

Another quiet quarter

M&A trends in energy, natural resources, and chemicals



Q3'23

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Introduction

Markets still facing headwinds

For the most part, Q3'23 marks another quarter of significant challenges for deal makers in the energy, natural resources, and chemicals (ENRC) sector. Interest rates remain high, fears of an economic downturn continue to brew in Europe, Germany is already in a recession according to several economic indices, and the UK may follow suit in the months ahead. Global demand for many products has softened as consumers face rising prices. Mergers and acquisitions transactions continue to be negatively impacted by high private equity (PE) multiples, which remain well above pre-pandemic levels.

The chemicals industry remains concerned about the cost of capital, worsening price-volume trends, and geopolitical uncertainties. Unlike in last year's markets, deal making in the chemicals industry has been hampered by an inability to pass along price increases to consumers. Chemical feedstock prices remain volatile as the Russian-Ukraine war continues into its second year.

One exception to these trends is the energy industry. Oil and gas (O&G) companies were some of the biggest gainers in the S&P 500 in Q3'23, as rising oil prices helped increase stock prices and profit expectations. Dealmaking in O&G continues

to move ahead, with cash-flush majors considering several acquisitions of shale oil producers in the Permian Basin of West Texas. At the same time, the Inflation Reduction Act is fueling new investments in sustainable technology with over \$500 billion in tax equity and tax credits earmarked for development. (For a deep dive into the IRA, see the KPMG Q2'23 M&A trends report, "Ready for Change.")



Michael Harling Deal Advisory & Strategy ENRC Leader

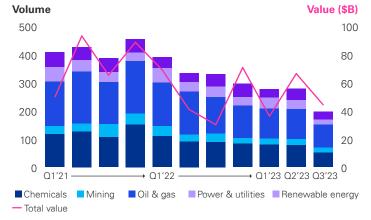
Q3'23 highlights

deals decrease

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decrease deal value Q_0Q

ENRC deal activity by sector



ENRC deal activity by type

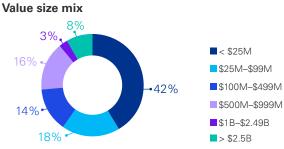


^{1 &}quot;Oil and Gas Stocks Topped S&P 500 Returns This Quarter as Crude Prices Surged," Investopedia, September 29, 2023

Q3'23 deal mix

Outer ring represents value, inner ring represents volume





Top strategic deals

iop charegie acaie		Value			
Acquirer	Target	Value (\$B)	Acquirer	Target	Value (\$B)
Energy Transfer LP	Crestwood Equity Partners LP	\$7.1	Kohlberg Kravis Roberts	Chase (ASE: CCF)	\$1.3
Enbridge Inc.	Dominion Energy Questar Corporation	\$6.6	Investment Management Corporation of Ontario	NeXtWind	\$0.8
Exxon Mobil Corporation	Denbury Inc.	\$5.0	JP Morgan Asset Management, Sonnedix	Arcadia Generación Solar	\$0.6
Permian Resources Corporation	Earthstone Energy, Inc.	\$4.5	ArcLight Capital Partners	Duke Energy (Commercial Distributed	\$0.4
Enbridge Inc.	Fall West Holdco LLC	\$4.3		Generation Business)	

Top PE deals

Deal data has been sourced from Capital IQ, Pitchbook, and KPMG analysis and excludes asset purchases/minority purchases. Q2 2023 covers all U.S. deals announced from April 1, 2023 to June 10, 2023 and select mega (>US\$1 billion) deals from June 11, 2023 to June 30, 2023. Deal values are presented based on publicly available deal data and might not be exhaustive. Previously published statistics may be restated to incorporate new data and/or any changes.



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By the numbers



Oil and gas

Potential megadeals ahead for majors

The O&G industry might be on the verge of a round of consolidations as majors consider a number of key acquisitions involving shale oil frackers. The largest of these deals so far is the takeover (announced on October 11, 2023) of Pioneer Natural Resources, the leading oil producer in West Texas, by ExxonMobil.² The merger is an all-stock transaction valued at \$59.5 billion. Perhaps this deal will usher in a transition across the sector where midsize producers are replaced by the largest companies in the industry by encouraging similar acquisitions by majors such as Chevron and ConocoPhillips.³ Meanwhile, the overall number of transactions has remained low as private capital focuses more on creating cash flow from existing operations.

To be clear, O&G companies continue to invest in green technology. Exxon has has announced that it will invest \$17 billion by 2027 in carbon-capture processes. However, the company currently has nearly \$30 billion in cash reserves, and investors currently favor dividends and stock buybacks over expensive explorations for new sources of crude. This leaves M&A deals as the preferred avenue to new growth.

Q3'23 highlights

80 ▼ -24%

decrease QoQ **\$29**

▼ -36%

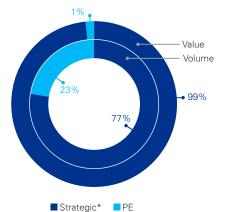
billion deal value decrease ΩοΩ

Oil and gas deal activity by subsector



Q3'23 oil and gas PE/strategic mix

Outer ring represents value, inner ring represents volume



*Includes SPAC deal activity

Top oil and gas deals

Acquirer	Target	Rationale	(\$B)
Energy Transfer LP	Crestwood Equity Partners LP	Expand Delaware basin geographic presence and cost synergy	\$7.1
Exxon Mobil Corporation	Denbury Inc.	Expand low carbon solutions and energy transition capabilities	\$4.9
Permian Resources Corporation	Earthstone Energy, Inc.	Strengthen position in Delaware basin	\$4.5
Enbridge Inc.	Fall West Holdco LLC	Boost portfolio with a large-scale, high-quality natural gas utilities	\$4.3
Viper Energy Partners LP	Certain Mineral and Royalty Interests	Near-term production growth with high confidence visibility	\$1.0

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Value

² "ExxonMobil announces merger with Pioneer Natural Resources in an all-stock transaction," ExxonMobil press release, October 11, 2023

^{3 &}quot;A tie-up between Exxon and Pioneer would put pressure on Chevron and other rivals to pursue deals of their own," Wall Street Journal, October 7, 2023

⁴ "A Mega-Deal May Await in the Oil Patch," New York Times, October 6, 2023

By the numbers



Broad softening, with divestments in focus

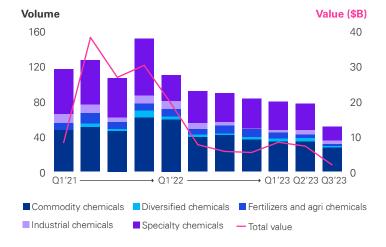
The chemicals industry has seen a general softening of the deal market. As noted in the introduction (page 2), dealmaking has been hampered by the cost of capital, the inability to pass along price increases, and geopolitical uncertainties. No transactions were made comparable to those in the O&G industry, and the pace of activity continues to decline. Many companies in both Europe and the U.S. are now focusing on divestments driven by uncompetitive cost structures. However, most players have maintained a consistent deal flow throughout the quarter.

Q3'23 highlights

51 ▼ -34%
deals decrease
QoQ

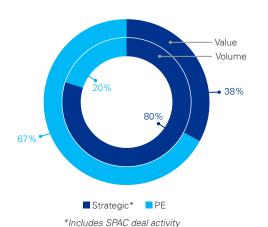
\$1.9 v -73%

Chemicals deal activity by subsector



Q3'23 chemicals PE/strategic mix

Outer ring represents value, inner ring represents volume



Top chemicals deals

Acquirer	Target	Rationale	(\$B)
Kohlberg Kravis Roberts	Chase	Product expansion opportunity and strategic inorganic growth	\$1.3
INEOS Acetyls Americas Limited	Texas City Operations of Eastman Chemical Company	Support the strategic global growth vision	\$0.5

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By the numbers



Power, utilities, and renewable energy

Renewables deals continue

Renewable energy companies remain an attractive target for deal makers. According to the KPMG 2023 ESG Due Diligence study, 62 percent of U.S. investors said they would pay a premium for a target that demonstrates a high level of environmental, social, and governance (ESG) maturity that is in line with their ESG priorities.⁵ Equally important, more than half (53 percent) of respondents said they have canceled M&A deals because of material findings in ESG due diligence. The research surveyed 200 U.S. ESG practitioners, including corporate and financial investors and M&A debt providers.

As with renewables, deals in the power and utilities industry were dominated by strategic transactions, a trend that has continued in both industries for the past several years.

Q3'23 highlights

deals 000

deal value

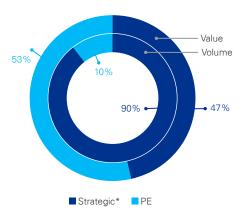
QoQ

Strategic and PE renewable energy deals

Volume Value (\$B) 60 20 50 15 40 30 10 20 ■ Strategic ■ PE Strategic value — PE value

Q3'23 renewable energy PE/strategic mix

Outer ring represents value, inner ring represents volume



*Includes SPAC deal activity

Top renewable energy deals

Acquirer	Target	Rationale	
Repsol, S.A. (BME:REP)	ConnectGen LLC	Enhance global position and expand product portfolio	\$0.8
Investment Management Corporation of Ontario, Public Sector Pension Investment Board, Sandbrook Capital	NeXtWind	Expand into wind assets operations and support future vision	\$0.8
JP Morgan Asset Management, Sonnedix	Arcadia Generación Solar	Expand solar production investments	\$0.6
One Energy Enterprises LLC	TortoiseEcofin Acquisition Corp. III	Go public via SPAC merger	\$0.3

Deal data has been sourced from Capital IQ, Pitchbook, and KPMG analysis and excludes asset purchases/minority purchases. Q2 2023 covers all U.S. deals announced from April 1, 2023 to June 10, 2023 and select mega (>US\$1 billion) deals from June 11, 2023 to June 30, 2023. Deal values are presented based on publicly available deal data and might not be exhaustive. Previously published statistics may be restated to incorporate new data and/or any changes

Value

⁵ "KPMG Study: Most U.S. investors want a dedicated ESG due diligence product that can analyze risks and opportunities," KPMG, July 27, 2023

Deep dive



New investment opportunities in renewable natural gas

Renewable natural gas (RNG) is gaining recognition as a promising energy source that can capture and make use of waste-derived methane, lower the carbon footprint of vehicles, and help achieve climate, waste management, and other environmental goals.⁶ As such, oil and gas (O&G) majors and private equity firms looking for acquisitions in sustainable energy are assessing new opportunities and making strategic moves in the rapidly growing RNG space.

RNG is a biogas that has traditionally been derived from two sources: landfill methane gas produced during the decomposition of organic waste in landfills, and methane gas produced from anaerobic digestors at wastewater treatment plants, waste from livestock farms, food waste, and organic municipal solid waste. The RNG is collected, purified, and fed into natural gas pipelines.

RNG is often used as a transportation fuel, particularly as a substitute for diesel in heavy-duty vehicles. According to recent research, 69 percent of natural gas vehicles worldwide are powered by RNG.⁷ Other uses for RNG include industrial processes and heating/cooling systems.

In recent years, the number of RNG production facilities in the U.S. has increased from just 30 production facilities in 2011 to over 300 by the summer of 2023.8 In the U.S. and Canada, 781 RNG facilities are now operational, planned or under construction. Recent research suggests that existing organic waste streams are sufficient to eventually produce enough RNG to replace up to 7 percent of the natural gas consumed in the U.S.9

RNG has already attracted significant investments from O&G majors. In February 2022 Chevron acquired Renewable Energy Group, Inc. for \$3.15 billion, with a plan to grow renewable fuels production capacity to 100,000 barrels per day by 2023. This was followed by BP's acquisition of Archaea Energy in December 2022 for \$4.1 billion.

Archaea operates 50 RNG and landfill gas-to-energy facilities across the U.S., and the company has a development pipeline with the potential of a five-fold increase in RNG volumes by 2030.

Shell acquired Nature Energy, the largest RNG producer in Europe, in February 2023 for almost \$2 billion. 12 The acquisition supports Shell's ambitions to build an integrated RNG value chain at global scale and to profitably grow its low-carbon offerings to customers across multiple sectors.

Mid-size players and private equity have also entered the RNG field. In March 2022 TPG Rise Climate announced an investment in Monarch Bioenergy, a joint venture between Roeslein Alternative Energy (RAE) and a subsidiary of Smithfield Foods, Inc.¹³ Monarch leverages RAE's state-of-the-art technology and Smithfield's innovative sustainable farming practices to capture methane emissions and convert them into RNG. In March 2023, Enbridge, a Canadian energy producer, paid \$80 million for a 10 percent equity stake in Divert Inc., a Massachusetts-based company that converts food waste into RNG.¹⁴

To be clear, the RNG market is still in the early stages of development, with just a few RNG companies in play. Most of these are start-ups or have very few operational entities. To invest in this space, sponsors will have to be willing to take some significant risks and compete against the majors. There are also challenges regarding the current monetization of RNG companies. However, the advantages of this market as a renewable energy source make RNG companies an increasingly attractive target for M&A transactions in the energy sector.



Fred Morris *Managing Director Infrastructure & Projects Advisory*

⁶ "Renewable Natural Gas as a Climate Strategy: Guidance for State Policymakers," World Resources Institute

⁷ "Renewable Natural Gas Breaking Motor Fuel Usage Records," NGVAmerica, press release, April 13, 2023

⁸ Tom DiChristopher, "Gas utilities see renewable natural gas investment opportunities expanding," S&P Global Market Intelligence, August 10, 2023

⁹ "Beyond Hydrogen: Renewable Natural Gas and Deep Decarbonization," Ameresco

^{10 &}quot;Chevron announces agreement to acquire renewable energy group" Chevron press release, February 28, 2022

¹¹ "BP completes acquisition of Archaea Energy," BP press release, December 28, 2022

^{12 &}quot;Shell completes acquisition of renewable natural gas producer Nature Energy," Shell press release, February 20, 2023

^{13 &}quot;Rise Climate joins Roselein Alternative Energy and Smithfield Foods to further develop, implement, and expand next generation renewable natural gas technologies to curb methane emissions," The Rise Fund, press release, March 10, 2022

^{14 &}quot;Collaboration between Enbridge and Divert Inc. aims to grow Renewable Natural Gas (RNG) supply, decarbonize the food value chain and combat climate change," Enridge press release. March 1, 2023

Outlook

The waiting game continues

KPMG Economics forecasts a general slowdown in Q4'23 and the first half of 2024. We see consumption slowing dramatically in early 2024 before starting to recover later in the year. More rate hikes from the Fed are not expected in the near future, but we don't expect the first rate cut until sometime around May 2024—we expect that the Fed won't start lowering rates until the 3 percent threshold of Core Personal Consumption Expenditures (PCE) is breached, but as of Q3'23, the PCE was only at 4.2 percent.

Activity for most ENRC dealmakers is expected to continue at a modest pace. Economic challenges for the sector include tight credit conditions, high interest rates, continued volatility in crude oil and natural gas markets, softening demand for products, and a growing recession in the UK and Europe. The Russia-Ukraine war shows no signs of a letup, and continued conflicts in the Middle East will continue to impact major energy and chemical markets. Increased economic problems in China based on a depressed real estate market, high unemployment among younger workers, excessive infrastructure development, and overcapacity in manufacturing may reduce trade volumes and create a ripple effect of economic disruption across global markets in 2024.

An exception to this general trend in the ENRC sector is O&G consolidation, as noted above (Megadeals ahead in the oil patch, page 4). To be clear, a potential economic slowdown in global markets will soften energy demand, and sustainable energy technology is making impressive strides in development while also increasing their share of energy markets. However, O&G deal makers will continue to benefit from global demand for fossil fuels, at least for the next several decades.

Looking ahead at sometime in late 2024, we see a potential uptick in deal activity due to factors such as increased clarity on interest rates and an accompanying decline in inflation. We might see less anxiety overall as markets become conditioned to current levels of uncertainty in the economy.

For the time being, many investors will most likely keep their powder dry and focus on a cautious and strategic approach for rationalizing their portfolios.

Key considerations as we look ahead

1 Structure deals carefully

Structure deals with an eye on softening global demand in 2024 for goods and services

2 Don't overlook funding opportunities

Focus on industry-specific opportunities such as Inflation Reduction Act funding for sustainable technology.

3 Approach economic challenges with creativity

Develop creative financing plans to accommodate high interest rates and elevated PE multiples.





How KPMG can help

KPMG helps its clients overcome deal obstacles by taking a truly integrated approach to delivering value, leveraging its depth in the ENRC industry, data-supported and tools-led insights, and full M&A capabilities across the deal lifecycle.

With an ENRC specialization, our teams bring both transactional and operational experience, delivering rapid results and value creation.

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