



Industry Insights

Global Oil and Gas M&A Outlook

Q3 2023



Executive Summary

In this edition of our *Global Oil and Gas M&A Outlook*, we examine and evaluate current trends for commodities prices, leading sector indicators, valuation developments, M&As performed during the quarter and developments on featured specialty subsectors.

Our top insights for this edition are detailed below:

- The LNG market remains heavily impacted by the Russia's war on Ukraine, which has caused a seismic shift in LNG trade flows as the European continent has turned into a major LNG importer willing to pay premium prices.
- The stagnating supply of LNG will continue until 2025–2026 when a new cycle of liquefaction capacity comes online. In consequence, the LNG market will face upward pricing pressure, especially in winter, when European and East Asian LNG demand may turn inelastic.
- In Q3 2023, global M&A activity registered a total of 154 deals with a disclosed value of USD 56.0 billion. The registered transactions are mainly concentrated in North America (52% of announced global deals and 77% of their disclosed value), specifically the U.S., which represented 36% of global deals with 75% of the global disclosed value.

Table of Contents

0	
3	Global Data Selected Global Index Performance FX Rates of Key Currency Pairs
5	Market Review Trading Statistics Leading Sector Indicators Subsector Focus Commodity Prices
14	M&A Transactions Announced Deals Hotspots for Oil and Gas Deal Activity Top 10 Global Deals Announced
22	Trading Statistics Commodity Prices Company Trading Statistics
31	Stay Ahead with Kroll

Explanatory Note:

To create this report, Kroll prepared a set of peer groups, according to the eight most representative subindustries of the oil and gas sector and the most relevant companies by market capitalization.

Deals displayed in "Top 10 Global Deals Announced" include acquisitions of private companies that do not disclose some information. Other M&A analysis performed throughout the report considers all available information.

Definition:

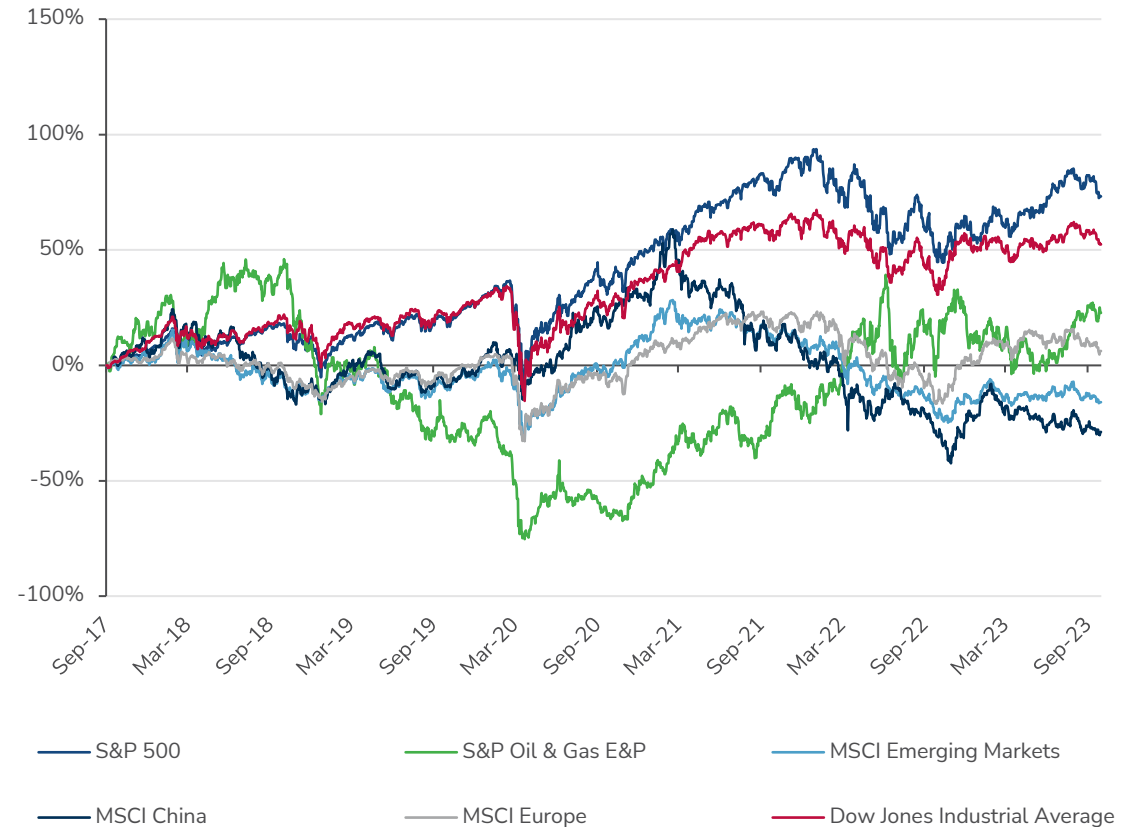
LNG: liquefied natural gas.

Economic Environment ●○

Key Considerations

- Over the last 12 months, the economic environment has been largely impacted by inflation levels remaining above policymakers' targets.
- Given the negative nature of elevated inflation, central banks have implemented an aggressive monetary policy of interest rate increases to counter inflation.
- In the short term, policymakers have made it clear that the restrictive cycle and the efforts against elevated inflation aren't over. Therefore, interest rates are set to remain elevated, while further rate increases may be enacted depending on the economic outcomes.
- Given the negative correlation between interest rates and the performance of most stocks, the current environment of elevated interest rates has negatively impacted the financial markets around the world, and companies' potential earnings are diminished.
- Despite the challenging conditions caused by elevated interest rates and the risk of recession in the U.S. and the Eurozone, index performance levels have grown YoY. The S&P 500 has grown 19.6%, and the Dow Jones has grown 16.6%, while MSCI China and Europe are up 2.9% and 25.4%.

Selected Global Index Performance



Source: Capital IQ

Explanatory Note:

The graph shown above portrays the performance of selected indexes against the S&P Oil and Gas E&P Industry Index, which encompasses a selection of the most important E&P companies in the world. The calculation takes September 1, 2017, as the starting point and tracks the percent change until October 1, 2023.

Definition:

E&P: exploration and production.

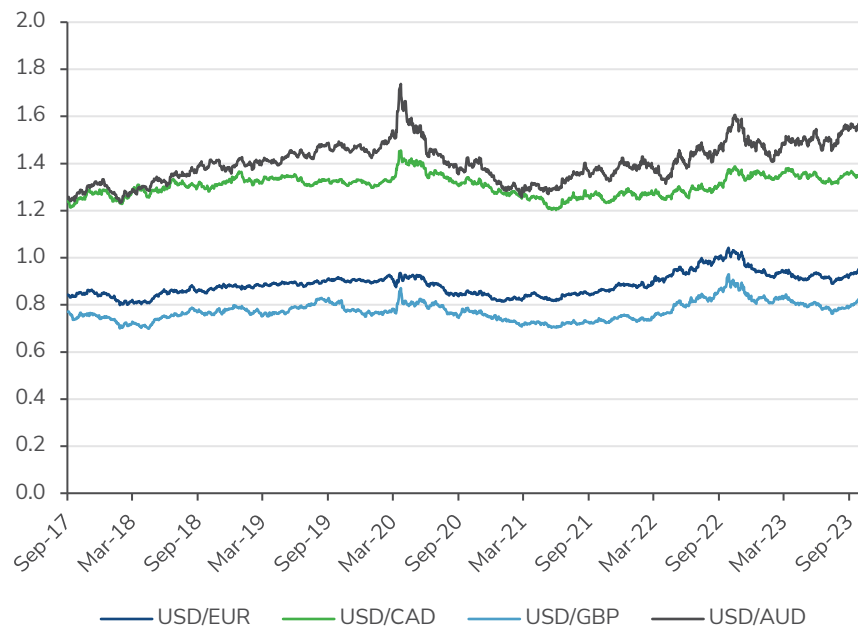
S&P: Standard & Poor's 500.

MSCI: Morgan Stanley Capital International

Economic Environment ○●

FX Rates of Key Currency Pairs

Key Exchange Rates



Other Relevant FX Pairs in the Global Oil and Gas Market

FX Pair	2017 Avg.	2018 Avg.	2019 Avg.	2020 Avg.	2021 Avg.	2022 Avg.	2023 Avg.
USD/MXN	18.91	19.23	19.25	21.50	20.28	20.11	17.80
USD/NOK	8.27	8.14	8.80	9.42	8.60	9.61	10.48
USD/BRL	3.19	3.65	3.94	5.16	5.39	5.16	5.01
USD/SAR	3.75	3.75	3.75	3.75	3.75	3.75	3.75
USD/JPY	112.14	110.41	109.01	106.77	109.82	131.42	138.15
USD/SKK	26.71	25.54	26.91	26.43	25.48	28.65	27.82
EUR/RUB	65.93	74.05	72.44	82.67	87.19	74.17	90.08

Source: Capital IQ

Note: 2023 average considers January–September.

Key Considerations

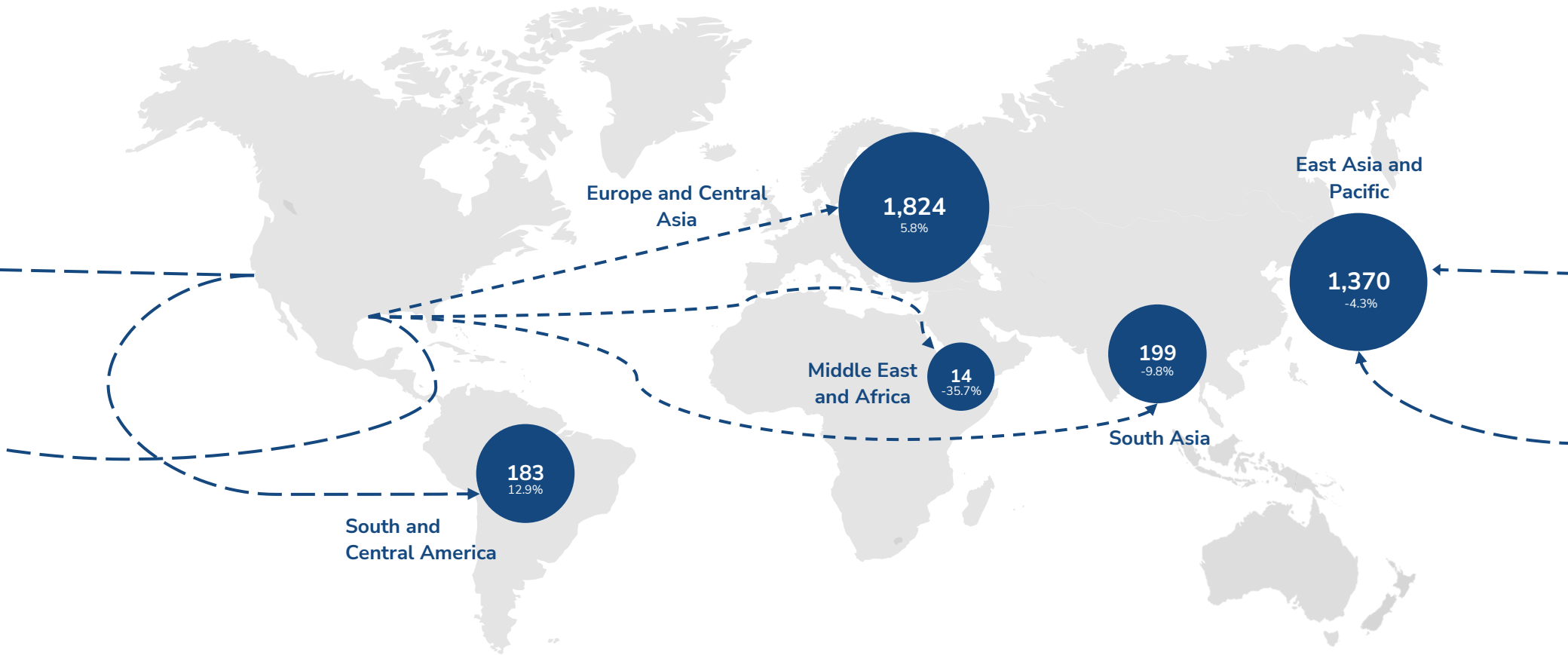
- The different banking cycles among the advanced economies are a major driver of FX fluctuations. As central banks evaluate their response, high interest rates in the short term will make major currencies such as the U.S. dollar or the euro more attractive to investors who look for returns in more solid currencies.
- In Q3 2023, the U.S. dollar has been characterized by its strength and supported by healthy economic activity in the U.S. The lasting strength of the U.S. dollar will depend on local consumer spending, which may be negatively affected by the depletion of consumer savings and less favorable credit conditions after the pandemic.

Definition:

FX: foreign exchange.

Trading Statistics ●○○○

Q3 2023 U.S. Crude Oil Exports by Region (MBbls/d)



Source: U.S. Department of Energy

Explanatory Note:

Data for this visualization includes U.S. commodity export values from July 2023 to August 2023.

Definition:

MBbls/d: thousand barrels per day.

Trading Statistics

Key Considerations

- Throughout 2023, the LNG market has continued to face constrained supply and high demand, keeping prices above the levels registered before late 2021. This situation is expected to continue until new liquefaction capacity becomes available in 2025 and 2026, mainly in the U.S. and Qatar.
- Heightened demand is linked to geopolitical events. Specifically, the reduction of Russian supply to Europe has forced the European continent to become a major LNG importer.
- This situation has benefited major global exporters of LNG, including MENA, North America, and Southeast Asia and Oceania, which together represent 82.6% share of global LNG exports, equivalent to 80.8 MMt.
- In Q3 2023, global LNG trade has decreased by 3.3 MMt, or 3.2%, compared to Q2 2023 despite the continued high demand and constrained supply conditions.
- Reductions in exports were mainly driven by lack of demand from Western Europe, which had an import decrease of 7.7 MMt QoQ, due to weak industrial demand and the continent's high levels of gas reserves (96% as of October 2, 2023).
- At the same time, exports to East Asia have increased by 3.9 MMt, thanks to stabilizing prices at levels below the previous year.

Explanatory Note:

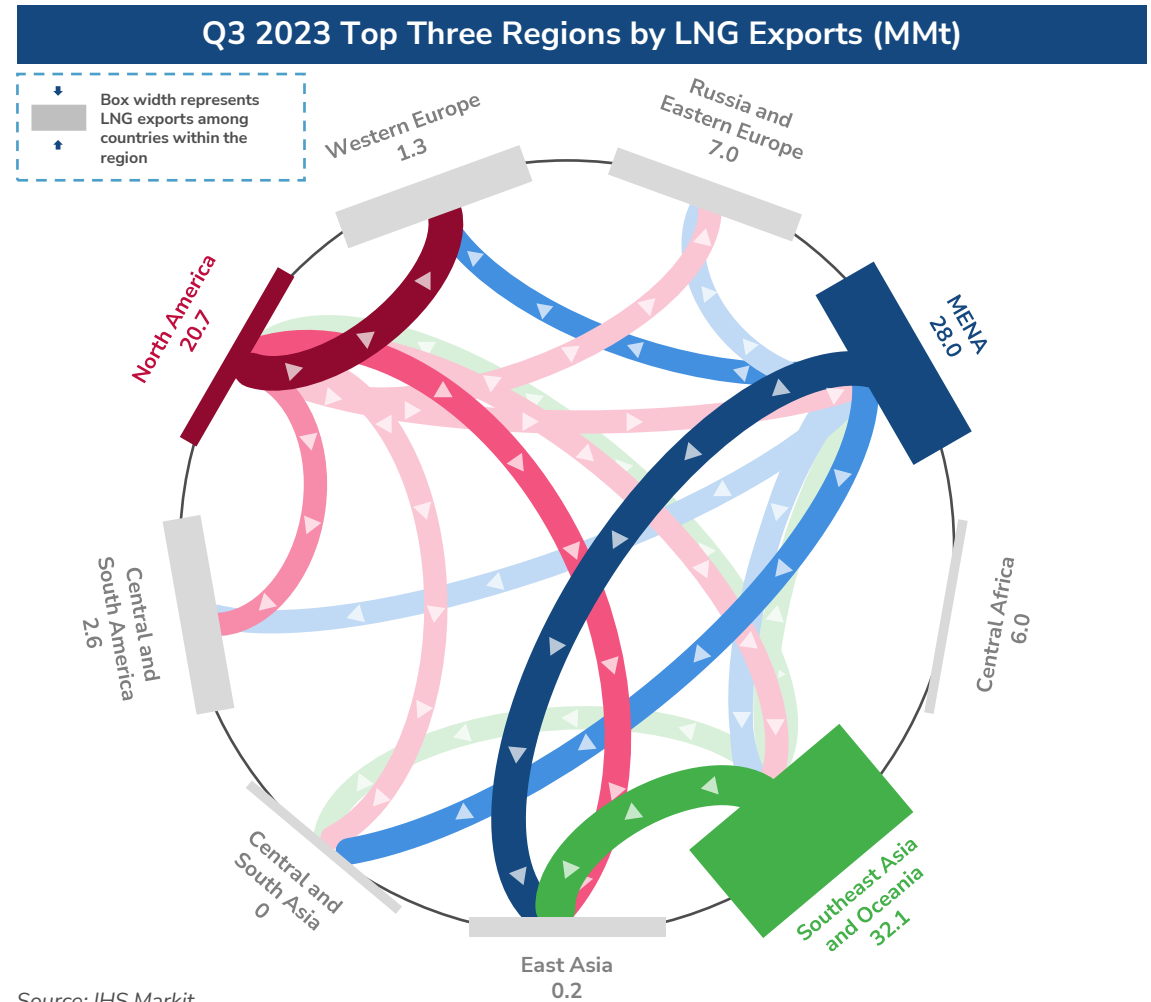
Data for this visualization includes commodity bilateral trade export values of selected regions from July 2023 to September 2023. Values accompanying the boxes indicate the global LNG exports for each region during the analyzed period.

Definitions:

LNG: liquefied natural gas.

MMt: million metric tons.

QoQ: quarter over quarter.



Trading Statistics

Key Considerations

- The rest of the regions highlighted in the illustration are mainly importers of LNG. In Q3 2023, they accounted for 19.2% of global LNG exports, equivalent to 17.1 MMt. This export total was reduced by 1.2 MMt from 18.3 MMt in Q2 2023.
- Specifically in East Asia, Western Europe and Eastern Europe, the intensity of the upcoming winter will prove to be a key factor in the short term for LNG demand. As heightened competition for LNG supplies requires the buildup of a sufficient stockpile to serve national gas demand, nations are taking measures to ensure sufficient gas reserves.
- In consequence, the cold months in Europe and East Asia may increase the inelasticity of LNG demand, which paired with a constrained supply of LNG may cause price spikes on the spot market.
- However, this effect has been delayed considering that European gas reserves remain elevated (96% as of October 2, 2023) and the continent's demand is weaker. This fact has enabled reduced spot prices YoY.
- Reduced YoY prices have encouraged an active spot market in China, which is set to resume its role as the world's largest single LNG market, becoming the primary driver of LNG demand.

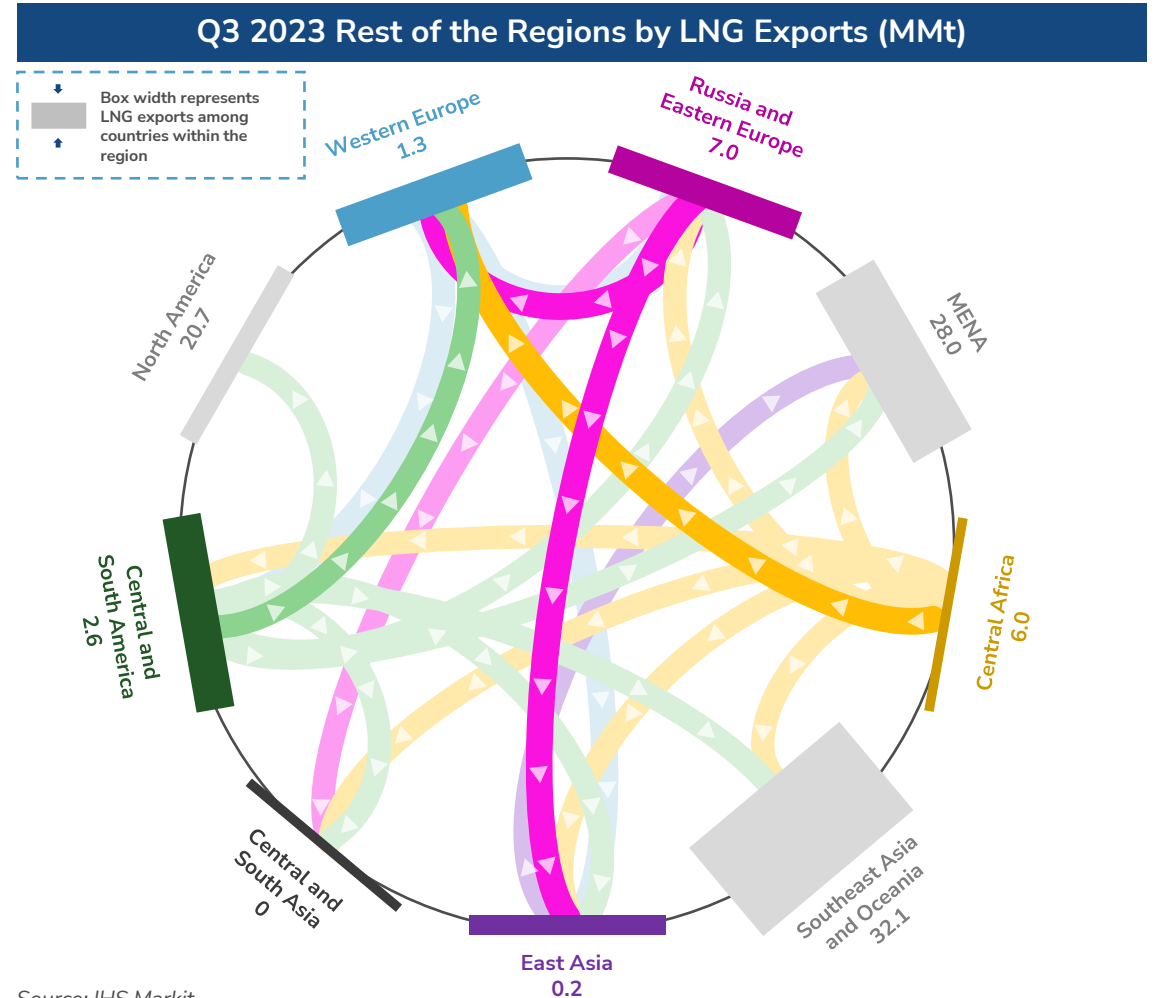
Explanatory Note:

Data for this visualization includes commodity bilateral trade export values of selected regions from July 2023 to September 2023. Values accompanying the boxes indicate the global LNG exports for each region during the analyzed period.

Definitions:

LNG: liquefied natural gas.

MMt: million metric tons.

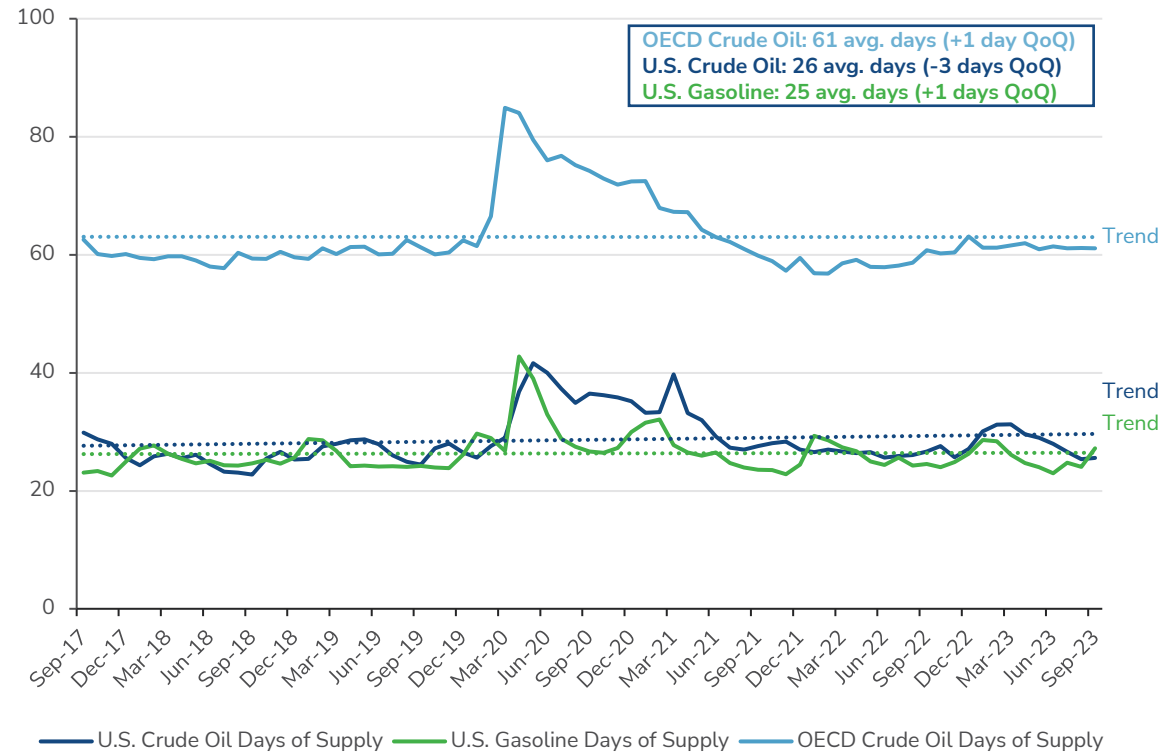


Leading Sector Indicators ●○

Key Considerations

- During Q3 2023, OECD commercial crude oil days of supply remained steady QoQ, despite Saudi Arabia's voluntary 1 MBbls/d production cut in July this year. This days of supply level is expected to last at least until the end of the year.
- Average U.S. crude oil and gasoline days of supply presented minimum variances due to a 3.0% decrease in crude oil exports and an increase in average refinery percent utilization from 92.0% to 92.7% QoQ.
- Average days of supply for OECD countries presented the following movements QoQ:
 - The OECD average crude oil supply has remained stable, increasing by one day.
 - U.S. crude oil supply has declined QoQ by three days, standing at 26 days in Q3 2023.
 - U.S. average gasoline supply stands at 25 days after increasing by one day QoQ.
- The U.S. Department of Energy announced on July 7, 2023, the purchase of 6 million barrels of oil for the strategic petroleum reserves for October and November 2023. This is the third repurchase request issued this year to replenish the reserves and tame the high oil prices observed last year.

OECD and U.S. Days of Supply Q3 2023



Source: U.S. Energy Information Administration

Explanatory Note:

Days of supply is "a measure of the adequacy of inventories. It is calculated by taking the current stock level and dividing by product supplied (used as an estimate of demand) averaged over the most recent four-week period. For crude oil, refinery inputs of crude oil are used as a proxy for demand" (U.S. Energy Information Administration).

Definitions:

QoQ: quarter over quarter.

MBbls/d: thousand barrels per day.

Leading Sector Indicators

Key Considerations

- In 2023, the monthly average rig count increased by 82 to 1,829 rigs. This increase was mainly driven by Europe, the Middle East and Asia Pacific, which added 21 rigs each. In contrast, the U.S. was the only country to reduce its rig count, with a 10-rig reduction.
- In terms of QoQ growth, Canada registered the largest quarterly rig count growth at the end of Q3 2023, with 42 additional rigs, a 2.4% increase. This contrasts with Canada's previous decrease of 50 rigs between the end of Q1 2023 and Q2 2023.
- At the end of Q3 2023, the U.S. registered a 3.1% decline in rig count QoQ due to a reduction of 41 oil rigs and 15 gas rigs.
- Oil prices and rig counts present a direct relationship with a two-to-three-month lag. In the U.S., rig count peaked at 779 in December of 2022 thanks to high prices caused by the Ukrainian conflict. Since then, as prices have fallen, U.S. rig closures have driven the QoQ global rig decline in 2023.
- This trend is expected to reverse as the U.S. is set to increase its rigs to over 700 in 2024 from the average of 626 in Q3 2023. With this increase, the U.S. hopes to accomplish production targets from operators and benefit from growing prices caused by the OPEC cuts and the turmoil in the Middle East.

Explanatory Note:

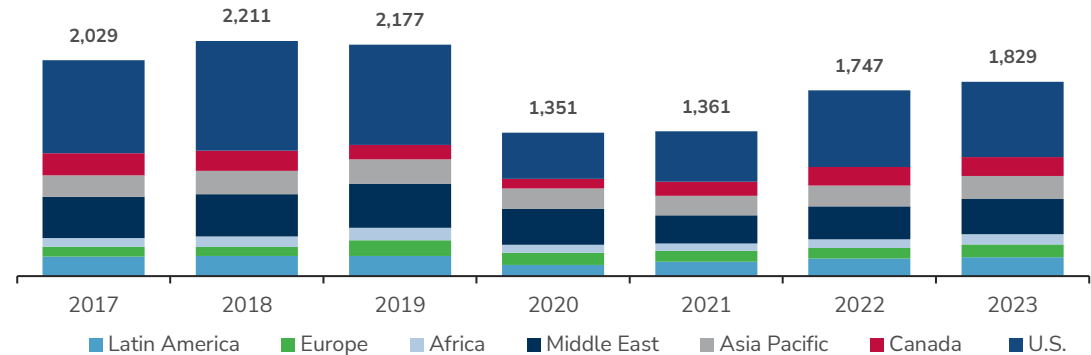
The first graph, "Monthly Average Rig Count," displays the average number of active drilling rigs throughout the world. This indicator is closely watched as a precursor to oil production across the oil and gas sector. The second graph, "Q3 2023 Rig Count," does not include "Miscellaneous" rigs because they represent a marginal number of rigs. Furthermore, "Q3 2023 Rig Count" considers rig count at the end of each quarter.

Definition:

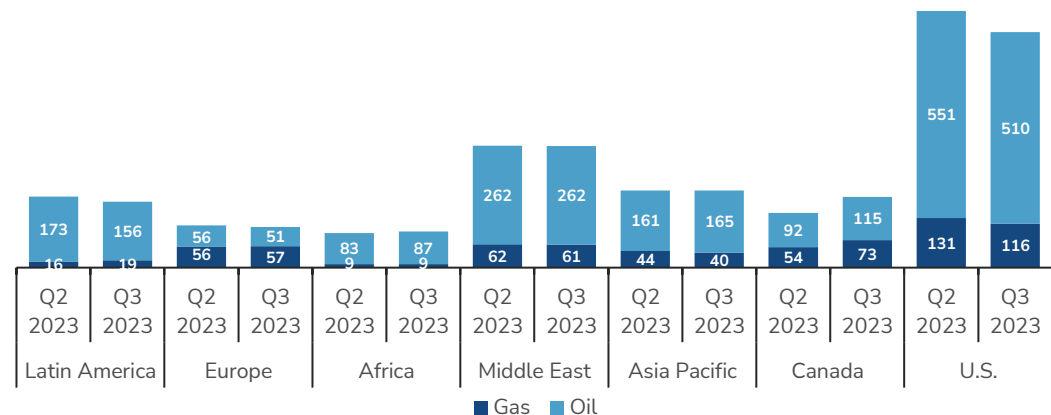
QoQ: quarter over quarter.

Rig Count Analysis Q3 2023

Monthly Average Rig Count



Q3 2023 Rig Count

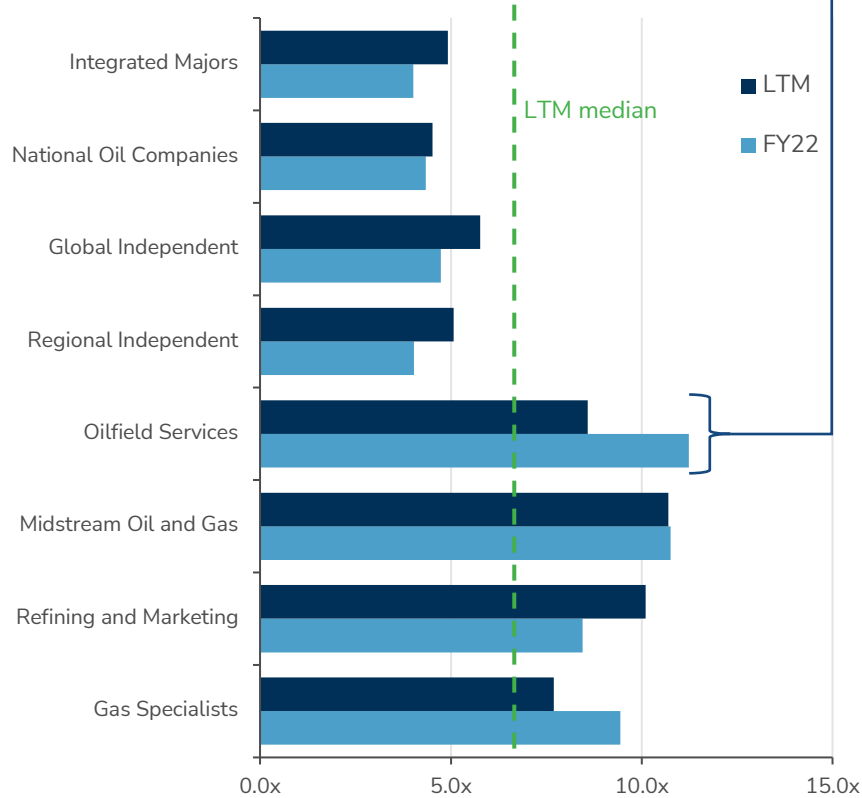


Source: Baker Hughes, September 30, 2023

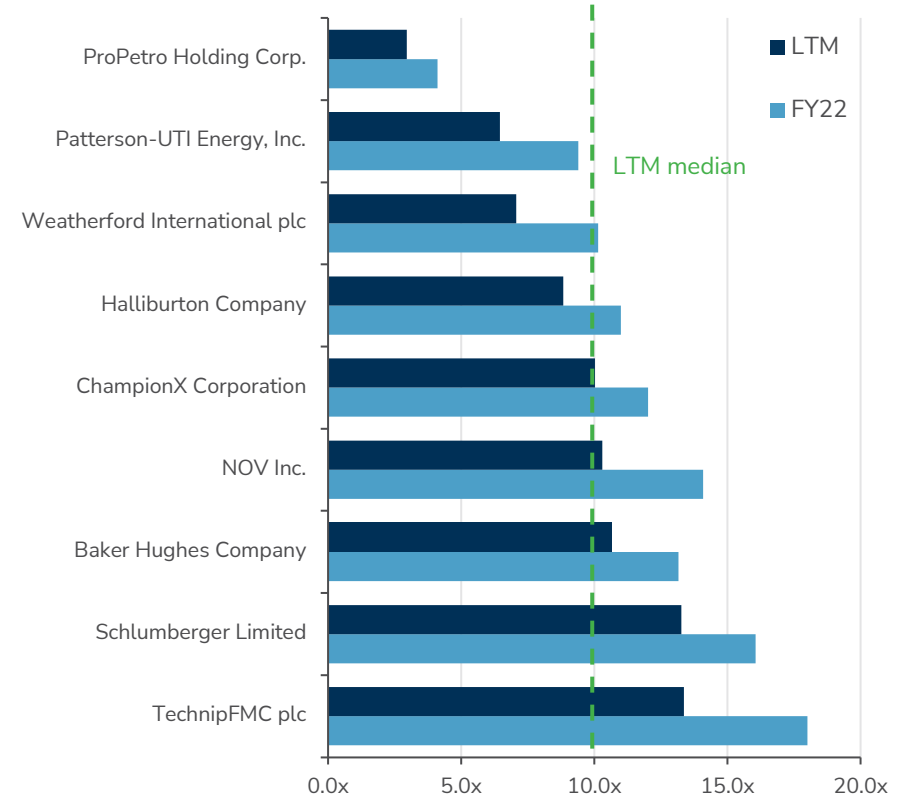
Subsector Focus ●○○

EV/EBITDA

Oil and Gas Subsector Average (LTM/FY22) Q3 2023



Spotlight: Oilfield Services



Source: Capital IQ as of September 29, 2023

Explanatory Note:

Subsector averages consider the available enterprise values and EBITDA values for the public companies under each category. Similarly, the oilfield services subsector spotlight considers the most representative companies by market capital (as of September 29, 2023) and uses the available data for the multiple calculation (LTM EV/EBITDA and FY22 EV/EBITDA). Therefore, the LTM median presented in the spotlight may differ from the subsector average because it only considers said companies and not all the companies listed under the category.

Definitions:

EV: enterprise value.

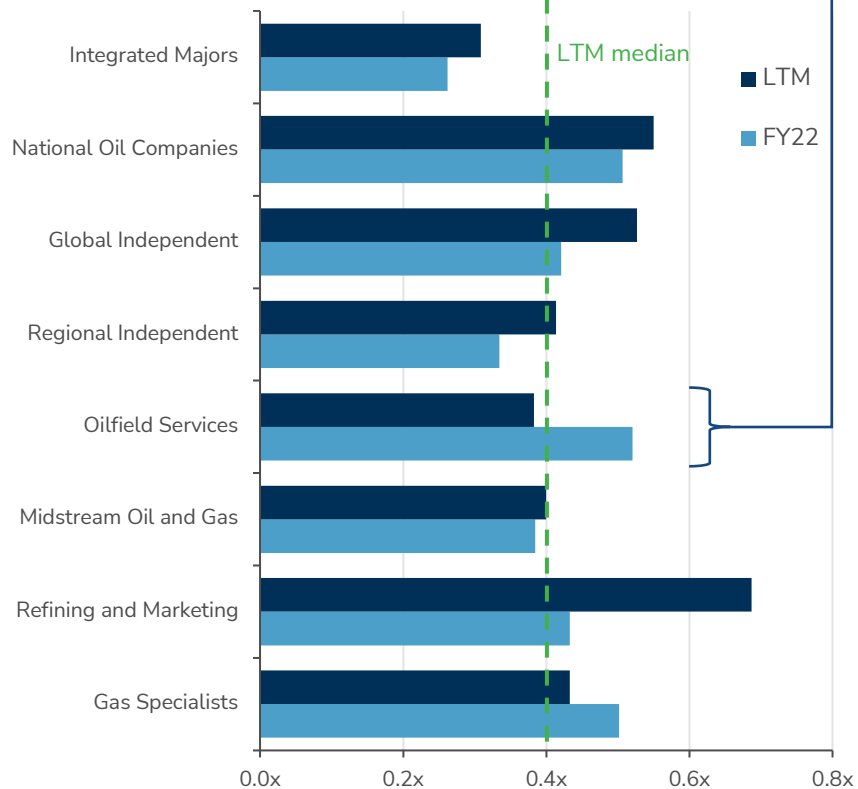
EBITDA: earnings before interest, taxes, depreciation and amortization.

LTM: last 12 months.

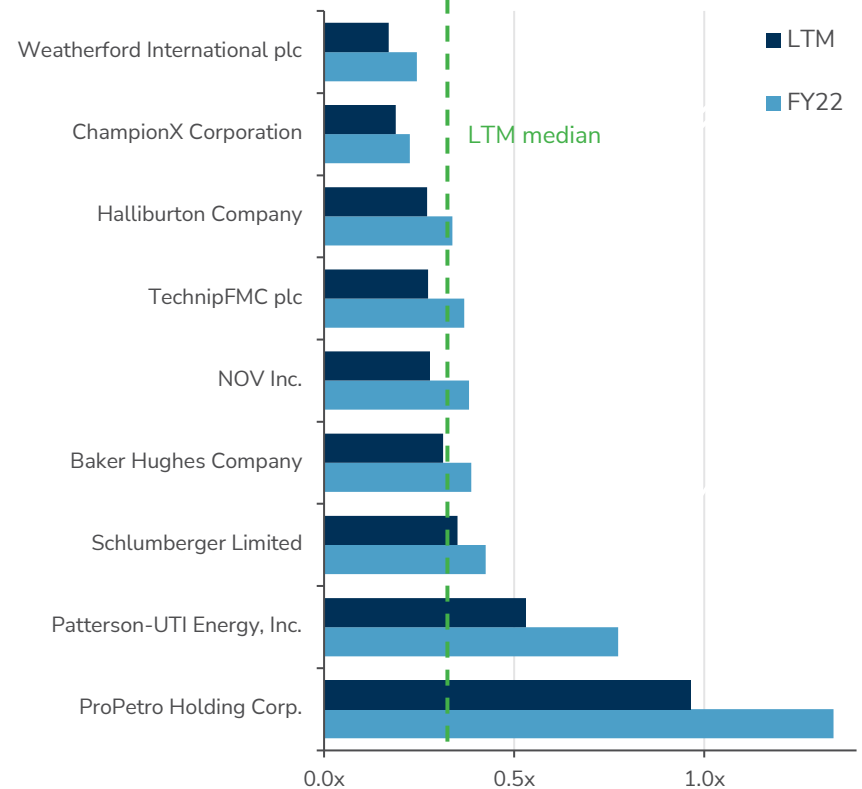
Subsector Focus ○●○

Capital Expenditure/EBITDA

Oil and Gas Subsector Average (LTM/FY22) Q3 2023



Spotlight: Oilfield Services



Source: Capital IQ as of September 29, 2023

Explanatory Note:

Subsector averages consider the available capital expenditure and EBITDA values for the public companies under each category. Similarly, the oilfield services subsector spotlight considers the most representative companies by market capital (as of September 29, 2023) and uses the available data as inputs for the multiple calculation. Therefore, the LTM median presented in the spotlight only considers said companies and not the entire universe under the category.

Definitions:

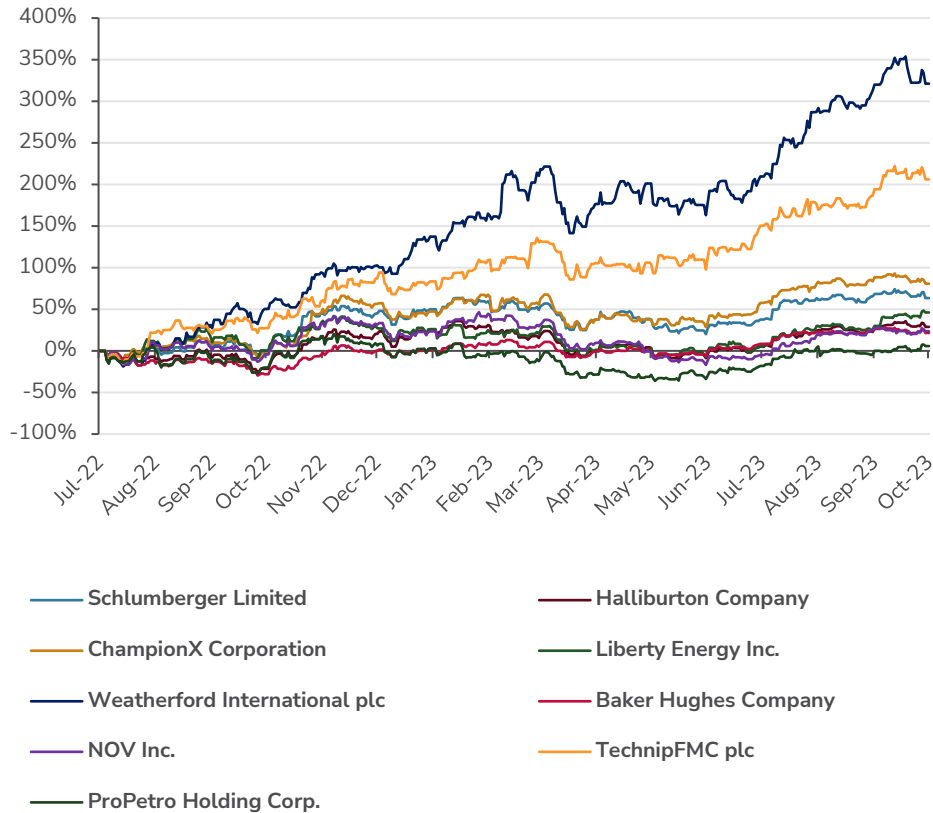
EBITDA: earnings before interest, taxes, depreciation and amortization.

LTM: last 12 months.

Subsector Focus

Oilfield Services

Share Price Development Q3 2023



Source: Capital IQ as of September 30, 2023; Kroll Analysis

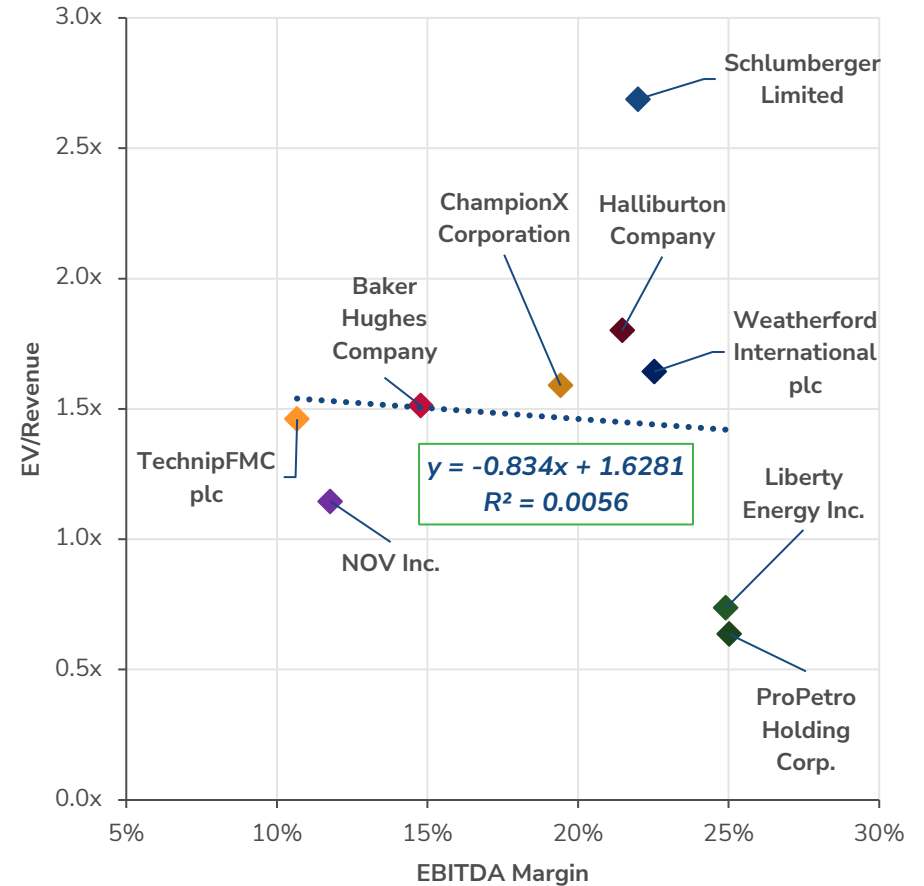
Explanatory Note:

The return showed in the share price chart is calculated by taking July 1, 2022, as the starting point and tracking the percent change until October 1, 2023. The linear regression plotted on the right graph represents the forecasted EBITDA margin depending on the EV/revenue multiple as of September 30, 2023.

Definitions:

EBITDA: earnings before interest, taxes, depreciation and amortization. EV: enterprise value.

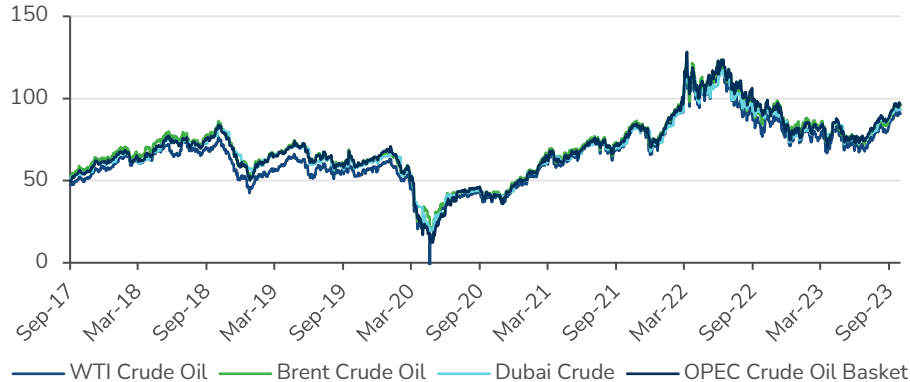
Regression Analysis: EBITDA Margin vs. EV/Revenue



Commodity Prices

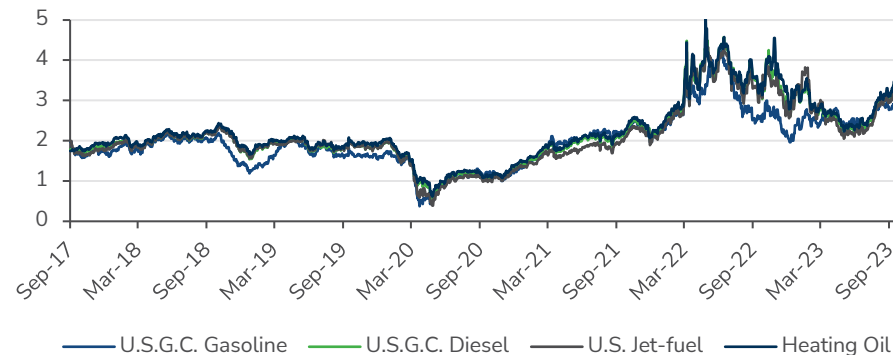
Q3 2023 Hydrocarbon Prices

Crude Oil USD/Bbl



Source: Bloomberg

Refined Products USD/Gal



Source: Bloomberg

Definitions:

Bbl: barrels.

WTI: West Texas Intermediate.

MMBtu: million British thermal units.

U.S.G.C.: United States Gulf Coast.

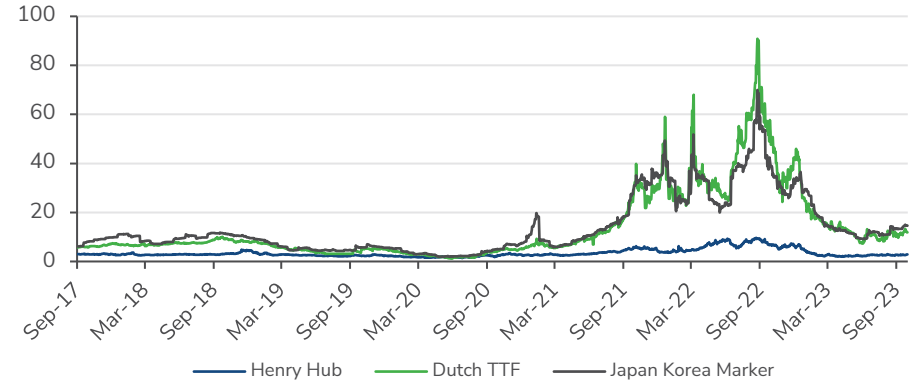
TTF: Title Transfer Facility.

Gal: U.S. gallons = 3.78 liters.

MMbpd: million barrels per day.

QoQ: quarter over quarter.

Natural Gas USD/MMBtu



Source: Bloomberg

Key Considerations

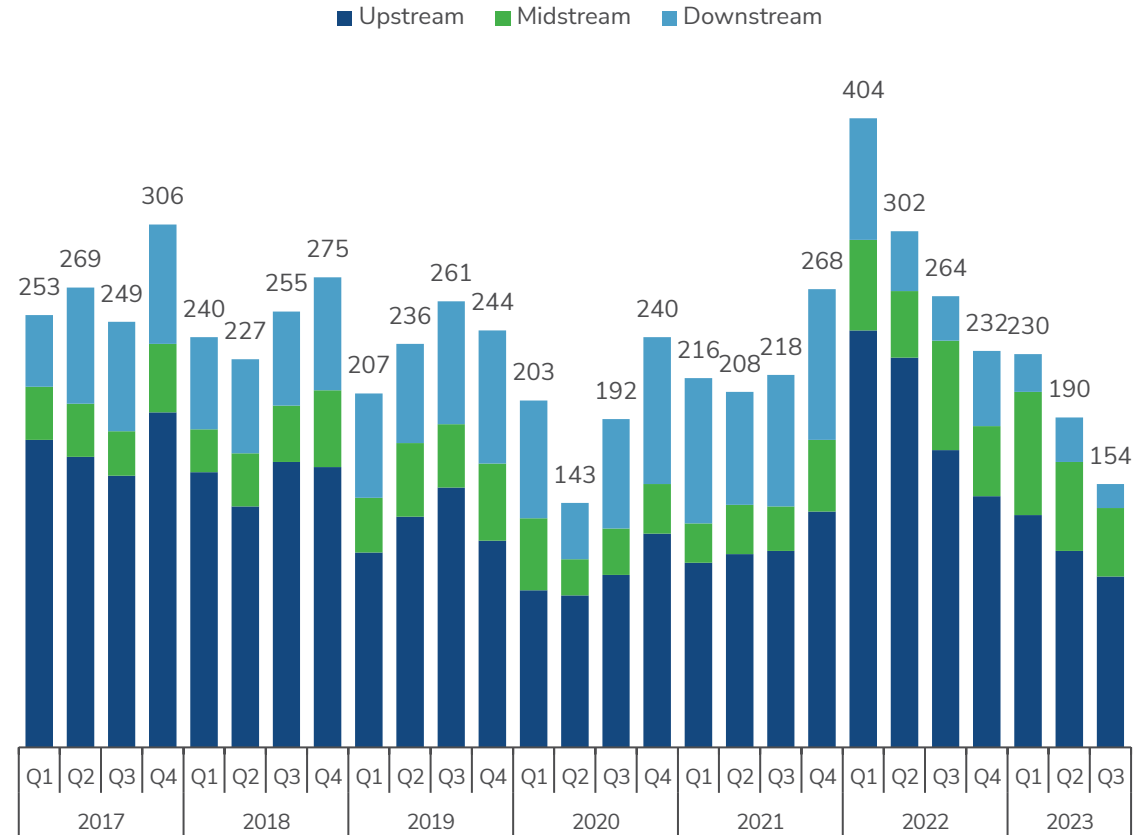
- QoQ, the four benchmark crude oil prices reported increases: WTI Crude Oil with 28.5%, Brent Crude Oil with 27.2%, Dubai Crude with 24.4% and OPEC Crude Oil Basket with 26.5%. OPEC Crude Oil's increase was mainly driven by the voluntary production cuts from Saudi Arabia (1 MMbpd).
- While Henry Hub Natural Gas price has remained steady, Dutch TTF and Japan Korea Marker prices increased QoQ due to the arrival of colder weather in Europe and East Asia and due to the latest Israel-Hamas conflict, which has impacted the Middle East with the closure of the Tamar Field in Israel and the cease of operations for the export pipeline from Israel to Egypt.

Announced Deals

Key Considerations

- A total of 154 M&A transactions for the oil and gas industry were registered in Q3 2023, compared to 190 transactions in Q2 2023. The disclosed value of the announced deals was USD 56.0 billion, which represented a reduction of 33%, or USD 27.8 bn, compared to the USD 83.8 bn from the previous quarter.
- Regarding the different subsegments:
 - Upstream deal count represented 65% of the reported transactions in Q3 2023, with a total volume of 100 transactions. The average disclosed value per transaction was USD 198.4 million, with the disclosed value of all transactions adding up to USD 19.8 bn.
 - The announced midstream deals in Q3 2023 amounted to 40, which represents 26% of the total oil and gas transactions. The disclosed value of the midstream deals was USD 20.5 bn, which represented an average value of USD 513.8 mn per deal.
 - Finally, the announced deals in downstream stand at 14, which is 9% of the total deals announced in Q3 2023. The observed deals report a disclosed value of USD 15.6 bn, with the average deal valued at USD 1.12 bn.

M&A Quarterly Deal Count Q3 2023



Source: Bloomberg as of September 29, 2023

Explanatory Note:

The analysis is based on disclosed transactions for the mentioned periods considering all announced M&A deals in the oil and gas industry in order to illustrate the overall M&A activity.

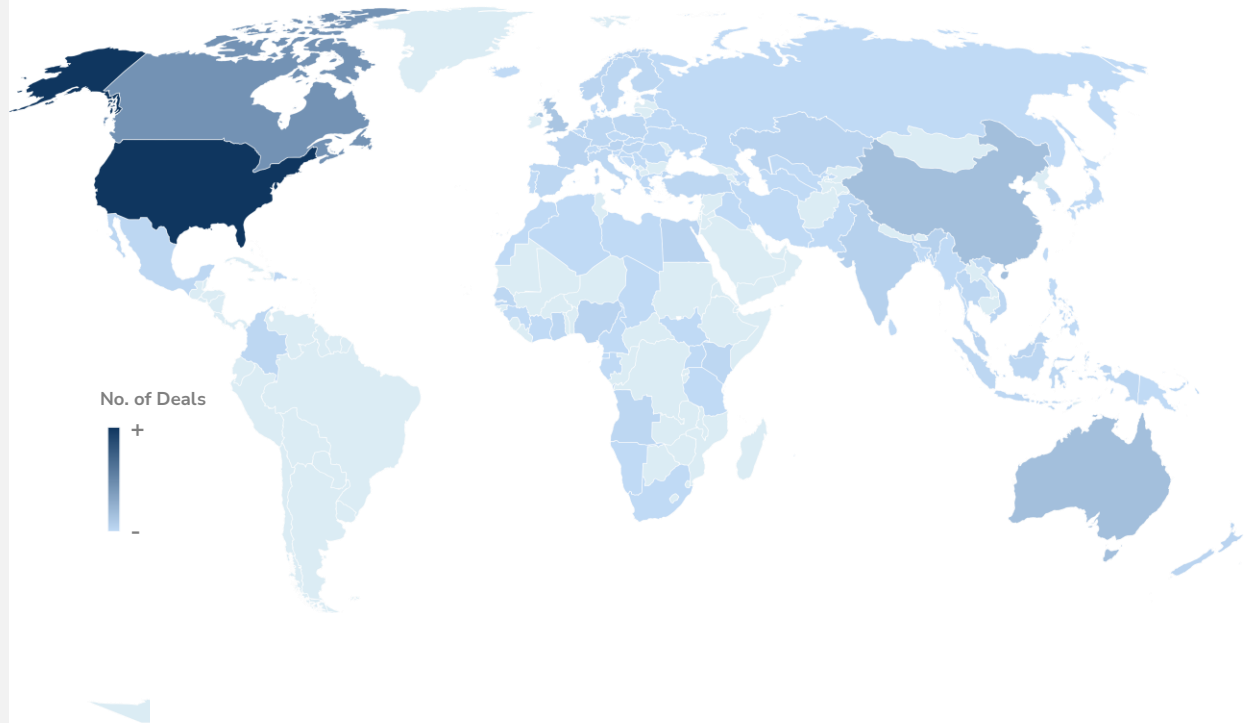
Hotspots for Oil and Gas Deal Activity



Key Considerations

- In Q3 2023, the U.S. presents the most active M&A landscape in the world as it reports 36% of the announced transactions and 75% of the total disclosed values.
- Initial acquisitions have targeted high-quality private assets with large synergy potential. However, the M&A focus is shifting toward mergers of publicly traded companies, given that most private entities and assets have majorly been acquired.
- Public entities M&A activity is accelerating in Q4 2023, with the latest acquisitions made by Chevron and ExxonMobil in October 2023. The values of these two megadeals are over twice the total global disclosed value reported during Q3 2023 (USD 113 bn vs. USD 56 bn).
 - On October 11, 2023, ExxonMobil announced a merger with Pioneer and obtained a leading presence in the Permian Basin in the third-largest ever upstream deal at USD 60 bn.
 - On October 23, 2023, Chevron announced the acquisition of Hess for USD 53 bn, which gives access to Guyana's offshore assets in the Stabroek block.

M&A Heatmap by Region and Deal Count Q3 2023



Source: Bloomberg between July 1, 2023, and September 29, 2023

Explanatory Note:

The heatmap displays M&A activity distribution across the world based only on the number of deals announced during the period and does not take into consideration the value corresponding to said transactions. As a result, the volume of events per location within the announced and completed deal universe provides an immediate visual summary of the figures regarding the Q3 2023.

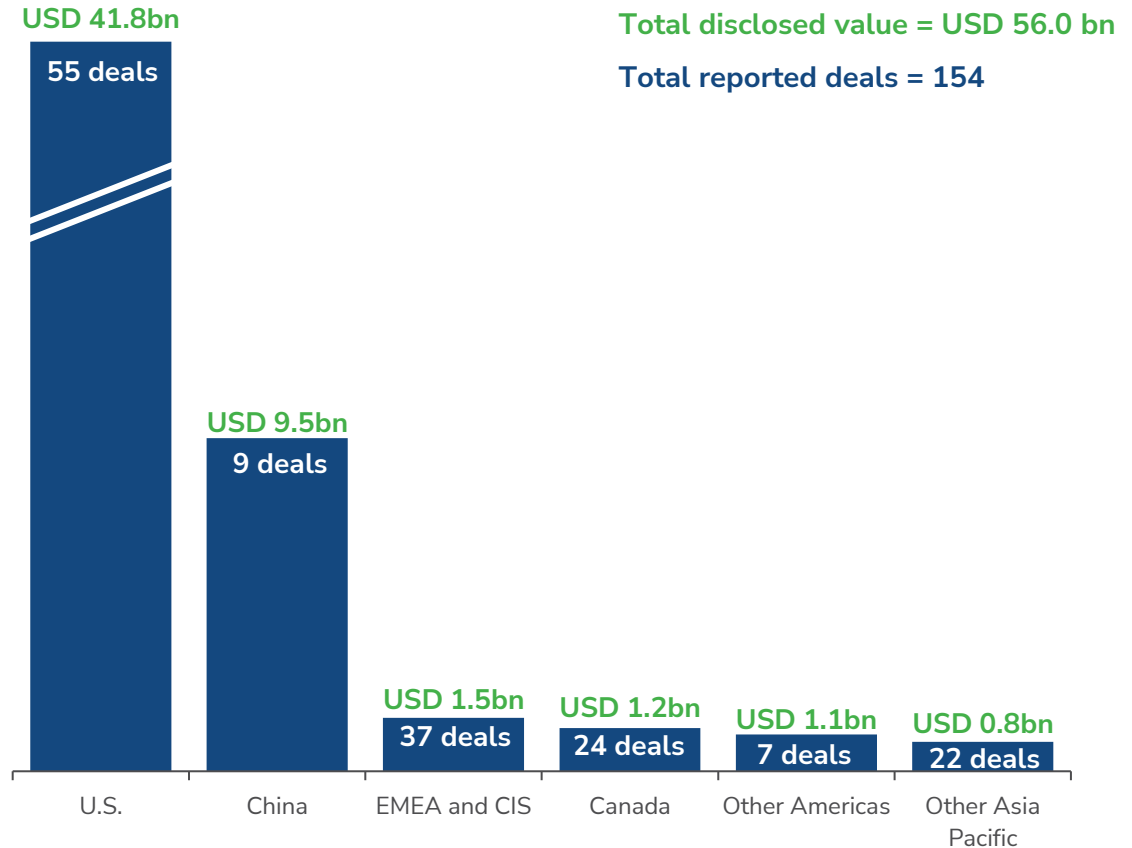
Hotspots for Oil and Gas Deal Activity



Key Considerations

- A handful of players represent the totality of oil and gas M&A activity. In particular, five countries account for 96.3% of the total global disclosed value, which represent 64.3% of the volume of announced deals .
- The top three countries with the largest M&A activity are the U.S. (74.6% of value and 35.7% of deals), China (17.0% of value and 5.8% of deals) and Canada (2.2% of value and 15.6% of deals).
- The number of megadeals (transaction over USD 1 bn) was reduced to nine in Q3 2023, compared to 14 in Q2 2023. These nine megadeals represented 5.8% of the total number of transactions, with their disclosed value accounting for 82.8% of global disclosed value.
- Megadeals remain concentrated in the U.S., with seven deals valued at USD 36.9 bn, which constitutes 88.3% of U.S. deals and 65.8% of global deals.
- Enbridge's acquisition of three U.S.-based utilities to form Dominion Energy represents the largest transaction of Q3 2023 at USD 14.0 bn, representing 25.0% of the global disclosed value. This acquisition has resulted in the largest natural gas distributor franchise in North America.

Top Six Regions by Disclosed Value Q3 2023



Source: Bloomberg as of September 29, 2023

Explanatory Note:

The analysis is based on disclosed transactions for the period, taking into account the total transaction value (considering all announced M&A deals in the oil and gas industry) to illustrate overall M&A activity. Therefore, said countries represent the industry's most significant regions by concentrating the highest proportion of market activity regarding volume and value.

Definitions

CIS: Commonwealth of Independent States.

Hotspots for Oil and Gas Deal Activity



Key Considerations

- Out of the 80 transactions observed in North America, 15 (18.8%) are undisclosed. The effects of tightening financial conditions can be observed in the progressive reduction of average TV/EBITDA multiple, which currently stands at 5.3 compared to 9.1 in Q3 2022.
- Europe's activity has decreased by 35 transactions (57.4%) QoQ, from 61 transactions in Q2 2023 to 26 transactions in Q3 2023. Out of these 26 transactions, 19 of them (73.1%) do not disclose a transaction value. Furthermore, the financial information from the disclosed transaction values does not offer sufficient data to calculate a multiple.
- Regarding Asia Pacific, most of the regional activity was driven by China and Australia, each with nine transactions. Both countries contributed 58.1% of the total activity within the region (31 transactions total). In terms of disclosed value, China concentrates 91.9% of the disclosed regional value.
- The previously highlighted regions represented 89.0% (137 transactions) out of the total announced deals (154 transactions) in Q3 2023.

Avg. Multiples (TV/EBITDA) by Region Q3 2023

Region	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023
North America	9.1	8.3	6.4	5.2	5.3
Europe	2.8	5.8	9.4	8.5	N/A
Asia Pacific	4.4	4.8	3.5	2.4	4.0

Source: IHS and Bloomberg as of September 29, 2023

Explanatory Note:

The chart displays M&A activity distribution across the world based only on the number of deals announced, disclosing the transaction value during the period. As a result, an approximate transaction value for multiples per region within the announced and completed deal universe provides an immediate visual summary of the figures regarding Q3 2023. Multiple calculation for the displayed heatmap only considers disclosed transaction value and available financial information regarding the target, and it may not be representative for all M&A activity of the quarter. Specifically in Europe, there's not enough information available to calculate the average multiple.

Definitions:

TV: transaction value. EBITDA: earnings before interest, taxes, depreciation and amortization.

Hotspots for Oil and Gas Deal Activity



Canada

Canadian gas drillers have suffered from low prices because of constrained export options.

In this situation, Tourmaline Oil Corp. has been a leader in devising new routes to market its output.

One of these efforts includes a joint venture with Rockies LNG to create a new LNG gas export terminal on Canada's Pacific Coast.

United States

Ongoing activity is focusing on producing assets in the U.S. Permian Basin. Exxon Mobil Corp. agreed to expand U.S. onshore operations in the Rockies and Gulf Coast, targeting carbon capture operations through the upstream acquisition market.

Brazil

In September 2023, Petrobras announced the end of its divestment efforts, which have been the main driver of regional M&A activity since 2013 by selling USD 46 bn worth of energy assets.

China

In the first half of 2023, China replaced Japan as the world's top LNG importer.

CNOOC Energy has signed an agreement with Nippon Yusen and China Merchants Energy Shipping to establish an LNG carrier joint venture with a total investment of EUR 412.6 million (around USD 446 mn).

United Kingdom

Harbour Energy Plc, which is the North Sea's largest independent oil producer and has 90% of the UK's reserves, has entered a new strategic partnership with Wood Group.

Under this partnership, Wood Group will provide engineering, procurement and construction, and operations and maintenance services.

The partnership will be operated under a new agreement which will impact contracts in the North Sea valued at around USD 330 mn.



High interest area



Medium interest area



Low interest area

Top 10 Deals Announced in Upstream

	Acquirer	Seller	Target	Type	Deal Description	Stake Acq.	Transaction Value (USD)	LTM Free Cash Flow	LTM EBITDA	TV/LTM Cash Flow	TV/LTM EBITDA
Announced											
July 13, 2023	 ExxonMobil	 Denbury	Denbury Inc.	Public Company	Exxon Mobil Corp announced the acquisition of Denbury Inc.	100%	4,523 mn	77 mn	621 mn	58.74x	7.28x
August 22, 2023	 EQT	 QUANTUM ENERGY PARTNERS	THQ Appalachia I LLC, THQ-XcL Holdings I Midco LLC	Private Company	Quantum Energy Partners LLC sold THQ Appalachia I LLC and THQ-XcL Holdings I Midco LLC to EQT Corp. The transaction was completed on 8/22/23.	100%	4,498 mn	N/A	N/A	N/A	N/A
August 21, 2023	 PERMIAN RESOURCES	 EARTHSTONE Energy, Inc.	Earthstone Energy Inc.	Public Company	Permian Resources Corp announced the acquisition of Earthstone Energy Inc.	100%	2,810 mn	387 mn	1,189 mn	7.26x	2.36x
September 15, 2023	 Vital Energy	 HENRY	Permian Basin/Delaware	Asset	A consortium led by Henry Resources LLC announced the sale of Permian Basin/Delaware to Vital Energy Inc. The transaction is expected to be completed by 12/31/23.	100%	1,165 mn	N/A	N/A	N/A	N/A
July 5, 2023	 PATTERSON-UTI DRILLING COMPANY LLC	 Blackstone	Ulterra Drilling Technologies LP	Private Company	Blackstone Inc. sold Ulterra Drilling Technologies LP to Patterson-UTI Energy Inc. The transaction was completed on 8/14/23.	100%	773 mn	N/A	N/A	N/A	N/A
August 16, 2023	 MAUREL PROM	 CARLYLE	Assala Energy UK Ltd.	Private Company	The Carlyle Group Inc. announced the sale of Assala Energy UK Ltd. to Etablissements Maurel et Prom SA. The transaction is expected to be completed by 3/31/24.	100%	730 mn	N/A	N/A	N/A	N/A
August 24, 2023	 Kraken RESOURCES	 Crescent Point	North Dakota assets	Asset	Crescent Point Energy Corp announced the sale of North Dakota assets to Kraken Resources LLC. The transaction is expected to be completed by 12/31/23.	100%	500 mn	N/A	N/A	N/A	N/A
September 7, 2023	 PEYTO Exploration & Development Corp.	 REPSOL	Repsol Canada Energy Partnership	Private Company	Repsol SA sold Repsol Canada Energy Partnership to Peyto Exploration & Development Corp. The transaction was completed on 10/17/23.	100%	468 mn	N/A	N/A	N/A	N/A
July 5, 2023	 CALLON PETROLEUM	 PERCUSSION PETROLEUM II	Delaware Basin assets	Asset	Percussion Petroleum Operating II LLC sold Delaware Basin assets to Callon Petroleum Co. The transaction was completed on 7/5/23.	100%	461 mn	N/A	N/A	N/A	N/A
September 28, 2023	 PETRONAS Chemicals Group	 TotalEnergies	Block 20/Kwanza Basin	Asset	TotalEnergies SE sold Block 20/Kwanza Basin to Petronas Chemicals Group Bhd.	40%	400 mn	N/A	N/A	N/A	N/A

Source: Bloomberg as of September 30, 2023

Definitions:

Transaction value (USD): For financial companies, transaction value is equivalent to equity value. For other companies, transaction value is equal to the equity value plus target net debt.
LTM: last 12 months. TV: transaction value. EBITDA: earnings before interest, taxes, depreciation and amortization.

Top 10 Deals Announced in Midstream




	Acquirer	Seller	Target	Type	Deal Description	Stake Acq.	Transaction Value (USD)	LTM Free Cash Flow	LTM EBITDA	TV/LTM Cash Flow	TV/LTM EBITDA
Announced											
August 30, 2023	 PipeChina	National Pipeline Group United Co. Ltd.	National Pipeline Group United Co. Ltd.	Private Company	National Petroleum and Natural Gas Pipeline Network Group Co. Ltd. acquired National Pipeline Group United Co. Ltd.	89%	7,943 mn	N/A	N/A	N/A	N/A
August 16, 2023	 ENERGY TRANSFER	 Crestwood	Crestwood Equity Partners LP	Public Company	Energy Transfer LP announced the acquisition of Crestwood Equity Partners LP.	100%	6,128 mn	294 mn	673 mn	20.84x	9.11x
September 5, 2023	 Western Midstream Partners, LP	 RIVER STONE	Meritage Midstream Services II LLC	Private Company	Riverstone Holdings LLC sold Meritage Midstream Services II LLC to Western Midstream Partners LP. The transaction was completed on 10/13/23.	100%	885 mn	N/A	N/A	N/A	N/A
August 31, 2023	 AltaGas	 TIDEWATER Midstream and Infrastructure Ltd.	Pipestone Natural Gas Processing Plant	Asset	Tidewater Midstream and Infrastructure Ltd. announced the sale of Pipestone Natural Gas Processing Plant to AltaGas Ltd. The transaction is expected to be completed by 12/31/23.	100%	565 mn	N/A	N/A	N/A	N/A
September 19, 2023	 M & G	 Vopak	Portfolio of three chemical terminals	Asset	Koninklijke Vopak NV announced the sale of a portfolio of three chemical terminals to M&G Investment Management Ltd. The transaction is expected to be completed by 12/31/23.	100%	435 mn	N/A	N/A	N/A	N/A
September 28, 2023	 Linda	 aes	LNG businesses	Private Company	The AES Corp announced the sale of LNG businesses/AES Corp to Grupo Linda. The transaction is currently pending.	10%	190 mn	N/A	N/A	N/A	N/A
August 15, 2023	 Tenaris	 SHAWCOR	Pipeline Performance Group LLC	Private Company	Shawcor Ltd. announced the sale of Pipeline Performance Group LLC to Tenaris SA. The transaction is expected to be completed by 2/29/24.	100%	166 mn	N/A	N/A	N/A	N/A
July 27, 2023	 NEXTTIER	 ECP	Continental Intermodal Group - Navasota LLC	Private Company	A consortium led by Energy Capital Partners LLC sold Continental Intermodal Group - Navasota LLC to NextTier Oilfield Solutions Inc. The transaction was completed on 8/3/23.	100%	33 mn	N/A	N/A	N/A	N/A
September 21, 2023	 W&T OFFSHORE	Undisclosed	Eight shallow water, oil and gas producing assets in Mexico	Asset	W&T Offshore Inc acquired eight shallow water, oil and gas producing assets.	100%	32 mn	N/A	N/A	N/A	N/A
September 6, 2023	 PERSIST OIL & GAS INC	 SIGULER & GUFF	Dienerian Resources Inc.	Private Company	Siguler Guff & Co. LLC sold Dienerian Resources Inc. to Persist Oil & Gas Inc. The transaction was completed on 9/6/23.	100%	29 mn	N/A	N/A	N/A	N/A

Source: Bloomberg as of September 30, 2023

Definitions:

Transaction value (USD): For financial companies, transaction value is equivalent to equity value. For other companies, transaction value is equal to the equity value plus target net debt.
LTM: last 12 months. TV: transaction value. EBITDA: earnings before interest, taxes, depreciation and amortization.

Top 10 Deals Announced in Downstream

	Acquirer	Seller	Target	Type	Deal Description	Stake Acq.	Transaction Value (USD)	LTM Free Cash Flow	LTM EBITDA	TV/LTM Cash Flow	TV/LTM EBITDA
Announced											
September 5, 2023	 ENBRIDGE	 Dominion Energy	Public Service Co. of North Carolina Inc, Questar Gas Co, East Ohio Gas Co, Wexpro Co.	Private Company	Dominion Energy Inc. announced the sale of Public Service Co of North Carolina Inc, Questar Gas Co, The East Ohio Gas Co and Wexpro Co to Enbridge. The transaction is expected to be completed by 12/31/24.	100%	14,000 mn	N/A	N/A	N/A	N/A
July 4, 2023	 大连市城乡建设委员会 Dalian Chengxing Jianzhu Weiyuanhui	 恒力石化 HENGLI PETROCHEMICAL	Yingkou Kanghui Petrochemical Co. Ltd.	Private Company	Hengli Petrochemical Co. Ltd. announced the sale of Kanghui New Material Technology Co. Ltd. to Dalian Thermal Power Co. Ltd. The transaction is currently pending.	100%	1,584 mn	N/A	N/A	N/A	N/A
July 25, 2023	 RUBIS TERMINAL	 RUBIS TERMINAL	CPA Sas	Private Company	Rubis Terminal Infra SAS announced the sale of CPA Sas to Anan International Ltd. The transaction is currently pending.	100%	10 mn	N/A	N/A	N/A	N/A
September 6, 2023	 NBIG 宁波工业投资集团有限公司 Ningbo Industrial Investment Group Co., Ltd.	 Ningbo Resource Industrial Co. Ltd.	Ningbo Resource Industrial Co. Ltd.	Private Company	Ningbo Energy Group Co. Ltd. sold Ningbo Resource Industrial Co. Ltd. to Ningbo Development & Investment Group. The transaction was completed on 9/19/23.	65%	9 mn	N/A	N/A	N/A	N/A
July 3, 2023	 MOLGROUP	 OMV	OMV Istrabenz Holding Co. PLC/Slovenia	Private Company	OMV AG sold OMV Istrabenz Holding Co. PLC/Slovenia to MOL Hungarian Oil & Gas PLC. The transaction was completed on 7/3/23.	100%	N/A	N/A	N/A	N/A	N/A
July 4, 2023	 ORLEN	 DOPPLER	Doppler Mineraloele GmbH Doppler	Private Company	Doppler Beteiligungs GmbH sold Doppler Energie GmbH to ORLEN SA. The transaction was completed on 7/4/23.	100%	N/A	N/A	N/A	N/A	N/A
July 7, 2023	 GLOBAL FUELS	 Greenergy	Canada Retail & Fuel Business/Greenergy International Ltd.	Asset	Greenergy International Ltd. announced the sale of Canada Retail & Fuel Business to Global Fuels Inc. The transaction is expected to be completed by 12/31/23.	100%	N/A	N/A	N/A	N/A	N/A
August 18, 2023	 nouria	 H.A. Mapes, Inc.	HA Mapes Inc.	Private Company	Nouria Energy Corp acquired HA Mapes Inc. The transaction was completed on 8/18/23.	100%	N/A	N/A	N/A	N/A	N/A
August 24, 2023	 SINOPEC	 Shell	Bukom oil refinery/Shell PLC	Asset	Shell PLC proposed to sell Bukom oil refinery/Shell PLC to China Petroleum & Chemical Corp.	100%	N/A	N/A	N/A	N/A	N/A
August 31, 2023	 KPC	 REPUBLIC OF KENYA	Kenya Petroleum Refineries Ltd.	Private Company	Republic of Kenya sold Kenya Petroleum Refineries Ltd. The transaction was completed on 8/31/23.	100%	N/A	N/A	N/A	N/A	N/A

Source: Bloomberg as of September 30, 2023

Definitions:

Transaction value (USD): For financial companies, transaction value is equivalent to equity value. For other companies, transaction value is equal to the equity value plus target net debt.
LTM: last 12 months. TV: transaction value. EBITDA: earnings before interest, taxes, depreciation and amortization.

Commodity Prices

	Unit	Type	Source	Date					% Change	
				Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	ΔQoQ	ΔYoY
Crude Oil										
WTI Crude Oil	USD/Bbl	Spot	Bloomberg	79.5	80.3	75.7	70.6	90.8	↑ 28.5%	↑ 14.2%
Brent Crude Oil	USD/Bbl	Spot	Bloomberg	88.0	85.9	79.8	74.9	95.3	↑ 27.2%	↑ 8.4%
Dubai Crude	USD/Bbl	Spot	Bloomberg	90.9	77.2	78.5	75.0	93.3	↑ 24.4%	↑ 2.6%
OPEC Crude Oil Basket	USD/Bbl	Spot	Bloomberg	92.3	81.3	78.1	76.1	96.4	↑ 26.5%	↑ 4.3%
Gas										
Henry Hub Natural Gas	USD/MMBtu	Spot	Bloomberg	6.8	4.5	2.2	2.8	2.9	↑ 4.7%	↓ -56.7%
Dutch TTF Natural Gas	USD/MMBtu	Spot	Bloomberg	47.6	24.6	15.0	11.8	11.9	↑ 0.3%	↓ -75.1%
Japan Korea Natural Gas	USD/MMBtu	Spot	Bloomberg	38.7	29.5	13.5	12.2	14.6	↑ 19.5%	↓ -62.2%
Refined Products										
U.S.G.C. Regular Gasoline	USD/Gal	Spot	Bloomberg	2.6	2.5	2.6	2.4	2.6	↑ 5.8%	↑ 0.4%
U.S.G.C. Diesel	USD/Gal	Spot	Bloomberg	3.2	3.4	2.6	2.4	3.3	↑ 38.3%	↑ 1.7%
U.S.G.C. Jet Fuel	USD/Gal	Spot	Bloomberg	3.3	3.4	2.5	2.3	3.1	↑ 36.4%	↓ -5.5%
Heating Oil	USD/Gal	Spot	Bloomberg	3.4	3.4	2.7	2.4	3.4	↑ 37.3%	↓ -0.2%

Explanatory Note:

Data indicates the rounded price of the selected commodities as of the last day of each quarter from Q3 2022 to Q3 2023. Percent change column may present differences due to the rounding of the Commodities' spot prices in the tables.

Company Trading Statistics

Integrated Majors

(USD bn, except for per-share data)

	Share Price		52-Week Share Price		Market Cap	Enterprise Value	Revenues			EBITDA		EBITDA Margin		EV/EBITDA	
	29-Sep-23	Low	High				LTM	LTM	FY2022	LTM	LTM	FY2022			
Integrated Majors															
Exxon Mobil Corporation	117.58	98.02	120.70	468.73	488.65	350.39	62.53	91.13	17.85%	7.81x	5.36x				
Chevron Corporation	168.62	141.73	189.68	314.85	327.73	202.70	45.94	57.45	22.66%	7.13x	5.70x				
Shell plc	31.80	26.36	34.35	211.36	250.64	339.19	70.35	78.39	20.74%	3.56x	3.20x				
TotalEnergies SE	65.95	54.07	69.31	158.13	184.20	228.13	53.10	62.54	23.28%	3.47x	2.95x				
BP p.l.c.	6.48	5.48	7.00	109.82	154.36	226.03	59.59	54.25	26.37%	2.59x	2.85x				
Average									22.18%	4.91x	4.01x				
Median									22.66%	3.56x	3.20x				

Source: Bloomberg as of September 29, 2023

Explanatory Note:

The information presented reflects analytical data and indicators from key public entities that make up the integrated majors subsector of the oil and gas industry as of September 29, 2023. The selected companies were sorted by order of the largest market capitalization from the entire subindustry's public company universe to highlight their financial status and capital adequacy. Therefore, the averages presented only account for the major players and not the entire subindustry.

Company Trading Statistics

National Oil Companies

(USD bn, except for per-share data)

	Share Price	52-Week Share Price		Market Cap	Enterprise Value	Revenues			EBITDA		EBITDA Margin	EV/EBITDA		
	29-Sep-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022			
National Oil Companies														
Saudi Arabian Oil Company	9.33	7.27	9.37	2257.56	2272.58	502.41	262.43	325.50	52.23%	8.66x	6.98x			
PetroChina Company Limited	0.75	0.42	0.77	192.98	237.64	420.18	67.08	68.14	15.96%	3.54x	3.49x			
Petróleo Brasileiro S.A. - Petrobras	6.94	4.23	7.91	95.32	139.37	107.39	53.62	66.64	49.93%	2.60x	2.09x			
Equinor ASA	32.93	25.14	34.53	97.55	85.53	111.85	50.70	82.33	45.33%	1.69x	1.04x			
China Petroleum & Chemical Corporation	0.55	0.43	0.70	92.62	156.57	456.87	24.66	25.31	5.40%	6.35x	6.19x			
Eni S.p.A.	16.15	12.50	16.93	52.87	67.88	107.54	16.59	27.47	15.42%	4.09x	2.47x			
Oil and Natural Gas Corporation Limited	2.31	1.60	2.39	29.05	45.14	71.37	12.91	10.15	18.09%	3.50x	4.45x			
PTT Public Company Limited*	0.92	0.82	1.01	26.17	60.53	91.08	9.38	11.13	10.30%	6.45x	5.44x			
Ecopetrol S.A.	0.58	0.49	0.71	24.04	54.31	36.61	15.52	15.27	42.40%	3.50x	3.56x			
Indian Oil Corporation Limited	1.09	0.83	1.28	15.08	31.92	94.77	8.91	6.27	9.40%	3.58x	5.09x			
Bharat Petroleum Corporation Limited	4.17	3.63	4.78	9.05	16.58	54.56	5.19	2.49	9.52%	3.19x	6.66x			
YPF Sociedad Anónima	28.63	6.55	39.97	11.26	16.39	11.76	2.32	3.57	19.69%	7.07x	4.60x			
Average									24.47%	4.52x	4.34x			
Median									17.03%	3.56x	4.52x			

Source: Bloomberg as of September 29, 2023

Explanatory Note:

The information presented reflects analytical data and indicators from key public entities that make up the national oil companies (NOCs) subsector of the oil and gas industry as of September 29, 2023. The selected companies were sorted by order of the largest market capitalization from the entire subindustry's public company universe to highlight their financial status and capital adequacy. Therefore, the averages presented only account for the major players and not the entire subindustry.

*Note: Values correspond to Q2 2023 period, as companies did not present earnings information for the Q3 2023 period by the elaboration time of this report.

Company Trading Statistics

Global Independent

(USD bn, except for per-share data)

	Share Price	52-Week Share Price		Market Cap	Enterprise Value	Revenues			EBITDA		EBITDA Margin	EV/EBITDA		
	29-Sep-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022			
Global Independent														
ConocoPhillips	119.80	91.53	135.68	143.46	153.09	61.84	25.49	34.92	41.22%	6.01x	4.38x			
EOG Resources, Inc.	126.76	98.52	150.05	73.81	73.19	23.73	13.56	13.79	57.17%	5.40x	5.31x			
Occidental Petroleum Corporation	64.88	55.51	75.78	57.40	86.52	29.30	14.15	20.59	48.29%	6.11x	4.20x			
Hess Corporation	153.00	113.82	167.75	46.78	54.45	10.22	5.07	5.63	49.61%	10.74x	9.67x			
Repsol, S.A.	16.48	13.32	16.98	21.04	27.06	57.29	7.27	10.65	12.70%	3.72x	2.54x			
Inpex Corporation	15.10	8.58	15.62	19.73	26.77	14.92	10.30	11.74	69.03%	2.60x	2.28x			
Average									46.33%	5.76x	4.73x			
Median									48.95%	5.70x	4.29x			

Source: Bloomberg as of September 29, 2023

Explanatory Note:

The information presented reflects analytical data and indicators from key public entities that make up the global independent subsector of the oil and gas industry as of September 29, 2023. The selected companies were sorted by order of the largest market capitalization from the entire subindustry's public company universe to highlight their financial status and capital adequacy. Therefore, the averages presented only account for the major players and not the entire subindustry.

Company Trading Statistics

Regional Independent

(USD bn, except for per-share data)

	Share Price	52-Week Share Price		Market Cap	Enterprise Value	Revenues			EBITDA		EBITDA Margin	EV/EBITDA		
	29-Sep-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022			
Regional Independent														
Canadian Natural Resources Limited	64.93	48.70	67.78	70.80	80.44	26.69	12.12	16.53	45.42%	6.64x	4.87x			
Pioneer Natural Resources Company	229.55	177.27	262.42	53.52	59.00	19.47	9.36	12.51	48.07%	6.30x	4.71x			
Suncor Energy Inc.	34.53	26.91	35.81	44.87	55.51	37.11	14.74	18.64	39.71%	3.77x	2.98x			
Cenovus Energy Inc.	20.91	14.73	21.17	39.48	46.63	39.28	7.38	9.68	18.79%	6.32x	4.82x			
Imperial Oil Limited	61.84	43.66	61.74	35.62	37.10	38.51	6.39	8.26	16.60%	5.80x	4.49x			
Devon Energy Corporation	47.70	42.59	73.98	30.56	37.05	14.93	7.52	10.28	50.39%	4.93x	3.60x			
Diamondback Energy, Inc.	154.88	119.01	171.40	27.70	35.07	7.74	6.07	7.34	78.37%	5.78x	4.78x			
Aker BP ASA	27.76	21.11	32.44	17.52	21.11	13.93	12.57	11.77	90.25%	1.68x	1.79x			
Santos Limited*	5.10	4.29	5.16	16.50	20.27	6.99	4.57	5.05	65.43%	4.43x	4.01x			
Marathon Oil Corporation	26.75	20.57	33.19	16.20	21.97	6.45	4.37	5.22	67.68%	5.03x	4.21x			
Average									52.07%	5.07x	4.03x			
Median									49.23%	5.40x	4.35x			

Source: Bloomberg as of September 29, 2023

Explanatory Note:

The information presented reflects analytical data and indicators from key public entities that make up the regional independent subsector of the oil and gas industry as of September 29, 2023. The selected companies were sorted by order of the largest market capitalization from the entire subindustry's public company universe to highlight their financial status and capital adequacy. Therefore, the averages presented only account for the major players and not the entire subindustry.

*Note: Values correspond to Q2 2023 period, as companies did not present earnings information for the Q3 2023 period by the elaboration time of this report.

Company Trading Statistics

Oilfield Services

(USD bn, except for per-share data)

	Share Price	52-Week Share Price		Market Cap	Enterprise Value	Revenues			EBITDA		EBITDA Margin	EV/EBITDA		
	29-Sep-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022			
Oilfield Services														
Schlumberger Limited	58.30	42.73	62.78	82.86	93.48	32.02	7.04	5.82	21.99%	13.27x	16.06x			
Baker Hughes Company	35.32	26.12	37.58	35.66	38.66	24.58	3.63	2.94	14.78%	10.64x	13.16x			
Halliburton Company	40.50	27.84	43.85	36.39	43.40	22.86	4.91	3.94	21.47%	8.84x	11.01x			
TechnipFMC plc	20.34	11.09	22.78	8.91	10.62	7.44	0.79	0.59	10.67%	13.37x	18.00x			
NOV Inc.	20.90	14.05	24.83	8.23	10.09	8.31	0.98	0.72	11.78%	10.30x	14.09x			
Weatherford International plc	90.33	38.61	100.93	6.51	7.94	4.98	1.12	0.78	22.54%	7.07x	10.14x			
ChampionX Corporation	35.62	23.66	38.37	7.00	7.40	3.80	0.74	0.62	19.42%	10.03x	12.02x			
Patterson-UTI Energy, Inc.	13.84	9.70	19.81	5.74	6.43	3.35	1.00	0.68	29.76%	6.45x	9.40x			
Liberty Energy Inc.	18.52	11.18	21.25	3.16	3.55	4.90	1.22	0.82	24.91%	2.91x	4.33x			
ProPetro Holding Corp.	10.63	6.33	12.58	1.20	1.21	1.63	0.41	0.29	25.03%	2.96x	4.12x			
Average									20.24%	8.59x	11.23x			
Median									21.73%	9.43x	11.51x			

Source: Bloomberg as of September 29, 2023

Explanatory Note:

The information presented reflects analytical data and indicators from key public entities that make up the oilfield services subsector of the oil and gas industry as of September 29, 2023. The selected companies were sorted by order of the largest market capitalization from the entire subindustry's public company universe to highlight their financial status and capital adequacy. Therefore, the averages presented only account for the major players and not the entire subindustry.

Company Trading Statistics

Midstream Oil and Gas

(USD bn, except for per-share data)

	Share Price	52-Week Share Price		Market Cap	Enterprise Value	Revenues			EBITDA		EBITDA Margin		EV/EBITDA	
	29-Sep-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022	LTM	FY2022	
Midstream Oil and Gas														
Enbridge Inc.	33.30	30.90	40.75	70.79	136.15	33.84	10.35	9.41	30.60%	13.15x	14.46x			
Enterprise Products Partners L.P.	27.37	23.14	27.95	59.44	89.42	48.74	8.63	8.73	17.70%	10.36x	10.24x			
The Williams Companies, Inc.	33.69	27.80	36.32	40.98	67.40	10.30	6.24	5.04	60.53%	10.81x	13.38x			
Energy Transfer LP	14.03	11.37	14.15	44.13	106.70	78.56	12.24	12.29	15.58%	8.72x	8.68x			
ONEOK, Inc.	63.43	55.91	71.57	36.95	49.64	17.47	4.43	3.34	25.37%	11.20x	14.87x			
TC Energy Corporation	34.41	32.52	49.51	35.82	82.33	10.15	5.57	6.44	54.92%	14.77x	12.78x			
Kinder Morgan, Inc.	16.58	15.89	19.36	36.94	69.55	15.88	6.44	6.17	40.54%	10.81x	11.27x			
MPLX LP	35.57	31.34	36.80	35.61	56.97	10.40	5.22	5.67	50.18%	10.92x	10.06x			
Plains All American Pipeline, L.P.	15.32	11.16	16.05	10.70	23.53	48.97	2.16	2.53	4.42%	10.88x	9.32x			
Antero Resources Corporation	25.38	19.91	38.70	7.62	12.62	5.21	2.09	3.43	40.20%	6.03x	3.68x			
EnLink Midstream, LLC	12.22	8.46	13.58	5.64	11.96	7.07	1.34	1.32	19.01%	8.89x	9.06x			
Equitrans Midstream Corporation	9.37	4.60	10.48	4.09	12.04	1.39	1.02	1.07	73.56%	11.79x	11.20x			
Average									36.05%	10.69x	10.75x			
Median									35.40%	10.84x	10.72x			

Source: Bloomberg as of September 29, 2023

Explanatory Note:

The information presented reflects analytical data and indicators from key public entities that make up the midstream subsector of the oil and gas industry as of September 29, 2023. The selected companies were sorted by order of the largest market capitalization from the entire subindustry's public company universe in order to highlight their financial status and capital adequacy. Therefore, the averages presented only account for the major players and not the entire subindustry.

Company Trading Statistics

Refining and Marketing

(USD bn, except for per-share data)

	Share Price	52-Week Share Price		Market Cap	Enterprise Value	Revenues			EBITDA		EBITDA Margin		EV/EBITDA	
	29-Sep-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022	LTM	FY2022	
Refining and Marketing														
Reliance Industries Limited	28.22	26.19	34.31	179.32	208.78	104.60	17.89	14.37	17.10%	11.67x	14.53x			
Marathon Petroleum Corporation	151.34	104.32	159.65	60.51	84.48	152.73	19.36	22.97	12.67%	4.36x	3.68x			
Phillips 66	120.15	89.74	125.19	53.50	71.50	149.41	10.46	11.31	7.00%	6.84x	6.32x			
Valero Energy Corporation	141.71	104.18	152.20	50.04	58.43	145.46	17.39	18.27	11.95%	3.36x	3.20x			
Neste Oyj	34.01	30.54	53.91	26.12	28.77	24.54	2.59	3.07	10.54%	11.13x	9.37x			
Formosa Petrochemical Corporation	2.50	2.41	2.78	23.86	22.42	22.71	0.55	0.63	2.41%	41.01x	35.74x			
Targa Resources Corp.	85.72	64.85	90.64	19.18	33.31	16.38	3.87	2.83	23.61%	8.62x	11.77x			
Pembina Pipeline Corporation	30.19	28.04	35.87	16.58	26.53	6.92	1.81	2.11	26.15%	14.67x	12.59x			
OMV Aktiengesellschaft	47.97	39.80	55.62	15.69	24.53	44.03	8.45	14.92	19.19%	2.90x	1.64x			
ENEOS Holdings, Inc.	3.95	2.88	4.24	11.91	37.49	95.35	3.19	8.27	3.35%	11.75x	4.53x			
HF Sinclair Corporation	56.93	37.12	66.19	10.31	13.03	33.29	3.70	4.60	11.12%	3.52x	2.83x			
SK Innovation Co., Ltd.*	109.57	90.83	173.57	9.72	26.46	60.56	1.48	4.54	2.45%	17.82x	5.83x			
PBF Energy Inc.	53.53	31.26	56.38	6.62	7.48	40.03	3.26	4.48	8.14%	2.30x	1.67x			
Sunoco LP	48.95	40.81	53.96	4.11	8.09	23.35	0.94	0.86	4.04%	8.57x	9.43x			
CVR Energy, Inc.	34.03	22.60	41.26	3.42	4.52	9.73	1.54	1.26	15.86%	2.93x	3.58x			
Average									11.70%	10.10x	8.45x			
Median									11.12%	8.57x	5.83x			

Source: Bloomberg as of September 29, 2023

Explanatory Note:

The information presented reflects analytical data and indicators from key public entities that make up the refining and marketing subsector of the oil and gas industry as of September 29, 2023. The selected companies were sorted by order of the largest market capitalization from the entire subindustry's public company universe to highlight their financial status and capital adequacy. Therefore, the averages presented only account for the major players and not the entire subindustry.

*Note: Values correspond to Q2 2023 period, as companies did not present earnings information for the Q3 2023 period by the elaboration time of this report.

Company Trading Statistics

Gas Specialists

(USD bn, except for per-share data)

	Share Price	52-Week Share Price		Market Cap	Enterprise Value	Revenues			EBITDA		EBITDA Margin	EV/EBITDA		
	29-Sep-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022			
Gas Specialist														
The Williams Companies, Inc.	33.69	27.80	36.32	40.98	67.40	10.30	6.24	5.04	60.53%	10.81x	13.38x			
Woodside Energy Group Ltd.*	23.55	19.73	25.15	44.71	48.21	18.41	11.57	10.41	62.84%	4.17x	4.63x			
Cheniere Energy, Inc.	165.96	135.00	179.05	39.93	67.15	24.47	21.01	5.62	85.84%	3.20x	11.95x			
ONEOK, Inc.	63.43	55.91	71.57	36.95	49.64	17.47	4.43	3.34	25.37%	11.20x	14.87x			
TC Energy Corporation	34.41	32.52	49.51	35.82	82.33	10.15	5.57	6.44	54.92%	14.77x	12.78x			
Kinder Morgan, Inc.	16.58	15.89	19.36	36.94	69.55	15.88	6.44	6.17	40.54%	10.81x	11.27x			
Coterra Energy Inc.	27.05	22.25	29.89	20.42	22.15	6.39	4.51	6.91	70.46%	4.92x	3.20x			
Southwestern Energy Company	6.45	4.57	7.69	7.10	11.28	8.21	6.62	3.30	80.62%	1.70x	3.42x			
Average									60.14%	7.70x	9.44x			
Median									61.69%	7.86x	11.61x			

Source: Bloomberg as of September 29, 2023

Explanatory Note:

The information presented reflects analytical data and indicators from key public entities that make up the gas specialist subsector of the oil and gas industry as of September 29, 2023. The selected companies were sorted by order of the largest market capitalization from the entire subindustry's public company universe to highlight their financial status and capital adequacy. Therefore, the averages presented only account for the major players and not the entire subindustry.

*Note: Values correspond to Q2 2023 period, as companies did not present earnings information for the Q3 2023 period by the elaboration time of this report.

KROLL

**Stay Ahead
with Kroll**



Leading Provider of Global Risk and Financial Advisory Solutions

We help clients detect, manage and mitigate enterprise risk and make strategic and informed financial decisions to protect and maximize value.

Valuation

Valuation of businesses, assets and alternative investments for financial reporting, tax and other purposes.

Compliance and Regulation

End-to-end governance, advisory and monitorship solutions to detect, mitigate and remediate security, legal, compliance and regulatory risk.

Corporate Finance and Restructuring

M&A advisory, restructuring and insolvency, debt advisory, strategic alternatives, transaction diligence and independent financial opinions.

Cyber Risk

Incident response, digital forensics, breach notification, managed detection services, penetration testing, cyber assessments and advisory.

Environmental, Social and Governance

Advisory and technology solutions, including policies and procedures, screening and due diligence, disclosures and reporting, investigations, value creation and monitoring.

Investigations and Disputes

World-wide expert services and tech-enabled advisory through all stages of diligence, forensic investigation, litigation, disputes and testimony.

Digital Technology Solutions

Enriching our professional services, our integrated software platform helps clients discover, quantify and manage risk in the corporate and private capital market ecosystem.

Business Services

Expert provider of complex administrative solutions for capital events globally. Our services include claims and noticing administration, debt restructuring and liability management services, agency and trustee services and more.

Why Kroll?

Unique insights, data and technology providing foresight clients need to create an enduring competitive advantage

Stay Ahead with Kroll



Expert Led Insights

World-class experts with demonstrated success of **helping clients stay ahead of opportunities and threats** and navigate mission-critical, complex challenges



Proprietary Data Intelligence

Digitizing our advisory insights from across our business to create **unique, valuable and actionable intelligence**, investment and reporting offerings



Cohesive Tech-Enhanced Platform

Purpose-built modular tools for key buyer types **presented on an integrated basis**, embedded with our expertise, insights and data intelligence



Values-Driven

Instilling **excellence, ambition, courage and inclusion** throughout the organization and collaborating as **One Team, One Kroll to deliver, innovate and grow together**



Trusted Brand

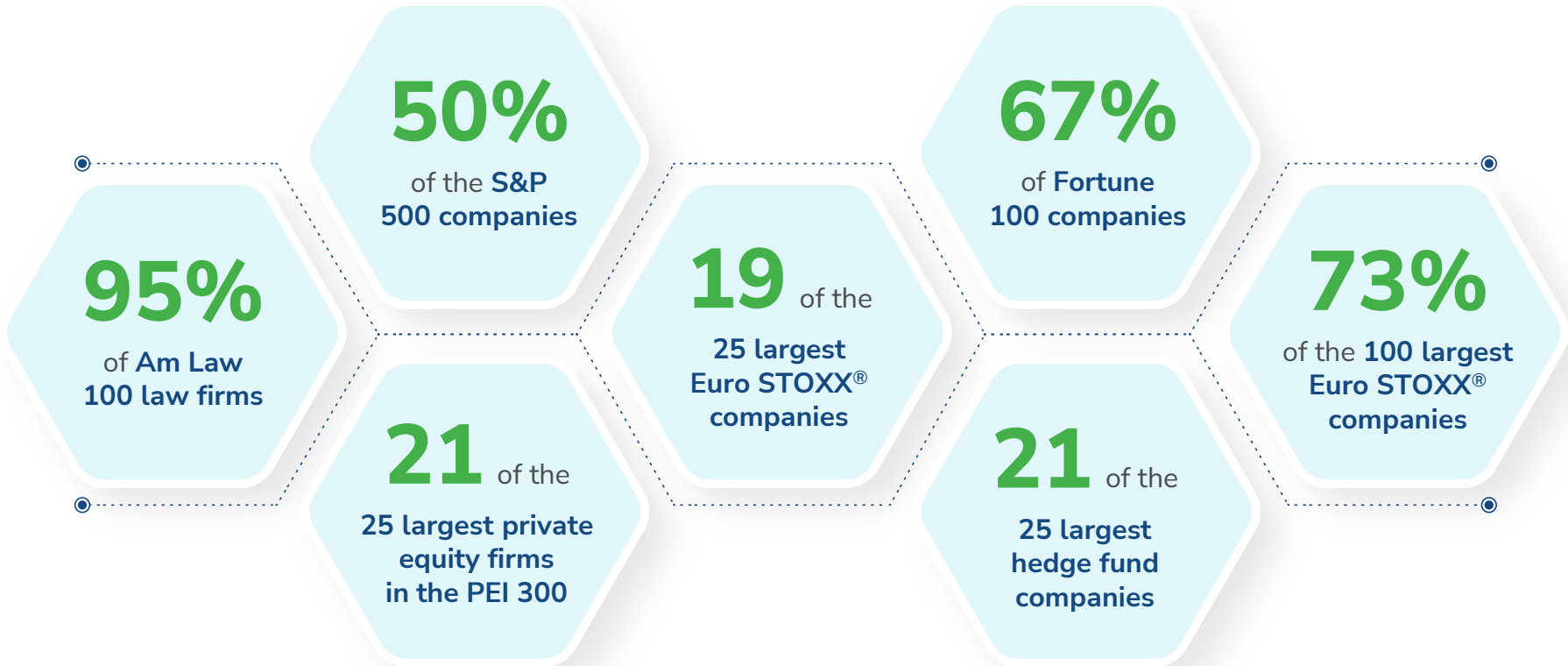
Nearly **100-year history** of relentless client focus, innovation and excellence in **risk, governance, transactions and valuation**



Compelling Breadth of Global Capabilities

Global capabilities, delivered as integrated, jointly-sold solutions, driving value creation and protection in the most critical areas of need

Our Market Presence



Our Awards and Rankings

Financial Advisory Recognition

REFINITIV 
Refinitiv Global M&A Review 2022
Ranked #1
for Global Announced Fairness Opinions for Full Year 2022¹
¹Based on 51 Credited Deals per Refinitiv's Global Mergers & Acquisitions Review Full Year 2022

 **privateequitywire**
Private Equity Wire US Awards 2022
Kroll Wins Best Regulatory and Compliance Firm of the Year


Forensic Accountants 2022
LEXOLOGY Client Choice Awards 2022 - Exclusive Winner of Forensic Accountants

 **TURNAROUND, RESTRUCTURING AND INSOLVENCY**
Turnaround, Restructuring & Insolvency Awards 2021
Winner - Turnaround Firm of the Year

with.
Intelligence
Best Valuations Firm
HFM European Services Awards 2023

Our Awards and Rankings

Risk Advisory Recognition

WWL
Who's Who Legal (WWL) 2022
Experts recognized in WWL Asset Recovery, Construction – Quantum Delay & Technical, Forensic Accountants Quantum of Damages

GAR Global Arbitration Review
Global Arbitration Review's GAR 100 Expert Witness Firms Power Index - 2022
Ranked fifth on the annual list of top expert firms globally.

GIR Global Investigations Review
Global Investigations Review (GIR) 100 2021
Named as one of the top 100 cross-border investigations practices

FORRESTER
Forrester Wave™ 2022
Kroll named a Strong Performer in the Forrester Wave™ Cybersecurity Incident Response Services Q1 2022

IAM
1000
IAM Patent 1000 2023
Recommended firm for Expert Witnesses

SC awards 2022 EUROPE
SC Awards Europe 2022
Winner - Managed Detection and Response Solution
Finalist - Best Incident Response Solution

IDC
IDC MarketScape 2021
Named a Global Leader in Incident Response Readiness

Best Support SUMMER 2022
G2 Awards 2022
G2 Best Support 2022

SIA NEW PRODUCTS+ SOLUTIONS AWARDS
ISC West Award Winner
Best in Threat/ Risk Management Software Application

Our Locations

More than 6,500 professionals continuing the firm's nearly 100-year history of trusted expertise across 34 countries and territories worldwide



○ The Americas

- Atlanta
- Austin
- Bermuda
- Bogota
- Buenos Aires
- Boston
- Chicago
- Dallas
- Ellensburg
- Houston
- Los Angeles
- Mexico City
- Morristown
- Nashville
- New York
- Philadelphia
- Richardson
- San Francisco
- Sao Paulo
- Seattle
- Secaucus
- Silicon Valley
- Toronto
- Washington, D.C.
- Waterbury

○ Caribbean

- British Virgin Islands
- Cayman Islands

○ Europe, Middle East and Africa

- Abu Dhabi
- Agrate Brianza
- Amsterdam
- Barcelona
- Berlin
- Bilbao
- Birmingham
- Brussels
- Dubai
- Dublin
- Frankfurt
- Gibraltar
- Guernsey
- Jersey
- Johannesburg
- Lisbon
- London
- Luxembourg
- Madrid
- Manchester
- Milan
- Munich
- Padua
- Paris
- Pesaro
- Riyadh
- Rome
- Turin
- Zurich

○ Asia Pacific

- Bangalore
- Beijing
- Guangzhou
- Hanoi
- Hong Kong
- Hyderabad
- Jakarta
- Kuala Lumpur
- Manila
- Mumbai
- New Delhi
- Shanghai
- Shenzhen
- Singapore
- Sydney
- Taipei
- Tokyo



For more information, please contact:

Global Energy and Mining	Oil and Gas Corporate Finance			
David Scott Managing Director, Global Energy and Mining Leader Dallas Tel +1 469 547 3914 David.Scott@kroll.com	Miguel Peleteiro Managing Director, Head of Oil and Gas Americas Corporate Finance Mexico City Tel +52 55 6820 6940 Miguel.Peleteiro@kroll.com	Diogo Pais Managing Director, Oil and Gas Corporate Finance Mexico City Tel +52 55 6820 6986 Diogo.Pais@kroll.com	Germán Ricardi Vice President, Oil and Gas Corporate Finance Mexico City Tel +52 55 6820 6901 German.Ricardi@kroll.com	
North America	Europe	Middle East and North Africa	Southeast Asia	
Eraj Weerasinghe Managing Director, Valuation Services San Francisco Tel +1 415 693 5320 Eraj.Weerasinghe@kroll.com	Anna Hensel Managing Director, Risk Advisory London Tel +44 20 7089 4834 Anna.Hensel@kroll.com	Murad Dovodov Director, Valuation Advisory London Tel +44 20 7029 5165 Murad.Dovodov@kroll.com	Hakim Abdeljaouad Managing Director, Valuation Services Dubai Tel +971 4449 6721 Hakim.Abdeljaouad@kroll.com	Srividya Gopal Managing Director, Valuation Services Singapore Tel +65 6589 9191 Srividya.Gopal@kroll.com

For questions regarding data in this report, please contact:

Jorge Pérez Olea | Vice President
Jorge.PerezOlea@kroll.com

Miguel Recio Velázquez | Analyst
Miguel.RecioVelazquez@kroll.com

About Kroll

As the leading independent provider of risk and financial advisory solutions, Kroll leverages our unique insights, data and technology to help clients stay ahead of complex demands. Kroll's team of more than 6,500 professionals worldwide continues the firm's nearly 100-year history of trusted expertise spanning risk, governance, transactions and valuation. Our advanced solutions and intelligence provide clients the foresight they need to create an enduring competitive advantage. At Kroll, our values define who we are and how we partner with clients and communities. Learn more at www.kroll.com

M&A advisory, capital raising and secondary market advisory services in the United States are provided by Kroll Securities, LLC (member FINRA/SIPC). M&A advisory, capital raising and secondary market advisory services in the United Kingdom are provided by Kroll Securities Ltd., which is authorized and regulated by the Financial Conduct Authority (FCA). Valuation Advisory Services in India are provided by Kroll Advisory Private Limited (formerly, Duff & Phelps India Private Limited), under a category 1 merchant banker license issued by the Securities and Exchange Board of India.

© 2023 Kroll, LLC. All rights reserved.

The material in this report is for information purposes only and is not intended to be relied upon as financial, accounting, tax, legal or other professional advice. This report does not constitute, and should not be construed as soliciting or offering any investment or other transaction, identifying securities for you to purchase or offer to purchase, or recommending the acquisition or disposition of any investment. Kroll does not guarantee the accuracy or reliability of any data provided from third-party resources. Although we endeavor to provide accurate information from third party sources, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future.