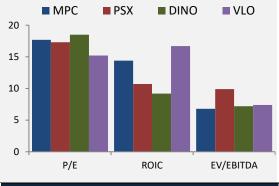


Marathon Petroleum Corporation (MPC)

Energy – Refining & Marketing and Midstream

		October 20, 2024
	Stock Rating	HOLD
	Target Price	\$155-162
	Henry Fund DCF	\$155
Marathon hs having argins. We eers, aided to return rchases to	Henry Fund DDM	\$93
	Relative Multiple	\$162
	Price Data	
	Current Price	\$158.30
	52wk Range	\$140.97 – 221.11
	Consensus 1yr Target	\$175.50
	Key Statistics	
	Market Cap (B)	\$54,695.26
per barrel	Shares Outstanding (M)	\$349
	Institutional Ownership	76.04%
2.5 Bcf/d	Beta	1.63
es to their	Dividend Yield	2.03%
	Est. 5yr Growth	-3.07%
	Price/Earnings (TTM)	6.30
rom ULSD	Price/Earnings (FY1)	17.80
of their	Price/Sales (TTM)	0.40
	Price/Book (mrq)	2.40
	Profitability	
	Operating Margin	5 69%

Operating Margin	5.69%
Profit Margin	4.83%
Return on Assets (TTM)	7.51%
Return on Equity (TTM)	28.93%



Company Description

Headquartered in Findlay, Ohio, Marathon Petroleum Corporation (MPC) is the largest downstream energy company in the United States. They currently have a capacity just shy of 3 million barrels per day across their 13 refineries. The company's operations include the refining, marketing and transporting of petroleum products. MPC compliments its downstream operations with MPLX, a master limited partnership that possesses pipelines, terminals and storage facilities.

We recommend a HOLD rating with a target price of \$155-\$162 for Marathon Petroleum Corporation. MPC maintains streamlined operations having experienced a 100% capture rate in 2023 with industry leading margins. We expect MPC will continue to capitalize on spreads better than their peers, aided by competitive price differentials on sour crude. MPC will continue to return significant capital back to shareholders, however, we expect repurchases to normalize in the coming quarters.

Investment Thesis

Drivers of Thesis

- Price differentials on sour crude that are forecasted to be -\$5.16 per barrel for MPC in 2025 offer a competitive edge over peers.
- MPC is growing and diversifying their midstream segment with a 2.5 Bcf/d pipeline that is set to be operational in 2026, adding 365 miles to their existing 16,000 miles.
- We forecast distillate production growth of 14.5% in 2025 from ULSD refining capacity expansions which currently comprise 32% of their revenues.

Risks to Thesis

- A narrowing of gulf coast or mid-continent crack spreads or price differentials would negatively impact margins.
- Oversupply of refined products from downstream players following a record turnaround quarter in the first quarter of 2024 would drive down prices for refined products.
- Geopolitical tensions may still have the capacity to influence the price of feedstock inputs and further narrow spreads.

Earnings Estimates							
Year	2021	2022	2023	2024E	2025E	2026E	
EPS	\$15.36	\$28.35	\$23.79	\$9.64	\$10.01	\$11.01	
HF est.				\$9.58	\$9.77	\$13.08	
Growth		84.6%	-16.1%	-63.7%	3.8%	9.9%	
				001770	0.070	0.070	



Important disclosures appear on the last page of this report.



COMPANY DESCRIPTION

Marathon Petroleum Corporation (MPC) stands at the forefront of the downstream energy industry in the United States, having been active in the sector for over 135 years. Possessing one of the nations largest refining operations, MPC has a refining capacity of roughly 3 million barrels per day (bpd) of feedstock₁ in 2023, representing roughly 16% of the nation's total refining capacity. With regards to distribution, MPC operates one of the largest and longest standing networks of terminals that store and distribute fuels to different markets. Moreover, MPC operates a substantial private fleet of barges that transport products via different waterways. MPC's operations fall under two integrated segments, Refining & Marketing and their supporting Midstream segment – the former representing their primary revenue driver. The following chart represents their 2023 revenue distribution from each of the aforementioned segments:



Source: 2023 Marathon Petroleum 10-K

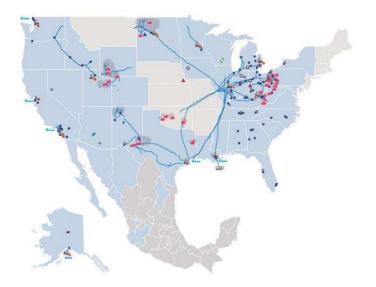
Refining & Marketing

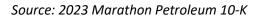
Refining and marketing represents the bulk of MPC's operations where they process different feedstocks at its refineries into petroleum products such as diesel, gasoline and jet fuel. MPC only holds refining operations in the US and are distributed across the Gulf Coast, Mid-Continent and West Coast. In 2023, MPC's refineries processed an average of 2,677 thousand barrels per calendar day (mbpcd) of crude oil and an additional 237 mbpd of other feedstocks and blendstocks₁. Other feedstocks can include natural gas liquids like butane, propane and ethane for petrochemical production and blendstocks are components added to base fuels for modification or enhancement of the final product (examples would be oxygenates and isomerate which are used to improve



combustion efficiency and improve gasoline quality, respectively). They utilize a variety of refining techniques such as atmospheric and vacuum distillation, fluid catalytic cracking, coking, and desulfurization. MPC's products cover a wide range of fuels that include transportation fuels, heavy fuel oil, asphalt, natural gas liquids, petrochemicals and propane. MPC has focused on optimizing refining operations through a high level of integration among refineries using pipelines, terminals and barges that facilitate the sharing of intermediate products amongst different refineries.

MPC's Operations





Gulf Coast Region:

MPC's operations in the Gulf Coast revolve around two refineries: the Garyville refinery in Louisiana and the Galveston Bay refinery which is a combination of a former refinery in in Texas City, Texas and the newer Galveston Bay refinery in Houston, Texas. Together, the two refineries' possess a refining capacity of 1,228 mbpcd with the latter Galveston refinery representing their largest refinery that alone has the capacity to process 621 mbpcd₁. The Galveston refinery benefits from accessibility to export markets, multiple sales channels as well as power from a cogeneration facility that has a capacity of 1,055 megawatts (MW) of electrical production that produces 4.3 million pounds of steam per hour₁. In 2023, the refinery used 49% of the generated power and the remainder was sold to the grid; the generated steam is crucial for refinery operations as it aids with heating,



distillation and chemical reactions. The Garyville refinery also possesses substantial output capacity at 597 mbpcd as of 2023 and is situated strategically on the Mississippi river which grants it access to one of the most important commercial waterways and cost-effective shipping. Their proximity to crude oil supplies in the Gulf of Mexico, which account for 15%-20% of total U.S. crude oil production, also allows them to source oil without high transportation costs and significant supply lines.

Mid-Continent Region:

MPC's mid-continent region is comprised of eight refineries that together offer a combined refining capacity of 1,170 mbpcd₁. The eight refineries are located in Kentucky, Illinois, Michigan, Texas, Minnesota, Ohio, North Dakota, and Utah, and process a variety of crude oils such as sweet, sour, and heavy sour types. Some refineries focus on specific feedstocks and products such as the Catlettsburg, Kentucky refinery and the Canton, Ohio refinery, both of which leverage sweet and sour crude oil from Utica Shale nearby due to improved accessibility to regional resources. Additionally, the Mandan, North Dakota refinery predominantly refines sweet crude from the nearby Bakken Shale region. Some refineries also benefit from their placement close to major waterways such as Catlettsburg and the St. Paul Park, Minnesota refineries' proximity to the Ohio and Mississippi rivers. The table below aggregates the individual production capacities of each of the refineries:

Refinery	mbpcd
Catlettsburg, Kentucky Refinery	300
Robinson, Illinois Refinery	253
Detroit, Michigan Refinery	140
El Paso, Texas Refinery	133
St. Paul Park, Minnesota Refinery	105
Canton, Ohio Refinery	100
Mandan, North Dakota Refinery	71
Salt Lake City, Utah Refinery	68
Total	1170

Source: 2023 Marathon Petroleum 10-K

West Coast Region:

MPC's West Coast region is comprised of three refineries that offer a refining capacity of 554 mbpcd. The largest West Coast refinery is the Los Angeles refinery by the Los Angeles Harbor and possesses a refining capacity of 365



mbpcd₁. The Los Angeles refinery also produces California Air Resources Board (CARB) fuels which are differentiated from traditional fuels in their formulations that are designed specifically to reduce air pollutants. The fuels are cleaner burning due to their lower emissions of compounds such as Volatile Organic Compounds (VOCs), Nitrogen Oxides (NOx) and Particulate Matter (PM) that have been known to present harmful effects in humans. The Los Angeles refinery sources it's crude from the San Joaquin Valley, Los Angeles Basin, as well as internationally from West Africa and South America. The Anacortes refinery in Washington maintains a production capacity of 119 mbpcd and is situated on Puget Sound (north of Seattle) and sources its crude oil from Canada, North Dakota and the Alaska North Slope. Finally, the Kenai refinery posseses a capacity of 68 mbpcd and is located on the Cook Inlet southwest of Anchorage; the Kenai refinery primarily sources its oil from Alaska and North Dakota.

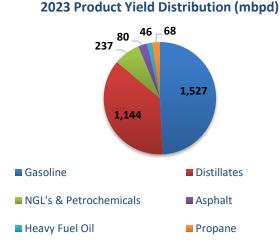
Refined Product Yields:

The products MPC refines in the largest quantities are gasoline and distillates. The former representing a lighter fuel used by cars and vehicles with spark-ignition engines, and the latter representing heavier fuels (not to be confused with heavy fuel oils) that are commonly used in diesel engines and heating systems. Gasoline yields increased 2.1% to 1526 mbpd in 2023 and we forecast a continued growth of 2.8% in 2024 followed by 17.8% in 2025 due to increased throughput from the high recent turnaround activity, which in the first quarter of 2024, reached a record high of \$648 million worth of activity1. Turnaround activity refers to the planned maintenance and upgrades of facilities and throughput represents the volume of crude oil that they process in a given time period.

Distillates production yields saw a 3% decline in 2023, we however, forecast much stronger production going forward with a 19% increase in yield in 2027. MPC has disclosed \$475 million of growth capital will contribute to a project to upgrade high sulfur distillate to ultra-low sulfur diesel (ULSD) and maximize distillate volume expansion primarily at the Galveston Bay refinery₁. A primary tailwind for this growth is the growing market demand for ULSD due to its cleaner burning properties. The Henry Fund believes reasons for the recent 3% drop in distillate yields can more-so be attributed sluggish demand due to a temporary slump in manufacturing activity and mild winter in 2023 which require diesel and heating fuel



respectively. Together, gasoline and distillates comprise 86% of total production yields, which is typical of refiners as they are in the highest demand and offer significant profitability; the chart below highlights the distribution of all the products in 2023:



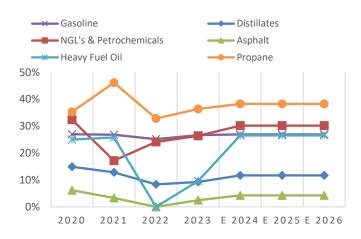
Source: 2023 Marathon Petroleum 10-K

Refined Product Sales:

MPC maintains a broad customer base for their refined products that include independent retailers, wholesale customers, direct retailers, brand jobbers and international customers. As of December 31, 2023, MPC maintained 7,217 brand jobber outlets (brand jobbers are independent businesses who buy MPC's refined products and sell them through MPC branded retail outlets) across 39 states₁. Additionally, under the ARCO brand, MPC maintains long-term supply contacts for 1,114 independently owned gas stations in Southern California. It is key to note that product sales volumes tend to be larger than production yield volumes, the differences attributed to third party purchases and resales to optimize logistics related to transportation and delivery times, maintain operational flexibility and optimize inventories. Notably, propane has been purchased the most as a percentage of MPC's own production yields, sitting at roughly 35% of yields, which we believe is the result of the fuels diverse and unrelated sectors that it serves that contributes to variable demand. Historically, purchased products have remained relatively consistent as a proportion of product yields and we forecast this trend will remain relative constant - the chart below highlights MPC's forecasted purchased product's as a proportion of vields.



MPC's Purchased Products as a % of Yields



Source: 2023 Marathon Petroleum 10-K

Midstream

MPLX

MPC's refining and marketing operations are aided by a midstream segment master limited partnership (MLP), MPLX, that offers crucial infrastructure and logistical assistance. MPC possesses a controlling interest in MPLX, owning 65% of the outstanding MPLX common units and owns the general partner of MPLX, MPLX GP LLC. Through MPLX, MPC manages an large network pipelines for crude oil, natural gas and other refined products. MPLX also operates multiple light product terminals, storage assets and a fleet of owned and leased towboats and barges that assist distribution efforts. MPLX also aids in integrating MPC's supply chain by offering natural gas gathering systems and NGL fractionation complexes (facilities that separated mixed NGL into individual components such as propane, butane and ethane).

MPC-Retained Midstream Assets and Investments

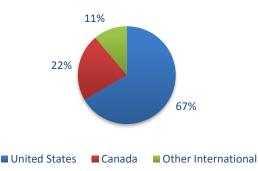
In addition to MPLX, MPC controls four Jones Act product tankers. The Jones Act, formally known as the Merchant Marine Act of 1920, necessitates that all domestic maritime transport by on US built and crewed vessels; such strict requirements offers a competitive advantage as not all downstream competitors own such vessels and opt to charter them. These assets decrease the need for third party reliance, increases the predictability of the supply chain and improves operational flexibility.



Cost Structure

MPC's primary costs relate to their feedstock, refining operations and distribution – all of which are aggregated in their "cost of revenues". Additionally, purchases from related parties, while not comparatively significant, are also included in the line item. Cost of revenues historically represented roughly 92% of total costs as feedstock represent a bulk of expenses. As gasoline and distillate represent the largest categories of refined products, MPC sources crude oil primarily through relatively consistent term contracts from the following regions:

2023 Crude Oil Supply



Source: 2023 Marathon Petroleum 10-K

MPC, a downstream player, profits from the crack spread, or difference, between the market price of feedstock and the price of refined products. Each marketing and refining segment processes different feedstock depending on the technology in the location. The following table depicts the crack spreads from each of the different locations (3-2-1 refers to the average crack spread derived from 3 barrels of crude that are refined into 2 barrels of gasoline and 1 barrel of distillate).

MPC Crack Spreads

Location	2020	2021	2022	2023
Mid-Continent 3-2-1	\$5.34	\$10.95	\$26.93	\$18.61
Gulf Coast 3-2-1	\$3.77	\$8.89	\$22.17	\$17.49
West Coast 3-2-1	\$9.26	\$13.80	\$34.91	\$30.11
Blended 3-2-1	\$5.64	\$10.70	\$26.62	\$20.46

Source: 2023 Marathon Petroleum 10-K

It is key to note that overall refining margins are not one to one with crack spreads as they must account for price differentials and operating costs. Price differentials refer to MPC's purchase of crude oil for discounts relative to crude oil prices referenced in the aforementioned crack

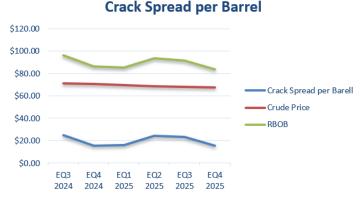


spreads, more negative differentials insinuating heavier discounts. While the reasons for the discounts are not disclosed, the Henry Fund believes they will continue at an average of \$-0.45 and \$-5.15 per gallon for sweet and sour crude respectively; the table below highlights past price differentials:

Crude Oil Differentials	2020	2021	2022	2023
Sweet	-\$1.07	-\$0.47	\$0.21	-\$0.48
Sour	-\$3.45	-\$4.05	-\$6.81	-\$6.31

Source: 2023 Marathon Petroleum 10-K

Sour crude trades at a heavier discount because it is more complex to refine due to its higher sulfur content, and we believe MPC will continue to benefit from their advanced processing capacity as indicated by their high Nelson Complexity Index (NCI) scores (NCI scores track a refineries ability to process heavier, sourer crude oils). A NCI score over 10 is considered high amongst its peers, and MPC's Garyville refinery in Louisiana, for example, has an NCI score of 13.1. As a result, relative to other players in the downstream industry, we forecast higher margins despite similar crack spreads due to cheaper sour input costs which yield 37% of their refined products (distillates). The table below highlights our forecast for crack spreads per 42 gallons processed over the next six quarters using RBOB gasoline futures (which represent a benchmark for gasoline prices in the US) and crude oil futures as proxies for input and output prices:



Source: CME Group

Throughout the latter half of 2024, the price of crude oil has remained relatively consistent, trading within a band of \$68-\$78 which we believe will persist; as a result, we forecast much of the variability in crack spreads to be the result of product prices rather than input costs. Overall, we believe cost of revenues will increase by 10% in 2025,



primarily due to increases in gasoline and distillate production from upcoming capacity expansions in the Detroit and Galveston Bay refineries.

Debt Maturity Analysis

In 2023, MPC took part in substantial debt management activities through its midstream subsidiary MPLX. In February of 2023, MPLX issued \$1.6 billion in senior notes with \$1.1 billion in 5.00% notes due in 2033 and \$500 million in 5.65% notes due in 2053₁. The funds were primarily used to redeem current outstanding debt with \$600 million going towards all outstanding series B preferred units and the remaining towards redeeming \$1.0 billion of 4.5% senior notes from MPLX and MarkWest, which is an independent midstream player turned subsidiary of MPLX. MPC's debt maturity schedule as of December 31, 2023, includes significant obligations over the next five years as reflected in the following table:

Year	Payment (Millions of dollars)
2024	\$1,901
2025	\$2,950
2026	\$2,249
2027	\$2,000
2028	\$1,750

Source: 2023 Marathon Petroleum 10-K

Though MPC possesses a substantial concentration of debt maturing in 2025, they also posses strong cash reserves following their sale of Speedway in 2021. Nonetheless, as much of the cash from the sale was allotted to share repurchase programs, with an average of \$2-\$3 billion in repurchases per quarter, we anticipate further refinancing plans in the near term. As of February 1st, 2024, MPC maintained a BBB credit rating from S&P and a Baa2 credit rating from Moody's₃ which we do not anticipate will change so long as cash balances remain strong and repurchases normalize in line with historical trends. MPC's operating cash flows in 2023 were \$14 billion, which amounts to roughly half of the total amount of debt outstanding, which we believe to be a positive financial indicator. MPC's debt maturities in the coming years can be serviced using operating cash flows though refinancing may be done for strategic advantages. MPC's credit rating relative to its peers can be seen in the table below:



Company	Moody's	S&P
Marathon Petroleum	Baa2	BBB
Phillips 66	Baa1	BBB+
HF Sinclair	Baa3	BBB-
PBF Energy	Ba2	BB
Par Pacific	Ba3	BB-
ExxonMobil	Aa1	AA+

Source: FactSet

MPC further enhanced it's liquidity profile by entering into a \$5.0 billion unsecured credit facility in July of 2022. This credit facility matures in 2027 and includes a \$2.2 billion letter of credit capacity as part of the \$5.0 billion which we believe will fortify their liquidity position and grant them added flexibility should they use cash reserves for large upcoming debt payments.

ESG Analysis

MPC has continued to make substantial efforts towards a variety of ESG goals. They have emphasized their plans to reduce greenhouse gas (GHG) emissions and conserve natural resources. In their updated 2023 targets, MPC have stated they aim to reduce their scope 1 and scope 2 GHG emission intensity by 30% come 2030 and 38% come 2035 compared to 2014 levels. Currently, MPC has already achieved 27% of that reduction, which we believe defines their goals as realistic and probable. MPC has also stated they aim to eliminate scope 3, Category 11 GHG emissions by 15% come 2030 compared to 2019 levels₁ – Scope 3 Category 11 representing the use of sold products which include indirect emissions that occur throughout the company's value chain. With regards to methane emissions, MPC currently aims to achieve a 75% reduction in MPLX's gathering and processing (key functions of the midstream segment) methane emissions come 2030 from 2016 levels with 57% already accomplished. MPC is more aggressive with their ESG goals relative to their peers as can be observed from their comparatively lower ESG scores derived from Sustainalytics:

Ticker	Company	ESG Rating
MPC	Marathon Petroleum	30.3
PSX	Phillips 66	33.0
VLO	Valero Energy	30.5
DINO	HF Sinclair	35.9
PARR	Par Pacific	39.9



Source: Sustainalytics

RECENT DEVELOPMENTS

Recent Earnings Announcement

On August 6th, 2024, MPC reported adjusted earnings per share of \$4.12 for the second guarter, which exceeded consensus expectations of \$3.09₁₄. MPC's strong performance can be attributed to strong operational performance with operating costs in refining sitting at \$4.97 per barrel₁₄. MPC also continued to deliver capital back to shareholders with \$3.2 billion distributed through share repurchases and dividends. The sale of Speedway has generated strong cash flows that have allowed for significant repurchases with roughly 50% of outstanding shares repurchased since May of 2021. During the second quarter, MPLX also contributed \$550 million in cash flow to MPC; the midstream segment saw gains in its natural gas and NGL value chains. The Henry Fund further expects MPLX's third-party revenue streams cash flows to increase as a result of their commitment to build the Blackcomb natural gas pipeline by 2026 which is planned to carry 2.5 billion cubic feet (Bcf) of natural gas per day from the Permian Basin to the Gulf Coast markets.

In aggregate, MPC's operating cash flows for the quarter were \$2.7 billion, \$541 million of which are contributions from working capital. At the end of the quarter MPC maintained \$6 billion in total cash and short-term investments at the parent level.

Detroit Refinery Strikes

Around 300 workers from Teamsters Local 283, a local chapter of the International Brotherhood of Teamsters (a large labor union in the US), have gone on strike. Reasons behind the strike include pay, forced overtime and working conditions. Though the strike began on September 4, 2024, and MPC has responded by utilizing salaried employees and managers from other locations to continue operations. While 300 employees represent only 3.5% of MPC's workforce in the refining segment of their business, the 300 employees are said to handle essential operations in the Detroit refinery that is responsible for processing 140,000 barrels of crude oil per day. While those on strike believe that these temporary workers may not be as familiar with the equipment and processes, causing safety risks, the Henry Fund does not believe a prolonged strike will significantly hinder refining



operations since the temporary workers are already salaried employees that are familiar with similar operations in other locations. Contract negotiations are set to resume on November 7, though a resolution date is still not clear.

MPLX

MPC is seeing growth in it's midstream segment through MPLX. The Whistler transaction was completed in the second quarter of 2024 giving MPLX a 30.4% stake in the existing Whistler pipeline which, as of September 2023, has a capacity of 2.5 Bcf/d. The Whistler pipeline extends 450 miles from the Permian Basin to Agua Dulce, Texas, a natural gas export hub. It is key to note that a 30.4% stake represents a decrease from their previous 38% ownership of the pipeline, which we believe was to free up capital for their investment in a new infrastructure project, the Blackcomb pipeline. The capital reallocation now allows for MPLX to maintain a 12.5% stake in the 2.5 Bcf/d pipeline that is set to be operational in 2026. We believe the reallocation allows for better diversification in their portfolio of assets without overextending their balance sheet.

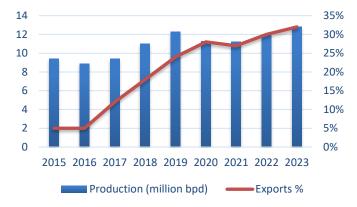
INDUSTRY TRENDS

Global Supply Turned Sour

The global supply of crude oil is becoming increasingly more sour in recent years, largely benefiting complex refineries due to the required processing capabilities. The high sulfur content feedstock is the dominant crude in many of the largest remaining reserves globally, including the Middle East, Canada's oil sands, Venezuela and Mexico. Conversely, light and sweet crude oil is seeing declines in the fields that produce it such as those in the North Sea and Alaska. Though much of US shale production is light sweet crude, much of it is exported to international markets within Europe and Asia where refineries are better suited to the lower sulfur crudes and are willing to pay a premium. In 2023, for example 4.1 million bpd was exported from the US out of a total of 12.8 million bpd produced₁₅. Crude oil exports as a percentage of production have been increasing following the lifting of the export ban in 2015 as can be seen in the chart below:



U.S. Production vs Exports



Source: EIA

As global supplies continue to be heavily skewed towards more sour crude and US exports of sweet crude continue to increase, we believe refineries in the US with more sour crude refining infrastructure will benefit. Not only is sweet crude more expensive due to it being cheaper to refine, but competition with markets in Asia and Europe will continue to drive up prices and make price differentials less attractive compared to sour differentials.

Regulation

The Environmental Protection Agency (EPA) introduced stricter regulations in 2023 that focus on reducing emissions of methane and volatile organic compounds (VOC's). Such regulation will require downstream players like MPC to invest in improving leak detection and repair systems. The EPA also updated their Renewable Fuel Standard (RFS), adjusting biofuel blending mandates which will require refineries to blend additional amounts of biofuels such as ethanol and biodiesel into diesel and gasoline. MPC has already began increasing renewable diesel production primarily through their renewable diesel facility in North Dakota. The International Maritime Organization (IMO) regulation in 2020 that looks to limit sulfur content in marine fuels has also had profound impact on the industry. Bunker fuels used in ships have historically had high sulfur contents; the IMO 2020 now requires refineries to further adapt their refining processes to produce low-sulfur fuel oil (LSFO). We believe downstream players such as MPC that maintain substantial complex refining units like cokers. hydrocrackers and desulfurization units are set to benefit most from the regulation.



RIN's

Renewable Identification Numbers (RINs) are credits used to track compliance with the Renewable Fuel Standard. RIN's require refiners to blend a specific amount of renewables such as ethanol and biodiesel into their products. Any downstream players who do not meet the blending requirements can buy RIN's form other companies that exceed fuel blending requirements. MPC has been focused on increasing its ability to generate its own RINs rather than purchasing them by investing in renewable fuel production. One example is their repurposing of their Martinez refinery in California into a renewable diesel facility that produces up to 730 million gallons of renewable diesel every year. MPC's last reported RIN expenses were in 2022 and amounted to \$2.4 billion. Though we believe there will always be uncertainty regarding the RFS program with respect to changes in blending mandates, they affect all downstream players, and we expect MPC to continue to be forward-looking in their efforts to diversify into renewable energy and biofuels.

MARKETS AND COMPETITION

Power of Buyers

The price elasticity of buyers in the downstream market depends on the type of buyer as some are able to exert more demand pressure on refiners. Retail consumers tend to be price inelastic in the short term up to a point – eventually increases in refined product prices can drive down demand as they did in 2007-2008. Conversely, large institutional buyers are more price sensitive given their more substantial purchasing volumes. Buyers such as airlines, industrial companies and retail chains are more capable of negotiating contracts.

Power of Suppliers

Suppliers to the downstream players are upstream producers. Price setting tends to be difficult if not impossible as a result of these commodities being priced in the global market. Nonetheless, major oil producing countries such as those in OPEC can dramatically influence crude prices as they scale production which impact the spreads and margins of refiners. Global supply diversity with regards to different grades of crude does however offer a buffer with regards to sourcing for refiners.



Barriers to Entry & Substitutes

The barriers to entry into the downstream sector remain high due to the substantial capital investment required to build and operate refineries. Refineries cost billions of dollars and continually require investment in addition to those to adhere with continually evolving environmental regulation. Complicated permits and approvals also deter potential entrants from the industry. Additionally, since refiners profit off the spread of feedstock and refined product prices, the costs of the raw inputs represent significant necessary expenses. With regards to substitutes, renewable energy and alternative fuels stand as looming threats. Gasoline and diesel currently stand as the primary fuel for the transportation sector but the emergence of electric vehicles and renewable energy sources such as solar and wind have gained significant traction. The market has also seen a push for biofuels and low carbon fuels as substitutes in aviation and shipping. Nonetheless, we believe substitution will be gradual and will not have any dramatic effect on the use of petroleumbased products in the near future.

Peers

The table below aggregates MPC's peer group with respect to their share prices and market capitalizations:

Name	Price	Mkt Cap (M)	Capacity (mmbpd)
Marathon Petroleum	158.3	53,280	2.90
Phillips 66	132.6	56,270	2.20
HF Sinclair	44.3	8,500	0.68
PBF Energy A	33.7	4,106	1.00
Par Pacific	17.9	1,033	0.15
ExxonMobil	120.0	537,721	4.60

Source: FactSet

Phillips 66 - (PSX)

Phillips 66 is a company with a strong presence in the U.S., Europe and Asia. The operate a total of 12 refineries that are predominantly in the US Gulf Coast and the Midwest, while two remain outside the US in the United Kingdom and Germany. Their product mix includes gasoline, diesel and jet fuel. They are a smaller player in comparison to Marathon but more diversified. They also posses a stronger presence in chemicals through a joint venture with Chevron Phillips Chemical (CPChem)₅.

HF Sinclair – (DINO)



HF Sinclair operates 7 refineries and maintains a total refining capacity of 678 mbpd. They are also smaller than MPC but have a larger focus on specialty products and renewable fuels. HF Sinclair predominantly operates in the Midwest and Southwest US. With their emphasis on sustainability, they have been converting traditional refining assets into renewable diesel facilities – much like MPC.

PBF Energy – (DINO)

PBF Energy operates 6 refineries with a focus on heavier sour crude. They have a refining capacity of 1 million bpd with their largest refineries located in New Jersey, Delaware, California, Ohio and Louisiana. In comparison to MPC's broader crude mix, PBF stands as a more focused high-sulfur play. Nonetheless, their refining capacity is a third of MPC's, limiting it's competitive reach.

Par Pacific – (PARR)

Par Pacific is a very small player in the refining space with a total of 4 refineries that produce a total of roughly 154 mbpd. The company's small scale allows it to focus on niche markets predominantly within Hawaii and the Pacific Northwest. Their product offering includes gasoline, diesel, and jet fuel.

ExxonMobil – (XOM)

ExxonMobil is a large integrated oil with substantial operations in the downstream segment. ExxonMobil operates 21 refineries worldwide and 5 in the US with a refining capacity of 4.6 million bpd and 1.9 million bpd in the world and the US, respectively. Their product mix is extensive, ranging from traditional products such as gasoline and diesel to more specialty products such as lubricants. They also posses a particularly strong petrochemical segment that produce plastics and chemicals for industrial purposes.

PEER COMPARISON METRICS

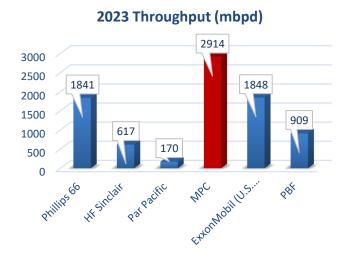
Industry Operating Metrics

Throughput

Throughput represents the total volume of feedstock that a refinery processes into finished products. It is used as a metric to better understand a refiner's operational capacity and efficiency. The chart below aggregates MPC's



throughput in comparison to its peers using throughput reported in 2023. We observe MPC maintains the highest throughput at 2,914 mbpd. It is key to note that ExxonMobil's international refining operations were not included, and the numbers reflect their throughput from 5 US refineries. As such, MPC dominates the downstream segment in the US by a wide margin that we do not expect to narrow significantly in the near future.



Source: FactSet

Margin per Barrel

Margins per Barrel represent the profitability of a refinery as it considers the difference between the price of feedstock inputs and the price of refined products after operating and distribution costs. The chart below offers indicates MPC's operations are more streamlined that their competitors as they posses the widest margins at just above \$22 per barrel. We attribute MPC's high margins to the flexibility of their refineries as well as their operational scale as the largest refining system in the country. MPC also posseses geographic advantages due to their placement next to export markets (Gulf Coast) allowing for higher margins on exports. HF Sinclair stands as the second highest in the reported peer group with margins at \$18 per barrel. ExxonMobil has not disclosed their margins for either their US or international operations but we expect competitively high margins as a result of their integrated operations along the entire operational value chain.



2023 Margin per Barrel



Source: FactSet

MPC's high margins are exceptionally impressive when compared to their reported crack spreads alongside their peers. While not all companies report their crack spreads, we can see from the few that do that MPC does not have the highest crack spread, and instead possess high margins from efficient operations and their attractive price differentials (crack spreads represent potential margins before any operating and distribution costs using benchmark prices rather than realized prices):

2023 Blended 3-2-1 Crack Spread



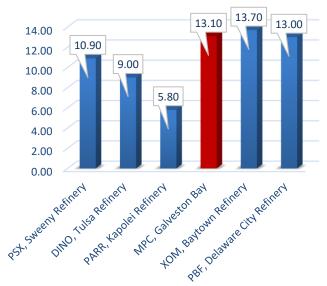
Source: FactSet

Nelson Complexity Index

The Nelson Complexity Index provides insight into the capacity of a refinery to process heavier and sour crudes into higher-value refined products. Advanced technology that leverages coking, hydrocracking and desulfurization to reduce sulfur content in crude result in a higher score which represents a competitive advantage with regards to processing sour crudes. The chart below highlights the NCI scores of the largest refinery that each member of the peer group operates. We observe MPC's Galveston Bay refinery



is second only to ExxonMobil's Baytown refinery with only a marginally lower NCI score. PBF Energy also possesses great infrastructure for processing sour crude, but as previously mentioned, they posses only a third of the production capacity MPC possesses. As it is both difficult and expensive to incorporate advanced processing units in existing refineries (due to both capital investment and operational downtime) we do not foresee significant change to MPC's competitive advantage sourcing and processing discounted sour crude.



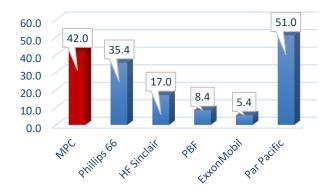
Nelson Complexity Index

Net Debt / Total Cap

Net debt as a percentage of total capitalization is an important metric to measure leverage undertaken by a company. We can observe Par Pacific maintains the highest debt ratio at 51% indicating highly leveraged aggressive growth. MPC is also comparatively highly leveraged with a debt ratio of 42%, highlighting their significant investments in increasing refining capacity and their diversification into renewable projects. While this level of leverage can increase financial vulnerability, MPC maintains a healthy cash position that has prevented leverage from impacting shareholders.



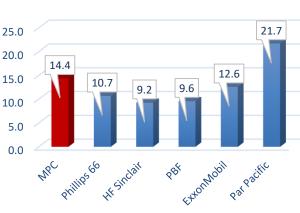
Net Debt / Total Cap (%)



Source: FactSet

Return on Invested Capital

In analyzing the ROIC of the peer group, we note Par Pacific leads with an ROIC of 21.7%. Though a comparatively small player, Par Pacific operates in a niche market focused on Hawaii and the Pacific Northwest that isn't subject to the same competitive pricing. MPC also possesses a high ROIC, just below 15%, that can be attributed to their high refining complexity and efficient use of refining infrastructure.



ROIC %

Source: FactSet

Overall, MPC has established a robust competitive position in the US refining market as a result of its industry leading throughput capacity, high margins per barrel, and flexible refinery infrastructure. MPC's operational scale and geographic advantages enable it to process discounted sour crudes and generate higher margins that their peers despite them not possessing the largest crack spreads. While they are highly leveraged, their strong cash position

Source: FactSet

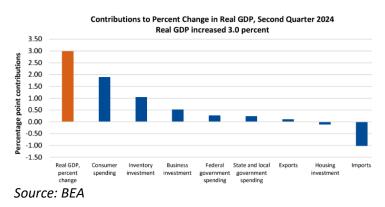


and high ROIC reflect their ability to manage their financial strategy.

ECONOMIC OUTLOOK

GDP Growth

Real GDP growth in the second quarter of 2024 showed strength in its rebound to 3.0%, primarily the result of a strong consumer and robust business investment. The chart below deconstructs the second quarter's real GDP growth:



For the third quarter, the Atlanta Fed further revised their forecasts for growth to 2.9% from 3.0%. Regardless, the US economy displays resilience which is a tailwind for energy demand. The Henry Fund maintains a long term GDP growth rate forecast of 2.9% which correlates with increased consumer spending and industrial activity – both of which will drive demand for refined products like gasoline, diesel and jet fuel and widen margins for MPC.

Exchange Rates

The strength of the US dollar against other currencies affects downstream companies in their capacity to export refined products. The US Dollar Index (DXY) measures the strength of the dollar against a basket of six major currencies and has been elevated over the past 3 years, sitting above 100. While a strong dollar would traditionally make it expensive for international buyers to purchase US refined products, energy supply shortages have kept exports to Europe robust, with exports reaching 2.2 million bpd in in the 12 months to June 2024; this represents a 23% year-over-year increase. Another significant reason for the growth of exports is the inclusion of WTI Midland Crude in the Brent Pricing mechanism₅, elevating the role of US crude in global markets. While further strengthening of the dollar may eventually negatively affect players such



as MPC, the Henry Fund has a 2-year forecast of a weakening dollar against both the Euro and Yen at \$1.12 and \$0.98, respectively. We believe the strong dollar in recent years, however, has played a role in offering MPC attractive pricing in its sourcing its feedstock given 33.4% of their crude oil supply comes from outside the US₁.

Interest Rates & Inflation

In September of 2024, inflation cooled to an annualized 2.4%, contributing to the current optimism in markets. MPC's operating costs per barrel in the second quarter of 2024 were \$4.95, representing a slight decrease from operating costs in the second quarter of the previous year that sat at \$5.30 per barrel which we foresee will continue to decrease alongside our 2-year forecast for the CPI inflation rate which we expect to decrease to 2.29%. The federal reserve cut rates by 50 basis points in September of 2024, and we expect the positive market sentiments to slowly effect the long end of the yield curve as demand for safe assets decreases. We expect this will positively affect MPC in their debt refinancing which we expect in 2025 and 2026.

VALUATION

Revenues

Leveraging futures prices for RBOB and Crude, a spread per gallon of refined products was used to calculate revenue sales numbers. Production yields for each refined product were forecasted quarterly in accordance with historical quarterly data to account for seasonality in production yields that are not constant. The table below highlights our revenue forecasts for the next three quarters:

Product	E Q3 2024	E Q4 2024	E Q1 2025	E Q2 2025
Gasoline	1.7%	1.6%	1.3%	1.4%
Distillates	3.9%	3.1%	2.0%	2.0%
NGL's & Petrochemicals	3.3%	3.1%	1.0%	1.0%
Asphalt	0.9%	0.8%	0.6%	0.8%
Heavy Fuel Oil	19.0%	25.0%	4.0%	2.0%
Propane	5.0%	5.0%	1.0%	1.0%

Source: HF Estimates

Increased manufacturing alongside a moderating winter, we forecast distillates will see notable growth with an average of 7.5% in 2024 and a 14.5% growth in 2025. We do not expect gasoline demand to increase dramatically in the near term, and we concur with EIA forecasts for lower



oil prices in 2025. As such our forecasts for gasoline yields are -1.2% in 2024 with a movement towards their 4-year historical average of 1.2% growth. Additionally, we forecast that purchased commodities will continue to be in line with historical averages of their proportions to yields.

Operating Costs

Cost of revenues, which include the price of feedstock, purchased commodities and the distribution of products, were forecasted as a percentage of sales. A four-year historical average was used amounting to roughly 89% of revenues. We do not expect cost of revenues to deviate from historical averages in the near term as that would require operational improvements to increase their capture rate which already sat at 100% in 2023.

Capital Expenditures

MPC, like many downstream players, incurs substantial capital expenditures for both capacity expansion and routine maintenance and upgrades. Given that capacity expansion is somewhat limited and much of the maintenance is scheduled and routine, we incorporated management guidance for 2024 capital expenditures followed by a historical average to represent to marginal upgrades and continuous repairs; capital expenditures amounted to \$1.5 billion and \$1.9 billion, respectively.

WACC

The Henry Fund constructed a Weighted Average Cost of Capital of 9.89% for MPC using the following assumptions:

- **Risk-Free Rate:** The risk-free rate of 4.08% is the current 10 US year treasury note.
- **Beta:** A raw (historical) beta of 1.63 was sourced from Bloomberg.
- Equity Risk Premium: A Henry Fund consensus of an equity risk premium of 5% was utilized.
- **Pre-Tax Cost of Debt:** A pre-tax cost of debt of 5.76 was derived from FacSet.
- **Tax Rate:** Using their historical average, we derived an implied marginal tax rate of 23.67%.



The DCF model offered an implied price of \$155.22, 2% decrease from it's current price of \$158.30. We believe the implied price is a fair estimate given modest gasoline demand forecasts and stable crack spreads as crude oil continue to trade within a stable band. A continuing value growth rate of 2.5% was used as the refining industry stands as relatively mature and does not expect rapid demand for petroleum products in the next decade. The equity risk premium of 5% also reflects a conservative estimate that was derived as an average of Damodaran's equity risk premium and the historical geometric average. Lower equity risk premiums significantly raised our implied price as can be seen in the table below:

	DCF				Beta			
	155.22	1.33	1.43	1.53	1.63	1.73	1.83	1.93
F	4.3%	213.98	201.54	190.30	180.07	170.74	162.18	154.31
j,	4.5%	204.13	192.00	181.04	171.10	162.03	153.73	146.10
ren	4.8%	195.03	183.20	172.52	162.84	154.03	145.97	138.57
ж С	5.0%	186.60	175.05	164.65	155.22	146.66	138.83	131.64
iii ii	5.3%	178.77	167.49	157.35	148.17	139.84	132.22	125.25
Equity Risk Premium	5.5%	171.48	160.46	150.57	141.63	133.51	126.11	119.33
В.	5.8%	164.67	153.91	144.25	135.53	127.63	120.42	113.83

DDM Model

Our dividend discount model gave a implied price of \$93.02, a significant discount from MPC's current trading price. A historical payout ratio was calculated to calculate dividends for the forecast period – MPC's payout ratio has increased substantially in recent years, so we believe a 3-year historical payout ratio offers the greatest insight into future dividend payments. The low implied price is the result of the high cost of equity at 12.24% is both the large beta of 1.63 (given the sectors cyclicality and market sensitivity) and the high cost of equity at 5.00%. As a result, we do not believe this model offers a fair estimate of the companies implied share price.

Relative Valuation

In our relative valuation model, we assessed MPC relative to its peers within the industry. Peers were downstream focused players that included Phillips 66, Valero, HF Sinclair, Cheniere Energy and Par Pacific. The price achieved from the P/E valuation was \$162.82 using 2024 P/E ratios. As a result, we believe MPC is fairly valued relative to their peers and that the company's current earnings and growth prospects are in line with market expectations.

DCF / EP Models



RECCOMENDATION SUMMARY

In assessing Marathon Petroleum's performance and future growth potential, the following are the key drivers behind our recommendation:

- We forecast crude oil prices will continue to trade within a \$68-\$78 band over the next year, minimizing spread volatility.
- Competitive price differentials from sour crude sourcing will continue to give MPC an advantage due to complex refining capabilities.
- Distillate production will grow from ULSD refining capacity expansions.
- MPC's midstream segment assets are growing and diversifying, with a new pipeline set to come on line in 2026.

Keys to Monitor

- The first quarter of 2024 saw heavy turnaround across the entire refining industry, with many players now increasing production. Oversupply in the market is possible and could place downward pressure on prices and further narrow spreads for MPC. Manufacturing activity in the US should also be monitored as an indication of the demand of distillates which MPC is increasing capacity for. Utilization rates and production yields across the industry require monitoring as increased production coupled with tempered demand can make MPC and other refiners temporarily unattractive.
- While MPC has maintained a strong buyback program following its sale of Speedway, cash has drawn by roughly \$5 billion in the fourth quarter of 2023 and the first quarter of 2024. Monitoring future repurchases is important as the current pace would mean a normalization in repurchases in the coming quarters.

In summary, the Henry Fund has placed a HOLD rating on NextEra to maintain our current position.

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- 15. EIA

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Marathon Petroleum Revenue Decomposition

Fiscal Years Ending Dec. 31	Q1 2020	Q2 2020			Q1 2021	Q2 2021		Q4 2021	Q1 2022	Q2 2022				Q2 2023	Q3 2023				E Q3 2024									E Q4 2026
Sales and other operating revenues	22,204	12,195	17,408	17,972	22,711	29,615	32,321	35,336	38,058	53,795	45,787	39,813	34,864	36,343	40,917	36,255	32,706	37,914	33,829	31,333	31,443	34,936	34,761	32,327	33,319	34,348	35,026	35,735
Refining Products Yields mbpd																												
Gasoline	1,488	1,114	1,311	1,343	1,324	1,436	1,451	1,573	1,483	1,536	1,501	1,456	1,508	1,497	1,511	1,588	1,370	1,527	1,553	1,578	1,598	1,621	1,650	1,683	1,722		1,800	1,841
growth Distillates	1,020	-25.1% 834	17.7% 872	2.4% 894	-1.4% 881	8.5% 984	1.0% 968	8.4% 1,027	-5.7% 978	3.6% 1,123	-2.3% 1,134	- <i>3.0%</i> 1,081	3.6% 1,024	-0.7% 1,033	0.9% 1,061	5.1% 1,070	-13.7% 943	11.5% 1,144	1.7% 1,189	1.6% 1,225	1.3% 1,250	1.4% 1,275	1.8% 1,300	2.0% 1,326	2.3% 1,393	2.3% 1,462	2.2% 1,492	2.3% 1,522
growth		-18.2%	4.6%	2.5%	-1.5%	11.7%	-1.6%	6.1%	-4.8%	14.8%	1.0%	-4.7%	-5.3%	0.9%	2.7%	0.8%	-11.9%	21.3%	3.9%	3.1%	2.0%	2.0%	2.0%	2.0%	5.0%	5.0%	2.0%	2.0%
NGL's & Petrochemicals growth	352	217 -38.4%	230 6.0%	177 -23.0%	222 25.4%	217 -2.3%	272 25.3%	289 6.3%	161 -44.3%	224 39.1%	199 - <i>11.2%</i>	128 -35.7%	157 22.7%	227 44.6%	202 -11.0%	142 -29.7%	166 16.9%	237 42.8%	245 3.3%	252 3.1%	255 1.0%	257 1.0%	260 1.0%	263 1.0%	265 1.0%	268 1.0%	271 1.0%	273 1.0%
Asphalt	80	-38.4%	92	-23.0%	25.4%	-2.5%	25.5%	83	-44.3%	59.1% 91	-11.2%	-35.7%	22.7%	44.0%	-11.0%	-29.7%	10.9%	42.8%	5.5%	5.1%	1.0%	83	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
growth		-5.0%	21.1%	-17.4%	27.6%	-6.2%	2.2%	-10.8%	4.8%	4.6%	0.0%	-4.4%	-3.4%	-1.2%	4.8%	-24.1%	22.7%	-1.2%	0.9%	0.8%	0.6%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
Heavy Fuel Oil arowth	37	27 -27.0%	21 -22.2%	27 28.6%	36 33.3%	27 -25.0%	32 18.5%	29 -9.4%	86 196.6%	54 -37.2%	43 -20.4%	109 153.5%	31 -71.6%	61 96.8%	74 21.3%	42 -43.2%	69 64.3%	46 -33.3%	55 19.0%	68 25.0%	71 4.0%	73 2.0%	74 2.0%	76 2.0%	77 2.0%	79 2.0%	80 2.0%	82 2.0%
Propane	58	-27.0%	-22.2%	28.0%	33.3%	-25.0%	18.5%	-9.4%	190.0%	-37.2%	-20.4%	155.5%	-71.8%	90.8%	21.5%	-43.2%	64	-33.3%	19.0%	25.0%	4.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
growth		-22.4%	11.1%	2.0%	-11.8%	20.0%	-1.9%	5.7%	23.2%	7.2%	-1.4%	-12.3%	4.7%	0.0%	-3.0%	0.0%	-1.5%	6.3%	5.0%	5.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Total	3,035	2,313	2,576	2,568	2,605	2,809	2,869	3,057	2,864	3,102	3,041	2,925	2,871	2,968	3,000	2,973	2,693	3,102	3,193	3,280	3,332	3,385	3,445	3,509	3,620	3,735	3,809	3,886
Purchased Products mbpd																												
Gasoline % of yields	181 12.2%	555 49.8%	358 27.3%	326 24.3%	510 38.5%	398 27.7%	383 26.4%	261 <i>16.6%</i>	387 26.1%	334 21.7%	369 24.6%	414 28.4%	425 28.2%	436 29.1%	422 27.9%	345 21.7%	369 26.9%	411 26.9%		425 26.9%	430 26.9%	436 26.9%	444 26.9%	453 26.9%	463 26.9%	474 26.9%	484 26.9%	496 26.9%
Distillates	20	206	168	146	208	105	121	62	191	46	24.0%	20.4%	120	111	83	74	110	134	139	143	146	149	152	155	163	171	174	178
% of yields	2.0%	24.7%	19.3%	16.3%	23.6%	10.7%	12.5%	6.0%	19.5%	4.1%	3.1%	8.1%	11.7%	10.7%	7.8%	6.9%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%
NGL's & Petrochemicals	-29	106	93	146	71	76	21	4	60	-3	22	93	73	3	28	88	50	72	74	76	77	78	78	79	80	81	82	82
% of yields Asphalt	-8.2%	48.8% 10	40.4%	82.5% 10	32.0%	35.0%	7.7%	1.4% 11	37.3%	-1.3%	11.1%	72.7%	46.5%	1.3%	13.9% -5	62.0% 16	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%
% of yields	7.5%	13.2%	-6.5%	13.2%	-3.1%	3.3%	1.1%	13.3%	2.3%	-2.2%	-2.2%	2.3%	-2.4%	-1.2%	-5.7%	24.2%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%
Heavy Fuel Oil	-2	8	14	8	3	12	7	10	-20	12	23	-43	26	-4	-17	15	14	10	11	14	15	15	15	16	16	16	17	17
% of yields	-5.4%	29.6%	66.7%	29.6%	8.3%	44.4%	21.9%	34.5%	-23.3%	22.2%	53.5%	-39.4%	83.9%	-6.6%	-23.0%	35.7%	20.8%	20.8%	20.8%	20.8%	20.8%	20.8%	20.8%	20.8%	20.8%	20.8%	20.8%	20.8%
Propane % of vields	11 19.0%	24 53.3%	19 38.0%	18 35.3%	31 68.9%	22 40.7%	23 43.4%	20 35.7%	24 34.8%	19 25.7%	20 27.4%	29 45.3%	23 34.3%	23 34.3%	25 38.5%	25 38.5%	25 38.3%	26 38.3%	27 38.3%	29 38.3%	29 38.3%	29 38.3%	30 38 3%	30 38.3%	30 38.3%	30 38.3%	31 38.3%	31 38.3%
Total	13.0%	909	646	654	820	616	556	368	644	406	467	583	665	568	536	563	571	655	672	690	700	710	723	736	756	776	791	807
Refined Product Sales Gasoline	1,669	1,669	1,669	1,669	1,834	1,834	1,834	1,834	1,870	1,870	1,870	1,870	1,933	1,933	1,933	1,933	1,739	1,938	1,971	2,002	2,028	2,057	2,094	2,136	2,185	2,235	2,284	2,337
Distillates	1,040	1,040	1,040	1,040	1,089	1,089	1,089	1,089	1,169	1,169	1,169	1,169	1,144	1,144	1,144	1,144	1,053	1,278	1,328	1,369	1,396	1,424	1,453	1,482	1,556	1,633	1,666	1,699
NGL's & Petrochemicals	323	323	323	323	293	293	293	293	221	221	221	221	230	230	230	230	216	309	319	329	332	335	339	342	345	349	352	356
Asphalt	86	86	86	86	94	94	94	94	89	89	89	89	82	82	82	82	84	83	84	84	85	85	86	87	88	88	89	90
Heavy Fuel Oil	35	35	35	35	39	39	39	39	66	66	66	66	57	57	57	57	83	56	66	83	86	88	89	91	93	95	97	99
Propane	69	69	69	69	76	76	76	76	93	93	93	93	90	90	90	90	89	94	99	104	105	106	107	108	109	110	111	112
Total	3,222	3,222	3,222	3,222	3,425	3,425	3,425	3,425	3,508	3,508	3,508	3,508	3,536	3,536	3,536	3,536	3,264	3,757	3,866	3,970	4,032	4,095	4,167	4,245	4,376	4,511	4,600	4,693
Refined Product Sales Volume (gal. per y Gasoline	ear) 25,585,770	25,585,770	25,585,770	25,585,770	28,115,220	28,115,220	28,115,220	28,115,220	28,667,100	28,667,100	28,667,100	28,667,100	29,632,890	29,632,890	29,632,890	29,632,890	26,654,416	29,708,973	30,214,026	30,697,450	31,096,517	31,531,868	32,099,442	32,741,431	33,494,484	34,264,857	35,018,684	35,824,113
Distillates	15,943,200	15,943,200	15,943,200	15,943,200	16,694,370	16,694,370	16,694,370	16,694,370	17,920,770	17,920,770	17,920,770	17,920,770	17,537,520	17,537,520	17,537,520	17,537,520	16,146,942	19,588,655	20,352,613	20,983,544	21,403,215	21,831,279	22,267,904	22,713,262	23,848,926	25,041,372	25,542,199	26,053,043
NGL's & Petrochemicals	4,951,590	4,951,590	4,951,590	4,951,590	4,491,690	4,491,690	4,491,690	4,491,690	3,387,930	3,387,930	3,387,930	3,387,930	3,525,900	3,525,900	3,525,900	3,525,900	3,312,875	4,729,828	4,885,912	5,037,375	5,087,749	5,138,626	5,190,013	5,241,913	5,294,332	5,347,275	5,400,748	5,454,756
Asphalt	1,318,380	1,318,380	1,318,380	1,318,380	1,441,020	1,441,020	1,441,020	1,441,020	1,364,370	1,364,370	1,364,370	1,364,370	1,257,060	1,257,060	1,257,060	1,257,060	1,285,918	1,270,043	1,281,473	1,291,725	1,299,475	1,309,871	1,320,350	1,330,913	1,341,560	1,352,293	1,363,111	1,374,016
Heavy Fuel Oil	536,550	536,550	536,550	536,550	597,870	597,870	597,870	597,870	1,011,780	1,011,780	1,011,780	1,011,780	873,810	873,810	873,810	873,810	1,277,731	851,821	1,013,914	1,267,393	1,318,089	1,344,450	1,371,339	1,398,766	1,426,741	1,455,276	1,484,382	1,514,069
Propane	1.057 770	1.057 770	1.057.770	1.057 770	1.165.080	1.165 080	1.165.080	1,165,080	1,425,690	1.425.690	1,425,690	1,425,690	1.379 700	1.379 700	1.379 700	1.379 700	1.357 061	1,441 878	1.513 971	1.589.670	1.605 567	1.621.622	1.637.839	1.654.217	1.670 759	1.687.467	1.704 341	1.721.385
Total								52,505,250																				
Refined Products Avg. Sales Price	1.41	1.41	1.41	1.41	2.29	2.29	2.29	2.29	3.30	3.30	3.30	3.30	2.74	2.74	2.74	2.74	2.37	2.62	2.28	2.06	2.03	2.23	2.18	1.99	1.99	1.99	1.99	1.99
Total Revenue	69,779	69,779	69,779	69,779	119,983	119,983	119,983	119,983	177,453	177,453	177,453	177,453	148,379	148,379	148,379	148,379	118,583			125,332	125,772	139,745	139,043		133,275		140,103	142,940
	, .	, .	, .	,	.,	.,	.,	.,	,	,	,	,	.,	.,	.,	.,	.,	,										
Futures Curve																												
Month 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.16 2.29	2.76	2.50 2.35	2.07 2.07	2.03 2.03	2.23 2.23	2.20 2.18	2.01				
Month 2 Month 3	1	-		-		1	-	-	-	-	-	-	-	-	1	2	2.29 2.66	2.53 2.57	2.35	2.07 2.04	2.03	2.23	2.18 2.14	1.96				
Month 3	-																2.37	2.62	2.28	2.06	2.03	2.23	2.18	1.99	1.99	1.99	1.99	1.99
																	2.57	2.02	2.20	2.00	2.03	2.23	2.20	2.00	2.00		1.00	1.55
Seasonality Test	Q1	Q2	Q3	Q4	Total																							
Gasoline	1,421	1,499	1,488	1,539	1,487																							
growth	-4.3%	5.7%	-0.1%	3.5%	1.2%																							
Distillates	957 -5.8%	1,071	1,054	1,059	1.9%																							
growth NGL's & Petrochemicals	-5.8%	226	224	186	1.9%																							
growth	5.2%	31.1%	1.1%	-19.7%	4.4%																							
Asphalt	87	86	90	79																								
growth Heavy Fuel Oil	12.9% 56	-1.0% 47	2.3% 50	-13.1% 60	0.3%																							
growth	56 55.7%	47 0.3%	6.5%	60 33.6%	24.0%																							
Propane	61	66	64	62	2																							

 growth
 55.7%
 0.3%
 6.5%
 33.6%
 24.0%

 Propane
 61
 66
 64
 62

 growth
 3.6%
 8.4%
 -2.1%
 -2.2%
 1.9%

Revenue Decomposition

Fiscal Years Ending Dec. 31	2020	2021	2022	2023	E 2024	E 2025	E 2026	E 2027	E 2028	E 2029	E 2030	E 2031	E 2032	E 2033
Sales and other operating revenues	69,779	119,983	177,453	148,379	132,530	133,467	138,427	151,533	160,503	167,637	173,805	177,960	181,319	184,756
Refining Products Yields mbpd														
Gasoline	1,314	1,446	1,494	1,526	1,507	1,638	1,781	1,826	1,866	1,899	1,933	1,961	1,984	2,008
growth		10.0%	3.3%	2.1%	-1.2%	8.7%	8.7%	2.5%	2.2%	1.8%	1.8%	1.4%	1.2%	1.2%
Distillates	905	965	1,079	1,047	1,125	1,288	1,467	1,746	1,920	2,055	2,158	2,222	2,267	2,312
growth		6.6%	11.8%	-3.0%	7.5%	14.5%	13.9%	19.0%	10.0%	7.0%	5.0%	3.0%	2.0%	2.0%
NGL's & Petrochemicals	244	250	178	182	225	259	269	291	315	340	368	384	401	418
growth		2.5%	-28.8%	2.2%	23.7%	15.0%	4.1%	8.1%	8.1%	8.1%	8.1%	4.4%	4.4%	4.4%
Asphalt	81	91	89	80	81	83	86	88	91	95	98	101	105	108
growth		12.3%	-2.2%	-10.1%	1.0%	2.6%	3.2%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%
Heavy Fuel Oil	28	31	73	52	60	73	79	103	114	116	118	120	123	125
growth		10.7%	135.5%	-28.8%	14.5%	23.2%	8.2%	30.0%	10.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Propane	51	52	70	66	70	77	80	82	83	85	87	88	90	92
growth		2.0%	34.6%	-5.7%	5.4%	10.4%	4.1%	2.0%	2.0%	2.0%	2.0%	2.0%	1.9%	1.9%
Total	2,623	2,835	2,983	2,953	3,067	3,418	3,762	4,136	4,389	4,590	4,761	4,877	4,969	5,064
Purchased Products mbpd														
Gasoline	355	388	376	407	406	441	479	491	502	511	520	528	534	540
% of yields	27.0%	26.8%	25.2%	26.7%	26.9%	26.9%	26.9%	26.9%	26.9%	26.9%	26.9%	26.9%	26.9%	26.9%
Distillates	135	124	90	97	132	151	172	204	225	240	252	260	265	270
% of yields	14.9%	12.8%	8.3%	9.3%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%
NGL's & Petrochemicals	79	43	43	48	68	78	81	88	95	103	111	116	121	126
% of yields	32.4%	17.2%	24.2%	26.4%	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%
Asphalt	5	3	0	2	3	3	3	3	3	3	3	4	4	4
% of yields	6.2%	3.3%	0.0%	2.5%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%
Heavy Fuel Oil	7	8	-7	5	12	15	17	21	24	24	25	25	26	26
% of yields	25.0%	25.8%	-9.6%	9.6%	20.8%	20.8%	20.8%	20.8%	20.8%	20.8%	20.8%	20.8%	20.8%	20.8%
Propane	18	24	23	24	27	29	31	31	32	33	33	34	34	35
% of yields	35.3%	46.2%	32.9%	36.4%	38.3%	38.3%	38.3%	38.3%	38.3%	38.3%	38.3%	38.3%	38.3%	38.3%
Total	599	590	525	583	647	717	782	839	880	914	945	966	984	1,002
Refined Product Sales (mbpd)														
Gasoline	1,669	1,834	1,870	1,933	1,913	2,079	2,260	2,317	2,368	2,410	2,454	2,488	2,518	2,548
Gasoline	1,005	9.9%	2.0%	3.4%	-1.1%	8.7%	8.7%	2,317	2,308	1.8%	1.8%	1.4%	1.2%	1.2%
Distillates	1,040	1,089	1,169	1,144	1,257	1,439	1,639	1,950	2,276	2,295	2,410	2,482	2,532	2,583
Distillates	1,040	4.7%	7.3%	-2.1%	9.9%	1,459	13.9%	1,950	10.0%	7.0%	5.0%	3.0%	2,552	2,585
NGL's & Petrochemicals	323	293	221	230	293	337	351	379	410	443	479	500	522	545
NGE S & Fell Ochemicals	323	-9.3%	-24.6%	4.1%	255	15.0%	4.1%	8.1%	8.1%	8.1%	8.1%	4.4%	4.4%	4.4%
Acobalt	86	-5.3%	-24.0%	4.1%	27.4%	15.0%	4.1%	92	95	98	101	105	108	112
Asphalt	00	94	-5.3%	-7.9%	2.0%	2.6%	3.2%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%
User First Off	25	9.5%		-7.9%		2.0%	5.2% 96	5.4%	137	5.4%	143	146	148	5.4%
Heavy Fuel Oil	35		66	÷.	72									
		11.4%	69.2%	-13.6%	26.2%	23.2%	8.2%	30.0%	10.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Propane	69	76	93	90	96	106	111	113	115	117	120	122	124	127
Total	3.222	10.1%	22.4% 3,508	-3.2% 3,536	7.0%	10.4% 4.135	4.1%	2.0%	2.0%	2.0%	2.0%	2.0%	1.9% 5.953	1.9% 6.066
	-,	07.20	0,000	0,000	-,	.,	.,		0,200			5/5 15	0,000	
Refined Product Sales Volume (gal. per ye Gasoline		28.115.220	28,667,100	29.632.890	29.318.716	31,867,314	34,650,534	35,516,798	36,298,167	36,951,534	37,616,662	38,143,295	38,601,015	39,064,227
Distillates	15,943,200	16,694,370	17,920,770	17,537,520	19,267,938	22,053,915	25,121,385	29,894,448	32,883,893	35,185,766	36,945,054	38,053,405	38,814,474	39,590,763
NGL's & Petrochemicals	4,951,590	4,491,690	3,387,930	3,525,900	4,491,497	5,164,575	5,374,278	5,809,594	6,280,171	6,788,865	7,338,763	7,661,669	7,998,782	8,350,729
Asphalt	1,318,380	1,441,020	1,364,370	1,257,060	1,282,290	1,315,152	1,357,745	1,403,908	1,451,641	1,500,997	1,552,031	1,604,800	1,659,363	1,715,782
Heavy Fuel Oil	536,550	597,870	1,011,780	873,810	1,102,715	1,358,161	1,470,117	1,911,152	2,102,268	2,144,313	2,187,199	2,230,943	2,275,562	2,321,073
Propane	1,057,770	1,165,080	1,425,690	1,379,700	1,475,645	1,629,811	1,695,988	1,729,908	1,764,506	1,799,796	1,835,792	1,872,508	1,908,085	1,944,339
Total	49,393 <u>,</u> 260	52,505,250	53,777,640	54,206,880	56,938,802	63,388,929	69,670,047	76,265,809	80,780,646	84,371,271	87,475,501	89,566,620	91,257,281	92,986,912
Refined Products Avg. Sales Price		2.22	2.22		2.33		4.00	1.00	1.00	4.00	1.00	1.99	1.00	1.00
Total Payanua	1.41	2.29	3.30	2.74		2.11	1.99	1.99	1.99	1.99	1.99		1.99	1.99
Total Revenue	69,779	119,983	177,453	148,379	132,530	133,467	138,427	151,533	160,503	167,637	173,805	177,960	181,319	184,756

Income	Statement
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Fiscal Years Ending Dec. 31	Q1 2020	Q2 2020	Q3 2020	Q4 2020	2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024	Q2 2024	Q3 2024	E Q3 2024	E Q4 2024	E Q1 2025	E Q2 2025	E Q3 2025	E Q4 2025	2026	2026	20
Sales and other operating revenues	22,204	12,195	17,408	17,972	22,711	29,615	32,321	35,336	38,058	53,795	45,787	39,813	34,864	36,343	40,917	36,255	32,706	37,914	33,829	31,333	31,443	34,936	34,761	32,327	33,319	34,348	35,026	35,7
Income from equity method investments	-1,233	79	117	102	91	93	122	152	142	147	180	186	133	199	215	195	204	373	166	157	-237	193	171	162	-251	190	172	1
Net gain / loss on disposal of assets	3	2	1	64	3	0	0	18	-18	39	1,051	-11	3	13	110	91	20	-1	0	0	0	0	0	0	0	0	0	
Other income	23	24	22	49	77	119	170	102	202	257	219	105	77	269	341	282	281	76	166	126	129	141	171	130	137	139	172	1
Total revenues and other income	20,997	12,300	17,548	18,187	22,882	29,827	32,613	35,608	38,384	54,238	47,237	40,093	35,077	36,824	41,583	36,823	33,211	38,362	34,162	31,615	31,335	35,271	35,103	32,619	33,204	34,676	35,370	36,0
Cost of revenues	-20,342	-11,502	-16,673	-17,216	-21,084	-27,177	-29,563	-32,184	-35,068	-44,207	-38,821	-33,575	-29,294	-31,762	-34,928	-32,582	-29,593	-33,945	-30,581	-28,294	-28,258	-30,645	-31,058	-29,181	-29,944	-30,129	-31,295	-32,2
Depreciation and amortization	-8,685	-858	-1,263	-995	-844	-871	-836	-813	-805	-819	-794	-797	-800	-834	-845	-828	-827	-838	-775	-775	-802	-802	-802	-802	-845	-845	-845	-8
Selling, general and administrative expens	-742	-665	-673	-630	-575	-625	-681	-656	-603	-694	-712	-763	-691	-704	-824	-820	-779	-823	-880	-747	-743	-906	-829	-771	-866	-819	-828	-9
Other taxes	-198	-170	-178	-122	-162	-189	-193	-177	-192	-190	-224	-219	-231	-219	-233	-198	-228	-234	-227	-178	-218	-252	-233	-184	-231	-248	-235	-2
Total Costs and Expenses	-29,967	-13,195	-18,787	-18,963	-22,665	-28,862	-31,273	-33,830	-36,668	-45,910	-40,551	-35,354	-31,016	-33,519	-36,830	-34,428	-31,427	-35,840	-32,462	-29,994	-30,022	-32,605	-32,923	-30,939	-31,886	-32,041	-33,203	-34,2
Income from operations	-12,155	575	-1,057	390	217	965	1,340	1,778	1,716	8,328	6,686	4,739	4,061	3,305	4,753	2,395	1,784	2,522	1,700	1,621	1,313	2,665	2,180	1,680	1,318	2,636	2,168	1,8
Net interest and other financial costs	-332	-341	-359	-333	-353	-372	-328	-430	-262	-312	-240	-186	-154	-142	-118	-111	-179	-194	-281	-281	-305	-305	-305	-305	-308	-308	-308	-3
Income before income taxes	-12,487	234	-1,416	57	-136	593	1,012	1,348	1,454	8,016	6,446	4,553	3,907	3,163	4,635	2,284	1,605	2,328	1,419	1,341	1,007	2,360	1,875	1,375	1,010	2,328	1,860	1,5
Provision for income taxes	1,951	-150	436	193	-34	-5	18	-243	-282	-1,799	-1,426	-984	-823	-583	-1,004	-407	-293	-373	-336	-317	-238	-559	-444	-325	-239	-551	-440	-3
Net Income	-10,536	84	-980	250	-170	588	1,030	1,105	1,172	6,217	5,020	3,569	3,084	2,580	3,631	1,877	1,312	1,955	1,083	1,023	769	1,801	1,431	1,049	771	1,777	1,420	1,15
Less net income attributabe to:																												
Redeemable noncontrolling interest	-20	-21	-20	-20	-20	-21	-38	-21	-21	-21	-23	-23	-23	-23	-25	-23	-10	-5	-25	-25	-26	-26	-26	-26	-27	-27	-27	
Non controlling interests	1,004	-246	-257	-269	-286	-269	-298	-310	-306	-323	-520	-297	-337	-331	-326	-403	-365	-435	-442	-269	-202	-473	-376	-275	-202	-466	-373	-3/
Net income attributable to MPC	-9,234	9	-886	285	-242	8,512	694	774	845	5,873	4,477	3,321	2,724	2,226	3,280	1,451	937	1,515	617	730	541	1,303	1,030	748	542	1,284	1,020	8
Net Income Attributable to MPC per share	-14	0	-1	0	0	13	1	1	1.50	11.03	9.12	7.13	6.13	5.34	8.31	3.86	2.59	4.34	1.49	1.77	1.50	3.60	2.85	2.07	1.58	3.75	2.98	2.4
Weighted average shares outstanding	648	650	650	650	651	650	633	605	564	532	491	465	444	417	394	376	361	349	413	413	362	362	362	362	342	342	342	34

Income Statement

Fiscal Years Ending Dec. 31	2020	2021	2022	2023	E 2024	E 2025	E 2026	E 2027	E 2028	E 2029	E 2030	E 2031	E 2032	E 2033
Sales and other operating revenues	69,779	119,983	177,453	148,379	135,782	133,467	138,427	151,533	160,503	167,637	173,805	177,960	181,319	184,756
Income from equity method														
investments	-935	458	655	742	900	289	577	632	669	699	725	742	756	770
Net gain / loss on disposal of assets	70	21	1,061	217	19	0	0	0	0	0	0	0	0	0
Other income	118	468	783	969	649	570	572	626	663	693	718	736	750	764
Total revenues and other income	69,032	120,930	179,952	150,307	137,350	134,326	139,577	152,791	161,836	169,029	175,248	179,438	182,825	186,290
Cost of revenues	-65,733	-110,008	-151,671	-128,566	-122,413	-119,143	-123,893	-135,622	-143,650	-150,035	-155,556	-159,274	-162,281	-165,356
Depreciation and amortization	-11,801	-3,364	-3,215	-3,307	-3,099	-3,209	-3,379	-3,549	-3,719	-3,889	-4,059	-4,229	-4,399	-4,569
Selling, general and administrative														
expenses	-2,710	-2,537	-2,772	-3,039	-3,229	-3,249	-3,325	-3,640	-3,855	-4,027	-4,175	-4,275	-4,355	-4,438
Other taxes	-668	-721	-825	-881	-867	-887	-906	-991	-1,050	-1,097	-1,137	-1,164	-1,186	-1,209
Total Costs and Expenses	-80,912	-116,630	-158,483	-135,793	-129,608	-126,489	-131,503	-143,802	-152,275	-159,048	-164,927	-168,942	-172,221	-175,572
Income from operations	-12,247	4,300	21,469	14,514	7,742	7,838	8,074	8,989	9,561	9,981	10,322	10,495	10,604	10,718
Net interest and other financial costs	-1,365	-1,483	-1,000	-525	-1,122	-1,221	-1,231	-1,285	-1,329	-1,279	-1,330	-1,378	-1,423	-1,468
Income before income taxes	-13,612	2,817	20,469	13,989	6,620	6,616	6,843	7,703	8,232	8,702	8,991	9,118	9,181	9,250
Provision for income taxes	2,430	-264	-4,491	-2,817	-1,319	-1,566	-1,620	-1,823	-1,948	-2,059	-2,128	-2,158	-2,173	-2,189
Net Income	-11,182	2,553	15,978	11,172	5,301	5,051	5,224	5,880	6,284	6,642	6,863	6,960	7,008	7,061
Less net income attributabe to:														
Redeemable noncontrolling interest	-81	-100	-88	-94	-98	-103	-107	-111	-116	-120	-124	-129	-133	-137
Non controlling interests	232	-1,163	-1,446	-1,397	-1,510	-1,326	-1,346	-1,487	-1,642	-1,814	-2,004	-2,214	-2,446	-2,702
Net income attributable to MPC	-9,826	9,738	14,516	9,681	3,692	3,622	3,771	4,282	4,526	4,708	4,735	4,617	4,429	4,221
Net Income Attributable to MPC per														
share	-15.14	15.36	28.35	23.79	9.64	10.01	11.01	13.17	14.61	15.90	16.68	16.91	16.82	16.57
Weighted average shares outstanding	649	634	512	407	383	362	342	325	310	296	284	273	263	255
Dividends Paid	1,510	1,484	1,279	1,261	1,272	1,299	1,325	1,505	1,591	1,655	1,664	1,623	1,557	1,484
Dividends per Share	2.33	2.34	2.50	3.10	3.32	3.59	3.87	4.63	5.13	5.59	5.86	5.94	5.91	5.83

Fiscal Years Ending Dec. 31 2022 2023 2024E 2025E 2026E 2027E 2028E 2029E 2030E 2031E 2032E 2020 2021 2033E NOPLAT: Sales and other operating revenues 69,779 119,983 177,453 148,379 135,782 133,467 138,427 151,533 160,503 167,637 173,805 177,960 181,319 184,756 Cost of revenues -65,733 -110,008 -151,671 128,566 122,413 119,143 123,893 135,622 -143,650 -150,035 155,556 159,274 162,281 165,356 Selling, general and administrative expenses -3,640 -4,438 -2,710 -2,537 -2,772 -3,039 -3,229 -3,249 -3,325 -3,855 -4,027 -4,175 -4,275 -4,355 Other taxes -668 -721 -825 -881 -867 -887 -991 -1,050 -1,097 -1,137 -1,164 -1,186 -1,209 -3.549 Depreciation and amortization -11.801 -3,364 -3.215 -3.307 -3.099 -3.209 -3.379 -3.719 -3.889 -4.059 -4.229 -4.399 -4.569 649 Other income 118 468 783 969 570 572 626 693 718 736 764 663 750 Interest on PV operating leases 104 88 79 70 71 76 78 82 86 90 94 98 102 106 EBITA -10,911 3,909 19,832 13,625 6,894 7,625 7,575 8,438 8,978 9,373 9,691 9,851 9,949 10,053 Less Adjusted Taxes 1,319 1,566 1,620 1,823 1,948 2,128 2,158 2,173 2,189 Tax Provision -2,430 264 4,491 2,817 2,059 Income from equity method investments -221 108 155 176 213 68 137 150 158 165 172 176 179 182 +Net interest and other financial costs 323 351 237 124 266 289 291 304 315 303 315 326 337 347 + Tax shield on operating lease 25 21 19 17 17 18 19 19 20 21 22 23 25 24 - Gain on disposal of assets Total Adjusted Taxes 17 251 51 0 0 4,842 -1,844 532 2,834 1,393 2,218 2,293 2,331 2,379 1,805 1,793 1,997 2,355 Add Changes in deferred taxes -189 -565 266 -70 538 639 661 744 795 841 869 881 887 894 NOPLAT -12,944 3,876 24,940 16,388 6,040 6,459 6,443 7,185 7,648 7,995 8,266 8,401 8,482 8,568 Invested Capital (IC): Operating Current Assets Normal Cash 415 714 1.055 882 788 794 823 901 955 997 1.034 1.058 1.078 1.099 Receivables, less allowance for doubtful accounts 5,760 11,034 13,477 11,619 10,893 10,958 11,024 12,207 13,020 13,554 13,999 14,374 14,655 14,919 Inventories 7 999 8.055 8 8 2 7 9.317 9 272 10 323 11.345 12 419 13.155 13 739 14 245 14 585 14 861 15 142 Other current assets 2,724 568 1,168 971 789 866 936 977 1,026 1,071 1,092 1,111 1,133 795 Total Operating Current Assets 16,898 20,371 24,527 22,789 21,742 22.869 24.059 26,464 28.106 29,316 30,348 31,109 31,704 32.293 Operating Current Liabilities 7.803 13.700 13.761 13.762 14.375 15.736 16.667 18.829 19.186 Accounts payable 15.312 13.860 17.408 18.049 18.480 Payroll and benefits payable 732 911 967 1,115 1,029 1,036 1,074 1,176 1,246 1,301 1,349 1,381 1,407 1,434 Accrued taxes excluding consumer excise taxes payable 1.105 1.231 1.140 1.221 572 679 702 790 844 893 922 935 942 949 Total Operating Current Liabilities 9,640 15,842 17,419 16,097 15,363 15,574 16,151 17,702 18,757 19,602 20,320 20,797 21,178 21,569 NWC 7,258 4,529 7,108 6,692 6,379 7,294 7,908 8,762 9,349 9,714 10,028 10,313 10,526 10,724 Net Property Plant Equipment 39,035 35,112 38,287 40,212 42,137 45,987 47,912 49,837 51,762 53,687 37,440 35,657 36,362 44,062 ROU Assets 1,521 1,372 1,214 1,233 1,316 1,359 1,416 1,496 1,569 1,631 1,698 1,769 1,838 1,905 Other Liabilities Deferred credits and other liabilities 1,570 2,095 1,207 1,346 1,304 1,409 1,540 1,514 1,718 1,820 1,901 1,971 2,018 2,056 64.221 Invested Capital 46.607 41,995 42.675 41.628 42.517 45.427 47.966 50.677 53,159 55,431 57.667 59,901 62.070 Free Cash Flow (FCF): 6,040 7,648 NOPLAT -12,944 3,876 24,940 16,388 6,459 6,443 7,185 7,995 8,266 8,401 8,482 8,568 ,-15<u>1</u> Change in IC 397 -13,341 4,612 8,488 681 24,260 -1,047 17,435 .910 539 183 234 169 6,416 5,151 3,550 3,905 4,474 5,165 5,724 6,030 6,167 6,313 FCF Return on Invested Capital (ROIC): NOPLAT -12,944 3.876 24,940 16.388 6.040 6 4 5 9 6.443 7.185 7.648 7,995 8.266 8.401 8.482 8.568 41.628 62.070 Beginning IC 46.210 46.607 41.995 42.675 42.517 45.427 47.966 50.677 53.159 55.431 57.667 59.901 ROIC -28.01% 8.32% 59.39% 38.40% 14.51% 15.19% 14.189 14.98 15.0 15.04% 14.91% 14.57 14.16 13.80% Economic Profit (EP): Beginning IC 46,210 46,607 41,995 42,675 41,628 42,517 45,427 47,966 50,677 53,159 55,431 57,667 59,901 62,070 x (ROIC - WACC) 37.86% 5.139 -1.539 49.54% 4.349 4.31% 3.96 28.569 5.19% 5.079 EP -17,494 -713 20.806 12,187 1.941 2.273 1.971 2.463 2.659 2,761 2.80 2,723 2,584 2.456

Marathon Petroleum Historical Cash Flow Statement

2021 Fiscal Years Ending Dec. 31 2014 2015 2016 2017 2018 2019 2020 2022 2023 1,213 Net income / loss 2,555 2,868 3,804 3,606 3,255 -9,977 11,001 16,050 11,172 Amortization of deferred financing costs and debt discount 70 69 50 27 16 64 33 61 79 -78 Depreciation and amortization 1,326 1,646 2,131 2,114 2,170 4,422 11,801 3,364 3,215 3,307 Pension and other postretirement benefits, net 151 80 9 47 93 -68 220 -499 172 -191 -1,233 14 -169 Deferred income taxes -242 134 394 807 -241 290 -28 Net gain on disposal of assets -21 -32 -278 -21 -217 -7 -10 -6 -70 -1,061 Income / loss from equity method investments -153 -88 185 -306 -299 -312 935 -458 -655 -742 Distributions from equity method investments 170 113 317 391 458 569 577 652 772 941 Income from discontinued operations -673 -1,205 -8,448 -72 -806 С Changes in income tax receivable 238 -358 -1,807 2,089 -555 135 Changes in the fair value of derivative instruments -3 4 -41 116 -62 -8 45 16 -147 70 Changes in Current receivables 1.642 1.292 -674 -1.093 1.277 -1.717 1.465 -5,299 -2.315 1.972 Inventories 965 1,750 -787 -786 -70 106 -362 -33 -489 80 Current accounts payable and accrued liabilities -1,547 985 2,814 -2,801 2,453 -2,927 6,260 1,909 -1,316 -2,400 Right of use assets / operating leases 0 0 -19 0 -9 3 -7 -547 All other, net -9 -35 -91 -202 49 355 191 -153 -412 Cash provided by / used in operating activities - continuing operations 3,810 5,136 3,867 4,987 5,099 7,976 807 8,384 16,319 14,117 Cash provided by operating activities - discontinued operations 0 1.059 1.465 1.612 4.024 42 n n 0 0 3,810 5,136 3,867 4,987 16,361 14,117 Net Cash from Operating Acitivities 6,158 9,441 2,419 4,360 Additions to property, plant and equipment -1.480 -1,998 -2,892 -2,732 -3,179 -4,810 -2,787 -1,464 -2,420 -1,890 Acquisitions, net of cash acquired -2.821 -1.218 0 -249 -3.822 -129 0 0 -413 -246 Disposal of assets 27 21 101 79 22 47 150 153 90 36 Investments - acquisitions, loans and contributions -413 -331 -288 -805 -409 -1,064 -485 -210 -405 -480 Investments-redemptions, repayments and return of capital 62 16 98 137 515 275 9 4 0 39 0 Purchases of short-term investments 0 -12,498 -6,023 -8,622 Sales of short-term investments 0 0 1,544 1,296 2 082 Maturities of short-term investments 0 0 5,406 7,159 5,048 All other, net excluding acquisitions, net of cash acquired 135 81 112 247 69 81 63 513 824 702 Cash used in investing activities - continuing operations -4,543 -3,441 -2,967 -3,398 -7,303 -5,777 -2,922 -6,517 623 -3,095 Cash used in investing activities - discontinued operations 0 0 0 0 -367 -484 -335 21,314 0 0 -4,543 -3,441 -2,967 -3,398 -3,095 Net Cash from Investing Activities -7,670 -6,261 -3,257 14,797 623 Commercial paper - issued 0 1.263 0 0 2.055 7.414 0 0 0 300 Commercial paper - repayments -1,263 -1,031 -8,437 0 -300 0 0 0 0 0 Long-term debt - borrowings 3,793 2.993 864 2.911 13.476 14 274 17,082 12,150 3.379 1 589 Long-term debt - repayments -548 -2,226 -2,269 -642 -8,032 -13,073 -15,380 -17,400 -2,280 -1,079 Debt issuance costs -22 -21 -33 -86 -22 -50 -39 -15 -11 0 Issuance of common stock 26 33 11 46 24 10 11 106 243 62 Common stock repurchased -2,131 -965 -197 -2,372 -3,287 -1 950 0 -4 654 -11 922 -11 572 -613 -719 -1,398 -1,510 -1,484 Dividends paid -773 -954 -1,279 -1,261 -524 -1,244 -1,245 Distributions to noncontrolling interests -27 -40 -542 -903 -1,449 -1,214 -1,281 -694 Repurchases of noncontrolling interests 0 -33 -630 -491 0 Redemption of noncontrolling interests - preferred units 0 -600 0 0 All other, net 19 -33 47 -69 -35 -50 -28 -35 Net Cash from Financing Activities 586 -824 -2,896 -1,604 210 -3,473 -135 -14,419 -13,647 -14,207 Net decrease / increase in cash and cash equivalents -798 -367 -244 2,123 -1,290 -196 -973 4,738 3,337 -3,185 Cash, cash equivalents and restricted cash continuing operations - beginning of period 2.849 1.519 1.395 416 5.294 8,631 Cash, cash equivalents and restricted cash discontinued operations - beginning of period 166 134 140 0 206 0 Cash, cash equivalents and restricted cash discontinued operations - end of period 206 134 140 0 0 0 Cash and cash equivalents at end of period 1.494 1.127 892 3.015 1.725 1.529 556 5.294 8.631 5.446

Forecasted Cash Flow Statement

Fiscal Years Ending Dec. 31	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Net income attributable to MPC	3,692	3,622	3,771	4,282	4,526	4,708	4,735	4,617	4,429	4,221
Depreciation & Amortization	3,099	3,209	3,379	3,549	3,719	3,889	4,059	4,229	4,399	4,569
Receivables, less allowance for doubtful accounts	726	-65	-66	-1,183	-813	-534	-445	-375	-281	-264
Inventories	45	-1,050	-1,023	-1,185	-735	-585	-506	-373	-275	-204
Other current assets	182	-6	-72	-70	-41	-49	-45	-21	-19	-23
Other noncurrent assets	-155	443	-114	-386	-230	-54	-151	-112	-67	-57
Accounts payable	133	97	515	1,361	932	741	640	431	349	357
Payroll and benefits payable	-86	7	38	102	70	55	48	32	26	27
Accrued taxes excluding consumer e	-649	107	23	88	54	48	30	13	6	7
Other current liabilities	-349	-22	47	125	86	68	59	40	32	33
Defined benefit postretirement										
plan obligations	-110	-99	-89	-80	-72	-65	-59	-53	-47	-43
Deferred credits and other										
liabilities	131	-26	56	149	102	81	70	47	38	39
Deferred Income Tax Liabilities	538	639	661	744	795	841	869	881	887	894
Net Cash From Operating Acitivities	7,066	6,856	7,128	7,607	8,392	9,145	9,305	9,389	9,476	9,478
Property, plant and equipment	-1,250	-1,925	-1,925	-1,925	-1,925	-1,925	-1,925	-1,925	-1,925	-1,925
Short-term investments	-1,230	-1,925	-1,923 -217	-1,925	-1,925	-1,925	-1,925	-1,925	-1,923	-1,925 -289
Equity method investments	-900	-208	-217	-632	-669	-699	-725	-200	-756	-289
ROU Assets	-83	-285	-57	-80	-73	-62	-68	-742	-68	-67
Goodwill	0	0	0	0	0	0	0	0	0	0
Net Cash From Investing Activities	-2,433	-2,465	-2,776	-2,863	-2,902	-2,931	-2,973	-3,004	-3,027	-3,051
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Long-term debt	-7,747	673	867	1,193	1,010	888	881	824	785	787
Debt due within one year	-53	1,049	-701	-249	-250	-1,750	0	0	0	0
Operating lease liabilities	-21	14	19	26	24	20	22	23	22	22
Long-term operating lease liabilities	109	29	38	53	48	41	45	47	45	44
Redeemable noncontrolling interest	212	8	41	109	75	60	52	35	28	29
Common stock	25	25	5	0	0	0	0	0	0	0
Held in treasury, at cost	-3,905	-3,479	-3,100	-2,762	-2,461	-2,192	-1,953	-1,740	-1,550	-1,381
Additional paid-in capital	0	0	0	0	0	0	0	0	0	0
Accumulated other comprehensive I	131	0	0	0	0	0	0	0	0	0
Dividends Paid	-1,272	-1,299	-1,325	-1,505	-1,591	-1,655	-1,664	-1,623	-1,557	-1,484
Noncontrolling interests	-1,510	-1,326	-1,346	-1,487	-1,642	-1,814	-2,004	-2,214	-2,446	-2,702
Net Cash From Financing Activities	-14,031	-4,307	-5,503	-4,621	-4,786	-6,402	-4,622	-4,647	-4,672	-4,685
Chango in Cash	0 209	84	1 150	124	703	-188	1 710	1 727	1 770	1 7/1
Change in Cash Cash at the beginning of the year	-9,398 5,443	-3,955	-1,150 -3,871	124 -5,021	-4,897	-188 -4,194	1,710 -4,382	1,737 -2,672	1,778 -935	1,741 842
Cash at year end	-3,955	-3,871	-5,021	-4,897	-4,194	-4,382	-2,672	-935	842	2,584

Balance Sheet	
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Fiscal Years Ending Dec. 31	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Assets																				
Cash and cash equivalents	1,494	1,127	887	3,011	1,687	1,393	415	5,291	8,625	5,443	-3,955	-3,871	-5,021	-4,897	-4,194	-4,382	-2,672	-935	842	2,584
Short-term investments	0	0	0	0	0	0	0	5,548	3,145	4,781	4,981	5,189	5,406	5,632	5,867	6,113	6,368	6,634	6,912	7,200
Receivables, less allowance for doubtful accounts	4,058	2,927	3,617	4,695	5,853	7,233	5,760	11,034	13,477	11,619	10,893	10,958	11,024	12,207	13,020	13,554	13,999	14,374	14,655	14,919
Inventories	5,642	5,225	5,656	5,550	9,837	9,804	7,999	8,055	8,827	9,317	9,272	10,323	11,345	12,419	13,155	13,739	14,245	14,585	14,861	15,142
Other current assets	145	192	241	145	646	893	2,724	568	1,168	971	789	795	866	936	977	1,026	1,071	1,092	1,111	1,133
Assets held for sale	0	0	0	0	0	11,135	11,389	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Current Assets	11,339	9,471	10,401	13,401	18,023	30,458	28,287	30,496	35,242	32,131	21,980	23,393	23,621	26,297	28,825	30,050	33,010	35,750	38,380	40,979
Equity method investments	865	3.622	3,827	4.787	5,898	6.568	5,422	5,409	6.466	6,260	7,160	7,449	8,026	8.658	9,327	10,026	10,751	11.493	12,249	13,020
Property, plant and equipment, net		25,164	25,765	26,443	45,058	40,870	39,035	37,440	35,657	35,112	33,263	31.978	30,524	28,900	27,105	25,141	23,007	20,703	18,229	15,586
Goodwill	1,566	4,019	3,587	3,586	20,184	15,650	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	8,244
Right of use assets	_,	.,==0	0	0	0	1.806	1.521	1.372	1.214	1.233	1.316	1.359	1.416	1,496	1.569	1.631	1.698	1.769	1.838	1,905
Other noncurrent assets	394	839	833	830	3.777	3,204	2,637	2,400	3.081	3.007	3,162	2,719	2,833	3,218	3,448	3.502	3.653	3,765	3.833	3.889
Total Assets	394	43,115	44,413	49,047	92,940	98,556	85,158	85,373	89,904	85,987	75,125	75,143	74,664	76,814	78,519	78,594	80.364	81,725	82,773	83,622
		,	,		/			/		/										
Liabilities																				
Accounts payable	6,661	4,743	5,593	8,297	9,366	11,222	7,803	13,700	15,312	13,761	13,762	13,860	14,375	15,736	16,667	17,408	18,049	18,480	18,829	19,186
Payroll and benefits payable	427	503	530	591	1,152	987	732	911	967	1,115	1.029	1.036	1.074	1,176	1.246	1,301	1,349	1,381	1,407	1,434
Accrued taxes excluding consumer excise taxes payable	647	184	153	670	1,446	1,015	1,105	1,231	1,140	1.221	572	679	702	790	844	893	922	935	942	949
Debt due within one year	27	29	28	624	544	704	2,854	571	1.066	1.954	1.901	2.950	2.249	2.000	1.750	000	522	555	512	5.5
Operating lease liabilities	0	0	0	0	0	514	497	438	368	454	433	448	466	493	517	537	559	583	605	627
Other current liabilities	354	426	378	296	708	758	822	1.047	1,167	1,645	1,296	1,274	1,321	1.446	1,532	1,600	1,658	1,698	1,730	1,763
Liabilities held for sale	0	0	0	250	0	1.748	1,850	2,017	1,10,	1,015	1,230	1,2,7	1,521	2,110	1,552	1,000	1,050	2,000	2,730	0
Total Current Liabilities	8,116	5.885	6,682	10,478	13,216	16,948	15,663	17,898	20,020	20,150	18,993	20,246	20,188	21,641	22,556	21.739	22,538	23.078	23,513	23,959
	0,110	5,005	0,002	10,170	10,210	10,510	15,005	17,050	20,020	20,250	10,555	20,210	20,100	21,011	22,550	22,755	22,550	23,070	20,010	20,000
Long-term debt	6,575	11,896	10,544	12,322	26,980	28,020	28,730	24,968	25,634	25,329	17,582	18,255	19,121	20,314	21,324	22,213	23,094	23,918	24,703	25,490
Deferred income taxes	2,014	3,285	3,861	2,654	4,864	6,392	6,203	5,638	5,904	5,834	6,372	7,012	7,673	8,417	9,212	10,053	10,921	11,802	12,689	13,582
Defined benefit postretirement plan obligations	1,099	1,179	1,055	1,099	1,509	1,617	2,121	1,015	1,114	1,102	992	893	803	723	651	586	527	474	427	384
Long-term operating lease liabilities	0	0	0	0	0	1,300	1,014	927	841	764	873	902	940	993	1,041	1,082	1,127	1,174	1,220	1,264
Deferred credits and other liabilities	768	735	604	666	1,318	1,172	1,207	1,346	1,304	1,409	1,540	1,514	1,570	1,718	1,820	1,901	1,971	2,018	2,056	2,095
Total Liabilities	18,572	22,980	22,746	27,219	47,887	55,449	54,938	51,792	54,817	54,588	46,353	48,820	50,294	53,806	56,604	57,573	60,178	62,464	64,608	66,774
Redeemable noncontrolling interest	0	0	1,000	1,000	1,004	968	968	965	968	895	1,107	1,115	1,156	1,265	1,340	1,400	1,451	1,486	1,514	1,543
Equity																				
Common Equity	9,848	11,078	11,067	11,269	33,739	33,167	33,218	33,272	33,412	33,475	33,500	33,524	33,529	33,529	33,529	33,529	33,529	33,529	33,529	33,529
Held in treasury, at cost	-6.299	-7.275	-7.482	-9.869	-13.175	-15.143	-15.157	-19.904	-31.841	-43.502	-47,407	-50.886	-53,986	-56,748	-59.208	-61,400	-63.354	-65.094	-66.644	-68.025
Retained earnings	7,515	9,752	10,206	12,864	14,755	15,990	4,650	12,905	26,142	34,562	36,983	39,306	41,751	44,529	47,463	50,517	53,587	56,582	59,454	62,191
Accumulated other comprehensive loss	-313	-318	-234	-231	-144	-320	-512	-67	20,212	-131	0	0	0	0	0	0	0	0	0	02,101
Total MPC Stockholders Equity	10,751	13,237	13,557	14.033	35,175	33.694	22,199	26.206	27,715	24.404	23.075	21,944	21.295	21.310	21,785	22.646	23,763	25.017	26,339	27,695
Noncontrolling interests	639	6,438	6.646	6,795	8.874	8,445	7.053	6.410	6.404	6.100	4.590	3.264	1.918	432	-1.210	-3.025	-5.029	-7.243	-9.689	-12.391
Total Equity	11.390	19.675	20,203	20.828	44.049	42.139	29.252	32.616	34.119	30,504	27.665	25.208	23.213	21.742	20.574	19.621	18.734	17.774	16.650	15.304
Total Liabilities and Equity	29.962	42.655	43.949	49.047	92.940	98.556	85.158	85.373	89.904	85.987	75.124	75.143	74.664	76.814	78.519	78.594	80.364	81.725	82.773	83.622
rotal mathematics and Equity	23,302	42,033	43,343		52,540	50,550	03,130	03,373	05,504	03,507	13,124	/3,143	77,007	70,014	.0,313	,,,,,,,,	30,304	51,725	52,113	33,022

Income Statement

Fiscal Years Ending Dec. 31	2020	2021	2022	2023	E 2024	E 2025	E 2026	E 2027	E 2028	E 2029	E 2030	E 2031	E 2032	E 2033
Sales and other operating revenues Income from equity method	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
investments	-1.3%	0.4%	0.4%	0.5%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%
Net gain / loss on disposal of assets	0.1%	0.0%	0.6%	0.1%	0.2%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%
Other income	0.2%	0.4%	0.4%	0.7%	0.4%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%	0.41%
Total revenues and other income	98.9%	100.8%	101.4%	101.3%	100.6%	100.61%	100.61%	100.61%	100.61%	100.61%	100.61%	100.61%	100.61%	100.61%
Cost of revenues	-94.2%	-91.7%	-85.5%	-86.6%	-89.1%	-89.50%	-89.50%	-89.50%	-89.50%	-89.50%	-89.50%	-89.50%	-89.50%	-89.50%
Depreciation and amortization	-16.9%	-2.8%	-1.8%	-2.2%	-5.9%	-5.94%	-5.94%	-5.94%	-5.94%	-5.94%	-5.94%	-5.94%	-5.94%	-5.94%
Selling, general and administrative														
expenses	-3.9%	-2.1%	-1.6%	-2.0%	-2.4%	-2.40%	-2.40%	-2.40%	-2.40%	-2.40%	-2.40%	-2.40%	-2.40%	-2.40%
Other taxes	-1.0%	-0.6%	-0.5%	-0.6%	-0.7%	-0.65%	-0.65%	-0.65%	-0.65%	-0.65%	-0.65%	-0.65%	-0.65%	-0.65%
Total Costs and Expenses	-116.0%	-97.2%	-89.3%	-91.5%	- 98.5 %	-98.50%	-98.50%	-98.50%	-98.50%	-98.50%	-98.50%	-98.50%	-98.50%	-98.50%
Income from operations	-17.6%	3.6%	12.1%	9.8%	2.0%	1.98%	1.98%	1.98%	1.98%	1.98%	1.98%	1.98%	1.98%	1.98%
Net interest and other financial														
costs	-2.0%	-1.2%	-0.6%	-0.4%	-1.0%	-1.03%	-1.03%	-1.03%	-1.03%	-1.03%	-1.03%	-1.03%	-1.03%	-1.03%
Income before income taxes	-19.5%	2.3%	11.5%	9.4%	1.0%	0.95%	0.95%	0.95%	0.95%	0.95%	0.95%	0.95%	0.95%	0.95%
Provision for income taxes	3.5%	-0.2%	-2.5%	-1.9%	-0.3%	-0.29%	-0.29%	-0.29%	-0.29%	-0.29%	-0.29%	-0.29%	-0.29%	-0.29%
Net Income	-16.0%	2.1%	9.0%	7.5%	0.7%	0.66%	0.66%	0.66%	0.66%	0.66%	0.66%	0.66%	0.66%	0.66%
Less net income attributabe to:														
Redeemable noncontrolling														
interest	-0.1%	-0.1%	0.0%	-0.1%	-0.1%	-0.08%	-0.08%	-0.08%	-0.08%	-0.08%	-0.08%	-0.08%	-0.08%	-0.08%
Non controlling interests	0.3%	-1.0%	-0.8%	-0.9%	-0.6%	-0.60%	-0.60%	-0.60%	-0.60%	-0.60%	-0.60%	-0.60%	-0.60%	-0.60%
Net income attributable to MPC	-14.1%	8.1%	8.2%	6.5%	2.7%	2.7%	2.7%	2.8%	2.8%	2.8%	2.7%	2.6%	2.4%	2.3%

Balance Sheet

Fiscal Years Ending Dec. 31	2018	2019	2020	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Assets																
Cash and cash equivalents	1,687	1,393	0.59%	4.41%	4.86%	3.67%	3.38%	4.08%	4.00%	3.78%	3.81%	3.92%	3.88%	3.85%	3.86%	3.88%
Short-term investments	-	-	0.00%	4.62%	1.77%	3.22%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%	2.40%
Receivables, less allowance for doubtful accounts	5,853	7,233	8.25%	9.20%	7.59%	7.83%	8.22%	8.21%	7.96%	8.06%	8.11%	8.09%	8.05%	8.08%	8.08%	8.07%
Inventories			248.26%	235.18%	251.62%	263.49%	249.64%	249.64%	249.64%	249.64%	249.64%	249.64%	249.64%	249.64%	249.64%	249.64%
Other current assets	646	893	3.90%	0.47%	0.66%	0.65%	0.60%	0.60%	0.63%	0.62%	0.61%	0.61%	0.62%	0.61%	0.61%	0.61%
Assets held for sale	-	11,135	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%	0.00%
Total Current Assets	8,186	20,654	40.54%	25.42%	19.86%	21.65%	26.87%	23.45%	22.96%	23.73%	24.25%	23.60%	23.64%	23.80%	23.82%	23.71%
Equity method investments	5,898	6,568	7.77%	4.51%	3.64%	4.22%	4.12%	4.12%	4.12%	4.12%	4.12%	4.12%	4.12%	4.12%	4.12%	4.12%
Property, plant and equipment, net	45,058	40,870	55.94%	31.20%	20.09%	23.66%	32.73%	26.92%	25.85%	27.29%	28.20%	27.07%	27.10%	27.41%	27.44%	27.26%
Goodwill	20,184	15,650	11.83%	6.88%	4.65%	5.56%	7.23%	6.08%	5.88%	6.18%	6.34%	6.12%	6.13%	6.19%	6.20%	6.16%
Right of use assets	0	1,806	3.90%	3.66%	3.40%	3.51%	3.62%	3.55%	3.52%	3.55%	3.56%	3.55%	3.54%	3.55%	3.55%	3.55%
Other noncurrent assets	3,777	3,204	3.78%	2.00%	1.74%	2.03%	2.39%	2.04%	2.05%	2.12%	2.15%	2.09%	2.10%	2.12%	2.11%	2.11%
Total Assets	92,940	98,556	122.04%	71.15%	50.66%	57.95%	75.45%	63.81%	61.97%	64.79%	66.50%	64.27%	64.38%	64.99%	65.04%	64.67%
Liabilities																
Accounts payable	9,366	11,222	11.18%	11.42%	8.63%	9.27%	10.38%	10.38%	10.38%	10.38%	10.38%	10.38%	10.38%	10.38%	10.38%	10.38%
Payroll and benefits payable	1,152	987	1.05%	0.76%	0.54%	0.75%	0.78%	0.78%	0.78%	0.78%	0.78%	0.78%	0.78%	0.78%	0.78%	0.78%
Accrued taxes excluding consumer excise taxes payable	1,446	1,015	45.47%	-466.29%	-25.38%	-43.34%	-43.34%	-43.34%	-43.34%	-43.34%	-43.34%	-43.34%	-43.34%	-43.34%	-43.34%	-43.34%
Debt due within one year	544	704	10.24%	2.27%	4.00%	7.32%	5.96%	5.96%	5.96%	5.96%	5.96%	5.96%	5.96%	5.96%	5.96%	5.96%
Operating lease liabilities	0	514	32.68%	31.92%	30.31%	36.82%	32.93%	32.93%	32.93%	32.93%	32.93%	32.93%	32.93%	32.93%	32.93%	32.93%
Other current liabilities	708	758	1.18%	0.87%	0.66%	1.11%	0.95%	0.95%	0.95%	0.95%	0.95%	0.95%	0.95%	0.95%	0.95%	0.95%
Liabilities held for sale	-	1,748	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%	0.00%
Total Current Liabilities	13,216	16,948	22.45%	14.92%	11.28%	13.58%	15.56%	13.83%	13.56%	14.13%	14.27%	13.95%	13.98%	14.08%	14.07%	14.02%
Long-term debt	19.79%	20.30%	23.21%	21.25%	21.92%	21.90%	21.40%	21.40%	21.40%	21.40%	21.40%	21.40%	21.40%	21.40%	21.40%	21.40%
Deferred income taxes	4,864	6,392	8.89%	4.70%	3.33%	3.93%	5.21%	5.21%	5.21%	5.21%	5.21%	5.21%	5.21%	5.21%	5.21%	5.21%
Defined benefit postretirement plan obligations	1,509	1,617	3.04%	0.85%	0.63%	0.74%	1.31%	1.31%	1.31%	1.31%	1.31%	1.31%	1.31%	1.31%	1.31%	1.31%
Long-term operating lease liabilities	0	1,300	66.67%	67.57%	69.28%	61.96%	66.37%	66.37%	66.37%	66.37%	66.37%	66.37%	66.37%	66.37%	66.37%	66.37%
Deferred credits and other liabilities	1,318	1,172	1.73% 78.73%	1.12% 43.17%	0.73% 30.89%	0.95% 36.79%	1.13% 47.39%	1.13% 39.56%	1.13% 38.66%	1.13% 40.60%	1.13% 41.55%	1.13% 40.09%	1.13% 40.23%	1.13% 40.62%	1.13% 40.62%	1.13% 40.39%
Total Liabilities	20,907	27,429	78.73%	43.17%	30.89%	36.79%	47.39%	39.56%	38.66%	40.60%	41.55%	40.09%	40.23%	40.62%	40.62%	40.39%
Redeemable noncontrolling interest	1,004	968	1.39%	0.80%	0.55%	0.60%	0.84%	0.84%	0.84%	0.84%	0.84%	0.84%	0.84%	0.84%	0.84%	0.84%
Equity																
Common stock	10	10	0.01%	0.01%	0.01%	0.01%	0.03%	0.04%	0.05%	0.04%	0.04%	0.04%	0.04%	0.04%	0.04%	0.03%
Held in treasury, at cost	-13,175	-15,143	-21.72%	-16.59%	-17.94%	-29.32%	-34.91%	-38.13%	-39.00%	-37.45%	-36.89%	-36.63%	-36.45%	-36.58%	-36.76%	-36.82%
	33,729	33,157	47.59%	27.72%	18.82%	22.55%	24.65%	25.07%	24.18%	22.08%	20.85%	19.96%	-30.43% 19.25%	18.80%	-30.70%	-30.82%
Additional paid-in capital Retained earnings	55,729 14,755	35,157 15,990	6.66%	10.76%	18.82%	22.55%	24.65%	29.45%	30.16%	22.08%	20.85%	30.13%	30.83%	31.79%	32.79%	33.66%
Accumulated other comprehensive loss	-144	-320	-0.73%	-0.06%	0.00%	-0.09%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total MPC Stockholders Equity		-320 33,694	-0.73% 31.81%	-0.06%	15.62%	-0.09% 16.45%	16.99%	16.44%	15.38%	14.06%	13.57%	0.00%	13.67%	14.06%	14.53%	14.99%
	35,175	,			3.61%											
Noncontrolling interests	8,874	8,445	10.11%	5.34%		4.11% 20.56%	3.38%	2.45%	1.39%	0.28%	-0.75%	-1.80%	-2.89%	-4.07%	-5.34%	-6.71%
Total Equity	44,049	42,139	41.92% 122.04%	27.18% 71.15%	19.23%	20.56% 57.95%	20.37%	18.89%	16.77%	14.35%	12.82%	11.70%	10.78%	9.99%	9.18%	8.28%
Total Liabilities and Equity	65,960	70,536	122.04%	/1.15%	50.00%	57.95%	55.33%	56.30%	53.94%	50.69%	48.92%	46.88%	46.24%	45.92%	45.65%	45.26%

Weighted Average Cost of Capital (WACC) Estimation

	Estimated WACC	9.85%
Market Value of the Firm	93,686.50	100.00%
MV of Total Debt	28,599.06	30.53%
PV of Operating Leases	1,316	
Long-Term Debt	25,329	
Current Portion of LTD	1,954	
Short-Term Debt		
Market Value of Debt:		
MV of Equity	65,087.44	69.47%
Current Stock Price	\$159.92	
Market Value of Common Equity: Total Shares Outstanding	407	MV Weights
After-Tax Cost of Debt	4.40%	
Marginal Tax Rate	24%	
Pre-Tax Cost of Debt	5.76%	Cost of Debt retrieved from FactSet
Implied Default Premium	1.68%	
Risk-Free Rate	4.08%	10-Year Treasury bond
Cost of Debt:		
Cost of Equity	12.24%	
Equity Risk Premium	5.00%	Henry Fund Consensus
Beta	1.63	Raw Beta from Bloomberg
Risk-Free Rate	4.08%	10-Year Treasury bond
Cost of Equity:		ASSUMPTIONS:

Discounted Cash Flow (DCF) and Economic Profit (EP) Valuation Models

Key Inputs:

Key Inputs:	
CV Growth of NOPLAT	2.50%
CV Year ROIC	13.80%
WACC	9.85%
Cost of Equity	12.24%

Fiscal Years Ending Dec. 31	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
DCF Model:										
Free Cash Flow (FCF)	5,151	3,550	3,905	4,474	5,165	5,724	6,030	6,167	6,313	6,416
Continuing Value (CV)	,	,	,	,	,	,	,	,	,	95,509
PV of FCF	4,689	2,942	2,946	3,073	3,230	3,258	3,125	2,909	2,711	41,020
Value of Operating Assets: Non-Operating Adjustments	69903.52									
Excess cash	4560.5									
Short-term investments	4781.0									
Debt due within one year	-1954.0									
Defined benefit postretirement p	-1102.0									
Redeemable noncontrolling inter	-895.0									
Long-term debt	-25329.0									
Other noncurrent assets	3007.0									
ESOP	-117.3									
ROU Liabilities	-1316.1									
Equity method investments	6260.0									
Value of Equity	57,799									
Shares Outstanding	407.0									
Intrinsic Value of Last FYE	\$ 142.01									
Implied Price as of Today	\$ 155.22									
P Model:										
Economic Profit (EP)	1940.9	2273.2	1970.8	2462.7	2658.7	2761.0	2808.3	2722.8	2583.8	2456.
Continuing Value (CV)										33439.
PV of EP	1766.9	1884.0	1486.9	1691.5	1662.5	1571.7	1455.3	1284.5	1109.7	14361.
Total PV of EP	28275.1									
Invested Capital (last FYE)	41628.5									
Value of Operating Assets:	69903.52									
Non-Operating Adjustments										
Excess cash	4560.5									
Short-term investments	4781.0									
Debt due within one year	-1954.0									
Defined by a fit we start the second	4402.0									

Continuing Value (CV)										
PV of EP	1766.9	1884.0	1486.9	1691.5	1662.5	1571.7	1455.3	1284.5	1109.7	
Total PV of EP	28275.1									
Invested Capital (last FYE)	41628.5									
Value of Operating Assets:	69903.52									
Non-Operating Adjustments										
Excess cash	4560.5									
Short-term investments	4781.0									
Debt due within one year	-1954.0									
Defined benefit postretirement p	-1102.0									
Redeemable noncontrolling inter	-895.0									
Long-term debt	-25329.0									
Other noncurrent assets	3007.0									
ESOP	-117.3									
ROU Liabilities	-1316.1									
Equity method investments	6260.0									
Value of Equity	57798.7									
Shares Outstanding	407.0									
Intrinsic Value of Last FYE	\$ 142.01									
Implied Price as of Today	\$ 155.22									

Dividend Discount Model (DDM) or Fundamental P/E Valuation Model

Fiscal Years Ending	2024E	2(025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E		2033E
EPS	\$ 9.64	\$ 10).01 \$	11.01	\$ 13.17	\$ 14.61	\$ 15.90	\$ 16.68	\$ 16.91	\$ 16.82	\$	16.57
<i>Key Assumptions</i> CV growth of EPS CV Year ROE Cost of Equity	2.50% 25.35% 12.24%											
Future Cash Flows P/E Multiple (CV Year) EPS (CV Year) Future Stock Price Dividends Per Share Discounted Cash Flows	3.32		<u>3.59</u> 2.85	3.87	4.63	5.13 2.88	5.59	5.86	<u>5.94</u> 2.36	<u>5.91</u> 2.09		9.25 16.57 153.38 60.90
Intrinsic Value as of Last FYE Implied Price as of Today	\$ 85.10 \$ 93.02		2.05	2.74	2.32	2.00	2.00	2.01	2.30	2.09	ç	00.90

Relative Valuation Models

			EPS	EPS		
Ticker	Company	Price	2024E	2025E	P/E 24	P/E 25
PSX	Phillips 66	\$136.00	\$7.72	\$10.92	17.62	12.45
VLO	Valero Energy	\$142.00	\$16.60	\$13.80	8.55	10.29
DINO	HF Sinclair	\$45.00	\$2.47	\$3.99	18.22	11.28
LNG	Cheniere Energy	\$190.83	\$9.88	\$10.83	19.31	17.62
PARR	Par Pacific	\$18.26	\$0.88	\$1.77	20.75	10.32
				verage	16.89	12.39
			A	verage	10.09	12.39
MPC	Marathon Petroleum	\$159.92	\$9.64	\$10.01	16.6	16.0
P/E (E	Relative Value: PS24) PS25)		\$ 162.82 \$ 124.07			

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

Number of Options Outstanding (shares):	1.04
Average Time to Maturity (years):	 2.20
Expected Annual Number of Options Exercised:	 0.475
Current Average Strike Price:	\$ 52.07
Cost of Equity:	12.24%
Current Stock Price:	\$159.92

Fiscal Years Ending Dec. 31	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Increase in Shares Outstanding:	0.47	0.47	0.09							
Average Strike Price:	\$ 52.07	\$ 52.07 \$	52.07	\$ 52.07 \$	52.07 \$	52.07 \$	52.07 \$	52.07 \$	52.07 \$	52.07
Increase in Common Stock Account:	25	25	5	-	-	-	-	-	-	-
Share Repurchases (\$)	3,905	3,905	3,905	3,905	3,905	3,905	3,905	3,905	3,905	3,905
Expected Price of Repurchased Shares:	\$ 159.92	\$ 179.49 \$	201.46	\$ 226.12 \$	253.80 \$	284.87 \$	319.73 \$	358.87 \$	402.79 \$	452.10
Number of Shares Repurchased:	 24	22	19	17	15	14	12	11	10	9
Shares Outstanding (beginning of the year)	407	383	362	342	325	310	296	284	273	263
Plus: Shares Issued Through ESOP	0	0	0	0	0	0	0	0	0	0
Less: Shares Repurchased in Treasury	 24	22	19	17	15	14	12	11	10	9
Shares Outstanding (end of the year)	 383	362	342	325	310	296	284	273	263	255

Valuation of Options Granted under ESOP

Current Stock Price	\$159.92
Risk Free Rate	4.08%
Current Dividend Yield	2.03%
Annualized St. Dev. of Stock Returns	32.50%

Range of Outstanding Options	Number of Shares	Average Exercise Price	Average Remaining Life (yrs)	B-S Option Price	Value of Options Granted
Range 1	1	52.07	2.20 \$	105.44 \$	110
Range 2					
Range 3					
Range 4					
Range 5					
Range 6				\$	-
Range 7				\$	-
Range 8				\$	-
Range 9				\$	-
Total	1 \$	52.07	2.20 \$	112.40 \$	110

Marathon Petroleum Sensitivity Tables

	DCF			NO	PLAT GROW	/тн		
	155.24	1.75%	2.00%	2.25%	2.50%	2.75%	3.00%	3.25%
	3.33%	164.91	166.41	168.01	169.74	171.59	173.59	175.76
te	3.58%	160.30	161.66	163.11	164.67	166.34	168.14	170.09
Ra	3.83%	155.89	157.12	158.43	159.84	161.35	162.97	164.72
ree	4.08%	151.67	152.79	153.98	155.24	156.60	158.06	159.63
Risk Free Rate	4.3%	147.63	148.64	149.72	150.86	152.08	153.39	154.80
Ri	4.6%	143.76	144.67	145.64	146.67	147.77	148.95	150.21
	4.8%	140.05	140.87	141.74	142.67	143.66	144.72	145.85
	DCF			Dro 7	ax Cost of I	Dobt		
	155.24	E 040/	5.26%				6.26%	6 540/
		5.01%	5.26%	5.51% 158.91	5.76%	6.01%		6.51%
ы	875.00	162.44			157.19	155.49	153.83	152.18
	1,000.00	161.78	160.01	158.26	156.54	154.85	153.18	151.54
2024 CAPEX	1,125.00	161.13	159.35	157.61	155.89	154.20	152.54	150.90
40	1,250.00	160.47	158.70	156.96	155.24	153.56	151.90	150.26
202	1,375.00	159.81	158.05	156.31	154.60	152.91	151.25	149.62
	1,500.00	159.16	157.39	155.66	153.95	152.27	150.61	148.98
	1,625.00	158.50	156.74	155.00	153.30	151.62	149.97	148.34
	DCF				Beta			
	155.24	1.33	1.43	1.53	1.63	1.73	1.83	1.93
E	4.3%	214.00	201.56	190.32	180.09	170.76	162.20	154.33
ji Di	4.5%	204.15	192.02	181.06	171.12	162.05	153.75	146.12
Pre	4.8%	195.05	183.21	172.54	162.86	154.05	145.99	138.59
š	5.0%	186.62	175.07	164.67	155.24	146.67	138.85	131.66
<pre>Ki</pre>	5.3%	178.79	167.51	157.37	148.19	139.86	132.24	125.27
Equity Risk Premium	5.5%	171.50	160.48	150.59	141.65	133.53	126.13	119.35
Ц.	5.8%	164.69	153.93	144.27	135.55	127.65	120.44	113.85

	DDM		Payout Ratio								
	93.02	21.3%	26.3%	31.3%	36.3%	41.3%	46.3%	51.3%			
	1.8%	81.16	84.46	87.76	91.06	94.36	97.66	100.96			
EPS	2.0%	81.81	85.19	88.57	91.94	95.32	98.70	102.07			
Growth of	2.3%	82.50	85.96	89.41	92.87	96.33	99.78	103.24			
wth	2.5%	83.23	86.77	90.31	93.85	97.39	100.93	104.46			
iro	2.8%	83.99	87.62	91.25	94.87	98.50	102.13	105.75			
S	3.0%	84.80	88.52	92.24	95.96	99.67	103.39	107.11			
0	3.3%	85.65	89.46	93.28	97.10	100.91	104.73	108.55			

	DCF		Depreciation Rate								
	155.24	-11.8%	-10.8%	-9.8%	-8.8%	-7.8%	-6.8%	-5.8%			
2024 Cost of Rever	-104.3%	107.20	119.87	132.55	145.22	157.89	170.56	183.23			
. Re	-99.3%	110.80	123.47	136.14	148.81	161.48	174.16	186.83			
tol	-94.3%	114.39	127.06	139.73	152.41	165.08	177.75	190.42			
Cos	-89.3%	117.99	130.66	143.33	156.00	168.67	181.34	194.02			
24	-84.3%	121.58	134.25	146.92	159.59	172.27	184.94	197.61			
	-79.3%	125.17	137.85	150.52	163.19	175.86	188.53	201.20			
Q1	-74.3%	128.77	141.44	154.11	166.78	179.45	192.13	204.80			

	DCF		Q3 2024 Gasoline Yield Growth							
	155.24	0.2%	0.7%	1.2%	1.7%	2.2%	2.7%	3.2%		
2024 Gasoline Yielc	0.1%	151.10	151.79	152.48	153.17	153.86	154.56	155.25		
۲e /	0.6%	151.78	152.48	153.17	153.86	154.56	155.25	155.95		
olir	1.1%	152.46	153.16	153.86	154.55	155.25	155.95	156.65		
Gas	1.6%	153.14	153.84	154.54	155.24	155.95	156.65	157.35		
24 (2.1%	153.82	154.53	155.23	155.93	156.64	157.34	158.05		
	2.6%	154.50	155.21	155.92	156.62	157.33	158.04	158.75		
Q4	3.1%	155.18	155.89	156.60	157.31	158.03	158.74	159.45		