



Industry Insights

Global Oil and Gas M&A Outlook

Q1 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 conducted during the quarter and developments on featured specialty subsectors.

Our top insights for this edition are detailed below:

- The downward trend in oil and gas prices persists due to a weaker than expected industrial activity and the banking sector crunch. Sticky inflation led to new recession worries, exacerbating a sluggish economic environment.
- Overall crude excess supply and concerns for the relatively low demand, stimulated inventory build-up in some regions, hoping for demand recovery to be led by emerging markets in the following months.
- The LNG market experienced a solid performance as demand continued to grow, driven by increased consumption in emerging markets and decarbonization efforts. Infrastructure expansion, including new terminals and regasification facilities, eased trade flow across regions.
- The upstream subsector has shown resilience within M&A activity, as firms sought to optimize their portfolios. Key trends included consolidation within the industry, and firms enhancing their asset base and operational efficiency.

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

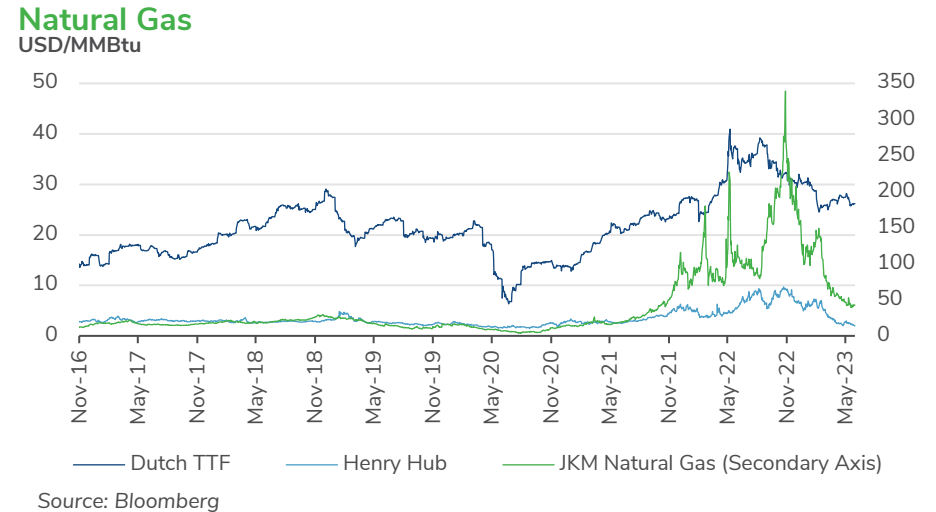
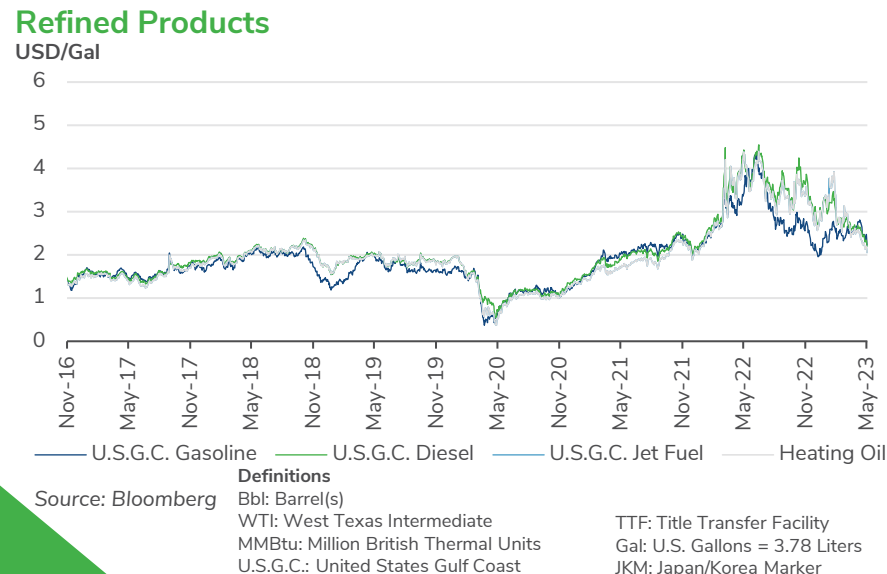
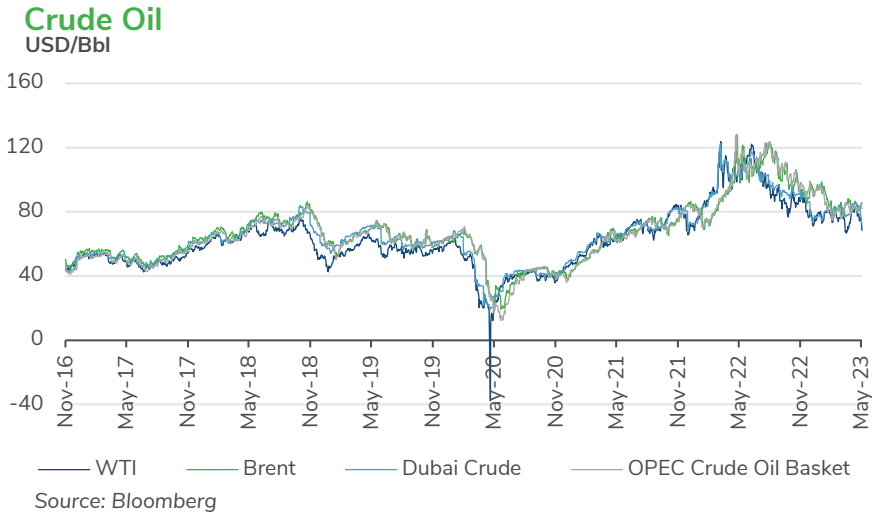
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Commodity Prices

Hydrocarbon Prices



Key Considerations

- While most of oil and gas prices are back to pre-war levels, the considerable sell-off trend experienced during the Q4 2022 persisted into Q1 2023 due to weaker-than-expected global industrial activity, prospective rate hikes and a slower-than-anticipated pick up in Chinese demand.
- Sustained interest rate hikes to reduce inflation, especially in the U.S., have caused negative implications on financial institutions and revival of recession fears, deepening low economic growth. This has led the OPEC+ to apply oil production cuts to boost oil prices against a latent harsh consumption scenario.



Commodity Prices

	Unit	Type	Source	Date					% Change	
				Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	ΔQoQ	ΔYoY
Crude Oil										
WTI Crude Oil	USD/Bbl	Spot	Bloomberg	100.3	105.8	79.5	80.3	75.7	-5.8%	-24.6%
Brent Crude Oil	USD/Bbl	Spot	Bloomberg	107.9	114.8	88.0	85.9	79.8	-7.1%	-26.1%
Dubai Crude	USD/Bbl	Spot	Bloomberg	110.9	113.2	90.9	77.2	78.5	1.7%	-29.2%
OPEC Crude Oil Basket	USD/Bbl	Spot	Bloomberg	107.7	115.6	92.3	81.3	78.1	-3.9%	-27.5%
				Date					% Change	
	Unit	Type	Source	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	ΔQoQ	ΔYoY
Gas										
Henry Hub Natural Gas	USD/MMBtu	Spot	Bloomberg	5.6	5.4	6.8	4.5	2.2	-50.8%	-60.4%
Dutch TTF Natural Gas	USD/MMBtu	Spot	Bloomberg	40.9	44.4	54.2	24.0	15.2	-36.5%	-62.7%
Japan Korea Natural Gas	USD/MMBtu	Spot	Bloomberg	35.4	38.7	38.7	29.5	13.5	-54.2%	-61.8%

Explanatory Note:

Data presented above indicates the rounded price of the selected commodities as of the last day of each quarter from Q1 2022 to Q1 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		
				Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	ΔQoQ	ΔYoY	
Refined Products											
U.S.G.C. Regular Gasoline	USD/Gal	Spot	Bloomberg	3.2	3.6	2.5	2.5	2.6	↑ 4.8%	↓ -18.1%	
U.S.G.C. Diesel	USD/Gal	Spot	Bloomberg	3.5	3.8	3.2	3.4	2.6	↓ -24.1%	↓ -26.3%	
U.S.G.C. Jet Fuel	USD/Gal	Spot	Bloomberg	3.6	3.7	3.2	3.4	2.5	↓ -25.6%	↓ -29.7%	
Heating Oil	USD/Gal	Spot	Bloomberg	3.7	3.9	3.4	3.4	2.7	↓ -21.3%	↓ -27.7%	

Key Considerations

- Global oil and gas prices continue to experience a downward trend as inflationary pressures continue to impact commodities. The overall decrease has had an effect on refined products as diesel, jet fuel and heating oil recorded an average decrease of 25% during the quarter. Despite such decreases, regular gasoline registered an increase of 5% in Q1 2023. Additionally, Russia’s oil exports have bounced back to levels last seen before the Ukrainian conflict, explaining the further decrease on prices.
- Despite investors and financial institutions anticipating a near-term recession in the U.S. and Chinese oil demand seeming to mildly dive, emerging markets will lead demand recovery following resilient OPEC cuts to aid price swift.

Explanatory Note:

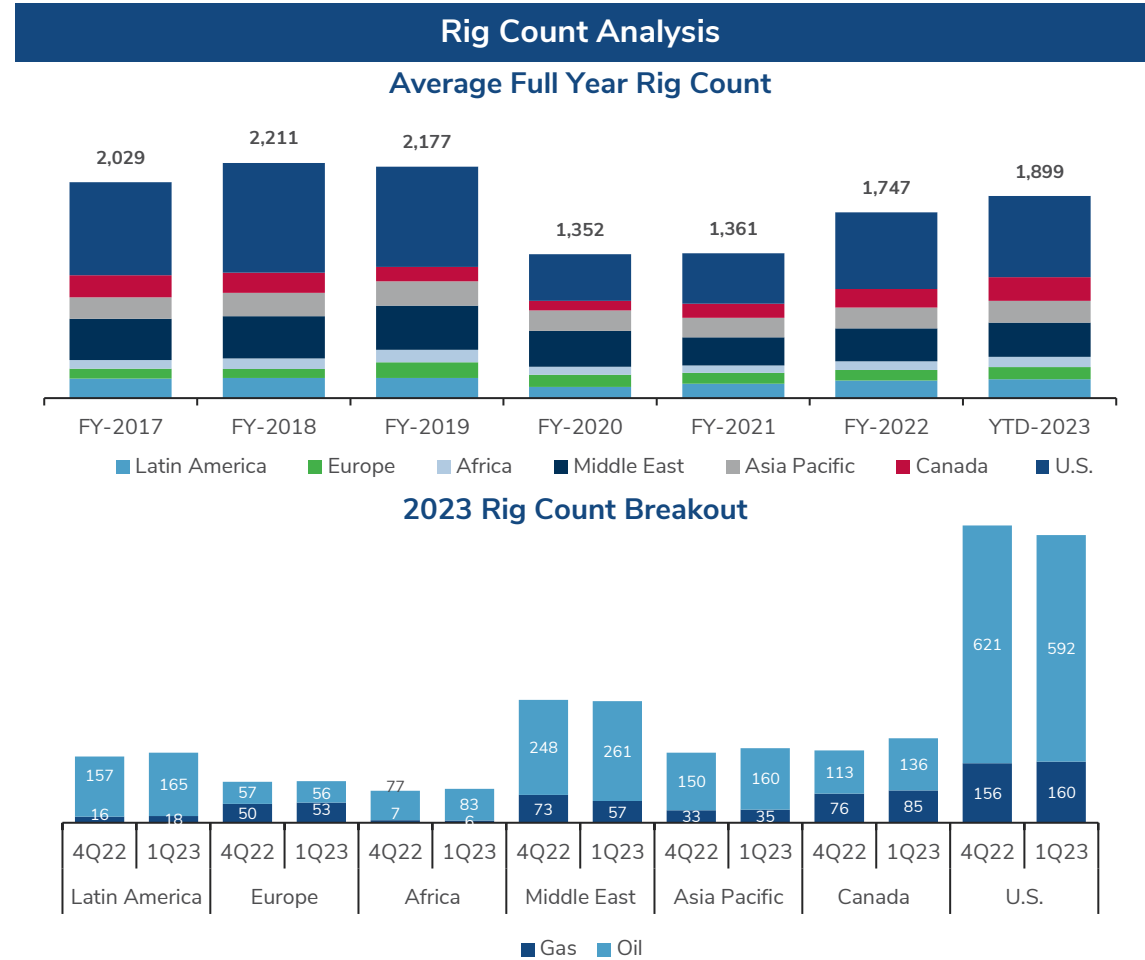
Data presented above indicates the rounded price of the selected commodities as of the last day of each quarter from Q1 2022 to Q1 2023. Percent change column may present differences due to the rounding off of the Commodities' spot prices in the table.



Leading Sector Indicators

Key Considerations

- Q1 2023 recorded a lower rig count compared to Q4 2022. Nevertheless, YTD 2023 has surpassed the overall rig count for FY2022 by 8.7%.
- The average international rig count (excluding the U.S. and Canada) for Q1 stands at 915, reflecting an overall 8% increase compared to Q1 2022. The regions who experienced the most important percentual increases were Europe and Africa, standing at 19% and 15%, respectively.
- Turmoil in the banking sector generated uncertainty across the economy and concerns about fuel demand outlook. As a result, WTI crude oil prices fell to around 70 USD/Bbl, diminishing the incentive to boost production, and declining rig count in various regions through the end of Q1 2023.
- Trends that will influence the rig count output during the rest of 2023:
 - OPEC+ voluntary production cuts of around 1.16 Mb/d from May until the end of 2023.
 - Global oil demand is expected to experience a significant surge throughout 2023, as demand is projected to increase from 710 kb/d in Q1 to 2.6 mb/d in Q4, with Asia being the most active region boosting oil demand consumption.



Source: Baker Hughes as of March 31, 2023

Explanatory Note:

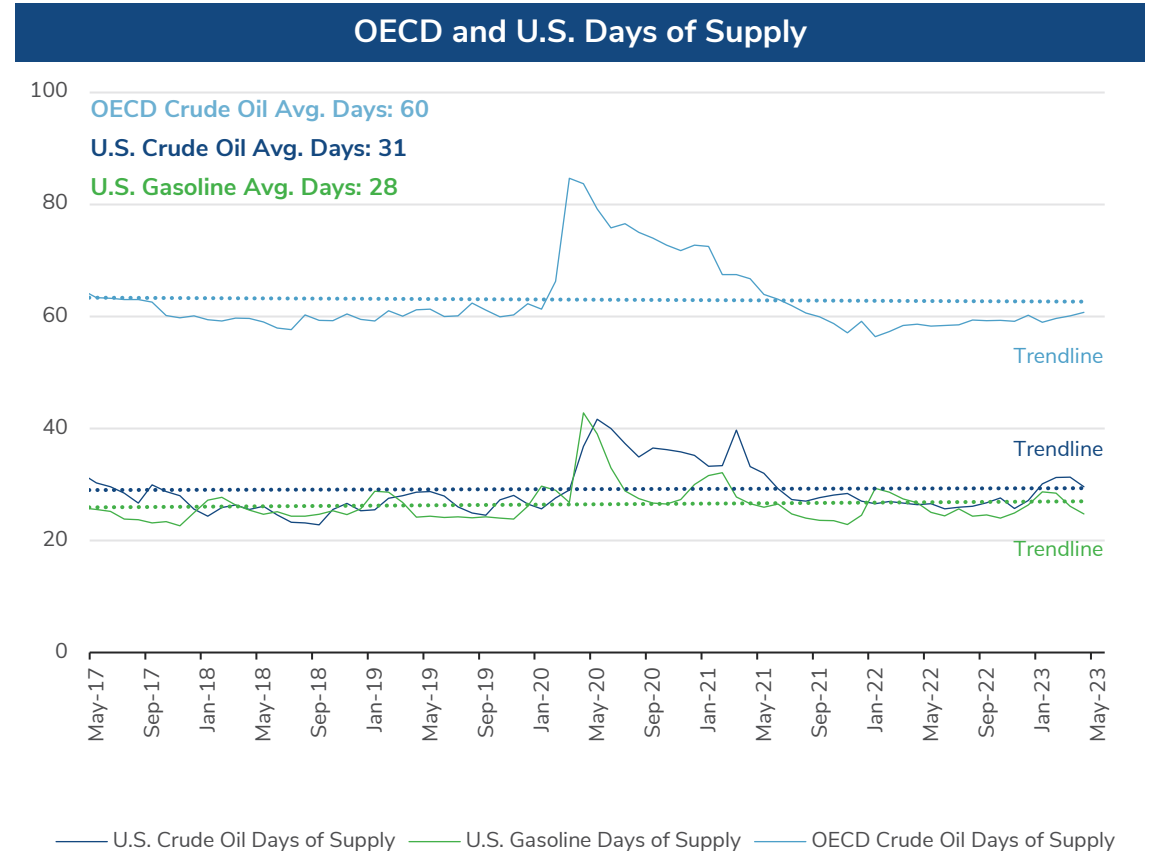
The Rig Count indicator displays the average number of active drilling rigs throughout the world. This indicator is closely watched as a precursor to oil production across the oil and gas sector. For the purpose of the analysis and data visualization, "Miscellaneous" subject from 2023 Rig Count Breakout was not included in the graph. This concept represents less than 3.0% of the total rig count for both periods.



Leading Sector Indicators

Key Considerations

- Compared to the last quarter, the average days of supply of crude oil increased 7.6%.
- Days of crude oil supply in the U.S. have consistently remained above 30 days throughout Q1 2023, while the OECD crude oil supply maintained a 60-day average in the same period.
- The minor slowdown in production profitability, combined with market anxiety over the banking crisis and its potential impact on future rate hikes, held back activity throughout Q1 2023.
- The crude oil market is currently facing a challenge of excess supply surpassing the relatively low demand, resulting in a build up of inventories to the highest levels seen in the past 18 months.
- The surplus in supply is mainly attributed to the plentiful availability of Russian oil, which is being redirected to other destinations due to the EU embargoes. This situation was likely a contributing factor in the recent production cut decision by OPEC+.



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.

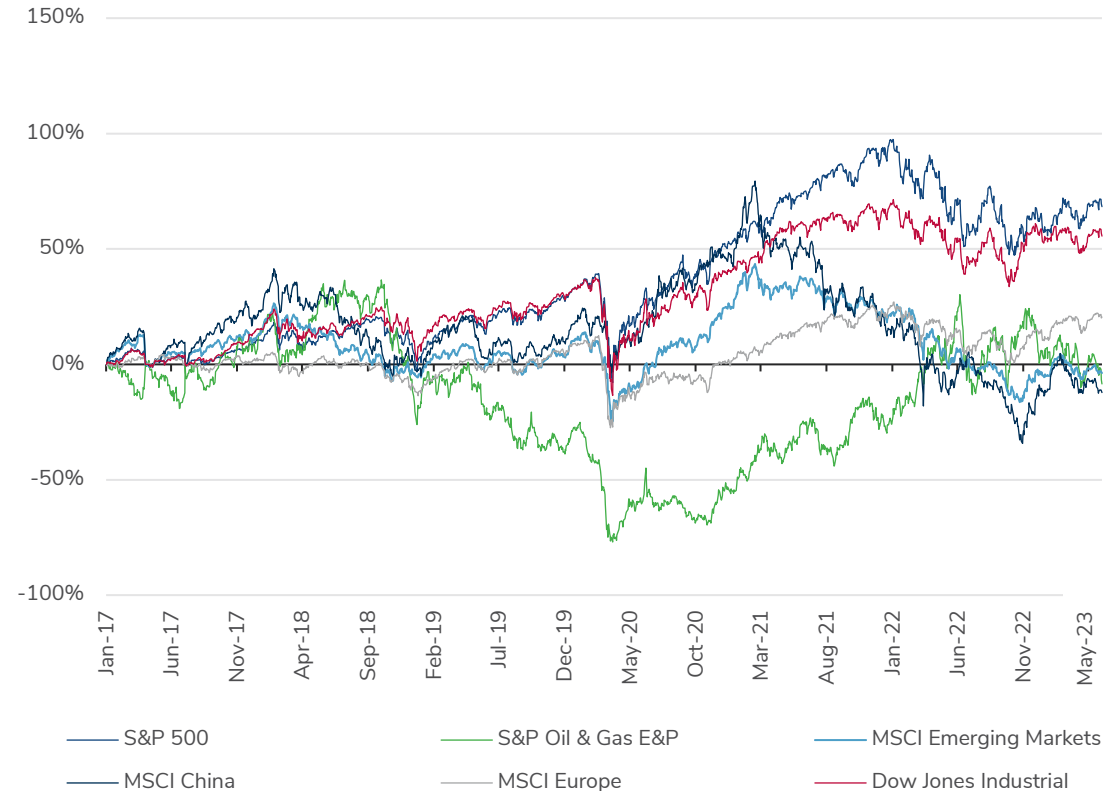


Economic Environment

Key Considerations

- The global economic environment is still influenced by central banks' monetary policy decisions towards battling core inflationary pressures, while goods price inflation starts to decline in most countries aided by the price drop in energy products.
- Market uncertainty stays lively, driven by the impact of tight monetary policies on the banking industry which constrained financing facilities and delayed dealmaking within global industries.
- Despite market turmoil and the fact that prices remain relatively high vs. pre-war levels, mentioned drops are heightening purchasing power from industrial firms and re-tracking confidence levels in the equity market.
- During Q1 2023, a modest improvement in selected equities performances is observed amidst recession fears, where supply chain bottleneck struggles were reduced in most of the sectors, which boosted business positive sentiments.
- Oil and gas companies were mildly affected by the downfall in prices and remain keen on securing strong balance sheets to be better positioned to execute expansion plans.

Selected Global Equities Performance



Source: Bloomberg

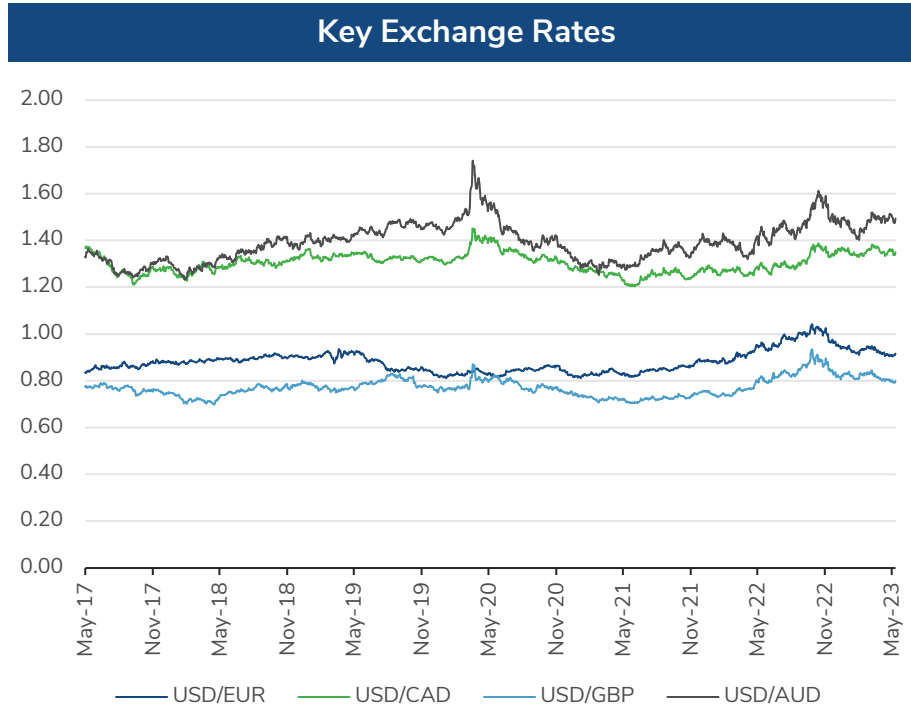
Explanatory Note:

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 percentual change until May 5, 2023.



Economic Environment

FX Rates of Key Currency Pairs



Source: Bloomberg

Key Considerations

- During Q1 2023, the U.S. dollar maintained its volatility against main currencies, due to the uncertain economic environment after recent domestic inflationary data and banking institutions failures, leaving the Fed in a tough position towards the next policy decisions.
- The most benefited currency was the Sterling Pound (GBP), gaining 3.88% against the USD from January 2023 to early May 2023, as the Fed strengthened its interest rate hikes, energy prices dropped and the Asian economy began to regain track.g

Definition:
FX: Foreign Exchange

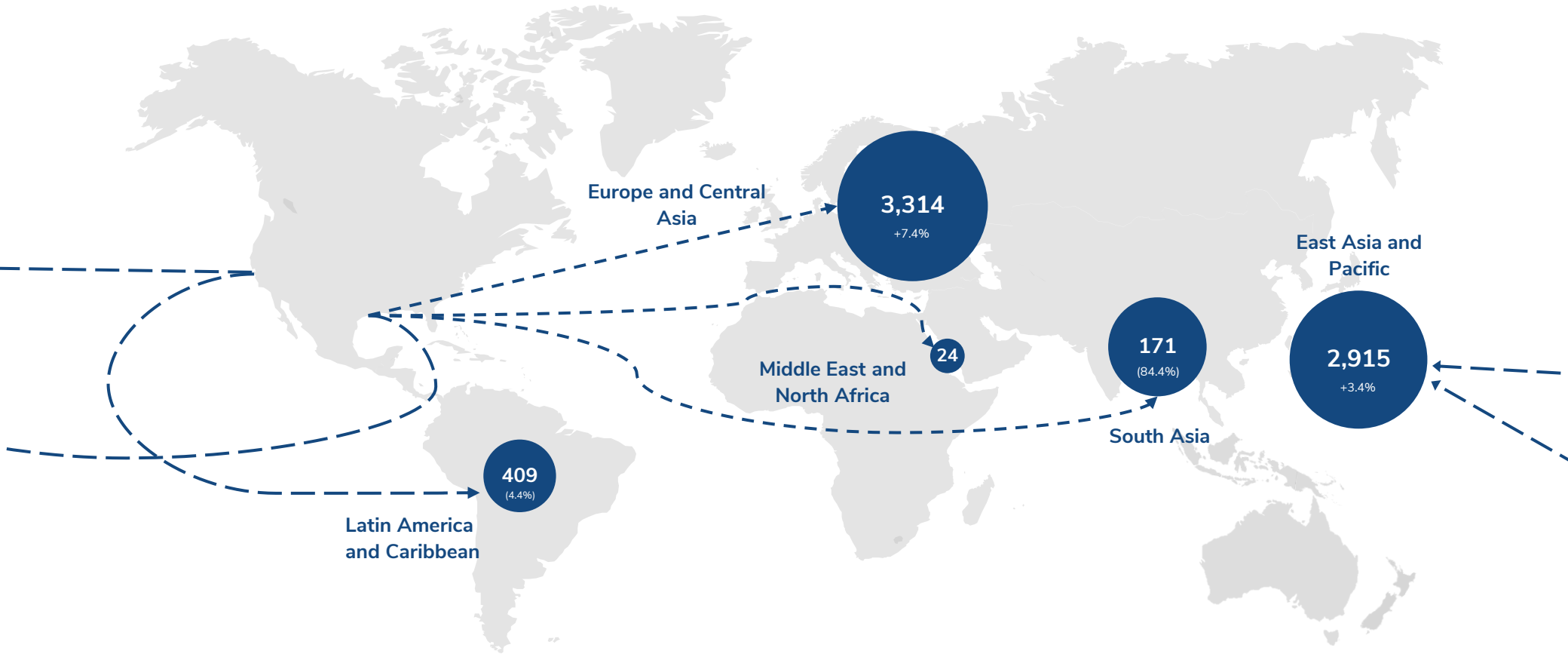
Other Relevant FX Pairs in the Global Oil and Gas Market

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

Q1 2023 U.S. Crude Oil Exports by Region (MBbbls/d)



Source: U.S. Department of Energy

Explanatory Note:

Data for this visualization includes U.S. commodity export values from January 2023 to February 2023.

Definition:

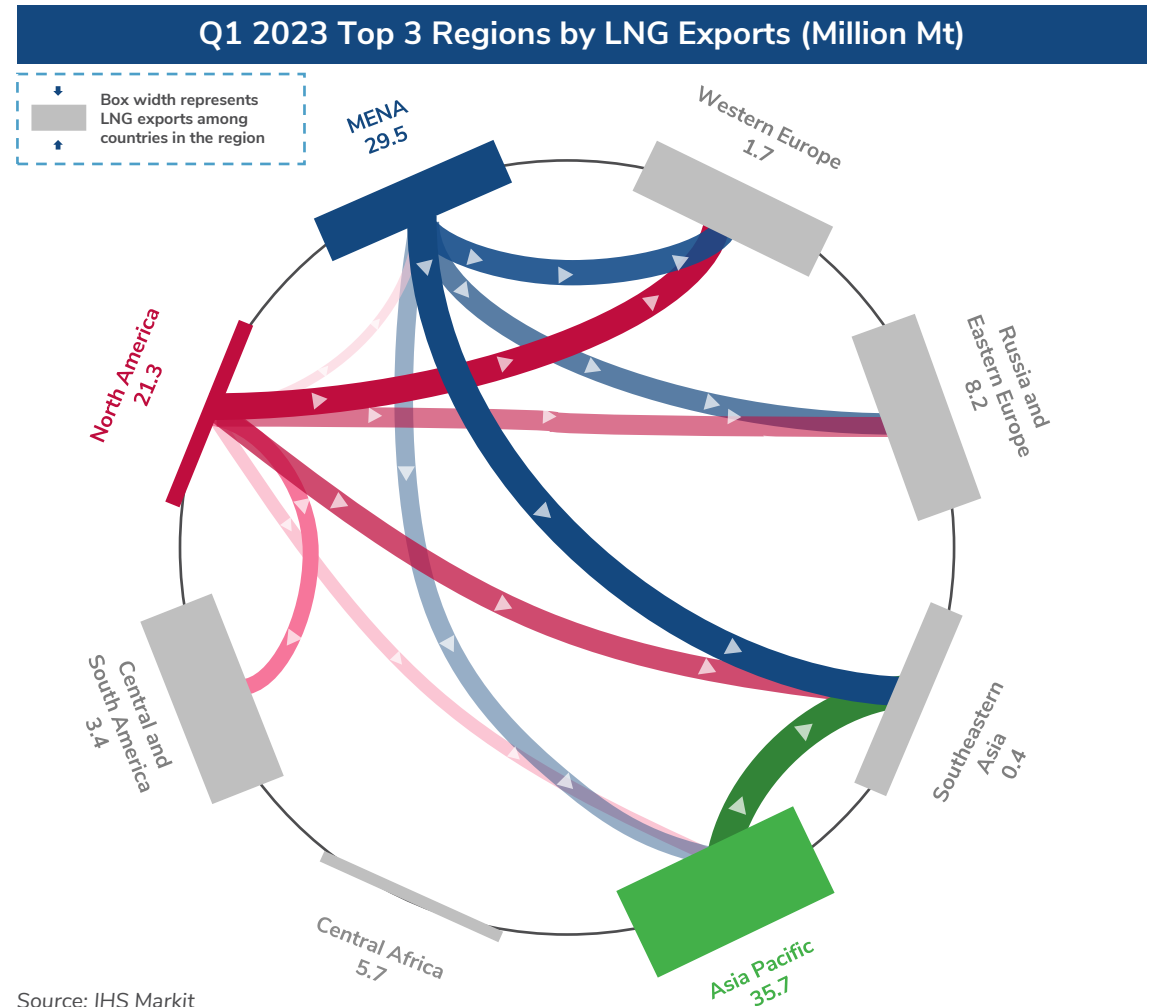
MBbbls/d: Thousand barrels per day



Trading Statistics

Key Considerations

- Global LNG exports experienced a 3.0% volume increase vs. Q4 2022 results.
- Highlighted regions dominated foreign trade, comprising 81.6% of total global exports. The Asia Pacific region led in terms of exported volume (35.7 Mt), while North America experienced a higher increase (10.6%), vs. the previous quarter.
- U.S. LNG exports to Europe increased as a result of both natural gas supply challenges in Europe after Russian pipeline exports to the region declined to a staggering 40-year low, and there were higher prices at Europe's natural gas trading hubs relative to other LNG markets.
- On the other hand, the U.S. natural gas consumption reached five-year lows during January and February of the current year, driven by above-average temperatures, particularly in regions where natural gas consumption makes up a large share of fuel used for space heating.
- In this year, four new LNG export projects are expected to come online worldwide with a combined capacity of one billion cubic feet per day. The total annual LNG capacity additions will be the lowest since 2013, when 0.7 Bcf/d of new export capacity was placed in service.



Source: IHS Markit

Explanatory Note:

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

Definition:

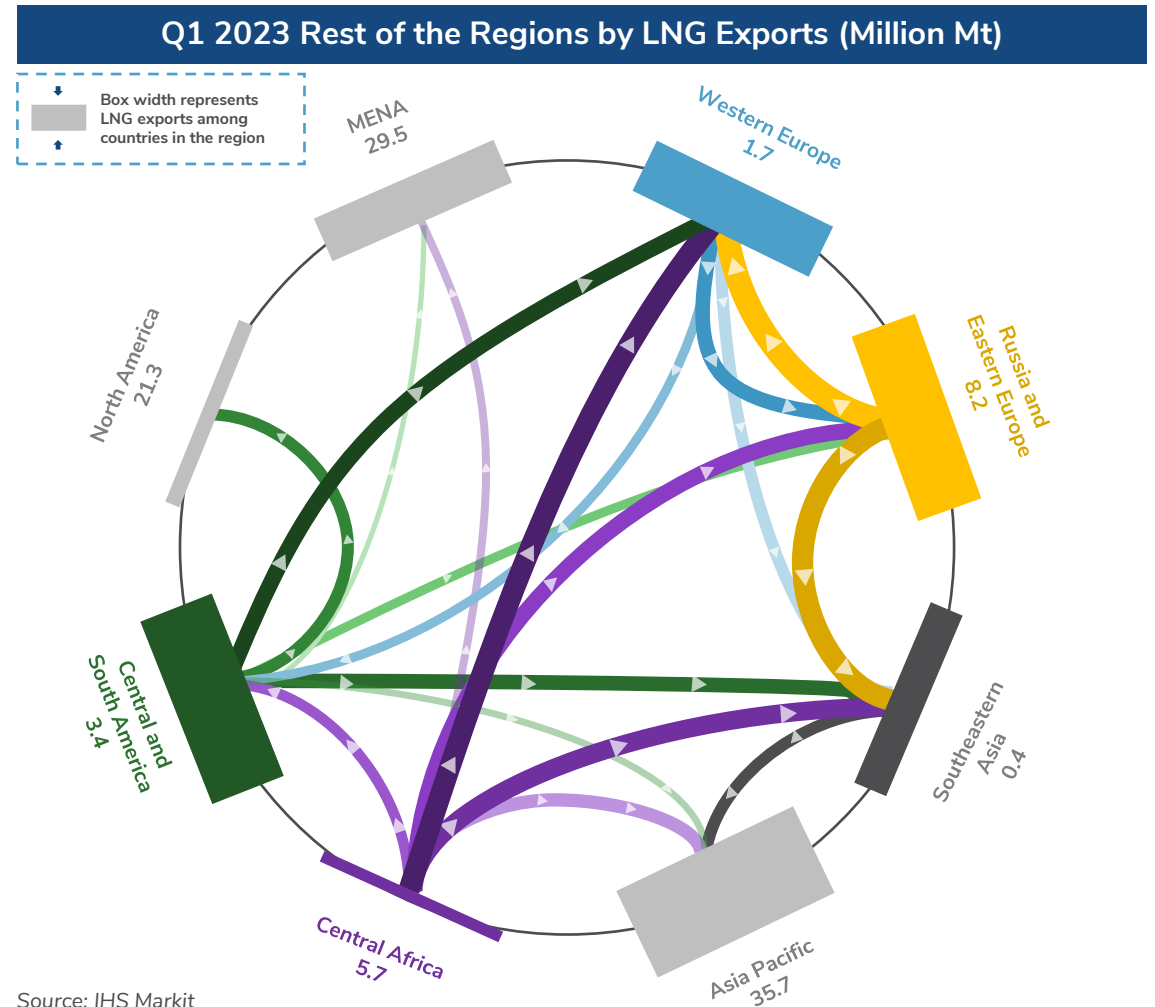
LNG: Liquefied Natural Gas
Bcf/D. Billion cubic feet per day



Trading Statistics

Key Considerations

- Rest of the regions displayed account for 18.4% of global LNG exports, increasing by 2.0% against Q4 2022 volumes.
- Overall trade within Southeastern Asia remains in virtuous momentum with a 55.8% growth q-o-q. In the same way, Central & South America increased both exporting routes and LNG volume traded, totaling 3.4 Mt through the quarter.
- During the last 11 years (2012–2022), Australia and the U.S. led the growth in global LNG capacity by adding a combined 22.7 Bcf/d of LNG export capacity that accounted for 75% of the total global capacity additions over this time span.
- Regionally, countries in Africa, built 2.7 Bcf/d of new export capacity over this period, while Russia added 2.6 Bcf/d. Countries in the Asia-Pacific region added a combined 2.4 Bcf/d of LNG export capacity (excluding Australia).
- In the following years, fewer global LNG export capacity additions are expected, since there are three projects already under construction in the U.S. and one in Russia.
- LNG export projects in Canada and Mexico are also expected to be placed into service by 2025–2026.



Source: IHS Markit

Explanatory Note:

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

Definition:

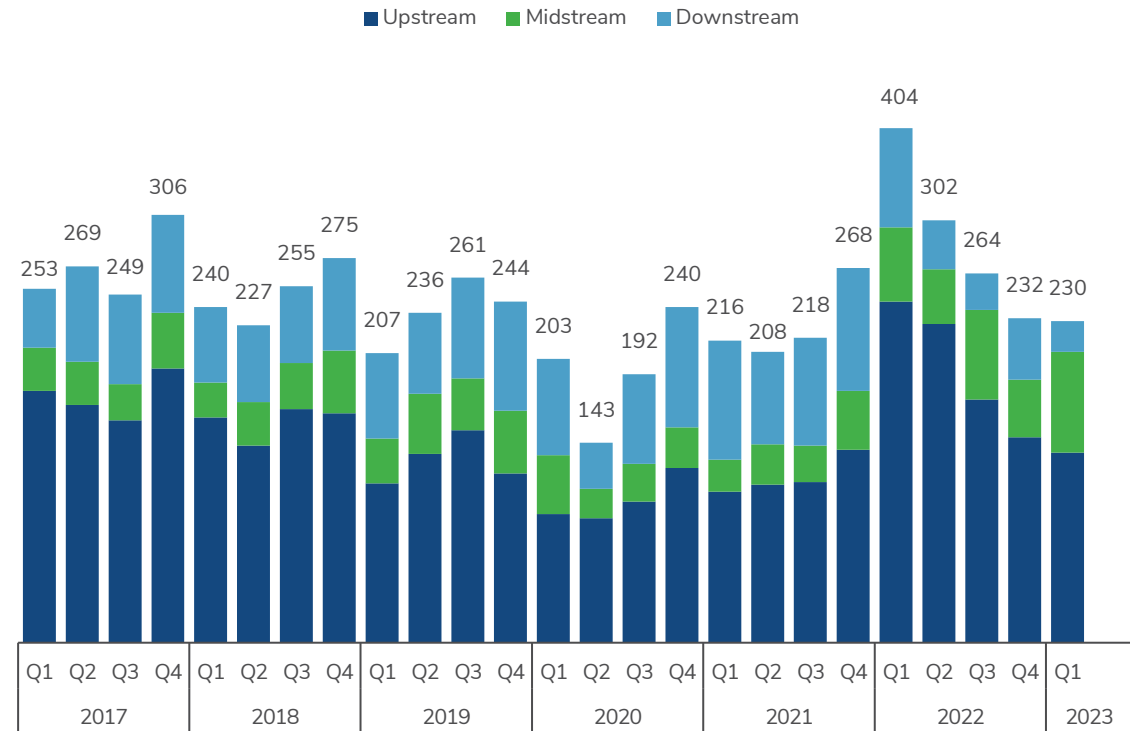
LNG: Liquefied Natural Gas

Announced Deals

Key Considerations

- M&A activity in the oil and gas industry suffered little to no change compared with Q4 2022, accumulating 230 deals during Q1 2023.
- The overall disclosed transaction value (TV) declined by 6.7%, dropping to USD 74.0 billion (bn) vs. USD 79.3 bn shown in Q4 2022.
- Even though the deal count plunge lost strength, the decreasing trend shown since Q2 2022 persists as the uncertain economic outlook for leading countries intensifies with recession warnings, volatile prices and high interest rates.
- Upstream remains as the top subsector, comprising 59.1% of total transactions, as companies have reshaped their strategy and aimed to rebalance their portfolios.
- Persistent geopolitical tensions in Europe fostered the region to aim for new LNG and gas supply players outside Russia, while Asian and North American producers shifted investment focuses into pipelines and interconnection expansions.
- Downstream activity slowed down as projects remain in reconditioning phases, to adapt biofuels and renewable feedstocks.

M&A Quarterly Deal Count



Source: IHS & Bloomberg as of March 31, 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.

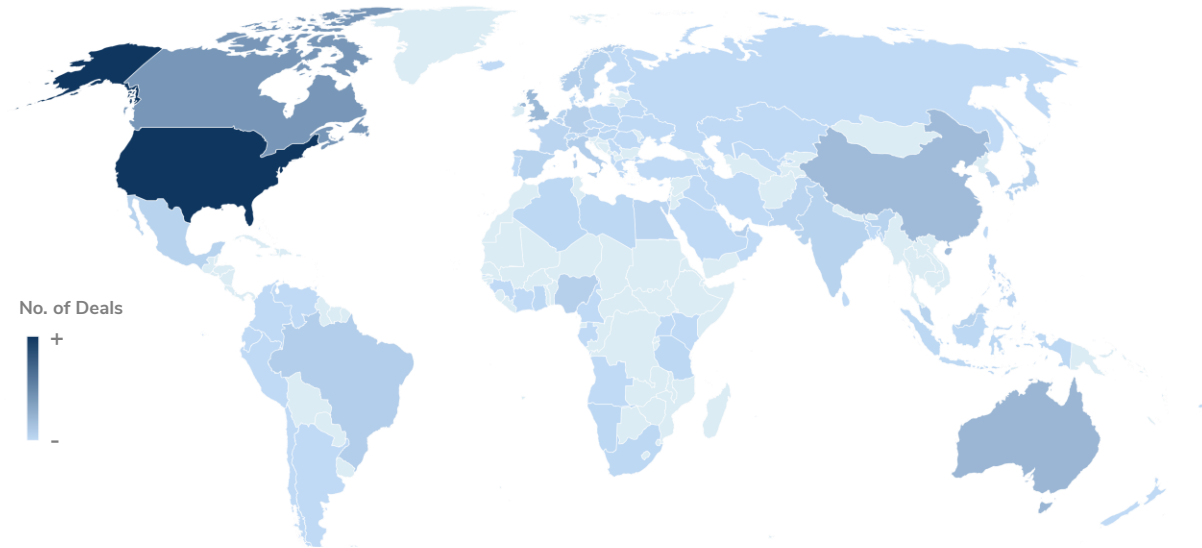


Global Hotspots for Oil and Gas Deal Activity

Key Considerations

- Dominance in the oil and gas M&A deal count continues to be within North America, Asia Pacific and Europe, comprising 89% of the total transactions during Q1 2023.
- North America leads M&A activity with 100 deals, covering 43% of total transactions in the period, followed by Asia Pacific accounting for 25% and Europe making 21%.
- U.S. oil and gas firms focused investment activities on their portfolio and operations optimization, increasing investors' confidence while complying with the carbon output reduction outlook.
- In the aftermath of the invasion of Ukraine, efforts to reduce Europe's reliance on Russian gas sparked interest in natural gas and LNG assets, enhancing transaction activity in Europe during the first part of 2023.
- Additionally, a great number of transactions seen in this quarter relate to oilfield services companies, as firms in the industry anticipate exploration activities for future rise in prices.

M&A Heatmap by Region and Deal Count



Source: IHS and Bloomberg between January 1st, and March 31, 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 Q1 2023.

Definition:

ESG: Environmental, Social and Governance



Global Hotspots for Oil and Gas Deal Activity

Key Considerations

- The spike in oil and gas prices seen during the latter part of 2022 positioned firms in a favorable position for cash securing. This aided the purchases of high transaction values in subsector assets during Q1 2023.
- Unlike the previous quarter, Europe's average Transaction Value/EBITDA (TV/EBITDA) multiple recorded the highest value during Q1 2023, while North America and Asia Pacific multiples decreased.
- EU concerns about emission reductions within the industry value chain have caused collateral risks as aggressive investing activities towards green assets showed lower returns in comparison with the oil and gas activities.
- Europe's growing interest in green energy investments implied addressing high capital expenditures as well as technological, regulatory and market challenges, holding back improvement in the presented multiple.
- On the other hand, U.S. and Asian oil and gas majors eyed their investments towards upstream assets and decarbonization of their current portfolio. Those mid-cost strategies, followed by strong cash reserves, allowed both regions' TV/EBITDA multiple to be lower than the EU's during the period.

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

Region	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023
North America	5.9	6.8	9.1	8.3	6.4
Europe	5.3	5.3	2.8	5.8	9.4
Asia Pacific	1.7	5.2	4.4	4.8	3.5

Source: IHS and Bloomberg as of March 31, 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 Q1 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

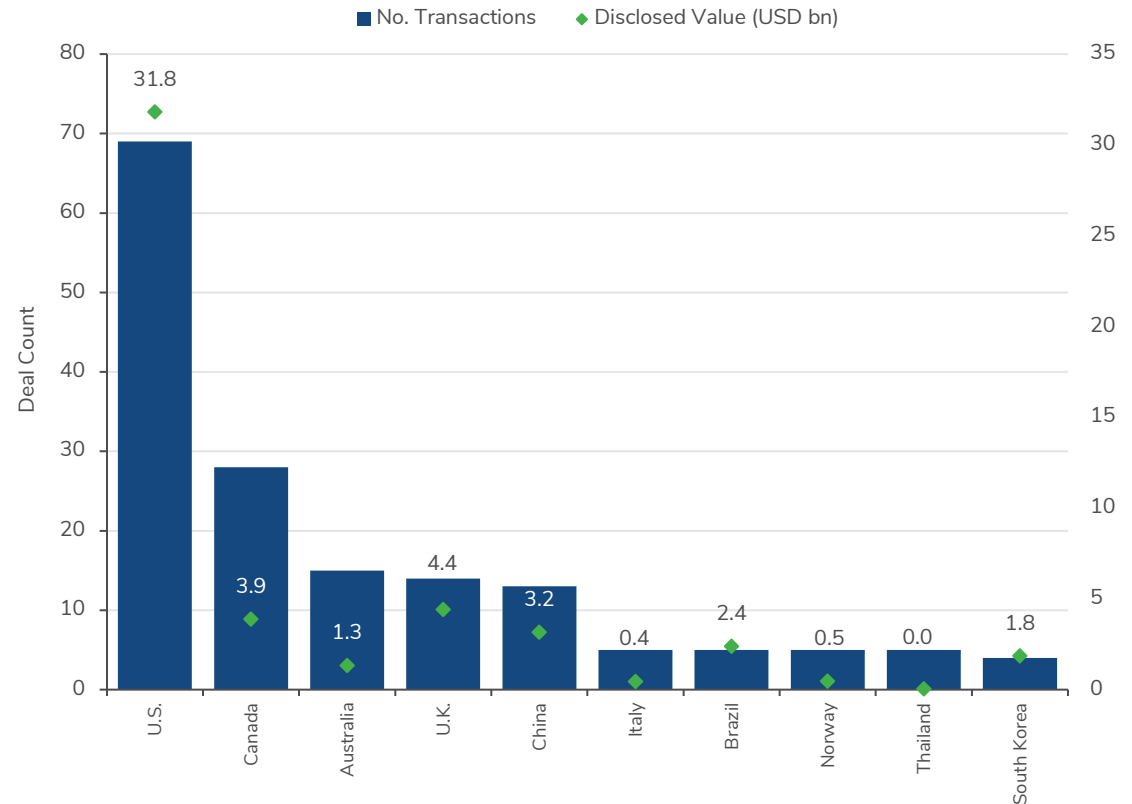
Key Considerations

- The top 10 leading countries for M&A activity displayed in the graph represent 71.2% of the global deal count and encompass 67.2% of the total transaction value during Q1 2023.
- The U.S. remains at the peak, accounting for almost one-third of the total oil and gas deals and comprising 43% of the global disclosed value.
- One of the most representative U.S. transaction was the announcement of Matador Resources Co. on the acquisition of Advance Energy Partners LLC for USD 1.6 bn. This acquisition expects to significantly increase Matador's drilling locations and operational scale in the Delaware basin.
- Canada keeps the great momentum within the industry activity, totaling 28 transactions and more than USD 3.8 bn involved. The country's pipelines and capacity expansion projects to boost exports influenced investment activity.
- China and Australia improved in the deal count ranking and remain as key countries for upstream M&A and investments. Both countries together comprised 12.1% of total Q1 2023 deals, highly focusing on gas development projects, exploration permits and drilling rigs.

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 Countries by Deal Count and Value























Source: IHS and Bloomberg as of March 31, 2023



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											
Mar 2, 2023			Repsol Upstream	Asset	Breakwater Energy Partners LLC bought a minority stake in Repsol Upstream. The transaction was completed on March 2, 2023.	25%	4,800	N/A	N/A	N/A	N/A
Jan 26, 2023			Albacora Leste Fields	Asset	Petroleo Brasileiro SA sold Albacora Leste Fields to a consortium led by Repsol SA. The transaction was completed on January 26, 2023.	100%	1,953	N/A	N/A	N/A	N/A
Jan 31, 2023			Lario Permian LLC	Private Company	Lario Oil & Gas Co. sold Lario Permian, LLC to Diamondback Energy, Inc.. The transaction was completed on January 31, 2023.	100%	1,495	N/A	N/A	N/A	N/A
Feb 21, 2023			Eagle Ford assets/Dimmit & LaSalle & McMullen Counties	Asset	Chesapeake Energy Corp. sold Eagle Ford assets/Dimmit & LaSalle & McMullen Counties to INEOS Group Ltd.	100%	1,400	N/A	N/A	N/A	N/A
Feb 13, 2023			Enven Energy Corp.	Private Company	Talos Energy Inc. acquired Enven Energy Corp. The transaction was completed on February 13, 2023.	100%	1,108	N/A	N/A	N/A	N/A
Feb 3, 2023			Fort Hills Energy LP	Private Company	Teck Resources Ltd. sold Fort Hills Energy LP to TotalEnergies SE and Suncor Energy Inc. The transaction was completed on February 3, 2023.	100%	739	N/A	N/A	N/A	N/A
Mar 31, 2023			Equinor Energy Ireland Ltd.	Private Company	Vermilion Energy Inc. acquired Equinor Energy Ireland Ltd. from Equinor ASA. The transaction was completed on March 31, 2023.	100%	434	N/A	N/A	N/A	N/A
Feb 28, 2023			Ridgeback Resources Inc.	Private Company	Saturn Oil & Gas Inc. acquired Ridgeback Resources Inc.. The transaction was completed on February 28, 2023.	100%	392	N/A	N/A	N/A	N/A
Mar 10, 2023			Warrego Energy Ltd.	Public Company	Hancock Prospecting Pty Ltd. acquired Warrego Energy Ltd. The transaction was completed on March 10, 2023.	100%	277	N/A	N/A	N/A	N/A
Jan 3, 2023			Norwest Energy NL	Private Company	Mineral Resources Ltd. announced the acquisition of Norwest Energy NL for AUD 329.99 mn. The transaction was announced on January 3, 2023.	80.1%	222	N/A	N/A	N/A	N/A

Source: Bloomberg as of March 31, 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											
Feb 1, 2023	Infrastructure Investments Fund	 South Jersey Industries	South Jersey Industries Inc.	Public Company	Infrastructure Investments Fund acquired South Jersey Industries Inc. The transaction was completed on February 1, 2023.	100%	7,427	N/A	N/A	N/A	N/A
Feb 16, 2023	 I SQUARED CAPITAL	 WTG	Whistler Pipeline LLC	Private Company	A consortium led by West Texas Gas Inc. sold Whistler Pipeline LLC to I Squared Capital Advisors U.S. LLC. The transaction was completed on February 16, 2022.	100%	2,000	N/A	N/A	N/A	N/A
Feb 20, 2023	 Shell	 S	NGF Nature Energy Biogas A/S	Private Company	A consortium led by Sampension Livsforsikring A/S sold NGF Nature Energy Biogas A/S to Shell plc. The transaction was completed on February 20, 2023.	100%	2,000	N/A	N/A	N/A	N/A
Mar 27, 2023	 Encap Flatrock Midstream	 e7	Lotus Midstream LLC	Private Company	Energy Transfer LP acquired Lotus Midstream, LLC from Encap Flatrock Midstream.	100%	1,454	N/A	N/A	N/A	N/A
Feb 15, 2023	 Williams	 Southwest Gas Holdings	Mountainwest Pipelines Holding Co.	Private Company	Southwest Gas Holdings Inc. sold MountainWest Pipelines Holding Co. to The Williams Companies, Inc. The transaction was completed on February 15, 2023.	100%	1,500	N/A	N/A	N/A	N/A
Jan 3, 2023	 TARGA	 Blackstone	Grand Prix NGL Pipeline	Asset	Blackstone Inc. sold Grand Prix NGL Pipeline to Targa Resources Corp. The transaction was completed on January 1, 2023.	100%	1,050	N/A	N/A	N/A	N/A
Mar 1, 2023	 TriSummit UTILITIES	 AltaGas	AK and Norstar Pipeline Co., NG Co., CINGSA	Asset	AltaGas Ltd. sold Alaska Pipeline Co., ENSTAR Natural Gas Co., NORSTAR Pipeline Co. Inc. & Cook Inlet Natural Gas Storage Alaska LLC to TriSummit Utilities Inc.	100%	860	N/A	N/A	N/A	N/A
Feb 22, 2023	 ENERGY INFRASTRUCTURE PARTNERS	 CDPQ	Fluxys Belgium SA	Public company	Caisse de Dépôt et Placement du Québec sold a minority stake in Fluxys Belgium SA to Energy Infrastructure Partners AG.	19.8%	777	N/A	N/A	N/A	N/A
Jan 12, 2023	 snam	 eni	SeaCorridor Srl	Private company	Eni S.p.A. sold a minority stake in SeaCorridor S.r.l. to Snam S.p.A.	49.9%	439	N/A	N/A	N/A	N/A
Feb 28, 2023	Golar LNG 	 NewFortress energy	FLNG Hilli	Asset	New Fortress Energy Inc. sold 2.4 MTPA floating liquefaction facility to Golar LNG Ltd.	100%	244	N/A	N/A	N/A	N/A

Source: Bloomberg as of March 31, 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											
Mar 28, 2023			New Rise Renewables, LLC	Private Company	Camber Energy Inc. has entered into an agreement with RESC Renewables Holdings, LLC to purchase the New Rise Renewables Reno renewable diesel project in Storey County, Nevada.	100%	750	N/A	N/A	N/A	N/A
Mar 28, 2023			CNOOC Orient Petrochemical Co. Ltd.	Private Company	China National Offshore Oil Corp. announced the sale of CNOOC Orient Petrochemical Co. Ltd. to China BlueChemical Ltd. The transaction was terminated on March 28, 2023.	100%	195	N/A	N/A	N/A	N/A
Feb 15, 2023			Fuel Business Egypt	Private Company	TotalEnergies SE announced the sale of Fuel Business Egypt to Abu Dhabi National Oil Co. for Distribution PJSC. The transaction was completed on February 15, 2023.	100%	186	N/A	N/A	N/A	N/A
Jan 11, 2023			Nayara Energy Ltd.	Public Company	Trafigura Group Pte Ltd. sold a minority stake in Nayara Energy Ltd. to Hara Capital Sarl. The transaction was completed on January 11, 2023.	24.5%	166	159.8	621.6	1.03x	0.26x
Feb 21, 2023			Oando PLC	Public Company	Ocean & Oil Development Partners Ltd. announced the acquisition of Oando Plc. The transaction was announced on March 30, 2023.	100%	81	N/A	N/A	N/A	N/A
Mar 2, 2023			TotalEnergies Marketing Egypt LLC	Private Company	Beltone Financial Holding SAE announced the sale of a minority stake in TotalEnergies Marketing Egypt LLC to TotalEnergies SE. The transaction was announced on January 3, 2023, and is currently pending.	9%	39	N/A	N/A	N/A	N/A
Feb 9, 2023			Intragaz LP	Private Company	Énergir Inc. acquired the remaining 50% stake in Intragaz LP from Engie Québec inc. for USD 34.25 million	50%	34	N/A	N/A	N/A	N/A
Feb 6, 2023	Ignite Invt and Commodities Ltd.		Ardova Plc.	Public Company	Ignite Investments and Commodities Limited offered to acquire remaining stake in Ardova Plc on February 6, 2023.	25.6%	13	N/A	N/A	N/A	N/A
Feb 21, 2023			DGP Co. Ltd.	Public Company	CBI Co. Ltd. acquired DGP Co. Ltd. The transaction was completed on February 21, 2023.	100%	8	N/A	.14	N/A	56.47x
Mar 23, 2023			Quantum Energy Inc.	Public Company	FloodCX Corp. announced the acquisition of Quantum Energy, Inc. for USD 2.04 mn. The transaction was announced on March 23, 2023, and is currently pending.	100%	2	N/A	N/A	N/A	N/A

Source: Bloomberg as of March 31, 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

BP and ADNOC have the intention to establish a JV and have made a non-binding offer to acquire NewMed Energy

March 2023

The intention is to acquire the free float and a part of Delek's share, which would result in ADNOC and BP holding 50% of NewMed Energy.

The non-binding offer made by ADNOC and BP to acquire NewMed Energy is the first step toward the formation of a new JV between these two companies.

The JV will be focusing on gas development in international areas of mutual interest which include the East Mediterranean. However, this will also strengthen the partnership between BP and ADNOC across oil and gas, hydrogen and carbon capture and storage technology.

The Assam Gas Company Ltd. and Oil India Ltd. established joint venture private limited Company

April 2023

The Assam Gas Company Ltd. (AGCL) and Oil India Ltd. (OIL) signed an agreement for a joint venture private limited company which main purpose is to lay, build and operate natural gas distribution networks in Assam and Tripura.

However, alongside building local natural gas grids and providing piped natural gas to regions in Assam and Tripura, the joint venture will also set up compressed natural gas stations.

About the equity share distribution, AGCL owns 51% of the joint venture share, meanwhile the 49% remaining is owned by OIL.

Source: Bloomberg News, GasWorld, UpStream, Borr Drilling, S&P

Definitions:

JVs: Joint Ventures

FID: Final Investment Decision

Mtpa: Million tons per annum

Sempra reaches FID on Port Arthur LNG

March 2023

Sempra announced the FID on the first phase of its Port Arthur LNG export project in Texas. The project will include two liquefaction trains, two LNG storage tanks and associated facilities. It is expected that commercial operations dates will start in 2027 for Train 1 and 2028 for Train 2. Sempra raised a total of \$6.8 bn in debt financing for the project.

Sempra has secured offtaker contracts for the Port Arthur Projects covering a total of 10.5 million mtpa, with parties such as ConocoPhillips, Ineos, Engie, RWE and PKN Orlen.

Additionally, ConocoPhillips has acquired a 30% equity stake in the project and has reached a new equity agreement for an infrastructure fund to acquire a 25% to 29% non-controlling interest in the project.

Venture Global LNG reaches FID for Plaquemines Project

March 2023

Venture Global LNG, announced they have reached FID for the Phase Two of the Plaquemines 2 LNG Project. This is a breakthrough announcement, as it became the first LNG scheme under development in the U.S. to achieve FID for 2023.

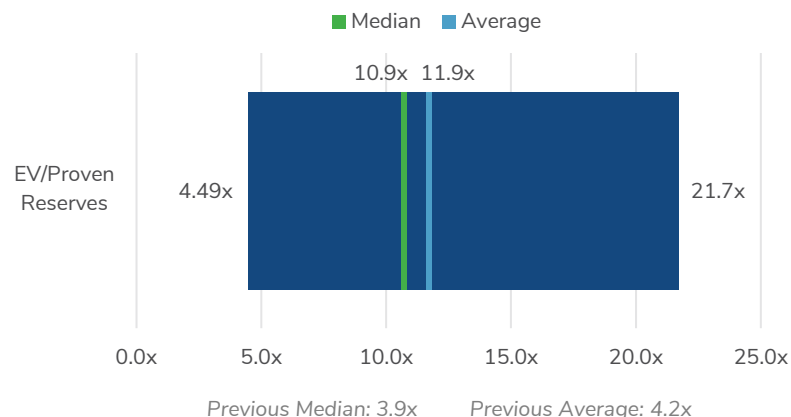
The Project secured \$7.8 bn in financing which, combined with Phase One, brings a total investment of \$21 bn, making it Venture Global's largest development.

Plaquemines is expected to bring to the market approximately 20 mtpa of LNG.

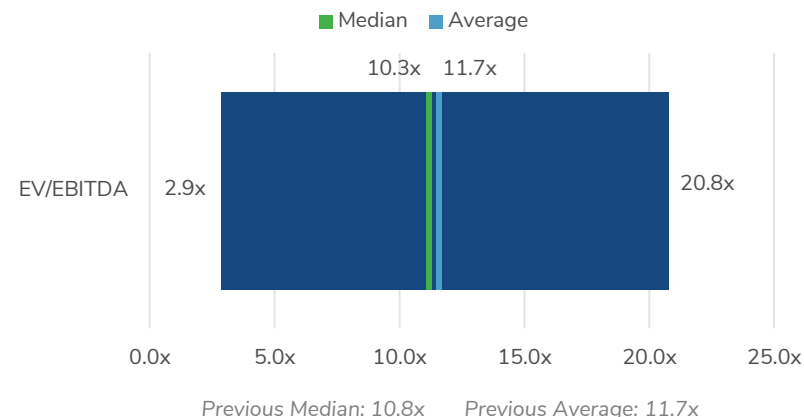
Transaction Multiples

Subindustry

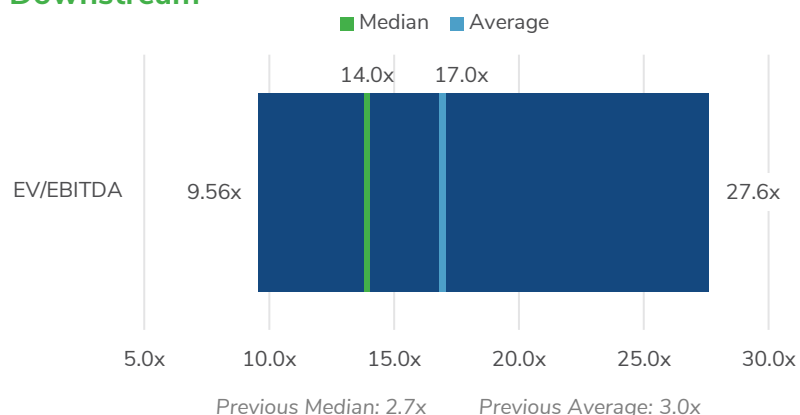
Upstream



Midstream



Downstream



Key Considerations

- The current race for securing upstream related assets, as well as strategic exploration and drilling companies to strengthen portfolio diversification, led to a significant value increase during the latter part of Q1 2023.
- In response to volatile prices, downstream players are reconsidering their investment scope by focusing on high-margin petroleum derivatives and greener infrastructure investments to jump into the renewable diesel shift.
- With firms specialized in renewable projects increasing in business value, along with a low performance in the downstream firms' profits, average EV/EBITDA multiple skyrocketed during Q1 2023.

Explanatory Note:

The values considered in this analysis reflect the disclosed valuation multiple values from Q1 2023, and it may not be representative for all M&A activity of the quarter.

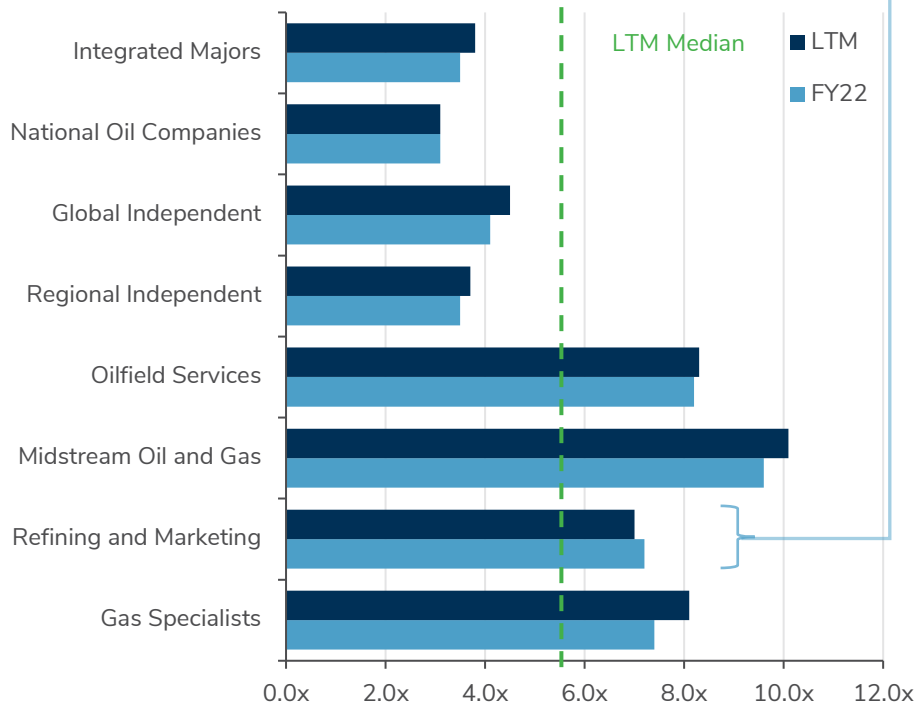
Source: Bloomberg/Capital IQ



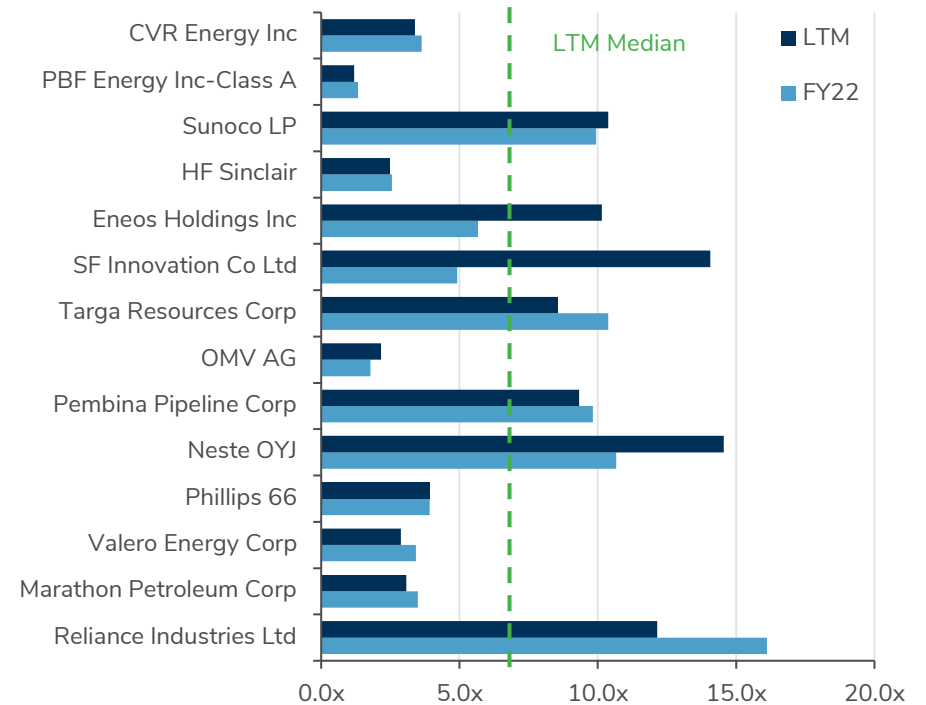
Public Trading Analysis

Subsector Focus: EV/EBITDA

Oil and Gas Subsector Average (LTM/FY22)



Spotlight: Refining and Marketing



Source: Bloomberg as of March 31, 2023

Explanatory Note:

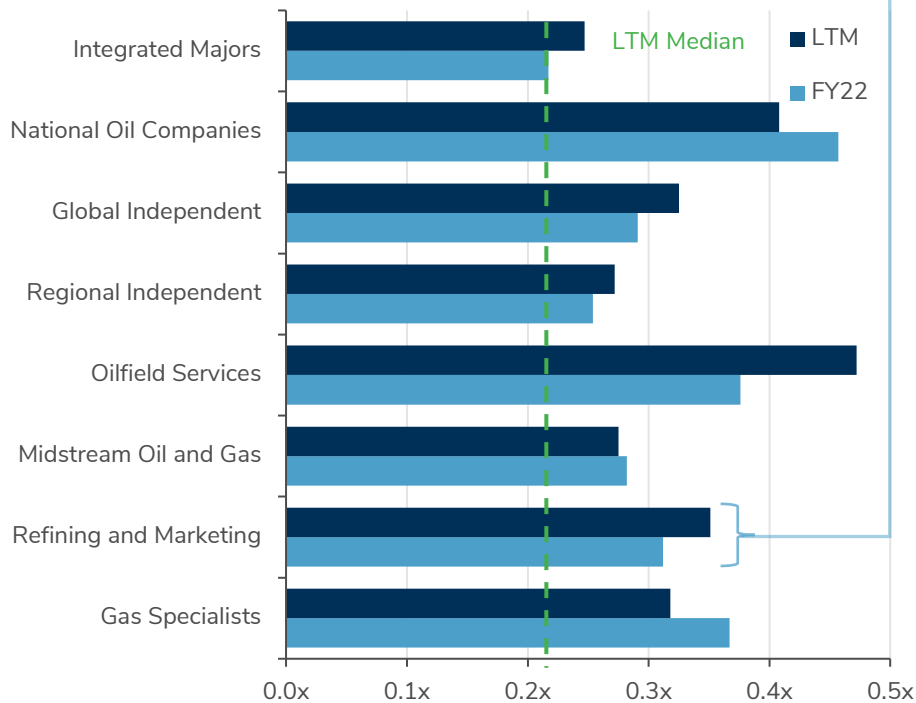
Subsector averages consider the available enterprise values and EBITDA values for the public companies under each category. Similarly, the Refining and Marketing subsector particular emphasis considers the most representative companies by market capital (as of March 31, 2023) with available data for 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.



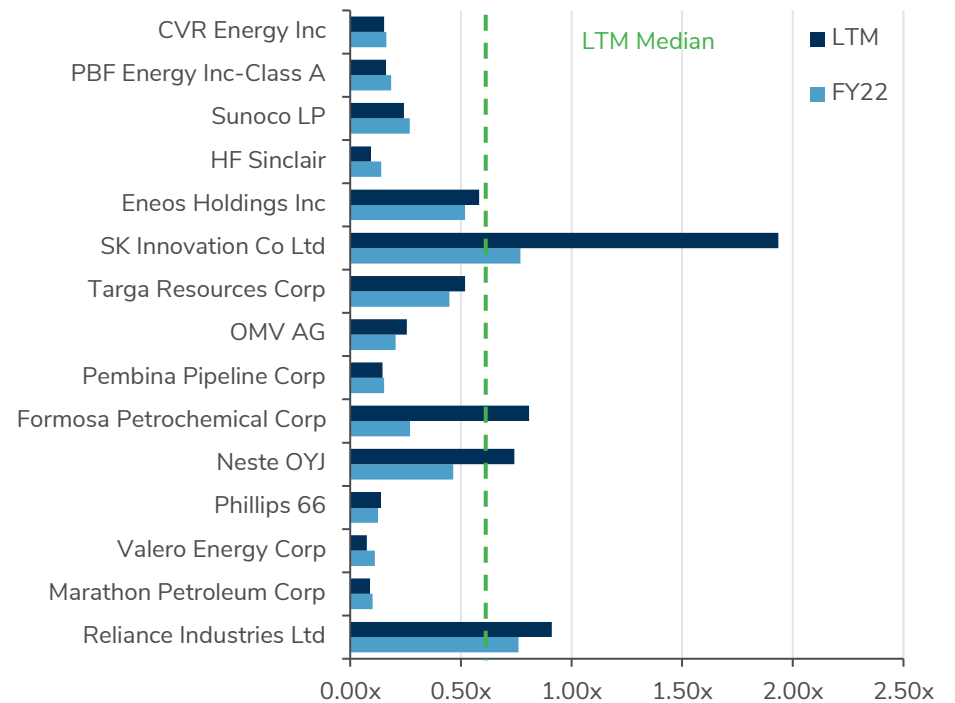
Public Trading Analysis

Subsector Focus: Capital Expenditure/EBITDA

Oil and Gas Subsector Average (LTM/FY22)



Spotlight: Refining and Marketing



Source: Bloomberg as of March 31, 2023

Explanatory Note:

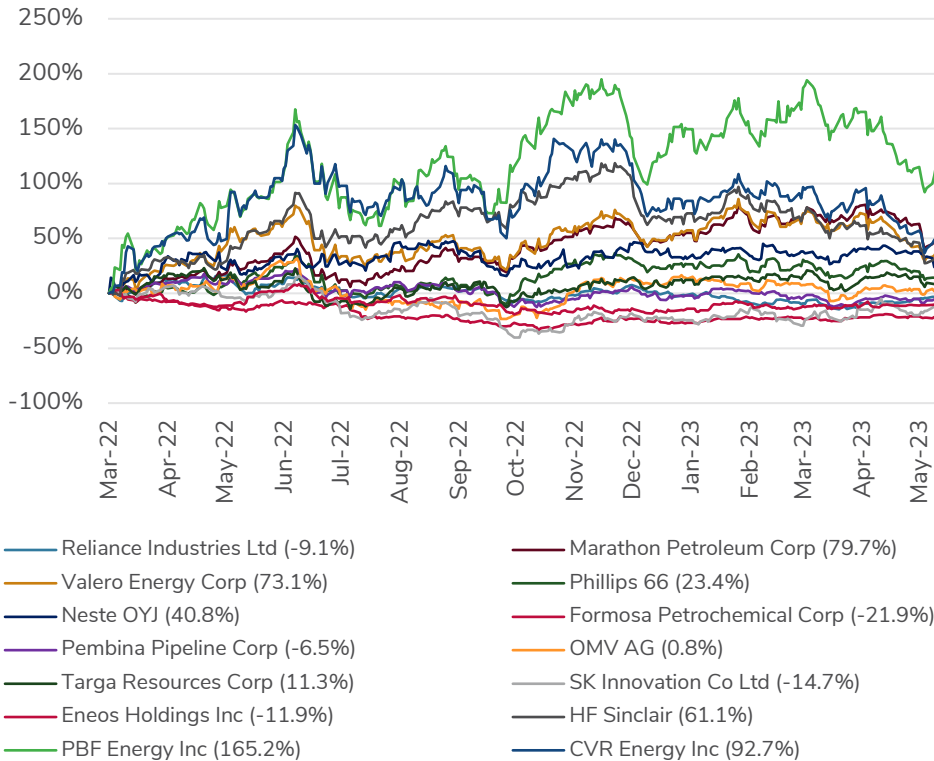
Subsector averages consider the available capital expenditure and EBITDA values for the public companies under each category. Similarly, the Refining and Marketing subsector particular emphasis considers the most representative companies by market capital (as of March 31, 2023) and uses the available 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: Refining and Marketing

Share Price Development Q1 2023*



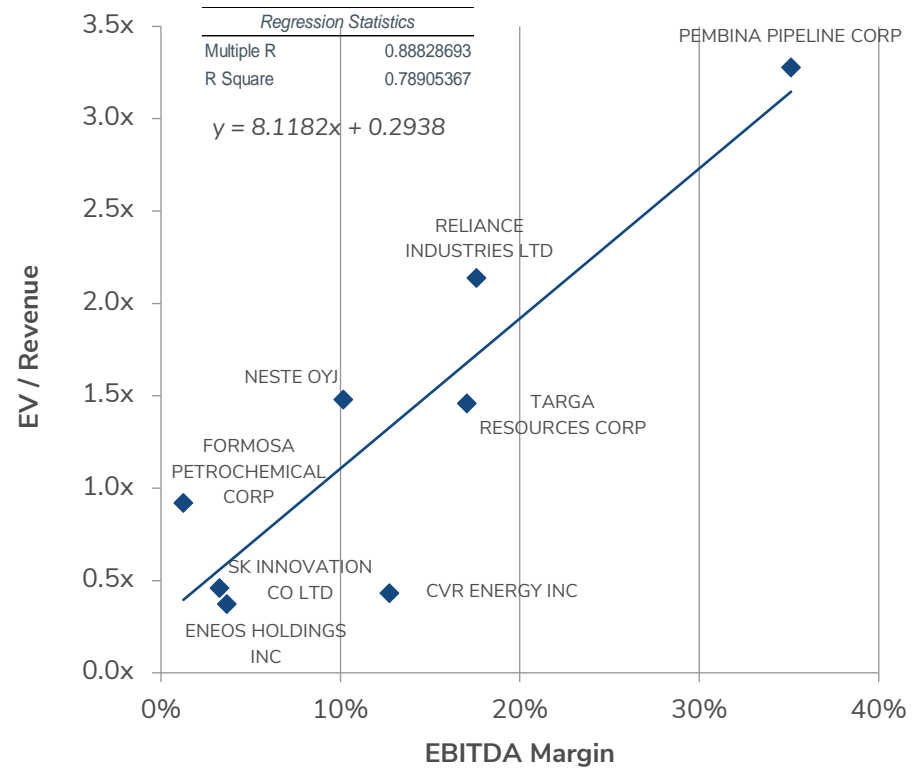
Source: Bloomberg as of March 31, 2023 / Kroll Analysis

Explanatory Note:

The linear regression plotted on the right side represents the forecasted EBITDA margin depending on the EV/Revenue multiple as of March 31, 2023.

* Note: The return showed in selected stocks is calculated by taking March 2, 2022, as the starting point and tracks the percentual change until May 11, 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	
	31-Mar-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022
Integrated Majors											
Exxon Mobil Corp.	109.7	83.14	119.17	443.36	470.31	394.59	91.01	104.52	23.1%	5.2x	4.5x
Chevron Corp.	163.2	135.94	188.05	309.06	320.05	232.25	56.63	67.92	24.4%	5.7x	4.7x
Royal Dutch Shell Plc	28.5	22.81	31.30	195.46	243.70	384.07	88.51	83.53	23.0%	2.8x	2.9x
TotalEnergies SE	59.1	45.15	64.68	147.13	165.29	257.59	57.34	64.53	22.3%	2.9x	2.6x
BP Plc	6.3	4.29	6.82	111.66	154.89	248.32	59.64	59.54	24.0%	2.6x	2.6x
Average									23.4%	3.8x	3.5x
Median									23.1%	2.9x	2.9x

Source: Bloomberg as of March 31, 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 March 31, 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	
	31-Mar-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022
National Oil Companies											
Saudi Arabian Oil Company	7.82	7.31	10.16	2,171.26	1,913.20	521.24	314.54	336.08	60.3%	6.1x	5.7x
Equinor Asa	28.6	26.75	41.73	90.77	76.69	142.16	80.01	82.71	56.3%	1.0x	0.9x
Petrochina Co. Ltd.	0.6	0.38	0.71	192.51	212.59	465.92	76.32*	66.40	16.4%*	2.8x*	3.2x
Petrobras	4.6	4.03	7.54	74.65	108.41	124.07	69.19	67.79	55.8%	1.6x	1.6x
China Petroleum & Chemical	0.6	0.39	0.69	102.99	153.81	480.30	30.49*	32.59	6.3%*	5.04*	4.7x
Eni Spa	14.0	10.30	15.91	50.10	65.30	132.84	22.79	30.17	17.2%	2.9x	2.2x
Ecopetrol SA	0.5	0.43	0.87	18.63	49.03	37.37	16.65	16.11	44.5%	2.9x	3.0x
PTT PCL	0.9	0.85	1.12	26.37	64.91	95.56	11.55	13.10	12.3%	5.5x	5.0x
Oil & Natural Gas Corp. Ltd.	1.8	1.50	2.13	23.48	39.14	85.29	9.4	10.68	11.0%	4.2x	3.7x
Indian Oil Corp. Ltd.	0.9	0.80	1.06	15.52	32.56	104.83	4.71	5.71	4.5%	6.9x	5.7x
Bharat Petroleum Corp. Ltd.	4.2	3.52	4.54	9.61	17.22	58.93	1.36	2.14	2.3%	12.7x	8.0x
YPF S.A.	21.26	6.31	24.45	9.18	8.64	19.78	5.28	4.96	26.7%	1.6x	1.7x
Average									39%	3.1x	3.1x
Median									36%	2.9x	3.0x

Source: Bloomberg as of March 31, 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 March 31, 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 Q4 2022 period, as companies did not present earnings information for the Q1 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	
	31-Mar-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022
Global Independent											
ConocoPhillips	99.21	81.61	134.94	120.05	128.77	75.54	30.99	36.37	41.0%	4.2x	3.5x
EOG Resources	114.63	95.12	148.26	63.25	66.72	25.10	15.49	14.59	61.7%	4.3x	4.6x
Repsol SA	15.42	10.90	17.30	20.47	28.56	76.22	8.43	14.30	11.1%	3.4x	2.0x
Inpex Corp.	10.52	9.24	13.47	13.74	24.58	17.88	11.93	11.52	66.7%	2.1x	2.1x
Occidental Petroleum Corp.	62.43	55.68	75.97	51.83	85.89	35.51	19.65	21.86	55.3%	4.4x	3.9x
Hess Corp.	132.34	94.19	160.44	40.64	47.86	11.42	5.65	5.87	49.4%	8.5x	8.2x
Average									47.5%	4.5x	4.1x
Median									52.4%	4.2x	3.7x

Source: Bloomberg as of March 31, 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 March 31, 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	
	31-Mar-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022
Regional Independent											
Canadian Natural Resources	55.31	44.72	68.78	60.22	68.93	30.48	15.54	17.18	51.0%	4.4x	4.0x
Pioneer Natural Resources Co.	204.24	181.85	285.28	47.74	52.24	22.51	11.69	12.68	51.9%	4.5x	4.1x
Suncor Energy Inc.	31.03	26.61	42.55	37.62	51.06	43.05	16.49	17.21	38.3%	3.1x	3.0x
Devon Energy Corp.	50.61	45.12	78.04	32.61	37.99	19.13	11.39	9.75	59.6%	3.3x	3.9x
Cenovus Energy Inc.	17.44	14.57	24.68	33.28	38.73	47.01	9.37	10.86	19.9%	4.1x	3.6x
Imperial Oil Ltd.	50.82	40.33	57.88	29.69	29.84	42.84	8.61	7.91	20.1%	3.5x	3.8x
Diamondback Energy Inc.	135.17	106.71	167.03	24.55	31.24	8.73	6.88	7.06	78.8%	4.5x	4.4x
Santos	4.62	4.44	6.31	15.70	18.57	7.52	5.49*	5.81	73.1%*	3.4x*	3.2x
Marathon Oil Corp.	23.96	20.41	33.03	14.90	20.67	7.39	5.04	5.76	68.2%	4.1x	3.6x
Aker BP ASA	24.53	21.97	43.94	15.50	17.86	14.03	11.22	11.55	80.0%	1.6x	1.5x
Average									52%	3.7x	3.5x
Median									52%	4.1x	3.8x

Source: Bloomberg as of March 31, 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 March 31, 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 Q4 2022 period, as companies did not present earnings information for the Q1 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	
	31-Mar-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022
Oilfield Services											
Schlumberger Ltd.	49.1	31.33	58.46	69.97	79.92	29.86	6.80	6.43	22.8%	11.7x	12.4x
Baker Hughes Co.	28.86	20.45	37.82	29.21	34.11	22.04	2.46	2.96	11.2%	13.9x	11.5x
Halliburton Co.	31.64	23.31	42.97	28.54	34.85	21.69	4.12	3.96	19.0%	8.5x	8.8x
NOV Inc.	18.51	14.1	24.8	7.29	8.48	7.65	0.72	0.66	9.3%	11.9x	12.9x
Championx Corp.	27.13	17.57	33.02	5.37	5.69	3.89	0.56	0.61	14.4%	10.2x	9.4x
TechnipFMC Plc	13.65	5.62	15.67	6.19	7.38	6.86	0.61	0.67	8.8%	12.2x	11.0x
Liberty Oilfield Services	12.81	11.22	18.74	2.23	2.52	4.62	1.10	0.83	23.9%	2.3x	3.1x
Nextier Oilfield Solutions	7.95	6.75	12.35	1.83	2.01	3.55	0.71	0.61	20.1%	2.8x	3.3x
Weatherford International	59.35	17.45	69.01	4.27	5.45	4.58	0.92	0.76	20.1%	5.9x	7.1x
Propetro Holding Corp.	7.19	6.41	14.22	0.83	0.76	1.42	0.18	0.31	12.7%	4.2x	2.4x
Average									16.2%	8.3x	8.2x
Median									16.7%	9.3x	9.1x

Source: Bloomberg as of March 31, 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 March 31, 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	
	31-Mar-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022
Midstream Oil and Gas											
Enbridge Inc.	38.01	35.68	47.50	76.97	144.53	38.04	7.43	11.46	19.5%	19.4x	12.6x
Enterprise Products Partners	25.90	22.91	28.47	56.32	85.87	57.62	8.67	9.19	15.0%	9.9x	9.3x
TC Energy Corp.	38.87	37.20	58.99	39.77	84.69	11.65	6.94	7.28	59.6%	12.2x	11.6x
Kinder Morgan Inc.	17.51	16.05	20.14	39.24	71.59	18.80	6.40	7.47	34.0%	11.2x	9.6x
Williams Cos Inc.	29.86	28.30	37.82	36.40	61.02	11.52	5.74	6.34	49.8%	10.6x	9.6x
Energy Transfer LP	12.47	9.54	13.50	38.62	101.52	88.38	12.15	12.95	13.7%	8.4x	7.8x
MPLX LP	34.45	27.98	35.12	34.48	56.18	11.72	6.26	5.76	53.4%	9.0x	9.8x
Oneok Inc.	63.54	50.58	70.93	25.46	41.47	21.46	4.28	3.60	19.9%	9.7x	11.5x
Antero Resources Corp.	23.09	20.10	48.31	6.91	11.55	7.65	5.47	3.23	71.5%	2.1x	3.6x
Magellan Midstream Partners	54.26	45.69	62.67	11.01	16.21	3.40	1.55	1.41	45.8%	10.4x	11.5x
Plains All Amer Pipeline LP	12.47	9.59	13.49	8.77	22.64	55.99	2.46	2.48	4.4%	9.2x	9.1x
Enlink Midstream LLC	10.84	8.00	13.38	5.06	11.46	9.08	1.36	1.30	14.9%	8.4x	8.8x
Equitrans Midstream Corp.	5.78	4.74	9.83	2.50	10.46	1.39	1.10	1.06	78.7%	9.5x	9.9x
Average									39.7%	10.1x	9.6x
Median									39.9%	9.8x	9.6x

Source: Bloomberg as of March 31, 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 March 31, 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	
	31-Mar-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022
Refining and Marketing											
Reliance Industries Ltd.	28.38	26.67	35.96	204.31	234.18	109.53	19.27	14.53	17.6%	12.2x	16.1x
Marathon Petroleum Corp.	134.83	79.31	135.64	57.98	82.66	174.26	26.84	23.64	15.4%	3.1x	3.5x
Valero Energy Corp.	139.60	97.89	149.96	50.47	60.17	174.28	20.88	17.60	12.0%	2.9x	3.4x
Phillips 66	101.38	74.16	112.29	42.89	62.78	168.21	16.03	16.02	9.5%	3.9x	3.9x
Neste OYJ	49.38	40.57	51.79	37.93	39.29	26.54	2.70	3.69	10.2%	14.5x	10.7x
Formosa Petrochemical Corp.	2.79	2.37	3.34	26.56	25.66	27.88	0.35	1.29	1.2%	73.7x	19.8x
Pembina Pipeline Corp.	32.37	30.27	42.33	17.81	27.19	8.30	2.91	2.77	35.1%	9.3x	9.8x
OMV AG	45.93	34.91	60.06	15.02	27.80	59.81	12.88	15.62	21.5%	2.2x	1.8x
Targa Resources Corp.	72.95	56.28	80.38	16.50	29.91	20.49	3.49	2.88	17.0%	8.6x	10.4x
SK Innovation Co. Ltd.	136.50	96.56	187.09	12.36	28.45	61.92	2.02	5.79	3.3%	14.1x	4.9x
Eneos Holdings Inc.	3.50	3.21	4.31	10.56	41.39	111.08	4.08	7.30	3.7%	10.1x	5.7x
HF Sinclair	41.78	38.26	65.61	7.71	12.46	38.31	5.01	4.89	13.1%	2.5x	2.6x
Sunoco LP	43.89	35.61	48.09	4.37	8.43	25.69	0.81	0.85	3.2%	10.4x	9.9x
PBF Energy Inc.	43.36	26.41	48.23	5.49	6.14	46.98	5.15	4.64	11.0%	1.2x	1.3x
CVR Energy Inc.	32.78	23.25	43.07	3.30	4.67	10.81	1.38	1.28	12.7%	3.4x	3.6x
Average									13.1%	7.0x	7.2x
Median									12.4%	6.2x	4.9x

Source: Bloomberg as of March 31, 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 March 31, 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	
	31-Mar-23	Low	High			LTM	LTM	FY2022	LTM	LTM	FY2022
Gas Specialists											
TC Energy Corp.	38.87	37.20	58.99	39.77	84.69	11.65	6.94	7.28	59.6%	12.2x	11.6x
Kinder Morgan Inc.	17.51	16.05	20.14	39.24	71.59	18.80	6.40	7.47	34.0%	11.2x	9.6x
Williams Cos Inc.	29.86	28.30	37.82	36.40	61.02	11.52	5.74	6.34	49.8%	10.6x	9.6x
Cheniere Energy Inc.	157.60	122.39	179.86	38.33	67.66	33.25	15.02	11.45	45.2%	4.5x	5.9x
Oneok Inc.	63.54	50.58	70.93	0.06	41.47	21.46	4.28	3.60	19.9%	9.7x	11.5x
Coterra Energy Inc.	24.54	22.78	36.11	18.58	20.34	9.15	6.93	6.71	75.8%	2.9x	3.0x
Woodside Petroleum Ltd.	22.33	19.49	26.59	42.52	44.43	18.76	13.2*	11.71	70.3%	3.4x	3.8x
Southwestern Energy Co.	5.00	4.61	9.64	5.21	9.86	14.18	9.18	3.26	64.7%	1.1x	3.0x
DCP Midstream LP	41.72	27.85	42.08	8.70	14.47	14.08	1.19	1.78	8.4%	12.2x	8.1x
Average									44.7%	8.1x	7.4x
Median									47.5%	10.2x	8.1x

Source: Bloomberg as of March 31, 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 March 31, 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.

Trading Statistics – Appendix I

Q1 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	Southeastern Asia	Total
Regions									
MENA	0.5	2.0	0.0	2.5	0.0	0.0	5.3	19.1	29.5
Asia Pacific	0.0	3.9	0.0	0.0	0.0	0.0	0.0	31.9	35.7
North America	0.0	0.2	0.1	2.3	0.0	0.5	13.5	4.7	21.3
Russia and Eastern Europe	0.0	0.0	0.0	0.7	0.0	0.0	4.0	3.5	8.2
Central Africa	0.1	0.3	0.0	0.5	0.0	0.2	3.8	1.0	5.7
Central and South America	0.1	0.1	0.3	0.2	0.0	1.0	0.9	0.9	3.4
Western Europe	0.0	0.0	0.0	0.5	0.0	0.1	0.9	0.1	1.7
Southeastern Asia	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.4
Total	0.7	6.6	0.3	6.8	0.0	1.8	28.5	61.3	106

Source: IHS Markit as of March 31, 2023

Explanatory Note:

The information presented reflects the global bilateral LNG trade for Q1 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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About Kroll

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