



Industry Insights

Global Oil and Gas M&A Outlook

Q2 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&A deals performed during the quarter and developments on featured specialty subsectors.

Our top insights for this edition are detailed below:

- Saudi Arabia continues its unilateral oil cuts in order to establish a high price floor, while at the same time economic expectations are defying the worst economic forecasts and the lowest economic point seems to have passed as trade flows adapt to a new market conjunction.
- The worldwide trade of LNG linked exporting regions to importing facilities, fostering a progressively interconnected LNG market on a global scale. Elevated prices upon entering the European market facilitated a significant shift in the direction of LNG shipments from Asia to Europe, effectively stabilizing the short-term market but leading to reduced demand in certain Asian markets.
- Navigating dealmaking has become unquestionably challenging. Amidst macroeconomic fluctuations, market turbulence, complex financing situations and heightened regulatory examination, accomplishing a transaction successfully appears more formidable than before. This holds true even as megadeals within the three subsectors were announced.

Explanatory Note:

EV/EBITDA: Enterprise Value/Earnings Before Interest, Taxes, Depreciation and Amortization

For the issuance of this report, Kroll prepared a set of peer groups, according to the eight most representative subindustries of the oil and gas sector, which, at the same time, are composed of the most relevant Companies by market capitalization.

Deals displayed in the "Top 10 Deals Announced" table analysis include acquisitions of private companies that do not disclose some information, whilst other M&A analysis performed along the report considers all available information.

LNG: Liquefied Natural Gas; JV: Joint Venture

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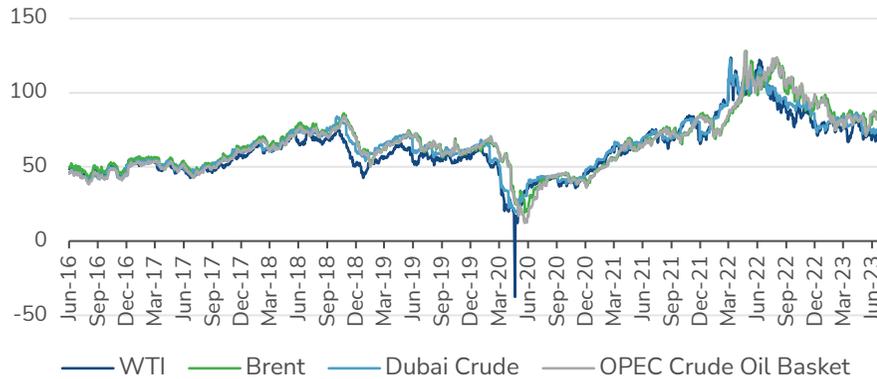
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Commodity Prices

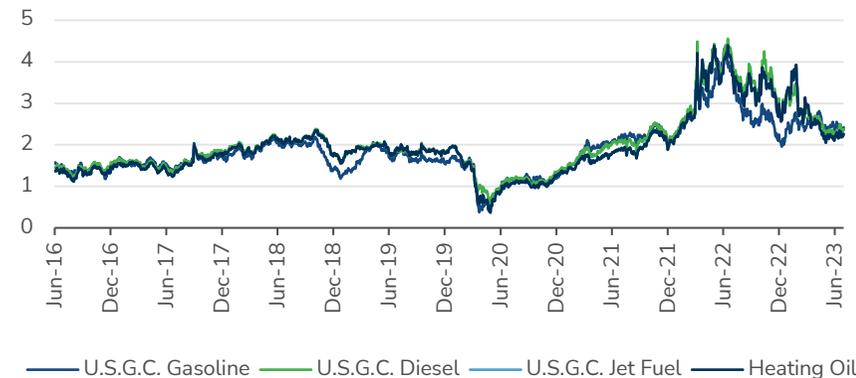
Hydrocarbon Prices

Crude Oil USD/Bbl



Source: Bloomberg

Refined Products USD/Gal



Source: Bloomberg

Definitions

Bbl: Barrel(s)

WTI: West Texas Intermediate

MMBtu: Million British Thermal Units

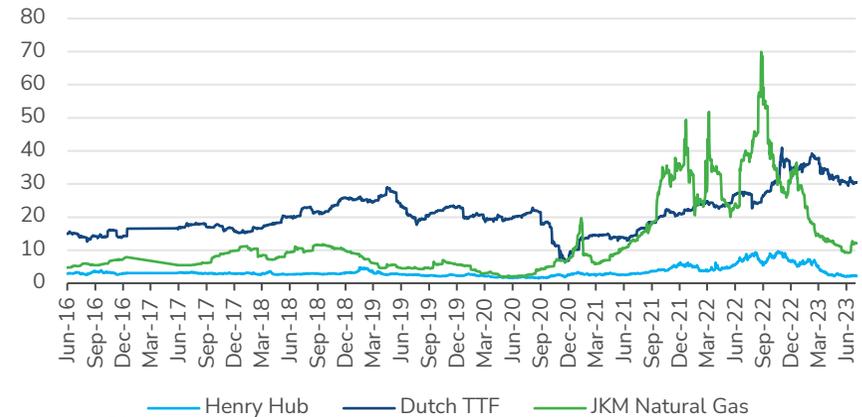
U.S.G.C.: United States Gulf Coast

TTF: Title Transfer Facility

Gal: U.S. Gallons = 3.78 Liters

JKM: Japan/Korea Marker

Natural Gas USD/MMBtu



Source: Bloomberg

Key Considerations

- Oil demand sentiment is being hampered down by economic weakness and central banks' policy while Russia's resilient oil production is keeping the market well-supplied. These are the main drivers of OPEC+'s aggressive output cut, which aims to preventively tighten the market and install a high price floor. Saudi Arabia's 1 million b/d unilateral cut in early June is expected to continue throughout September.
- In the gas market, LNG will remain volatile as supply growth is constrained by the lack of new liquefaction projects coming online while mild weather remains a critical driver for a reduced demand. Europe continues to replenish its supplies, while some Asian countries favor the use of coal instead of LNG.



Commodity Prices

				Date					% Change	
	Unit	Type	Source	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	ΔQoQ	ΔYoY
Crude Oil										
WTI Crude Oil	USD/Bbl	Spot	Bloomberg	105.8	79.5	80.3	75.7	70.6	-6.7%	-33.3%
Brent Crude Oil	USD/Bbl	Spot	Bloomberg	114.8	88.0	85.9	79.8	74.9	-6.1%	-34.8%
Dubai Crude	USD/Bbl	Spot	Bloomberg	113.2	90.9	77.2	78.5	75	-4.5%	-33.7%
OPEC Crude Oil Basket	USD/Bbl	Spot	Bloomberg	115.6	92.3	81.3	78.1	76.1	-2.6%	-34.2%
				Date					% Change	
	Unit	Type	Source	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	ΔQoQ	ΔYoY
Gas										
Henry Hub Natural Gas	USD/MMBtu	Spot	Bloomberg	5.4	6.8	4.5	2.2	2.8	27.3%	-48.1%
Dutch TTF Natural Gas	USD/MMBtu	Spot	Bloomberg	44.4	54.2	24.0	15.2	11.9	-21.9%	-73.3%
Japan Korea Natural Gas	USD/MMBtu	Spot	Bloomberg	38.7	38.7	29.5	13.5	12.2	-9.3%	-68.4%

Explanatory Note:

Data presented above indicates the rounded price of the selected commodities as of the last day of each quarter from Q2 2022 to Q2 2023. Percent change column may present differences due to the rounding of the Commodities' spot prices in the tables.



Commodity Prices

	Unit	Type	Source	Date					% Change		
				Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	ΔQoQ	ΔYoY	
Refined Products											
U.S.G.C. Regular Gasoline	USD/Gal	Spot	Bloomberg	3.6	2.5	2.5	2.6	2.4	-8.3%	-34.2%	
U.S.G.C. Diesel	USD/Gal	Spot	Bloomberg	3.8	3.2	3.4	2.6	2.4	-8.4%	-37.9%	
U.S.G.C. Jet Fuel	USD/Gal	Spot	Bloomberg	3.7	3.2	3.4	2.5	2.3	-11.5%	-38.0%	
Heating Oil	USD/Gal	Spot	Bloomberg	3.9	3.4	3.4	2.7	2.4	-9.3%	-37.2%	

Key Considerations

- U.S. crack spreads are expected to remain above their 10-year average levels as the U.S. market remains tight facing potential distortions. Market imbalances may appear due to reduced output derived from new sulfur regulations and refinery closures.
- Gasoline demand in 2023 has surpassed expectations but remains below 2019 levels while inventories remain within the 15-year average read and crack spreads surpass the 15-year average. Short-term demand will be tested by the Fed’s monetary policy, which is keeping high interests rate while refinery capacity on the East and West coasts has been reduced. Gulf Coast refiners are exporting large amounts of gasoline whose sulfur doesn’t meet local requirements outside the U.S.
- Diesel demand is expected to increase during these winter in the U.S. Northeast as heating oil stockpiles have diminished. Such demand is expected to increase diesel margins benefitting U.S. refiners. Increased demand will be paired with diminished diesel supplies due to the prioritization of gasoline production which is driven by a superior gasoline yield from U.S. Shale, who makes nearly two barrels of gasoline for each barrel of diesel.

Explanatory Note:

Data presented above indicates the rounded price of the selected commodities as of the last day of each quarter from Q2 2022 to Q2 2023. Percent change column may present differences due to the rounding off of the Commodities’ spot prices in the table.



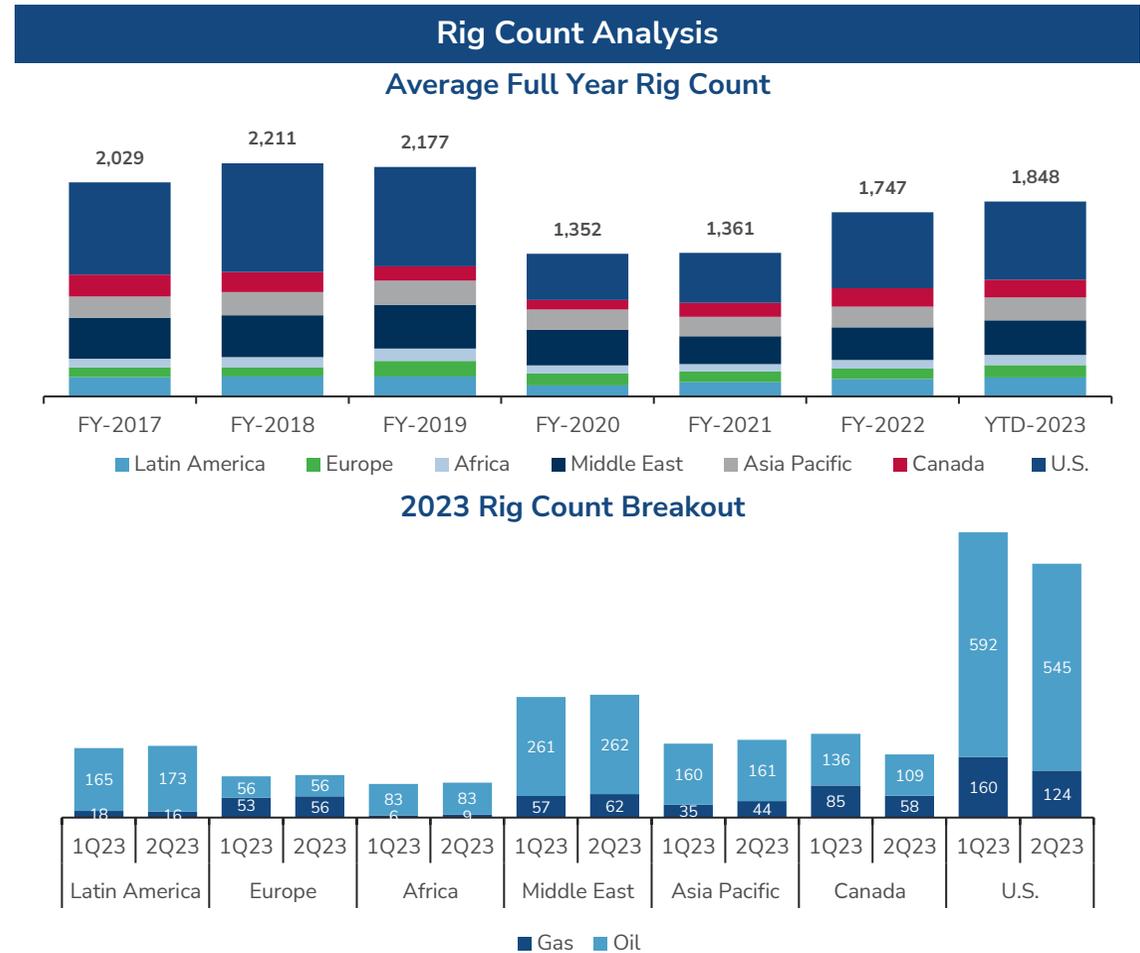
Leading Sector Indicators

Key Considerations

- With a slight reduction from last quarter's figure, the average international rig count as of 2H 2023 represented a 5.8% increase from FY 2022, a level that still struggles to recover from 2020's oil demand crisis.
- In 2Q 2023, the geography with the largest increase in rig count was Asia Pacific, with eight additional oil rigs and Latin America with nine additional gas rigs. On the other hand, the steepest decline in rig count was registered in the U.S., with a reduction of 47 oil rigs and 36 gas rigs.
- Evidently, the general trend in oil and gas rig count has been a declining effect, mostly seen in the U.S., which at the same time is being unsuccessfully countered by Asia Pacific's increases. The net reduction effect is mainly due to the following factors:
 - The persistent oil output cap in the U.S., causing higher labor and materials costs, which have affected profitability margins and forced to limit spending as a countering measure.
 - With regards to gas rig count reduction in particular, investment activity cuts are consistent to the current and expected low gas prices, with Henry Hub's more-than-20% price drop registered in 1H 2023.

Explanatory Note:

The Rig Count indicator 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. For the purpose of the analysis and data visualization, "Miscellaneous" subject from 2023 Rig Count Breakout was not included in the graph. This concept represents less than 3.0% of the total rig count for both periods.



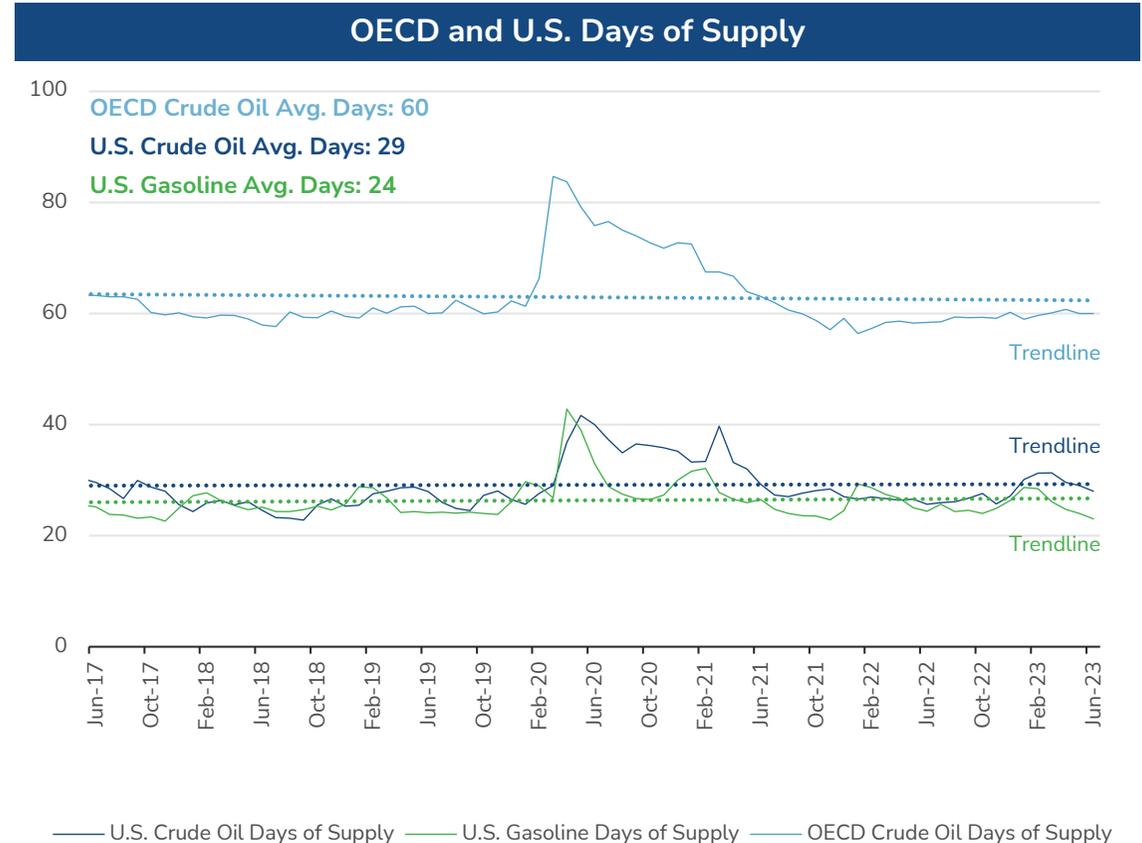
Source: Baker Hughes as of June 30, 2023



Leading Sector Indicators

Key Considerations

- As of 2Q 2023, average days of supply have declined in the U.S. against the previous quarter. Average crude oil days and average gasoline days decreased quarter over quarter by 6.5% and 14.3%, respectively. OECD average oil days on the other hand, remained unchanged at 60 days.
- Although these were minor shifts for days of supply internationally, largely due to increase demand in gasoline and strong refining demand as U.S. crude oil refineries ran at a rate of 94% utilization this quarter, there was an increase of 4% compared to last year.
- The U.S. Department of Energy announced it would start to refill its emergency stockpile strategic petroleum reserve, after it reached a 40-year low after the U.S. government decision to deplete its reserve to help tame high oil prices last year. With a plan to purchase about 12 million barrels of oil this year, taking a passive approach in an effort to not add additional pressure to the oil prices with the summer driving season, the beginning of the election season and OPEC+ voluntary production cuts.



Source: EIA

Explanatory Note:

The U.S. days of crude oil supply is a measure of the adequacy of inventories. It is calculated by taking the current stock level and dividing by product supplied averaged over the most recent four-week period. The OECD days of crude oil supply is a measure of OECD member countries' inventory adequacy. It is calculated with the same methodology as the U.S. index.



Economic Environment

Key Considerations

- The world economy is absorbing the impact of a series of unprecedented shocks. Through trade barriers and massive subsidies, the previous champions of globalization are now encouraging security and resilience on strategic supply chains which causes a reshuffling of global trade flows as corporations are working towards supply chain diversification while implementing geopolitical concerns in their strategies.
- New barriers to the free movement of goods services and capital, as well as a restrictive monetary policy, are reducing global growth while the more pessimistic outlooks fail to materialize. The last stretch on the fight against inflation is still a major concern in advanced economies
- Despite some headwinds, the U.S. labor market is proving to be surprisingly resilient which, paired with other evidences, generates an increased expectation of a soft landing in the largest economy.
- In consequence, pressure on stocks should wane as the economic low point passes and a brighter outlook emerges. The main exogenous factor that have eroded margins are alleviating while growth and economic uncertainty remains a risk.

Selected Global Equities Performance



Source: Bloomberg

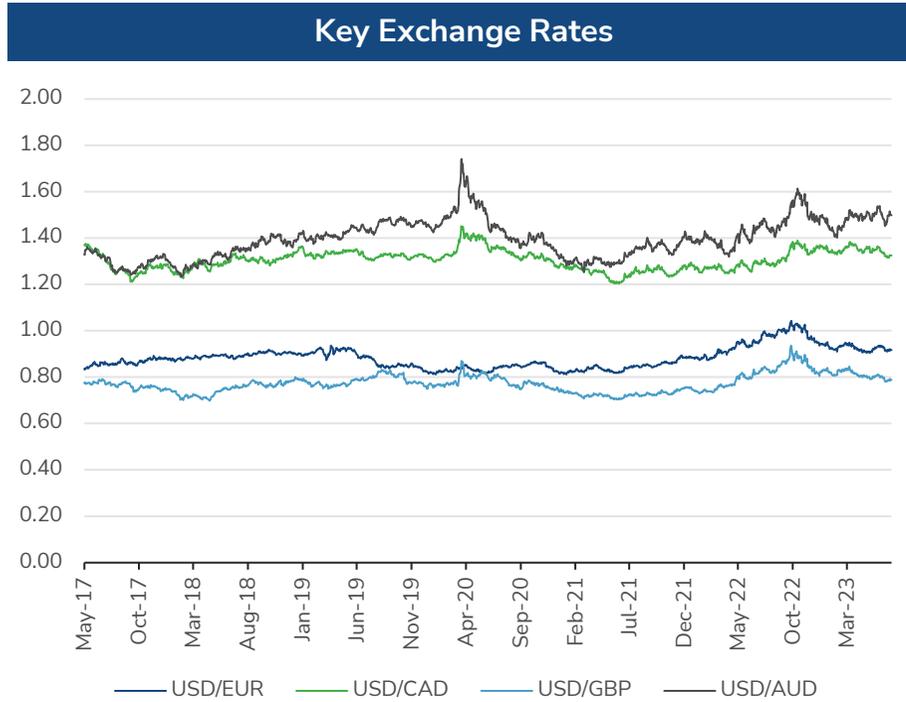
Explanatory Note:

The graph shown above portrays the performance of selected indexes against the "S&P Oil and Gas E&P Index," which encompasses a selection of the most important exploration and production companies in the world; the calculation takes January 17, 2017, as the starting point and tracks the percentage change until July 3, 2023.



Economic Environment

FX Rates of Key Currency Pairs



Source: Bloomberg

Key Considerations

- FX drivers have constantly evolved throughout 2023: in 1H, the expectation on a soft U.S. dollar was fed by a weak economy and rising rates which then turned into a bullish dollar due to much-stronger-than-expected economic indicators.
- The different central banking cycles among the advanced economies will drive the short-term appeal of major currencies. The Fed tightening cycle was initiated before the ECB's and is likely to finish earlier which, paired with a resilient EU economy, should be supportive of the euro.

Definition:
 FX: Foreign Exchange
 ECB: European Central Bank

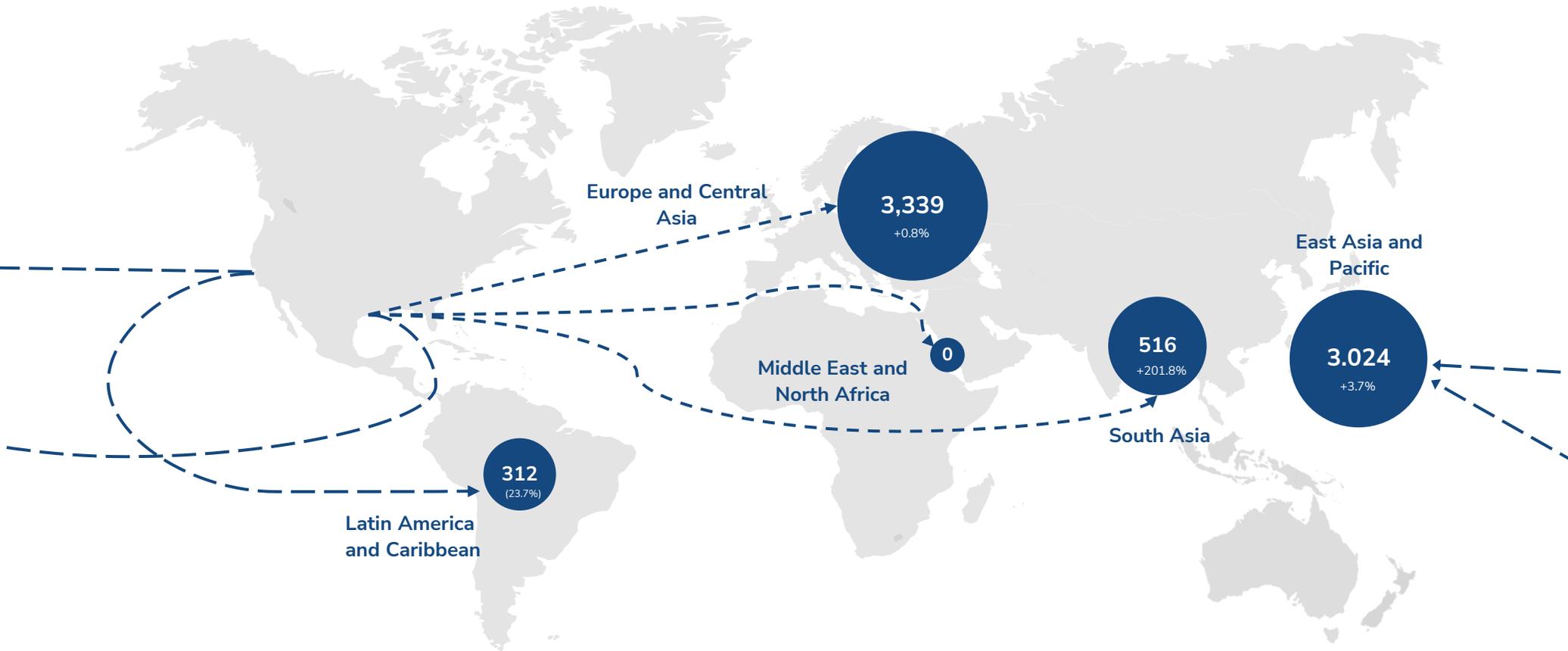
Other Relevant FX Pairs in the Global Oil and Gas Market

FX Pair	2016 Avg.	2017 Avg.	2018 Avg.	2019 Avg.	2020 Avg.	2022 Avg.	2023 Avg.
USD/MXN	18.69	18.91	19.23	19.25	21.48	20.11	18.45
USD/NOK	8.40	8.27	8.14	8.80	9.41	9.62	10.34
USD/BRL	3.48	3.19	3.65	3.95	5.16	5.16	5.13
USD/SAR	3.75	3.75	3.75	3.75	3.75	3.75	3.75
USD/JPY	108.78	112.15	110.46	109.03	106.77	131.55	132.90
USD/SKK	27.23	26.72	25.54	26.92	26.42	28.66	27.88
EUR/RUB	74.13	65.92	74.02	72.42	82.66	74.13	81.70



Trading Statistics

Q2 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 April 2023 to May 2023.

Definition:

MBbls/d: Thousand barrels per day



Trading Statistics

Key Considerations

- Global LNG exports decreased in approximately 3.6% compared to Q1 2023.
- The highlighted regions represented 82.1% of total LNG exports in Q2 2023, that is equivalent to 83.9 mn metric tons.
- In 2023, the U.S. is expected to contribute more than half of the worldwide supply growth, solidifying its position as the leading global exporter of LNG. This expansion will be predominantly driven by the increased operations at the Calcasieu Pass LNG terminal and the successful reactivation of Freeport LNG, which resumed full operations in Q1 2023.
- Asia Pacific was more active this quarter as it renewed its exports to MENA, North America, Russia and Eastern Europe; despite this, its output decreased by 6.8% QoQ.
- Global supply of LNG is anticipated to witness an expansion of approximately 4% in 2023, which translates to an increase of over 20 bcm.
- This growth can be attributed to a combination of factors, including new production facilities coming online, technological advancements in LNG extraction and transportation, and evolving trade dynamics in the energy sector.



Source: IHS Markit

Explanatory Note:

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

Definition:

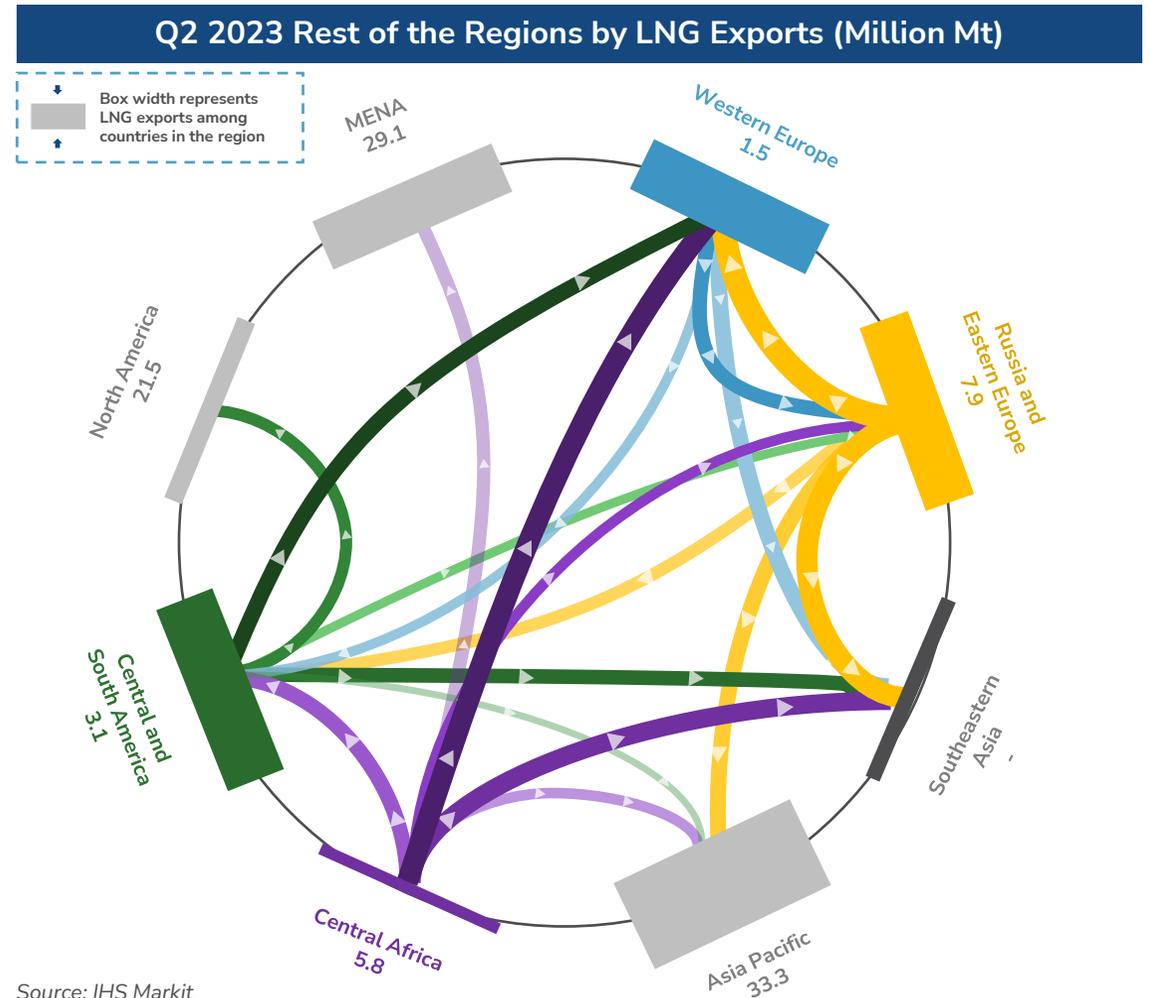
LNG: Liquefied Natural Gas
Bcf/D: Billion cubic feet per day



Trading Statistics

Key Considerations

- Rest of the regions displayed account for 17.9% of global LNG exports, with Central Africa being the only highlighted region that increased its export volume against last quarter.
- Countries continue to export LNG to Europe as the region continues to offset declining Russian pipeline gas supplies, mainly by increasing LNG imports and taking advantage of low gas price levels.
- The supply of LNG from Africa and South and Central America is expected to rise by nearly 10 bcm due to enhanced availability of feed gas and the expansion of operations at the Coral South and Congo floating LNG facilities.
- LNG supply growth in 2H 2023 will be primarily supported by improving feed gas availability in Trinidad & Tobago, and the ramp-up of production at Mozambique's Coral South FLNG system.
- Southeast Asia did not export LNG this quarter largely due to its falling gas production and rising demand.
- This decline in LNG exports due to local supply requirements is also seen in Australia, where the government is seeking to manage quarterly exports of LNG, to ensure that local supply requirements are met.



Source: IHS Markit

Explanatory Note:

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

Definition:

LNG: Liquefied Natural Gas

FLNG: Floating Liquefied Natural Gas

Announced Deals

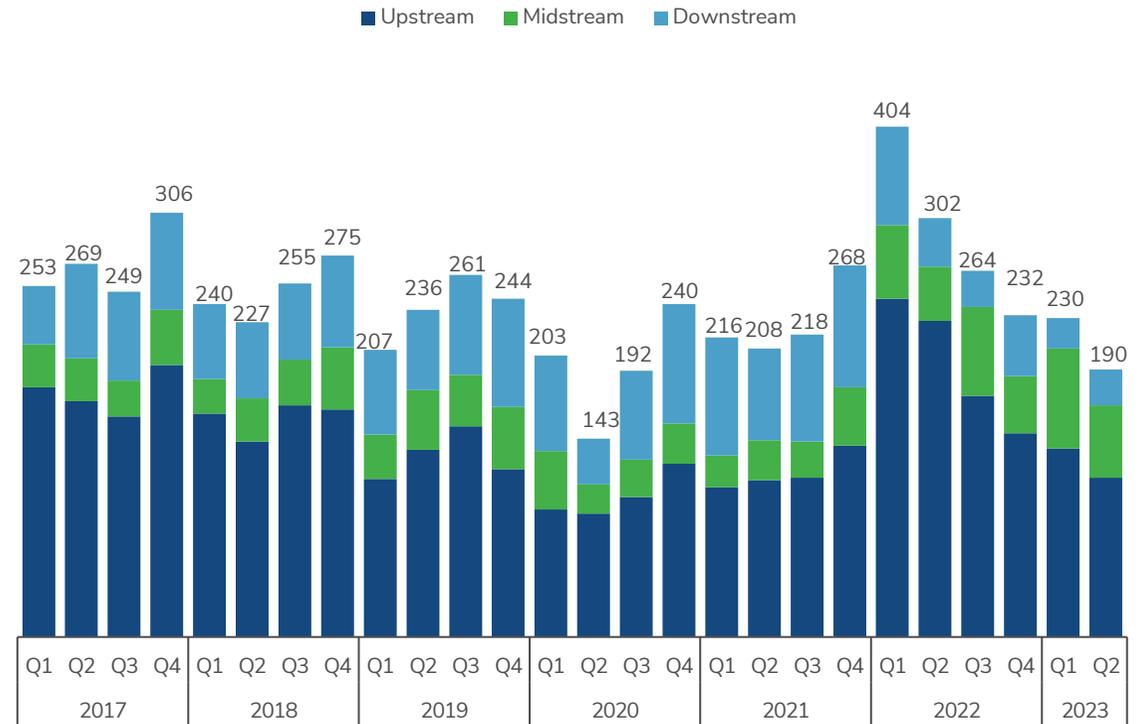
Key Considerations

- The total number of M&A transactions in the oil and gas industry decreased from 230 in Q1 2023 to 190 in Q2 2023.
- The overall reduction in M&A activity in this quarter can be explained by high interest rates, economic uncertainty and lower oil prices compared to last year.
- Despite the decrease in transaction volume, the total disclosed transaction value (TV) amounted to USD \$83.8 bn, a USD \$9.7 bn increase from last quarter's disclosed TV.
- Upstream M&A transactions remain the dominant subsector, regarding deals announced. It experienced a 14.7% decrease, but still heavily dominates as it represents 61.1% of total deal volume.
- The Midstream subsector had a total of 47 transactions this quarter, a 34.7% decrease vs. Q1 2023, as companies appear more cautious in investment for this subsector. Despite this decrease, it accounted for 39.9% of disclosed TV.
- However, downstream deals bucked the trend and experienced an increase of 22.7% vs. Q1 2023, potentially driven by refinery modernization and investors seeking to diversify with value-added products.

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.

M&A Quarterly Deal Count



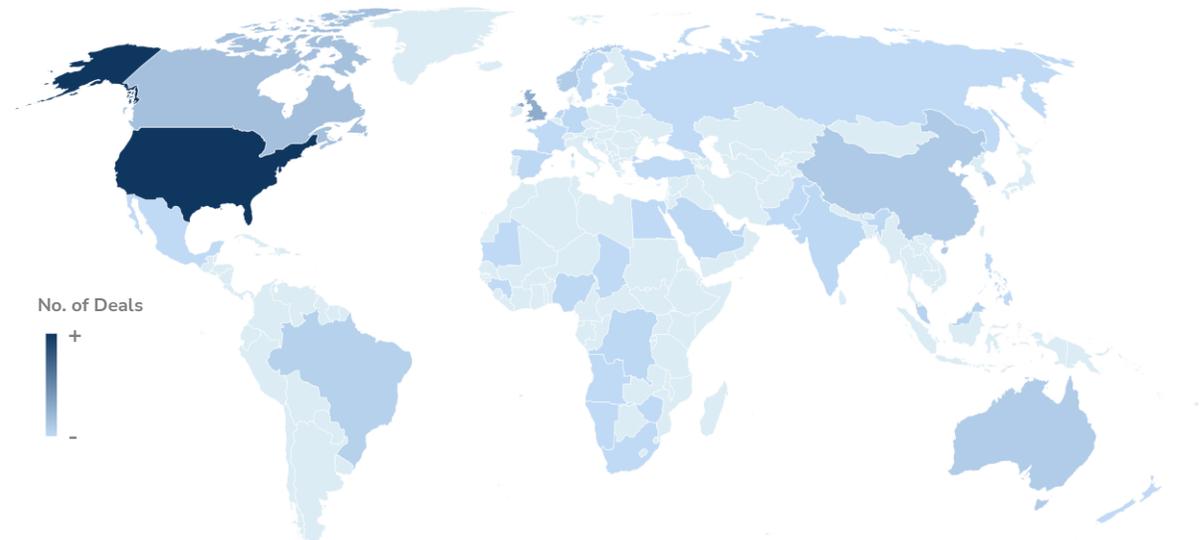
Source: IHS & Bloomberg as of June 30, 2023

Global Hotspots for Oil and Gas Deal Activity

Key Considerations

- The M&A global deal landscape continues to be dominated by North America, Europe and Asia Pacific, as 89% of the transactions were carried out in these regions during Q2 2023.
- The industry is highly influenced by external factors, such as the regulatory environment, market conditions and investment climate. The observed trends could be a result of a combination of these factors specific to each region.
- The Permian Basin in North America especially gained attention as some of the biggest deals in the region were target companies that operate in this area, such as PDC Energy Inc which was acquired by Chevron, and Lotus Midstream LLC which was acquired by Energy Transfer LP. In addition to Ovintiv Inc. acquiring all the assets of the PE firm EnCap Investments' Permian Basin portfolio companies.
- Europe M&A activity remained relative stable compared to other regions due to stricter regulations driving companies to reprioritize investments in oil and across low-carbon activities.
- Asia Pacific saw a significant drop in deal activity that can be explained by China's economic slowdown.

M&A Heatmap by Region and Deal Count



Source: IHS and Bloomberg between April 1st, and June 30, 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 Q2 2023. **KROLL** 14



Global Hotspots for Oil and Gas Deal Activity

Key Considerations

- Europe exhibited the most noteworthy TV/EBITDA multiples within M&A transactions. With an average multiple of 8.5, this marks the second consecutive quarter in which the region has outperformed North America and the Asia Pacific.
- Europe's economic outlook seems to be gradually rebounding from a period of notable instability, as evidenced by the TV/EBITDA multiple.
- Amid a surge in cash flow, most global international oil companies are prioritizing shareholder returns. However, even in a down market certain major players are opting for significant acquisitions seeking consolidation or adapting its portfolio to energy transition trends, utilizing high-priced equity.
- In the most substantial upstream purchase of 2023 and the most significant U.S. deal since 2021, Chevron Corp. has committed to acquiring PDC Energy Inc. for a disclosed TV/EBITDA multiple of 2.66.
- Numerous acquisitions occurred with undisclosed financial details, as various private equity firms divested numerous oil and gas holdings from their portfolios. These firms are expanding their investments into the energy transition and possibly aimed to release capital for this purpose.

Avg. Multiples (TV/EBITDA) by Highlighted Regions*

Region	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
North America	6.8	9.1	8.3	6.4	5.2
Europe	5.3	2.8	5.8	9.4	8.5
Asia Pacific	5.2	4.4	4.8	3.5	2.4

Source: IHS and Bloomberg as of June 30, 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 of transaction value multiples per region within the announced and completed deal universe provides an immediate visual summary of the figures regarding the Q2 2023.

* Note: 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.

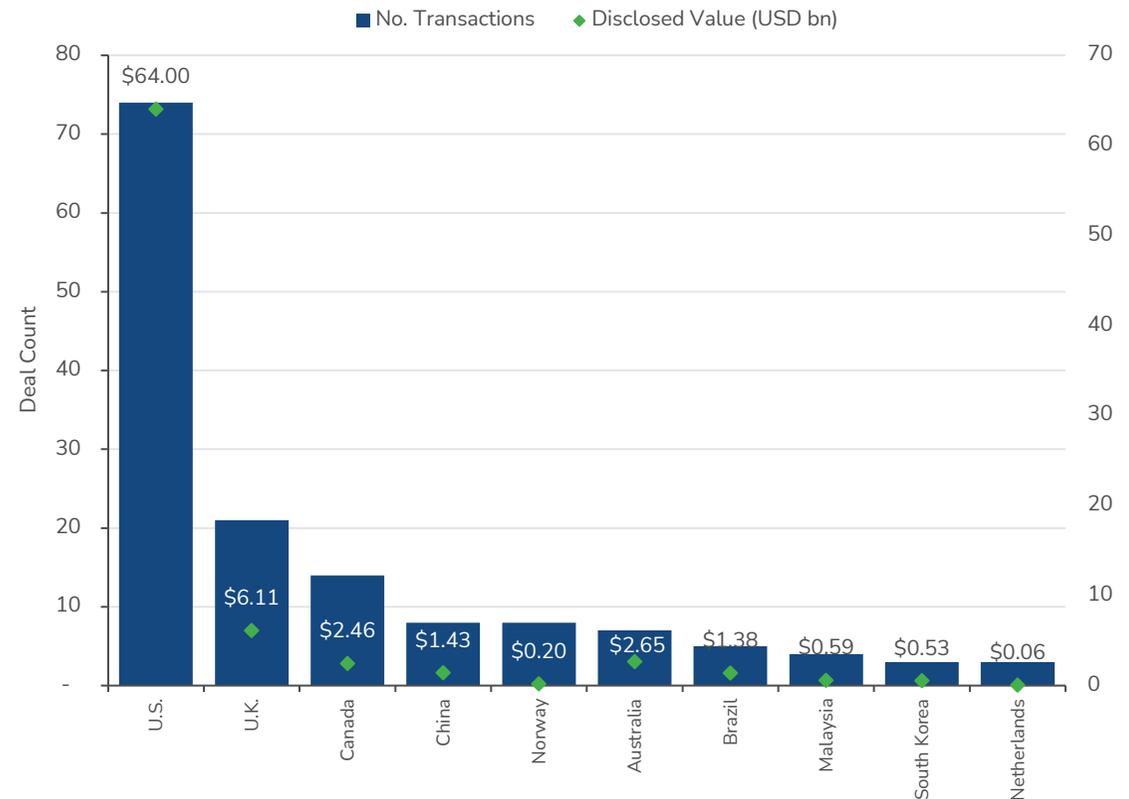


Global Hotspots for Oil and Gas Deal Activity

Key Considerations

- The top 10 leading countries for M&A activity represent 80.3% of the global deal count and encompass 94.8% of the disclosed transaction value during Q2 2023.
- UK M&A deal count increased 50% vs. Q1 2023, with a total of 21 transactions totaling more than USD \$6 bn in announced transaction value.
- The momentum of transactions in the UK can be due to the Energy Profits Levy Reform, which aims to safeguard energy firms from significant decreases in barrel price in the market.
- Upstream deals in the U.S. accounted for 48% of the disclosed transaction value, highlighting the trend of oil and gas producers need to get larger to gain inventory and wring the most savings out of exploration and production (E&P) activities.
- Newcomer to the list Malaysia invested heavily in the downstream sector with its most representative transaction this quarter being the proposed sale of Boustead Petroleum Marketing Sdn. Bhd. for USD \$431.5 mn.

Top 10 Countries by Deal Count and Value



Source: IHS and Bloomberg as of June 30, 2023

Explanatory Note:

The analysis is based on disclosed transactions for the period taking into account the top 10 countries by total transaction value (considering all announced M&A deals in the oil and gas industry) in order to illustrate overall M&A activity. Therefore, the said countries represent the industry's most significant regions by concentrating the highest proportion of market activity regarding volume and value.



Top 10 Deals Announced in Upstream

(In USD mn)

	Acquirer	Seller	Target	Type	Deal Description	Stake Acq.	Transaction Value	LTM Cash Flow	LTM EBITDA	TV/LTM Cash Flow	TV/LTM EBITDA
Announced											
May 22, 2023			PDC Energy Inc.	Public Company	Chevron Corp announced the acquisition of PDC Energy Inc for USD 7,874.41 mn. The transaction is expected to be completed by 12/31/2023.	100%	7,874.41	N/A	2,960.3	N/A	2.66x
Apr 7, 2023			PetroLegacy, Energy, Piedra Resources, Black Swan O&G	Private Company	A consortium led by EnCap Investments LP sold 3 Oil and Gas Companies to Ovintiv Inc for USD 4,321.93 mn. The transaction was completed on 06/13/2023.	100%	4,321.93	N/A	N/A	N/A	N/A
Apr 4, 2023			Neptune Energy Group Ltd.	Private Company	A consortium led by The Carlyle Group Inc announced the sale of Neptune Energy Group Lt except for Germany and Norway businesses to Eni SpA. The transaction is expected to be completed by 03/31/2024.	100%	2,600	N/A	N/A	N/A	N/A
Jun 23, 2023			Tap Rock Resources LLC (Delaware Basin assets)	Private Company	NGP Energy Capital Management LLC announced the sale of Tap Rock Resources LLC to Civitas Resources. The transaction is expected to be completed by 07/01/2023.	100%	2,450	N/A	N/A	N/A	N/A
Jun 16, 2023			Neptune Energy Norge AS	Private Company	Neptune Energy Group Ltd announced the sale of Neptune Energy Norge AS to Var Energi ASA for USD 2,275.00 mn.	100%	2,275	N/A	N/A	N/A	N/A
Jun 23, 2023			Hibernia Energy III LLC (Midland Basin assets)	Private Company	NGP Energy Capital Management LLC announced the sale of Hibernia Energy III LLC to Civitas Resources Inc for USD 2,250.00 mn. The transaction is expected to be completed by 07/01/2023.	100%	2,250	N/A	N/A	N/A	N/A
Jun 20, 2023			PureWest Energy LLC	Private Company	A consortium led by Fortress Investment Group LLC acquired PureWest Energy LLC for USD 1,840.00 mn. The transaction was completed on 06/01/2023.	100%	1,840	N/A	N/A	N/A	N/A
Jun 1, 2023			Novo Oil & Gas Holdings LLC	Private Company	EnCap Investments LP announced the sale of Novo Oil & Gas Holdings LLC to Earthstone Energy Inc for USD 1,500.00M. The transaction is expected to be completed by 09/30/2023.	100%	1,500	N/A	N/A	N/A	N/A
Jun 15, 2023			Ranger Oil Corp.	Public Company	Baytex Energy Corp acquired Ranger Oil Corp for USD 1,473.16M. The transaction was announced on 02/28/2023 and completed on 06/21/2023.	100%	1,473.16	N/A	411.5	N/A	3.58x
Jun 7, 2023			26 Potiguar onshore and shallow water fields	Asset	Petroleo Brasileiro SA sold 26 Potiguar onshore and shallow water fields/Petroleo Brasileiro to 3R PETROLEUM OLEO E GAS SA. The transaction was completed on 06/07/2023.	100%	1,380	N/A	N/A	N/A	N/A

Source: Bloomberg as of June 30, 2023

Definitions:

LTM: Last Twelve Months

TV/LTM: Transaction Value/Last Twelve Months Revenue

TV/LTM EBITDA: Transaction Value/Last Twelve Months Earnings Before Interest Taxes Depreciation and Amortization



Top 10 Deals Announced in Midstream

(In USD mn)	Acquirer	Seller	Target	Type	Deal Description	Stake Acq.	Transaction Value	LTM Cash Flow	LTM EBITDA	TV/LTM Cash Flow	TV/LTM EBITDA
Announced											
May 15, 2023	ONEOK	SS&C ALPS ADVISORS Energy Income Partners, LLC	Magellan Midstream Partners LP	Public Company	ONEOK Inc. announced the acquisition of Magellan Midstream Partners LP for USD 18,900.38 mn. The transaction is expected to be completed by 09/30/2023.	100%	18,900.38	N/A	1,481.81	N/A	13.2x
May 16, 2023	PHILLIPS 66	DCP Midstream	DCP Midstream LP	Public Company	Phillips 66 acquired DCP Midstream LP for USD 3,783.87 mn. The transaction was completed on 06/15/2023.	43.49%	9,213.66	N/A	913.14	N/A	10.09x
May 4, 2023	HF Sinclair	HOLLY ENERGY PARTNERS LP	Holly Energy Partners LP	Public Company	HF Sinclair Corp. proposed to acquire Holly Energy Partners LP for USD 3,376.26 mn. The transaction was proposed on 05/04/2023.	52.8%	3,376.26	N/A	291.05	N/A	11.6x
Apr 21, 2023	PipeChina	NCI 新华保险	National Pipeline Group United Co. Ltd.	Public Company	New China Life Insurance Co. Ltd. announced the sale of a minority stake in National Pipeline Group United Co. Ltd. to Pipe China. The transaction was announced on 04/21/2023 and is currently pending.	3.46%	1,316.19	N/A	N/A	N/A	N/A
May 16, 2023	PEMEX	MONTERRA ENERGY	Fuel storage terminal/Tuxpan	Asset	Monterra Energy Holdings LLC proposed to sell Fuel storage terminal/Tuxpan to Pemex for USD 320.00 mn. The transaction was proposed on 05/16/2023.	100%	320	N/A	N/A	N/A	N/A
Apr 19, 2023	EXCELERATE ENERGY	Anemoesa Marine	FSRU Sequoia	Asset	Anemoesa Marine Inc sold Floating storage regasification unit Sequoia/Anemoesa Marine Inc to Excelerate Energy Inc. for USD 265.00 mn. The transaction was completed on 04/19/2023.	100%	265	N/A	N/A	N/A	N/A
May 4, 2023	Green Plains PARTNERS LP	Green Plains PARTNERS LP	Green Plains Partners LP	Public Company	Green Plains Inc proposed to acquire Green Plains Partners LP for USD 236.31 mn. The transaction was proposed on 05/04/2023.	48.2%	236.3	N/A	44.83	N/A	5.27x
Jun 14, 2023	TotalEnergies	NEXT DECADE	NextDecade Corp.	Public Company	TotalEnergies SE announced the acquisition of a minority stake in NextDecade Corp. The transaction is expected to be completed by 06/30/2023.	17.5%	219	N/A	(76.3)	N/A	-
Apr 14, 2023	GASO	EESTI GAAS	Gasp AS	Private Company	Gas AS sold Latvian gas distribution network/Latvia to Eesti Gaas AS for EUR 120.00 mn. The transaction was completed on 07/17/2023.	100%	131.7	N/A	N/A	N/A	N/A
Apr 10, 2023	LIBERTY	SIREN ENERGY	Siren Energy LLC	Private Company	Liberty Oilfield Services LLC acquired Siren Energy LLC for USD 78.00 mn. The transaction was completed on 04/10/2023.	100%	78	N/A	N/A	N/A	N/A

Source: Bloomberg as of June 30, 2023

Definitions:

LTM: Last Twelve Months

TV/LTM: Transaction Value/Last Twelve Months Revenue

TV/LTM EBITDA: Transaction Value/Last Twelve Months Earnings Before Interest Taxes Depreciation and Amortization



Top 10 Deals Announced in Downstream

(In USD mn)	Acquirer	Seller	Target	Type	Deal Description	Stake Acq.	Transaction Value	LTM Cash Flow	LTM EBITDA	TV/LTM Cash Flow	TV/LTM EBITDA
Announced											
May 30, 2023	ASDA	EG Group	UK & Ireland gas station business	Asset	EG Midco Ltd. announced the sale of UK & Ireland gas station business to ASDA Group Ltd. The transaction is currently pending.	100%	2,814	N/A	N/A	N/A	N/A
Apr 28 2023	Couche-Tard	COPEC	Portfolio of Service Stations/Alabama	Asset	Empresas Copec SA announced the sale of Portfolio of Service Stations/Alabama to Alimentation Couche-Tard Inc for USD 725.00 mn. The transaction was announced on 04/28/2023 and is currently pending.	100%	725	N/A	N/A	N/A	N/A
Jun 15, 2023	Private Buyer	Boustead Holdings Berhad	Boustead Petroleum Marketing	Public company	Boustead Holdings Bhd. proposed to sell Boustead Petroleum Marketing Sdn. Bhd. for MYR 2,000.00 mn. The transaction was proposed on 06/15/2023.	100%	431	N/A	N/A	N/A	N/A
Jun 6, 2023	Private Investor	JAEWON INDUSTRIAL CO., Ltd.	Jaewon Industrial Co. Ltd.	Private company	Private Investor announced the acquisition of a minority stake in Jaewon Industrial Co. Ltd. The transaction is currently pending.	100%	385	N/A	N/A	N/A	N/A
Jun 30, 2023	MOI HUNGARY	OMV	OMV Slovenija d.o.o.	Private company	Hungary acquired OMV Slovenija d.o.o. for EUR 301.00 mn. The transaction was completed on 06/30/2023.	100%	329	N/A	N/A	N/A	N/A
Apr 4, 2023	TATNEFT	Dogar	Aytemiz Akaryakit Dagitim AS	Public company	A consortium led by Dogan Sirketler Grubu Holding AS announced the sale of Aytemiz Akaryakit Dagitim AS to Tatneft PJSC for USD 320.00 mn. The transaction was announced on 04/05/2023.	100%	320	N/A	842.1	N/A	.38x
Jun 2, 2023	远东控股集团	TOP FRONTIER INVESTMENT HOLDINGS INC.	Top Frontier Investment Holdings Inc.	Public company	Far East Holdings announced the acquisition of Top Frontier Investment Holdings Inc. for PHP 10,849.33 mn. The transaction was announced on 06/02/2023 and is expected to be completed by 06/30/2023.	11.9%	194	N/A	N/A	N/A	N/A
Jun 5, 2023	MACQUARIE	CNCITY	Cncity Energy Co. Ltd.	Private company	Macquarie Korea Infrastructure Fund acquired a stake in Cncity Energy Co. Ltd. The transaction was completed on 06/05/2023.	48%	143	N/A	N/A	N/A	N/A
May 4, 2023	SUNOCO	ZENITH ENERGY	16 refined product terminals	Asset	Zenith Energy Ltd. sold 16 refined product terminals/East Coast & Midwes to Sunoco LP for USD 110.00 mn. The transaction was announced on 05/04/2023 and completed on 05/01/2023.	100%	110	N/A	N/A	N/A	N/A
May 17, 2023	KE	ACE GASES MARKETING SDN. BHD.	Ace Gases Marketing Sdn. Bhd.	Private Company	Kelington Group Bhd. announced the acquisition of Ace Gases Marketing Sdn. Bhd. for MYR 5.19 mn. The transaction was announced on 06/01/2023 and is expected to be completed by 07/31/2023.	100%	1.13	N/A	N/A	N/A	N/A

Source: Bloomberg as of June 30, 2023

Definitions:

LTM: Last Twelve Months

TV/LTM: Transaction Value/Last Twelve Months Revenue

TV/LTM EBITDA: Transaction Value/Last Twelve Months Earnings Before Interest Taxes Depreciation and Amortization

JVs and Projects

Norway approves 19 new oil and gas projects worth around EUR £14.62 bn

June 2023

Norway has approved 19 new oil and gas projects in its waters, with total investment topping NOK 200 billion (GBP £14.62 bn).

The approved projects consist of further development of existing fields and investments in projects for increased extraction at existing fields. Aker BP managed to secure nine of the 19 approvals across the Norwegian and North Seas.

The green-lit developments were those seen as being able to contribute to continued high and stable production from the Norwegian Continental Shelf as well as green lighting these developments to contribute to Europe's energy security.

QatarEnergy Awards USD \$10 Billion Contract for North Field Expansion Project

May 2023

QatarEnergy awarded the major engineering, procurement, and construction (EPC) contract for its North Field South (NFS) Project to a joint venture between Technip Energies and Consolidated Contractors Company (CCC).

Qatar confirmed that the award comprises two LNG mega trains with a combined capacity of 16 million tpa. The value of the EPC contract is around USD \$10 bn, with a scope that includes the construction of the LNG mega trains with a capacity of 8 mtpa each, associated gas treatment facilities, natural gas liquids recovery, helium extraction, and refining within the Ras Laffan Industrial City.

Source: Bloomberg News, Journal of Petroleum Technology, EnergyVoice, Total Energies, Aramco

Definitions:

JVs: Joint Ventures
FID: Final Investment Decision
Mtpa: Million tons per annum
Ktpa: kilotons per annum

Saudi Arabian Oil Co. and TotalEnergies award contract for \$11 Bn Saudi Petrochemicals Project

June 2023

Aramco and TotalEnergies have granted Engineering, Procurement and Construction (EPC) agreements for the "Amiral" complex, an \$11 bn petrochemical expansion project at the SATORP refinery in Saudi Arabia.

The awarding of EPC contracts signifies the commencement of construction on the collaborative petrochemical expansion, subsequent to the FID taken in December 2022. The new facility, integrated into the existing SATORP refinery in Jubail, is poised to host one of the Gulf's largest mixed-load steam crackers, capable of generating 1,650 ktpa of ethylene and other industrial gases.

It is anticipated to be completed at a cost of \$11 bn and is expected to be operational in 2027.

TotalEnergies partners with GIP and NextDecade on new LNG projects

June 2023

In order to take part in the construction of the Rio Grande LNG (RGLNG) project, an LNG facility located in South Texas, TotalEnergies has signed a framework agreement with the U.S. company NextDecade.

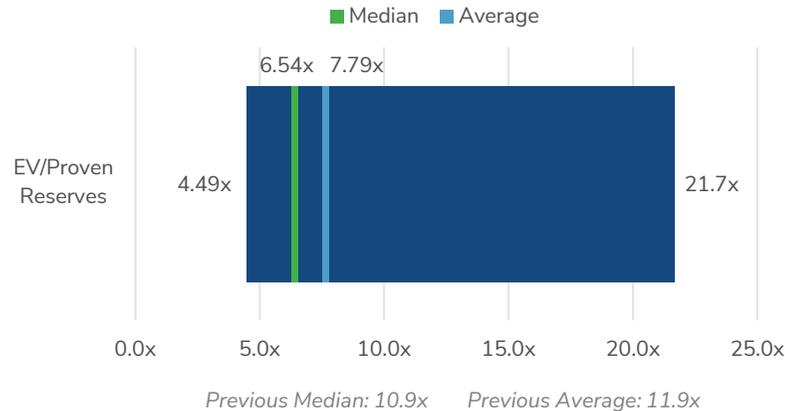
The initial documentation states that TotalEnergies shall hold 16.7% interest in the first phase of the project, which consists of three liquefaction trains with total annual capacity of 17.5 Mtpa.

In addition to TotalEnergies, the first phase of RGLNG will be developed by NextDecade as shareholder and operator and Global Infrastructure Partners (GIP) as the majority shareholder. The final investment decision (FID) on Phase 1 is expected by the end of the second quarter, and start-up in 2027.

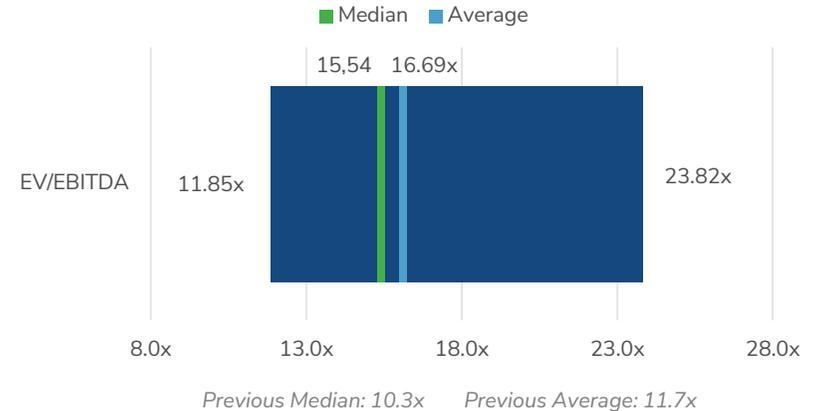
Transaction Multiples

Subindustry

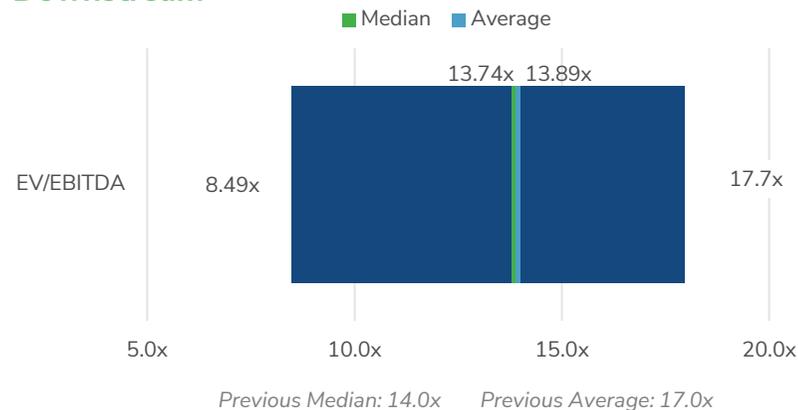
Upstream



Midstream



Downstream



Key Considerations

- Escalating borrowing costs have cast a shadow on debt raising, rendering the task of obtaining loans for funding M&A and other business investments a more arduous endeavor. However, the industry record profits in 2022 provided plenty of cash flow to fund its strategies in 2023.
- We continue to see high average EV/EBITDA multiple, especially in the midstream sector with megadeals announced this quarter.
- A new aspect to M&A within the industry is in the rising as companies that predominantly invest in non-operated shares in active wells are now transitioning toward acquiring complete stakes in exploration and production company ventures.

Explanatory Note:
The values considered in this analysis reflect the disclosed valuation multiple values from Q2 2023, and it may not be representative for all M&A activity of the quarter.

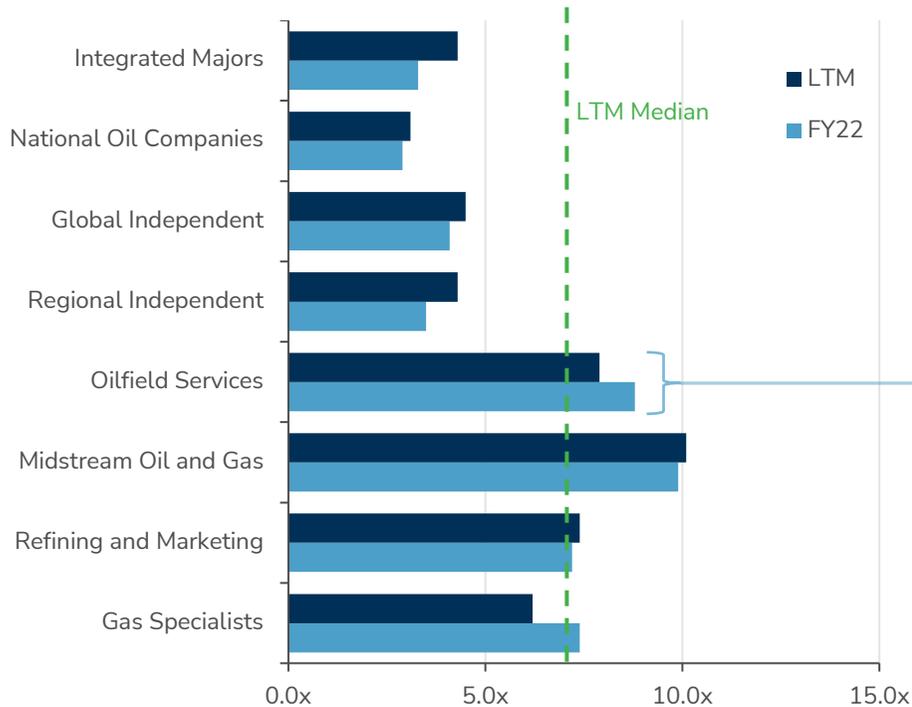
Source: Bloomberg/Capital IQ



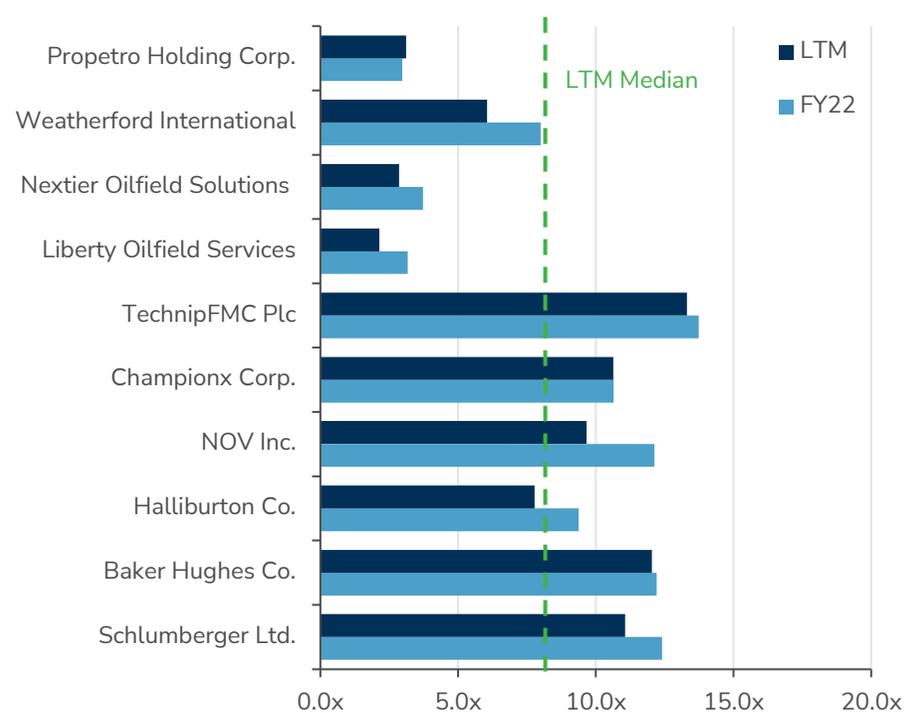
Public Trading Analysis

Subsector Focus: EV/EBITDA

Oil and Gas Subsector Average (LTM/FY22)



Spotlight: Oilfield Services



Source: Bloomberg as of June 30, 2023

Explanatory Note:

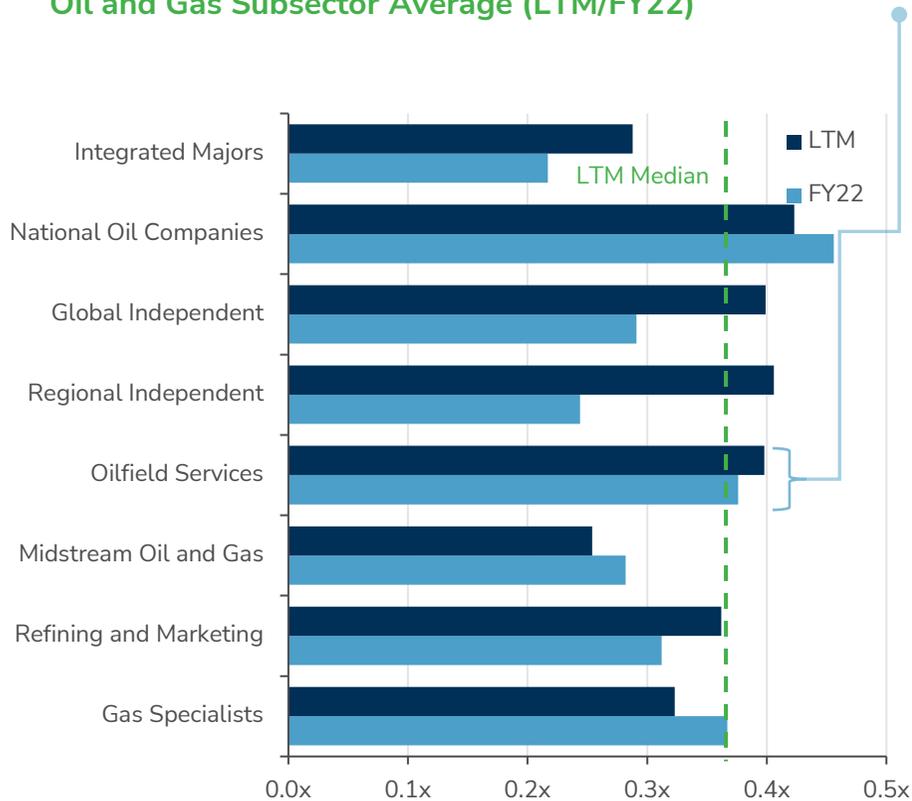
Subsector averages consider the available enterprise values and EBITDA values for the public companies under each category. Similarly, the Oilfield Services subsector particular emphasis considers the most representative companies by market capital (as of June 30, 2023) with available data for the multiple calculation (LTM EV/EBITDA and FY22 EV/EBITDA). Therefore, the LTM median presented in the analysis may differ from the subsector average as it only considers said companies and not all the companies listed under the category.



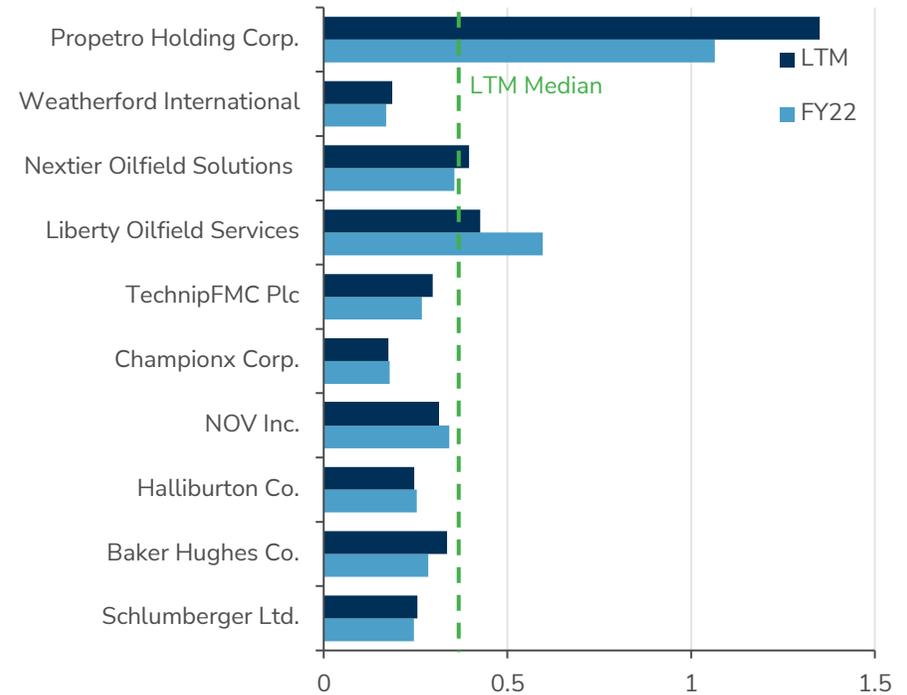
Public Trading Analysis

Subsector Focus: Capital Expenditure/EBITDA

Oil and Gas Subsector Average (LTM/FY22)



Spotlight: Oilfield Services



Source: Bloomberg as of June 30, 2023

Explanatory Note:

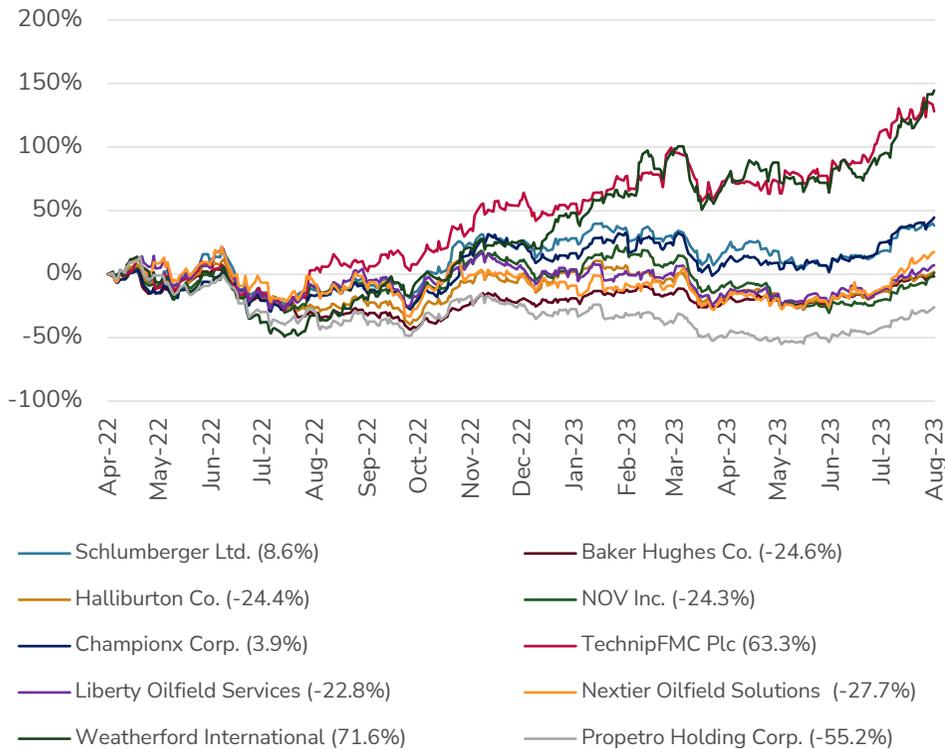
Subsector averages consider the available capital expenditure and EBITDA values for the public companies under each category. Similarly, the Oilfield Services subsector particular emphasis considers the most representative companies by market capital (as of June 30, 2023) and uses the available data as inputs for the multiple calculation. Therefore, the LTM median presented in the analysis only considers said companies and not the entire universe under the category.



Public Trading Analysis

Subsector Focus: Oilfield Services

Share Price Development Q2 2023*



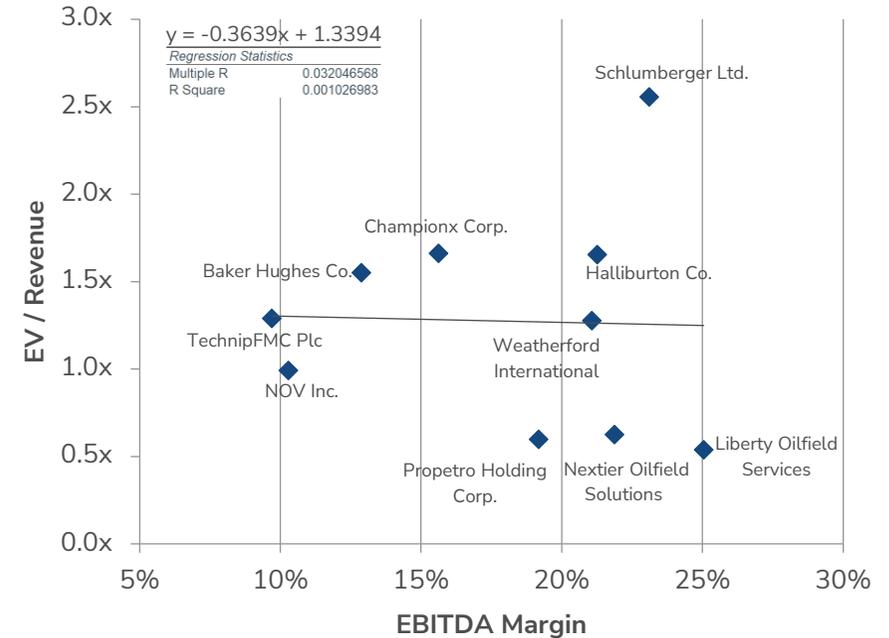
Source: Bloomberg as of June 30, 2023 / Kroll Analysis

Explanatory Note:

The linear regression plotted on the right side represents the forecasted EBITDA margin depending on the EV/Revenue multiple as of June 30, 2023.

* Note: The return showed in selected stocks is calculated by taking April 1, 2022, as the starting point and tracks the percentual change until August 1, 2023.

Regression Analysis: EV/Revenue vs. EBITDA Margin





Public Trading Analysis

Company Trading Statistics

(USD bn, except for per-share data)

	Share Price	52-Week Share Price		Market Cap	Enterprise Value	Revenues	EBITDA		EBITDA Margin	EV/EBITDA	
	30-Jun-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022
Integrated Majors											
Exxon Mobil Corp.	107.3	83.98	119.17	429.32	447.91	364.12	79.88	104.52	21.9%	5.6x	4.3x
Chevron Corp.	157.4	140.96	188.05	293.81	304.41	214.09	50.04	67.92	23.4%	6.1x	4.5x
Royal Dutch Shell Plc	29.8	23.62	31.35	200.62	244.23	358.59	72.06	83.53	20.1%	3.4x	2.9x
TotalEnergies SE	57.4	45.15	64.68	143.34	169.18	238.68	50.69	64.47	21.2%	3.3x	2.6x
BP Plc	5.8	4.59	6.82	101.29	142.46	228.99	49.33	59.54	21.5%	2.9x	2.4x
Average									21.6%	4.3x	3.3x
Median									21.5%	3.4x	2.9x

Source: Bloomberg as of June 30, 2023

Explanatory Note:

The information presented reflects analytical data and indicators from key public entities that make up the integrated major subsector of the oil and gas industry as of June 30, 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.



Public Trading Analysis

Company Trading Statistics

(USD bn, except for per-share data)

	Share Price	52-Week Share Price		Market Cap	Enterprise Value	Revenues	EBITDA		EBITDA Margin	EV/EBITDA	
	30-Jun-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022
National Oil Companies											
Saudi Arabian Oil Company	8.59	7.3	9.9	2,171.26	2,088.41	478.77	285.07	336.08	59.5%	7.3x	5.7x
Equinor Asa	29.1	25.4	41.7	87.51	68.34	128.65	69.46	82.71	54.0%	1.0x	0.8x
Petrochina Co. Ltd.	0.7	0.4	0.8	192.51	229.22	465.92*	76.32*	66.40	16.4%*	2.8x*	3.5x
Petrobras	6.2	4.0	7.3	80.38	128.63	112.77	58.34	67.79	51.7%	2.2x	1.9x
China Petroleum & Chemical	0.6	0.4	0.7	102.99	158.39	480.30*	30.49*	32.59	6.3%*	5.04x*	4.9x
Eni Spa	14.4	10.3	15.9	48.59	61.52	121.08	18.86	30.17	15.6%	3.3x	2.0x
Ecopetrol SA	0.5	0.4	0.6	18.63	51.53	34.11	14.46	16.32	42.4%	3.6x	3.2x
PTT PCL	0.9	0.9	1.1	27.10	61.86	91.29	10.11	13.10	11.1%	6.1x	4.7x
Oil & Natural Gas Corp. Ltd.	2.0	1.5	2.2	19.59	35.83	85.28*	9.40*	10.68	11.0%*	3.8x*	3.7x
Indian Oil Corp. Ltd.	1.1	0.8	1.2	11.61	30.10	102.96*	4.71*	5.71	4.6%*	6.39x*	5.7x
Bharat Petroleum Corp. Ltd.	4.4	3.5	4.8	7.98	17.18	58.76*	1.54*	2.14	2.6%*	11.1x*	8.0x
YPF S.A.	29.8	8.5	31.2	9.18	11.74	19.50	5.28	4.96	27.1%*	2.2x*	2.4x
Average									25.2%	4.6x	3.8x
Median									16.0%	3.6x	3.6x

Source: Bloomberg as of June 30, 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 June 30, 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.

*Note: Values correspond to Q1 2023 period, as companies did not present earnings information for the Q2 2023 period by the elaboration time of this report.



Public Trading Analysis

Company Trading Statistics

(USD bn, except for per-share data)

	Share Price	52-Week Share Price		Market Cap	Enterprise Value	Revenues	EBITDA		EBITDA Margin	EV/EBITDA	
	30-Jun-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022
Global Independent											
ConocoPhillips	103.61	93.63	134.94	124.07	132.87	66.73	26.85	36.37	40.2%	4.9x	3.7x
EOG Resources	114.44	101.48	148.26	66.63	65.25	23.98	14.51	14.59	60.5%	4.5x	4.5x
Repsol SA	14.55	10.90	16.87	18.59	27.85	68.38	7.23	14.30	10.6%	3.9x	1.9x
Inpex Corp.	11.07	9.24	14.65	14.46	22.96	16.80	11.06	11.52	65.8%	2.1x	11.07x
Occidental Petroleum Corp.	58.80	56.07	75.97	52.02	80.95	31.54	16.24	21.86	51.5%	5.0x	3.7x
Hess Corp.	135.95	100.74	160.44	41.74	48.81	10.76	5.04	5.87	46.8%	9.7x	8.3x
Average									45.9%	5.0x	4.0x
Median									29.2%	4.7x	3.7x

Source: Bloomberg as of June 30, 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 June 30, 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.



Public Trading Analysis

Company Trading Statistics

(USD bn, except for per-share data)

	Share Price	52-Week Share Price		Market Cap	Enterprise Value	Revenues	EBITDA		EBITDA Margin	EV/EBITDA	
	30-Jun-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022
Regional Independent											
Canadian Natural Resources	56.27	44.72	62.38	61.46	71.00	27.42	12.87	17.18	46.9%	5.5x	4.1x
Pioneer Natural Resources Co.	207.18	181.85	268.62	48.30	53.27	20.11	10.05	12.68	50.0%	5.3x	4.2x
Suncor Energy Inc.	29.37	26.61	37.06	38.25	50.11	39.20	14.12	17.21	36.0%	3.5x	2.9x
Devon Energy Corp.	48.34	45.12	77.35	30.99	37.00	17.01	9.48	9.75	55.8%	3.9x	3.8x
Cenovus Energy Inc.	17.01	14.57	21.63	32.26	39.39	41.75	7.66	10.86	18.3%	5.1x	3.6x
Imperial Oil Ltd.	51.24	40.33	57.84	29.93	31.30	38.14	6.78	7.91	17.8%	4.6x	4.0x
Diamondback Energy Inc.	131.36	111.21	167.03	23.54	31.12	8.14	6.26	7.06	76.9%	5.0x	4.4x
Santos	5.02	4.44	5.46	15.70	19.17	7.51*	5.54*	5.81	73.7%*	4.45x*	3.3x
Marathon Oil Corp.	23.02	21.09	33.03	13.94	20.01	6.70	4.45	5.76	66.4%	4.5x	3.5x
Aker BP ASA	23.51	21.57	38.02	14.85	16.83	15.29	12.80	11.55	83.7%	1.3x	1.5x
Average									50.2%	4.3x	3.5x
Median									50.0%	4.6x	3.7x

Source: Bloomberg as of June 30, 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 June 30, 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.

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Public Trading Analysis

Company Trading Statistics

(USD bn, except for per-share data)

	Share Price	52-Week Share Price		Market Cap	Enterprise Value	Revenues	EBITDA		EBITDA Margin	EV/EBITDA	
	30-Jun-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022
Oilfield Services											
Schlumberger Ltd.	49.12	33.86	58.46	69.80	79.73	31.19	7.21	6.43	23.1%	11.1x	12.4x
Baker Hughes Co.	31.61	20.45	35.84	31.80	36.13	23.31	3.00	2.96	12.9%	12.0x	12.2x
Halliburton Co.	32.99	23.31	42.66	29.63	37.06	22.41	4.77	3.96	21.3%	7.8x	9.4x
NOV Inc.	16.04	14.07	24.80	6.32	7.95	8.02	0.82	0.66	10.3%	9.7x	12.1x
Championx Corp.	31.04	18.05	36.04	6.09	6.45	3.88	0.61	0.61	15.6%	10.6x	10.7x
TechnipFMC Plc	16.62	8.03	18.75	7.28	9.18	7.12	0.69	0.67	9.7%	13.3x	13.7x
Liberty Oilfield Services	13.37	11.56	18.01	2.28	2.62	4.87	1.22	0.83	25.0%	2.1x	3.2x
Nextier Oilfield Solutions	8.94	6.75	11.92	2.04	2.28	3.65	0.80	0.61	21.9%	2.9x	3.7x
Weatherford International	66.42	21.88	84.10	4.78	6.11	4.79	1.01	0.76	21.1%	6.1x	8.0x
Propetro Holding Corp.	8.24	6.41	12.10	0.93	0.92	1.54	0.30	0.31	19.2%	3.1x	3.0x
Average									18.0%	7.9x	8.8x
Median									20.1%	8.7x	10.0x

Source: Bloomberg as of June 30, 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 June 30, 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.



Public Trading Analysis

Company Trading Statistics

(USD bn, except for per-share data)

	Share Price	52-Week Share Price		Market Cap	Enterprise Value	Revenues	EBITDA		EBITDA Margin	EV/EBITDA	
	30-Jun-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022
Midstream Oil and Gas											
Enbridge Inc.	37.18	34.48	44.29	75.21	142.80	35.48	8.01	11.46	22.6%	17.8x	12.5x
Enterprise Products Partners	26.35	22.91	27.31	57.30	87.46	52.21	8.52	9.19	16.3%	10.3x	9.5x
TC Energy Corp.	40.47	34.20	51.13	41.56	87.74	11.65*	6.94*	7.28	59.6*	12.2*	12.1x
Kinder Morgan Inc.	17.22	16.09	19.26	38.38	71.00	17.15	6.44	7.47	37.5%	11.0x	9.5x
Williams Cos Inc.	32.63	28.30	35.60	39.71	66.14	11.52	6.15	6.34	53.4%	10.8x	10.4x
Energy Transfer LP	12.70	10.22	13.50	39.92	101.95	80.76	11.89	12.95	14.7%	8.6x	7.9x
MPLX LP	33.94	28.56	35.53	33.97	55.48	11.47	6.32	5.76	55.1%	8.8x	9.6x
Oneok Inc.	61.72	50.58	70.93	27.63	40.14	19.20	4.34	3.60	22.6%	9.3x	11.1x
Antero Resources Corp.	23.03	20.10	43.26	6.92	11.84	6.40	4.38	3.23	68.4%	2.7x	3.7x
Magellan Midstream Partners	62.32	45.69	66.27	12.59	17.64	3.48	1.60	1.41	45.8%	11.1x	12.5x
Plains All Amer Pipeline LP	14.10	10.18	15.02	8.77	23.04	51.23	2.45	2.48	4.8%	9.4x	9.3x
Enlink Midstream LLC	10.60	8.10	13.38	4.90	11.29	8.01	1.37	1.30	17.0%	8.3x	8.7x
Equitrans Midstream Corp.	9.56	4.74	10.37	4.14	12.17	1.38	1.04	1.06	75.6%	11.7x	11.5x
Average									36.0%	10.1x	9.9x
Median									30.1%	10.1x	9.6x

Source: Bloomberg as of June 30, 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 June 30, 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.

*Note: Values correspond to Q1 2023 period, as companies did not present earnings information for the Q2 2023 period by the elaboration time of this report.



Public Trading Analysis

Company Trading Statistics

(USD bn, except for per-share data)

	Share Price	52-Week Share Price		Market Cap	Enterprise Value	Revenues	EBITDA		EBITDA Margin	EV/EBITDA	
	30-Jun-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022
Refining and Marketing											
Reliance Industries Ltd.	28.31	24.30	31.93	197.66	235.80	104.55	17.32	14.53	16.6%	13.61x	16.1x
Marathon Petroleum Corp.	116.60	89.54	140.25	46.99	73.26	156.81	21.83	23.64	13.9%	3.4x	3.1x
Valero Energy Corp.	117.30	97.89	149.96	41.42	50.16	157.15	17.48	17.60	11.1%	2.9x	2.8x
Phillips 66	95.38	74.16	112.29	42.47	59.76	154.72	14.77	16.02	9.5%	4.0x	3.7x
Neste OYJ	38.50	35.69	51.79	29.57	30.99	24.92	2.29	3.69	9.2%	13.5x	8.4x
Formosa Petrochemical Corp.	2.71	2.37	2.93	25.78	24.57	24.99	-0.44	1.29	-1.8%	-55.6x	19.0x
Pembina Pipeline Corp.	31.48	30.13	37.93	17.28	26.86	7.47	2.78	2.77	37.2%	9.7x	9.7x
OMV AG	42.41	34.91	53.17	14.32	25.55	54.63	11.70	15.62	21.4%	2.1x	1.6x
Targa Resources Corp.	76.10	57.28	82.47	17.05	30.85	17.84	3.75	2.88	21.0%	8.2x	17.05
SK Innovation Co. Ltd.	147.12	95.01	166.45	12.36	27.22	60.36	2.02	5.79	3.4%	13.5x	12.36
Eneos Holdings Inc.	3.41	3.21	3.90	10.28	35.80	107.01	2.30	7.30	2.2%	15.5x	10.28
HF Sinclair	55.93	38.26	65.61	7.71	11.55	34.98	4.07	4.89	11.6%	2.8x	7.71
Sunoco LP	43.56	37.10	48.09	4.37	8.22	23.62	0.78	0.85	3.3%	10.5x	4.37
PBF Energy Inc.	40.94	28.28	48.23	5.08	5.89	42.06	4.86	4.64	11.5%	1.2x	5.08
CVR Energy Inc.	29.96	23.25	40.93	3.01	4.32	9.90	1.20	1.28	12.1%	3.6x	3.01
Average									11.1%	2.6x	6.8x
Median									11.1%	4.0x	4.7x

Source: Bloomberg as of June 30, 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 June 30, 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.



Public Trading Analysis

Company Trading Statistics

(USD bn, except for per-share data)

	Share Price	52-Week Share Price		Market Cap	Enterprise Value	Revenues	EBITDA		EBITDA Margin	EV/EBITDA	
	30-Jun-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022
Gas Specialists											
TC Energy Corp.	40.47	34.20	51.13	41.56	87.74	11.65	6.88	7.28	59.8%	11.45	12.1x
Kinder Morgan Inc.	17.22	16.09	19.26	38.38	71.00	17.15	6.44	7.47	37.5%	11.0x	9.5x
Williams Cos Inc.	32.63	28.30	35.60	39.71	66.14	11.52	6.15	6.34	53.4%	10.8x	10.4x
Cheniere Energy Inc.	152.36	137.75	179.86	36.70	64.36	29.35	15.89	11.45	54.1%	4.1x	5.6x
Oneok Inc.	61.72	50.58	70.93	27.63	40.14	19.20	4.34	3.60	22.6%	9.3x	11.1x
Coterra Energy Inc.	25.30	22.78	32.23	19.10	20.65	7.76	5.58	6.71	71.9%	3.7x	3.1x
Woodside Petroleum Ltd.	22.97	19.49	26.59	42.52	44.45	18.76	12.98	11.71	69.2%	3.4x	3.8x
Southwestern Energy Co.	6.01	4.61	8.06	6.62	10.62	11.31	7.03	3.26	62.2%	1.5x	3.3x
DCP Midstream LP*	41.69	35.76	42.08	8.70	14.13	11.72	0.92	1.78	7.9%	15.35x	8.1x
Average									47.3%	6.2x	6.7x
Median									53.8%	4.1x	5.6x

Source: Bloomberg as of June 30, 2023

Explanatory Note:

The information presented reflects analytical data and indicators from key public entities that make up the gas specialists subsector of the oil and gas industry as of June 30, 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.

*Phillips 66 acquired the majority of economic interest of DCP Midstream LP on June 15, 2023, thus the company will no longer be listed on the New York Stock Exchange.

Trading Statistics – Appendix I

Q2 2023 LNG Exports by Destination

(In mn metric tons)

	MENA	Asia Pacific	North America	Russia and Eastern Europe	Central Africa	Central and South America	Western Europe	Southeast Asia	Total
Regions									
MENA	1.4	2.4	-	1.3	-	0.3	7.1	16.6	29.1
Asia Pacific	0.1	5.3	0.1	0.1	-	-	-	27.8	33.3
North America	0.1	0.2	0.1	1.0	-	2.0	14.5	3.6	21.5
Russia and Eastern Europe	-	0.1	-	0.3	-	0.1	3.6	3.9	7.9
Central Africa	0.5	0.4	-	0.1	-	0.6	2.9	1.3	5.8
Central and South America	-	0.1	0.1	0.1	-	1.1	1.3	0.5	3.1
Western Europe	-	-	-	0.3	-	0.0	0.8	0.4	1.5
Southeastern Asia	-	-	-	-	-	-	-	-	-
Total	2.2	8.4	0.3	3.2	-	4.0	30.2	54.0	102.2

Source: IHS Markit as of June 30, 2023

Explanatory Note:

The information presented reflects the global bilateral LNG trade for Q2 2023, with the first column indicating the exporting region and the following columns being the reception regions or importers.

How Kroll Can Help

Kroll has a dedicated industry team with more than 100 full-time professionals combining two essential key success factors in oil and gas transactions: (i) deep operational knowledge and market and legal understanding of the industry, and (ii) corporate finance and accounting expertise.

We work with oil and gas organizations to rationalize portfolios, raise private debt and capital, find cost reduction opportunities and successfully navigate regulatory and tax law changes.

Our team has advised most major international oil companies on a variety of transactions and strategic issues, ranging from M&A mandates to full due diligence, valuation advisory, corporate reorganizations and capital raising.

Our team structure provides a flexible approach and senior management is present throughout every phase of a transaction.

Buy-Side Advisory

From decision support at origination to deal closing and beyond, Kroll supports its clients throughout the deal cycle. Combining market data with fundamental financial competencies, we support critical decision-making with essential advice and information.

We provide our clients with the information they need to make informed business decisions for buy-side transaction projects.

From strategy to execution, Kroll enables oil and gas companies to transact, grow and realize value with greater conviction and speed and the appropriate industry insights.

Sell-Side Advisory

Sellers may face tremendous pressure to drive maximum value by bringing to market assets that are operationally optimized and transaction-ready.

Whether the seller is looking to spin off, carve out an asset, or sell an entire company or business unit, oil and gas companies should focus on selling assets in the same rigorous way they focus on acquisitions.

Kroll's team can help companies optimize their portfolio and improve divestment strategy and execution through the following vendor assistance actions:

- Assessing the strategy and portfolio management
- Drafting equity story development and delivery
- Executing complete due diligence as a one-stop-shop (financial, commercial, risk and compliance)
- Supporting negotiations and closings

Private Debt and Capital

Kroll has long-standing relationships with the leading providers of private debt and equity capital and supports our clients in achieving an array of strategic objectives, including:

- Capital structure, capital raising and capital alternatives (recapitalization)
- Financial structuring
- Strategic planning
- Independent views on investment bank and equity research analyst selection, pricing, valuation and equity raising process appropriate to industry insights

Oil and Gas-Specific Services

The nature of and investment amounts required for the oil and gas industry need a thorough understanding of sector-specific drivers, such as macroeconomic and geopolitical impacts on market balances.

Our Oil and Gas team has extensive and global hands-on experience in the sector and we add value by providing a bridge between technical, commercial, legal and financial teams.

The Kroll Oil and Gas team understands the idiosyncrasies of the global sector and puts the following knowledge at your disposal:

- Project and structured commodity finance advisory and asset-based lending advisory
- Joint venture audits, financial joint venture management and preparation of cost certificates
- Valuation of exploration and production assets, commercial contracts, etc.
- Development or tariff/rate models for midstream and downstream assets



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