



This document constitutes part of a Prospectus covering securities that have been registered under the Securities Act of 1933.

PROSPECTUS

Marathon Petroleum Thrift Plan

This Prospectus relates to the Registration Statements on Form S-8 filed with the United States Securities and Exchange Commission (“Commission”) on June 30, 2011, August 5, 2016, and August 19, 2020, registering 15,000,000, 50,000,000 and 50,000,000 shares, respectively, of common stock, par value \$0.01 per share (the “Common Stock”), of Marathon Petroleum Corporation (“MPC,” “we,” “us” or the “Corporation”), that may be issuable from time to time under the Marathon Petroleum Thrift Plan, as amended from time to time (the “Plan”).

This Prospectus may be used only in connection with offers and sales of our Common Stock under the Plan and may not be used for reoffers or resales of our Common Stock. Persons who are not officers or directors of the Corporation, or otherwise deemed affiliates of the Corporation, however, may publicly resell shares of Common Stock acquired under the Plan. Persons who are officers or members of the Board of Directors of the Corporation (the “Board”), or who are otherwise affiliates of the Corporation, may publicly resell shares acquired under the Plan only by compliance with Rule 144 of the Securities Act of 1933, as amended (the “Securities Act”), or through a separate specific registration statement filed under the Securities Act. Plan participants may be subject to restrictions on dealing in Common Stock through the Plan’s Marathon Petroleum Corporation Stock Fund investment option. You should review the insider trading section of Marathon Petroleum Corporation’s Company Policies, at the policy titled “Trading of Securities” available on the Marathon Petroleum Corporation intranet website at mpcconnect.com. The possible application of Section 16(b) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), should also be considered by affiliates and other Plan participants.

The date of this Prospectus is January 1, 2023.

In connection with any offer contained in this Prospectus, no person has been authorized to give any information or to make any representations, other than the information and representations contained or incorporated by reference in this Prospectus, and if given or made such other information or representations must not be relied upon as having been authorized by the Corporation. This Prospectus does not constitute an offer to sell or a solicitation of an offer to buy, nor shall there be any sale of these securities by anyone, in any jurisdiction in which such offer, solicitation or sale would be unlawful. Neither delivery of this Prospectus nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the Corporation since the date hereof.

NEITHER THE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

Thrift Plan Prospectus



This Prospectus is provided by Marathon Petroleum Corporation and is not provided by the Plan administrator or any Plan fiduciary. This Prospectus is separate from, and does not constitute part of, the Plan's Summary Plan Description ("SPD").

This Prospectus contains a summary of the principal provisions of the Plan and other information for participants. The Plan text, as modified by law, is the final authority and will govern.

This document relates to benefits offered to participants under the Plan, including the shares of Common Stock noted above and an indeterminate amount of participants' interests to be offered or sold pursuant to the Plan.

Our common stock is traded on the New York Stock Exchange under the symbol "MPC."

How This Prospectus is Organized

In order to satisfy the legal requirements for registration statements under the Securities Act, we are required to provide certain information to you as part of the Prospectus. This information includes: (i) information regarding the Corporation; (ii) a summary description of how the Plan operates and the tax effects of your participation in the Plan; and (iii) information about the historical performance of the investment alternatives available under the Plan. We have elected to provide this information to you, in part, by incorporating information from other documents into this Prospectus.

In accordance with the Commission's rules, we will provide you with certain of the documents that are incorporated by reference on a regular basis. A copy of these, plus (1) a copy of the Corporation's annual report to stockholders for the latest fiscal year, (2) a copy of the latest annual report of the Plan filed with the Commission, (3) copies of all reports, proxy statements and other communications distributed to the Corporation's stockholders, and (4) all other documents that are incorporated by reference in this Prospectus (excluding exhibits to such documents unless such exhibits are specifically incorporated by reference into such documents), are available without charge and upon oral or written request made to: Marathon Petroleum Corporation 539 South Main Street, Findlay, Ohio 45840-3229, Attention: Corporate Secretary, telephone: 1-419-422-2121.

Information About the Corporation

An important part of your participation in the Plan is understanding the Corporation, its products, operations and financial condition. Like any stockholder of the Corporation, you can keep yourself informed about the Corporation by reviewing reports and other documents that the Corporation prepares for stockholders and the general public. If you become a stockholder of the Corporation, you will be entitled to attend its stockholder meetings and to vote on the election of directors and other matters brought before the stockholders. You will receive copies of all reports, proxy statements and other communications distributed to the Corporation's stockholders in general. Such materials will be delivered to participants not later than the time at which they are sent to the Corporation's stockholders.

You should have already received a copy of MPC's most recent annual report to stockholders either as a stockholder of the Corporation or via access on the Corporation's internal website. Whether or not you have already received the annual report to stockholders, you may always request a copy from the Corporation by contacting: Marathon Petroleum Corporation, 539 South Main Street, Findlay, Ohio 45840-3229, Attention: Corporate Secretary, telephone: 1-419-422-2121. In addition, you may access the annual report to stockholders on the Corporation's web site at <https://www.marathonpetroleum.com/Investors/>.

Thrift Plan Prospectus



The U.S. federal securities laws require the Corporation to provide information about its business and financial status in annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, which are filed with the Commission. The Corporation also prepares and files with the Commission a proxy statement in connection with its annual meeting of stockholders, which provides further information about the Corporation and its officers, directors and certain beneficial owners. The Corporation makes available on its website <https://www.marathonpetroleum.com/Investors/>, free of charge, copies of the Corporation's annual, quarterly, and current reports and amendments thereto as soon as reasonably practicable after filing or submitting such material electronically or otherwise filing it with the Commission.

Recent Filings with the Commission Incorporated by Reference

The Commission allows us to “incorporate by reference” the information we file with it, which means that we can disclose important information to you by referring you to those documents. We incorporate by reference the following documents into the Prospectus, as of the date of their filing:

- Our annual report on Form 10-K for the year ended December 31, 2021, filed on February 24, 2022;
- Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2022, filed on May 3, 2022;
- Our Quarterly Report on Form 10-Q for the quarter ended June 30, 2022, filed on August 2, 2022
- Our Quarterly Report on Form 10-Q for the quarter ended September 30, 2022, filed on November 1, 2022;
- The Plan's Annual Report on Form 11-K for the Plan year ended December 31, 2021, filed on June 23, 2022;
- Our Current Report on Form 8-K filed on March 8, 2022, April 21, 2022, May 2, 2022, July 12, 2022 (two reports), August 22, 2022, and October 11, 2022;
- The descriptions of the Common Stock set forth in our registration statements filed pursuant to Section 12 of the Exchange Act, and any amendment or report filed for the purpose of updating those descriptions, including the description contained in our Registration Statement on Form 10 filed with the SEC on January 25, 2011, as amended by the description of our common stock contained in Exhibit 4.3 to our Annual Report on Form 10-K for the year ended December 31, 2020, and as amended by any subsequent amendment or any report filed for the purpose of updating such description; and
- All other reports subsequently filed by the Corporation pursuant to section 13(a), 13(c), 14 and 15(d) of the Exchange Act prior to the filing of a post-effective amendment to the registration statement relating to this Prospectus that indicates that all securities offered have been sold or that deregisters all securities that remain unsold.

Note that the Corporation's fiscal year runs from January 1 to December 31.

The information incorporated by reference is an important part of this Prospectus, and information we file later with the Commission will automatically update and supersede this information where applicable. Current Reports on Form 8-K (or portions thereof) that are not filed but are furnished by the Corporation under the Commission's rules, including information furnished pursuant to Item 2.02 and Item 7.01 of Form 8-K, are not incorporated into this Prospectus. Any statement contained herein shall be deemed to be modified or superseded for purposes of this Prospectus to the extent that a statement contained herein or in any subsequently filed document that is incorporated by reference herein modifies or supersedes such statement.

Thrift Plan Prospectus



S-8 Registration Statements. The Corporation has filed Registration Statements on Form S-8 with the Commission on June 30, 2011, August 5, 2016, and August 19, 2020, under the Securities Act covering the shares of our Common Stock covered by this Prospectus (the “Registration Statements”). This Prospectus does not contain all of the information set forth in the Registration Statements and the exhibits and schedules thereto. For further information about us and the securities offered by this Prospectus, please refer to the Registration Statements and the exhibits thereto.

Copies of SEC Filings Available. As noted above, the Corporation is subject to the informational requirements of the Exchange Act, and in accordance therewith files reports, proxy statements and other information with the Commission. Also, the Corporation has filed the Registration Statements noted above. The Registration Statements, and electronic reports, proxy statements and other information that we file through the Commission’s Electronic Data Gathering, Analysis and Retrieval system (“EDGAR”) are publicly available through the Commission’s Web site (<http://www.sec.gov>).

Additional updating information with respect to the Corporation’s Common Stock may be provided in the future to Plan participants by means of appendices to this Prospectus or delivery of other documents.

Information About Material Terms of the Plan and the Tax Consequences of Participation

The Commission’s rules require that we provide a summary description of the material terms of the Plan, including a summary of the tax consequences of participation in the Plan and any restrictions on resale of the shares of the Corporation’s Common Stock acquired under the Plan. All of this information is in the Summary Plan Description of the Plan, as the same may be updated from time to time by the Plan Administrator (“SPD”). The SPD, updated from time to time, is incorporated by reference into, and thus is considered a part of, this Prospectus. **The Prospectus, however, does not form a part of, and is not incorporated into, the SPD. Please be sure to read the full SPD for details regarding the operation of the Plan.**

The SPD can be found on the MyMPCBenefits website at this online link: <http://www.mympcbenefits.com/Documents/MPC-Thrift-SPD.pdf>. You can print a PDF copy from this online link.

The SPD can also be found by a participant or beneficiary who has registered with the Plan’s recordkeeper, Fidelity Institutional Retirement Services Company, at this online account access link maintained for the Plan: www.netbenefits.com/marathonpetroleum.

You may also request free of charge a printed copy of the SPD of the Plan and the most recent fact sheets for the Plan investment options by contacting the Plan Administrator at the following address or phone number: Marathon Petroleum Corporation, 539 South Main Street, Findlay, Ohio 45840-3229, Attention: Thrift Plan Administrator, Telephone: 1-419-422-2121.



Information About Historical Performance of the Investment Alternatives

The Commission's rules require that we provide a summary description of the investment options under the Plan and their historical performance, material terms of the Plan, including a summary of the tax consequences of participation in the Plan and any restrictions on resale of the shares of the Corporation's Common Stock acquired under the Plan. Attachment 1 – Prospectus Supplement to this Prospectus contains information regarding the historical rates of return for the Plan's investment options, including our Common Stock, which are available as investment alternatives under the Plan. The SPD is incorporated by reference into, and thus is considered a part of, this Prospectus. **The Prospectus, however, does not form a part of, and is not incorporated into, the SPD.**

We will provide updated information on the historical performance of the Plan's investment options on an annual basis through distribution of an updated Attachment 1 – Prospectus Supplement.

Each fact sheet for the Plan investment options, as it is updated and posted quarterly on the Fidelity NetBenefitsSM website at www.netbenefits.com/marathonpetroleum, is incorporated by reference as part of this Prospectus. Please be sure to read each fact sheet for the latest information on each Plan investment option.

Experts

The financial statements and schedules incorporated by reference into this document have been audited by independent public accountants, as indicated in their reports with respect to these statements and schedules, and they are included in this document in reliance on the authority of such accountants as experts in giving these reports.



Attachment 1 — Prospectus Supplement

This document constitutes part of a Prospectus covering securities that have been registered under the Securities Act of 1933.

The date of this document is January 1, 2023.

The following table shows the rates of return for the investment options in the Marathon Petroleum Thrift Plan for the 2022, 2021 and 2020 fiscal years.

Investment Option	2020 Rate of Return	2021 Rate of Return	2022 Rate of Return
Fidelity Freedom Fund Blend Income Commingled Pool Class T	8.81%	2.98%	-11.47%
Fidelity Freedom Fund Blend 2005 Commingled Pool Class T	9.58%	3.68%	-11.93%
Fidelity Freedom Fund Blend 2010 Commingled Pool Class T	11.02%	5.32%	-13.38%
Fidelity Freedom Fund Blend 2015 Commingled Pool Class T	12.52%	6.98%	-14.90%
Fidelity Freedom Fund Blend 2020 Commingled Pool Class T	13.79%	8.67%	-16.40%
Fidelity Freedom Fund Blend 2025 Commingled Pool Class T	14.86%	9.86%	-17.09%
Fidelity Freedom Fund Blend 2030 Commingled Pool Class T	15.86%	11.23%	-17.35%
Fidelity Freedom Fund Blend 2035 Commingled Pool Class T	17.45%	14.11%	-18.20%
Fidelity Freedom Fund Blend 2040 Commingled Pool Class T	18.57%	16.25%	-18.91%
Fidelity Freedom Fund Blend 2045 Commingled Pool Class T	18.59%	16.26%	-18.93%
Fidelity Freedom Fund Blend 2050 Commingled Pool Class T	18.61%	16.24%	-18.92%
Fidelity Freedom Fund Blend 2055 Commingled Pool Class T	18.62%	16.21%	-18.93%
Fidelity Freedom Fund Blend 2060 Commingled Pool Class T	18.56%	16.24%	18.94%
Fidelity Freedom Fund Blend 2065 Commingled Pool Class T	18.84%	16.30%	-18.93%
Marathon Stable Value Fund	1.98%	1.14%	1.36%
JPMorgan Emerging Markets Equity Fund Class R6	35.00%	-10.14%	-25.61%
Vanguard Value Index Fund Institutional Shares	2.30%	26.48%	-2.05%
Fidelity® Contrafund® Commingled Pool	31.32%	24.67%	-27.19%
Fidelity® Government Income Fund	6.79%	-2.10%	-12.77%
Fidelity® Growth Company Commingled Pool Class 2	68.79%	22.95%	-32.88%
Fidelity® International Discovery Commingled Pool	21.75%	11.40%	-24.53%
Allspring Mid Cap Value CIT E2	1.93%	29.10%	-4.55%
Fidelity® Investments Money Market Government Portfolio Institutional Class	0.38%	0.01%	1.51%
Baird Mid Cap Growth Fund Institutional Class	34.81%	22.51%	-27.64%
Dodge & Cox Income Fund Class X	9.45%	-0.91%	-10.77%
Spartan® Extended Market Index Pool Class E	32.18%	12.35%	-26.42%
Spartan® International Index Pool Class E	8.26%	11.43%	-14.20%
Spartan® 500 Index Pool Class E	18.38%	28.68%	-18.12%
Vanguard Total Bond Market Index Fund Institutional Plus Shares	7.74%	-1.65%	-13.14%
Vanguard Small-Cap Value Index Fund Institutional Shares	19.13%	17.75%	-17.60%
Marathon Petroleum Corporation Common Stock	-27.36%	60.99%	86.59%