

## What's Market: US Oil & Gas Sector 2021

by Practical Law Finance, with special thanks to Jeff Nichols of Haynes and Boone LLP for his invaluable contributions to this Article

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A review of the US oil and gas sector in 2021, including a discussion of pricing, production, and financing trends and recent legal and regulatory developments.

Following a challenging 2020, the US oil and gas sector had a strong recovery in 2021. Crude oil and natural gas prices reached their highest levels in years amid increased economic activity and higher demand. Although the recovery was better and faster than expected after the COVID-19 pandemic decimated the sector in 2020, oil and gas production have not kept pace with the increase in demand, putting upward pressure on prices. The sector is also grappling with several challenges that are causing some oil and gas companies and their lenders to rethink their operations and lending practices. These challenges include:

- Geopolitical and trade tensions that are causing supply disruptions, most notably the Ukraine crisis. For more information on this issue and its implications for investment and trade, see [Articles, Normalizing Uncertainty: Geopolitical Risk Trends for Cross-Border Investors in 2022](#) and [US LNG Sector: 2021 in Review, Practice Note, US Sanctions and Export Controls on Russia in Response to Ukraine Crisis: Tracker](#) and [Russia Sanctions and Related Considerations Toolkit](#).
- The transition to clean energy. Public oil and gas companies are under pressure from lenders, investors, and other stakeholders to invest in cleaner energy sources and technologies, reduce the carbon intensity of their operations, and demonstrate their commitment to protecting the environment and slowing the pace of climate change. Private oil and gas companies, by contrast, feel less pressure. The terms “carbon” and greenhouse gas (GHG) emissions are used interchangeably because the global warming potential of particular GHGs, regardless of whether they actually contain carbon, is expressed in terms of their carbon dioxide equivalents.
- A change in the regulatory environment. In a departure from the prior administration’s staunch support for energy development that had marginalized

environmental issues, President Biden has made climate change and the environmental consequences of energy development a priority. His administration has placed greater emphasis on reducing GHG emissions from the oil and gas sector and limiting the effects of climate-related risks on the US economy.

- A more cautious lending environment. Financial institutions are trying to avoid repeating mistakes made during other periods of high commodity prices that ultimately put the sector at risk, including supporting aggressive drilling programs financed with high debt levels. They are also concerned about the effect that possible prudential regulations regarding climate risk, mandatory environmental, social, and governance (ESG) disclosures, and continued investor focus on sustainability may have on their lending practices and loan portfolios.

This Article examines these challenges and other developments in the US oil and gas sector in 2021, including:

- Crude oil and natural gas pricing trends.
- US oil and gas production trends.
- Financing trends, including changes in loan terms generally and reserve-based loans (RBLs) specifically and the increase in sustainability-linked loans (SLLs) and other sustainable financing products.
- Key legislative and regulatory developments, including initiatives to reconsider the federal oil and gas leasing program and to reduce methane and other GHG emissions from the oil and gas sector.

This Article also considers the outlook for this sector in the near and medium terms, including new regulations and policy initiatives that may change energy development and judicial decisions and political calculations that may constrain President Biden’s ability to implement his environmental and energy agenda (see [Looking Forward](#)).



### 2021 Overview

After the challenges brought on by the COVID-19 pandemic (notably, lockdowns and other measures to limit the spread of the virus that reduced economic activity and demand for oil and gas), the oil and gas sector started to recover at the end of 2020. This recovery accelerated in 2021 as various COVID-19 vaccines were approved and economic activity picked up, increasing the demand for oil and gas. Recovering oil prices also brought much needed stability to the balance sheets of oil and gas borrowers that had struggled during the downturn to manage their operations and service their debt.

But supplies did not keep pace with the higher demand. Many companies cut production during 2020 as demand fell and they did not fully restart operations once prices began to rise. Under pressure from their lenders, US producers are exercising more capital discipline and financing their operations from available cash flow. They are also trying to strengthen their balance sheets to better manage any future price collapses. Many oil and gas companies are also using the higher revenues to pay down debt and return cash to their shareholders (in the form of dividends and stock buybacks), instead of increasing shale oil production. OPEC has also taken a conservative approach to production. This restraint, coupled with cold weather in Europe and Asia and a storm in Texas at the beginning of 2021 that impacted oil and gas infrastructure, reduced global inventories and put upward pressure on prices. Supply constraints in the natural gas value chain also led some companies to turn to oil to meet their energy needs, further impacting the crude oil supply-demand curve (see [Article, US LNG Sector: 2021 in Review](#)).

ESG issues have become increasingly important and are a component in publicly-traded oil and gas companies' decision making. Faced with pressure from their investors, these companies are paying greater attention to, and are making a greater effort to, limit their GHG emissions, while maintaining profits and limiting capital expenditures. They are also under pressure from lenders and investors to consider climate-related risks. However, without a similar pressure from investors, private oil and gas companies are less influenced by ESG issues and are much more focused on expanding quickly.

The Biden administration has made reducing GHG emissions and slowing the effects of climate change a key policy goal and has taken several steps to implement more environmentally-friendly initiatives to achieve this goal. These steps include revoking several Trump administration policies and regulations that had

weakened environmental regulations and expanded oil and gas drilling on federal lands, setting a target to achieve a net zero carbon emissions economy no later than 2050, and increasing funding for renewable and clean energy technologies. Recognizing the continued importance of hydrocarbons to the US energy supply and security, few oil and gas companies are preparing for a net zero economy, however. Legislative setbacks and inflation constraints are also casting doubt on many of these goals. For more information on these issues, see [Practice Notes, Biden Administration Energy and Climate Change Policies and Regulations: 2021 Tracker](#) and [Biden Administration Energy and Climate Change Policies and Regulations: 2022 Tracker](#).

Although the Biden administration is taking a more measured approach to the oil and gas industry than the prior administration and investors are focused more than ever on reducing GHG emissions and the transition from carbon intensive activities, investment in this sector remains strong, although slightly more cautious. With the recovery in oil and gas prices, banks are gradually offering more credit to the sector and have increased or maintained many upstream companies' borrowing capacity. Nevertheless, volatility in the oil and gas market, coupled with concerns regarding environmental issues, are causing some lenders and investors to reconsider their exposure to this sector. The focus on ESG is also causing a small number of oil and gas companies and financial institutions to enter into loans with targets for GHG intensity or water use. Thus far, the incentives in these loans are minor adjustments to pricing, and are not sufficient to incentivize oil and gas companies to make capital investments to improve their environmental profile or invest in renewable energy.

With the rebound in prices, US M&A activity also picked up, especially in the first half of the year, as larger oil and gas companies looked for ways to strengthen their position and increase their cash flows. The number of bankruptcies also fell as the sector bounced back from the higher levels recorded in 2020.

### Pricing Trends

#### Crude Oil Prices

Building on the tepid recovery seen in the second half of 2020, oil prices jumped in 2021 as market conditions improved and supplies remained tight. According to the Energy Information Administration (EIA), Brent crude oil, the global benchmark, averaged roughly \$71 per barrel

in 2021, almost \$30 more than the 2020 average and the highest level in the past three years (see [EIA: Short-Term Energy Outlook \(January 2022\)](#)). These prices increased steadily throughout the year, starting at roughly \$50/b in the beginning of 2021, spiking to a high of \$86/b in October, before pulling back slightly in the final weeks of the year. The US benchmark, West Texas Intermediate (WTI), also rose and averaged about \$68/b in 2021, roughly \$30 more than in 2020.

While demand increased, there was not a commensurate increase in production, putting upward pressure on prices. Supplies remained restrained as a result of production cuts by OPEC+, US producers' discipline, and other supply disruptions (see [Production Trends](#)). To ease fuel prices, in November 2021 the Biden administration [released](#) 50 million barrels of oil from the Strategic Petroleum Reserve. The release, which was coordinated with other leading energy-consuming countries, had a limited impact on prices, however. For more information on this initiative, see [Department of Energy: Summary of 50 Million Barrel Release from the Strategic Petroleum Reserve](#). The Biden administration also asked OPEC+ to increase production, but this request was [rebuffed](#).

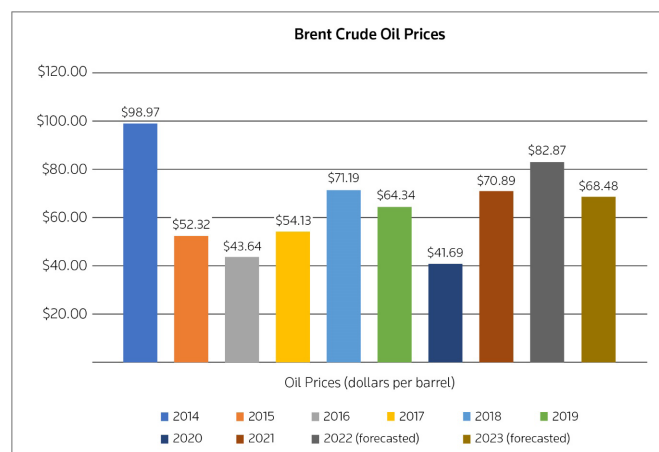
Despite the uptick in virus cases due to the omicron variant at the start of 2022, market participants originally anticipated that oil prices would remain around \$70/b for the year, well above break-even price for many US producers. The Ukraine crisis has driven these prices higher, however. On February 24, 2022, Brent oil prices pushed above \$105/b at one point, for the first time since 2014 (see [Reuters: Investors regain risk appetite; dollar, oil pare gains after Ukraine invasion](#)). It appears likely that

this upward trajectory will continue, at least in the near and mediums, as governments and companies respond to Russia's actions in Ukraine, including divesting of their Russian oil and gas assets (for example, Shell and ExxonMobil) and amid concerns that supply shortages may last for several months. In early March, Brent oil prices reached \$129.25/b and WTI prices reached \$125.29/b. According to market watchers, crude oil may approach \$200 a barrel if more sanctions are levied against Russian oil and gas, disrupting supplies. For more information on these issues, see [Looking Forward](#).

In its February report, the EIA forecasted that Brent prices will average \$83/b in 2022 (an \$8 increase from the price forecasted in January) and \$68/b in 2023 and WTI crude oil prices will average about \$3 to \$4 less per barrel in 2022 and in 2023 (see [EIA: Short-Term Energy Outlook \(February 2022\)](#)). Prolonged hostilities between Russia and Ukraine are pushing these forecasts higher. The EIA has already adjusted these numbers in its March forecast, with Brent crude expected to average \$117/b in March 2022, \$116/b in the second quarter of 2022, and \$102/b in the second half of 2022 (see [EIA: Short-Term Energy Outlook \(March 2022\)](#)). These figures may change as the Ukraine crisis evolves and governments and energy companies continue to adjust their responses to the highly fluid conditions.

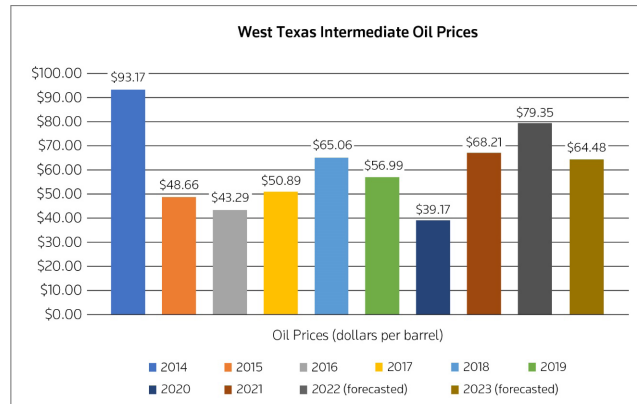
For more information on these statistics and other energy industry data, see [EIA: Short-Term Energy Outlooks \(January 2022\)](#) and [\(February 2022\)](#).

For a chart depicting Brent crude oil prices over the past few years (and estimates as of February 2022), see:



**Figure 1:** Price (dollars per barrel) of North Sea Brent crude oil, the international benchmark, since 2014 (Data from the Energy Information Administration as of February 2022).

For a chart depicting WTI crude oil prices over the past few years (and estimates as of February 2022), see:



**Figure 2:** Price (dollars per barrel) of West Texas Intermediate oil, the US benchmark, since 2014 (Data from the Energy Information Administration as of February 2022).

## Natural Gas Prices

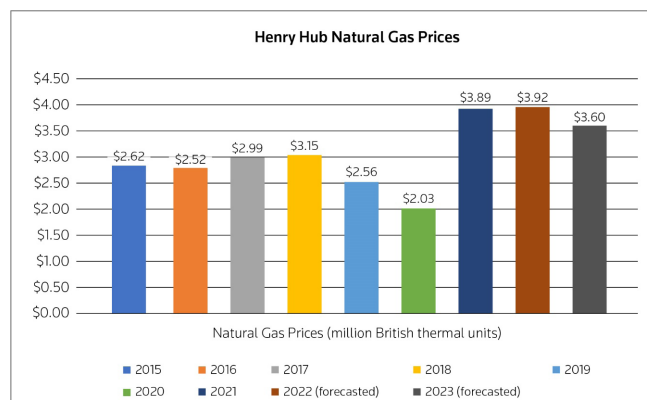
Natural gas prices also jumped, with prices at Henry Hub averaging about \$3.89 per million British thermal unit (MMBtu) in 2021, a significant uptick from the \$2.03 per MMBtu recorded in 2020 (see [EIA: Henry Hub Natural Gas Prices](#)). While the 2020 prices have limited statistical value given the effects of COVID-19 on demand, it was still a significant increase. Henry Hub prices averaged about \$2.56 per MMBtu in 2019.

Prices steadily rose throughout 2021, reaching a high of \$5.51 per MMBtu in October, as domestic consumption rose, gas supplies from Russia fell, and demand for liquefied natural gas (LNG) increased. These prices pulled back slightly in November and December due to mild weather patterns (see [EIA: Henry Hub Natural Gas](#)). However, the Ukraine crisis and other issues may

affect these prices (see [Articles, Normalizing Uncertainty: Geopolitical Risk Trends for Cross-Border Investors in 2022](#) and [US LNG Sector: 2021 in Review](#)).

The EIA forecasts that Henry Hub natural gas spot prices will average \$3.92 per MMBtu in 2022 (slightly higher than the \$3.79/MMBtu estimated in the January report) and \$3.60 per MMBtu in 2023 (steady with the \$3.63/MMBtu January estimate) (see [EIA: Short-Term Energy Outlooks \(January 2022\)](#) and [\(February 2022\)](#)). The EIA has also adjusted upward its forecasts for gas prices. In its March 2022 forecast, it expects that Henry Hub prices will average \$3.95 per MMBtu in 2022 (see [EIA: Short-Term Energy Outlook \(March 2022\)](#)).

For a chart depicting Henry Hub prices over the past few years (and estimates as of February 2022), see:



**Figure 3:** Natural Gas Prices (million British thermal units) at Henry Hub (the national benchmark) (Data from the Energy Information Administration as of February 2022).

### Production Trends

#### Crude Oil Production

The EIA estimated in January 2022 that global oil inventories fell for six consecutive quarters, starting with the third quarter of 2020, as consumption outpaced supply.

#### OPEC+ Production

In 2020, hoping to drive up oil prices, OPEC+ agreed to cut crude oil production by ten million barrels/day (b/d) (see [Legal Update, OPEC and Russia Agree to Cut Crude Oil Production](#)). As the market started to recover, OPEC+ initiated production increases, although in a measured way. At the December 2020 meeting, the countries participating in the [Declaration of Cooperation \(DoC\)](#) agreed to increase crude oil production by 500,000 b/d starting in January 2021 (see [Legal Update, OPEC and Russia Agree to Increase Crude Oil Production in January 2021](#)). At the April 2021 meeting, they approved higher production levels for May, June, and July 2021 of 350,000 b/d, 350,000 b/d, and 450,000 b/d, respectively (see [Legal Update, OPEC+ Agree to Increase Oil Production](#)). The parties [agreed](#) to raise monthly crude oil production beginning in August 2021 by 400,000 b/d each month, subject to a review of market fundamentals in December 2021. This decision has since been reaffirmed several times and the increase is in place through March 2022.

OPEC+ has resisted calls for more production amid concerns that a rapid increase may lead to a collapse in prices. Uncertainty about the stability and sustainability of the recovery is also causing OPEC+ to take a more cautious approach and rebuild their balance sheets after 2020 saw a steep decline in their revenues. OPEC+ has also indicated that it does not intend to immediately raise production in response to Russia's actions in Ukraine (see [Reuters: OPEC+ deal seen on track despite Russia's Ukraine invasion -sources](#)). During its most recent meeting on March 2, 2022, it [confirmed](#) the current production totals and noted that "current oil market fundamentals and the consensus on its outlook pointed to a well-balanced market, and that current volatility is not caused by changes in market fundamentals but by current geopolitical developments."

According to the EIA, crude oil production from OPEC member countries averaged 26.3 million b/d in 2021, up from 25.6 million b/d in 2020, but less than the 2019 total of 28.6 million b/d. The EIA estimates that average OPEC crude oil production will rise by roughly 2.5 million b/d to average 28.6 million b/d in 2022 and 29.0 million b/d in 2023 (see [EIA: Short-Term Energy Outlook \(January 2022\)](#)).

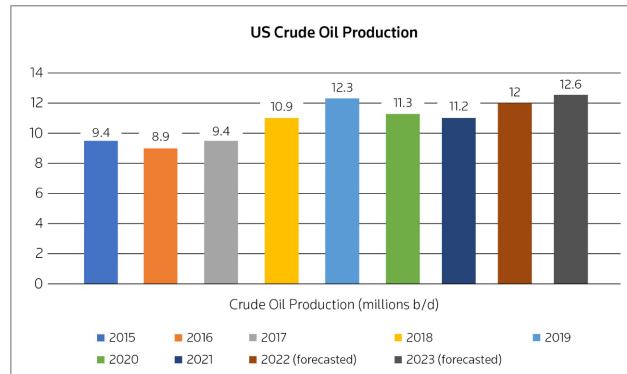
#### US Production

During prior periods of high commodity prices, US producers generally increased production to take advantage of these prices. The focus on production made the US the leading producer of crude oil (see [Practice Note, US Oil & Gas Industry: Overview: Domestic Production of Petroleum Hydrocarbons](#)). This drill, baby, drill approach was often at the expense of these producers' financial condition as they incurred significant debt to finance these operations. The high levels of debt these companies carried meant that any significant decline in commodity prices led to major disruptions in the oil and gas sector (see [Bankruptcies](#)). This approach also often led to tensions with OPEC+ as they battled US producers for market share.

That has not been the case this time. Continuing pressure from lenders and investors to exercise drilling discipline and finance their operations from available cash flows has kept production increases at more modest levels. (Although it is worth noting that smaller or non-public companies are increasing production to take advantage of the price increase). US production has also been affected by higher drilling costs and general and administrative expenses, supply chain bottlenecks, and a tight labor market.

According to the EIA, US crude oil production averaged 11.2 million b/d in 2021, at pace with 2020, which averaged 11.3 million b/d. This is lower than the 2019 total of 12.3 million b/d, the current record for the highest annual average US crude oil production. The EIA expects production to average 12.0 million b/d in 2022 and to rise to 12.6 million b/d in 2023, surpassing the high seen in 2019 (see [EIA: Short-Term Energy Outlook \(February 2022\)](#)). The EIA's March forecast estimates higher crude oil production in 2023, with a total of 13.0 million b/d in 2023 (see [EIA: Short-Term Energy Outlook \(March 2022\)](#)).

For a chart depicting US production trends over the past few years (and estimates as of February 2022), see:



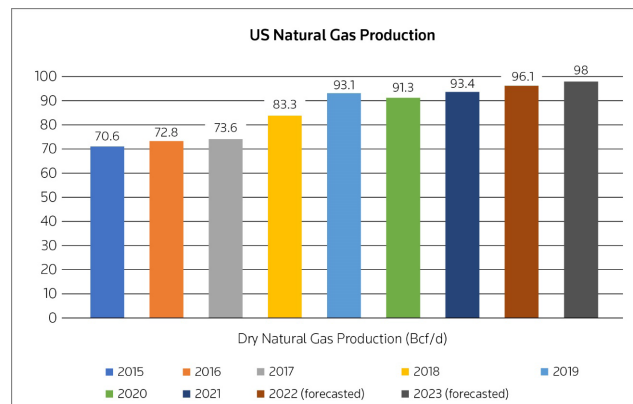
**Figure 4:** US Crude Oil Production (millions b/d) since 2015 (Data from the Energy Information Administration as of February 2022).

## Natural Gas Production

According to the EIA, US dry natural gas production averaged 93.4 Bcf/d in 2021, up slightly from the 91.3 Bcf/d recorded the previous year (see [EIA: U.S. Dry Natural Gas Production](#)). The EIA estimates that production will average 96.1 Bcf/d in 2022 and 98.0 Bcf/d in 2023 (see

[EIA: Short-Term Energy Outlook \(January 2022\)](#)). The EIA's March forecast estimates higher natural gas production with an average of 96.7 Bcf/d in 2022 and 99.1 Bcf/d in 2023 (see [EIA: Short-Term Energy Outlook \(March 2022\)](#)).

For a chart depicting US natural gas production over the past few years (and estimates as of February 2022), see:



**Figure 5:** US Natural Gas Production (Bcf/d) since 2015 (Data from the Energy Information Administration as of February 2022).

The increase in natural gas production was driven in part by higher domestic consumption of natural gas and global demand for LNG (see [Article, US LNG Sector: 2021 in Review](#)).

## Oil and Gas Financing Trends

A few financial institutions (mostly in Europe), either under pressure from stakeholders, at their own behest, or concerned by regulatory changes that may

be forthcoming, have announced that they will stop lending to the oil and gas industry. Lenders that remain committed to this sector are taking a more measured approach in their lending as regulators require them to consider the potential impact of ESG mandates, possible prudential regulations, environmental regulations, and the electrification of the car industry on the long term viability of the oil and gas sector.

To manage their exposure to the oil and gas sector and avoid a repeat of the insolvencies and restructurings that occurred during the last downturn, lenders are:

- Tightening their underwriting criteria.
- Requiring oil and gas companies to operate their business from their cash flows.
- Imposing tighter covenants to limit their exposure. This includes reinstating covenants that were suspended in response to the pandemic (see Reinstatement of Certain Financial Covenants) and including anti-hoarding provisions in some credit agreements, although to a lesser degree than in 2015-2017 (see Anti-Hoarding Provisions).
- Increasing the percentage of the total proved value of the borrower's oil and gas properties to be set aside as collateral (see Mortgage Requirements).

As prices rose in 2021 and financial performance improved, lenders loosened hedge requirements. The downturn in 2020 induced lenders to require higher levels of hedging at low prices, usually on a rolling 12 or 24 month basis. As prices rose in 2021, these hedges were a material burden. But each month old hedges at low prices were replaced by new hedges at higher prices, at the same time that unhedged volumes enjoyed higher prices. The combined effect reduced risk for lenders, allowing them to allow producers to reduce hedging (see Hedging).

In 2020, to avoid lenders decreasing their borrowing capacity, many exploration and production (E&P) borrowers looked to reduce costs, scale back their drilling programs, and manage their debt through repayment or lower borrowings. As prospects brightened and oil prices inched higher in 2021, companies saw their borrowing bases reaffirmed, or in some cases increased (see Borrowing Base Redetermination).

A significant number of E&P companies filed for bankruptcy in 2020 or sought to restructure their business. With the increase in prices, the outlook was much more positive in 2021 and bankruptcy filings levelled off, reaching new lows (see Bankruptcies).

### Borrowing Base Redetermination

Many producers depend on RBL facilities to finance their operations. RBL deal activity depends on the banks' price decks, the commodity prices they use to calculate the value of the reserves used in determining a borrower's borrowing base. In a low oil price environment, lenders may not allocate sufficient value to the borrower's assets to support the amount of financing the borrower needs to meet its capital and operating needs. In a high price environment, the lenders' assessment of the value of an upstream company's oil and gas assets is potentially higher, increasing the amount they can borrow under their RBL facilities.

Following challenging borrowing base redetermination seasons in 2020, market participants were hopeful that 2021 would bring increased availability. According to the Haynes & Boone spring borrowing base 2021 survey, most participants estimated that borrowing bases would be reaffirmed or increased by roughly 10%. Participants were even more optimistic during the fall 2021 survey, with most respondents estimating a bump of 10% to 20%.

Many borrowing bases did remain the same or were increased during the spring 2021 borrowing base redetermination period, although some did decrease (for an example, see [Battalion Oil Corporation](#) ("reduces the borrowing base to \$185.0 million effective June 1, 2021 and further reduces the borrowing base to \$175.0 million effective September 1, 2021")). For examples of borrowing bases that were reaffirmed or increased during the spring redetermination season, see:

- [Bonanza Creek Energy, Inc.](#), which had its borrowing base increased from \$260 million to \$500 million.
- [Earthstone Energy, Inc.](#), which had its borrowing base increased from \$360 million to \$475 million (and further increased to \$550 million on closing of the company's acquisition).
- [HighPeak Energy, Inc.](#), which had its borrowing base increased from \$40 million to \$125 million.
- [Penn Virginia Holdings, LLC](#), which had its borrowing base reaffirmed at \$375 million.

Reaffirmation and increases continued during the fall redetermination cycle. For examples, see:

- [Civitas Resources, Inc.](#), which had its borrowing base increased from \$500 million to \$1.0 billion.
- [Silverbow Resources, Inc.](#), which had its borrowing base increased from \$300 million to \$460 million.

- [Earthstone Energy Holdings, LLC](#), which had its borrowing base increased from \$650 million to \$825 million.
- [Denbury Inc.](#), which had its borrowing base reaffirmed at \$575 million.
- [Callon Petroleum Company](#), which had its borrowing base reaffirmed at \$1.6 billion.

In addition to the typical semiannual borrowing base redeterminations, some credit agreements also allowed an interim wildcard redetermination (for examples, see [Chesapeake Energy Corporation](#) and [Extraction Oil & Gas, Inc.](#) credit agreements).

### Hedging

Oil prices can rise and fall rapidly, resulting in financial instability for oil and gas producers. Hedging mitigates this risk by providing producers with a minimum amount of revenue they can use to manage their operations and service their debt. Hedging is therefore a crucial component of any oil and gas producer's risk and financial management program.

According to an Opportune LLP survey published in early 2021, roughly 90% of the upstream energy companies surveyed had hedges on the books at the end of 2020, with many lengthening the hedging period compared to previous years (see [Opportune LLP - Oil & Gas Companies Hedging Production Farther Into The Future](#)). As prices rose in 2021, however, companies experienced billions of dollars in hedging losses due to agreements made when prices were extremely low at the height of the pandemic. According to market watchers, although hedging levels still remain high (see, for example, [Earthstone Energy Holdings, LLC](#) (adds certain hedging requirements)), the continued rise in oil prices has led some producers to rethink their programs and delay adding more hedges. Lenders have generally accepted this change (for examples, see [Penn Virginia Holdings, LLC](#) (removed minimum hedging requirements) and [Contango Oil & Gas Company](#) (decreased minimum hedging covenant)). For an additional example, see [Energy 11 Operating Company, LLC](#) ("... hedge at least 50% of its rolling 12-month projected future production if less than 50% and at least 50% of its rolling 24-month projected future production if utilization is greater than 50%...").

For additional information on hedging, see [Practice Note, Hedging Oil and Gas Production: Issues and Considerations](#).

### Anti-Hoarding Provisions

When crude oil prices plunged in 2020, many lenders turned to anti-hoarding provisions to limit their exposure to the oil and gas sector. These provisions, which prevent borrowers from holding onto cash to create negotiating leverage with a bank group or in advance of restructuring or bankruptcy filing, were a fairly common feature in credit agreements in 2016.

Although commodity prices have increased, some lenders continue to be more conservative in their approach to lending in this sector and included anti-hoarding features in their credit agreements (see [W&T Offshore, Inc.](#) ("establishes a customary anti-cash hoarding prepayment requirement in the event the cash balances of [W&T Offshore] exceed \$25.0 million...")). See also [Antero Resources Corporation](#) and [Laredo Petroleum](#) credit agreements.

For additional information on anti-hoarding, see [Practice Note, What's Market: Anti-Hoarding Provisions in Reserve-Based Loans](#).

### Reinstatement of Certain Financial Covenants

During the pandemic, many borrowers and lenders agreed to temporarily suspend compliance with certain financial covenants or to make them less onerous. This allowed many companies to avoid defaulting under their credit agreements. Market watchers have observed an unwinding of these types of concessions for many borrowers as the economy has bounced back and many borrowers are able to meet their original financial covenant tests. For examples, see [Contango Oil & Gas Company](#) (reinstated the minimum current ratio covenant calculation of 1.0:1.0 beginning with the quarter ending June 30, 2021) and [Viper Energy](#) (added a financial covenant requiring the ratio of secured debt to EBITDAX not to exceed 2.50 to 1.0).

### Mortgage Requirements

Borrowers are typically required in an RBL transaction to deliver fully executed mortgages and/or deeds to the administrative agent to secure their obligations under the credit agreement. A mortgage sets aside as collateral a certain percentage of a borrower's oil and gas properties. Title should provide enough information to confirm coverage of a certain percentage of the borrower's oil and gas properties.

Before the pandemic, lenders typically required that 85% of the total proved value of the borrower's oil and gas properties be set aside as collateral. Although 85% is still frequently seen in the market, these values have pushed higher the past few years. For examples, see:

- **Matador Resources.** Includes mortgages on least 85% of the oil and natural gas properties.
- **Civitas Resources.** Includes mortgages on at least 90% of the total value of the proved oil and gas properties evaluated in the reserve report.
- **Gulfport Energy Operating.** Includes mortgages on at least 85% of the borrowing base properties as set out in the reserve report.
- **US Energy.** Includes title information on interests constituting at least 90% of the borrowing base properties as set out in the reserve report.
- **Battalion Oil Corporation.** Amends the credit agreement by replacing the phrase "ninety percent (90%)" with the phrase "ninety-five percent (95%)."

## Other Market Developments

### Consolidations

Many oil and gas companies refrained from dealmaking in the beginning of 2020 due to the uncertain market conditions exacerbated by the COVID-19 pandemic. The volatility in commodity prices and uncertain market outlook made it difficult for buyers and sellers to agree on a price, leading to fewer deals. M&A activity picked up in the latter part of 2020, however, amid climbing oil prices, increased investor confidence, and the industry's overall recovery.

According to market participants, upstream companies jumped on opportunities in the beginning of 2021 to consolidate scale and generate cash flow as a way to strengthen their balance sheets and better prepare for future disruptions and market volatility. There were 11 public oil and gas deals in 2021, representing 7.1% of overall deal activity (see [What's Market: 2021 Year-End Public M&A Wrap-Up](#)). The Permian basin was an especially hot market. According to an [Evaluate Energy M&A report](#), almost \$30 billion in new M&A deals over a six-month span (April - September) were concentrated in this region, including ConocoPhillips' \$9.5 billion all-cash purchase of Royal Dutch Shell plc's Permian assets. Additional examples of large-scale oil and gas acquisitions in 2021 include:

- Chesapeake Energy Corporation's acquisition of Vine Energy Inc., valued at \$2.2 billion. Vine Energy

focuses on the development of natural gas properties in the Haynesville and Mid-Bossier shale in northwest Louisiana (see [What's Market, Chesapeake Energy Corporation and Vine Energy, Inc. merger summary](#)).

- Cabot Oil & Gas Corporation's combination with Cimarex Energy Co., valued at \$17 billion. The companies rebranded as Coterra Energy and brought together more than 700,000 net acres across the Marcellus Shale and the Permian and Anadarko Basins (see [What's Market, Cabot Oil & Gas Corporation and Cimarex Energy Co. merger summary](#)).
- Independence Energy, LLC's acquisition of Contango Oil & Gas Company, valued at \$5.7 billion. The companies rebranded as Crescent Energy and brought together a set of assets across several basins. The newly-created company published its first [ESG report](#) in December 2021 shortly after closing (see [What's Market, Independence Energy, LLC and Contango Oil & Gas Company merger summary](#)).

Although deal flow cooled in the second half of 2021, market observers expect there may be renewed interest in M&A in the new year as large companies look for ways to transform their portfolios. The Permian Basin has already seen some activity in 2022. Desert Peaks Minerals and Falcon Minerals Corporation recently combined in a \$1.9 billion merger, with 73% of its oil operations located in the Permian.

Market watchers are also optimistic that a focus on climate change initiatives and the desire to invest in clean energy sources may be an important factor in future M&A decisions.

For more information on M&A activity in the oil and gas sector, see [What's Market: 2021 Year-End Public M&A Wrap-Up](#).

### Bankruptcies

Bankruptcies fell in 2021 to the lowest levels in the past few years as the sector continued to stabilize. According to a Haynes and Boone report, there were 20 E&P bankruptcy filings recorded in 2021 (12 bankruptcies were filed in the first half of 2021 (the lowest January to June total since 2015) while eight were filed in the second half of the year), a significant drop from the 46 oil and gas producers filing in 2020 (see [Haynes and Boone Oil Patch Bankruptcy Monitor - Final Report](#)). According to the final report, the aggregate debt for oil and gas producers totaled \$2.1 billion in 2021, the lowest amount since the firm started tracking in 2015.

The oilfield services sector also bounced back and experienced a significant decrease in bankruptcy filings. According to a Haynes and Boone report, there were 36 oilfield services bankruptcy filings in 2021 (13 companies filed in the first half of the year and 23 companies declared bankruptcy in the latter part of 2021), compared to a total of 61 filings in 2020. Texas led the way once again, posting more than half of the total filings, according to the report (see [Haynes and Boone Oilfield Services Bankruptcy Tracker - Final Report](#)).

For additional information, see [Bankruptcy: Energy Industry Tracker](#).

## Legal and Regulatory Developments

### Energy and Environmental Regulations

President Biden has made tackling climate change a centerpiece of his administration. Since taking office on January 20, 2021, he has taken several steps to implement his agenda, including:

- Revoking several Trump executive orders and policy initiatives that had weakened methane regulations and limited the environmental review of energy projects under the National Environmental Policy Act (see, for example, [Legal Updates, President Biden Signs Congressional Resolution Repealing Trump-Era Rule that had Weakened Regulations to Limit Methane Emissions from the Oil & Gas Industry and CEQ Issues Interim Final Rule Delaying Revisions to the National Environmental Policy Act](#)).
- Rejoining the Paris Agreement. The Trump administration previously withdrew from the Paris Climate Agreement in 2019.
- Committing to scale back fossil fuel production and pledging to achieve net zero emissions from overall federal operations by 2050. President Biden also signed an executive order in December 2021, which seeks in part to reduce emissions from overall federal operations by 65% by 2030 (see [Executive Order on Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability](#)).
- Implementing a temporary moratorium on all new oil and gas leasing on federal lands. Following a court decision in June 2021 that held that President Biden did not have the authority to pause onshore or offshore oil and gas leases, leasing resumed at the end of 2021 (see [Legal Update, Federal Judge Enjoins Biden Administration Pause of Fossil Fuel Leases and Permits on Public Lands](#)). However, a court recently invalidated

a lease sale because it found the analysis that was conducted during the Trump administration of the environmental impact of the decision to proceed with the sale was “arbitrary and capricious” and deficient under NEPA (see *Friends of the Earth v. Haaland*, 2022 WL 254526 (D.D.C. Jan. 27, 2022)). This and other recent decisions have led to uncertainty regarding federal regulators’ approach to energy development (see [Practice Note, Biden Administration Energy and Climate Change Policies and Regulations: 2022 Tracker: Oil and Gas Leasing on Federal and Tribal Lands](#)). The Department of Interior (DOI) is also reviewing the leasing program to ensure it provides a fair return to taxpayers and serves the public interest (see [Legal Update, DOI Releases Report Which Found Significant Shortcomings in the Federal Oil and Gas Leasing Program](#)).

- Proposing regulations to reduce methane emissions and other harmful pollutants from oil and natural gas production, processing, transmission, and storage segments (see [Legal Update, EPA Proposes Rule to Regulate and Reduce Methane Emissions from the Oil & Gas Sector](#)).
- Increasing funding for clean energy technologies (see [Legal Update, Infrastructure Investment and Jobs Act of 2021: Key Infrastructure and Energy Provisions](#)).

For more information on significant Biden administration actions and initiatives on climate, energy, and environmental issues in 2021, see [Practice Note, Biden Administration Energy and Climate Change Policies and Regulations: 2021 Tracker](#). See also, [Practice Note, Biden Administration Energy and Climate Change Policies and Regulations: 2022 Tracker](#).

### Climate-Related Risks in the Financial Sector

President Biden also issued an executive order to address the potential effects of climate change on the financial sector. The order, which seeks “to advance consistent, clear, intelligible, comparable, and accurate disclosure of climate-related financial risk,” directs certain regulators to:

- Assess the physical and transition climate-related risks to the financial stability of the federal government and US financial system. The physical risks refer to damage to borrower business operations, properties, and supply chains from more intense hurricanes, floods, wildfires, and drought. Transition risks refer to the risks to banks from shifts in policy, consumer and business sentiment, or technologies associated with the changes necessary to limit climate change. This includes the trend toward decarbonization that may

cause a decline in value of a borrower's oil and gas reserves or infrastructure assets.

- Facilitate the sharing of climate-related financial risk data among certain agencies.
- Issue a report to President Biden within 180 days on efforts to integrate climate-related financial risk into their policies and programs, including the necessity for actions to enhance climate disclosures by regulated entities.
- Include an assessment of climate-related financial risk in the Financial Stability Oversight Counsel's annual report to Congress.

For more information on this order, see [Legal Update, President Biden Signs Executive Order on Climate-Related Financial Risk](#).

To better understand and manage the risks these issues pose to bank safety and soundness and the overall financial system, the Office of the Comptroller of the Currency (OCC) in November 2021 requested feedback on draft principles regarding the identification and management of climate-related financial risks for large banks. For more information on these issues, see [Practice Note, Bank Management of Climate-Related Financial Risks: Regulatory Tracker](#) and [Article, OCC's Draft Principles for Climate-Related Financial Risk Management](#).

### ESG Considerations

Companies are increasingly assessing how ESG issues, such as climate change and environmental justice, may impact their business. Shareholder proposals on ESG matters are receiving higher votes and shareholder activists are pointing to ESG vulnerabilities in their campaigns (see [Article, Board Oversight: Key Focus Areas for 2022](#)). This is causing some public oil and gas companies to take a closer look at their operations to address these concerns and avoid the reputational harm that failure to consider these issues may cause.

Many in the oil and gas industry are incorporating ESG policies and programs into their business models to address issues. According to an August 2021 Haynes and Boone report, roughly 83% of companies sampled have pledged to adopt comprehensive ESG programs (see [Haynes Boone and EnerCom Oil & Gas ESG Tracker](#)). These companies have focused on improving the reliability, consistency, and comparability of ESG and, in particular, climate disclosure, including by establishing mandatory reporting requirements. In fact, in an effort to attract more environmentally-conscious investors, some oil and gas companies have pledged to accelerate transition to net zero carbon emissions by 2050.

Many banks have also signed up to the United Nations' [Net-Zero Banking Alliance](#), which was launched in April 2021. The signatories commit to reducing GHG emissions linked to their lending and investment portfolios and modify their lending practices to reach net zero emissions by 2050. The Net-Zero Banking Alliance has 105 members as of March 8, 2022. Most of these members are in Europe, although there are nine members in the US, including Bank of America, Citi, JPMorgan Chase, Morgan Stanley, Goldman Sachs, and Wells Fargo.

### Disclosure Requirements

US companies are under pressure from investors to disclose their ESG policies and their performance against certain ESG metrics, as well as provide investors with more information about their exposure to the risks of climate change. Companies often provide these disclosures on their websites and in standalone sustainability reports (see [Article, What's Market: Disclosure on Climate Change \(2021\)](#) and [Article, What's Market: ESG and Sustainability Disclosures](#)). However, these disclosures are often insufficient or incomplete.

State and federal regulators have also ramped their efforts to require and standardize climate risk related disclosures to ensure investors and lenders have adequate information to compare risk exposure levels within and across industries. The SEC is expected to propose a rule mandating certain climate- and other ESG-related disclosures.

For more information on these requirements, see:

- [Legal Update, SEC's Acting Chair Directs the Division of Corporation Finance to Enhance Review of Climate-Related Disclosure](#).
- [Legal Update, Acting Chair Lee Discusses the SEC's Focus on Climate Change and ESG, Solicits Public Comment on Disclosure Framework](#).
- [Legal Update, SEC Releases Sample Letter to Companies Regarding Climate Change Disclosures](#).
- [Practice Note, Key Developments in ESG and Climate Disclosure Tracker](#).

### Impact of ESG and Climate Risk Considerations on Borrower Operations and Lending

Oil and gas industry participants and their lenders must find ways to manage their commitments under their ESG policies, climate-related risks (their own as well as those

of the companies to which they extend financing), and investor expectations. These issues may start influencing the way oil and gas companies do business and cause some banks to take a harder look at their oil and gas portfolios.

### Changes to Borrower Operations

Some oil and gas companies are reconsidering their long-term investment strategies to improve the climate resiliency of their assets and reduce the risk of stranded assets (for example, pipelines with limited use or LNG facilities that are no longer relevant or that may become economically non-viable if governments abide by their Paris Agreement and COP26 commitments). For more information on these issues, see [Legal Updates, COP 26 global climate change conference in Glasgow: formal outcomes and other key announcements](#) and [COP 26 global climate change conference in Glasgow: formal outcomes and other key announcements](#) and [Practice Note, UNFCCC, the Kyoto Protocol and the Paris Agreement](#).

A few public upstream and midstream companies are also looking for ways to reduce their carbon footprint by

- Making greater investment in renewable energy assets.
- Expanding the use of carbon capture and sequestration (CCS) technology.
- Reducing flaring and venting.
- Entering into loan transactions that promote and facilitate these initiatives (see [Growth of SLLs](#)).

These initiatives remain largely confined to a small number of large high-profile oil and gas companies who widely publicize these efforts. For the typical E&P company, these activities are non-existent or are confined to an ESG policy with minimal commitments.

### Impact on Lending

Banks and other financial institutions also face exposure to climate-related risks that may impact their lending decisions. They also face increasing pressure from regulators to manage financial risk related to climate change. Increased regulations may result in higher capital or liquidity requirements for non-green or non-sustainable investments that may increase borrowing costs and lead to a realignment of loan portfolios. Intensifying ESG activism may also lead to heightened reputational risk in the long term for those involved with lending to oil and gas related activities.

Banks are employing different strategies to manage these risks including:

- Reducing their investment in this sector.
- Conducting enhanced due diligence to better understand their borrowers' exposure to climate-related risks.
- Incentivizing borrowers to reduce their carbon footprint by reducing their borrowing costs if certain conditions are met (see [Growth of SLLs](#)).

### Growth of SLLs

Market demand for SLLs exploded in 2021 as an increasing number of US companies incorporated environmentally friendly, sustainability, and good governance metrics and targets into their loan documents (see [Legal Update, Growth and Increasing Diversity of the US Sustainability-Linked Loan Market](#)). According to data from Refinitiv LPC, global sustainable financing reached \$1.6 trillion in 2021, a 116% increase compared to the 2020 total; 2021 recorded a record \$600 billion in sustainability-linked lending, an increase of 3.5 times year over year. In the US, SLL volume topped \$218 billion, a historic record for the US market and a staggering increase compared to the approximately \$5 billion posted in 2020, according to data obtained from the Loan Syndications and Trading Association (LSTA). Market watchers are optimistic this number will continue to rise in light of the Biden administration's commitment to combat climate change and a shifting investor landscape.

Examples of several recent SLL loans to hit the market include:

- [Occidental Petroleum Corporation](#), which tied the interest rate margin and the facility fee rates to Occidental's performance on specified sustainability target thresholds concerning absolute reductions in GHA emissions from its global assets.
- [PDC Energy, Inc.](#), which added certain sustainability-linked key performance indicators to be agreed related to the applicable margin and commitment fee rate.

For more information on these issues, see [Practice Note, What's Market: 2021 Year-End Trends in Large Cap and Middle Market Loan Terms](#).

SLLs are just one example of a sustainable financing product currently in the market (green loans, green bonds, and social loans are other examples), but they are among the most popular because of their availability to all types of companies and the diversity in the terms they offer. Unlike green financing products, SLLs do not require the use of proceeds to be used for a green

or environmentally-friendly project or purpose. Rather, they are performance-based loans with terms (typically, interest rate margins) that adjust up or down depending on the borrower's ability to meet pre-determined sustainability performance targets (SPTs) as measured by pre-defined key performance indicators (KPIs). The KPIs that must be met are varied and range from environmental targets to increasing diversity in the borrower's board of directors.

The LSTA, together with the Loan Market Association (LMA) and the Asia Pacific Loan Market Association (APLMA) have published several documents relating to principles and guidance for sustainable financing. Originally published in 2019, the [Sustainability-Linked Loan Principles \(SLLP\)](#) and the [Guidance on Sustainability-Linked Loan Principles \(GSLLP\)](#) were most recently updated in May 2021 (see [Legal Update, LSTA Publishes Revised Versions of the Sustainability-Linked Loan Principles and Accompanying Guidance](#)). The 2021 updates were published in response to the dramatic increase in the volume of SLLs and are intended to promote transparency and integrity in the SLL market and tighten the language regarding the choice of KPIs and scope of SPTs.

For more information on SLLs and the issues they present, see [Practice Note, Understanding Sustainability-Linked Loans, What's Market: Green Loans](#) and [What's Market: Sustainability-Linked Loans](#).

### Looking Forward

Oil and gas industry participants are anxious about the state of the US oil and gas sector in 2022. While prices are expected to remain relatively high, stabilizing the sector, uncertainty remains regarding the sustainability about the economic recovery amid concerns about rising inflation. The US rate rose to 7% in December 2021, the highest in 40 years. This has affected drilling and other costs. Increases in interest rates to reduce this rate may also increase borrowing costs. Some observers expect the Federal Reserve to raise rates by as much as one percentage point before the end of the year.

Any expectations that observers and industry participants may have had about the oil and gas sector at the beginning of 2022 have been upended by the Ukraine crisis. Prices have risen dramatically and there are significant concerns about supply shortages as governments and companies respond to Russia's actions in Ukraine.

To ease the pressure on crude oil supplies and prices, the US, together with 30 other countries, announced their

intent to release an additional 60 million barrels of oil from their strategic reserves. The US promised an initial commitment of 30 million barrels of oil from the SPR (see [DOE: DOE Announces an Emergency Sale of 30 Million Barrels of Crude Oil From The Strategic Petroleum Reserve](#) and [DOE: U.S. and 30 Countries Commit to Release 60 Million Barrels of Oil From Strategic Reserves to Stabilize Global Energy Markets](#)). This is expected to have a limited impact on prices, especially if significant Russian supplies are removed from the global markets as a result of sanctions or bans on Russian energy assets.

Russia is one of the world's leading producers and exporters of both oil and gas. Its proven oil reserves total about 107.2 billion barrels, which equates to nearly 6.2% of the total global reserves (see [Country Q&A, Oil and gas regulation in the Russian Federation: overview: Domestic sector](#)).

In response to the Ukraine crisis, President Biden, as well as other world leaders, have imposed aggressive sanctions on Russia (see [Practice Note, US Sanctions and Export Controls on Russia in Response to Ukraine Crisis: Tracker](#) and [Russia Sanctions and Related Considerations Toolkit](#)). President Biden had hesitated taking actions against imports of Russian oil and gas because of their potential effects on US consumers, but on March 8, 2022, he issued an [executive order](#) prohibiting the import of Russian oil, LNG, and coal. Russian hydrocarbons and petroleum products represent about 7% to 8% of total US imports (see [EIA: US Imports from Russia of Crude Oil and Petroleum Products](#)). The executive order also prohibits new investment in the Russian energy sector or financing of an activity in this sector by a US person. For more information on this ban, see [Fact Sheet: United States Bans Imports of Russian Oil, Liquefied Natural Gas, and Coal](#). These sanctions, coupled with lengthy hostilities between the two countries, may cause a further uptick in energy prices.

President Biden issued this executive order amid pressure from both sides of the aisle to ban Russian oil imports. Congress had taken several actions in response to the Ukraine crisis, including:

- Republican Senator Roger Marshall introduced a [bill](#) to stop the import of Russian petroleum products in the hopes of energizing US energy production. Senator Marshall, along with fellow Kansas Senator Jerry Moran and Congressman Tom Cole also sent President Biden a [letter](#) requesting an immediate embargo on all Russian energy exports under the International Emergency Economic Powers Act (50 U.S.C. §§ 1701 to 1708) and urged the administration to focus more on domestic drilling.

- Democratic Senator Edward Markey introduced legislation, the [Severing Putin's Immense Gains from Oil Transfers \(SPIGOT Act\) of 2022](#), to stop dependence on Russian oil and to accelerate transition to clean energy and other renewable sources.
- Several senators, including Senators Joe Manchin (D-WV), Chairman of the Senate Energy and Natural Resources Committee, and Lisa Murkowski (R-AK), senior member of the Senate Energy and Natural Resources Committee, introduced the [Ban Russian Energy Imports Act](#) which would prohibit the importation of Russian crude oil, petroleum, petroleum products, LNG, and coal.

Prices may also be affected if:

- US producers and OPEC+ change course and increase production more rapidly. More production may also come on the market if sanctions are lifted against Iran ([Practice Note, Export Regulation: OFAC Economic and Trade Sanctions](#)) and some OPEC+ members do not fully comply with the DoC agreement. Increased US production may also be mitigated by:
  - the costs and challenges of reopening shut-in wells;
  - difficulties securing necessary personnel; and
  - supply chain issues.
- More countries impose sanctions or import bans on Russian oil and gas assets or Vladimir Putin stops gas deliveries to Europe.
- New and more lethal COVID-19 variants emerge, leading to more government measures to contain the virus.

In the longer-term, ESG mandates and environmental regulations may also increase the costs of doing business and jeopardize the viability of the sector. Regulatory scrutiny and environmental regulations may:

- Require lenders to tighten their underwriting criteria-- reducing the amount of capital available for this sector and increasing the sector's borrowing costs.
- Reduce investment in the oil and gas sector.
- Increase the costs of oil and gas extraction and development. While the majority of oil and gas is conducted on private lands, oil and gas companies still rely on onshore and offshore leases on public lands (see [Practice Note, US Oil & Gas Industry: Overview: Securing Access and Rights to Hydrocarbons](#)). The DOI's review of the federal oil and gas lease program may lead to increases in the minimum auction bids, the royalty rates companies have to pay, and the minimum

bond they must post (see [Legal Update, DOI Releases Report Which Found Significant Shortcomings in the Federal Oil and Gas Leasing Program](#)).

The Biden administration's focus on environmental issues and efforts to reduce GHG emissions may also be constrained by geopolitical realities, domestic politics, and judicial decisions. In February 2022, a Louisiana court issued a preliminary injunction preventing federal agencies from using the social cost of carbon (SCC) metric after concluding that the metric's application increases regulatory costs (*Louisiana v. Biden*, W.D. Louisiana, Lake Charles 2022 WL 438313). The SCC puts a dollar value on a metric ton of GHG emissions (an interim estimate of \$50 per ton of GHG emitted) and is used in rulemakings to determine the potential benefits of controlling releases of these gases.

On February 19, 2022, the US appealed the decision before the US Court of Appeals for the Fifth Circuit. It also sought a stay of the injunction, arguing that it should not have been granted and improperly restricts executive branch policymaking. Although the lower court decision conflicts with other court decisions that suggested this metric should be used, it is still a blow to the administration's environmental agenda that had made using a SCC a major component of its efforts to combat climate change.

The Supreme Court agreed to review a lower court decision that may have implications for the Biden administration's agenda (*West Virginia v. Env'tl. Prot. Agency*, 142 S.Ct. 420 (2021)). Although this case involves GHG emissions from power plants, it may have significant implications for the EPA's authority generally and, in particular, to regulate GHG emissions under the Clean Air Act (42 U.S.C. § 7411). Arguments were heard on this case on February 28, 2022 with the court signaling it may limit the EPA's authority, although the basis for doing so is unclear. A decision is expected in June 2022. For more information on these cases and issues, see [Practice Note, Biden Administration Energy and Climate Change Policies and Regulations: 2022 Tracker](#).

Oil and gas companies may need to navigate the conflict between investor concerns regarding climate change and the transition to clean energy and the need to increase short-term investor returns. Environmental groups, investors, and other stakeholders have criticized the commitments of oil and gas companies to reduce GHG emissions as inadequate and vague. Many of these commitments do not apply to scope 3 emissions which includes all indirect emissions that occur in a company's value chain, including upstream and downstream

emissions (see [Greenhouse Gas Protocol: Corporate Value Chain \(Scope 3\) Standard](#)). Scope 3 emissions represent the majority of an oil and gas company's carbon footprint.

The transition to clean energy is also expensive and will take time. Although investments in renewable energy has increased exponentially in recent years, it is still a fraction of the investment in the oil and gas sector. The energy transition would require very large and sustained financial support from the federal government, which may not have support in the current Senate, or would require regulation causing high energy prices to be paid by consumers, which is also politically difficult. Moreover, renewable energy cannot meet all US energy needs. Despite the many wind and solar projects that have come online in recent years, they contribute about 15% of the electricity generated in the US (see [EIA: Electric Power Monthly \(January 2022\)](#)).

Alternative energy sources (for example, green hydrogen and blue hydrogen) or technologies to reduce carbon emissions (CCS and CCUS) are also expensive and difficult to scale. Displacing oil and gas with these technologies requires significant investment from the public and private sectors. Moreover, many oil and gas companies have made investments in expensive and long life oil and gas assets (for example, pipelines and LNG facilities) and they cannot easily pivot from these investments.

Financial institutions also have a role to play in addressing these issues. As the pressure to reduce their carbon footprint increases, including to reduce their investment in and financing of carbon-intensive industries, banks may need to consider their borrowers' ESG mandates and climate risk-related strategies in their underwriting processes. The extent to which banks consider these issues are subject to competitive considerations (as banks do not want to lose clients), standardization of the metrics that can be used to assess and analyze these issues, and the costs of doing so (including having the experts in-house or otherwise that can adequately evaluate these issues).

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If financial institutions also seek to limit their exposure to oil and gas holdings or are subject to greater regulation regarding their practices that increase capital requirements, borrowers may need to seek alternative financing sources that have more flexibility. This may include private equity funds, hedge funds, and volumetric production payments. For more information on these and other potential sources, see [Practice Note, Reserve Based Loans: Issues and Considerations: Other Sources of Financing](#).

Practical Law is continuing to monitor these developments and produce content where appropriate.

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