

Introduction

A year of watch and wait

As we look back at ENRC M&A activity in 2022, we see that many events and circumstances in the first quarter set the tone for the rest of the year. Deal makers expected a busy year like they saw in 2021, but a number of factors—including the Russia-Ukraine war that began in late February, interest rate increases by the Federal Reserve, volatility in energy markets, and continued supply chain disruptions—led to a dramatic year-overyear decline in M&A transactions. Deal volume fell 23.1 percent and deal value dropped 51.4 percent.

Despite this general softening of M&A markets across the ENRC sector, there were a number of significant deals in 2022. Celanese Corporation acquired the Mobility and Materials business of DuPont de Nemours for \$11.0 billion, and Infrastructure Investment Fund acquired South Jersey Industries for \$8.1 billion. Selling was driven in many cases by private equity firms that had been unable to exit the market during the last two years due to pandemic overhang and regulatory pressures. Some deals were prompted by a surge in commodity prices and the buyer's need for increased size and scale to help maximize and enhance operational efficiencies. Other deals were put on hold as deal makers waited for more favorable markets in 2023.

Several deals in the oil and gas (O&G) industry were the result of companies trying to gain more scale to drive improved cost savings and pricing power down the road. The renewables subsector benefited from regulatory policies and continued pressure from investors to support global net-zero agendas, making

green assets an attractive target for O&G companies. Deals involving renewables services were driven by larger companies looking to round out their service offerings and fill in gaps so they can offer a "one stop shop" solution to customers. Service providers were also looking at M&A as a way to better manage employee/labor shortage issues. Chemicals companies maintained an active approach to portfolio management that included the divestment of strategically incompatible or underperforming businesses.

In short, 2022 never came close to matching M&A activity levels from 2021, but deal makers continued to find new value opportunities across the ENRC sector.



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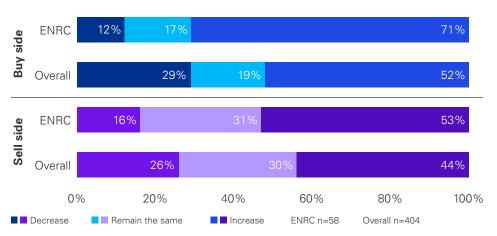
Key statistics

-23% decrease in total ENRC deal volume from 2021 to 2022 (1,673 to 1,287).

decrease in total ENRC deal value from 2021 to 2022 (\$296.5 billion to \$144.2 billion).

PE share of ENRC deals in 2022. PE buyers accounted for 33.3 percent of total value.

Compared to the last 12 months, do you expect deal activity in your industry to increase or decrease over the next 12 months?



A quiet 2022 for all subsectors

Compared to 2021, total 2022 deal value for ENRC declined 51.4 percent (\$296.5 billion to \$144.2 billion). The total volume of ENRC deals fell 23.1 percent (1,673 to 1,287).

Strategic deals declined in value 56.9 percent (\$211.3 billion to \$91.1 billion) and dropped in volume 20.4 percent (1,241 to 988). PE deals declined 18.8 percent in value (\$59.1 billion to \$48.0 billion) and dropped 32.3 percent in volume (424 to 287).

Among the top four deals of the year, the largest one involved the chemicals subsector. Celanese Corporation, a global specialty materials company, acquired the Mobility and Materials business of DuPont de Nemours.1 As part of the transaction, Celanese gained a large portfolio of engineered thermoplastics and elastomers, industry-recognized brands and intellectual property, and global production assets.

Other deals in the top four involved O&G companies. The largest of these was the acquisition of South Jersey Industries by PE investor Infrastructure Investment Fund. Another top O&G deal was the acquisition of Oasis Petroleum by Whiting Petroleum Corporation.² The deal creates a new entity, Chord Energy, which will function as a U.S. oil producer with a Williston Basin acreage position and sustainable free cash flow. The year also saw the acquisition of Tug Hill and XcL Midstream by EQT Corporation.3 The acquisition included Tug Hill's upstream assets and XcL Midstream's gathering and processing assets in southwest Appalachia.

Top ENRC deals 2022

Acquirer	Target	Value (billions)
Celanese Corporation	Mobility and Materials business of DuPont de Nemours	\$11.0
Infrastructure Investments Fund (a J.P. Morgan fund)	South Jersey	\$8.1
Whiting Petroleum Corporation	Oasis Petroleum	\$6.0
EQT Corporation	Tug Hill and XcL Midstream	\$5.2

U.S. ENRC activity by sector



U.S. ENRC strategic and PE deals



^{*}Includes SPAC deal volume and value

Data was sourced from CapitallQ, Refinitiv, Pitchbook, and KPMG analysis. The values and volumes data cited are for U.S. deals announced between 1/1/2022 and 12/10/2022. Deal values are only presented based on publicly available deal data and are not exhaustive. Previously published statistics may be restated to incorporate new data and/or changes in deal outcomes.

¹ Source: "Celanese Completes Acquisition of Mobility & Materials Business," Celanese press release, November 1, 2022

² Source: "Whiting and Oasis Complete Combination, Establishing Chord Energy," Oasis press release, July 1, 2022

³ Source: "EQT Announces Strategic Bolt-On Acquisition and Doubles Share Repurchase Program to \$2 Billion," EQT press release, September 6, 2022



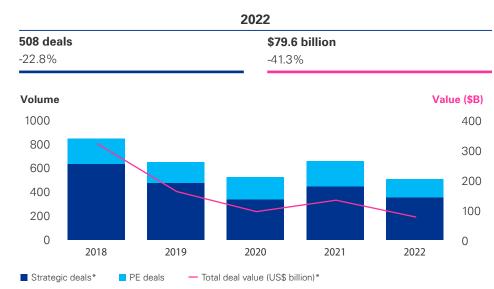
Oil & gas and chemicals M&A trends

Focus on greener assets and new technologies

Deal volumes for O&G remained suppressed based on a continued lack of investment from large PE capital sources and sellers who considered deal multiples to be unattractive. A number of companies were also turning to renewable assets in response to policymakers and investors who have been placing more pressure on companies to better align their operations to support a net-zero world. In February 2022, Chevron Corporation announced the acquisition of Renewable Energy Group, a leading producer and supplier of bio-based diesel.4 The transaction will support Chevron's goal to grow production capacity for renewable fuels.

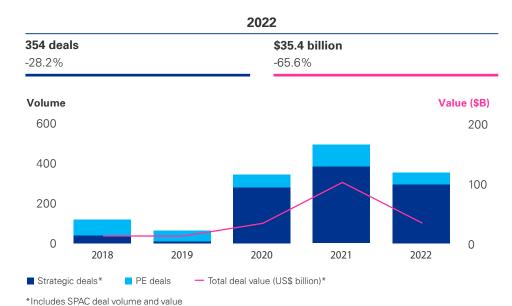
A number of chemicals companies adopted digitalization and other new technologies in order to generate growth opportunities and optimize existing platforms. Manufacturers in particular were looking to integrate technologies in their products in the near future. In November 2022, coatings manufacturer SDC Technologies announced its acquisition of Coburn Technologies, a provider of machinery and software for use in ophthalmic diagnostics.5 The acquisition is intended to broaden SDC's range of premium coatings, automated coating equipment, and advanced lens processing technologies.

U.S. oil & gas deal value and volume



^{*}Includes SPAC deal volume and value

U.S. chemicals deal value and volume



⁴ Source: "Chevron announces agreement to acquire renewable energy group," Chevron press release, February 28, 2022

⁵ Source: "SDC Technologies Inc. Announces Acquisition of Coburn Technologies Inc.," Eyecare Business, November 11, 2022



Power & utilities and renewable energy M&A trends

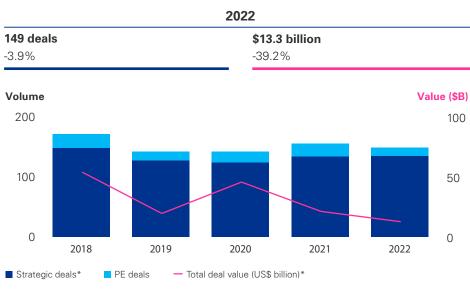
Deal volume and value in a steep downswing

The power & utilities industry saw a sharp drop Y-o-Y in deal value, while renewable energy ended the year with significant declines in both deal value and deal volume.

Companies focused 2022 acquisitions on energy transmission assets and related facilities as they looked to build better power infrastructure and energy storage resources. In November 2022, BlackRock Alternatives (through a fund managed by EnCap) acquired Jupiter Power, a U.S.-based energy storage developer.⁶ BlackRock will help Jupiter Power facilitate the integration of renewables into the U.S. power grid.

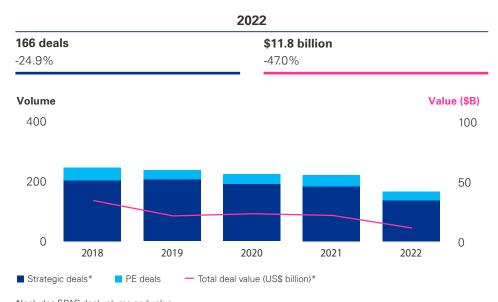
Some PE investors were divesting their hydroelectric energy generation assets due to licensing and permitting processes. These divestments were also fueled by the recent environmental harm caused by hydroelectric dams, which are exacerbating water shortages in some regions. In November 2022, Hull Street Energy, a middle market investment firm specializing in energy transition, announced its intention to sell Central Rivers Power to LS Power, a development, investment, and operating company focused on the energy sector.7 The deal includes a 334 MW portfolio of 42 hydroelectric plants across 11 states.

U.S. power & utilities deal volume and value



^{*}Includes SPAC deal volume and value

U.S. renewable energy deal volume and value



^{*}Includes SPAC deal volume and value

⁶ Source: "EnCap Investments Sells Jupiter Power to BlackRock," Businesswire, November 15, 2022

⁷ Source: "LS Power to acquire 334-MW US hydro portfolio from Hull Street," Renewables Now, November 17, 2022



ENRC PE M&A trends

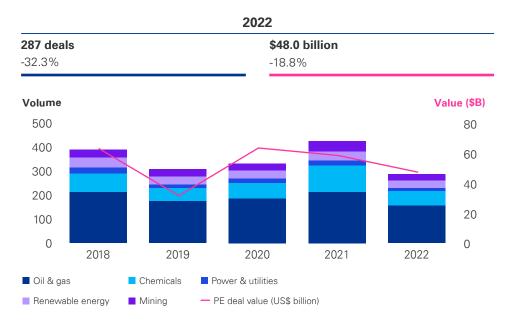
PE deals see overall decline

Compared to 2021, PE deal volume and deal value declined significantly. This decline was the direct result of rising interest rates and the lack of clarity around the forward rate outlook, which made deal valuation and exit planning more uncertain for investments with shorter expected hold periods. This interest rate environment also led to tighter debt markets in H2'22, which further contributed to the decline in PE activity.

The largest deal of the year was the acquisition of South Jersey Industries, an energy infrastructure holding company and natural gas provider, by Infrastructure Investment Fund (J.P. Morgan), a long-term investor in utility and renewable energy companies. The deal is designed to help support South Jersey Industries' clean energy initiatives in alignment with the environmental goals of New Jersey and the surrounding region.

In second place was the acquisition by Advent and LANXESS of the Engineering Materials business from DSM.9 LANXESS is a leading specialty chemical company, Advent is a global PE investor, and DSM supplies high-performance specialty materials. LANXESS will use the proceeds of the transaction to reduce debt and to strengthen its balance sheet.

U.S. ENRC PE deal volume and value



Top PE ENRC deals in 2022

Acquirer	Target	Value (billions)
Infrastructure Investments Fund (a J.P. Morgan fund)	South Jersey	\$8.1
Advent International, LANXESS Deutschland	DSM Engineering Materials business of Royal DSM	\$4.1
Cinven	Environmental Science Professional business of Bayer	\$2.6
Kohlberg Kravis Roberts	ContourGlobal	\$2.2

⁸ Source: "South Jersey Industries, Inc. Enters into Agreement to be Acquired by the Infrastructure Investments Fund," SJ Industries press release, February 24, 2022

⁹ Source: "LANXESS and Advent International establish a leading global joint venture for high-performance engineering polymers," LANXESS press release, May 31, 2022

Deep dive



Chemicals companies and plastics circularity

Plastics are a vital part of modern life, but we now produce twice as much plastic waste as we did 20 years ago. Most of this waste ends up in landfills, incinerated, or escaping into the environment.¹⁰ Less than 10 percent of plastic waste is successfully recycled.

The chemicals industry has recognized for years the importance of recycling plastics. In 2018, the American Chemistry Council (ACC) announced that members of ACC's Plastics Division had set the goal to recycle, reuse, or recover 100 percent of plastic packaging by 2040.¹¹ This includes designing new products for greater efficiency, recycling and reuse, developing new technologies and systems for collecting, sorting, recycling and recovering materials, and aligning products with key end markets.

Most plastic recycling is a mechanical process where used plastic is broken up but its molecules remain intact—the recycled pellets are only suitable for certain uses. Chemical or advanced

recycling changes the chemical structure of polymeric waste and enables more plastic to be recycled.

Chemicals companies are well positioned to support advanced recycling solutions for waste plastics. In January 2022, Eastman announced a \$1 billion investment to accelerate plastics circularity by building the world's largest molecular plastics recycling facility in France. 12 In October 2022, Cyclyx International, ExxonMobil, and LyondellBasell announced an agreement to advance development of a plastic waste sorting and processing facility near Houston. 13 The Cyclyx Circularity Center will produce feedstock for both mechanical and advanced recycling.

Driven by environmental concerns, investor pressure, public policy, and business opportunities, plastics circularity will continue to increase in importance for the chemicals industry. According to some analysts, the global post-consumer-recycled plastic market is projected to

grow at a CAGR of 9.4 percent between 2023 and 2033.¹⁴ Companies such as Evonik Industries, Solvay, LANXESS, and Trinseo have emphasized the environmental benefits of their recent portfolio rationalizations.¹⁵

We see a strong outlook for M&A in this space due to high levels of market demand from consumer packaging companies and the need for localized infrastructure. Potential buyers are likely to include PE investors looking to boost their ESG portfolios as well as corporates trying to improve their environmental posture through vertical integration and expanded capabilities.



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¹⁰ Source: "Plastic pollution is growing relentlessly as waste management and recycling fall short, says OECD," OECD press release, February 22, 2022

¹¹ Source: "U.S. Plastics Resin Producers Set Circular Economy Goals to Recycle or Recover 100% of Plastic Packaging by 2040," ACC press release, May 9, 2018

¹² Source: "Eastman to invest up to \$1 billion to accelerate circular economy through building world's largest molecular plastics recycling facility in France," Eastman press

¹º Source: "Cyclyx, ExxonMobil and LyondellBasell Advance First-of-its-Kind Plastic Processing Facility in Houston," LyondellBasell press release, October 18, 2022

¹⁴ Source: "Global Post-Consumer Recycled Plastic market is projected to grow at a CAGR of 9.4 % by 2033: Visiongain Reports Ltd," Globalnewswire, January 6, 2023

¹⁵ Source: "The chemical industry's new green deals: Chemical companies are increasingly paying attention to how mergers and acquisitions affect their environmental goals," C&EN, June 26, 2022

Outlook

Deal making to pick up in H2'23

KPMG Economics expects a mild recession in the first half of 2023 as the Federal Reserve continues to combat high inflation by tightening financial conditions; the federal funds rate is expected to peak at 5.25 percent. The outlook is expected to improve later in the year as consumer spending rebounds.

The global economy is likely to face significant challenges in 2023. Global inflationary pressures are likely to remain elevated, which will keep interest rates high in many countries. China's reopening should help offset some of the slowdown, but could also stoke additional inflationary pressures. And the risks of another rise in geopolitical tensions or energy shock are material.

Global M&A activity will likely increase in H2'23. For deal makers in the energy industry, the cost of capital may play a bigger role in 2023 as lenders come back to the market. We have a neutral to positive outlook for energy-related M&A in Q1'23 and Q2'23, assuming continued stability in commodity prices

(\$70 to \$80 per barrel). Reduced energy demand because of lower economic activity is the wildcard for traditional energy. Ideally, an economic slowdown has already been priced into the 2023 market, but a prolonged recession will dampen M&A activity for O&G. In the renewables subsector, the benefits of the Inflation Reduction Act (IRA) are just starting to trickle into the marketplace and will likely accelerate throughout 2023 as new credits, refreshed investment tax credits (ITCs), and other growth incentives become a reality.

In the chemicals industry, dealmakers will continue to look for opportunities in support of growth priorities and ESG, but deal activity is likely to be subdued as long as capital markets remain challenged. Chemicals will continue to see ESG diligence play a major role in assessing targets and specific deals to assist buyers in their net-zero journeys. PE investors will focus on how to access low-cost financing, and will develop realistic valuations for a business in light of raw

material pricing fluctuations, increased transportation and logistics costs, supply chain dislocations, and other factors.

Current volatility in the commodity price environment and macroeconomic uncertainty around interest rates and inflation have all made getting deals done a bit more difficult. However, assets are available and deals are out there to be made.



Key considerations as we look ahead

To successfully navigate a more uncertain deal landscape, companies should focus on the following requirements:



Both buyers and sellers need to define an outlook three, five, and 10 years ahead, and adapt to where they see the market headed.



Companies need to effectively understand and articulate their actual run rate and develop a realistic valuation of their business.



Deal makers will need to be flexible and react quickly to what will most likely be a fluid M&A market in 2023.

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How we can help you

KPMG helps its clients overcome deal obstacles by taking a truly integrated approach to delivering value, leveraging its depth in the ENRC industry, datasupported 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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