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The Strategic Asset Report

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Fair Value: $50
Recommendation: LONG

Occidental Petroleum (OXY: NYSE)		
(in millions except stock price and ratios)		
Stock Price	$	28.74
Shares Outstanding		954
Market Capitalization	**$**	**27,424**
Cash	$	2,059
Current Debt		780
Pension Liability		1,595
Preferred Stock		9,762
Long-Term Debt		30,915
Net Debt	**$**	**40,993**
Enterprise Value (EV)		**68,417**
2021 Estimates		
GAAP EPS	$	1.24
Revenue		25,490
EBITDA		13,480
P/E		23.1
EV/Revenue		2.7
EV/EBITDA		5.1
2022 Estimates		
GAAP EPS	$	2.50
Revenue		26,690
EBITDA		14,170
P/E		11.5
EV/Revenue		2.6
EV/EBITDA		4.8
2023 Estimates		
GAAP EPS	$	1.53
Revenue		24,030
EBITDA		12,710
P/E		18.8
EV/Revenue		2.8
EV/EBITDA		5.4

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This is the second of our research pieces analyzing "strategic assets", or common equity claims on difficult to replicate, unique, competitively advantaged asset bases. One of the great strategic assets of our time, both geopolitically and economically, is ***global oil production and reserves***. Global oil production and reserves by country are presented below: [1]

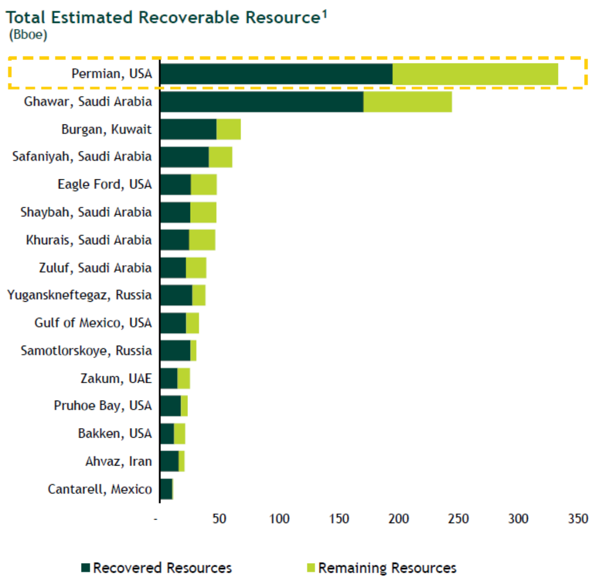
2020 Global Oil Production (millions of barrels per day)		
Country	**Production**	**%**
United States	***18.6***	***19.8%***
Saudi Arabia	10.8	11.5%
Russia	10.5	11.2%
Canada	5.2	5.6%
China	4.9	5.2%
Iraq	4.2	4.4%
UAE	3.8	4.0%
Brazil	3.8	4.0%
Iran	3.0	3.2%
Kuwait	2.8	2.9%
Top 10	**67.5**	**71.9%**
World Total	**93.9**	**100.0%**

2020 Global Oil Reserves (billions of barrels)		
Country	**Reserves**	**%**
Venezuela	302.8	18.2%
Saudi Arabia	267.0	16.1%
Canada	169.9	10.2%
Iran	155.6	9.4%
Iraq	145.0	8.7%
Kuwait	101.5	6.1%
UAE	97.8	5.9%
Russia	80.0	4.8%
Libya	48.4	2.9%
United States	***47.1***	***2.8%***
Top 10	**1,415.1**	**85.1%**
World Total	**1,661.9**	**100.0%**

The United States ranks first in production and tenth in reserves. ***Adjusted for political risk, the United States would likely rank second in oil reserves behind Canada.***

[1] Source: U.S. Energy Information Administration.

Permian Basin
The United States is also home to the Permian Basin (located in Western Texas and Southeastern New Mexico), ***the largest oil deposit in the world (see chart below).***



Source: Wood Mackenzie and Ecopetrol.

The Permian Basin produced 4.9 million barrels of oil per day (BPD) in November 2021, more than the largest producing oil field historically, Saudi Aramco's Ghawar which produced 3.8 million BPD in 2018. ***The Permian now accounts for approximately 59% of U.S. oil production and 22% of U.S. natural gas production.***[2]

Delaware Basin
On November 28, 2018, the U.S. Department of the Interior announced the Wolfcamp Shale and overlying Bone Spring Formation in ***the Delaware Basin*** portion of Texas and New Mexico's Permian Basin contain an estimated mean of ***46.3 billion barrels of oil***, 281 trillion cubic feet of natural gas, and 20 billion barrels of natural gas liquids, according to an assessment by the U.S. Geological Survey (USGS). This estimate is for continuous (unconventional) oil, and consists of undiscovered, technically recoverable resources. ***America's oil and gas reserves effectively doubled on this announcement, yet press coverage was limited.***[3]

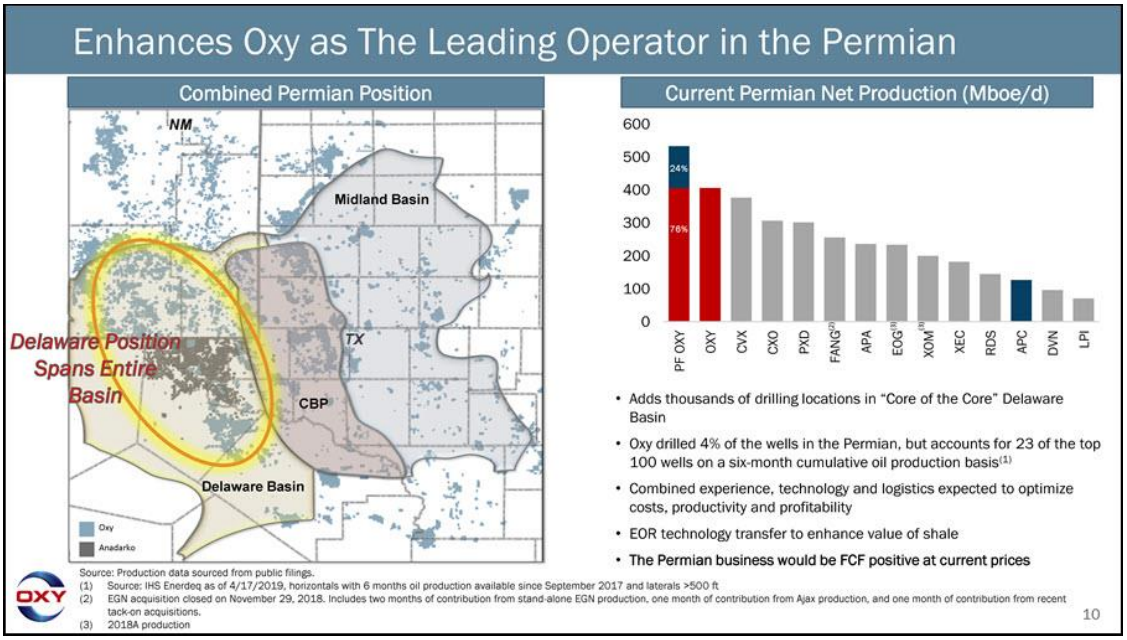
The quality of the Delaware Basin in terms of cubic dimension is dramatically higher than other U.S. basins.

[2] EIA November 2021 Drilling Productivity Report
[3] Cohen, Ariel. "America's Oil & Gas Reserves Double With Massive New Permian Discovery." *Forbes*, 21 December 2018.

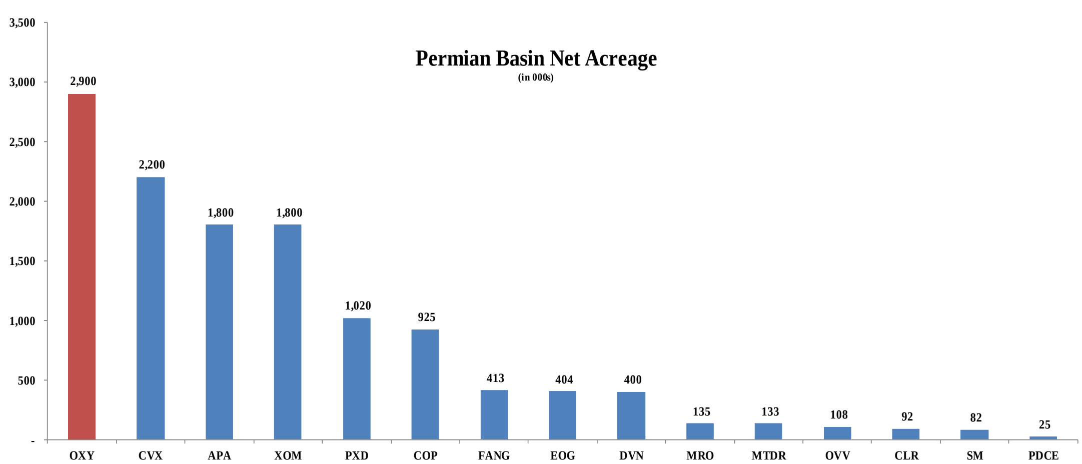
"In the two other major shale-drilling areas of the U.S., the Bakken and Eagle Ford deposits, the depth of shale is roughly 400 feet, and the thickness of the productive layers within which the drilling is focused is roughly 200 feet. ***In the western portion of the Permian Basin…the Delaware Trend, the depth of the shale is as great as 25,000 feet, and the interval thickness where drilling is focused can be over 4,000 feet.*** " [4]

Occidental Petroleum – Top Permian Land Holder

Occidental Petroleum's (OXY) 2019 acquisition of Anadarko Petroleum was primarily focused on its ***Delaware Basin*** land position (see slide below).



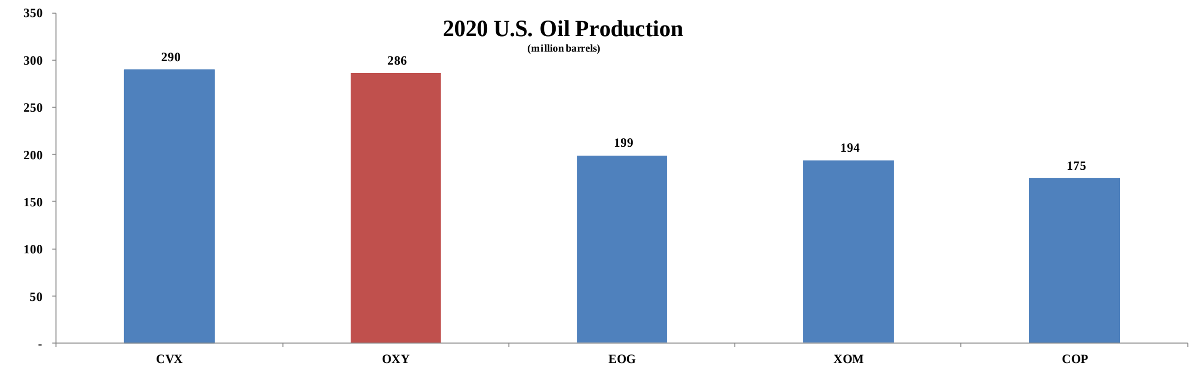
Consequently, OXY further cemented its position as the largest land holder in the Permian with 2.9 million net acres (see chart below).



Source: Company filings and presentations.

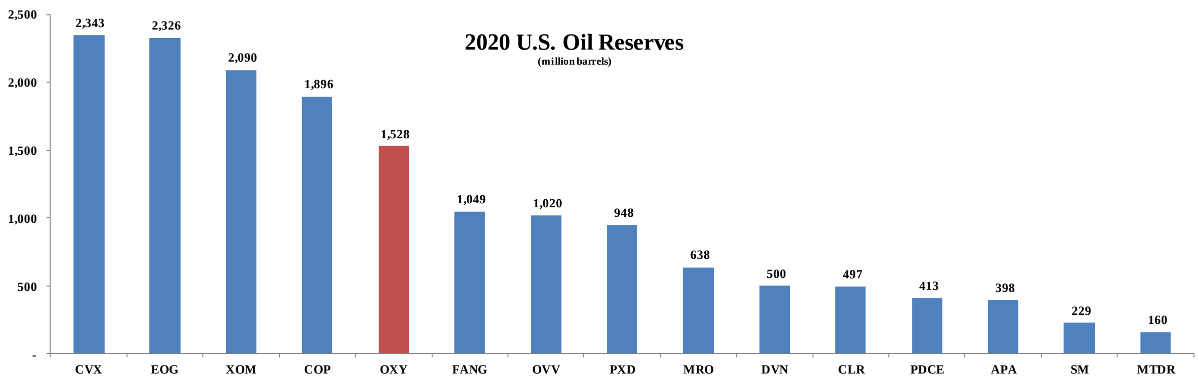
[4] Source: Horizon Kinetics.

Primarily due to its Permian oil production (499K BPD in Q3 2021 or 10% of total Permian output), ***OXY is the second largest oil producer in the United States*** (highlighted in red below):



Source: Ernst & Young 2021 U.S. oil and gas reserves, production, and ESG benchmarking study.

OXY maintains a large oil reserve base as well, ranking fifth among publicly traded producers (highlighted in red below):



Source: Ernst & Young 2021 U.S. oil and gas reserves, production, and ESG benchmarking study.

Valuation

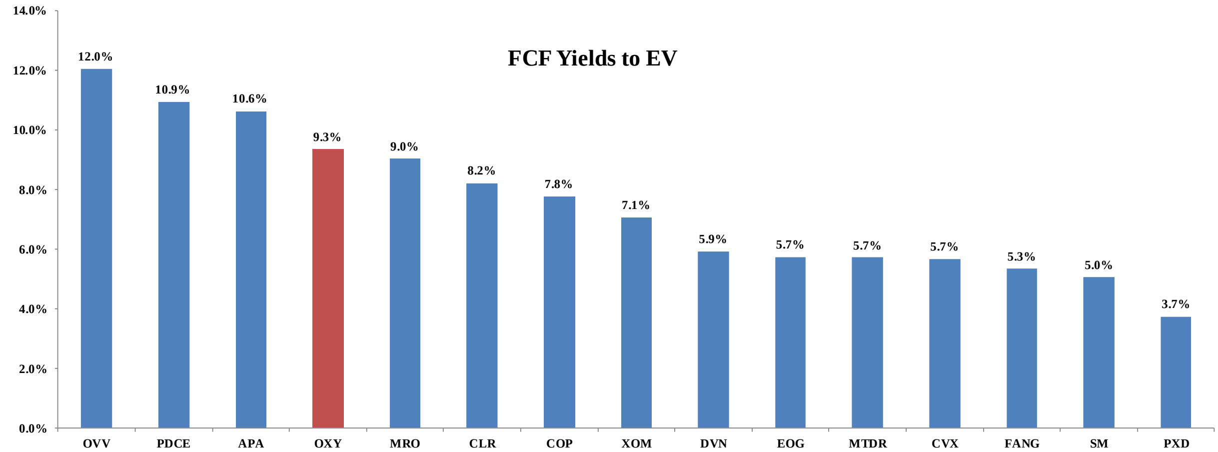
Despite these world class assets, OXY's shares are languishing due to concerns over the price paid for Anadarko and the debt load required to finance the transaction. These concerns pushed the stock to ten-year lows in late 2020.

We have presented free cash flow and sum of the parts based valuation estimates for the company below:

Valuation Summary		
Method	**Assumptions**	**Value**
Free Cash Flow Yield to Market Capitalization	400 bps Yield Premium Over Preferred	$55.21
Free Cash Flow Yield to Enterprise Value	Peer Group Median of 7.1%	50.36
Sum of the Parts	Flowing Production Multiples	44.70
Average		**$50.09**

Free Cash Flow (FCF) to Enterprise Value (EV)

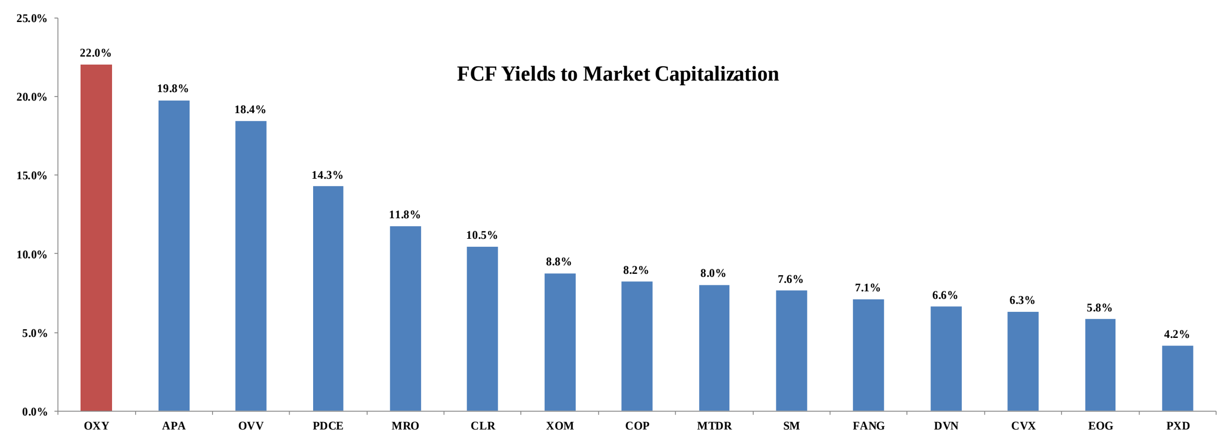
Relative to other oil and gas producers with Permian Basin exposure, OXY appears undervalued on a FCF basis. OXY offers a 9.3% FCF yield to EV compared to a 7.1% median yield for its peer group (see below):



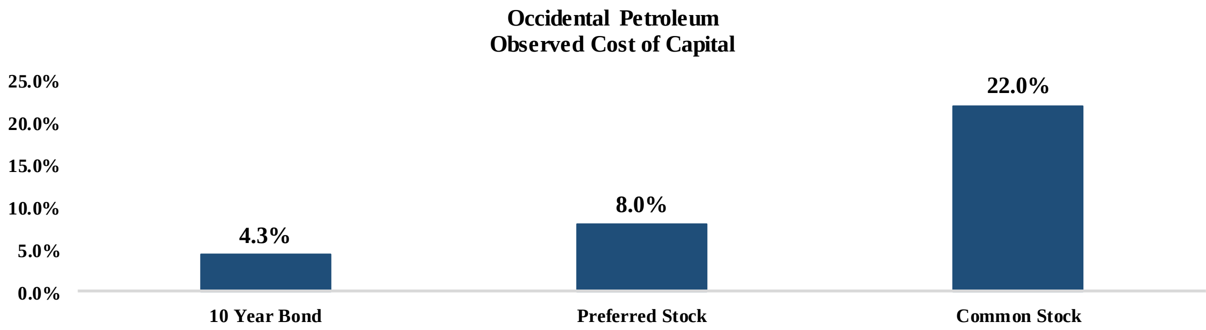
Applying a 7.1% required enterprise value yield to OXY's $6.3 billion in free cash flow results in a fair value of $50.36 per share.

Free Cash Flow (FCF) to Market Capitalization

Due to its leveraged capital structure, OXY offers a ***22.0% FCF yield*** to market capitalization compared to an 8.2% median yield for its peer group (see below):



More pointedly, OXY offers stock investors the opportunity to participate in a publicly traded leveraged buyout (LBO). The common stock trades at a ***significant yield premium*** relative to the company's senior debt and preferred stock (see chart below).



A more reasonable yield of 12.0% ***(+400 basis points over the preferred stock coupon)*** on the common stock results in a stock price of $55.21

Sum of the Parts

In addition to its Permian Basin assets that we value at $38 billion, OXY has a variety of other valuable operations listed below:

Asset	Net Acres	Q321 Net Production (Mboed)	Value Per Acre	Value Per boed	Valuation	Support
Permian EOR	1,500,000				-	
Permian Resources	1,400,000				-	
Permian Subtotals	**2,900,000**	**499**	**$ 13,058**	**$ 75,888**	**$ 37,867,899,408**	Pioneer Natural Reources comparable
DJ Basin	800,000				-	
Powder River	400,000				-	
Rockies Subtotals	**1,200,000**	**292**	**$ 12,167**	**$ 50,000**	**$ 14,600,000,000**	U.S. E&P comparables price per flowing barrel
Gulf of Mexico	700,000	127	$ 6,350	$ 35,000	$ 4,445,000,000	Historical transactions price per flowing barrel
Other Onshore	4,600,000	-	250	-	1,150,000,000	Orion land grant sale price per acre
U.S. Subtotals	**9,400,000**	**918**	**$ 6,177**	**$ 63,249**	**$ 58,062,899,408**	
Al Hosn		83				
Dolphin		40				
Oman	6,000,000	73				
Algeria	500,000	46				
International Subtotals	**$ 6,500,000**	**242**	**$ 1,072**	**$ 28,802**	**$ 6,970,000,000**	697 Mmboe of proved developed reserves
Oil & Gas Subtotals	**15,900,000**	**1,160**	**$ 4,090**	**$ 56,063**	**$ 65,032,899,408**	
Chemicals					**10,844,000,000**	12x average operating earnings (2019-2021)
WES					**4,144,789,000**	51.7% economic interest at fair market value
Midstream					**3,626,666,667**	10x 2021 operaating earnings
Cash					2,059,000,000	
Current Debt					(780,000,000)	
Pension Liability					(1,595,000,000)	
Preferred Stock					(9,762,000,000)	
Long-Term Debt					(30,915,000,000)	
Sum of the Parts					**$ 42,655,355,075**	
Diluted Shares Outstanding					954,200,000	
SOP Value					**$ 44.70**	

Our sum of the parts value of approximately $45 is in-line with consensus sell-side analyst price target of $40 per share (ranging from a low of $24 to a high of $55).

Future Growth & Catalysts

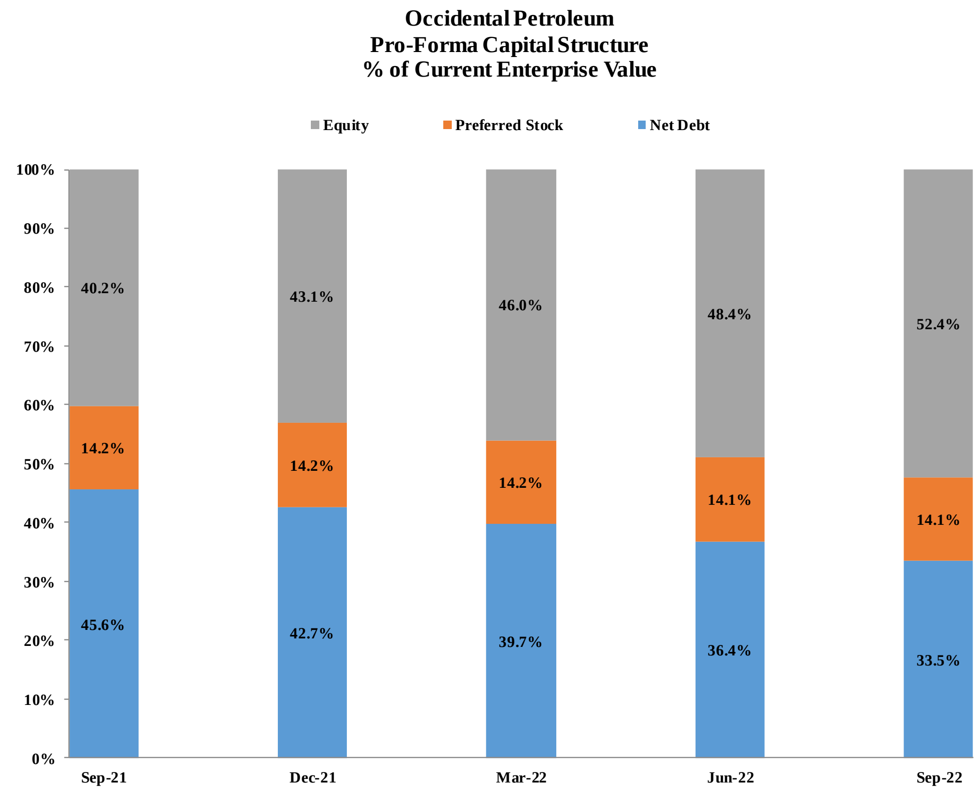
Opportunities for OXY's share price to advance over the next few years includes, but are not limited to the following catalysts:

<u>Dividend Payments</u>

Management has indicated that a competitive dividend will be established once gross debt is in the mid $20 billion range compared to $32.5 billion currently. ***This implies a dividend start date in late 2022 based on current free cash flow generation.*** Upon OXY's first dividend raise, we expect the stock to re-rate in valuation closer to Permian peers like EOG Resources (EOG), Devon Energy (DVN) and Pioneer Natural Resources (PXD) that pay substantial dividends.

<u>Debt Reduction = Equity Accretion</u>

If oil stays at a current price of $73 per barrel, we expect OXY to generate $2 billion in free cash flow per quarter. This cash generation will be applied to debt reduction, leading to a less levered capital structure, equity accretion and likely a lower cost of capital or equity beta for OXY's shares. Continued debt pay down also lowers interest expense and the oil price needed for cash flow breakeven. ***OXY's forecasted equity as a percentage of current enterprise value advances from 40% currently to over 52% by the end of Q3 2022 (see below).***



Note: Assumes $2 billion in quarterly free cash flow applied to debt reduction.

<u>Carbon Capture Business</u>

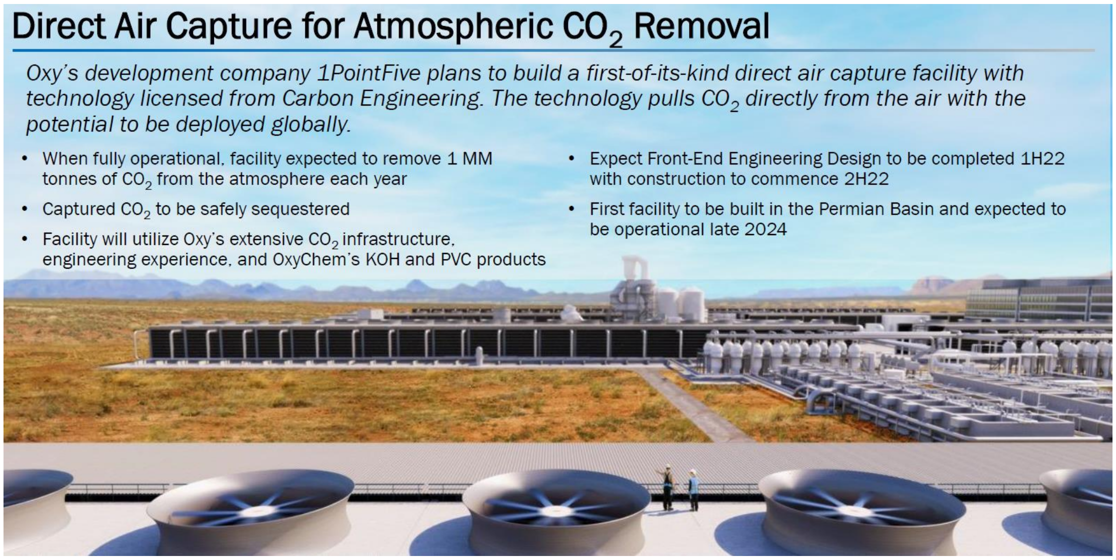
Currently, we are assigning no value to OXY's Low Carbon Ventures (OLCV), but it provides ***a potential source of upside optionality***. OXY describes the business below from its 2020 10-K:

> "Oxy Low Carbon Ventures (OLCV) seeks to leverage Occidental's carbon management expertise that is derived from its enhanced oil recovery (EOR) operations to develop carbon capture, utilization and storage facilities that are expected to source anthropogenic CO_2 and promote innovative technologies that drive cost efficiencies and economically grow Occidental's business while reducing emissions.
>
> OLCV was formed to execute on Occidental's vision to reduce global emissions and provide a more sustainable future through low carbon energy and products. OLCV capitalizes on Occidental's extensive experience in utilizing CO_2 for EOR by investing in technologies, developing projects and providing services to facilitate and accelerate the implementation of carbon capture, utilization and storage projects and opportunities for zero-carbon power. Moreover, OLCV is fostering new technologies and business models with the potential to position Occidental as a leader in the production of low-carbon oil and products. Occidental has developed standards and protocols recognized by the EPA for monitoring, reporting and verifying the amount, safety and permanence of CO2 stored through secure geologic sequestration. ***The company holds the nation's first two EPA-approved monitoring, reporting and verification plans for geologic sequestration through EOR production***."

According to Morningstar,

> "Occidental's emissions intensity in the Permian, its main focus area, is already lower than most peers. And the firm does have another edge over peers, ***as it is uniquely positioned to divert CO_2 bound for the atmosphere and store it underground instead.*** This advantage stems from its extensive enhanced oil recovery operations (a technology that boosts productivity in mature oil fields by injecting CO2 into the reservoir, creating a sink for CO_2). ***Through its Low Carbon Ventures business unit, OXY aims to construct a Direct Air Capture plant in the Permian area, which will reduce atmospheric CO2 by 1 million metric tons annually (which would offset about half of OXY's current emissions).***"

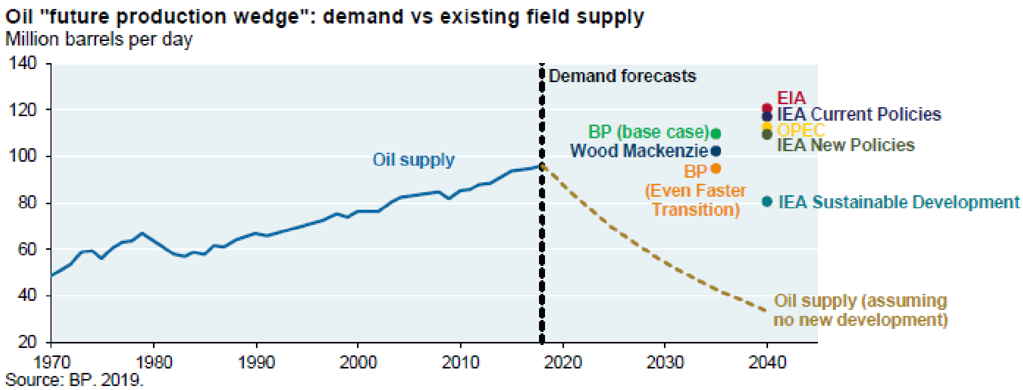
A rendition of its direct air capture facility project is shown below:



<u>International Asset Sales</u>
The likely continued divestment of OXY's international assets will lead to a geopolitical premium placed on its U.S. assets. This is a longer-term catalyst, but we believe OXY trades at a conglomerate discount due to its hodge-podge collection of assets. In addition, activist OXY shareholder Carl Icahn (7.9% stake) has been historically interested in taking cash out of an enterprise, not reinvesting it. Icahn's capital allocation philosophy bodes well for future divestments of overseas investments.

Risks
There are a variety of risks to consider regarding an investment in OXY, including, but not limited to:

<u>Commodity Business</u>
Oil and gas is a commodity industry, although OPEC offers some supply discipline. However, declining oil and natural gas prices would pressure this firm's profitability, reduce cash flows, and amplify financial leverage. Annual oil demand and supply are about 100 million barrels per day. Climate-conscious consumers are likely to shift from fossil fuels in greater numbers, resulting in long-term demand erosion. However, even in the IEA's sustainable development scenario, oil demand will still be ***80 million barrels per day in 2040***. ***Due to the depleting nature of oil reserves, existing production will decline to under 40 million barrels per day by 2040 (see chart below).***



In this low demand growth environment, the development of supply should be the primary driver of oil prices. ***Consequently, industry capital expenditures and investment need to be monitored closely to avoid surplus production.***

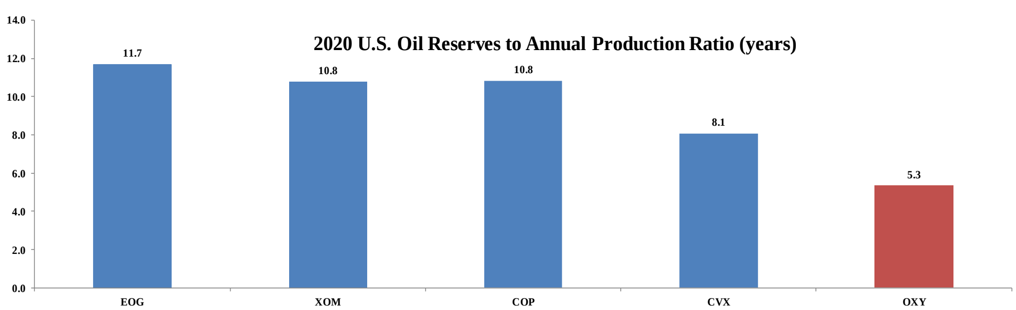
Environmental, Social & Corporate Governance (ESG) Exposures

OXY's most significant exposures are greenhouse gas emissions from extraction operations and oil spills. Climate concerns could also trigger regulatory interventions, such as fracking bans, drilling permit suspensions, and ***even direct taxes on carbon emissions***.

Also, as an offshore producer in the U.S., OXY has additional regulatory exposure. The company's ***Gulf of Mexico operations require ongoing approvals from the Department of the Interior.*** As this entity is controlled by the executive branch of the U.S. government, it can suspend permitting activity without congressional approval.

Reserve Replacement, Decline Rates & Depletion

Oil and gas reserves are nonrenewable sources of energy that deplete with production. Shale oil and gas, in particular, has a very high production decline rate. Based on 2020 proved reserve data, OXY only has 5.3 years of oil reserves based on Q3 2021 production volumes (see chart below).



However, OXY's substantial land inventory for future drilling, mitigates this risk somewhat. In addition, drilling joint ventures (JVs), like its JV deal with Ecopetrol can accelerate the time to production through external financing.