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Managing Director and Head of Energy Partners


John is based in New York and Houston and has 25 years of investing experience. Mr. Moon served as a senior member of the Morgan Stanley Capital Partners (MSCP) team from 1998 to 2004 and then rejoined Morgan Stanley in 2008.

Prior to his return to MSCP, Mr. Moon was a Managing Director of Riverstone Holdings LLC where he served on the Investment Committees of the Carlyle/Riverstone Global Energy & Power Funds III and IV. Prior to Riverstone, Mr. Moon was a founding partner, Managing Director and member of the Management Committee of Metalmark Capital LLC.

Mr. Moon holds an A.B., magna cum laude, from Harvard College. He also holds an A.M. and Ph.D. in Business Economics from Harvard University. Mr. Moon is an adjunct professor of finance at Columbia Business School.

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Recent Trends In the Upstream Sector: A Private Equity Perspective

17th Annual Ryder Scott Conference

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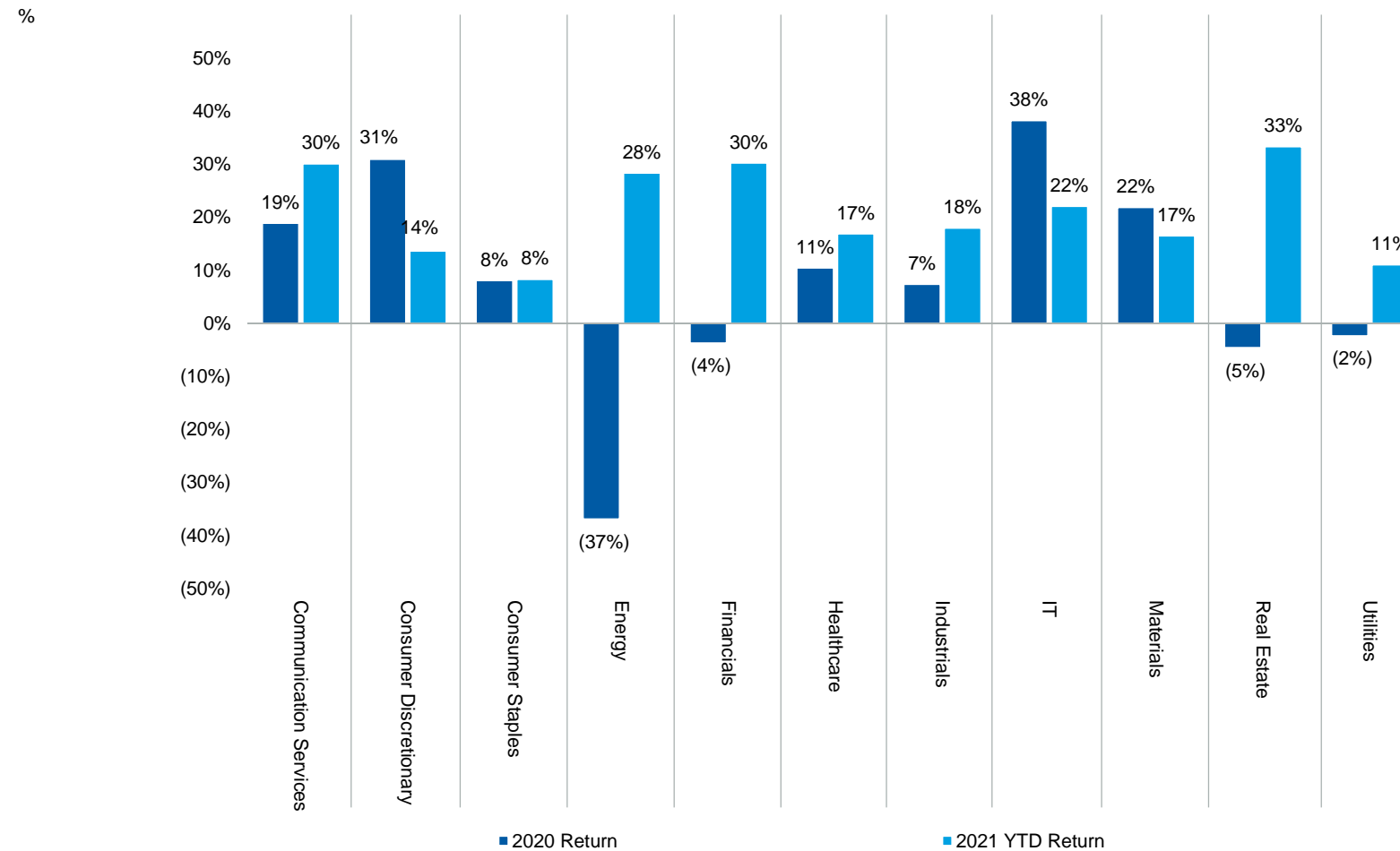
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Public Energy Sector has Rebounded After a Weak 2020

- In 2020 the energy sector was the worst performing sector in the S&P 500
- Energy, Financials and the Real Estate sectors have rebounded the most significantly in 2021 YTD

S&P 500 Industry Index Performance, 2020 and 2021 YTD



Source: Marketwatch, YTD as of 9/13/21.

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The State of the Upstream Energy Sector

Recent Trends

- ❑ Don't confuse the cyclical with the secular. The energy industry suffered greatly during the pandemic, but most forecasts predict further recovery
 - Oil and gas are critical to economic growth and will be for decades. Not just for transportation, heat and power, but as industrial inputs
- ❑ Reducing GHG emissions is imperative. It's a collective action problem of a global scale with global ramifications. It's **everyone's business**
 - The energy industry must reduce its emissions – CO2 and methane
- ❑ The U.S. must be the most efficient producer not just one of the largest
 - The U.S. energy industry must lead on emissions reductions to preserve its social license to operate
- ❑ Doctrinaire/absolutist policies lead to incoherence and contradictions
 - Policies restricting Western production or forcing divestitures while demanding greater production from other producers isn't the answer
- ❑ Neither is intransigence by the energy industry

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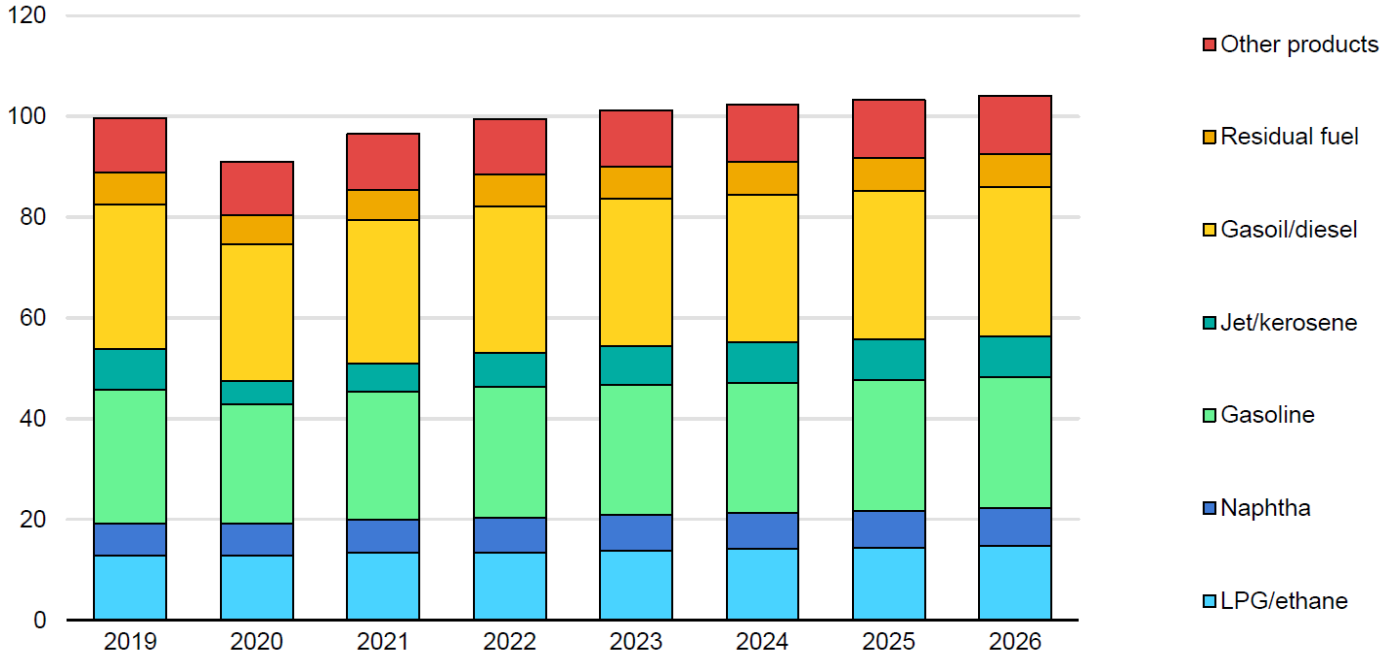
Global Oil Demand Rebounds in 2021 and Forecasted to Grow Further

9-year low of 91 mb/d in 2020 to 104 mb/d in 2026

- Worldwide pandemic and tumultuous economic downturn triggered an unprecedented collapse in global oil demand of 8.7 mb/d in 2020
- Growth is expected to rebound sharply in 2021, and is projected to rise by 13.1 mb/d to 2026

Global Oil Demand by Product

Mb/d



Source: IEA 2021

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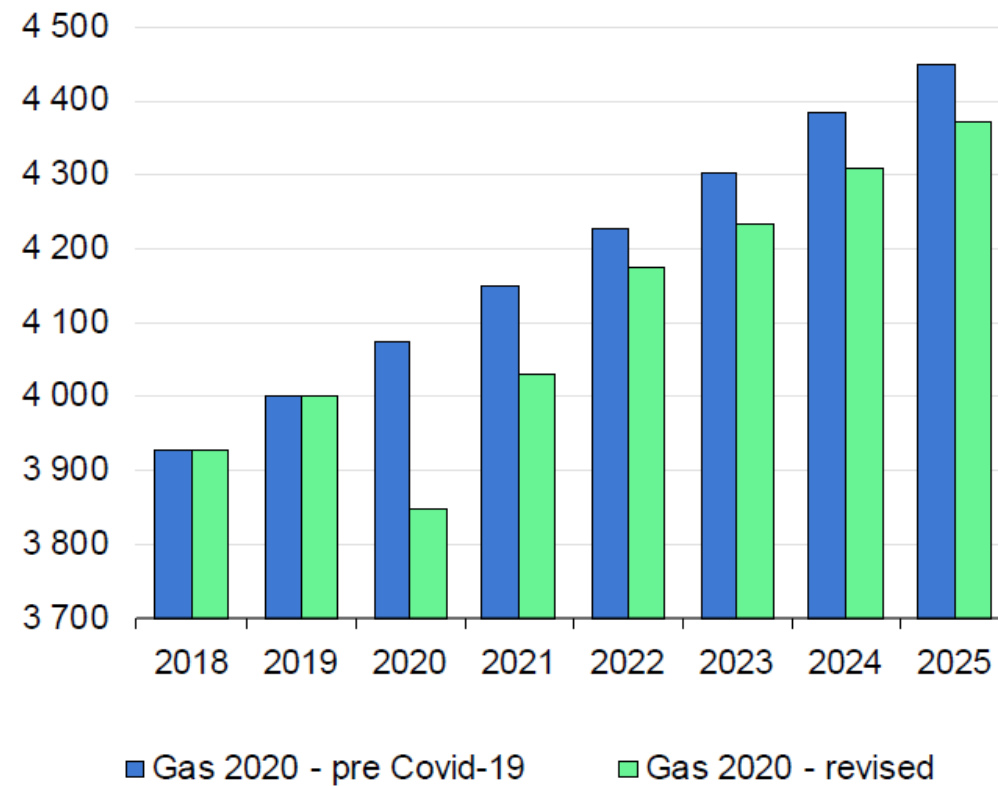
Natural Gas Demand has Recovered in 2021

After a 4% drop in 2020, short-term natural gas demand is expected to progressively recover

- After a 4% drop in 2020, natural gas demand is expected to progressively recover in 2021 as consumption returns close to its precrisis level in mature markets, while emerging markets benefit from economic rebound
- The impact of the 2020 crisis is, however, expected to have some impact on medium-term growth
- Forecast expects an average growth rate of 1.5% per year during this period

Evolution of EIA Global Gas Demand Projections

bcm



Source: IEA 2021

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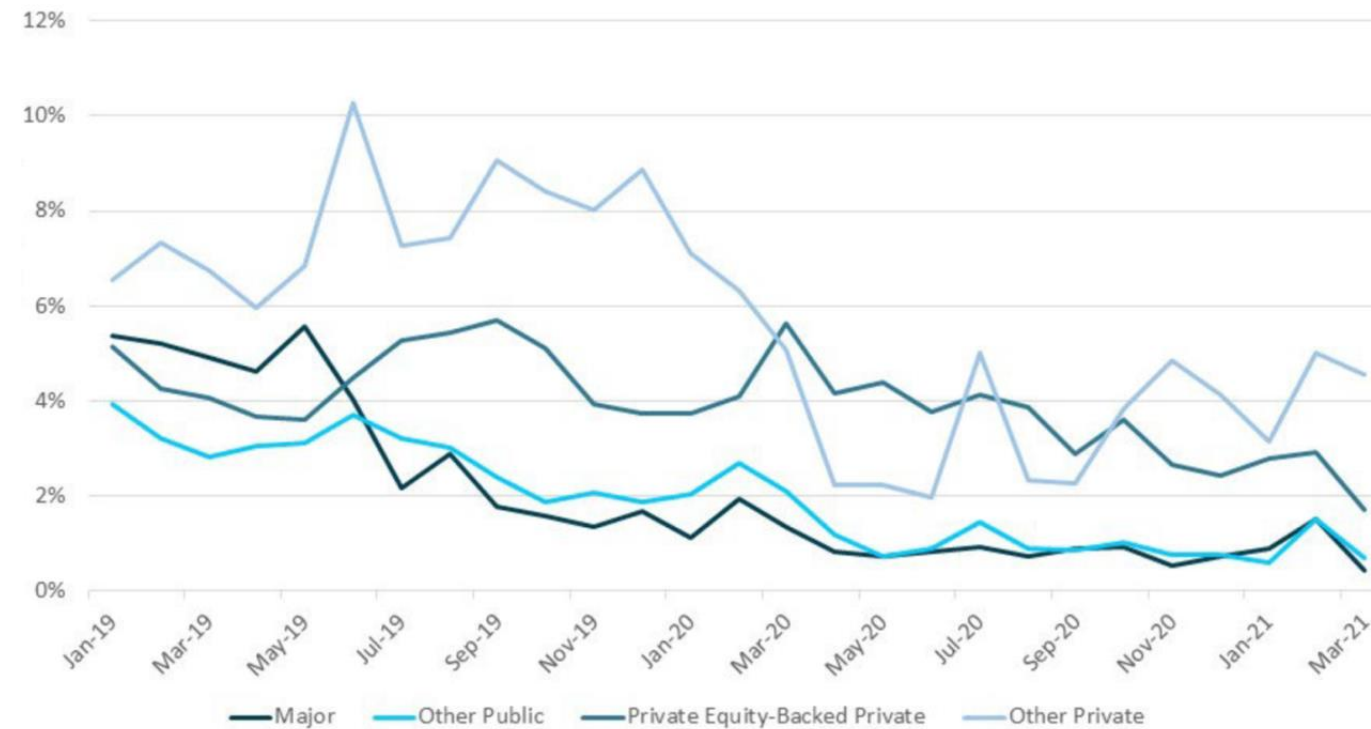
As Permian Recovers, Reductions in Flaring Prove Lopsided

While reductions from public companies have been steady, reductions from private companies have been less consistent. This is especially true for private operators unaffiliated with private equity

- Reducing/eliminating “normal course” flaring is low-hanging fruit for the energy industry
- Reductions in the recent past are at least in part due to decreased drilling activity
- Nevertheless, there appears to be meaningful differences among classes of producers
- Further research in this area is required, but ALL producers must be induced to reduce flaring

Flare Intensity For First-Year Wells

% Flare Intensity (Mcf/Mcfe)



Source: BTU Analytics

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The State of the Upstream Energy Sector

Recent Trends

- ❑ Don't let perfect be the enemy of the good
 - Pre-Covidin 2019, the U.S. stood at a 27-year low in GHG emissions. Coal-to-gas switching is a big part of that story.
 - But the world needs more - to get to NET zero, sequestration is a must
 - IEA is calling for less (actually, no) exploration and more optimization
 - Cuts in long-dated exploration should lead to greater payouts to investors and greater reliance on short-cycle wells (e.g., shale)
- ❑ Greater appreciation for lower emissions and free cash flow distribution prompts greater interest in governance and financial innovation
 - The rise of shareholder activism at energy companies (Engine No. 1 as well as traditional activists)
 - Oil & Gas Securitizations

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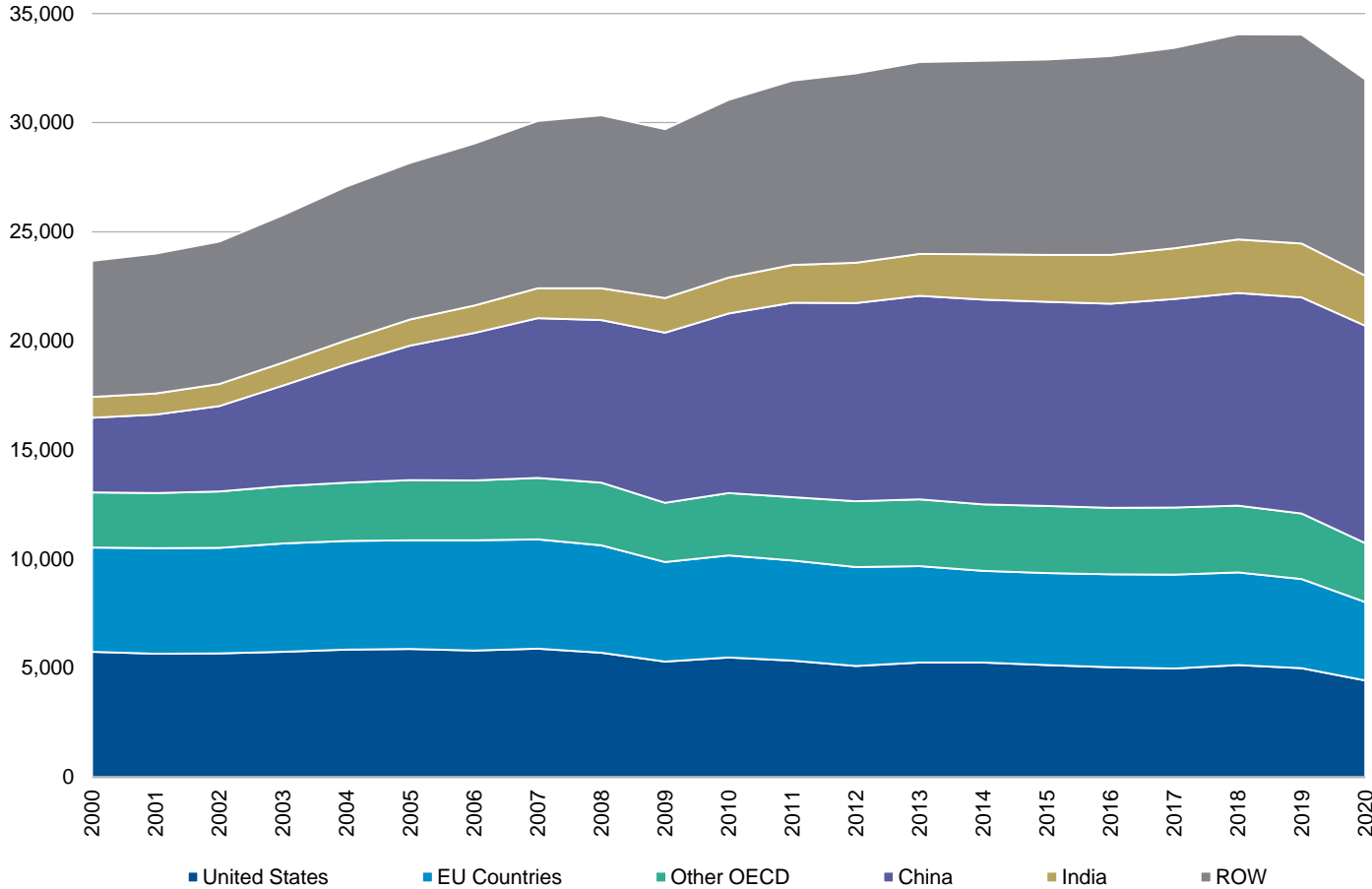
U.S. and European CO2 Emissions Have Been Declining While Global Emissions Have Been Rising

Percentage Change Since 2000

	Annual Change	Total Change
United States	-1.3%	- 22.8 %
EU Countries	-1.4%	- 25.0 %
Other OECD	0.4%	7.2%
China	5.5%	191.8 %
India	4.5%	139.4 %
ROW	1.8%	44.2 %
Total	1.5%	35.2 %

Global CO2 Emissions 2000-2020

MM Metric Tons

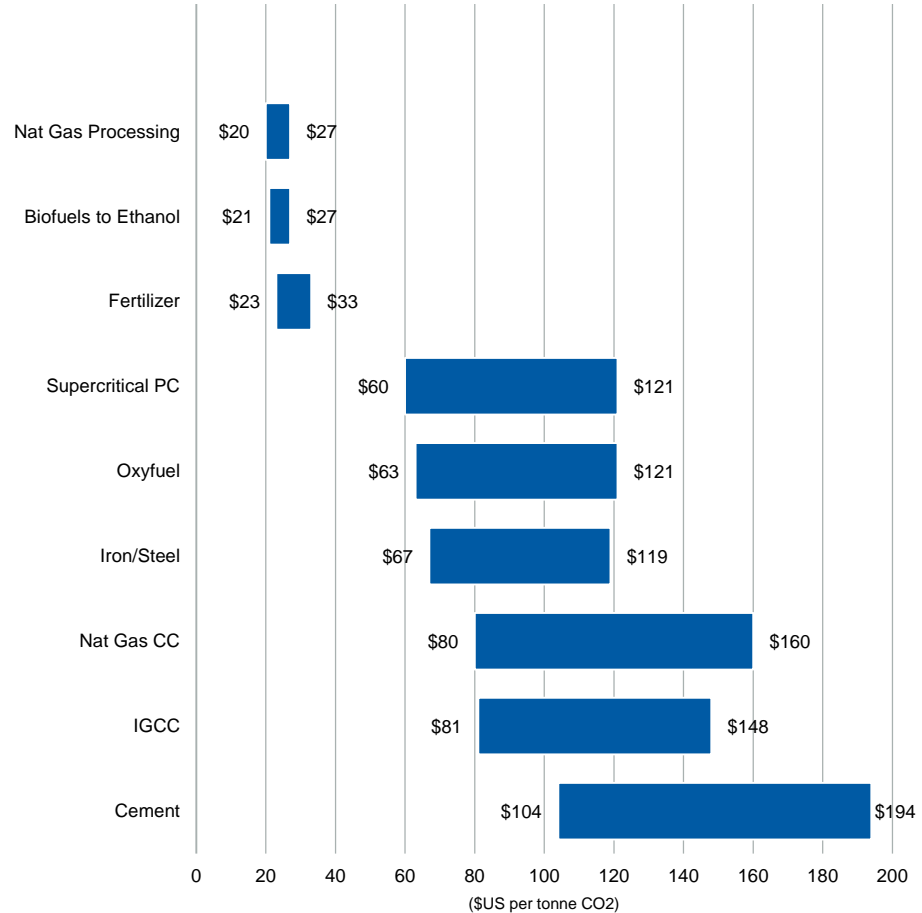


Source: BP Statistical Review of World Energy, June 2021.

Carbon Capture Costs and Incentives

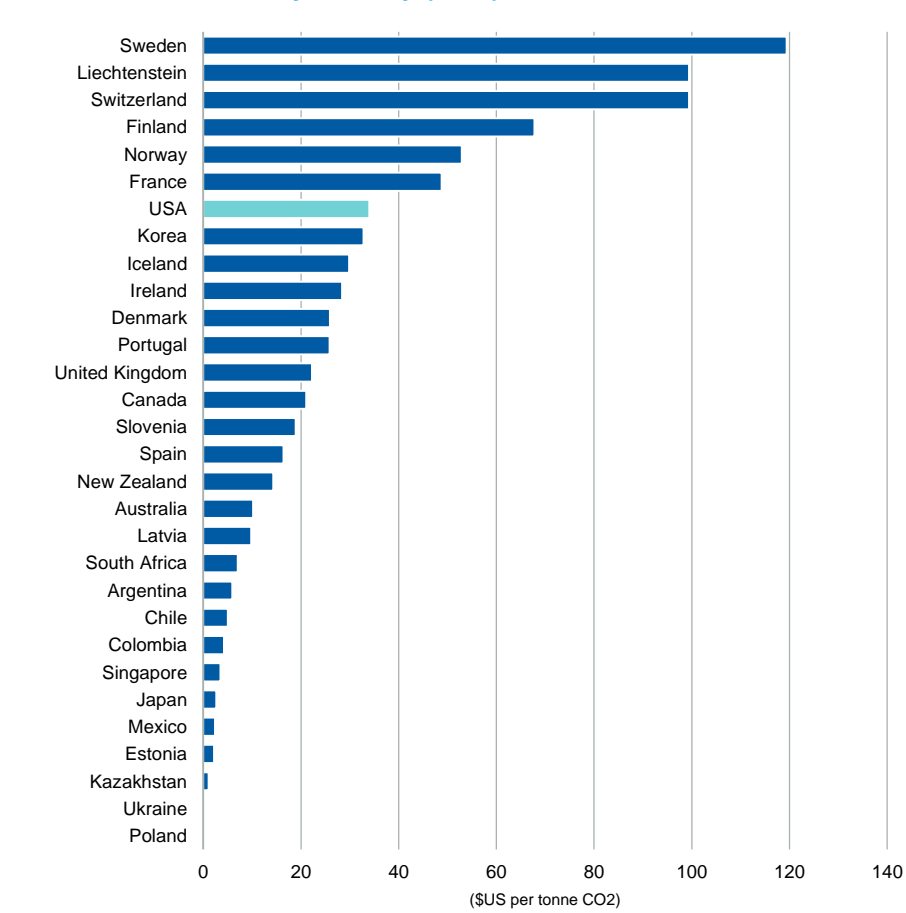
Global CCUS Incentives are Growing in Scope and Value

CCS Costs by Industry¹



Source: Global CCS Institute, The Global Status of CCS: 2017

Carbon Price/Credits by Country (2019)



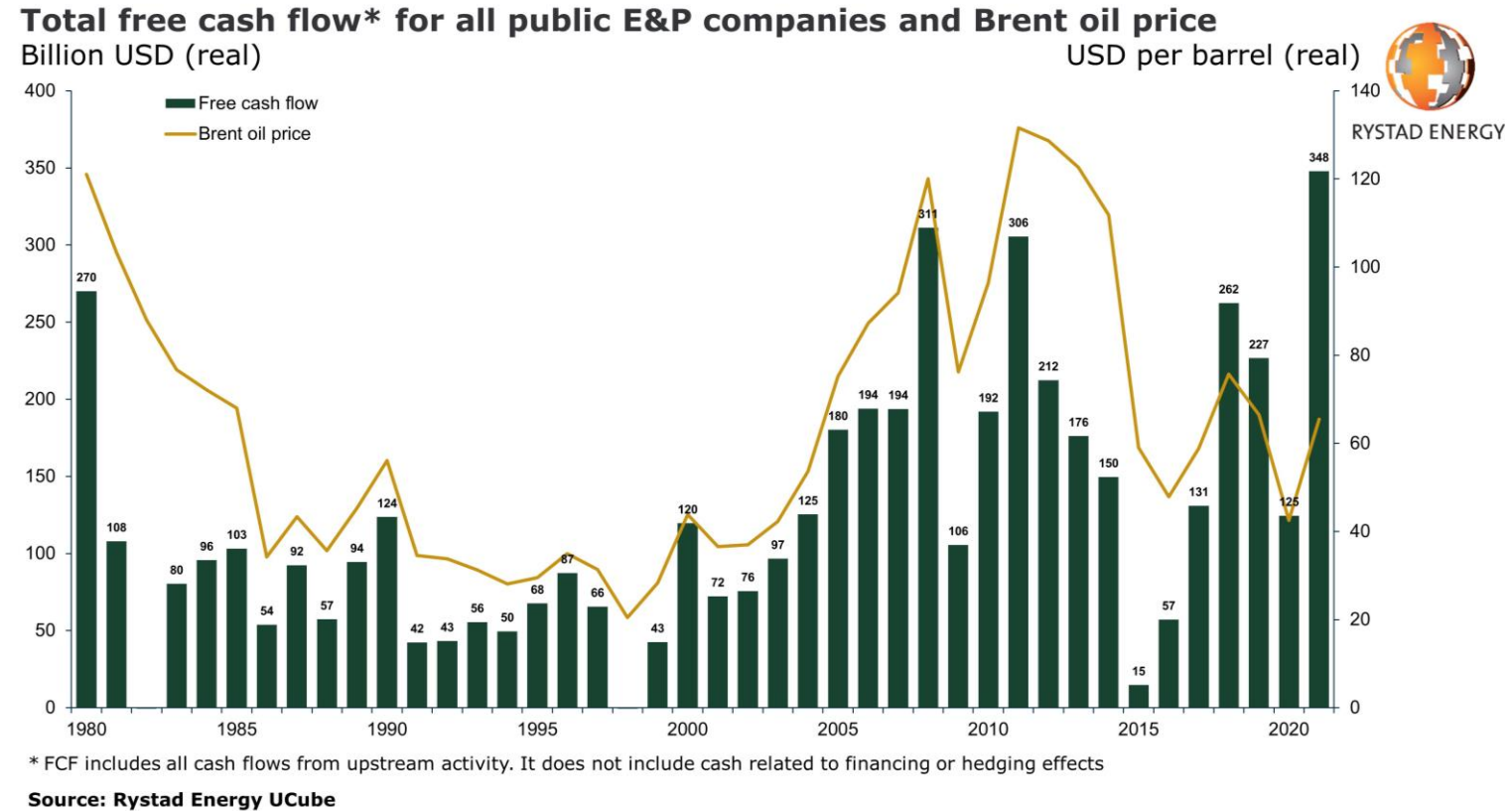
Source: The World Bank (Carbon Pricing Dashboard). Accessed 14 Jul 2020. Morgan Stanley research

Notes:
 1. For illustrative purposes only. Represents estimated "first of a kind" CCS costs in different industries. The costs of implementing CCS technologies can vary considerably across different plant types, technology mix, and geographies in the power and industrial sectors. These costs are for new-build systems and retrofits with current technology, and include capture, compression, transportation, and storage costs. They do not include revenues from EOR or utilization.
ALL FORECASTS ARE SUBJECT TO CHANGE AT ANY TIME AND MAY NOT COME TO PASS DUE TO CHANGES IN MARKET OR ECONOMIC CONDITIONS

Higher Focus on Capital Allocation and Cash Flow Generation

E&Ps will need a deep and granular understanding of portfolio economics to respond quickly to market changes

- Oil and gas companies need to ensure their portfolio decisions are based on market signals (i.e., demand and competitive economic positioning)
- This analytic view enabled companies to make better decisions about which projects to start, stop, maintain, or invest in
- 2021 should deliver record cash flow for the world's public E&Ps - now companies will need to prudently determine how to allocate that capital
- Shareholder activism will rise as desire for greater accountability of cash flows and GHG emissions grows



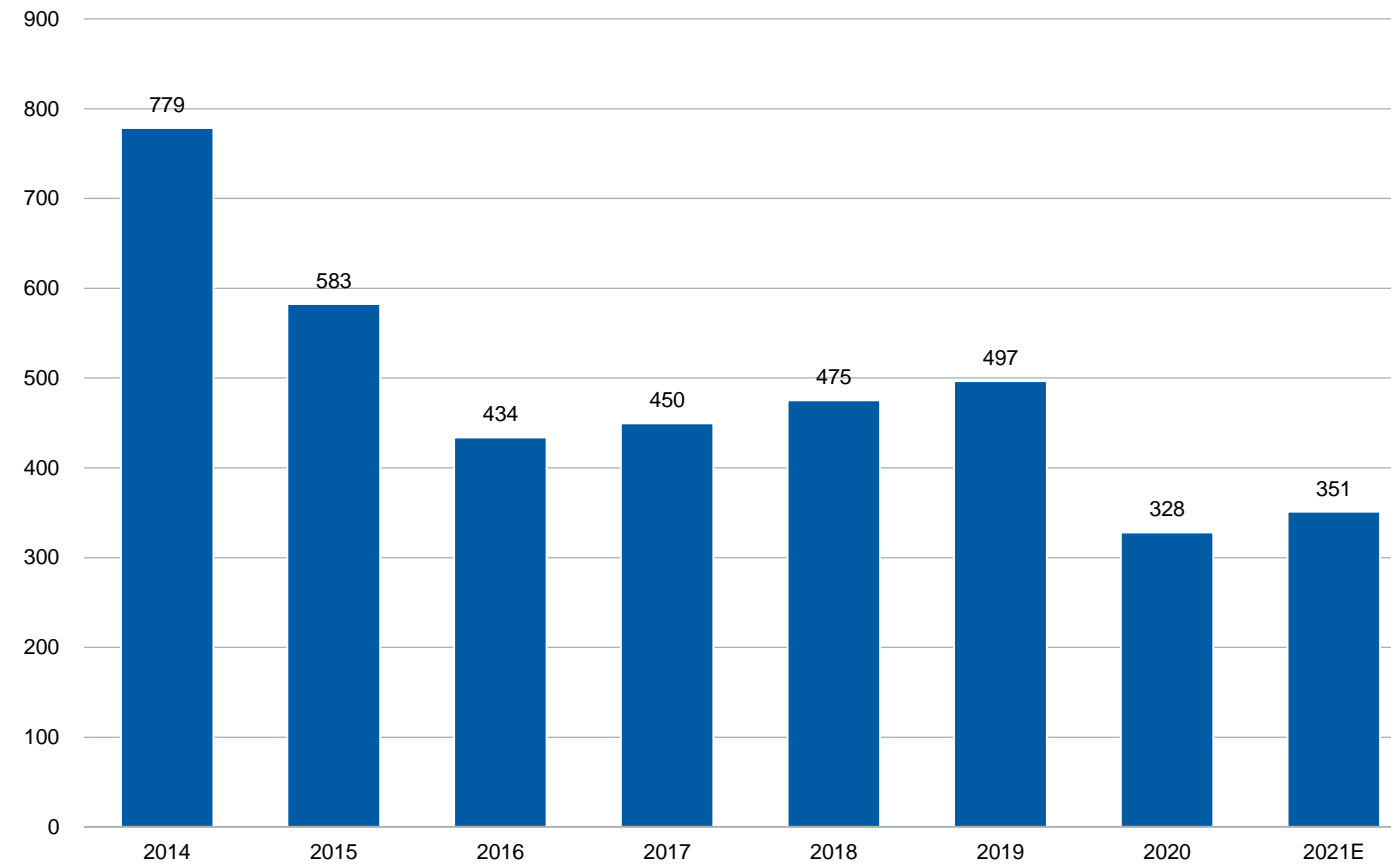
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Global Oil and Gas Upstream Capital Spending

- Capital expenditures have rebounded only slightly in 2021 after a 7 year low of \$328 billion in 2020
- In many analysts' view, the rebound is surprisingly small relative to the price rebound. It may portend greater capital discipline by energy companies both large and small

Global Oil and Gas Upstream Capital 2014-2021 Estimated

USD billion



Source: EIA.

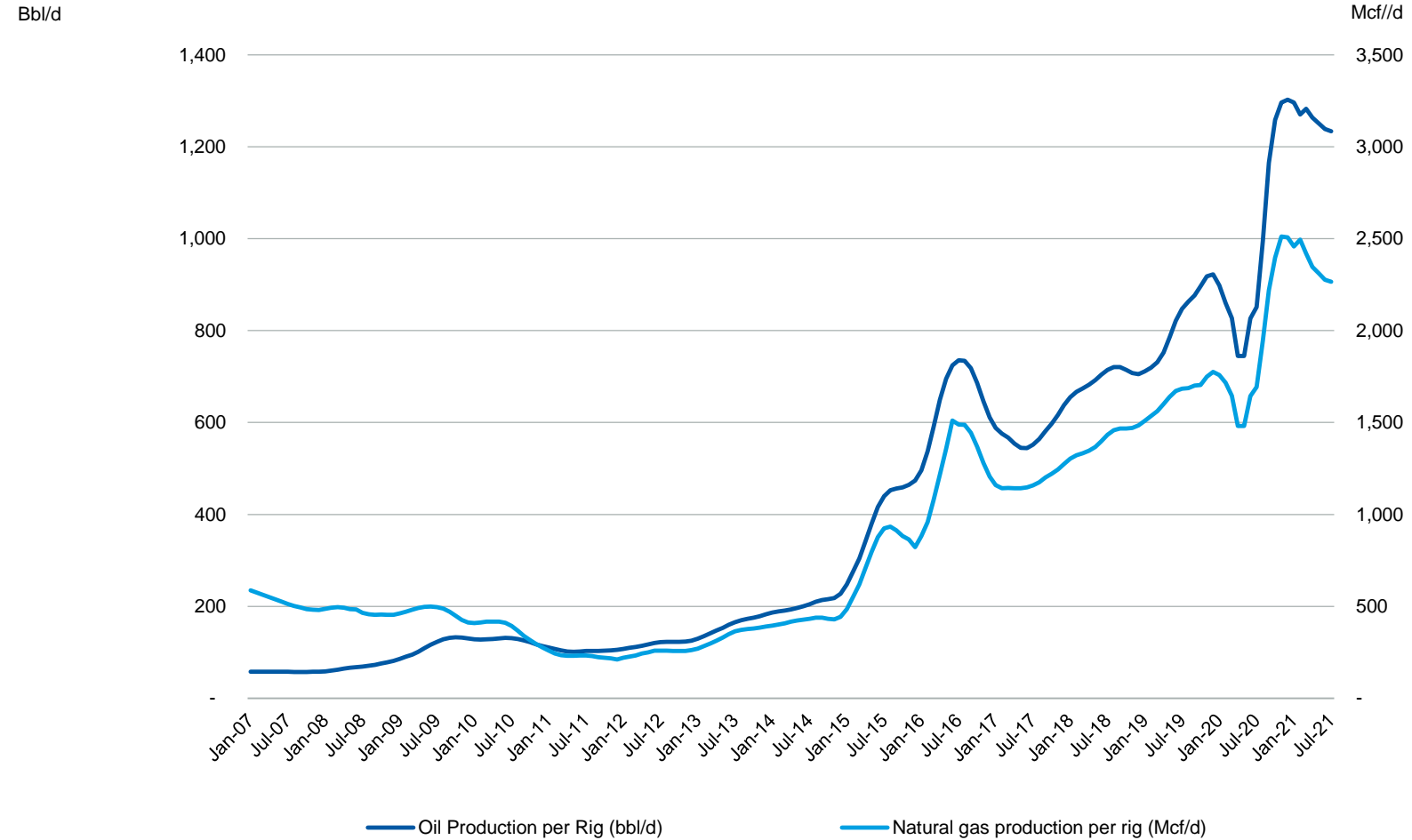
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Less Exploration and More Optimization

The U.S. oil & gas industry has been highly innovative... and tremendously productive

- Fewer large, long-dated capital projects may lead to significant market tightness. This in turn will lead to greater reliance on short-cycle supply like the shales
- Aggressive use of automation, technology and analytics should unlock new levels of efficiency and reduce carbon intensity
- An environmental overlay to all economic decisions will be more important than ever

U.S. Permian Region Production Per Rig



Source: EIA

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Innovative PDP Securitization Recapitalizes Presidio's Balance Sheet

August 4, 2021 – FOR IMMEDIATE RELEASE

Presidio Petroleum Closes Inaugural Issuance of Asset Backed Securities

Transaction follows the successful integration of three previously announced acquisitions in the U.S. Midcontinent region since the establishment of Presidio's partnership with Morgan Stanley Energy Partners.

FORT WORTH, TEXAS – Presidio Investment Holdings LLC ("Presidio Petroleum", "Presidio", or the "Company"), a portfolio company of Morgan Stanley Energy Partners, announced today that it has closed upon the issuance of term asset backed securities (the "Notes") in a private placement transaction with a syndicate of U.S.-based institutional investors. The Notes are the largest single issuance of asset backed securities by an energy producer, the first such issuance to a syndicate of Note purchasers, and include two investment grade rated tranches. The Company plans to use the net proceeds of the issuance to accelerate its acquisition-driven growth strategy in the Midcontinent region of the United States and recapitalize its balance sheet.

Presidio was established as a differentiated oil and gas operator focused on the optimization of mature, producing oil and natural gas assets in the United States. Without drilling new wells, Presidio has achieved significant scale, growing to 38,000 boe/d of net production under management since the start of its partnership with Morgan Stanley Energy Partners. Presidio has consistently and successfully executed on its strategy to enhance the operational, financial, and sustainability performance of legacy oil and natural gas assets in pursuit of industry-leading returns.

Chris Hammack, Co-Founder and Co-Chief Executive Officer of Presidio, said, "Presidio's disciplined operating model and culture of continuous innovation has enabled us to generate exceptional returns on capital from under-managed legacy oil and gas assets. We look forward to continuing the efficient and responsible management of our assets under this new structure."

Will Ulrich, Co-Founder and Co-Chief Executive Officer of Presidio, added, "Presidio is the last and best steward of oil and gas assets which are essential to supporting the global economy as it continues to decarbonize. We plan to be fully compatible with the International Energy Agency's recent Net Zero by 2050 roadmap for the global energy sector, and, as part of this Note issuance, have developed Sustainability Performance Targets with Moody's affiliate Vigeo Eiris to formalize the reduction of Scope 1 and Scope 2 greenhouse gas emissions from our assets."

Robert Lee, Managing Director of Morgan Stanley Energy Partners, said, "This innovative securitization of Presidio's existing asset base will enable the Company to pursue additional, capital-efficient acquisitions in the U.S. Midcontinent. The Presidio management team has established a strong track record of strategic consolidation of legacy assets in the Anadarko Basin. We continue to see opportunity to grow the Presidio platform through consolidation and improved management of producing assets."

John Moon, Managing Director and Head of Morgan Stanley Energy Partners, added, "We are pleased to partner with Presidio in pioneering the use of securitization as a financing strategy within the energy industry. Presidio's diversified asset base and free cash flow profile are a strong match for long-term, investment grade debt securities, and this inaugural issuance to a broad base of U.S. institutional investors validates Presidio's strong track record and differentiated strategy."

Terms of the transaction were not disclosed. Sidley Austin LLP served as legal counsel to Presidio and MSEP and Guggenheim Securities LLC served as sole structuring advisor and placement agent to Presidio and MSEP in connection with the transaction.

About Presidio Petroleum

Headquartered in Fort Worth, Texas, Presidio Petroleum is a leading oil and natural gas efficiency company with assets located in the Anadarko Basin of Texas, Oklahoma, and Kansas. For further information about Presidio Petroleum, please visit www.presidiopetroleum.com.

About Morgan Stanley Energy Partners

Morgan Stanley Energy Partners is the energy-focused private equity business of Morgan Stanley Investment Management that makes privately negotiated equity and equity-related investments in energy companies located primarily in North America. Morgan Stanley Energy Partners pursues a differentiated investment strategy, focused on the buyout and build-up of strategically attractive, established energy businesses across the energy value chain in partnership with world-class management teams. For further information about Morgan Stanley Energy Partners, please visit www.morganstanley.com/im/energypartners.

For illustrative purposes only.

Energy Asset-Backed Securitization (“ABS”) Overview

Illustrative Structure

Collateral

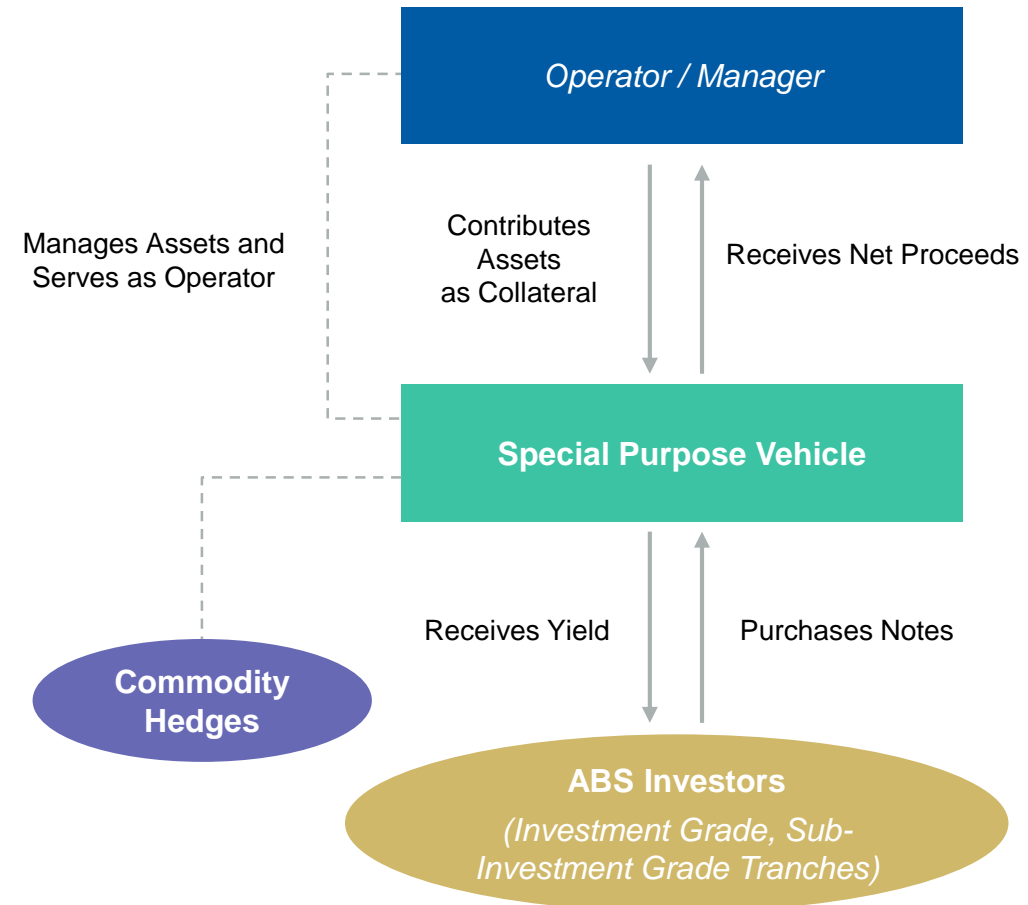
- Contribution of wellbores (excluding undeveloped leasehold) to a bankruptcy-remote, special purpose vehicle

Typical Structure

- Senior Tranche
 - Investment grade credit rating
 - Advance of 75% - 85% of total issuance size
- Subordinated Tranche
 - Advance of 15% - 25% of total issuance size
- Amortizing structure with term hedge coverage; legal final maturity of 15 years

Targeted Investor Base

- Insurance companies, endowments, and pension funds



For illustrative purposes only.

The Future of the Upstream Energy Sector

Significant value remains to be unlocked by a U.S. oil & gas industry focused on the right metrics

Decarbonization

Less Exploration and More Optimization

Higher Focus on Capital Allocation and Cash Flow Generation

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