

# Upstream Oil and Gas

Connect™ User Guide

2019



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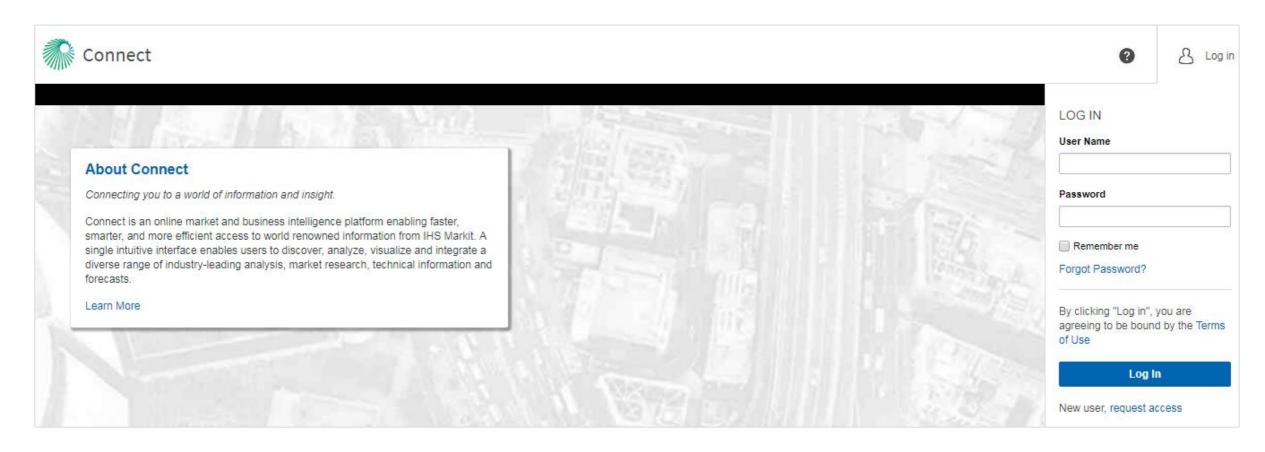
# **Connect Login Instructions**



## **Connect Login Instructions**

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

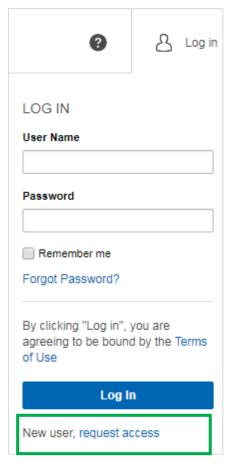
Click on 'Forgot Password?' to reset your password.





### Connect New User Registration

# Go to connect.ihs.com and request access.





# Follow 4 steps for Connect registration

- 1. Enter your corporate email address.
- 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 <a href="mailto:customercare@ihsmarkit.com">customercare@ihsmarkit.com</a> with your login instructions.

Self Registration Step 1: Enter your email address
Create a personal account  Please enter a valid corporate e-mail address to begin.  Email address:
than address.
Self Registration Step 2: Complete your profile
Please complete your profile. Required fields are indicated by *. We will keep your information confidential. We never share with third parties.

# Go to connect.ihs.com and login

•	2	Log in
LOG IN		
User Name		
Password		
Remember me		
By clicking "Log in", y agreeing to be bound of Use		Ferms
Log li	n	
New user, request ac	cess	



# 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:

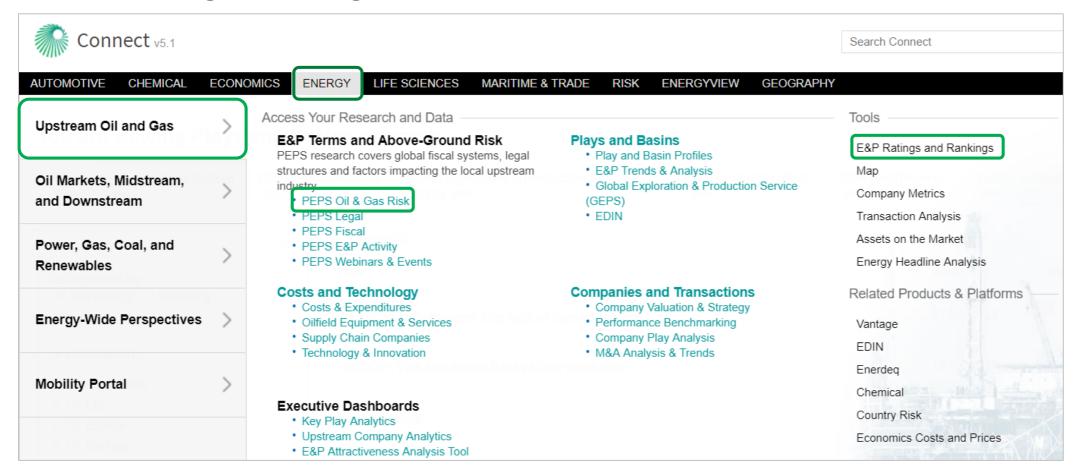
- > Customizable tool to visualize and evaluate risk for 130 countries over the immediate and five-year time-horizons, focusing on 21 upstream risk factors.
- Captures metrics relating to existing investor success and experience in access, approvals, contract stability and government relations.
- > Adjustable 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.

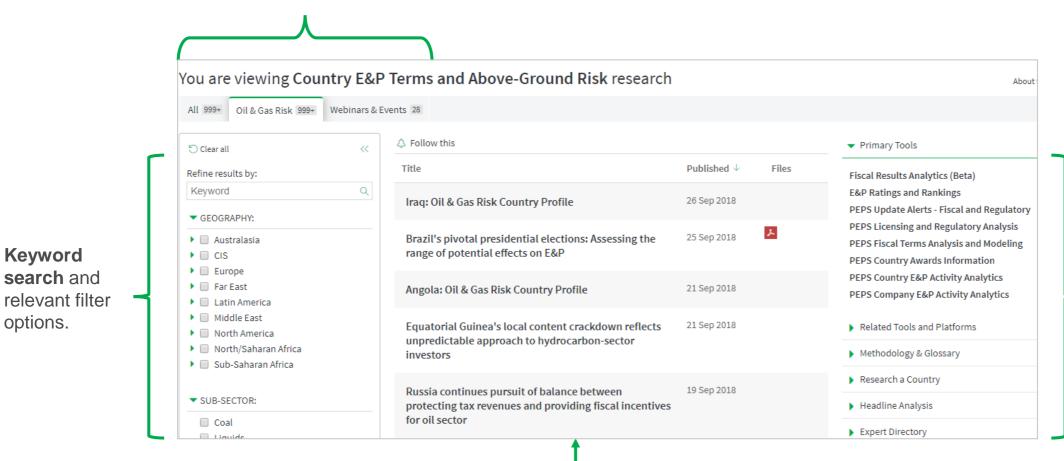
Access the **E&P Ratings and Rankings** data tool under **Tools.** 





### Oil & Gas Risk Page Navigation

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

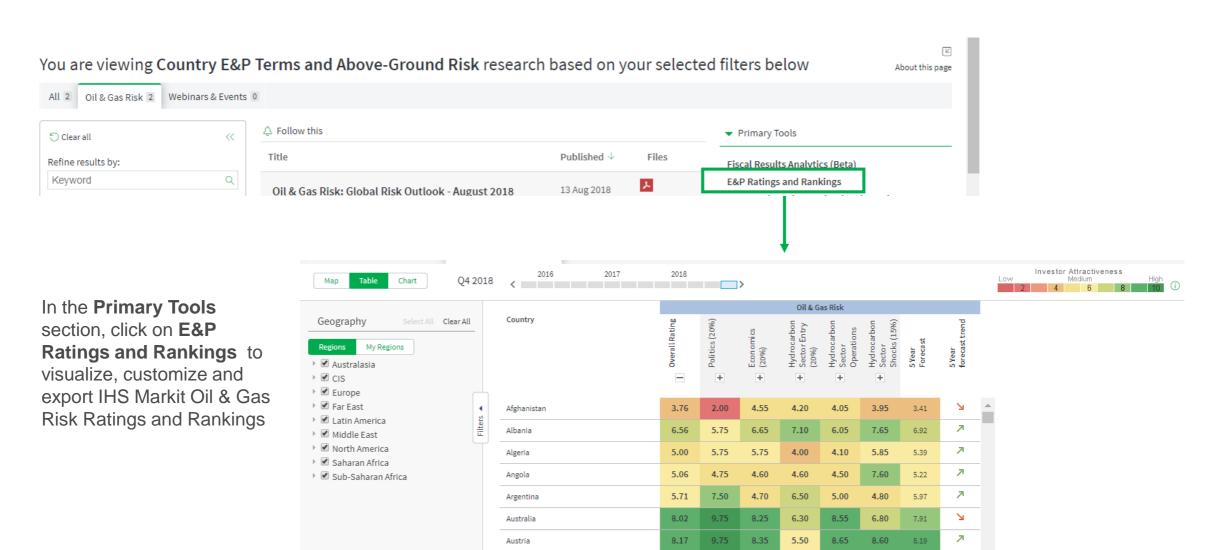


Relevant Data tools, Charts, and other Resources.

View and quickly access research and insights.

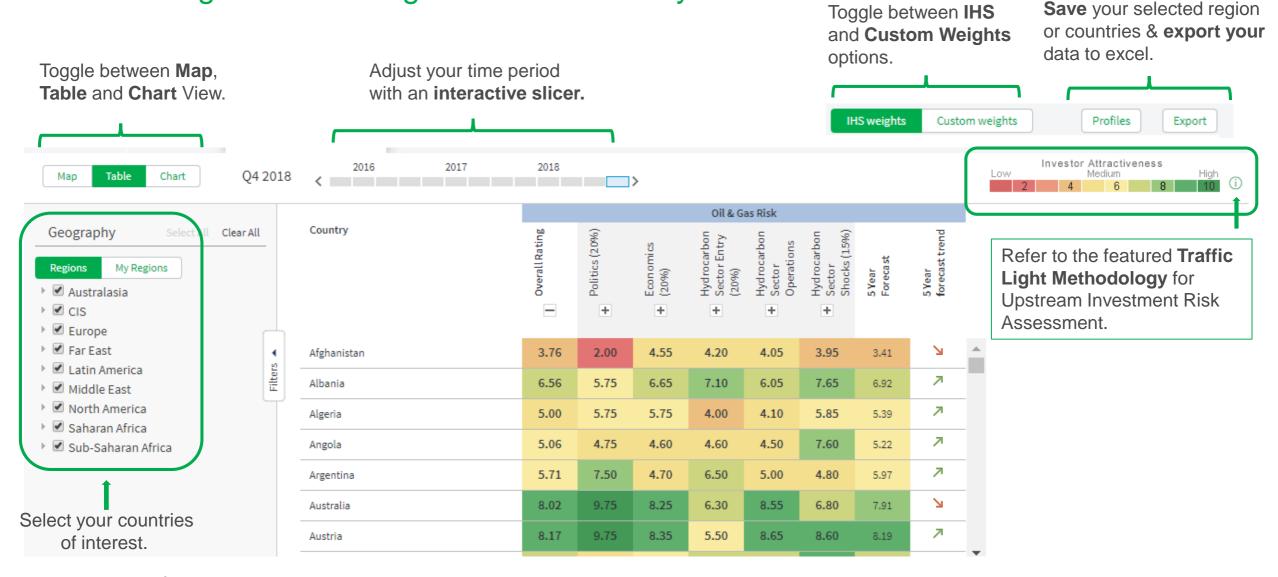


## **E&P** Ratings and Rankings Tool





## E&P Ratings and Rankings Tool Functionality





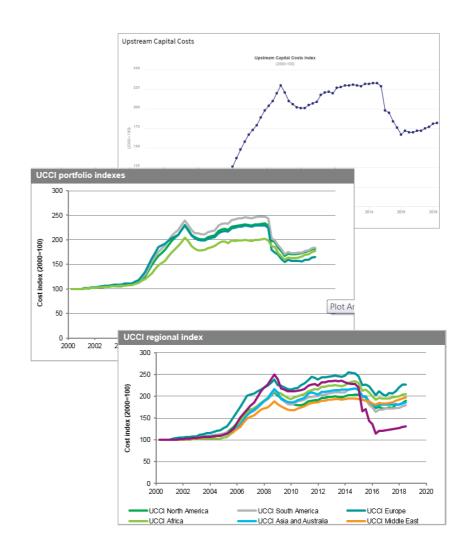
# Costs and Technology

- > 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.
- 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.
- **Brazil Costs:** 4x/year cost index and periodic strategic sourcing analysis & ad hoc insights, 1x/year workshop.
- **Webinars:** Delivered by the best IHS Markit energy thought leaders. *Ad-hoc at least 4 per*

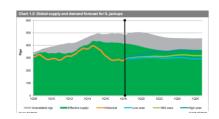




### Oilfield Equipment & Services Deliverables

- 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.
- Market Segment Cost Models: quarterly updated 50+ cost models across 34 market segments. Transparent nearly 300 raw data indices. Date range 2003-2019. (quarterly & annual)
- 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.



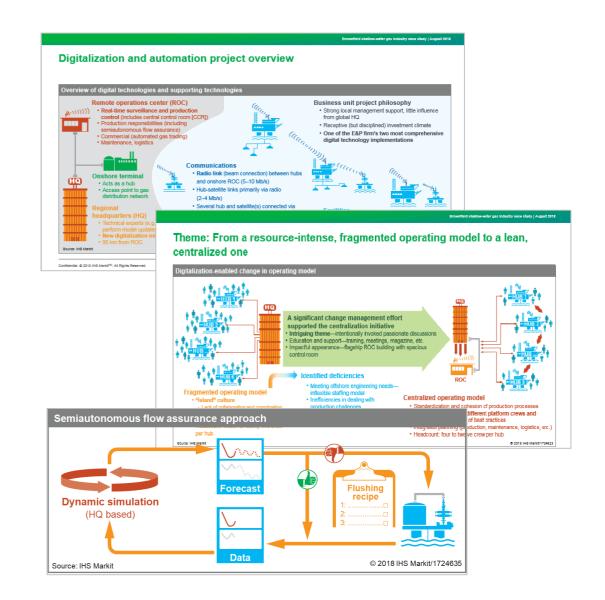


- IHS Markit IQ Reports provide detailed analysis & outlook of:
- > play-by-play details of NAM rig counts, well completions, wells frac'ed, frac stages, and stimulated length/**WellQ**.
- > US proppant supply, demand, and pricing, by play and proppant type (sand, resin-coated sand, ceramics)/ ProppantIQ.
- > Global fracturing services market/PumpinglQ.
- > US oilfield water management market /WaterlQ.
- > Global stimulation chemicals market and trends, including a market overview report and deep-dive reports on 8 key chemical categories (crosslinker, HCl, guar, etc.)/ChemIQ.
- > Material Price Tables & Headline Analysis



### Technology & Innovation Deliverables

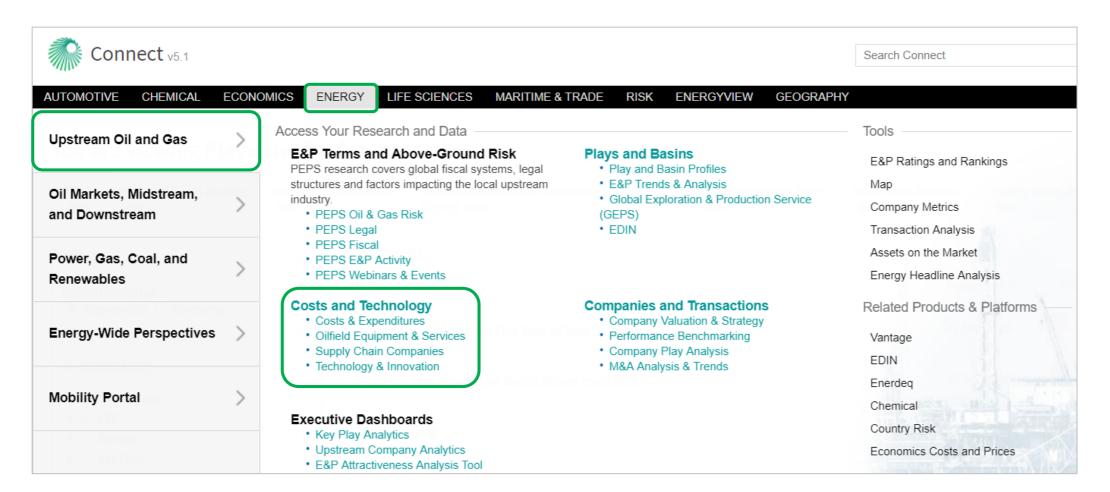
- IHS Markit Oil & Gas Digitalization Workshops: Semiannual member workshops and associated research reports.
- Technology Screening reports: Quantifying technology impacts (e.g., recovery factor increase) by resource segment to provide guidance on investment and deployment prioritization.
- Technology 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.





Keyword

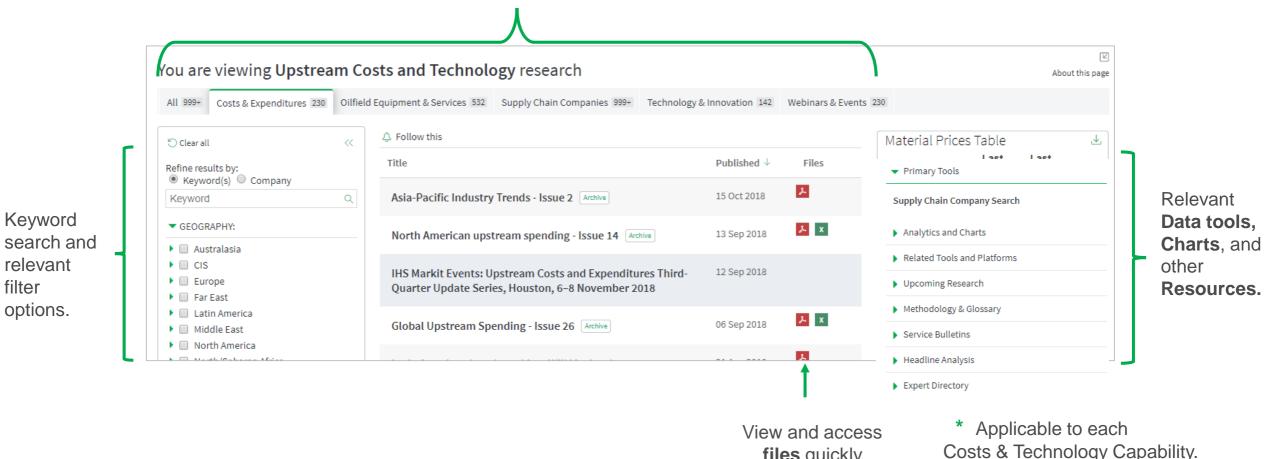
relevant

options.

filter

# Costs & Technology Page Navigation\*

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



files quickly.



# Costs & Technology Topical Tabs on Research Page

You are viewing Upstream Costs and Technology research All 999+ Costs & Expenditures 230 Oilfield Equipment & Services 479 Supply Chain Companies 999+ Technology & Innovation 142 Webinars & Events 230

Costs & Expenditures	Oilfield Equipment & Services	Supply Chain Companies	Technology & Innovation	Webinars & Events
Market Update & Summary of all Indexes Excel Workbooks for:  > Upstream Capital Costs > Upstream Operating Costs > Brazil Costs & Strategic Sourcing > North America Costs  Global Upstream Spending & Industry Trends Reports	Market Segment Analysis Reports  Market Segment Cost Models  ChemIQ  ProppantIQ  WaterIQ  Pumping IQ	Supply Chain Company Profiles	IHS Markit Oil and Gas Digitalization Workshops  Technology Screening Reports  Technology Trends Reports  Special Reports  Insights	Event workshop presentation materials  Webinar recordings and presentation materials
North American Upstream Spending Report				mple of key research ore research is available on nnect.

this page in Connect.

Last

week

83.05

72.96

Commodity

Crude oil. Brent

Crude oil, WTI

Last

month

78.11

68.96

Change

6.3%

5.8%

 $\Sigma$ 

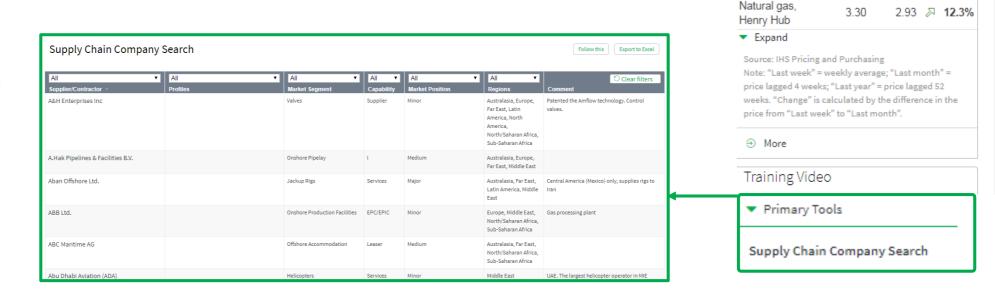


## Supply Chain Company Search Tool

### You are viewing **Upstream Costs and Technology** research



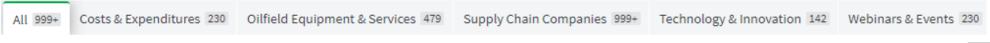
In the **Primary Tools** section, click on Supply Chain Company Search to search across 1,000 equipment and service suppliers by capability, segment, region and/or market position.





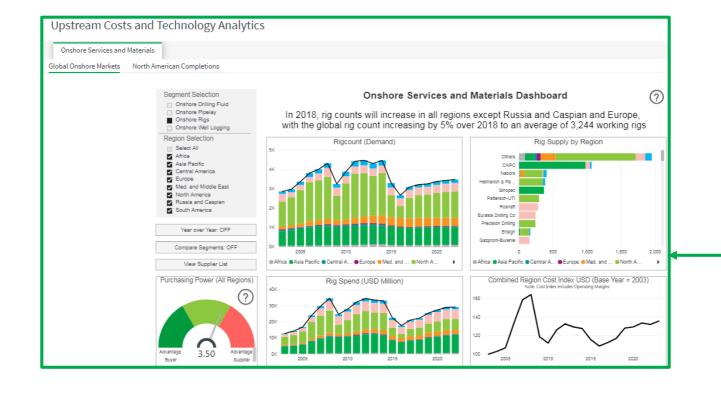
### **Upstream Costs and Technology Analytics**

### You are viewing **Upstream Costs and Technology** research



Follow this

In the Analytics and Charts section, click on Upstream Costs and Technology Analytics to visualize, customize, and export data related to Global Onshore Markets and North American Completions.



Material Prices	Table			₼
Commodity	Last week	Last month	(	Change
Crude oil, Brent	83.05	78.11	$\sum$	6.3%
Crude oil, WTI	72.96	68.96	$\sum$	5.8%
Natural gas, Henry Hub	3.30	2.93	Ŋ	12.3%

#### Expand

Source: 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

Analytics and Charts
 Upstream Costs and Technology Analytics

Brazil Costs and Strategic Sourcing Market Segment Cost Indexes Upstream Operating Costs Upstream Capital Costs

Downstream Capital Costs Index

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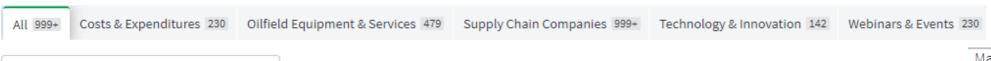
Clear all

### Costs & Technology Dynamic Charts

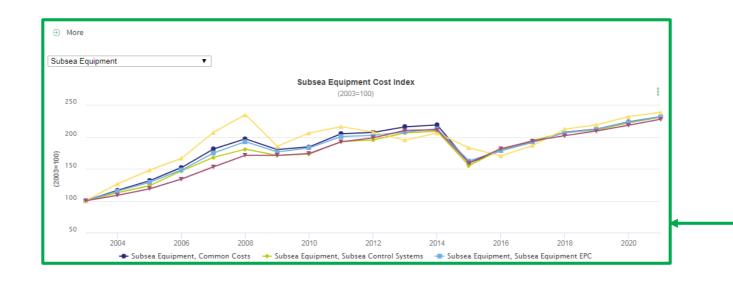
<<

### You are viewing Upstream Costs and Technology research

Follow this



In the **Analytics and Charts** section, click on a relevant option to visualize, customize, and export **Upstream Costs** and **Market Segment Cost** Indexes.



Material Prices Table Last Change Commodity week month Crude oil. Brent 83.05 78.11  $\lambda$ 6.3% Crude oil. WTI 72.96 68.96 5.8% Natural gas. 3.30 2.93 2 12.3% Henry Hub

#### Expand

Source: 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

Analytics and Charts

Brazil Costs and Strategic Sourcing Market Segment Cost Indexes Upstream Operating Costs **Upstream Capital Costs** 

**Downstream Capital Costs Index** 

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# Plays and Basins



### Plays and Basins Deliverables

- Plays and Basins North America: Provides the most comprehensive forward-looking analysis of oil and gas exploration and development activity in leading unconventional resource plays in both the U.S. and Canada.
  - > Regularly published insight into competitive activity in North American unconventional plays.
  - > Type curves and economics for different sub-plays within each play.
  - > Benchmarking of key operators by daily production and economics.
  - > Trends in well construction and drill times.
  - > Rig-based, market constrained production forecasts for North American resource plays.
  - > Forward-looking evaluation of emerging plays.
  - > Direct access to IHS Markit experts.

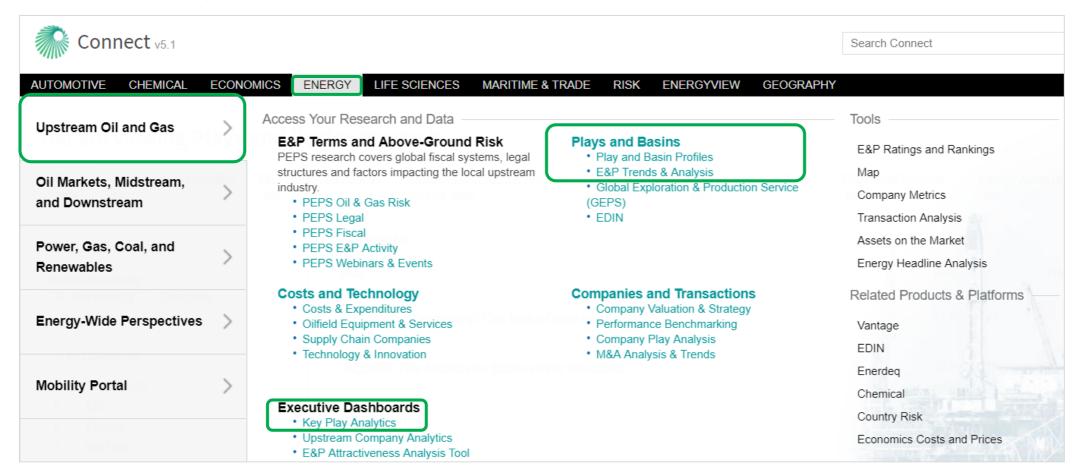
- **Basin Insights**: the leading source for commercial and strategic advisory into changes in the E&P industry's perception of a play's or basin's commercial value; integrates competitive landscape analysis, resource potential and above-ground risks.
- Regularly updated briefs that answer questions such as:
  - > To whom is this basin most important, and why?
  - > How is value being created in this basin, and by whom?
  - > What are the drivers of future basin development?
- Leading Indicator Memos: High-frequency report series that assess implications of events affecting select basins:
  - > E&P Trends
  - > Critical Wells
  - > Competitive Landscape
  - > Policy Shifts

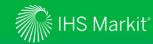


### Plays and Basins

In Connect, hover over the **Energy** menu > **Plays and Basins** > Click on **Plays and Basins Profiles.** 

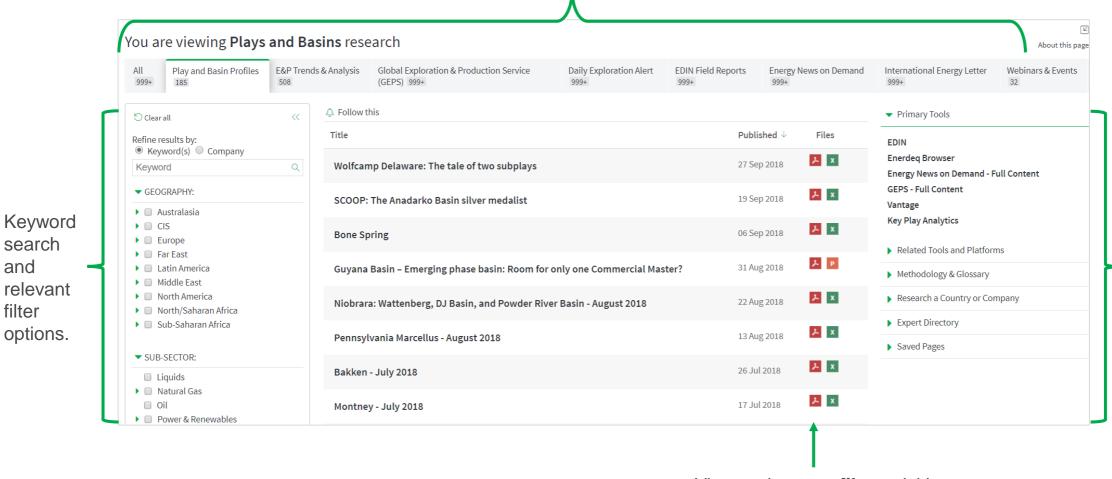
Access Key Play Analytics data tool under Executive Dashboards.





### Plays and Basins Insights in Connect

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



Other
Relevant
Energy
platforms,
Analytics,
and
Resources.

View and access files quickly.



### Plays and Basins Topical Tabs on Research Page

#### You are viewing Plays and Basins research All Play and Basin Profiles E&P Trends & Analysis Global Exploration & Production Service EDIN Field Reports Energy News on Demand Webinars & Events **Plays and Basins Profiles E&P Trends & Analysis** \*All other tabs are entitled separately. **Webinars and Events** Analyst insights on basin and High-frequency report series that Event workshop presentation materials

play-level competition, valuecreation, and forecast

assess implications of events affecting select basins

**F&P Trends** Critical Wells Competitive Landscape Policy Shifts

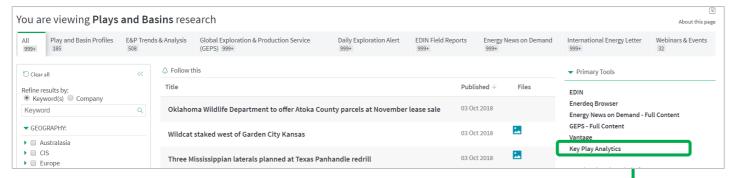
**Entitled separately** Webinar recordings and

> \*This is an example of key research deliverables. More research is available on this page in Connect.

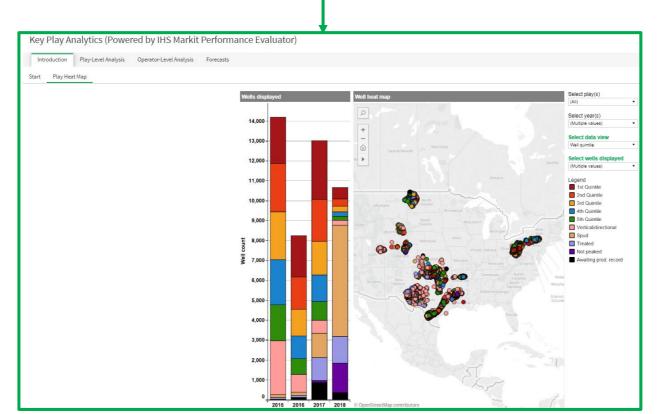
presentation materials



# Plays and Basins Key Play Analytics



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





# 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**

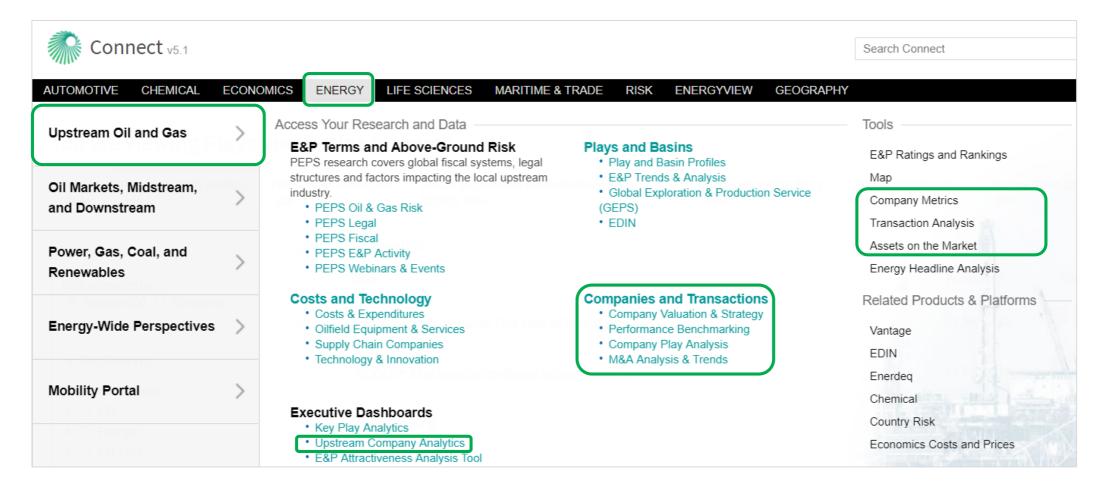
- M&A Database and Insights: Critical independent analysis and insights into the energy merger, acquisition, and divestiture marketplace. Dedicated deal analysis on a daily basis, across Upstream, Mid-stream, Downstream, and Oilfield Service segments. Providing proprietary deal pricing, valuation benchmarks,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





# Companies and Transactions Topical Tabs on Research Page

You are viewing Upstream Companies and Transactions research

All 999+ Company Valuation & Strategy 999+ Performance Benchmarking 999+ Company Play Analysis 227 M&A Analysis & Trends 999+ Assets on the Market 999+ Webinars & Events 28

Company Valuation and Strategy	Performance Benchmarking	Company Play Analysis	M&A Analysis and Trends	Assets on the Markets	Webinars and Events
Company Valuation Reports	Company Peer Group & Special Studies	Company Play Analysis	Global Upstream M&A Review	SEAM Bi-Weekly Perspectives	Event workshop presentation materials
Company Valuation Updates & Memos	Global Upstream Performance Review (GUPR)		Transaction Deal Summary Sheets	SEAM Alerts	Webinar recordings and presentation materials
Company Upstream Strategy Assessments	Relative Valuation Dashboard		M&A Topical Insights		
NOC Government Drivers & Upstream Strategy Assessments	Analyst Insights Presentations		Monthly Upstream Perspectives		
Memos & Insights			Quarterly M&A Regional Reviews		
Headline Analysis			TOVIEWS		ple of key research re research is available on nect.



### **Upstream Company Analytics and Data Tools**

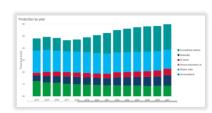
**E&P Portfolio Visualization Tool**: newly designed and updated, the E&P Portfolio Tool is a comprehensive web-based interface that allows users to explore both historical oil and gas production, as well as forecast volumes based on up-to-date IHS Markit analysis of company portfolios.

**Company Valuation Visualization Tool**: a comprehensive web-based interface that allows users to explore both historical company valuation changes, relative share price performance, as well as our independent forecast for EBITDA, cash flow, and net income.

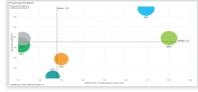
Company and Peer Benchmarking Metrics on Power BI: allows users to easily benchmark companies versus peers across many financial & operational metrics. Includes auto-generated charts, ability to customize peer groups, and easy access to underlying data.

**Company Metrics:** comprehensive financial & operational database. 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 worldwide, upstream asset types include conventional, deepwater, enhanced/improved recovery, heavy oil, and bitumen/oil sands.





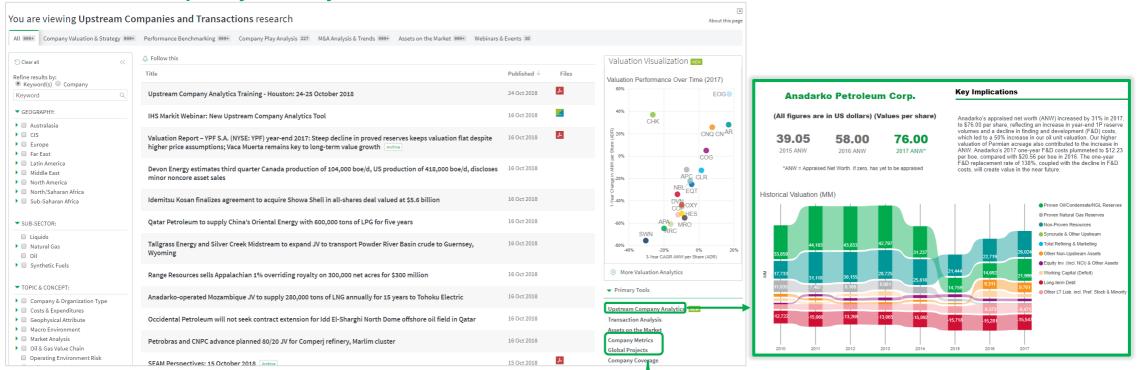


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### **Upstream Company Analytics and Data Tools**



In the **Primary Tools** section, click on a **Upstream Company Analytics**, **Company Metrics** and **Global Projects** to visualize data, which can be filtered by operators, years and top metrics. Save templates and download refreshable files.







### 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.



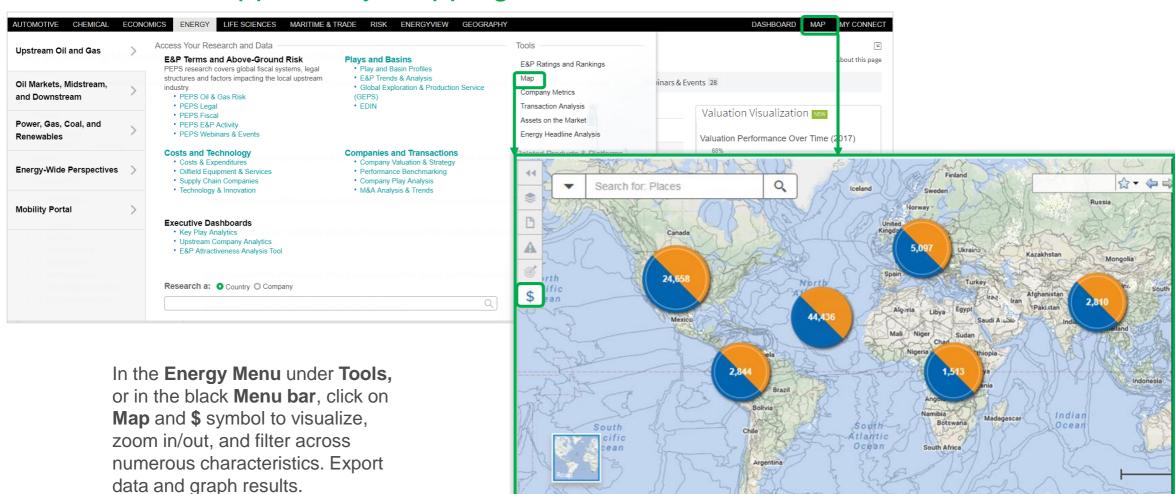




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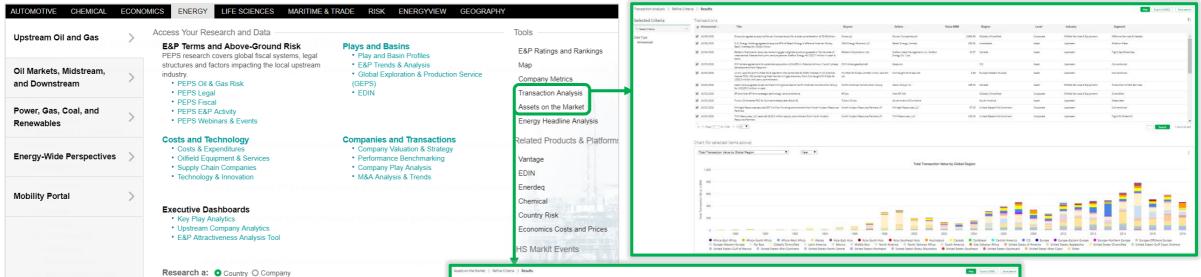


### Transaction & Opportunity Mapping Interface





### Transaction Analysis & Assets on the Market Data Tools



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.





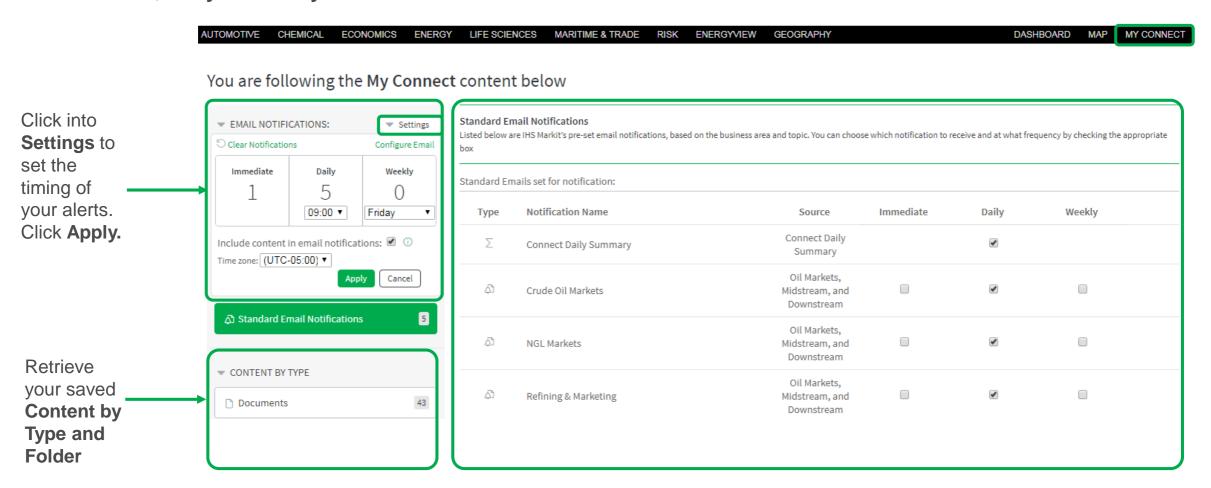
# Customize Your Research

Email alert options and your saved research.



### My Connect

Click on **My Connect** in the black menu bar to manage **Email Notifications** by selecting/deselecting the check boxes in the **Immediate**, **Daily** or **Weekly** columns.

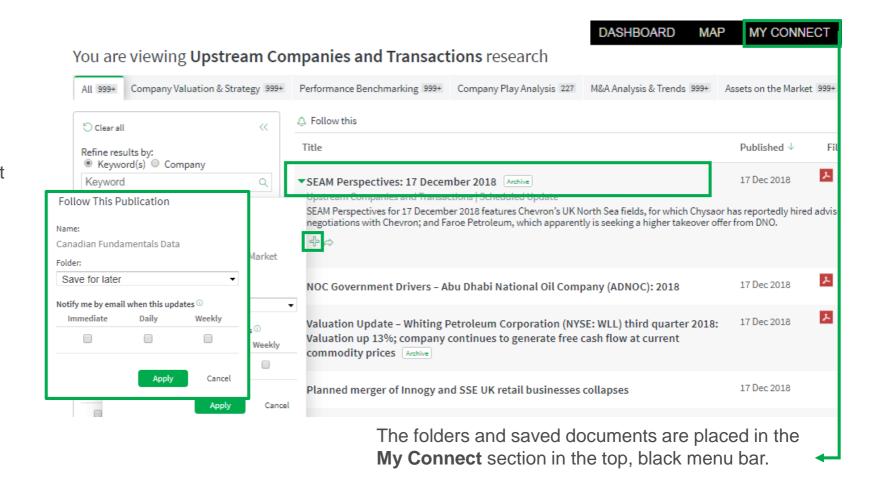




### Customize Your Research: Save and Follow an Individual Document.

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

- Hover over the title of the report and click on the green arrow.
- Click on the plus sign that appears at the bottom of the dropdown.
- 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.
  Archive

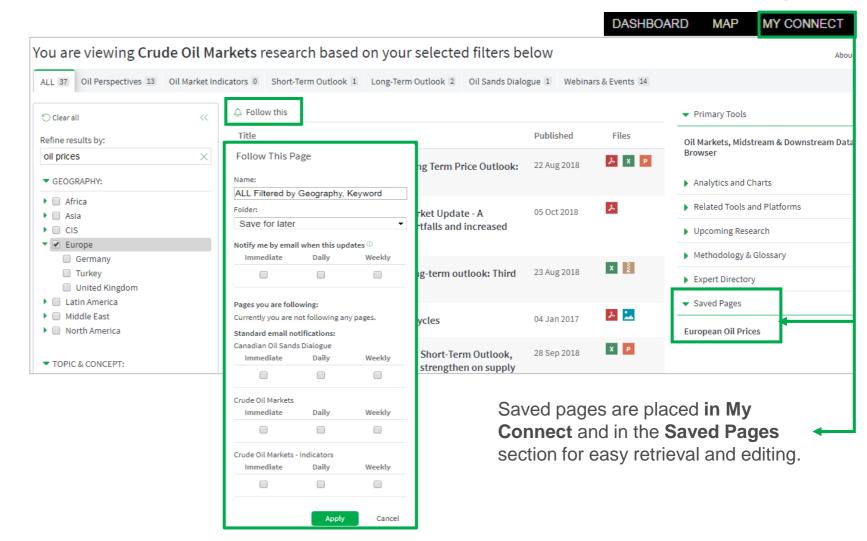




## Customize Your Research: Save and Follow a Research Page

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

- Apply filters or a key word search on a research page.
- Click on Follow this above the results listing.
- 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.





### **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 <u>iPad</u> and <u>Smartphone</u> apps to your mobile device.



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