

The Henry Fund

Henry B. Tippie College of Business

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Marathon Petroleum Corporation (MPC)

Energy – Refining & Marketing and Midstream

October 12, 2023

Stock Rating

HOLD

Investment Thesis

The Henry Fund recommends a hold rating for Marathon Petroleum Company with a target share price of \$103 - \$156. This represents an upside of 8% or a downside of 27%. While refinery margins overall are falling, we believe MPC is well positioned to remain a market leader and remain profitable because of its refining flexibility.

Drivers of Thesis

- As global tensions remain high, other countries will rely on the United States for their refined petroleum needs, providing an opportunity for U.S.-based refiners.
- As the US dollar becomes weaker, US exports will become more affordable for foreign countries making US petroleum products a more economically viable option.
- MPC has the largest market share out of all the refining companies in the United States. Last year the company had a higher margin (28%) than many of their peers.

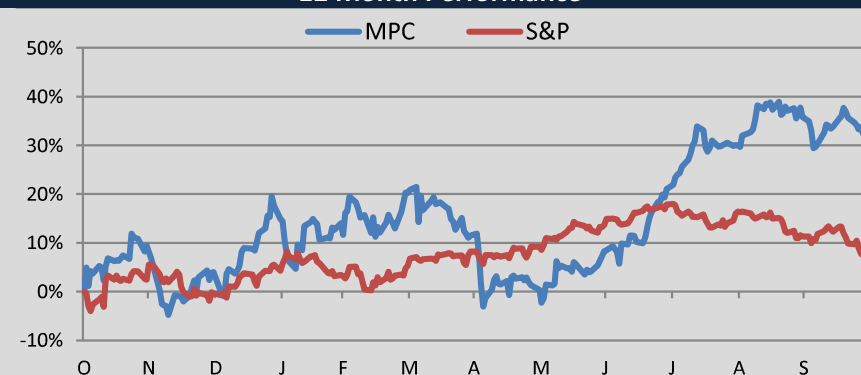
Risks to Thesis

- Increasing WTI crude prices will eliminate the price differential between WTI and Brent crude oil, hurting refiner margins.
- New regulations on emissions will increase the cost of capital for refiners. Additionally, the government is simultaneously pushing for more renewable energy sources that may shrink demand for refined products.
- Continued production cuts from OPEC+ could continue to elevate the cost of crude inputs as supplies are tightened. This would hurt refiner margins and continue to put pressure on already historically high oil prices.

Earnings Estimates

Year	2019	2020	2021	2022	2023E	2024E
EPS	\$4.00	-\$15.13	\$15.34	\$28.31	\$22.54	\$16.11
HF est.					\$10.62	\$10.57
Growth	-201.39%	84.55%	-83.93%	184.55%	-18.33%	30.58%

12 Month Performance



Target Price

\$103-156

Henry Fund DCF	\$156
Henry Fund DDM	\$97
Relative Multiple	\$177

Price Data

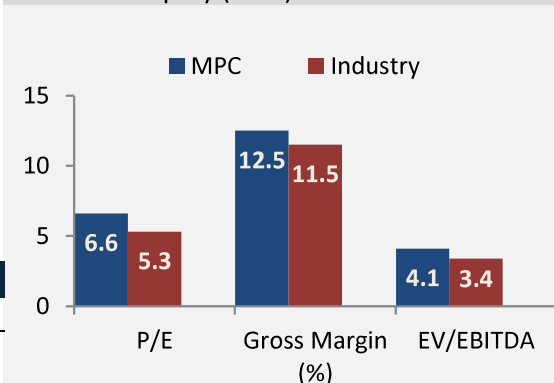
Current Price	\$143.18
52wk Range	\$104.32 - 159.50
Consensus 1yr Target	\$159.00

Key Statistics

Market Cap (B)	\$60.09
Shares Outstanding (M)	399.84
Institutional Ownership	78.49%
Beta	1.56
Dividend Yield	2.02%
Est. 5yr Growth	33.2%
Price/Earnings (TTM)	5.51
Price/Earnings (FY1)	8.77
Price/Sales (TTM)	0.43
Price/Book (mrq)	2.30

Profitability

Operating Margin	9.04%
Profit Margin	8.09%
Return on Assets (TTM)	11.69%
Return on Equity (TTM)	43.04%



Company Description

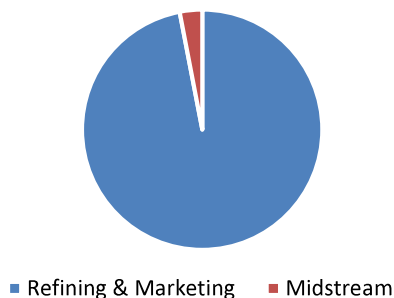
Marathon Petroleum Corporation is a leading integrated downstream energy company operating the nation's largest refining systems with 2.9 million barrels per day refining capacity. The company also operated as one of the largest wholesale suppliers of gasoline and distillates to the resellers in the United States. The company operates under two reportable segments: Refining & Marketing and Midstream. MPC was created by spinning of these two segments from Marathon Oil company in 2011.

Important disclosures appear on the last page of this report.

COMPANY DESCRIPTION

Marathon Petroleum Corporation is a leading integrated downstream energy company operating the nation's largest refining systems with 2.9 million barrels per day refining capacity. The company also operated as one of the largest wholesale suppliers of gasoline and distillates to the resellers in the United States. The company operates under two reportable segments: Refining & Marketing and Midstream. MPC was created by spinning of these two segments from Marathon Oil company in 2011. Additionally, in May 2021 the company completed the sale of Speedway, which was the company owned and operated gas station and convenience store business to 7-Eleven.¹

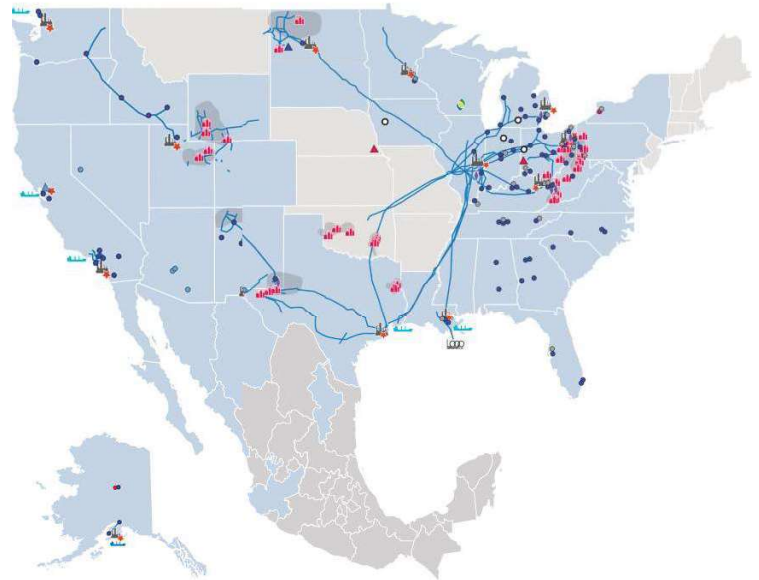
Revenue by Segment 2022



Source: MPC 10-K

Refining & Marketing

MPC's first reportable segment is the refining and marketing business. Currently, the company owns and operates refineries in the Gulf Coast, Mid-Continent, West Coast regions of the United States. The aggregate crude refining capacity of 2,898 mbpcd. During 2022, the company processed 2,621 mbpd of crude oil and 178 mbpd of other charge and blendstocks. The refining capabilities include crude oil atmospheric and vacuum distillation, fluid catalytic cracking, hydrocracking, catalytic reforming, coking, desulfurization, and sulfur recovery units, giving the company the ability to process various qualities of crudes from domestic and foreign suppliers. The company currently owns and operates 13 different refineries broken up by 3 geographic regions.¹ The following map shows the location of MPC refineries in grey, natural gas processing complexes are in red and MPC/MPLX pipelines are shown in blue.



Source: MPC 10-K

Gulf Coast Region

The first and largest capacity region is the Gulf Coast Region which accounts for over 41% of the company's total capacity. The Gulf Coast region is comprised of 2 plants: the Garyville, Louisiana refinery and the Galveston Bay, Texas City, Texas Refinery.¹

The Garyville, Louisiana Refinery is one of the largest in the U.S. with access to the Mississippi River. This plant is designed to handle a wide variety of crude oils into gasoline, distillates, NGLs, petrochemicals, heavy fuel oil, asphalt, and propane with a capacity of 593 mbpcd. Its access to the Mississippi positions it to have access to the export market and multiple options to sell and ship refined products.¹

The Galveston Day, Texas City, Texas Refiner has a capacity of 593 mbpcd and is a combination of the formerly independent Texas City and Galveston Bay refineries. Like the other Gulf Coast plant, this one can process a wide variety of crude oils into various products and has access to the export market to sell refined products. There is also a cogeneration facility, which produces 1,055 megawatts of electricity and can produce 4.3 million pounds of steam per hour. 48% of the power generated through the cogeneration facility was used at the refinery in 2022 with the remainder being sold into the electrical grid.¹

Mid-Continent Region

The second largest region is the Mid-Continent Region which falls slightly behind the Gulf Coast region in terms of capacity at 1,159 mbpcd. This accounts for just under 40% of the total refining capacity of MPC.

The Catlettsburg, Kentucky Refinery is the largest in this region located on the western bank of the Big Sandy River. This plant specializes in refining sweets and sour crudes, including production from the nearby Utica Shale. These are processed into gasoline, distillates, NGLs and petrochemicals, propane, and heavy fuel oil.

The Robinson, Illinois Refinery processes sweet and sour crude oils and has a capacity of 253 mbpcd.

The Detroit, Michigan Refinery processes sweet and heavy crude oil and it is the only refinery current operating in the state of Michigan.

The El Paso, Texas Refinery has a capacity of 140 mbpcd and refines sweet and sour crudes into gasoline, distillates, heavy fuel oil, propane, asphalt and NGLs and petrochemicals.

The St. Paul Park, Minnesota Refinery is located along the Mississippi River and processes both sweet and heavy sour crude.

The Salt Lake City, Utah Refinery is the largest refinery in Utah with 66 mbpcd of capacity. This refinery processes crudes coming from Utah, Colorado, Wyoming, and Canada.¹

West Coast Region

The final region is the West Coast Region comprising the last roughly 19% of total MPC capacity.

The Los Angeles, California plant is situated near the LA Harbor and is the largest refinery on the West Coast with 363 mbpcd of capacity. This refinery is a major producer of cleaner burning CARB fuels. CARB is the California Air Resource Board and authorizes standards, rules, and regulations to help achieve emission reductions from motor vehicles (CARB). This plant processes heavy crude from San Joaquin Valley and Los Angeles Basin, as well as crudes from the Alaskan North Slope, South America, West Africa, and other international locations. It manufactures

both CARB gasoline and CARB diesel fuel and conventional gasoline distillates, NGLs and petrochemicals, heavy fuel oil and propane.

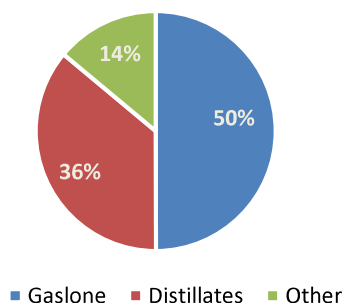
The Anacores, Washington Refinery process Canadian crude, domestic crude from North Dakota, along with some capacity for international crude to manufacture refined products. This facility has a capacity of 119 mbpcd.

The last refinery in the West Coast Region is the Kenai, Alaska Refinery located in the Cook Inlet in southwest Anchorage. This plan refines Alaskan domestic crude, domestic crude from North Dakota along with limited international crude.¹

Refined Product & Yields

Most of the company's refinery production is comprised of gasoline with 1,494 mbpd being produced in total over all of the refineries. Gasoline production accounted for over 50% of the total refining production in 2022. This segment includes gasoline, gasoline blendstocks. The second largest segment is distillates, which includes a range of light products including kerosene, jet fuel and renewable diesel. These products accounted for 1,079 mbpd or slightly over 36% of the total production. There is a significant drop-off when accounting for the remaining product yields. Asphalt represents about 3% of production. This includes asphalt cement, polymer-modified asphalt, emulsified asphalt, industrial asphalt and roofing flux. Propane, which is primarily used for heating and cooking as well as in the petrochemical industry and for grain drying accounts for 2% of total production. Heavy fuel oil each represents the remaining 2% of production and includes heavy residual fuel oil and related components including slurry. These products are used in the utility and ship bunkering industries.¹

2022 Refined Product Yields



Source: MPC 10-K

When comparing this production from 2022 to 2021 the largest growth stemmed from heavy fuel production, which increased 135% from the prior year. The largest segment gasoline only grew by 3% while the distillates grew by 12%. Overall yields increased by 5% between 2022 and the prior year. The gasoline and Distillates segment experiences seasonality with MPC experiencing higher demand during the summer months. The following table shows the refined product yields:

Mbpd	2022	2021	2020
Gasoline	1,494	1,446	1,314
Distillates	1,079	965	905
NGLs & petrochemicals	178	250	244
Asphalt	89	91	81
Propane	70	52	51
Heavy Fuel Oil	73	31	28
Total	2,983	2,835	2,623

Source: MPC 10-K

Refined Product Sales

These refined products are then sold to independent retailers, wholesale customers, brand jobbers, direct dealers along with international customers. A brand jobber is a middleman who buys from MPC and other refiners and sells to retailers. In 2022, MPC had 7,209 brand jobber outlets in 38 states, the District of Columbia and Mexico where Marathon branded outlets are maintained by independent operators. Additionally, a portion of the company's revenue comes from 1,172 long-term supply contracts with direct dealer locations in Southern California under the ARCO brand.¹ The chart below shows MPC's refined product sales volume by product group of the last three year. Since last year, the largest volume growth has stemmed from the Heavy Fuel Oil segment, which has increased over 69% YOY.

Mbpd	2022	2021	2020
Gasoline	1,870	1,834	1,669
Distillates	1,169	1,089	1,040
NGLs & petrochemicals	221	293	323
Asphalt	89	94	86
Propane	93	76	69
Heavy Fuel Oil	66	39	35
Total	3,508	3,425	3,222

Source: MPC 10-K

Retail and Marketing Locations

Marathon Petroleum has approximately 8,400 North American retail and marketing locations, which are predominately owned and operated by independent entrepreneurs under both the Marathon brand and ARCO brand names. ARCO locations are located across the West Coast, Mexico, and Upper Midwest while Marathon stations are located around the U.S.

Midstream

MPLX

The Midstream segment of MPC primarily includes the operations of MPLX, which owns and operates a network of crude oil, natural gas, and refined product pipelines. It has joint ownership interest in crude oil, refined products and other pipelines that can be used to transport these products. MPLX additionally utilizes light products terminals and other infrastructure to store and transport these products on behalf of MPC.¹ Marathon Petroleum own 65% of MPLX.

MPC-Retained Midstream Assets and Investments

Marathon Petroleum owns four Jones Act product tankers. The Jones Act has provided an advantage for domestic shipping companies as it bans foreign competitors from transporting goods between U.S. ports. However, it is also increased the cost of shipping and shipbuilding in the United States due to the lack of price competition. The company also has interests in additional pipeline systems and has an indirect ownership interest in an ocean vessel joint venture through the investment in Crowley Coastal Partners.

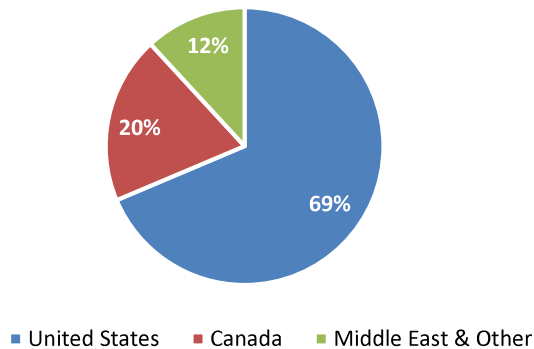
The midstream segment, like refining & marketing, can also be impacted by seasonal demand factors and fluctuations in commodity prices.¹

Cost Structure Analysis

The company must source the crude oil that it refines since it is not a fully integrated company that has its own exploration and production segment like some of its competitors. MPC obtains the crude through negotiated term contracts and purchases on the spot market. The term contracts are typically structured to allow for market-related pricing provisions. Most of the crude oil that the company processes is sourced from the United States;

however, the company also gets crude oil from Canada and the Middle East & other international countries.¹

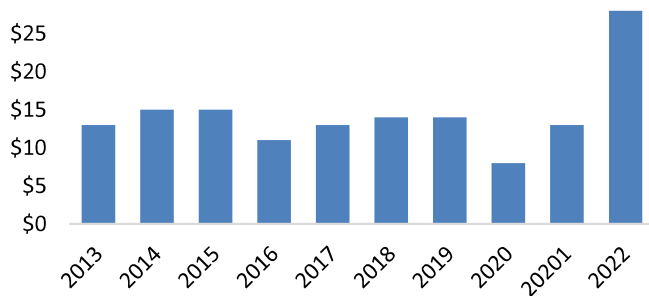
Crude Oil Supply by Country



Source: MPC 10-K

Since 2020, MPC's margins have been steadily increasing. Refineries margins are driven by the crack spread. A positive crack spread indicated that the price of refined products is higher than the cost of the crude oil inputs. In 2022 MPC's refining and marketing margin per barrel was \$28.24, which represents a 111% increase from the margin in 2021.

MPC Refining Margin

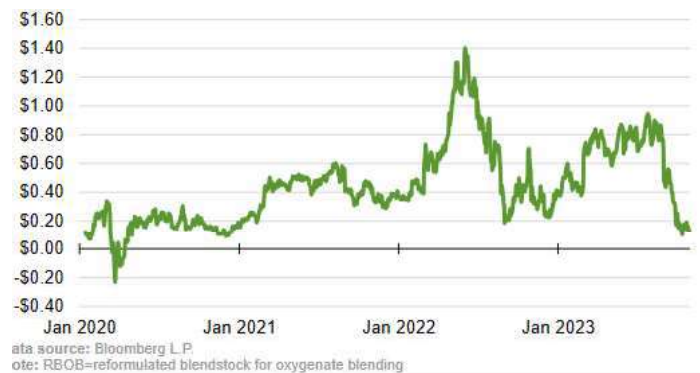


Source: EIA

Below is a chart showing the dollar per gallon crack spread from January 2, 2020, to October 30, 2023. As the spread falls, it becomes less profitable for refiners to make gasoline. Recently, lower demand in addition to the impacts of the seasonal switch to winter grade gasoline have made gasoline less profitable for all refiners to produce. Factors that may be reducing the gasoline demand include less discretionary spending to high inflation in addition to improved fuel efficiency of vehicles. Since exploration and production companies have more fixed extraction costs, they are able to profit from high crude oil prices. However, high crude oil prices mean

higher input costs for refiners. At the same time the Energy Information Administration notes that the prices of crude oil make up about 50% of the equation to determine the cost of gas at the pump. Crack spreads make up 25% of the costs of a gallon of gas, while taxes, distribution and marketing impact the remaining portion of the gasoline retail price equation. (Business Insider)

New York Harbor RBOB-Brent Futures Price Crack Spread



Source: Business Insider

Debt Maturity Analysis

In the coming years MPC has debt obligations coming due with the largest being \$2,950 million in 2026. The Henry Fund believes that the company will have enough resources to be able to make these payment as they arise. The company has a long-term debt to EBITA of 1.42x, which means that it has the ability to pay its outstanding debt from its operations.

Fiscal Year	Payment (\$mil)
2023	\$1,000
2024	1,901
2025	2,950
2026	2,249
2027	2,000
Total	\$10,100

Source MPC 10-K

The chart below shows MPC's current debt rating along with other comparable companies. The current rating for MPC is BBB with a stable outlook.

Ticker	Debt Rating
MPC	BBB
VLO	BBB
XOM	AA-

CVX	AA-
PSX	BBB+
CVI	B+
DINO	BBB-

ESG Analysis

ESG is a highly considered factor in the oil and gas industry as it has a reputation for not being an environmentally friendly industry. MPC has increased its attention on ESG in recent years due to increased pressure from advocacy groups. This has led to increased attention on the energy transition and climate change in general. These concerns have led to investment limitations in the oil and gas space for financial service companies. As a result, the company has created goals to reduce greenhouse gas emissions and MPLX has created a target to reduce the methane emissions. The main areas of concern for this type of company are the impact on the air from emissions, the water, and solid waste.²

ESG Risk Rating

30.5

COMPREHENSIVE ?

High Risk



Ranking

Industry Group (1st = lowest risk)

Refiners & Pipelines

73 out of 207

Source: Sustainalytics

Air

Greenhouse gas emissions are the primary concern when addressing the impact of operations on air quality and pollution. Currently, regulation on this topic is under various stages in the review processes; however, new adoption of policy may lead to increased costs to operate and maintain facilities, install new emissions controls, capture the emissions, and administer and manage any GHG programs. Not only could these regulations be placed directly on the company, but MPC could also be indirectly impacted if regulation is placed on vehicle tailpipe emissions. Other air emissions include fine particulate

matter. In January 2023, the EPA proposed to lower the primary fine particulate matter annual standard from 12.0 µg/m³ to within the range of 9.0 to 10.0 µg/m³. There has not been a decision on the change, but if it were to pass, it could lead to increased costs with the full-scale impact to be uncertain. In California, state regulation adopted Rule 1109 in November 2021, which nitrogen oxides and carbon monoxide emission limits for combustion equipment at petroleum refiners. Compliance with this rule is being phased in through 2032. This regulation will directly impact to operate and maintain the MPC's refinery in Los Angeles.¹

Water

MPC maintains water discharge permits as required under the National Pollutant Discharge Elimination System program. The company also maintains an emergency plan to address an oil spill or leakage of hazardous substances if these events were to occur. As part of the emergency response plan, MPC has aqueous film forming foam that contains per- and polyfluoroalkyl substances chemicals as a vapor and fire suppressant. These chemicals are the only proven foams to prevent and effectively manage a petroleum-based liquid fire. However, the EPA has issued lifetime health advisory levels for the substances in these foams. In 2023, the EPA is expected to make a proposed rulemaking on national drinking water standards, which will impact the chemicals in these fire prevention tools. Again, MPC is unable to predict how this ruling would impact the operations.¹

Solid Waste

Solid Waste management is established under the RCRA and addresses the environmental impacts of waste disposal and recycling practices.¹

Peer ESG

When you consider the peers, MPC has a lower overall ESG score than some of their peers. This can be attributed in part to the fact that some of the peers also engage in exploration and production. Additionally, the score is most likely also impacted by factors such as the amount of renewable energy produced and investments in this area.²

Ticker	ESG Score	Risk Level
MPC	30.5	High Risk
VLO	32.5	High Risk
XOM	41.6	Severe Risk
CVX	36.8	High Risk
PSX	35.4	High Risk
CVI	48.6	Severe Risk
DINO	33.0	High Risk

Source: Sustainalytics

RECENT DEVELOPMENTS

Recent events are impacting the refining & marketing and midstream oil and gas industry. These developments include both industry specific events as well as developments specific to MPC.

Recent Earnings Announcement

On August 1, 2023, MPC released their second-quarter 2023 results. The company reported Net income attributable to MPC of \$2.2 billion or \$5.32 per diluted share. This beat consensus estimates of \$4.55 by \$0.77.

The company notes that they are progressing in construction on the Martines Renewable Fuels facility that is expected to come online in the second half of 2023. IT is anticipated to be able to produce 730 million gallons of renewable fuel per year by the end of 2023.

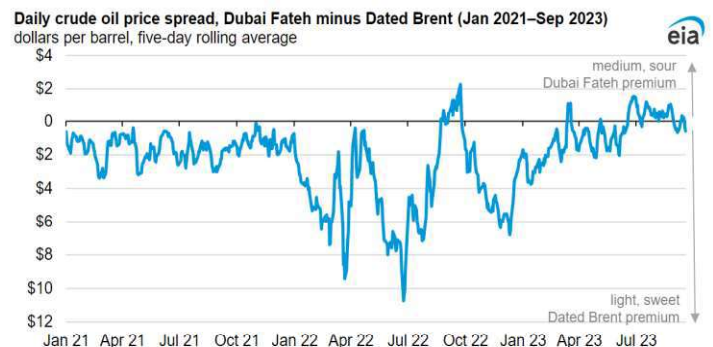
The company also completed the STAR project at the Galveston Bay refinery. This project is expected to add 40,000 barrels per day of incremental crude capacity.

Speedway Sale

The sale of Speedway, which was a gas station and convenience store owned and operated by MPC was completed on May 14, 2021. MPC classifies this as a strategic transaction risk as the decision to sell this segment results are less diversification of revenue sources. This was a \$21 billion transaction to 7-Eleven, Inc. In connection with the closing, the board of directors also approved an additional \$7.1 billion share repurchase authorization.³

OPEC Production

OPEC+ production cuts have driven up medium, sour and heavy, and sour grades of crude oil price around the world due to limited supply. In June 2023, OPEC+ members announced that they would be extending crude oil production cuts through 2024. Furthermore, Saudi Arabi announced an additional voluntary production cut on top of the OPEC announcement. This would reduce Saudi Arabian output by an additional 1 million barrels per day extending through the end of 2023. Typically, sweet crudes are more expensive because they require less refining. The recent production cuts have reversed typical price relationships between sour and sweet crude as sour crudes become more expensive. From January 4, 2021, to June 20, 2023, Dated Brent traded at a premium of \$2.56 per barrel over sour Dubai Fateh, which is an Asia-Middle East benchmark. However, Dubai Fateh traded at an average premium of \$0.48 over the Date Brent from June 21 to September 19.⁴



Source: EIA

Chevron Worker Strike

Chevron, one of MPC's competitors, has been facing a series of worker strikes at liquified natural gas facilities in Australia. These facilities account for 7% of LNG supply. Union workers are set to strike on October 19, 2023, which comes two weeks after the company and union had reached agreement for a new employment contract featuring increased pay and improvements that lead to the union ending the strike at the time. However, since then, both sides have continued to debate over issues such as stipends and travel arrangement, which had reignited the strike.⁵

Israel-Hamas War

Investors are still assessing the impact of the conflict. Israel is not a large oil producer; however, the conflict is one of the largest risks for the oil and gas markets since Russia's invasion of Ukraine last year. There are concerns about escalations involving Iran, who is a member of OPEC. There is uncertainty around the impact of a more widespread conflict reaching countries that are in the top oil producing regions like Iran, Saudi Arabia and the United Arab Emirates ⁶

Garyville, Louisiana Refinery Fire

On August 25, 2023, naphtha leaked out of an MPC storage tank at the Garyville, Louisiana Refinery and caught fire. It took four days to completely extinguish the fire. The disaster initiated a two-mile evacuation order out of caution in case of severe air quality impacts; however, authorities maintain that there were no off-site impacts or threat to individuals in the community. In hindsight of this event, locals stress that they need more timely notification to alert of this danger and evacuate sooner. Still, the cause of the incident is under investigation (Fox8Live). Once the fire was put out, MPC said that it was preparing to restart units at the plant after shutting them down because of their proximity to the two storage tanks that caught fire. However, the plant was not entirely un-operational during this catastrophe. The incident led to two people sustaining minor injuries while 10 others were treated for heat stress. There have not been any further updates of the impact of the fire or the cause at this time. ⁶



Source: Nola.com

INDUSTRY TRENDS

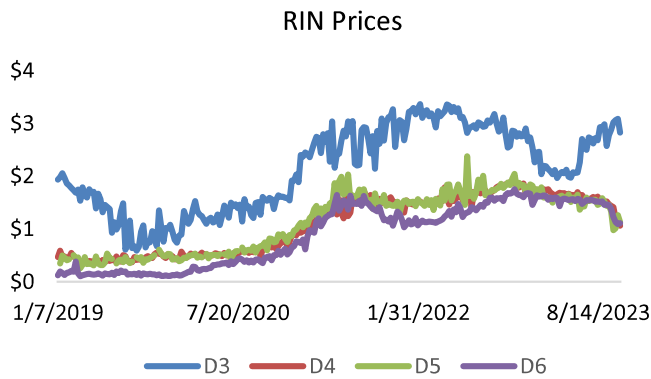
There are many trends impacting MPC and other refineries. These trends include items regulations and the evolving RIN market. As these trends continue to develop, they could have a significant impact on the industry.

Regulation

The oil and gas industry faces a wide array of regulations. Some of these laws include the Clean Air Act, the Clean Water Act and the Resource Conservation and Recovery Act, and the Oil Pollution Act. While some of the regulations are enforced at a federal level, the states where MPC operations take place also have their own laws and regulations that the company must follow. The company anticipates that substantial CAPEX will be needed to remain in line with evolving environmental laws and regulations. ¹

RINs

RINs or Renewable Identification Numbers are credits that are used to track renewable transportation fuels. This identification system allows the EPA to track compliance with the Renewable Fuel Standard (RFS). The RFS sets a required renewable volume obligation (RVO) for refiners, blenders, and importers to sell a percentage of renewable fuel based on a percentage of the company's total fuel sales. The RIN is a 38-character number code that is assigned to each physical gallon of renewable fuel produced or imported and the obligated parties that produce or own RIN, like refiners or blenders, must register them with the EPA. After blending, the RIN is then separated from the newly created blended gallon and used as proof that the renewable fuel has been sold to meet the company's own RVO. Additionally, companies can buy and sell these RINs to one another. For example, a company may have already met its RVO for the year but continues to blend renewable fuels. The excess RIN that is being generated can then be sold to another from who has not produced sufficient renewable fuels. RIN prices are determined by market factors like supply and demand, like other commodities. ⁷ RIN market pricing is important to companies like Marathon because it can impact if they continue to produce excess renewable energy. In 2022, MPC increased other income by \$315 million primarily due to higher income on RIN sales. MPC also purchases RINs to satisfy a portion of our RFS2 compliance. In 2022, expenses associated with RIN purchases were \$2.40 billion. RIN prices continue to be volatile, which could have a significant impact on the company.



Source: EPA

MARKETS AND COMPETITION

Porter's 5 Forces

Competition

MPC faces a large set of competitors as the downstream petroleum industry is highly competitive. The main source of competition for refiners is the ability to obtain cheap crude oil that they then are able to market. The four largest companies in 2023 accounted for 79.8% of the market share. Marathon Petroleum Corporation alone accounts for 24.5% of the industry in terms of market share by revenue. The other players include Valero Energy Corporation, which accounts for 20.1% of the revenue, Exxon Mobile Corporation at 18.2% and Chevron at 15.3%. The remaining 20.2% of the market share is controlled by other smaller players.

Threat of New Entrants

The threat of new entrants into the refining and midstream oil and gas space is low due to the high costs of building and maintaining the refineries. They operate at such a large scale that it minimizes the opportunities for smaller players to capture a large portion of the market. Additionally, the location of these refiners plays a role in their success. Most large players are located within proximity to a crude oil production center or an area where there is a larger population where there will be a high demand for refined products. This leaves little room for new entrants in both terms of geography and market share. As of January 1, 2023, there were 129 operable refineries in the United States. The newest refinery in the United States is the Texas International Terminals with a capacity of 45,000 barrels per calendar day (b/cd).

However, the newest refinery with significant capacity came online in 1977. This is Marathon's Garyville, Louisiana facility with an initial capacity of 200,000 b/cd. Now, this plant has a capacity of over 593,000 b/cd. Rather than building new refineries to increase capacity, existing refineries tend to initiate upgrades or new construction.⁴

Substitutes

While there is minimal differentiation between the refined product outputs, refineries have been able to differentiate themselves by reducing their carbon emissions. Buyers are willing to pay more for these products that meet their low carbon guidelines, and the company could benefit from the resulting carbon credits as well.

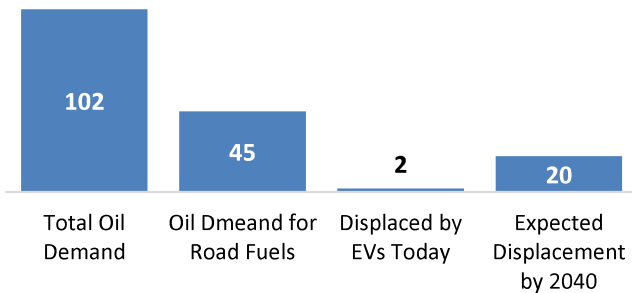
Additionally, there has been a growth in competition due to an increase in refiners that handle alternate fuels such as biodiesel and ethanol. The demand for these products has increased over the last few years because of economic incentives from the government as well as social pushes for environmentally friendly options.

It is forecasted by the IBIS World Industry report that imports are expected to account for more than 20% of domestic demand in 2023. This is a threat if companies can purchase the refined products cheaper from outside of the United States.

Furthermore, the automotive industry makes up for a significant portion of refined products. From one 42-gallon barrel of crude oil, 19 to 20 gallons of motor gasoline is produced and about 11 to 12 gallons of ultra-low sulfur distillate fuel oil is produced. A shift away from fossil fuel vehicles could significantly shift demand away from these products. According to BloombergNEF, EVs are going to be displaced by 20 million barrels of oil demand by 2040 based on their Economic Transition Scenario. This forecast assumes no policy changes compared to those in place on August 15, 2023. The report believes that road fuel demand will peak at 49 million barrels per day in 2027 before falling to 35 million b/d in 2040.¹⁹ While this is a long-term threat for the industry, we believe that the

energy transition may more expensive and thus father out in time than originally anticipated.

Oil Demand Displaced by EV (million b/d)



Source: BloombergNEF

Power of Customers

Buyers of the refined products include petrochemical manufacturers and gas stations. These customers have moderate buying power because there are limited other inputs that can replace the gas and diesel products that they need to fill their pumps or create their products. However, this buying power is increasing as they look for low-carbon energy sources. As this becomes more highly demanded or even required, buyers will be able to pay more for the products that meet their specification, while others may be left behind or receive a lower price for their sub-standard products.

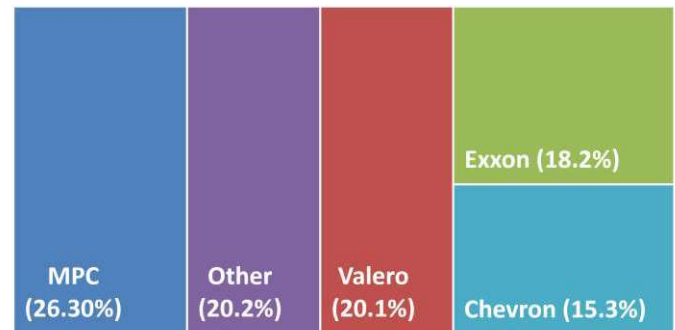
Power of Suppliers

The suppliers for the refineries are the companies that are extracting the oil and gas, but do not have the capabilities to process it themselves. Depending on where the crude oil was extracted, it impacts the sulfur content and other characteristics of the oil. Refineries that have flexible equipment are able to adjust the equipment to manage a range of qualities, which allows them to purchase crude oil that is heavier and therefore discounted. This ability helps lower their input costs and can give a large competitive advantage for the refiners that have this ability.⁸

Peer Comparisons

There are many players in the refining & marketing and midstream industry that Marathon Petroleum competes with. In this section, there will be a peer analysis to identify which players are best positioned in the industry.

Industry Market Share



Valero Energy Corporation (VLO)

Valero Energy is a multinational manufacturer and marketer of petroleum based low-carbon liquid transportation fuels and petrochemical products. The company owns 15 petroleum refineries in the US and Canada, United Kingdom, Ireland and Latin America. The company has a joint venture agreement with Diamond Green Diesel Holdings which has two renewable diesel plants with a combined capacity of 1.2 billion gallons per year. Valero also owns 12 ethanol plants with a capacity of 1.6 billion gallons per year. Valero seemed to place a much stronger emphasis on the renewable energy with the first few pages in the 10-K highlighting the Renewable Fuel Standard, the California Low Carbon Fuel Standard and the Canadian Clean Fuel Regulations and their overall Low-Carbon projects. The company has already invested \$5.1 billion in their low-carbon fuels business and expects further growth in this area.⁹

Exxon Mobil Corporation (XOM)

Exxon Mobil engages in the business of exploration for, and production of, crude oil and natural gas; manufacture, trade, transport and sale of crude oil, natural gas, petroleum products, petrochemicals, and a wide variety of specialty products including carbon capture and storage, hydrogen, and lower-emission fuels.¹⁰ The company has a total refining capacity of 4,582 mbpd based on 100% of atmospheric distillation capacity in operations of XOM and majority-owned subsidiaries. They also own/lease 981 worldwide retail fuel sites at year-end 2022. The majority of XOM's the company's operating segments are divided into four segments: Upstream, Energy Products, Chemical Products, and Specialty Products. Over 65% of the company's Earnings After Income Tax come from the Upstream business, which makes XOM and MPC more difficult to compare.

Chevron Corporation (CVX)

Chevron is one of the world's leading integrated energy companies. This is a key differentiator of Chevron for Marathon Petroleum company because Chevron, like Exxon Mobil also engages in the exploration and production business. Chevron split their revenue between these two segments: Upstream and Downstream. The Downstream segment is comprised of the revenues from refining and marketing petroleum products such as gasoline, jet fuel, gas oils and lubricants, residual fuel oils and other crude based products. CVX's downstream segment accounts for approximately 73% of the companies' total sales and other operating revenues in 2022.¹¹ This makes it comparable to Marathon Petroleum company because while it does have the added upstream segment, the majority of the company's revenues stem from their downstream segment.

Phillips 66 (PSX)

Phillips 66 has four main segments: Midstream, Chemicals, Refining, and Marketing and Specialties. The Midstream segment provides crude oil and refined product transportation, terminal and processing services. The chemicals business encompasses PSX's 50% equity stake in CPCChem. This company manufactures and markets petrochemicals and plastics on a global scale. The refining business includes 12 refineries in the U.S. and Europe. This segment places a strong emphasis on operating excellence and margin enhancement. The final segment, Marketing and Specialties, refines petroleum products in the U.S. and Europe.¹²

CVR Energy (CVI)

CVR Energy is a diversified holding company that is primarily engaged in petroleum refining and marketing and the nitrogen fertilizer manufacturing industry through its interest in CVR partners. The Petroleum Segment focuses on high value transportation fuels. The company has emphasized their renewable energy initiative and recently completed a project to convert the refinery's hydrocracker to a renewable diesel unit with the ability to produce 100 million gallons of renewable diesel per year. CVR only operated two refineries, one in Coffeyville, KS and one in Wynnewood Oklahoma.¹³

HF Sinclair (DINO)

HF Sinclair is an independent energy company that engages in the business of producing and marketing high-value light products including gasoline, diesel fuel, jet fuel, and renewable diesel along with other specialty products. HF Sinclair's refinery operations serve the Mid-continent, Southwest & Rocky Mountains extending into the Pacific Northwest. The company owns and operates seven complex refineries with a total crude processing capacity of 678,000 bpsd. These facilities have the capability to process discounted, heavy, and sour crude into high a percentage of gasoline and high-value refined products.¹⁴

Par Pacific Holdings (PARR)

Par Pacific Holdings is an energy and infrastructure business. The company acquires and develops businesses in three main segments: refining, retail and logistics. The company operated three refineries with a total capacity of 155 mbpd. One of the two refineries is located in Kapolei, Hawaii and produces gasoline, jet fuel, ultra-low diesel fuel, marine fuel, low sulfur fuel oil and other refined products. They also operate 121 gas stations in Hawaii, Washington, and Idaho. The Hawaii network includes Hele and "76" branded fuel retail sites, "nomnom" branded company-operated convenience stores, 7-Eleven operated convenience stores, other sites operated by third parties, and unattended cardlock stations.¹⁵

	# of Refineries	Miles of pipeline	Throughput mbpd
MPC	13	3,282	2,951
VLO	15	3,000	3,150
XOM	19	4,000	4,582
CVX	8	3,000	1,779
PSX	12	6,655	1,961
CVI	2	967	205.3
DINO	5	1,200	431.9

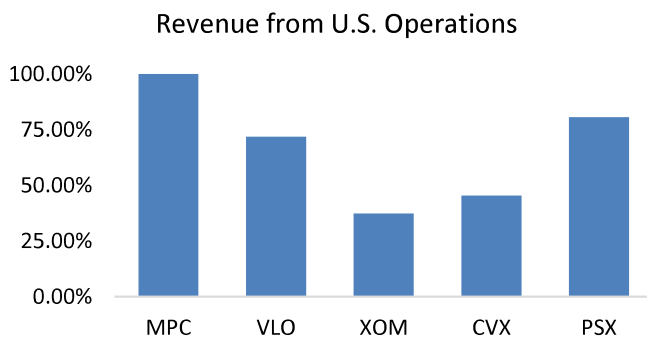
Source: Company 10-Ks

	Capacity Utilization	Margins per barrel
MPC	96%	28%
PSX	90%	22%
CVR	81%	19.1%
DINO	93.1%	10.9%

Source: FactSet

When comparing MPC's margins against its peers, we can see that the company has some of the strongest margins.

A factor in this could be MPC's ability to purchase lower heavier crudes that can be managed at their facilities. If the crack spread is high enough, refiners can benefit from purchasing lower grade crudes despite the higher cost to refine them. Some plants do not have the flexibility to alter between various grades of crude, which could hurt margins when oil prices are high. In 2022, 47% of MPC's crude throughput was sour crude oil while the remaining 53% was sweet crude.



Source: FactSet

ECONOMIC OUTLOOK

MPC's operations can be sensitive to economic events, which could impact the firm's cash flow or growth.

GDP Growth

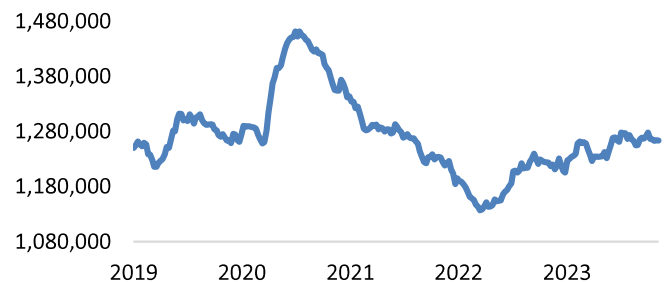
During times when the economy is growing quickly, there is a higher demand for crude consumption and the need for refining than during a recession. GDP is anticipated to grow by 2.2% in 2023 and then fall to 0.8% in 2024.¹⁶ The Henry Fund is slightly less optimistic for continued growth this year. Furthermore, the team believes that the probability of a recession is 51.7%, which could further slow GDP growth over the next year.

Crude Inventory

Crude Oil Inventories that are currently being held for future at refineries, in pipelines and at terminals use can be an indicator of production and consumption of oil over a given timeframe. As inventories increase over periods of time, it indicates that production is outpacing demand, which leads to excess oil being stored until it is ready to be processed at the refinery. The excess supply of stored oil may also signal that the price of oil may fall.¹⁷ For the week ending October 6, 2023, U.S crude oil refinery inputs averaged 15.2 million barrels per day, which is 399

thousand barrels per day less than the prior week's average. Refineries were operating at 87.5% of operable capacity. Commercial crude inventories, excluding the U.S. Petroleum Reserve, increases by 10.2 million barrels from the prior week. However, the average inventories still remain about 3% below the 5-year average for this time of year, which is a sign that the economy may not be slowing and demand for oil is still remaining strong.⁴ Furthermore, the U.S government has started to replenish the U.S. Strategic Petroleum Reserve after large draw downs in 2022. In October of 2022, the Department of Energy announced it would prefer to buy crude at \$67-72 per barrel and is authorized to purchase another 59 -63 million barrels without further approval if prices return to this level

U.S. Ending Stocks of Crude Oil & Petroleum Products (excluding SPR, thousands of barrels)

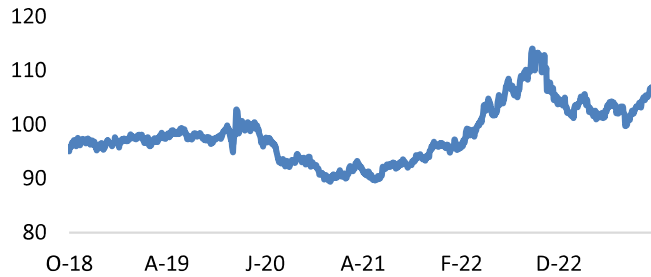


Source: EIA

US Dollar Index

The U.S. Dollar Index is a relative measure of the U.S dollar's strength against a basket of six currencies: the Ruti, Pound, Yen, Canadian Dollar, Swedish Korner and Swiss Franc. When the index started in March 1973, the value was 100.00. Over the next few years, the dollar is anticipated to weaken, making U.S. refined products more economically viable for other countries to purchase and use.¹⁸

ICE Dollar Index



Source: Yahoo Finance

VALUATION

Payout Policy Forecasts

To forecast dividend payments, we used the historical average dividend payout ratio of 16.49%.

WACC Assumptions

To calculate our Weighted Average Cost of Capital (WACC) we used the assumptions below. Using these, we found a WACC of

Risk Free Rate: The risk-free rate of 4.78% is from the yield of a 10-year U.S. Treasury Note as of October 6, 2023.

Beta: The beta used in the model for MPC was found using an average of the weekly 5-year monthly beta.

Equity Risk Premium: 5.00% is the Henry Fund's consensus for the equity risk premium.

Pre-Tax Cost of Debt: The pre-tax cost of debt for MPC is from the yield of a 6.50% coupon bond maturing in March of 2041.

Tax Rate: We used an implied marginal tax rate of 17.33% based on the historical average.

Discounted Cash Flow Model

The DCF resulted in an implied price as of today of \$156 per share. We feel that this method gives the most accurate representation of Marathon Petroleum Corporation's implied price. The DCF model is calculated by discounting expected free cash flows from the company's weighted average cost of capital to its present value.

Dividend Discount Model

This model discounts future expected dividends by the company's cost of equity. The DDM gives an implied price of \$103 per share.

Relative Valuation Model

The relative valuation model gives an implied price of \$XX per share. This model provided the lowest implied price. Because of substantial variation in business and financial characteristics among the closest peers, we felt that this model did not accurately reflect MPC intrinsic price and therefore was left out of the valuation range.

KEYS TO MONITOR

The energy market is a volatile market as is however, we feel that there is potential for events that may have a large impact on the refining & marketing and midstream oil and gas industry. Here a few events that could have large impact on the industry:

- Widespread involvement in the Israel-Hamas War
- Continued Production Cuts by OPEC
- A large shift in the Crude Inventory
- Complications or Lawsuits from the fire in the Louisiana refinery fire
- An adverse movement in the RIN market
- Continued abnormalities in price relationships between sour and sweet crude as sour crudes become more
- New Regulation

New information or changes in these areas could hurt oil prices, shrink refiners' margins, negatively impact crude demand, or alter the energy landscape all together.

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Marathon Petroleum Company
Revenue Decomposition

Fiscal Years Ending Dec. 31	2020	2021	2022	2023E
mbpd				
Refining Products Yields mbpd				
Gasoline	1314	1446	1494	
	-16%	10%	3%	8.36% Average
Distillates	905	965	1079	
	-17%	7%	12%	10.66% Average
NGLs & Petrochemicals	244	250	178	
	-23%	2%	-29%	9.46% Average
Asphalt	81	91	89	
	-7%	12%	-2%	4.19% Average
Propane	51	52	70	
	-7%	2%	35%	11.72% Average
Heavy Fuel Oil	28	31	73	
Total	2623	2835	2983	
	-17%	8%	5%	8.98% Average

Purchased Products mbpd				
Gasoline	355	388	376	
	-13%	9%	-3%	9.00% Average
Distillates	135	124	90	
	14%	-8%	-27%	15.54% Average
NGLs & Petrochemicals	79	43	43	
	163%	-46%	0%	582.44% Average
Asphalt	5	3	0	
	-17%	-40%	-100%	18.29% Average
Propane	18	24	23	
	6%	33%	-4%	60.93% Average
Heavy Fuel Oil	7	8	-7	
	75%	14%	-188%	-278.87% Average
Total	599	590	525	
	3%	-2%	-11%	11.03% Average

mbpd				
Refined Products Sales				
Gasoline	1669	1834	1870	
	-15%	10%	2%	8.35% Average
Distillates	1040	1089	1169	
	-14%	5%	7%	10.80% Average
NGLs & Petrochemicals	323	293	221	
	-6%	-9%	-25%	65.54% Average
Asphalt	86	94	89	
	-8%	9%	-5%	33.09% Average
Propane	69	76	93	
	-4%	10%	22%	15.31% Average
Heavy Fuel Oil	35	39	66	
	-34%	11%	69%	20.48% Average
Total	3222	3425	3508	
	-14%	6%	2%	9.11% Average

Refined Products Sales Volume - gal. per year	2020	2021	2022	2023E	2024E	2025E	2026E	2027E	2028E	2029E
Gasoline	25,585,770	28,115,220	28,667,100	30,100,455	33,110,501	35,428,236	37,199,647	38,315,637	39,081,949	39,863,588
				5%	10%	7%	5%	3%	2%	2%
Distillates	15,943,200	16,694,370	17,920,770	19,354,432	20,322,153	21,135,039	21,769,090	21,986,781	21,766,914	22,202,252
				8%	5%	4%	3%	1%	-1%	2%
NGLs & Petrochemicals	4,951,590	4,491,690	3,387,930	3,387,931	3,387,932	3,387,933	3,387,934	3,387,935	3,387,936	3,387,937
				-5%	-2%	3%	1%	3%	3%	2%
Asphalt	1,318,380	1,441,020	1,364,370	1,323,439	1,349,908	1,390,405	1,376,501	1,404,031	1,432,111	1,460,754
				-3%	2%	3%	-1%	2%	2%	2%
Propane	1,057,770	1,165,080	1,425,690	1,496,975	1,541,884	1,588,140	1,619,903	1,652,301	1,685,347	1,719,054
				5%	3%	3%	2%	2%	2%	2%
Heavy Fuel Oil	536,550	597,870	1,011,780	1,163,547	1,279,902	1,382,294	1,423,763	1,438,000	1,423,620	1,452,093
				15%	10%	8%	3%	1%	-1%	2%
Total	49,393,260	52,505,250	53,777,640	56,826,778	60,992,279	64,312,047	66,776,838	68,184,685	68,777,878	70,085,678
Refined Products Avg. Sale Price (based on benchmark)	1.19	2.06	3.22	2.70	2.07	2.01	1.96	1.96	1.96	1.96
\$/gal.										
Total Revenue	58,777,979	108,160,815	173,164,001	153,432,301	126,006,999	129,241,490	131,149,711	133,914,722	135,079,753	137,648,271

RBOB Futures Price Curve

Jan	2.1544	2.0572	2.0028	1.931
Feb	2.1586	2.0678	2.0086	
Mar	2.1757	2.0879	2.0241	
April	2.3714	2.2743	2.206	
May	2.3736	2.2813	2.2237	
June	2.3644	2.2781	2.2184	
July	2.3419	2.2584	2.2032	
Aug	2.31	2.2298	2.1831	
Sept	2.2687	2.1854	2.1426	
Oct	2.1093	2.0524	2.0118	
Nov	2.0741	2.029	1.9769	
Dec	2.0578	2.0096	1.9511	
Average	2.7	2.06595	2.0096	1.964
				1.964
				1.964
				1.964

Marathon Petroleum Company
Income Statement

Millions

Fiscal Years Ending Dec. 31	2020	2021	2022	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Sales & other operating revenue	69,779	119,983	177,453	153,432	126,007	129,241	131,150	133,915	135,080	137,648	140,268	142,940	145,666
Sales to related parties	-	-	-	-	-	-	-	-	-	-	-	-	-
Income (loss) from equity method investments	-935	458	655	576	607	640	675	712	750	791	834	879	927
Net gain on disposal of assets	70	21	1,061	-	-	-	-	-	-	-	-	-	-
Other income	118	468	783	454	373	382	388	396	400	407	415	423	431
Total revenues & other income	69,032	120,930	179,952	154,462	126,987	130,264	132,213	135,023	136,230	138,846	141,517	144,243	147,024
Cost of revenues	65,733	110,008	151,671	135,236	111,063	113,914	115,596	118,033	119,060	121,324	123,633	125,989	128,391
Purchases from related parties	-	-	-	-	-	-	-	-	-	-	-	-	-
Inventory market valuation charge	-	-	-	-	-	-	-	-	-	-	-	-	-
Consumer excise taxes	-	-	-	-	-	-	-	-	-	-	-	-	-
Impairment expense	8,426	-	-	-	-	-	-	-	-	-	-	-	-
Depreciation & amortization	3,375	3,364	3,215	2,638	2,622	2,614	2,614	2,622	2,637	2,659	2,688	2,724	2,766
Selling, general & administrative expenses	2,710	2,537	2,772	3,939	3,235	3,318	3,367	3,438	3,468	3,533	3,601	3,669	3,739
Restructuring expenses	367	-	-	-	-	-	-	-	-	-	-	-	-
Other taxes	668	721	825	978	803	824	836	853	861	877	894	911	928
Total costs & expenses	81,279	116,630	158,483	142,791	117,723	120,670	122,413	124,946	126,025	128,394	130,816	133,293	135,825
Income (loss) from continuing operations	-12,247	4,300	21,469	11,671	9,264	9,594	9,800	10,076	10,204	10,453	10,701	10,950	11,199
Net interest & other financial income (costs)	-1,365	-1,483	-1,000	(1,556)	(1,481)	(1,505)	(1,527)	(1,555)	(1,580)	(1,613)	(1,649)	(1,688)	(1,730)
Income (loss) from continuing operations before income taxes	-13,612	2,817	20,469	10,115	7,782	8,089	8,273	8,522	8,624	8,840	9,052	9,262	9,469
Provision (benefit) for income taxes on continuing operations	-2,430	264	4,491	3,720	2,022	1,605	1,662	1,698	1,746	1,768	1,811	1,854	1,897
Income (loss) from continuing operations, net of tax	-11,182	2,553	15,978	6,395	5,760	6,484	6,611	6,824	6,878	7,072	7,241	7,408	7,572
Income from discontinued operations, net of tax	1,205	8,448	72	0	0	0	0	0	0	0	0	0	0
Net income (loss)	-9,977	11,001	16,050	6,395	5,760	6,484	6,611	6,824	6,878	7,072	7,241	7,408	7,572
Redeemable noncontrolling interest	-81	-100	-88	-88	-88	-88	-88	-88	-88	-88	-88	-88	-88
Noncontrolling interest	232	-1,163	-1,446	-870	-263	378	1,053	1,764	2,515	3,306	4,140	5,019	5,946
Net income (loss) attributable to Marathon Petroleum Corporation	-9,826	9,738	14,516	5,437	5,410	6,774	7,575	8,500	9,305	10,289	11,293	12,339	13,430
Weighted average shares outstanding - basic	649	634	512	512	512	512	512	512	512	512	512	512	512
Net income (loss) per share - basic	-15.13	15.34	28.31	10.62	10.57	13.23	14.80	16.60	18.17	20.10	22.06	24.10	26.23
Dividends per share	2.32	2.32	2.49	1.75	1.74	2.18	2.44	2.74	3.00	3.31	3.64	3.97	4.33

Total Dividends Paid 896.581715 892.01658 1116.9926 1249.0991 1401.6001 1534.2932 1696.6452 1862.1204 2034.6143 2214.5793

Marathon Petroleum Company
Balance Sheet

Fiscal Years Ending Dec. 31	2020	2021	2022	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Cash & cash equivalents	415	5,291	8,625	14,915	15,088	20,538	26,429	34,128	41,378	52,118	64,468	78,464	94,191
Short-term investments	-	5,548	3,145	3,336	3,538	3,753	3,980	4,221	4,477	4,749	5,037	5,342	5,666
Receivables	5,760	11,034	13,477	9,304	7,641	7,837	7,953	8,121	8,191	8,347	8,506	8,668	8,833
Receivables from related parties	-	-	-	-	-	-	-	-	-	-	-	-	-
Inventories	7,999	8,055	8,827	10,769	8,844	9,071	9,205	9,400	9,481	9,662	9,845	10,033	10,224
Other current assets	2,724	568	1,168	976	802	822	835	852	860	876	893	910	927
Assets held for sale	11,389	-	-	-	-	-	-	-	-	-	-	-	-
Total current assets	28,287	30,496	35,242	39,300	35,913	42,021	48,402	56,722	64,388	75,751	88,749	103,417	119,841
Equity method investments	5,422	5,409	6,466	7,042	7,649	8,290	8,965	9,676	10,427	11,218	12,052	12,931	13,858
Property, plant & equipment, net	39,035	37,440	35,657	35,439	35,332	35,332	35,435	35,638	35,937	36,329	36,812	37,385	38,045
Goodwill	8,256	8,256	8,244	8,244	8,244	8,244	8,244	8,244	8,244	8,244	8,244	8,244	8,244
Right of use assets	1,521	1,372	1,214	1,207	1,203	1,203	1,206	1,213	1,224	1,237	1,253	1,273	1,295
Other noncurrent assets	2,637	2,400	3,081	1,883	1,546	1,586	1,609	1,643	1,658	1,689	1,721	1,754	1,788
Total assets	85,158	85,373	89,904	93,115	89,888	96,676	103,862	113,137	121,876	134,468	148,831	165,004	183,071
Accounts payable	7,803	13,700	15,312	15,462	12,699	13,025	13,217	13,496	13,613	13,872	14,136	14,405	14,680
Payables to related parties	-	-	-	-	-	-	-	-	-	-	-	-	-
Payroll & benefits payable	732	911	967	1,370	1,125	1,154	1,171	1,196	1,206	1,229	1,253	1,276	1,301
Consumer excise taxes payable	-	-	-	-	-	-	-	-	-	-	-	-	-
Accrued taxes	1,105	1,231	1,140	1,439	782	621	643	657	675	684	701	717	734
Debt due within one year	2,854	571	1,066	1,000	1,901	2,950	2,249	2,000	0	0	0	0	0
Operating lease liabilities	497	438	368	360	359	359	360	362	365	369	374	380	387
Other current liabilities	822	1,047	1,167	1,280	1,051	1,078	1,094	1,117	1,127	1,148	1,170	1,193	1,215
Liabilities held for sale	1,850	-	-	-	-	-	-	-	-	-	-	-	-
Total current liabilities	15,663	17,898	20,020	20,912	17,918	19,187	18,735	18,828	16,987	17,303	17,634	17,971	18,317
Long-term debt	28,730	24,968	25,634	23,943	22,791	23,150	23,492	23,918	24,313	24,818	25,370	25,969	26,614
Deferred income taxes	6,203	5,638	5,904	6,303	3,427	2,720	2,817	2,877	2,958	2,996	3,069	3,142	3,215
Defined benefit postretirement plan obligations	2,121	1,015	1,114	1,003	891	780	668	557	446	334	223	111	0
Long-term operating lease liabilities	1,014	927	841	844	841	841	844	849	856	865	877	890	906
Deferred credits & other liabilities	1,207	1,346	1,304	1,440	1,182	1,213	1,231	1,256	1,267	1,292	1,316	1,341	1,367
Total liabilities	54,938	51,792	54,817	54,444	47,050	47,891	47,786	48,286	46,827	47,608	48,488	49,425	50,418
Redeemable noncontrolling interest	968	965	968	880	792	704	616	528	440	352	264	176	88
Common stock held in treasury, at cost	15,157	19,904	31,841	31,841	31,841	31,841	31,841	31,841	31,841	31,841	31,841	31,841	31,841
Additional paid-in capital & common stock	33,218	33,272	33,412	33,413	33,413	33,414	33,414	33,415	33,415	33,416	33,417	33,417	33,418
Retained earnings	4,650	12,905	26,142	30,683	35,200	40,857	47,183	54,282	62,052	70,645	80,076	90,380	101,596
Accumulated other comprehensive income (loss)	(512)	(67)	2	2	2	2	2	2	2	2	2	2	2
Total Marathon Petroleum Corporation stockholders' equity	23,167	27,171	28,683	33,136	37,567	43,136	49,375	56,386	64,069	72,574	81,917	92,134	103,263
Noncontrolling interests	7,053	6,410	6,404	5,534	5,271	5,649	6,701	8,466	10,980	14,286	18,426	23,445	29,391
Total equity	30,220	33,581	35,087	38,670	42,838	48,785	56,076	64,852	75,049	86,860	100,343	115,579	132,653
Total Liabilities, redeemable noncontrolling interest & equity	85,158	85,373	89,904	93,115	89,888	96,676	103,862	113,137	121,876	134,468	148,831	165,004	183,071

Marathon Petroleum Company
Historical Cash Flow Statement

Fiscal Years Ending Dec. 31	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Operating Activities												
Net income (loss)	2,389	3,393	2,133	2,555	2,868	1,213	3,804	3,606	3,255	(9,977)	11,001	16,050
Adjustments to reconcile net income to net cash provided by operating activities:												
Amortization of deferred financing costs & debt discount	-	-	-	-	-	61	64	70	33	69	79	50
Impairment expense	-	-	-	-	-	130	-	-	1,197	8,426	-	-
Depreciation & amortization	891	995	1,220	1,326	1,646	2,001	2,114	2,490	3,638	3,375	3,364	3,215
Inventory market valuation charge	-	-	-	-	370	(370)	-	-	-	-	-	-
Pension & other postretirement benefits, net	(90)	153	(124)	151	80	9	47	90	(64)	220	(499)	172
Deferred income taxes	123	492	23	(242)	134	394	(1,233)	47	1,023	(241)	(169)	290
Net loss (gain) on disposal of assets	(12)	(177)	(6)	(21)	(7)	(32)	(10)	(23)	(307)	(70)	(21)	(1,061)
Loss (income) from equity method investments	(2)	11	(18)	17	25	185	(306)	(373)	(394)	935	(458)	(655)
Distributions from equity method investment	-	-	-	-	-	291	388	519	662	577	652	772
Loss (income) from discontinued operations	-	-	-	-	-	-	-	-	-	(1,205)	(8,448)	(72)
Changes in income tax receivable	-	-	-	-	-	-	-	-	-	(1,807)	2,089	(555)
Net recognized losses (gains) on investments & derivatives	-	-	-	-	-	-	-	-	-	-	16	-
Changes in the fair value of derivative instruments	(57)	59	(21)	(3)	4	(41)	116	(62)	(8)	45	-	(147)
Current receivables	(1,164)	851	(940)	1,642	1,292	(674)	(1,093)	1,589	(2,024)	1,465	(5,299)	(2,315)
Inventories	(255)	(115)	(305)	(786)	80	(70)	106	931	(366)	1,750	(33)	(787)
Current accounts payable & accrued liabilities	1,544	(1,223)	1,464	(1,547)	(2,400)	985	2,814	(2,798)	2,502	(2,927)	6,260	1,909
Right of use assets & operating lease liabilities, net	-	-	-	-	-	-	-	-	14	(19)	3	-
Receivables from/payables to related parties	(55)	-	-	-	-	-	-	-	-	-	-	-
All other operating activities, net	(3)	53	(21)	18	(31)	(96)	(202)	72	280	191	(153)	(547)
Cash flows from operating activities - continuing operations	3,309	4,492	3,405	3,110	4,061	3,986	6,609	6,158	9,441	807	8,384	16,319
Cash flows from operating activities - discontinued operations	-	-	-	-	-	-	-	-	-	1,612	(4,024)	42
Net cash flows from operating activities	3,309	4,492	3,405	3,110	4,061	3,986	6,609	6,158	9,441	2,419	4,360	16,361
Investing Activities												
Additions to property, plant & equipment	(1,185)	(1,369)	(1,206)	(1,480)	(1,998)	(2,892)	(2,732)	(3,578)	(5,374)	(2,787)	(1,464)	(2,420)
Acquisitions, net of cash acquired	(74)	(190)	(1,515)	(2,821)	(1,218)	-	(249)	(3,822)	(129)	-	-	(413)
Disposal of assets	144	53	16	27	21	101	79	54	127	150	153	90
Investments in related party debt securities - purchases	(10,326)	-	-	-	-	-	-	-	-	-	-	-
Investments in related party debt securities - redemptions	12,730	-	-	-	-	-	-	-	-	-	-	-
Investments - acquisitions, loans & contributions	(56)	(57)	(151)	(413)	(331)	(288)	(805)	(409)	(1,064)	(485)	(210)	(405)
Investments - redemptions, repayments & return of capital	53	108	77	9	4	26	65	16	98	137	39	515
Purchases of short-term investments	-	-	-	-	-	-	-	-	-	-	(12,498)	(6,023)
Sales of short-term investments	-	-	-	-	-	-	-	-	-	-	1,544	1,296
Maturities of short-term investments	-	-	-	-	-	-	-	-	-	-	5,406	7,159
Investments - repayments of loans & return of capital	-	-	-	-	-	-	-	-	-	-	-	-
All other investing activities, net	9	3	23	135	81	112	248	69	81	63	513	824
Cash flows from investing activities - continuing operations	1,295	(1,452)	(2,756)	(4,543)	(3,441)	(2,941)	(3,394)	(7,670)	(6,261)	(2,922)	(6,517)	623
Cash flows from investing activities - discontinued operations	0	0	0	0	0	0	0	0	0	(335)	21,314	0
Net cash flows from investing activities	1,295	(1,452)	(2,756)	(4,543)	(3,441)	(2,941)	(3,394)	(7,670)	(6,261)	(3,257)	14,797	623
Financing Activities												
Commercial paper - issued	-	-	-	-	-	-	-	-	-	2,055	7,414	-
Commercial paper - repayments	-	-	-	-	-	-	-	-	-	(1,031)	(8,437)	-
Long-term debt payable to Marathon Oil Corporation & subsidiaries - borrowings	7,748	-	-	-	-	-	-	-	-	-	-	-
Long-term debt payable to Marathon Oil Corporation & subsidiaries - repayments	(11,366)	-	-	-	-	-	-	-	-	-	-	-
Commercial paper - issued	-	-	-	-	-	1,263	300	-	-	-	-	-
Commercial paper - repayments	-	-	-	-	-	(1,263)	(300)	-	-	-	-	-
Long-term debt - borrowings	2,989	-	-	3,793	2,993	864	2,911	13,476	14,274	17,082	12,150	3,379
Long-term debt - repayments	(12)	(17)	(21)	(548)	(2,226)	(2,269)	(642)	(8,032)	(13,073)	(15,380)	(17,400)	(2,280)
Debt issuance costs	(60)	(6)	(4)	(22)	(21)	(11)	(33)	(86)	(22)	(50)	-	(39)
Issuance of common stock	1	108	48	26	33	11	46	24	10	11	106	243
Common stock repurchased	-	(1,350)	(2,793)	(2,131)	(965)	(197)	(2,372)	(3,287)	(1,950)	-	(4,654)	(11,922)
Dividends paid	(160)	(407)	(484)	(524)	(613)	(719)	(773)	(954)	(1,398)	(1,510)	(1,484)	(1,279)
Issuance of MPLX LP common units	-	407	-	221	-	776	473	-	-	-	-	-
Issuance of MPLX LP redeemable preferred units	-	-	-	-	-	984	-	-	-	-	-	-
Distributions to noncontrolling interests	-	-	(21)	(27)	(40)	(542)	(694)	(903)	(1,245)	(1,244)	(1,449)	(1,214)
Contributions from noncontrolling interests	-	-	-	-	-	-	129	12	97	-	-	-
Repurchases of noncontrolling interests	-	-	-	-	-	-	-	-	-	(33)	(630)	(491)
Contributions from (distributions to) Marathon Oil Corporation	(783)	-	-	-	-	-	-	-	-	-	-	-
Tax settlement with Marathon Oil Corporation	-	-	39	-	-	-	-	-	-	-	-	-
Contingent consideration payment	-	-	-	(172)	(175)	(164)	(89)	-	-	-	-	-
All other financing activities, net	-	6	19	19	27	(18)	(47)	(28)	(69)	(35)	(35)	(44)
Net cash flows from financing activities	(1,643)	(1,259)	(3,217)	635	(987)	(1,285)	(1,091)	222	(3,376)	(135)	(14,419)	(13,647)
Net change in cash, cash equivalents & restricted cash	2,961	1,781	(2,568)	(798)	(367)	(240)	2,124	(1,290)	(196)	(973)	4,738	3,337
Cash, cash equivalents & restricted cash from continuing operations - beginning of year	118	3,079	4,860	2,292	1,494	1,127	887	3,015	1,725	1,395	416	5,294
Cash, cash equivalents & restricted cash balances - discontinued operations - beginning of year	-	-	-	-	-	-	-	-	-	134	140	-
Cash, cash equivalents & restricted cash balances - less: discontinued operations - end of year	-	-	-	-	-	-	-	-	-	140	-	-
Cash, cash equivalents & restricted cash from continuing operations - end of year	3,079	4,860	2,292	1,494	1,127	887	3,011	1,725	1,529	416	5,294	8,631

Marathon Petroleum Company
Forecasted Cash Flow Statement

Fiscal Years Ending Dec. 31	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Net Income (loss)	5,437	5,410	6,774	7,575	8,500	9,305	10,289	11,293	12,339	13,430
Depreciation	2,638	2,622	2,614	2,614	2,622	2,637	2,659	2,688	2,724	2,766
Changes in Deferred Income Tax	399	-2,877	-707	97	60	81	38	73	73	73
ROU Assets	7	4	0	-4	-7	-10	-13	-16	-19	-22
Adjustments to reconcile NI:										
Receivables	4,173	1,663	-196	-116	-168	-71	-156	-159	-162	-165
Receivables from related parties	0	0	0	0	0	0	0	0	0	0
Inventories	-1,942	1,925	-227	-134	-194	-82	-180	-184	-188	-191
Other current assets	192	175	-21	-12	-18	-7	-16	-17	-17	-17
Other noncurrent assets	1,198	337	-40	-23	-34	-14	-32	-32	-33	-33
Accounts payable	150	-2,764	326	192	279	117	259	264	269	275
Payables to related parties	0	0	0	0	0	0	0	0	0	0
Payroll & benefits payable	403	-245	29	17	25	10	23	23	24	24
Deferred credits & other liabilities	136	-257	30	18	26	11	24	25	25	26
Accrued taxes	299	-657	-161	22	14	19	9	17	17	17
Other current liabilities	113	-229	27	16	23	10	21	22	22	23
Accumulated Other Comprehensive Income	0	0	0	0	0	0	0	0	0	0
Consumer Excise Tax	0	0	0	0	0	0	0	0	0	0
Defined benefit postretirement plan obligations	-111	-111	-111	-111	-111	-111	-111	-111	-111	-111
Net Cash from Operating Activities	13,092	4,995	8,337	10,152	11,017	11,894	12,813	13,885	14,962	16,092
Capex	-2,420	-2,515	-2,614	-2,717	-2,824	-2,936	-3,051	-3,171	-3,296	-3,426
Short-term investments	-191	-202	-215	-228	-241	-256	-272	-288	-305	-324
Assets held for sale	0	0	0	0	0	0	0	0	0	0
Equity method investments	-576	-607	-640	-675	-712	-750	-791	-834	-879	-927
Goodwill	0	0	0	0	0	0	0	0	0	0
Liabilities held for sale	0	0	0	0	0	0	0	0	0	0
Net Cash From Investing Activities	-3,187	-3,325	-3,469	-3,620	-3,777	-3,942	-4,114	-4,293	-4,481	-4,677
Long-term debt	-1,691	-1,152	359	341	427	394	506	552	598	645
Long-term operating lease liabilities	3	-3	0	2	5	7	9	12	14	16
Debt due within one year	-66	901	1,049	-701	-249	-2,000	0	0	0	0
Repurchase of common stock	0	0	0	0	0	0	0	0	0	0
Issuance of Common Stock	1	1	1	1	1	1	1	1	1	1
Payment of Dividends	-897	-892	-1,117	-1,249	-1,402	-1,534	-1,697	-1,862	-2,035	-2,215
Noncontrolling Interest	-870	-263	378	1,053	1,764	2,515	3,306	4,140	5,019	5,946
Redeemable Non Controlling Interest	-88	-88	-88	-88	-88	-88	-88	-88	-88	-88
Operating lease liabilities	-8	-1	0	1	2	3	4	5	6	7
Net Cash From Financing Activities	-3,616	-1,497	582	-640	460	-702	2,040	2,758	3,515	4,312
Change in cash	6,290	173	5,450	5,891	7,699	7,250	10,740	12,350	13,996	15,727
Cash as the beginning of the year	8,625	14,915	15,088	20,538	26,429	34,128	41,378	52,118	64,468	78,464
Cash at end of year	14,915	15,088	20,538	26,429	34,128	41,378	52,118	64,468	78,464	94,191

Marathon Petroleum Company
Common Size Income Statement

<i>Fiscal Years Ending Dec. 31</i>	2020	2021	2022	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Sales & other operating revenue	101.08%	99.22%	98.61%	99.33%	99.23%	99.22%	99.20%	99.18%	99.16%	99.14%	99.12%	99.10%	99.08%
Sales to related parties	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Income (loss) from equity method investments	-1.35%	0.38%	0.36%	0.37%	0.48%	0.49%	0.51%	0.53%	0.55%	0.57%	0.59%	0.61%	0.63%
Net gain on disposal of assets	0.10%	0.02%	0.59%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other income	0.17%	0.39%	0.44%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%
Total revenues & other income	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cost of revenues	95.22%	90.97%	84.28%	87.55%	87.46%	87.45%	87.43%	87.42%	87.40%	87.38%	87.36%	87.35%	87.33%
Purchases from related parties	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Inventory market valuation charge	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Consumer excise taxes	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Impairment expense	12.21%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Depreciation & amortization	4.89%	2.78%	1.79%	1.71%	2.06%	2.01%	1.98%	1.94%	1.94%	1.91%	1.90%	1.89%	1.88%
Selling, general & administrative expenses	3.93%	2.10%	1.54%	2.55%	2.55%	2.55%	2.55%	2.55%	2.55%	2.54%	2.54%	2.54%	2.54%
Restructuring expenses	0.53%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other taxes	0.97%	0.60%	0.46%	0.63%	0.63%	0.63%	0.63%	0.63%	0.63%	0.63%	0.63%	0.63%	0.63%
Total costs & expenses	117.74%	96.44%	88.07%	92.44%	92.70%	92.63%	92.59%	92.54%	92.51%	92.47%	92.44%	92.41%	92.38%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Income (loss) from continuing operations	-17.74%	3.56%	11.93%	7.56%	7.30%	7.37%	7.41%	7.46%	7.49%	7.53%	7.56%	7.59%	7.62%
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Net interest & other financial income (costs)	-1.98%	-1.23%	-0.56%	-1.01%	-1.17%	-1.16%	-1.15%	-1.15%	-1.16%	-1.16%	-1.17%	-1.17%	-1.18%
Income (loss) from continuing operations before income taxes	-19.72%	2.33%	11.37%	6.55%	6.13%	6.21%	6.26%	6.31%	6.33%	6.37%	6.40%	6.42%	6.44%
Provision (benefit) for income taxes on continuing operations	-3.52%	0.22%	2.50%	2.41%	1.59%	1.23%	1.26%	1.26%	1.28%	1.27%	1.28%	1.29%	1.29%
Income (loss) from continuing operations, net of tax	-16.20%	2.11%	8.88%	4.14%	4.54%	4.98%	5.00%	5.05%	5.05%	5.09%	5.12%	5.14%	5.15%
Income from discontinued operations, net of tax	1.75%	6.99%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Net income (loss)	-14.45%	9.10%	8.92%	4.14%	4.54%	4.98%	5.00%	5.05%	5.05%	5.09%	5.12%	5.14%	5.15%
Redeemable noncontrolling interest	-0.12%	-0.08%	-0.05%	-0.06%	-0.07%	-0.07%	-0.07%	-0.07%	-0.06%	-0.06%	-0.06%	-0.06%	-0.06%
Noncontrolling interest	0.34%	-0.96%	-0.80%	-0.56%	-0.21%	0.29%	0.80%	1.31%	1.85%	2.38%	2.93%	3.48%	4.04%
Net income (loss) attributable to Marathon Petroleum Corporation	-14.23%	8.05%	8.07%	3.52%	4.26%	5.20%	5.73%	6.30%	6.83%	7.41%	7.98%	8.55%	9.13%

Marathon Petroleum Company
Common Size Balance Sheet

Fiscal Years Ending Dec. 31	2020	2021	2022	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Cash & cash equivalents	0.59%	4.41%	4.86%	9.72%	11.97%	15.89%	20.15%	25.49%	30.63%	37.86%	45.96%	54.89%	64.66%
Short-term investments	0.00%	4.62%	1.77%	2.17%	2.81%	2.90%	3.03%	3.15%	3.31%	3.45%	3.59%	3.74%	3.89%
Receivables	8.25%	9.20%	7.59%	6.06%	6.06%	6.06%	6.06%	6.06%	6.06%	6.06%	6.06%	6.06%	6.06%
Receivables from related parties	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Inventories	11.46%	6.71%	4.97%	7.02%	7.02%	7.02%	7.02%	7.02%	7.02%	7.02%	7.02%	7.02%	7.02%
Other current assets	3.90%	0.47%	0.66%	0.64%	0.64%	0.64%	0.64%	0.64%	0.64%	0.64%	0.64%	0.64%	0.64%
Assets held for sale	16.32%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total current assets	40.54%	25.42%	19.86%	25.61%	28.50%	32.51%	36.91%	42.36%	47.67%	55.03%	63.27%	72.35%	82.27%
Equity method investments	7.77%	4.51%	3.64%	4.59%	6.07%	6.41%	6.84%	7.23%	7.72%	8.15%	8.59%	9.05%	9.51%
Property, plant & equipment, net	55.94%	31.20%	20.09%	23.10%	28.04%	27.34%	27.02%	26.61%	26.60%	26.39%	26.24%	26.15%	26.12%
Goodwill	11.83%	6.88%	4.65%	5.37%	6.54%	6.38%	6.29%	6.16%	6.10%	5.99%	5.88%	5.77%	5.66%
Right of use assets	2.18%	1.14%	0.68%	0.79%	0.95%	0.93%	0.92%	0.91%	0.91%	0.90%	0.89%	0.89%	0.89%
Other noncurrent assets	3.78%	2.00%	1.74%	1.23%	1.23%	1.23%	1.23%	1.23%	1.23%	1.23%	1.23%	1.23%	1.23%
Total assets	122.04%	71.15%	50.66%	60.69%	71.34%	74.80%	79.19%	84.48%	90.23%	97.69%	106.10%	115.44%	125.68%
Accounts payable	11.18%	11.42%	8.63%	10.08%	10.08%	10.08%	10.08%	10.08%	10.08%	10.08%	10.08%	10.08%	10.08%
Payables to related parties	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Payroll & benefits payable	1.05%	0.76%	0.54%	0.89%	0.89%	0.89%	0.89%	0.89%	0.89%	0.89%	0.89%	0.89%	0.89%
Consumer excise taxes payable	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Accrued taxes	1.58%	1.03%	0.64%	0.94%	0.62%	0.48%	0.49%	0.49%	0.50%	0.50%	0.50%	0.50%	0.50%
Debt due within one year	4.09%	0.48%	0.60%	0.65%	1.51%	2.28%	1.71%	1.49%	0.00%	0.00%	0.00%	0.00%	0.00%
Operating lease liabilities	0.71%	0.37%	0.21%	0.23%	0.29%	0.28%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%
Other current liabilities	1.18%	0.87%	0.66%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%
Liabilities held for sale	2.65%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total current liabilities	22.45%	14.92%	11.28%	13.63%	14.22%	14.85%	14.28%	14.06%	12.58%	12.57%	12.57%	12.57%	12.57%
Long-term debt	41.17%	20.81%	14.45%	15.60%	18.09%	17.91%	17.91%	17.86%	18.00%	18.03%	18.09%	18.17%	18.27%
Deferred income taxes	8.89%	4.70%	3.33%	4.11%	2.72%	2.10%	2.15%	2.15%	2.19%	2.18%	2.19%	2.20%	2.21%
Defined benefit postretirement plan obligations	3.04%	0.85%	0.63%	0.65%	0.71%	0.60%	0.51%	0.42%	0.33%	0.24%	0.16%	0.08%	0.00%
Long-term operating lease liabilities	1.45%	0.77%	0.47%	0.55%	0.67%	0.65%	0.64%	0.63%	0.63%	0.63%	0.62%	0.62%	0.62%
Deferred credits & other liabilities	1.73%	1.12%	0.73%	0.94%	0.94%	0.94%	0.94%	0.94%	0.94%	0.94%	0.94%	0.94%	0.94%
Total liabilities	78.73%	43.17%	30.89%	35.48%	37.34%	37.06%	36.44%	36.06%	34.67%	34.59%	34.57%	34.58%	34.61%
Redeemable noncontrolling interest	1.39%	0.80%	0.55%	0.57%	0.63%	0.54%	0.47%	0.39%	0.33%	0.26%	0.19%	0.12%	0.06%
Common stock held in treasury, at cost	21.72%	16.59%	17.94%	20.75%	25.27%	24.64%	24.28%	23.78%	23.57%	23.13%	22.70%	22.28%	21.86%
Additional paid-in capital & common stock	47.60%	27.73%	18.83%	21.78%	26.52%	25.85%	25.48%	24.95%	24.74%	24.28%	23.82%	23.38%	22.94%
Retained earnings	6.66%	10.76%	14.73%	20.00%	27.94%	31.61%	35.98%	40.53%	45.94%	51.32%	57.09%	63.23%	69.75%
Accumulated other comprehensive income (loss)	-0.73%	-0.06%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Marathon Petroleum Corporation stockholders' equity	33.20%	22.65%	16.16%	21.60%	29.81%	33.38%	37.65%	42.11%	47.43%	52.72%	58.40%	64.46%	70.89%
Noncontrolling interests	10.11%	5.34%	3.61%	3.61%	4.18%	4.37%	5.11%	6.32%	8.13%	10.38%	13.14%	16.40%	20.18%
Total equity	43.31%	27.99%	19.77%	25.20%	34.00%	37.75%	42.76%	48.43%	55.56%	63.10%	71.54%	80.86%	91.07%

Marathon Petroleum Company
Value Driver Estimation

Fiscal Years Ending Dec. 31	2020	2021	2022	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
NOPLAT:													
Sales & other operating revenue	69,779	119,983	177,453	153,432	126,007	129,241	131,150	133,915	135,080	137,648	140,268	142,940	145,666
Sales to related parties	-	-	-	-	-	-	-	-	-	-	-	-	-
Cost of revenues	65,733	110,008	151,671	135,236	111,063	113,914	115,596	118,033	119,060	121,324	123,633	125,989	128,391
Purchases from related parties	-	-	-	-	-	-	-	-	-	-	-	-	-
Consumer excise taxes	-	-	-	-	-	-	-	-	-	-	-	-	-
Depreciation & amortization	3,375	3,364	3,215	2,638	2,622	2,614	2,614	2,622	2,637	2,659	2,688	2,724	2,766
Selling, general & administrative expenses	2,710	2,537	2,772	3,939	3,235	3,318	3,367	3,438	3,468	3,533	3,601	3,669	3,739
Other taxes	668	721	825	978	803	824	836	853	861	877	894	911	928
Add: Imputed Interest of Operating Lease	132	82	74	65	65	65	65	65	65	66	66	67	68
EBITA	(2,707)	3,353	18,970	10,641	8,284	8,572	8,737	8,969	9,054	9,255	9,452	9,648	9,841
Less Adjusted Taxes													
Tax Provision	(2,430)	264	4,491	3,720	2,022	1,605	1,662	1,698	1,746	1,768	1,811	1,854	1,897
Add Tax shield on PV of Operating Lease	23	14	13	11	11	11	11	11	11	11	12	12	12
Add Tax shield from Inv. Market Val. Charge	-	-	-	-	-	-	-	-	-	-	-	-	-
Add Tax shield from Impairment Expense	585	583	557	457	454	453	453	454	457	461	466	472	479
Add Tax on Net Interest and Other Income	(236)	(257)	(173)	(270)	(257)	(261)	(265)	(269)	(274)	(279)	(286)	(292)	(300)
Add Tax shield for restructuring expense	64	-	-	-	-	-	-	-	-	-	-	-	-
Less: Income from Equity Method Inv.	(162)	79	113	100	105	111	117	123	130	137	144	152	161
Less: Other income	20	81	136	79	65	66	67	69	69	71	72	73	75
Less: Gain on Disposal of Assets	12	4	184	-	-	-	-	-	-	-	-	-	-
Total Adjusted Taxes	(1,889)	426	4,442	3,729	2,050	1,620	1,666	1,691	1,730	1,742	1,775	1,808	1,841
Add: Changes in Deferred Taxes	(241)	(169)	290	399	(2,877)	(707)	97	60	81	38	73	73	73
NOPLAT	(1,059)	2,758	14,818	7,312	3,357	6,245	7,167	7,338	7,406	7,551	7,751	7,913	8,073
Invested Capital (IC):													
Net Operating Working Capital													
Operating Current Assets													
Normal Cash	5	65	106	182	185	251	323	418	506	638	789	960	1,152
Receivables	5,760	11,034	13,477	9,304	7,641	7,837	7,953	8,121	8,191	8,347	8,506	8,668	8,833
Receivables from related parties	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Current Assets	2,724	568	1,168	976	802	822	835	852	860	876	893	910	927
Inventories	7,999	8,055	8,827	10,769	8,844	9,071	9,205	9,400	9,481	9,662	9,845	10,033	10,224
Total Operating Current Assets	16,488	19,722	23,578	21,232	17,472	17,982	18,316	18,790	19,038	19,522	20,033	20,571	21,137
Operating Current Liabilities													
Accounts Payable	7,803	13,700	15,312	15,462	12,699	13,025	13,217	13,496	13,613	13,872	14,136	14,405	14,680
Payables to related parties	-	-	-	-	-	-	-	-	-	-	-	-	-
Payroll & benefits payable	732	911	967	1,370	1,125	1,154	1,171	1,196	1,206	1,229	1,253	1,276	1,301
Consumer Excise Taxes Payable	-	-	-	-	-	-	-	-	-	-	-	-	-
Accrued Taxes	1,105	1,231	1,140	1,439	782	621	643	657	675	684	701	717	734
Total Operating Current Liabilities	9,640	15,842	17,419	18,272	14,606	14,800	15,031	15,348	15,495	15,785	16,089	16,399	16,714
Net Operating Working Capital	6,848	3,880	6,159	2,961	2,866	3,183	3,285	3,442	3,544	3,737	3,944	4,172	4,422
Net: PPE	39,035	37,440	35,657	35,439	35,332	35,332	35,435	35,638	35,937	36,329	36,812	37,385	38,045
Other Operating Assets													
ROU Assets	1,521	1,372	1,214	1,207	1,203	1,203	1,206	1,213	1,224	1,237	1,253	1,273	1,295
Other Operating Liabilities													
Deferred Credits and Other Liabilities	1,207	1,346	1,304	1,440	1,182	1,213	1,231	1,256	1,267	1,292	1,316	1,341	1,367
INVESTED CAPITAL	48,611	44,038	41,726	38,167	38,219	38,505	38,697	39,036	39,437	40,012	40,693	41,488	42,396
Free Cash Flow (FCF):													
NOPLAT	(1,059)	2,758	14,818	7,312	3,357	6,245	7,167	7,338	7,406	7,551	7,751	7,913	8,073
Change in IC	(5,455)	(4,573)	(2,312)	(3,559)	52	287	191	340	400	575	682	795	908
FCF	4,395	7,332	17,130	10,871	3,305	5,958	6,976	6,998	7,006	6,976	7,069	7,118	7,165
Return on Invested Capital (ROIC):													
NOPLAT	(1,059)	2,758	14,818	7,312	3,357	6,245	7,167	7,338	7,406	7,551	7,751	7,913	8,073
Beginning IC	54,066	48,611	44,038	41,726	38,167	38,219	38,505	38,697	39,036	39,437	40,012	40,693	41,488
ROIC	-2%	6%	33.65%	17.52%	8.80%	16.34%	18.61%	18.96%	18.97%	19.15%	19.37%	19.45%	19.46%
Economic Profit (EP):													
Beginning IC	54,066	48,611	44,038	41,726	38,167	38,219	38,505	38,697	39,036	39,437	40,012	40,693	41,488
x (ROIC - WACC)	(0)	(0)	22.96%	6.84%	-1.89%	5.65%	7.93%	8.28%	8.29%	8.46%	8.69%	8.76%	8.77%
EP	(6,836)	(2,436)	10,113	2,854	(721)	2,161	3,053	3,203	3,235	3,337	3,475	3,565	3,640

Weighted Average Cost of Capital (WACC) Estimation

Cost of Equity:

Risk-Free Rate	4.78%
Beta	1.56
Equity Risk Premium	5.00%
Cost of Equity	12.58%

ASSUMPTIONS:

10/6/2023 10Y Treasury
5Y monthly Beta
HF ERP estimate

Cost of Debt:

Risk-Free Rate	4.78%
Implied Default Premium	1.72%
Pre-Tax Cost of Debt	6.50%
Marginal Tax Rate	17%
After-Tax Cost of Debt	5.37%

Senior Note, 6.5% due March 2041

Market Value of Common Equity:

Total Shares Outstanding	512
Current Stock Price	\$143.18
MV of Equity	73,308.16

MV Weights

73.71%

Market Value of Debt:

Short-Term Debt	-
Current Portion of LTD	1,000
Long-Term Debt	23,943
PV of Operating Leases	1,207
MV of Total Debt	26,149.67

26.29%

Market Value of the Firm

99,457.83

100.00%

Estimated WACC

10.69%

Fiscal Years Ending Dec. 31

2023E 2024E 2025E 2026E 2027E 2028E 2029E 2030E 2031E

DCF Model:

Free Cash Flow (FCF)	10,871	3,305	5,958	6,976	6,998	7,006	6,976	7,069	7,118
Continuing Value (CV)									
PV of FCF	9,821	2,698	4,394	4,648	4,212	3,810	3,427	3,138	2,855
Value of Operating Assets:	73,475								
Non-Operating Adjustments:									
Excess Cash	14,732								
ROU Liability	(1,207)								
Short Term Investments	3,336								
Long Term Debt	(23,943)								
Defined Benefit Postretirement Obligation	(1,003)								
Other Non-Current Assets	976								
Other Current Assets	1,883								
Debt due within One Year	1,000								
Deferred Credits and Other Liabilities	(1,440)								
ESOP	239								
Redeemable Non-Controlling Interest	(880)								
Equity Method Investments	7,042								
Value of Equity	74,212								
Shares Outstanding	512.0								
Intrinsic Value of Last FYE	\$ 144.95								
Implied Price as of Today	\$ 156.29								

EP Model:

Economic Profit (EP)	2853.5	-720.9	2161.1	3053.0	3203.2	3234.8	3336.7	3475.3	3564.7
Continuing Value (CV)									
PV of EP	2578.1	-588.5	1593.7	2034.0	1928.1	1759.2	1639.4	1542.7	1429.6
Total PV of EP	31749.7								
Invested Capital (last FYE)	41725.5								
Value of Operating Assets:	73475.2								
Non-Operating Adjustments:									
Excess Cash	14732								
ROU Liability	-1207								
Short Term Investments	3336								
Long Term Debt	-23943								
Defined Benefit Postretirement Obligation	-1003								
Other Non-Current Assets	976								
Other Current Assets	1883								
Debt due within One Year	1000								
Deferred Credits and Other Liabilities	-1440								
ESOP	239								
Redeemable Non-Controlling Interest	-880								
Equity Method Investments	7042								
Value of Equity	74212								
Shares Outstanding	512								
Intrinsic Value of Last FYE	\$ 144.95								
Implied Price as of Today	\$ 156.29								

Marathon Petroleum Company*Dividend Discount Model (DDM) or Fundamental P/E Valuation Model*

Fiscal Years Ending Dec. 31	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
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EPS	\$ 10.62	\$ 10.57	\$ 13.23	\$ 14.80	\$ 16.60	\$ 18.17	\$ 20.10	\$ 22.06	\$ 24.10	\$ 26.23
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Key Assumptions

CV growth of EPS	2.50%
CV Year ROE	33.00%
Cost of Equity	12.58%

Future Cash Flows

P/E Multiple (CV Year)										9.17
EPS (CV Year)										\$ 26.23
Future Stock Price										\$ 240.52
Dividends Per Share	1.75	1.74	2.18	2.44	2.74	3.00	3.31	3.64	3.97	
Discounted Cash Flows	1.56	1.37	1.53	1.52	1.51	1.47	1.45	1.41	1.37	\$ 82.79

Intrinsic Value as of Last FYE	\$ 95.98
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Implied Price as of Today	\$ 103.49
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Marathon Petroleum Company

Relative Valuation Models

Ticker	Company	Price	EPS	EPS	P/E 23	P/E 24
			2023E	2024E		
PSX	Phillips 66	\$109.19	\$15.99	\$13.35	6.83	8.18
VLO	Valero Energy	\$126.53	\$25.33	\$14.80	5.00	8.55
CVI	CVR Energy	\$30.68	\$5.90	\$3.17	5.20	9.68
DINO	HF Sinclair	\$52.07	\$9.93	\$6.88	5.24	7.57
PARR	Par Pacific Holdings	\$32.48	\$8.74	\$4.86	3.72	6.68
Average					5.57	8.49

MPC	Marathon Petroleum Company	\$143.18	\$10.62	\$10.57	13.5	13.6
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Implied Relative Value:

P/E (EPS23)	\$ 59.12
P/E (EPS24)	\$ 89.74

Marathon Petroleum Company
Present Value of Operating Lease Obligations

Fiscal Years Ending Dec. 31	2011	2012	2013	2014	2015	2016	2017	2018	2019
Year 1	141.0	151.0	191.0	249.0	282.0	254.0	255.0	709.0	698.0
Year 2	130.0	137.0	184.0	209.0	212.0	211.0	224.0	619.0	590.0
Year 3	117.0	117.0	152.0	150.0	186.0	198.0	205.0	553.0	402.0
Year 4	107.0	80.0	106.0	136.0	161.0	188.0	177.0	389.0	287.0
Year 5	67.0	49.0	95.0	114.0	138.0	170.0	152.0	295.0	222.0
Thereafter	101.0	78.0	241.0	468.0	475.0	569.0	463.0	858.0	634.0
Total Minimum Payments	663.0	612.0	969.0	1326.0	1454.0	1590.0	1476.0	3423.0	2833.0
Less: Cumulative Interest	118.9	102.1	192.4	303.2	320.5	368.6	322.9	681.6	529.2
PV of Minimum Payments	544.1	509.9	776.6	1022.8	1133.5	1221.4	1153.1	2741.4	2303.8
Implied Interest in Year 1 Payment		35.4	33.1	50.5	66.5	73.7	79.4	75.0	178.2
Pre-Tax Cost of Debt	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%
Years Implied by Year 6 Payment	1.5	1.6	2.5	4.1	3.4	3.3	3.0	2.9	2.9
Expected Obligation in Year 6 & Beyond	67	49	95	114	138	170	152	295	222
Present Value of Lease Payments									
PV of Year 1	132.4	141.8	179.3	233.8	264.8	238.5	239.4	665.7	655.4
PV of Year 2	114.6	120.8	162.2	184.3	186.9	186.0	197.5	545.7	520.2
PV of Year 3	96.9	96.9	125.8	124.2	154.0	163.9	169.7	457.8	332.8
PV of Year 4	83.2	62.2	82.4	105.7	125.1	146.1	137.6	302.4	223.1
PV of Year 5	48.9	35.8	69.3	83.2	100.7	124.1	110.9	215.3	162.0
PV of 6 & beyond	68.1	52.5	157.5	291.6	302.0	362.8	297.9	554.4	410.3
Capitalized PV of Payments	544.1	509.9	776.6	1022.8	1133.5	1221.4	1153.1	2741.4	2303.8

Marathon Petroleum Company

Effects of ESOP Exercise and Share Repurchases on Common Stock Account and Number of Shares Outstanding

Number of Options Outstanding (shares): 2,489,234
Average Time to Maturity (years): 0.20
Expected Annual Number of Options Exercised: 12,446,170

Current Average Strike Price: \$ 46.78
Cost of Equity: 12.58%
Current Stock Price: \$143.18

Fiscal Years Ending Dec. 31	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Increase in Shares Outstanding:	124	124	124	124	124	124	124	124	124	124
Average Strike Price:	\$ 46.78	\$ 46.78	\$ 46.78	\$ 46.78	\$ 46.78	\$ 46.78	\$ 46.78	\$ 46.78	\$ 46.78	\$ 46.78
Increase in Common Stock Account:	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58
Share Repurchases (\$)	0	0	0	0	0	0	0	0	0	0
Expected Price of Repurchased Shares:	\$ 143.18	\$ 157.96	\$ 174.26	\$ 192.24	\$ 212.08	\$ 233.97	\$ 258.11	\$ 284.75	\$ 314.14	\$ 346.55
Number of Shares Repurchased:	-	-	-	-	-	-	-	-	-	-
Shares Outstanding (beginning of the year)	500	624	749	873	998	1,122	1,247	1,371	1,496	1,620
Plus: Shares Issued Through ESOP	124	124	124	124	124	124	124	124	124	124
Less: Shares Repurchased in Treasury	-	-	-	-	-	-	-	-	-	-
Shares Outstanding (end of the year)	624	749	873	998	1,122	1,247	1,371	1,496	1,620	1,745

Marathon Petroleum Company*Valuation of Options Granted under ESOP*

Current Stock Price	\$143.18
Risk Free Rate	4.78%
Current Dividend Yield	2.26%
Annualized St. Dev. of Stock Returns	31.04%

Range of Outstanding Options	Number of Shares	Average Exercise Price	Average Remaining Life (yrs)	B-S Option Price	Value of Options Granted
Range 1	2,489,234	46.78	0.20	\$ 96.20	\$ 239,462,749
Total	2,489,234	\$ 46.78	0.20	\$ 96.85	\$ 239,462,749

Key Management Ratios

[illegible]