pricing, by play and proppant type (sand, resin-coated sand, ceramics)/ProppantIQ.
  > Global fracturing services market/PumpingIQ.
  > US oilfield water management market /WaterIQ.
  > Material Price Tables & Headline Analysis
Technology & Innovation Deliverables

- **IHS Markit Oil & Gas Digitalization Workshops**: Semi-annual member workshops and associated research reports.

- **Technology Screening reports**: Quantifying technology impacts (e.g., recovery factor increase) by resource segment to provide guidance on investment and deployment prioritization.

- **Technology Trends reports**: Updates on technology development trends e.g. spending levels, areas of focus, sources of innovations and organizational strategy, along with the business and technical factors influencing them. Deep dives into key technology development trends along with guidance on how best to position one’s organization to benefit from them. Best practices for accelerating technology adoption by shortening the cycle from field piloting to broad deployment, reinforced by actual industry case studies.

- **Special reports and insights**
Costs and Technology in Connect

In Connect, hover over the Energy menu > Upstream Oil and Gas > click on Costs and Technology topics.

Access the Upstream Costs and Analytics data tool under Executive Dashboards. Click here to access.
Costs & Technology Page Navigation*

Research and Data are organized within **topical tabs** to instantly narrow down your search.

*Applicable to each Costs & Technology Capability.
### Costs & Technology Topical Tabs on Research Page

<table>
<thead>
<tr>
<th>Costs &amp; Expenditures</th>
<th>Oilfield Equipment &amp; Services</th>
<th>Supply Chain Companies</th>
<th>Technology &amp; Innovation</th>
<th>Webinars &amp; Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Update &amp; Summary of all Indexes</td>
<td>Market Segment Analysis Reports</td>
<td>Supply Chain Company Profiles</td>
<td>IHS Markit Oil and Gas Digitalization Workshops</td>
<td>Event workshop presentation materials</td>
</tr>
<tr>
<td>Excel Workbooks for:</td>
<td>Market Segment Cost Models</td>
<td></td>
<td>Technology Screening Reports</td>
<td>Webinar recordings and presentation materials</td>
</tr>
<tr>
<td></td>
<td>ProppantIQ</td>
<td></td>
<td>Technology Trends Reports</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WaterIQ</td>
<td></td>
<td>Special Reports</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WellIQ</td>
<td></td>
<td>Insights</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pumping IQ</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*This is an example of key research deliverables. More research is available on this page in Connect.*
Supply Chain Company Search Tool

You are viewing Upstream Costs and Technology research

In the Primary Tools section, click on Supply Chain Company Search to search across 1,000 equipment and service suppliers by capability, segment, region and/or market position.

Material Prices Table

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Last week</th>
<th>Last month</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude oil, Brent</td>
<td>83.05</td>
<td>78.11</td>
<td>6.3%</td>
</tr>
<tr>
<td>Crude oil, WTI</td>
<td>72.96</td>
<td>68.96</td>
<td>5.8%</td>
</tr>
<tr>
<td>Natural gas, Henry Hub</td>
<td>3.30</td>
<td>2.93</td>
<td>12.3%</td>
</tr>
</tbody>
</table>

Expand

Service: IHS Pricing and Purchasing
Note: "Last week" = weekly average; "Last month" = price lagged 4 weeks; "Last year" = price lagged 52 weeks. "Change" is calculated by the difference in the price from "Last week" to "Last month".

More

Training Video

Primary Tools

Supply Chain Company Search
Upstream Costs and Technology Analytics

You are viewing Upstream Costs and Technology research

In the Analytics and Charts section, click on Upstream Costs and Technology Analytics to visualize, customize, and export data related to:

- Global Onshore Markets
- North American Completions
- North American Frac Chemicals (ChemIQ)
- Engineering & Fabrication
- Subsea & Capital Equipment
- Offshore Services & Vessels
- Rig Markets
In the Analytics and Charts section, click on a relevant option to visualize, customize, and export Upstream Costs and Market Segment Cost Indexes.
Plays and Basins
Plays and Basins North America Overview and Deliverables

**Plays and Basins North America:** provides critical judgment and authoritative perspectives with the most comprehensive forward-looking analysis of oil and gas exploration and development in onshore unconventional plays in North America.

- **Deliverables: Turning expert led insights into actionable decisions**
  - Quarterly supply forecasts (reports and accompanying xls files with underlying data) including comprehensive views and scenario analysis of operator strategy, investor expectations, global commodity markets, midstream and service sector capacity, and play trend analysis
  - Semi-annual updates to North America unconventional play workbooks (reports and accompanying xls files with underlying data)
  - Ad hoc coverage of legacy and emerging plays
  - Memos catered to clients with upstream interest or exposure including operator strategy and activity, recent mergers and acquisitions, aboveground issues, and leading-edge data analysis
  - Key Play Analytics, online interactive visualization for analysis and evaluation of plays and operators critical elements in industry
  - Access to analysts via webinars, events and onsite engagements

- **Access**
  - Through our online application, Connect, or directly to your company’s internal data management tools through APIs
  - Enterprise access
Basin Insights: Overview and Deliverables

Basin Insights
Leading source for commercial and strategic advisory into changes in the E&P Industry’s perception of a play’s or basin’s commercial value; integrates competitive landscape analysis, resource potential and above ground risks. Identifying changes in the industry’s perception of the commercial value of a play or basin.

Core Deliverables
Strategic and commercial guidance, with regular commentary and analysis on distinct basin and regional play themes:

- Critical Analysis Document series:
  - Basin Reports: Provides advisory that is forward looking, analytical evaluation of the commercial and strategic implication of E&P activity that alters a basin’s future investment and development trajectory. Two to three (2-3) per month.
    - Basin assessments – commercial and strategic challenges and implications
    - Critical wells
    - Basin importance
    - Basin leaders
    - Critical above ground risks
  - E&P Trends & Analysis: ongoing independent commentary with strategic and commercial analysis of basin competitiveness and attractiveness that considers both below-and-above-ground perspectives. Competitive assessments rank a given basin versus other basins, with particular focus on future investment opportunities and strategic portfolio fit. Dictated by events and selected basins (several times per quarter).
    - Competitive landscape analysis that identifies the leading players in the most important basins worldwide.

- Webinars / Workshops with access to analysts
Plays and Basins
In Connect, hover over the Energy menu > Plays and Basins > Click on Plays and Basins Profiles.
Access Key Play Analytics data tool under Executive Dashboards. Click here to access.
Plays and Basins Insights in Connect

Research and Data are organized within **topical tabs** to instantly narrow down your search.

You are viewing **Plays and Basins** research

Keyword search and relevant filter options.

View and access **files** quickly.

Other Relevant Energy platforms, Analytics, and Resources.
# Plays and Basins Topical Tabs on Research Page

## Plays and Basins Profiles
- **Analyst insights on basin and play-level competition, value-creation, and forecast**

## E&P Trends & Analysis
- **High-frequency report series that assess implications of events affecting select plays & basins**
- **First Look**
- **E&P Trends & Analysis**

*All other tabs are entitled separately.*

## Webinars and Events
- Event workshop presentation materials
- Webinar recordings and presentation materials
Plays and Basins: North America Key Play Analytics. Click here to access.

In the Primary Tools section, click on a Key Play Analytics
• visualize, customize, and filter data by plays, operators, dates and metrics.

Key Play Analytics – an online interactive data visualization tool for analysis and evaluation of plays and operators
• Leverages select aspects of IHS Markit’s Performance Evaluator database
• Users quickly and easily create powerful visualizations of well performance data, acting as a complement to existing Play level reports available to plays and basins subscribers.
• Click here for complete user guide and methodologies.
Follow and Save Plays and Basins Bi-weekly Webinars

Save a research page into My Connect and apply an email alert to be notified when a document is updated on your page.

1. Apply notification on Webinars & Events page to keep up with the bi-weekly webinars by our research team.

2. Click on Follow this above the results listing.

3. In the Follow This Page box that appears, Name your page and select the Save for later folder, or click into the dropdown to create your own folder.

4. Select your email alert frequency.

5. Click Apply.

Saved pages are placed in My Connect and in the Saved Pages section for easy retrieval and editing.
Companies and Transactions
Companies and Transactions Deliverables

**Company Research**

- **Company Valuation:** Understanding the true drivers of shareholder value with a consistent and time-tested methodology that focuses on the valuation, upstream strategy, financial & operational performance and government drivers of the world’s leading oil & gas companies.

- **Upstream Portfolio & Strategy:** Independent assessment of upstream company strategic objectives, portfolio strengths and weaknesses, and those of peers and competitors. Thorough review of regional and asset level production profiles, identifying risks beyond peak output. Identifying opportunities to strengthen the asset portfolio that complement specific company expertise.

- **Peer Benchmarking:** Benchmark the financial and operational performance against peers. Identify key drivers of value growth and areas of focus for improvement. Identify and understand winning strategies.

**Transaction Research**

- **M&A Database and Insights:** Critical independent analysis and insights into the energy merger, acquisition, and divestiture marketplace. Dedicated deal analysis on a daily basis, across Upstream, Mid-stream, Downstream, and Oilfield Service segments. Providing proprietary deal pricing, valuation benchmarks, and M&A trend analysis.

- **Assets on the Market:** Our Significant Energy Assets on the Market (SEAM) product internally leverages the IHS M&A database and comparable market transactions to establish independent pre-deal valuations, analysis, and insights on assets and companies actively being sold.

- **Opportunity screening & due diligence:** Custom screen and identify all relevant opportunities within a select focus area and assess entry options. Evaluate the competitive environment of active buyers and sellers, and competitive deal pricing. Receive independent valuation of target assets, projects, and companies or assets targeted for divestment.
Companies and Transactions in Connect

In Connect, hover over the Energy menu > Companies and Transactions > Click on Companies and Transactions topics. Access the Upstream Company Analytics under Executive Dashboards and other data tools under Tools. Click here to access.
<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Valuation Reports</td>
<td>Company Peer Group &amp; Special Studies</td>
<td>Company Play Analysis</td>
<td>Global Upstream M&amp;A Review</td>
<td>SEAM Bi-Weekly Perspectives</td>
<td>Event workshop presentation materials</td>
</tr>
<tr>
<td>Company Valuation Updates &amp; Memos</td>
<td>Global Upstream Performance Review (GUPR)</td>
<td>Significant Digits</td>
<td>Transaction Deal Summary Sheets</td>
<td>SEAM Alerts</td>
<td>Webinar recordings and presentation materials</td>
</tr>
<tr>
<td>Company Upstream Strategy Assessments</td>
<td>Relative Valuation Dashboard</td>
<td></td>
<td>M&amp;A Topical Insights</td>
<td>Significant Digits</td>
<td></td>
</tr>
<tr>
<td>NOC Government Drivers &amp; Upstream Strategy Assessments</td>
<td>Analyst Insights Presentations</td>
<td></td>
<td>Monthly Upstream Perspectives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memos &amp; Insights</td>
<td>Significant Digits</td>
<td></td>
<td>Quarterly M&amp;A Regional Reviews</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Headline Analysis</td>
<td></td>
<td></td>
<td>M&amp;A Hot Sheet</td>
<td></td>
<td><em>This is an example of key research deliverables. More research is available on this page in Connect.</em></td>
</tr>
</tbody>
</table>
Upstream Company Analytics Dashboard  Click here to access.

**E&P Portfolio Tool**
- Access 10 years of historical production and 10 years of future production for approximately 50 of the largest International Oil Companies (IOCs), Independents, and National Oil Companies (NOCs)
- Search and analyze production portfolios by location, asset type, hydrocarbon, and field (project) name, both on a historical and forecast basis
- Benchmark companies on the basis of production portfolio attributes, volumetric growth rates, and upstream returns
- Create visualizations to better understand what drives company strategies with respect to production portfolios, while also accessing the underlying data

**Company Valuation**
- Access 10 years of historical IHSM corporate valuation assessments and their underlying asset categories for approximately 80 of the worlds key International Oil Companies, Independents, and National Oil Companies
- Select and compare key metrics that drive valuation growth; including capital spending patterns, sources/uses of cash flow, cost, profitability, and reserves/production growth.
- Benchmark companies on their valuation components, per unit reserve values, operating efficiency, and financial strength.

**Financial and Operational Benchmarking**
- Easily benchmark companies versus peers across many financial & operational metrics
- Includes auto-generated charts, ability to customize peer groups
- Allows users to easy access to underlying data.
Other Data Tools

**Company Metrics**
Comprehensive financial & operational database containing 25 years of historical data, over 300 active publicly traded companies, over 1,200 line items and metrics, with more than 60 reported geographic regions.

**Global Projects**
Contains information on projects, both onshore and offshore, with a focus on the upstream exploration and production sector. Over 8,500 projects world-wide, upstream asset types include conventional, deepwater, enhanced/improved recovery, heavy oil, and bitumen/oil sands.

**SourceArchive**
Contains financial filings of thousands of public energy companies. Users can search by keyword, company name, date, for direct access to publicly released presentations by energy companies, which allows users to quickly access multiple company presentations and filings from a single database instead of visiting individual corporate websites.
Upstream Company Analytics and other Data Tools

Primary Tools includes Upstream Company Analytics, Company Metrics, Global Projects, Company Coverage and SourceArchive to visualize, save and export data.
Transaction Research Data Tools

Transaction & Opportunity Mapping Interface: a mapping interface that allows for geo-referencing of transactions and current acquisition opportunities. Includes ability to filter across numerous characteristics, export results, graph results, and transition between the map and our Transaction databases. Mapping display also allows entitled customers to see related IHS Markit analysis and technical content, including global basin outlines, with transaction information.

Transaction Analysis Online database featuring a broad range of search parameters to identify deal comparable, including all global regions, energy subsectors, transaction value ranges, and individual buyers and sellers. Over 25 years of transaction history with more than 46,000 industry transactions.

Assets on the Market Database: Searchable and exportable database that actively tracks all known energy assets on the market, covering all global and regional locations and all resource segments, detailing valuations and full operational data including reserves, production and acreage. More than 1,800 global opportunities and tracking over $300 billion of global opportunities.
In the Energy Menu under Tools, or in the black Menu bar, click on Map and $ symbol to visualize, zoom in/out, and filter across numerous characteristics. Export data and graph results.
In the **Energy Menu** under **Tools**, click on **Transaction Analysis** and **Assets on the Markets** to visualize and customize data, which can be filtered across numerous upstream metrics. Export data and graph results, save templates, and download refreshable files.
Customize Your Research

Email alert options and your saved research.
My Connect

Click on My Connect in the black menu bar to manage Email Notifications and retrieve Saved Content.

**Home:** View your selected notifications and latest saved content.

**My Notifications:** View your selected email notifications by type (Immediate, Daily, Weekly)

**Standard Email Notifications:** A listing of all available email notifications within your subscription.

**Saved Content:** Retrieve and edit your saved content by type and folder.
Customize Your Research: Save and Follow an Individual Document.

Save an individual document into **My Connect** and apply an email alert to be notified when that document is updated.

1. Hover over the title of the report and click on the green arrow.

2. Click on the plus sign that appears at the bottom of the dropdown.

3. In the **Follow This Publication** box that appears, select the **Save for later folder** or click into the dropdown to create your own folder.

4. Select your email alert preference and click **Apply**.

5. The **Archive** button next to the report title indicates that this is a recurring deliverable and an email alert can be set. Click into this button to group and view the historical reports.

The folders and saved documents are placed in the **My Connect** section in the top, black menu bar.
Customize Your Research: Save and Follow a Research Page

Save a research page into My Connect and apply an email alert to be notified when a document is updated on your page.

1. Apply filters or a key word search on a research page.
2. Click on Follow this above the results listing.
3. In the Follow This Page box that appears, Name your page and select the Save for later folder, or click into the dropdown to create your own folder.
4. Select your email alert frequency.
5. Click Apply.

Saved pages are placed in My Connect and in the Saved Pages section for easy retrieval and editing.
Contact Us
For questions or assistance, contact our Customer Care team.

Schedule a complimentary Connect training:
IHSConnectTraining@ihsmarkit.com

Access IHS Markit Connect anywhere, anytime for the information, insight and analytics necessary to make critical decisions. Download the free Connect iPad and Smartphone apps to your mobile device.

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Mon. to Fri. 0800 to 1800 MYT (GMT +8hrs)
Email: customercare@ihsmarkit.com