PERSPECTIVES ON

CLIMATE-RELATED SCENARIOS

Risks and Opportunities

AUGUST 2025

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GLOSSARY OF TERMS

approximately: The "~" is used throughout the report and means approximate or approximately

barrel: 42 U.S. gallons — a common volume measure for crude oil and petroleum products

barrel of oil equivalent or boe: A unit of energy based on the energy released by burning one barrel of crude oil, or 5.8 million British thermal units

bcm: Billion cubic meters — a measure of natural gas volume

bpcd: Barrels per calendar day — the average of how much crude oil or other feedstock a refinery processes over a period of time, divided by the number of days in that period, typically 365 days (a common rate measure for petroleum refineries)

bpd: Barrels per day — a common rate measure for crude oil and petroleum products

blue hydrogen: Hydrogen produced through a reaction that separates methane into hydrogen and CO_2 and then captures and sequesters the CO_2

CCUS: Carbon capture, utilization and sequestration

CO_2e: Carbon dioxide equivalent — a common unit of measurement converting various greenhouse gases to carbon dioxide on the basis of their global-warming potential. MPC calculates CO_2e using the EPA factors identified in Table A-1 in 40 CFR Part 98

companywide: Means inclusive of all operations within MPC and MPLX

degrees Celsius: °C

EIA: The U.S. Energy Information Administration

EPA: The U.S. Environmental Protection Agency

ERM: Enterprise Risk Management

ESG: Environmental, social and governance

exa: Metric prefix for 10^{18} (a quintillion)

GHG: Greenhouse gases, such as carbon dioxide and methane

giga: Metric prefix for 10^{9} (a billion)

IEA: International Energy Agency

IPCC: The United Nations Intergovernmental Panel on Climate Change

LDAR: Leak detection and repair

LNG: Liquefied natural gas

LPG: Liquefied petroleum gas

MPC: Marathon Petroleum Corporation

MPLX: MPLX is a diversified, large-cap master limited partnership formed by Marathon Petroleum Corporation that owns and operates midstream energy infrastructure and logistics assets, and provides fuels distribution services

mmbtu: Million metric British thermal units

NGL: Natural gas liquid — a light hydrocarbon liquid often produced with natural gas

NZE: IEA's Net-Zero Emissions by 2050 scenario

PPE: Personal protective equipment

Renewable diesel: Renewable fuel consisting of hydrocarbon molecules, produced through the hydrotreating of animal fats, vegetable oils, and recycled grease feedstock

RNG: Renewable natural gas

Scope 1 emissions: All direct GHG emissions by a company, including fuel combustion, company vehicles and fugitive emissions

Scope 2 emissions: Indirect GHG emissions from consumption of purchased electricity, heat or steam

Scope 3 emissions: Other indirect GHG emissions that occur in a company's value chain that are not captured by Scope 2

scf: Standard cubic feet

TCFD: Task Force on Climate-related Financial Disclosures

tonne or metric ton: 2,205 pounds

WEO: IEA World Energy Outlook

A Message from Our CEO

At Marathon and MPLX, we execute through a continuous improvement mindset, upholding rigorous expectations for ourselves and never accepting the status quo. Those traits are key components of our Core Value of Excellence, and they also characterize our approach to climate-related risks and opportunities. We were the first independent refiner to publish a Task Force on Climate-related Financial Disclosures (TCFD) aligned report on climate-related perspectives. In our first report, published in October 2017, we noted that for many years we had taken seriously the physical and transitional risks associated with climate change. Our approach remains enduring and effective. We believe we have a strong history of transparently reporting how we stress-test our strategies, assumptions, and operations against a range of potential scenarios. We believe this approach exemplifies our Core Value of Excellence.

Through strong governance and a robust enterprise risk management process, we not only identify, assess and manage risk, but also monitor the effectiveness of our mitigation strategies. Given the continually evolving nature of energy security and climate-related actions around the world, our planning against long-term and short-term scenarios is a critical part of how we identify both risks and opportunities. In this report, we identify them and detail how we capture and address them, including how we deploy capital, to safeguard the long-term success of Marathon and MPLX.

We provide a detailed, objective analysis of our refining assets' resilience relative to the rest of the industry – both domestically and globally – as well as that of our midstream, particularly related to its role in meeting natural gas demand. Even under the most carbon-constrained scenarios, we expect these areas of our business to be well-positioned and cost-competitive over the long term.

At the same time, our renewable fuels portfolio provides us with the opportunity to engage in the evolution of the energy supply and its latest technologies. We have been supplying ethanol to the market for decades, and we are also one of the largest suppliers of renewable diesel in the U.S. through a joint venture plant in Martinez, California, and our Dickinson, North Dakota, facility. We have also invested in renewable natural gas, carbon capture and more to complement our traditional energy offerings.

We have consistently worked to reduce the carbon intensity and environmental footprint of the energy we provide, driven by our ambitious set of goals to reduce our use of fresh water, decrease our methane emissions intensity and lower our greenhouse gas emissions intensity from their respective baselines. Scope 1 and 2 greenhouse gas emissions intensity is down 28% from its 2014 baseline, freshwater withdrawal intensity is down 18% from its 2016 baseline, and methane emissions intensity has been reduced by an impressive 59% from its 2016 baseline.

The energy efficiency of our operations continues to be a particular point of pride and another example of our Core Value of Excellence. Collectively, we have earned more U.S. EPA ENERGY STAR® recognitions than all other refiners combined.

Our Bluestone natural gas plant in Pennsylvania is the first and only facility in the U.S. natural gas processing sector to take and achieve the EPA's ENERGY STAR® Challenge for Industry. This challenge includes a requirement to reduce energy intensity by 10% within a five-year period. Bluestone met and exceeded this ambition in less than two years. These advances in our energy efficiency not only reduce our environmental footprint; they also reduce our fuel consumption, representing substantial cost savings.

We are committed to long-term energy security and reliability. As one of the largest suppliers of transportation fuels in the U.S., we are committed to meeting the evolving energy needs of our customers. I invite you to read this detailed look at our Board oversight, scenario analyses, asset and portfolio optimization, and other tools we deploy to mitigate risks and leverage opportunities inherent in an evolving energy landscape of potential climate impacts and climate-related policies.

Sincerely,

Maryann T. Mannen
President and CEO, MPC and MPLX

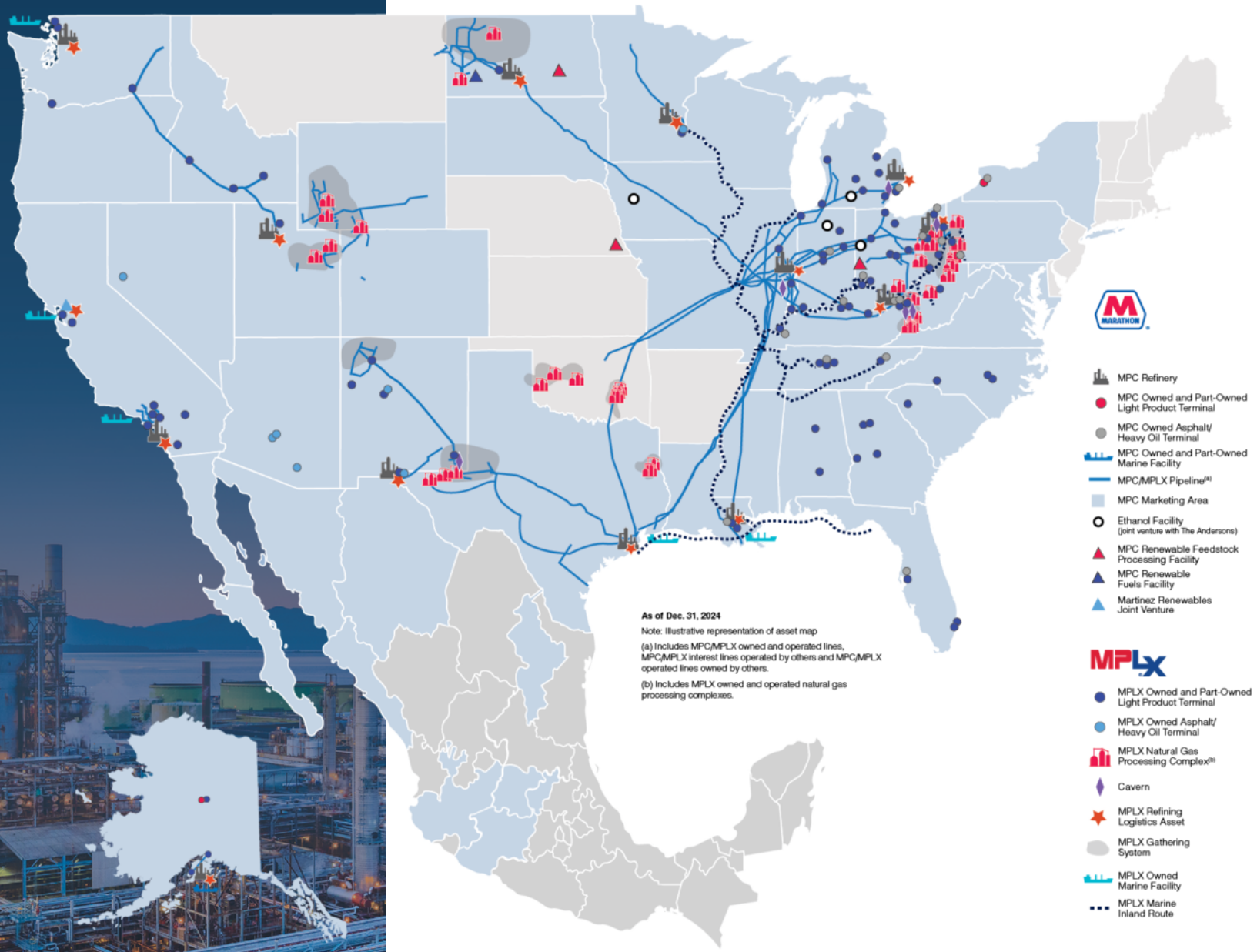
MPC and MPLX Operations

APPROX.
3 million
barrels per calendar day of crude oil refining capacity

APPROX.
2.8 billion
gallons of renewable fuel delivered in 2024

12.4 billion
standard cubic feet per day of natural gas processing capacity

829,000
barrels per day of natural gas liquids fractionation capacity



Introduction

Our annual *Perspectives on Climate-Related Scenarios* report follows the reporting guidelines established by the Task Force on Climate-related Financial Disclosures (TCFD), formed by the Financial Stability Board, an international body of financial policymakers representing the world's 20 largest economies. The TCFD's primary objective is to develop voluntary, consistent climate-related disclosures that enhance transparency and provide stakeholders with reliable information on how companies are managing climate-related risks and opportunities.

By following this framework, MPC presents an easy-to-read summary of four key areas: governance, risk management, strategy and scenario planning, and metrics and targets. We evaluate our business against various less than 2°C scenarios, including several 1.5°C scenarios, available through the International Energy Agency (IEA) and the United Nations Intergovernmental Panel on Climate Change (IPCC). These scenarios act as a predictive stress-test of our company's resilience under different lower-carbon economy outcomes.

Not all scenarios rely heavily on eliminating fossil fuels to achieve the desired outcome. Several incorporate more inclusive energy strategies, such as replacing coal with natural gas, enhancing energy efficiency, expanding the use of renewables and nuclear energy, implementing climate-smart agriculture practices, advancing carbon capture, utilization and sequestration (CCUS), and other lifestyle and behavioral changes.

> **Long-term energy security and reliability must remain a priority, and be pursued in parallel with carbon-reduction ambitions to support economic and societal development.**

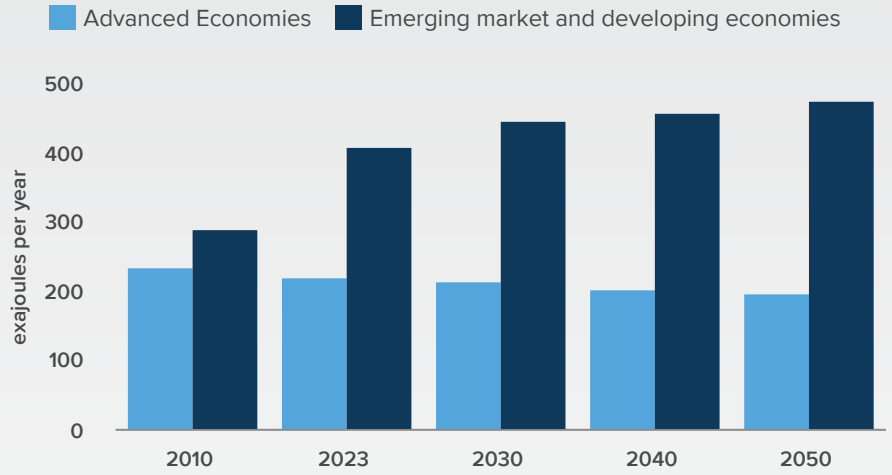
As illustrated in Figure 1, under the IEA Stated Policies Scenario (STEPS), a rise in global energy demand is observed, driven primarily by emerging market and developing economies (EMDE), such as India, Southeast Asia, the Middle East and Africa.[1] These economies, which represent the majority of the global population, are experiencing sustained increases in energy consumption due to population growth, expanding economic activity, and ongoing infrastructure development.[2]

In addition, access to modern energy sources remains a significant challenge[2]:

- 750 million people still lack access to electricity
- Over 2 billion people do not have access to clean cooking fuels

This represents roughly a quarter of the global population. In contrast, advanced economies are experiencing a slowdown in energy demand growth, influenced by factors such as energy efficiency improvements and slower economic growth.[2]

Figure 1. Total Primary Energy Demand



Data source: IEA, *World Energy Outlook 2024*[1]

Operational Excellence and Environmental Stewardship

As one of the largest suppliers of transportation fuels in the United States, MPC remains steadfast in our commitment to meeting diverse energy needs, both domestically and internationally. We are dedicated to implementing solutions that deliver real environmental benefits by maintaining a strong focus on:

- The safe and reliable operations of our assets
- Upholding our core value of environmental stewardship through enhanced energy efficiency
- Reducing our Scope 1 and 2 greenhouse gas (GHG) emissions intensity
- Lowering the methane emissions intensity of our MPLX operations

> **As we advance these goals, we continue to prioritize the delivery of reliable, cost-effective energy that supports the infrastructure and services society depends on every day.**
>
> **We believe that the analysis presented in this report, along with our other disclosures, help demonstrate that MPC and MPLX are well positioned for the future, even in a carbon-constrained economy.**

Governance

At MPC, under the leadership and direction of our Board of Directors, we identify and manage climate-related risks and opportunities. Our directors bring a range of backgrounds, critical skills, perspectives and expertise to our Board. For more information on the individual qualifications of each of our directors, please see our latest Proxy Statement available at https://www. marathonpetroleum.com/Investors/Annual-Report-Proxy-Statement/.

Board Oversight

SUSTAINABILITY GOVERNANCE

Our performance, risks and opportunities related to sustainability topics, including climate change, are identified and managed by company leadership, with the oversight of our Board.

The Board's committees are responsible for specific areas of oversight and policy decision-making. The specific responsibilities of the Board's committees are outlined in our Corporate Governance Principles and in each committee's charter.* Our executive leadership team holds primary responsibility for our sustainability strategies and standards, which are developed by the committees they oversee.

Sustainability is embedded within several cross-functional management committees, helping ensure that our goals and objectives are incorporated into the appropriate company standards, metrics and strategies. These are, in turn, cascaded throughout the company and aligned with related procedures and plans at the operational level. Collaboration and communication among the Board, its committees, and the MPC executive leadership team ensure aligned direction on sustainability-related matters.

* Our Corporate Governance Principles are available at: https://www.marathonpetroleum.com/Investors/Corporate-Governance
Our Committee charters are available at: https://www.marathonpetroleum.com/About/Board-of-Directors/

BOARD OF DIRECTORS

Audit Committee	Compensation and Organization Development Committee	Corporate Governance and Nominating Committee	Sustainability and Public Policy Committee
RESPONSIBILITIES AND OVERSIGHT:			
• Oversees risks associated with financial, financial reporting and accounting matters • Monitors compliance with regulatory requirements and internal control systems • Oversees our enterprise risk management process and reviews performance • Reviews sustainability and climate risk disclosures within the financial reporting framework • Oversees business continuity, data privacy and cybersecurity risks	• Oversees risk associated with our compensation programs, plans and policies to help ensure they do not encourage excessive risk-taking. • Oversees our management succession planning process and our human capital management strategies and policies • Oversees stakeholder engagement on compensation and human capital management matters	• Oversees risk associated with corporate governance matters, including director independence, Board composition and succession, Board leadership structure and Board effectiveness • Oversees the evaluation of the Board, its committees and individual directors • Oversees stakeholder engagement on corporate governance matters	• Oversees risks and opportunities associated with sustainability, safety and public policy matters • Reviews our sustainability and climate reports and other key sustainability disclosures • Oversees establishment of our sustainability targets • Oversees governance framework and budgets for our political contributions and lobbying expenditures • Oversees stakeholder engagement related to sustainability and public policy matters

MPC EXECUTIVE LEADERSHIP TEAM

Sustainability is embedded across executive committees with primary responsibility for sustainability strategies and standards

- Business Integrity Committee
- Enterprise Risk Management Committee
- External Policy Committee
- Health, Environment, Safety, Security & Product Quality Management Committee
- Strategy Steering Committee

ORGANIZATIONAL LEADERS

Drive sustainability strategies across the enterprise

- Advocacy Steering Committee
- Health, Environment, Safety & Security Planning Committee
- Renewables Council
- Renewables Compliance Governance Committee
- Sustainability Working Group

CROSS-FUNCTIONAL TEAMS

Implement key sustainability strategies, programs and plans

- Enterprise Risk Management Community of Practice
- Environmental Justice Team
- Focus on Water Team
- Focus on Energy Team
- International ESG Reporting Working Group
- Operational Excellence Management System (OEMS) Center of Excellence
- Renewables Feedstock Compliance Committee

Risk Management

ENTERPRISE RISK MANAGEMENT PROCESS

We apply a comprehensive Enterprise Risk Management (ERM) program across the company to identify, assess, and manage enterprise-level risks, and to review the effectiveness of risk mitigation strategies. This program is established and driven by our executive leadership team, led by our enterprise risk manager and ERM Committee, and supported by officers and senior managers who work across the business to manage enterprise-level risk and identify emerging risks. These leaders meet regularly and provide ongoing updates to our Board and its committees throughout the year. Our enterprise risk manager leads the process through workshops involving the executive leadership team and subject matter experts associated with various risks, including climate-related risks, opportunities and metrics. This framework fosters close interaction among the Board, its committees, and our senior leadership.

ERM COMMUNITY OF PRACTICE

An ERM Community of Practice supports the ERM process and associated workshops. It comprises mid-level risk and assurance representatives from across our value chains to discuss, develop and standardize best practices and risk mitigation measures throughout the company. The Board's Audit Committee further evaluates performance trends and internal processes to ensure the effectiveness of the ERM process.

CLIMATE-RELATED RISKS AND OPPORTUNITIES

Collaboration and communication among the Board and executive leadership team is achieved through standing committee meetings and other engagement. We carefully review, evaluate and manage sustainability- and climate-related risks and opportunities to enhance our adaptability and strengthen our resilience. The Sustainability and Public Policy Committee oversees environmental and climate risk matters, reviews our sustainability and climate reports along with other key sustainability disclosures, and oversees the establishment of our sustainability targets.

COMPLIANCE-RELATED RISK

As part of our ERM process, our Board oversees risks related to the regulatory landscape. These risks include emerging and proposed regulations related to issues that could impact our business, such as GHG and other air emissions, water withdrawals and effluents, hazardous materials management, product specifications, and employee health and safety.

IDENTIFICATION AND DISCLOSURE OF RISKS

We disclose material risks to our company in the Risk Factors section of our most recent Annual Report on Form 10-K, as well as in other filings with the U.S. Securities and Exchange Commission. The categories of risk described in these reports include business and operational risks, financial risks, legal and regulatory risks, and general risk factors.

The evolution of our climate-related disclosures and metrics helps demonstrate the effectiveness of our governance process for climate-related matters.

	2025	2024	2023	2022	2021	2020	2017-19
Extended and Increased Scope 1 and 2 GHG Emissions Intensity Reduction Target	✓	✓					
Extended and Increased MPLX Natural Gas and NGL Services Methane Intensity Reduction Target	✓	✓	✓	✓			
Absolute Scope 3 - Category 11 GHG Emissions Disclosure	✓	✓*	✓*	✓*	✓		
Freshwater Withdrawal Intensity Target	✓	✓	✓	✓	✓		
Third-Party GHG Emissions Verification	✓	✓	✓	✓	✓	✓	
MPLX Natural Gas and NGL Services Methane Intensity Reduction Target	✓	✓	✓	✓	✓	✓	
Scope 1 and 2 GHG Emissions Intensity Reduction Target	✓	✓	✓	✓	✓	✓	
TCFD Disclosure	✓	✓	✓	✓	✓	✓	✓

* Absolute Scope 3 - Category 11 GHG Emissions Reduction Target effective 2022 to 2024; please see Pages 30-31 for more information.

Strategy and Scenario Planning

The energy landscape is continually evolving to address the complex challenges of energy security and climate change mitigation. We conduct scenario planning to evaluate how various future energy outcomes could impact our company. We continually assess the climate-related risks and opportunities associated with these scenarios to understand where we should invest capital, both to strengthen our existing assets and to pursue new growth opportunities.

Our scenario planning includes the evaluation of both long-term and short-term scenarios. Throughout this section, we provide detailed analyses of our business strategies against future scenarios from the IEA, IPCC, and other sources such as the U.S. Energy Information Administration and HSB Solomon Associates LLC (Solomon).* These scenarios provide our company a range of potential outcomes, enabling us to plan proactively and adapt as the future unfolds. It is important to note that scenarios are hypothetical constructs and not sensitivity analyses.

In this year's report, we apply the following hypothetical scenarios:

IEA Stated Policies Scenario (STEPS)[2]: Provides a view of where today's policy ambitions would take the energy sector. It incorporates policies and measures that governments around the world have already implemented, as well as the effects of announced policies.

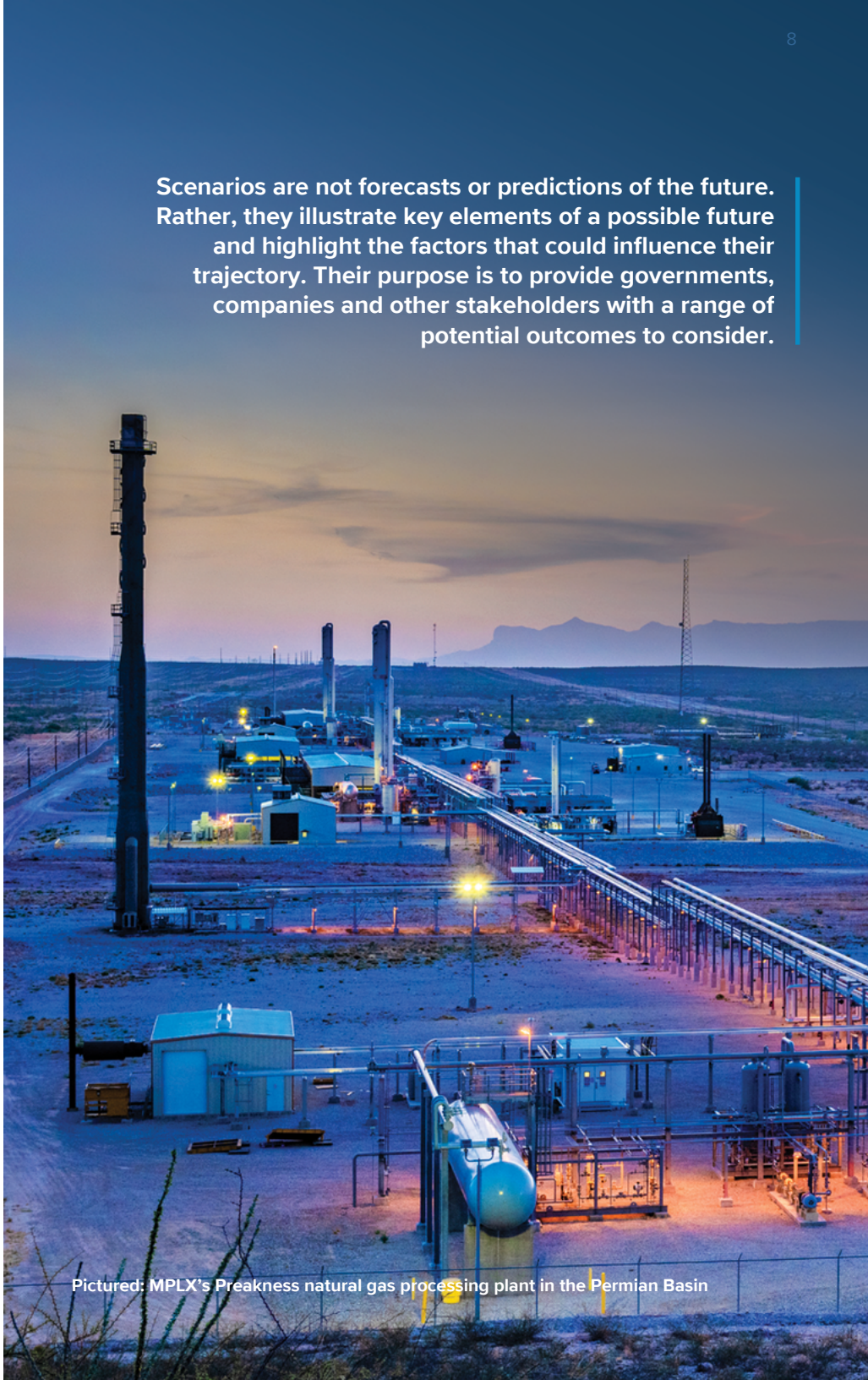
IEA Announced Policies Scenario (APS)[2]: Assumes that all long-term emissions and energy access targets, including net-zero commitments, will be met on time and in full, even where policies are not yet in place to deliver them.

IEA Net-Zero Emissions by 2050 (NZE)[2]: Outlines a pathway for the global energy sector to achieve net-zero GHG emissions by 2050, updating the IEA analysis first published in 2021. While the APS is exploratory, the NZE Scenario is normative, as it is designed to achieve a specific objective and illustrate a pathway to that goal.

IPCC Scenarios[3]: Refers to the 16 vetted IPCC Scenarios, identified by the IEA, that reach net-zero energy sector emissions by 2050. Because they reach net-zero by 2050, they are comparable in ambition to the IEA NZE Scenario.

* HSB Solomon Associates (Solomon) is uniquely qualified to perform this analysis because it has cost and production data for more than 300 refineries worldwide through its biennial fuels studies (https://www.solomoninsight.com/industries/refining/benchmarking/fuels-study). The biennial Solomon Fuels Studies are a key resource we use to benchmark our operations and conduct scenario analysis.

Scenarios are not forecasts or predictions of the future. Rather, they illustrate key elements of a possible future and highlight the factors that could influence their trajectory. Their purpose is to provide governments, companies and other stakeholders with a range of potential outcomes to consider.

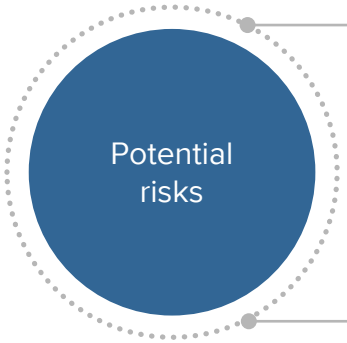


Pictured: MPLX's Preakness natural gas processing plant in the Permian Basin

Potential Risks and Opportunities

MPC and MPLX may be affected by climate-related risks related to the transition to a lower-carbon economy, as well as risks associated with the physical impacts of climate change. The transition to a lower-carbon energy system may also present climate-related opportunities to improve energy efficiency, drive innovation, and support growth. Below, we present examples of potential risks and opportunities that may impact our business. For a more comprehensive list of risks, please refer to Item 1A in MPC's and MPLX's most recent Form 10-K filings.

TCFD categories of climate-related **risks**



Transition risks

Policy and legal risks:

- Legal, technological, political and scientific developments regarding emissions, fuel efficiency and alternative fuel vehicles may decrease demand for liquid transportation fuels.
- A significant decrease in oil and natural gas production in MPLX's areas of operation may adversely affect MPLX's business, financial condition, results of operations and cash available for distribution to its unitholders, including MPC. Many variables may impact oil and gas production, including governmental regulations and policies.
- Denials of, delays in receiving or revocations of requisite regulatory approvals or permits can subject large capital projects to delays. Market conditions could deteriorate significantly between the project approval date and the project startup date, negatively impacting project returns.

Technology risks: Technology breakthroughs relating to renewable fuels or other fuel alternatives, such as hydrogen or ammonia, or efficiency improvements for internal combustion engines could reduce demand for traditional transportation fuels

Market risks: Consumer acceptance and market penetration of electric, hybrid and alternative fuel vehicles may decrease demand for liquid transportation fuels.

Reputational risks: Increasing attention and demand for action related to climate change and energy transition matters, such as promoting the use of substitutes to fossil fuel products and encouraging the divestment of fossil fuel equities, could have a material adverse effect on our access to capital.

Physical risks

Acute physical risks: Our assets are subject to acute physical risks, such as floods, hurricane-force winds, wildfires, winter storms, and earth movement in variable steep and rugged terrain with varied or changing subsurface conditions.

Chronic physical risks: Our assets are subject to chronic physical risks such as sea-level rise or water shortages.

TCFD categories of climate-related **opportunities**

Resource efficiency: Energy efficiency is a core business function that reduces operating costs and GHG emissions, enhancing long-term cost competitiveness. Freshwater withdrawal intensity reductions increase resiliency and reduce long-term operating costs.

Energy source: The availability and procurement of lower-carbon or renewable energy to power our operations could further reduce the life-cycle carbon intensity of the fuels and products we manufacture.

Products and services, markets and resilience

- Continued coal-to-natural gas switching and production of blue hydrogen could increase demand for natural gas.
- Continued demand for renewable diesel as a drop-in replacement for fossil diesel can help further diversify our portfolio.
- Research and development in the renewable fuels space could provide new products and markets, increasing revenues.
- Domestic production, processing and export of LNG to Europe and other regions facing energy security issues may steadily increase as these regions look to secure energy from the United States.
- Increased demand for NGLs as petrochemical feedstock or cleaner cooking fuel in the developing world could strengthen demand for NGLs processed by our facilities.
- Our MPLX pipelines and rights of way are potentially positioned to transport hydrogen and carbon dioxide as those markets develop.

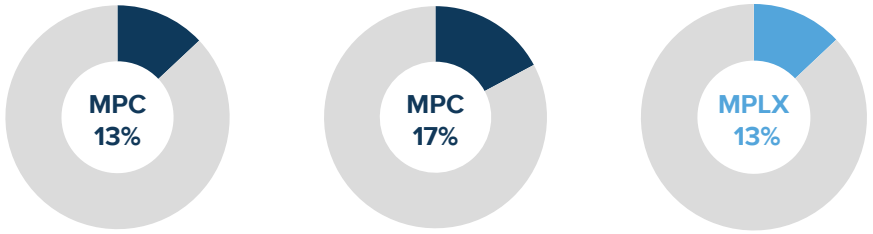
Business Planning and Capital Allocation

At MPC and MPLX, our investments strengthen the competitive position of our assets and enhance our resilience, with growth capital allocated between traditional and lower-carbon investments. As shown in the table below, we have undergone a significant evolution since becoming an independent company in 2011. Today, we are focused on optimizing our core refining and logistics portfolio and expanding our natural gas and NGL business, while lowering the carbon intensity of the products we manufacture. Through our significant investments, we have become a key player not only in the U.S. refining sector, but also in the renewable fuels and natural gas sectors (Figure 2).

MPC and MPLX Portfolio Evolution
(based on energy content of products)

CATEGORY	2011	2024
Petroleum fuels	93%	53%
Natural gas processing	0%	35%
NGLs, renewable fuels and other specialty products	7%	12%

Figure 2. Our Participation in Multiple U.S. Energy Segments
(based on latest available data)



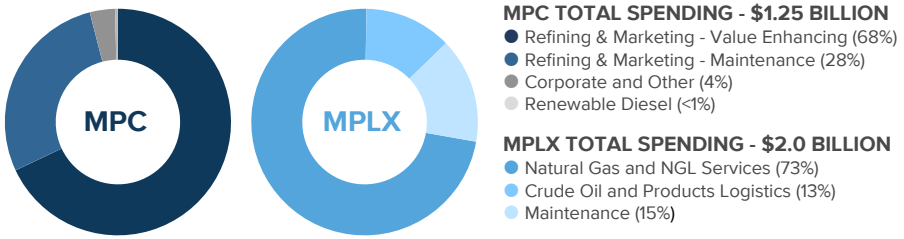
(a) Represents MPC's share of the renewable diesel production capacity at our Martinez joint venture and Dickinson renewable fuel facilities as published in MPC's Annual Report on Form 10-K relative to the U.S. renewable diesel fuel and other biofuels plant production capacity as published by the EIA (release date: Aug. 15, 2024).

(b) Represents MPC's crude oil refining capacity as published in MPC's Annual Report on Form 10-K relative to U.S. refining capacity as published by the *Oil & Gas Journal* (release date: Mar. 7, 2025).

(c) Represents MPLX's natural gas processing volumes as published in MPC's Annual Report on Form 10-K relative to the U.S. natural gas plant processing volumes published by the EIA (release date: Jun. 30, 2025).

MPC's capital allocation is categorized into sustaining capital and growth capital. Sustaining capital underpins our commitment to safe, reliable, and compliant operations and represents approximately 30% of MPC's anticipated 2025 capital spend. The remainder is growth capital, which we invest in a disciplined fashion in areas that we believe will enhance our competitiveness. Of MPC's anticipated 2025 growth capital, approximately 12% is allocated to lower-carbon projects, such as initiatives that help reduce GHG emissions at our refineries or investments in renewable fuels. The remaining growth capital is aimed toward projects that enhance margins and reduce costs, primarily at our complex, competitively advantaged facilities, helping to position MPC well into the future. As indicated on Pages 14-16, our MPLX capital spend enables the build-out of our lower carbon-intensive value chain, further enhancing our resiliency and positioning MPLX to continue to play a vital role in the energy system now and in the future, including under multiple lower-carbon scenarios.

Figure 3. 2025 Capital Spending Outlook



Note: Total may not sum due to independent rounding.

ENHANCING COMPETITIVENESS BY IMPROVING RELIABILITY AND ENERGY EFFICIENCY

We made a multiyear investment of approximately $700 million at our Los Angeles refinery to integrate and modernize utility systems, improve reliability and increase energy efficiency, while also ensuring compliance with tighter emission regulations.

- The project is expected to reduce Scope 1 GHG emissions by approximately 750,000 tonnes CO_2e per year, supporting progress towards our Scope 1 and 2 emissions GHG intensity goals.
- This initiative is also intended to ensure compliance with upcoming NO_X emissions reduction requirements applicable to all Southern California refineries (South Coast Air Quality Management District Rule 1109.1).
- Target completion: Year-end 2025

Climate Scenario Analysis for Refining and Marketing

MPC operates one of the nation's largest refining systems, with nearly 3 million barrels per calendar day of crude oil refining capacity. Our complex refining system is capable of processing a wide variety of crude oils and other feedstocks to produce numerous refined products, primarily transportation fuels, as well as specialty products such as petrochemicals and asphalt. These products compete in a global market, and we believe the U.S. refining system is cost advantaged over the rest of the world due to:

- Flexibility of the U.S. refining system, as indicated by its complexity (Figure 4)
- Accessibility and abundance of nearby crude oil (Figure 5)
- Availability of low-cost natural gas (Figure 6)

We believe MPC's refining assets are further advantaged by their inherent flexibility, as well as by our domestic and international commercial and logistical capabilities, which position us to remain competitive both today and in the future.

Figure 4. Refining Nelson Complexity Index

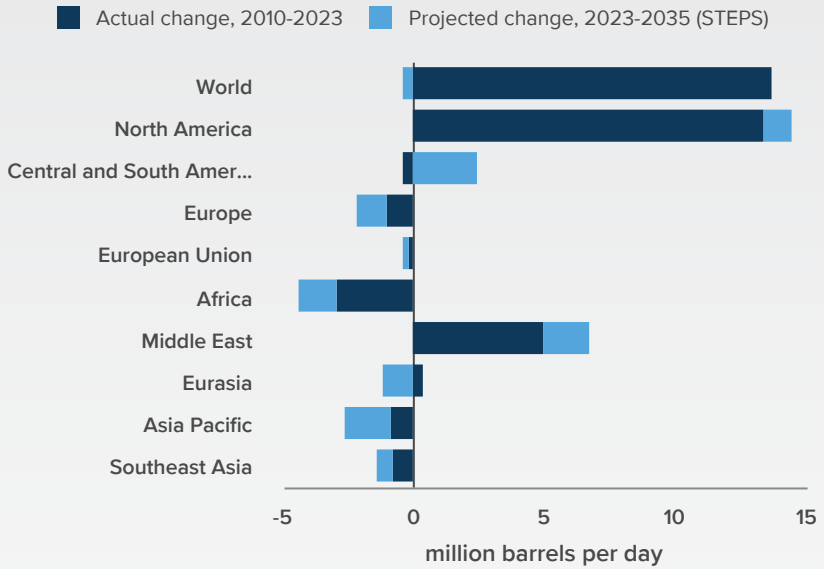
Data source: Oil and Gas Journal, *2025 Worldwide Refinery Survey and Complexity Analysis*.[4] The average refinery complexity ratings for U.S. refineries and non-U.S. refineries are based on the Nelson Complexity Index, which is a measure of a refinery's conversion efficacy of crude oil to higher-value products.

With the availability of low-cost natural gas and our complex and geographically well-positioned refining systems, including optimal accessibility of crude oil, we anticipate the U.S. refining industry will remain structurally advantaged over the rest of the world.

Despite ongoing shifts in the energy landscape, oil remains a vital part of the energy system, currently accounting for approximately 30% of the global energy mix, and is expected to remain a critical source, supported by sustained demand for conventional transportation fuels.[5] Additionally, oil demand continues to be resilient in key sectors such as aviation, maritime transport, and petrochemicals.

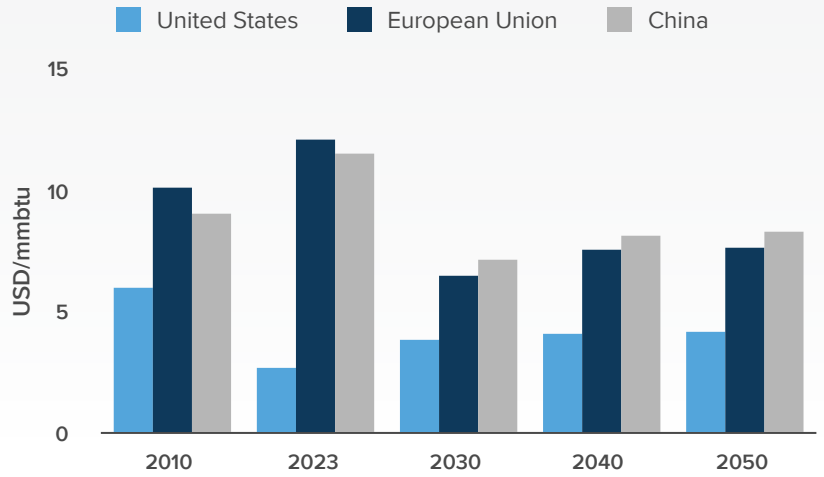
In this context, the refined products produced at MPC's refineries and delivered through our logistics network play an essential role in today's economy, and are expected to be critical for the foreseeable future, even under many peer-reviewed, less than 2°C climate scenarios. To evaluate the resilience of our operations, we conducted scenario analyses for this report that stress test our assets against a range of potential future energy systems that differ from today's conditions.

Figure 5. Oil Production: Actual and Projected Change in Selected Regions



Data source: IEA, *World Energy Outlook 2024*[2]

Figure 6. Natural Gas Prices: Actual and Projected (STEPS)



Data source: IEA, *World Energy Outlook 2024*[1]; based on real terms USD, 2023.

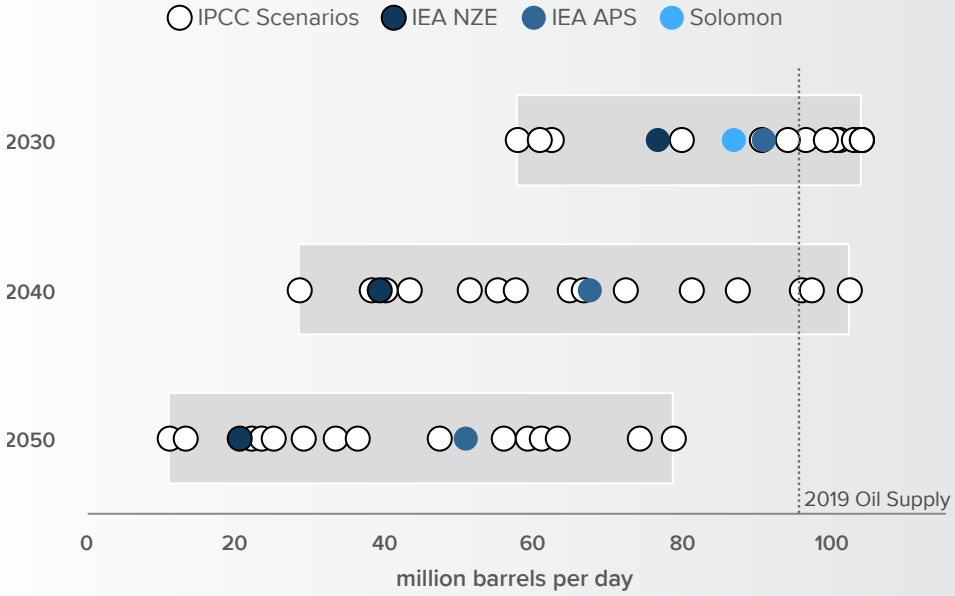
TRANSITION RISKS

As illustrated in Figure 7, there is no single, definitive pathway to limiting the global temperature increase to less than 2°C. The IEA has identified 16 scenarios, each vetted by the IPCC, that achieve the same objective as its NZE Scenario. While the NZE Scenario emphasizes significant reductions in oil supply, other IPCC-reviewed pathways adopt broader and more inclusive strategies to reach the same climate goal.

To better understand the implications for our sector, we have analyzed a range of externally modeled scenarios that align with the global temperature targets of the Paris Agreement. Specifically, we examined supply modeled under the APS and NZE Scenario, along with 16 additional peer-reviewed IPCC scenarios.

By 2050, the NZE Scenario includes a 79% reduction in global oil supply compared to 2019 levels, with non-energy uses, such as asphalt and petrochemical feedstocks, remaining relatively stable and comprising the majority of the remaining demand as transport fuel use declines. In contrast, the APS Scenario anticipates a 48% reduction in oil supply by 2050, with 34% allocated to non-energy purposes. Collectively, these scenarios point to a significant shift away from oil, implying a corresponding reduction in global refining capacity.[2]

Figure 7. Global Oil Supply under Various Scenarios

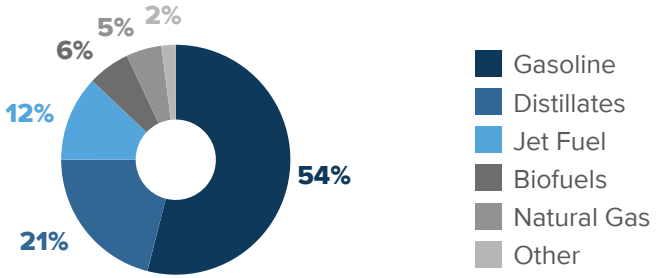


Data sources: IEA, *World Energy Outlook 2024*[2]; IPCC, *AR6 Scenario Explorer and Database Hosted by IIASA*[3]; to test the resiliency of our refining assets, a less than 2°C scenario was assessed using the Solomon WORLD® model (please see Page 13 for more information).

As the global energy landscape evolves, the ability to adapt to shifting demand patterns will be critical for ensuring long-term energy security.

Refineries remain a vital component of the U.S. energy system, supplying nearly 90% of the nation's transportation energy (Figure 8).[6] However, the sector faces growing transition risks driven by shifting oil demand, evolving regulatory frameworks, and changing consumer expectations. In response to tightening market conditions, refineries may need to pivot toward more energy-efficient fuel production while enhancing both operational efficiency and cost effectiveness to remain competitive in the long term.

Figure 8. U.S. Transportation Energy Sources, 2024

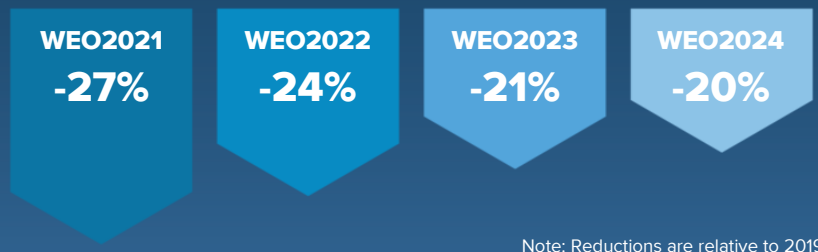


Data source: EIA, *March 2025 Monthly Energy Review*.[6] Based on energy content. Gasoline is motor gasoline and aviation gasoline. Biofuels include ethanol biodiesel, renewable diesel, and other biofuels. Other includes residual fuel oil, lubricants, hydrocarbon gas liquids (propane), and electricity.

For a fourth year in a row, the IEA has revised oil supply reductions by 2030 in their annual World Energy Outlook (WEO) NZE Scenario.[2,7-9]

These adjustments are indicative of a slower than expected progression of the energy evolution.

Figure 9. IEA NZE Oil Supply Reduction by 2030

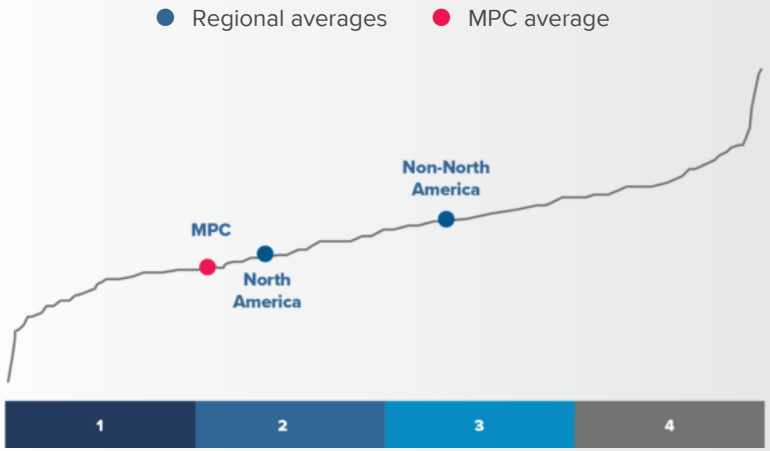


Note: Reductions are relative to 2019.

RESILIENCY OF U.S. REFINERS

MPC retained Solomon to evaluate the resiliency of our refining assets.* As illustrated in Figure 10, the U.S. refining industry demonstrates a lower overall cost structure relative to the rest of the world. This competitive advantage is attributable to having access to lower-cost natural gas and a network of highly complex, geographically well-positioned refining systems to ensure optimal access to diverse crude oil sources.

Figure 10. Cost of Producing Transportation Fuels, 2022 (USD/bbl)



Proprietary © HSB Solomon Associates LLC

The U.S. refining industry remains cost advantaged compared to the rest of the global fleet. Furthermore, the average production costs of MPC's refineries continue to be below the national average.

Moreover, over the long term, the U.S. refining industry is expected to maintain a structural advantage over the rest of the world. This is largely due to the sustained availability of low cost natural gas (Figure 6), a key driver of operating cost efficiency.

* HSB Solomon Associates (Solomon) is uniquely qualified to perform this analysis because it has cost and production data for more than 300 refineries worldwide through its biennial fuels studies (https://www.solomoninsight.com/industries/refining/benchmarking/fuels-study). The biennial Solomon Fuels Studies are a key resource we use to benchmark our operations and conduct scenario analysis.

Over the last several years, we have enhanced the resiliency and cost competitiveness of our refining assets by undertaking a series of measures, including:

- Strengthening our portfolio through actions such as ceasing crude oil processing at three less-competitive refineries in 2020 and 2021, and repurposing two of these facilities for renewable fuel production.
- Executing our strategic commitment of achieving profitability in each region of operation through multiple initiatives, including ensuring safe and reliable operations, transitioning to value chain-focused activities, and maintaining strict capital discipline.

As a result of these actions, we expect our refining system will remain well positioned and cost competitive over the long term, even in a carbon-constrained economy.

Additional Insights from the WORLD® Model

To better understand this outlook and assess how our strategic decisions align with future markets, we further evaluated the competitiveness of our refining assets using Solomon's World Oil Refining Logistics and Demand (WORLD®) model under a scenario in which global oil demand in 2030 is approximately 12% lower per day than in 2019. The analysis included a detailed assessment of the U.S. refining sector alongside developments in other global regions, with a focus on carbon regimes, market disruptions, fuel regulations, crude oil export policies, and trade and refining outlooks. The results indicate that the U.S. refining sector would remain globally competitive in a carbon-constrained future, with minimal rationalization expected, and none anticipated within MPC's refining portfolio.

The results of our analyses reinforce our confidence in the long-term resilience of our refining portfolio, even amid an evolving energy landscape.

MPC'S DISCIPLINED APPROACH TO ENHANCING OUR COMPETITIVE ADVANTAGE

- **Strengthening our competitive position in the Gulf Coast, the most globally advantaged refining region.**
- **Improving reliability, energy efficiency, and cost competitiveness to become the most profitable company in each of the regions where we operate.**
- **Advancing product yield optimization to create incremental value.**
- **Leveraging our integrated value chain and geographically-diversified assets.**

Climate Scenario Analysis for Midstream

Natural gas is increasingly recognized for its role in the energy system as a reliable and affordable source of energy that is also a lower-carbon alternative to traditional coal-fired electricity generation. Its flexibility and ease of transport are ideal for meeting growing global energy needs, particularly for fuel-importing nations during periods of market volatility and geopolitical tension, conditions that can trigger energy price spikes and a resurgence in coal use. In these situations, natural gas serves as a dependable, lower-emitting option that helps stabilize energy systems. These advantages, among many, continue to drive strong, sustained demand for natural gas, liquefied natural gas, and natural gas liquids.

NATURAL GAS

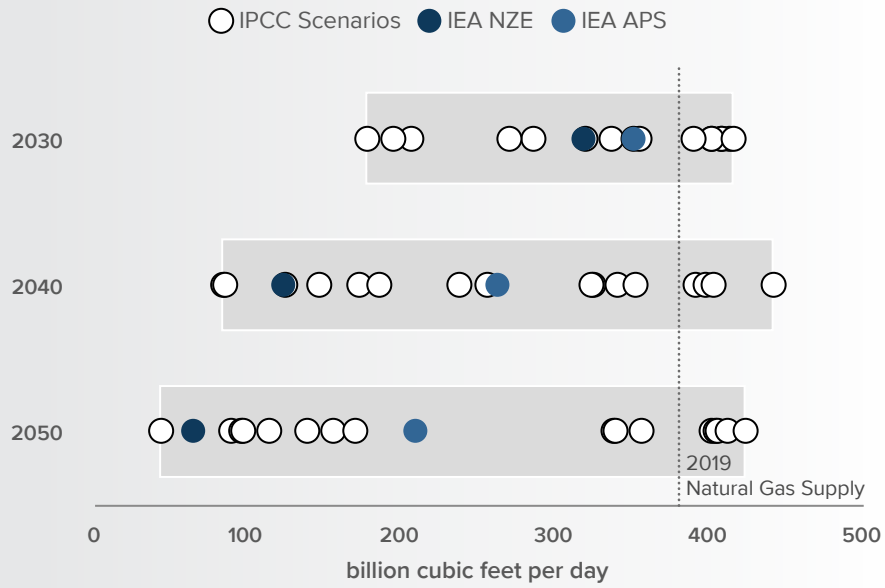
As illustrated in Figure 11, many net-zero scenarios indicate that natural gas will remain a vital component of the global energy mix through 2050. Natural gas is the lowest carbon-emitting conventional fuel, making it a practical option for reducing greenhouse gas emissions in the near to medium term. It also plays a critical role as a feedstock for blue hydrogen production, an emerging energy source expected to be essential in decarbonizing hard-to-abate sectors such as heavy industry and long-haul transport.

As a substitute for coal, natural gas remains the most technically and economically viable option, producing roughly half the carbon emissions for the same energy output. It is abundant, has a cleaner combustion profile than other conventional fuels, and provides efficient, on-demand heat, making it well suited to respond to both seasonal and short-term fluctuations in energy demand. Its versatility allows it to supply both base load and peak power, ensuring grid reliability while facilitating the integration of variable renewable energy sources such as wind and solar.

Looking ahead, global demand for natural gas is expected to continue rising beyond 2035, particularly in Southwest Asia and other emerging markets and developing economies (Figure 12).[1] To meet this growing need, a large share of supply will come from the United States, which is rapidly expanding its LNG export capabilities. Notably, global LNG export capacity is anticipated to increase by nearly 50%, driven primarily by major expansions in the U.S. and Qatar.[2]

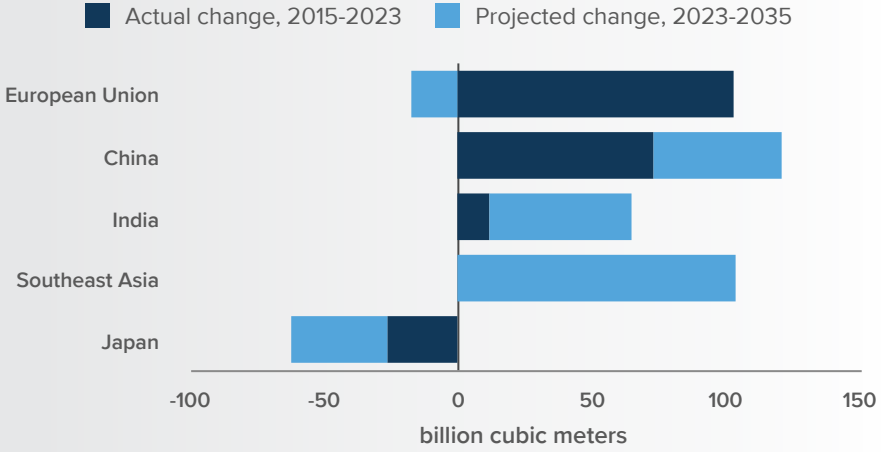
The natural gas market is undergoing a significant transformation. Historically reliant on pipeline infrastructure, it is shifting in response to factors such as supply disruptions caused by Russia's invasion of Ukraine. Several nations have accelerated investments in LNG terminals, a move that aims to enhance market flexibility and enable natural gas to be traded more like crude oil in the future. These developments highlight the importance of adapting supply strategies, investing in LNG infrastructure, and aligning long-term planning with a more dynamic and globally connected gas market.

Figure 11. Global Natural Gas Supply under Various Scenarios



Data sources: IEA, *World Energy Outlook 2024*[2]; IPCC, *AR6 Scenario Explorer and Database Hosted by IIASA*[3]

Figure 12. LNG Demand: Actual and Projected Change in Selected Regions



Data source: IEA, *World Energy Outlook 2024*[2]

The Role of Natural Gas in the U.S. Energy System

In the United States, the transition from coal to natural gas has been the single largest driver of reductions in CO_2e emissions from fuel combustion, cutting over a billion tonnes annually compared to 2000 levels – a 19% decrease (Figure 13). A significant portion of this reduction is attributed to the displacement of coal by natural gas, and, to a lesser extent, contributions from renewable sources such as wind and solar.[10]

These reductions were enabled by a significant increase in natural gas demand, supported by substantial private investment across the entire natural gas value chain, including production, gathering and processing, transmission, distribution, and storage. This strategic transition has helped maintain grid stability, kept electricity prices affordable, and enabled the rapid integration of renewable energy sources without compromising supply reliability.

NATURAL GAS LIQUIDS (NGLS)

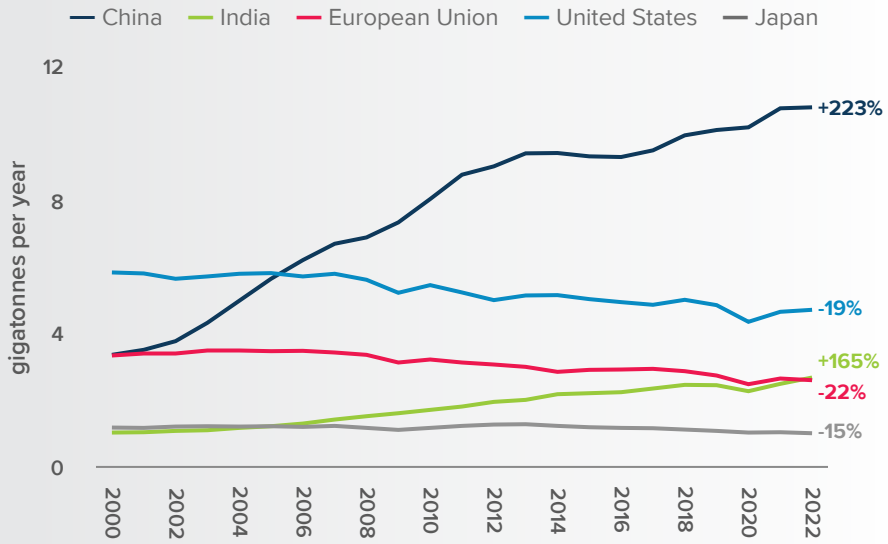
NGLs are primarily produced during the processing of natural gas. These liquids, including ethane, propane, butane, and other heavier hydrocarbons, serve as essential feedstocks for the petrochemical industry. In addition, there remains a pressing need for cleaner cooking fuels in developing regions where traditional biomass and coal are still widely used. NGLs, particularly propane and butane, can offer a cleaner-burning alternative, supporting both indoor health and environmental goals.

Because natural gas processing is a major source of NGL production, the output of NGLs is closely tied to the anticipated growth in natural gas production and the increasing demand for petrochemical feedstocks. According to the EIA short-term forecast, global NGL demand is projected to grow 23% between 2022 and 2027, an upward revision from earlier estimates in the 2023 Annual Energy Outlook (Figure 14).[12-14]

MIDSTREAM ENERGY INFRASTRUCTURE AND EXPORTS

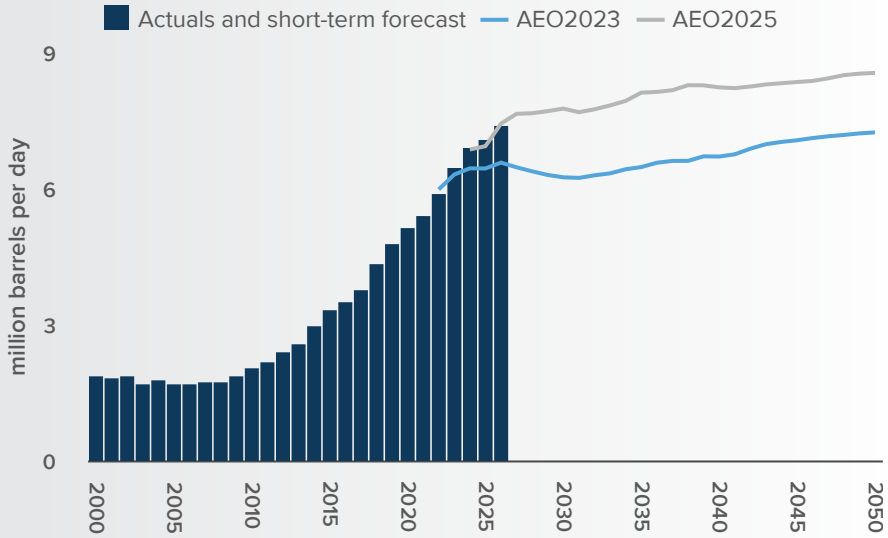
As the world works to balance carbon-reduction efforts with rising energy needs and security concerns, the midstream sector is uniquely positioned to enable a more adaptable and efficient energy system. By connecting production with consumption, it ensures that energy resources are delivered reliably and where they are needed most. In the United States, the outlook for crude oil and natural gas production remains strong. However, to fully realize the benefits of this growth, infrastructure development must align with production to ensure that domestic output can be seamlessly delivered to consumers both at home and abroad.

Figure 13. Regional CO_2e Emissions from Total Energy



Data source: IEA, *Greenhouse Gas Emissions from Energy, 2024 - Highlights*[10]

Figure 14. Natural Gas Plant Liquids Production



Data sources: EIA, *Short-Term Energy Outlook*[12]; May 2025; EIA, *Annual Energy Outlook 2025*[13]; *EIA, Annual Energy Outlook 2023*[14]

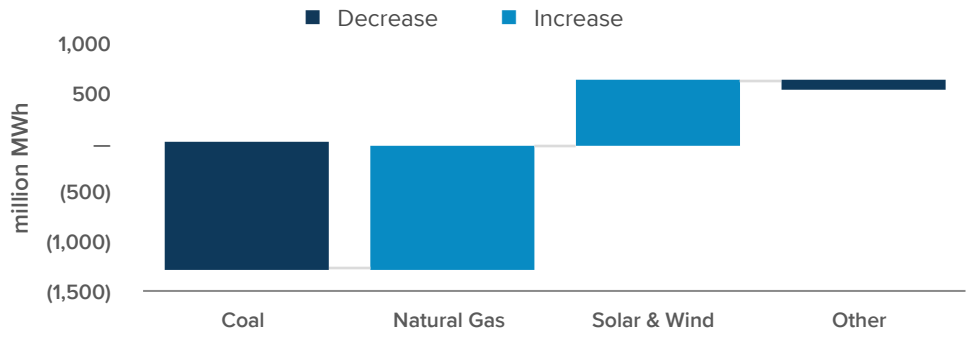
MPLX

Through significant investments, MPC's master limited partnership, MPLX, has grown into one of the largest natural gas processing companies in the U.S. Between 2015 and 2024, we invested over $20 billion through MPLX to acquire and expand natural gas gathering and processing capacity. Today, MPLX operates an integrated network of pipelines, gathering systems, processing and fractionation facilities, terminals, and transport vessels. To continue building on this momentum, MPLX has announced a $2 billion spending outlook for 2025. This plan is focused on further enhancing asset utilization, improving operational efficiency, and deepening the integration between our midstream and refining operations. Together, these efforts position us well to meet future energy needs while delivering long-term value and stability in an evolving energy landscape.

MPLX's Participation in U.S. GHG Emissions Reductions

MPLX's infrastructure build-out aligns with the broader increase in natural gas-fired electricity generation, as illustrated in Figure 15. Notably, during this same period, U.S. CO_2 emissions declined significantly, even as overall electricity generation remained steady, highlighting the role of natural gas in supporting lower-carbon energy solutions.[15]

Figure 15. Change in Electricity Generation, 2000 - 2024



Data source: EIA, *Monthly Energy Review - March 2025*[15]

MPLX's Impact in 2024*

In 2024, MPLX processed approximately 10 billion cubic feet of natural gas per day, enough energy to generate an estimated 475 billion kilowatt-hours of electricity annually.

- This is the equivalent of powering more than 35 million U.S. homes for an entire year.[16]
- This volume of natural gas could avoid up to 300 million tonnes of CO_2e emissions across the U.S. energy supply chain by displacing coal-fired electricity generation, highlighting our ability to support a lower-carbon energy system.

* This estimate assumes natural gas displaces coal-fired generation on an energy-equivalent basis. The potential emissions reduction is estimated based on average CO_2e emissions per kilowatt-hour for coal and natural gas, using publicly available emissions factors from sources such as the U.S. EPA Inventory of U.S. GHG Emissions and Sinks 1990-2022 and data from the EIA.

WELLHEAD TO WATER:

A Fully Integrated NGL System Connecting Permian Supply Growth to Export Demand

In early 2025, MPC announced a $2.5 billion, multiyear initiative to develop an NGL fractionation and export facility near Galveston Bay, Texas.

This project will establish a key outlet for NGLs produced in the Permian Basin and other core regions where MPLX operates. NGLs will be transported via pipeline to a centralized fractionation facility near our Galveston Bay refinery. Finished liquid petroleum gas (LPG) products will be distributed through pipeline networks and from an LPG terminal at the Port of Texas City, helping to meet growing global LPG demand.

PROJECT HIGHLIGHTS:

- **Construction of two new Gulf Coast fractionators with a combined capacity of 300,000 bpd**
- **Development of a 400,000 bpd LPG export terminal through joint ventures with ONEOK, featuring:**
  - **Refrigeration and storage tanks**
  - **Two marine berths with loading facilities**
  - **Dedicated pipeline connections to the terminal**

This integrated strategy provides end-to-end control over gathering, processing, transportation, and export operations, strengthening our competitive position across the full value chain. In turn, it enables the delivery of lower-carbon energy sources to regions around the world where they are needed.

Climate Scenario Analysis of Renewable Fuels

Renewable liquid fuels are derived from non-mineral resources, such as biomass and organic waste materials and include ethanol, biogasoline, biodiesel, renewable diesel and sustainable aviation fuel (SAF). Because these fuels are sourced from biomass materials (e.g., plants and animal fats) the CO_2 released during combustion is part of the current carbon cycle and offset by the CO_2 recently removed from the atmosphere. As a result, burning these renewable fuels does not increase net atmospheric CO_2 levels.

A key consideration is that most renewable fuels in use today are not net-zero, as their production process generates carbon emissions. However, these processes are becoming more efficient. Several renewable liquid fuels, such as renewable diesel, can deliver a 50% to 80% reduction in embedded life-cycle greenhouse gases when compared to the fossil-based fuels.[17]

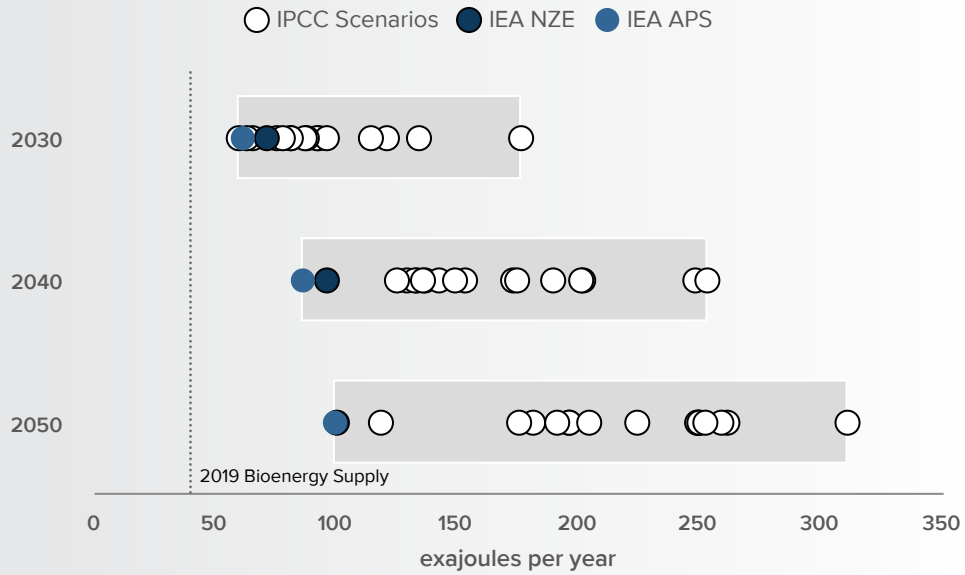
Each fuel generally has a unique carbon intensity (CI) that accounts for its entire life cycle. This includes emissions from the cultivation or production of feedstock materials, transportation, conversion processes, and end-use. Carbon reductions at any point along the value chain, such as improved farming practices, more efficient refining or the incorporation of renewable energy, can result in a lower CI value. Some renewable fuels, like renewable natural gas collected from dairy farms, can even have a net-negative CI.[17,18]

Renewable fuels are an important component in the effort to decarbonize the transportation sector. They are compatible with existing engines and infrastructure, enabling immediate reductions without the need for widespread technological overhauls. Liquid biofuels are particularly important for hard-to-abate sectors such as heavy-duty trucking, shipping and aviation, which currently have limited cost-effective alternatives. Renewable liquid fuels are among the few viable near-term solutions for reducing emissions in these sectors. Global biofuels demand reached a record high in 2023 and is modeled by the IEA to continue its upward trajectory in the years ahead (Figure 16).[2]

IEA NZE: Demand for liquid biofuels more than doubles by 2050, requiring a growth of more than 3% each year.

The NZE scenario includes a significant increase in biofuel production to meet global climate goals. This would involve expanding the use of advanced feedstocks and scaling up biofuel production to align with targets for reducing carbon emissions

Figure 16. Bioenergy Supply under Various Scenarios



Data sources: IEA, *World Energy Outlook 2024*[2]; IPCC, *AR6 Scenario Explorer and Database Hosted by IIASA*[3]

ADOPTION CHALLENGES

Despite their advantages, renewable liquid fuels remain costly to produce, often exceeding the cost of traditionally refined petroleum-based transportation fuels. Without market mandates and subsidies, renewable fuel production would not be as economically viable as conventional alternatives. Additionally, challenges such as complex regulatory permitting processes and feedstock supply chain considerations can delay or limit the expansion of renewable liquid fuel production.

Government support through federal and state programs, such as the U.S. EPA Renewable Fuel Standard, California Low Carbon Fuel Standard and various blending mandates around the world, has been pivotal in advancing the adoption of renewal liquid fuels. These initiatives provide the economic justification needed to construct new facilities or convert traditional refineries into biofuel production facilities, helping to overcome significant cost barriers and encourage investment in the sector. However, some renewable fuel products, such as SAF, continue to struggle with cost competitiveness even with existing subsidies.

There remains an ongoing need for robust policy support to ensure the continued growth and viability of renewable fuels.

RENEWABLES PORTFOLIO HIGHLIGHTS

KEY OBJECTIVES

- **Identify and pursue renewable opportunities that offer attractive returns, lower costs, increase reliability and reduce emissions.**
- **Deploy technologies that reduce environmental impact while enhancing business performance.**

Pictured: Dickinson renewable diesel facility

At MPC and MPLX, we have a long history of innovation that continues today. We seek to optimize our core fuels manufacturing and logistics businesses and expand our natural gas business while making strategic, measured investments in renewable and low-carbon energy solutions, emerging technologies and early-stage developments. We have invested over $1 billion to convert two of our petroleum refineries to produce renewable diesel.

We believe energy supply and technologies will continue to evolve, and we are excited to be engaged in their evolution. Hydrocarbon fuels are critical to today's economy and are likely to continue to be for the foreseeable future. Optimizing how they are produced and delivered is important to energy markets, strategic to our business and foundational to our environmental stewardship commitment. Our investments in renewable fuels serve our customers and contribute to reducing the carbon intensity of our products.

> **In 2024, we were one of the largest suppliers of renewable fuels in the U.S., delivering approximately 2.8 billion gallons of renewable fuel to customers.**

MARTINEZ RENEWABLE FUELS (JOINT VENTURE)

Our renewable diesel facility in Martinez, California, which we co-own through our Martinez Renewables joint venture with Neste Corporation, has a capacity of 730 million gallons per year and includes pretreatment capabilities. The facility reached full capacity in late 2024, placing it among the largest renewable diesel facilities in the world.

DICKINSON RENEWABLE FUELS

Our renewable diesel facility in Dickinson, North Dakota, was operated as a petroleum refinery until 2020. This is a prime example of how MPC is supporting the transition to a lower-carbon future by using existing assets and workforce. This facility has the capacity to produce 184 million gallons per year of renewable fuels.

LF BIOENERGY (MPC INVESTMENT)

We expanded our portfolio in 2023 to include renewable natural gas (RNG) through acquisition of a 49.9% interest in LF Bioenergy, a renewable energy developer that builds, owns and operates facilities that turn organic waste on dairy farms into RNG. Since then, LF Bioenergy has initiated commercial operations at five facilities and has two additional sites under construction across the U.S.

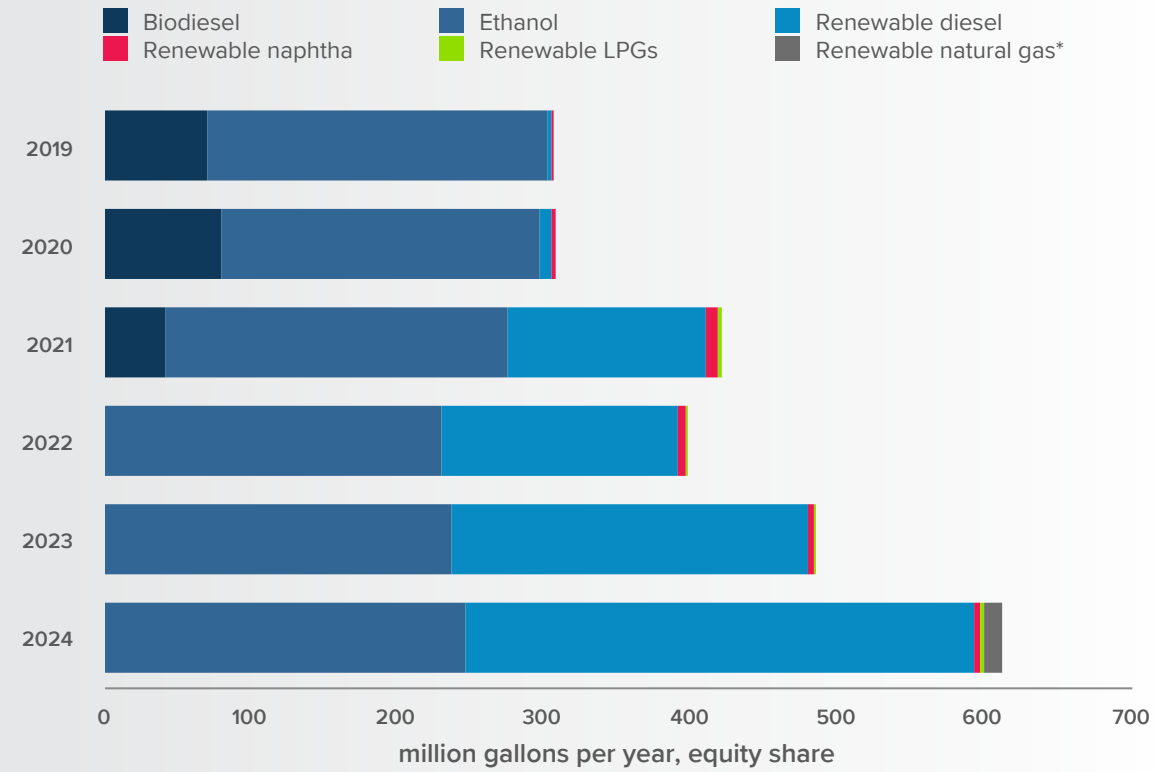
RENEWABLE LIQUID FUELS

In 2024, we achieved a milestone by producing approximately 600 million gallons of renewable fuels, setting a record for our company. Additionally, by late last year, our joint venture operation with Neste in Martinez reached its renewable fuel annual capacity rate of 730 million gallons per year.

We strive to continually lower the carbon intensity of the products we offer to our customers. In 2024, we delivered approximately 2.8 billion gallons of renewable fuels, which is estimated to avoid nearly 16 million tonnes of CO_2e transportation emissions per year.[19]

Pictured: Martinez renewable diesel facility

Figure 17. MPC Renewable Fuels Production



*Presented as million gallons per year renewable diesel equivalent.

While biofuel production has made notable strides in adoption, significant challenges and opportunities persist. Addressing these is essential for the successful and sustainable integration of biofuels.

KEY FACTORS INCLUDE:

- **Feedstock availability and cost**
- **Advancements in biofuel production technology**
- **Economic considerations**
- **Policy and regulatory support**

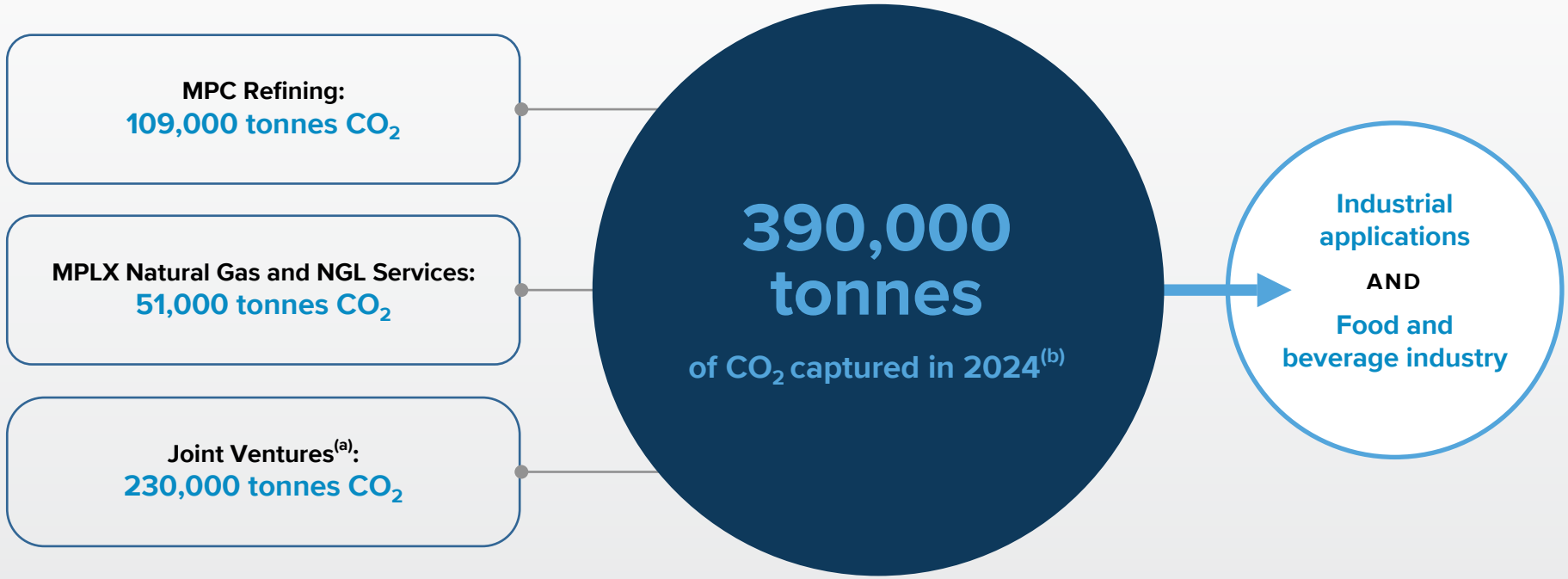
CARBON CAPTURE

Carbon capture, utilization and sequestration (CCUS) technologies are recognized by both the IPCC and IEA as critical tools in achieving long-term carbon reduction goals.[2,20] This proven and effective technology can support efforts such as lower-carbon hydrogen production, an essential resource that can further support the decarbonization of hard-to-abate sectors, including petroleum refining, chemical and steel manufacturing, and heavy-duty transportation and shipping.

Despite its potential, CCUS technology has so far been adopted only in limited applications. However, momentum is growing as private companies, along with federal, state and local governments, policy institutions, academia, national laboratories, and other, increasingly contribute their resources and expertise to advance the technology.

MPC and MPLX support the continued development and use of CCUS technology as a strategy for reducing CO_2 emissions and the carbon intensity of the products we supply.

Figure 18. Carbon Capture by MPC and MPLX Operations and Joint Ventures



(a) Value includes production by joint venture entity accounted for as equity method investments.
(b) Total may not sum due to independent rounding.

Managing Physical Risks to Our Facilities

To screen for climate-related physical risks of our assets, we conduct an assessment of multiple hazards relevant to our geographic areas. We take into account our physical assets and consider their exposure and resilience to climate impacts. This information is put together to assess the overall climate risk, given the site properties and projection of climate hazards, both acute (i.e., extreme weather) and chronic (i.e., sea-level rise). Based on this information, we determine if additional measures are required to enhance the resilience or adaptability of our sites. While some hazards include quantitative assessments, others remain primarily qualitative. The results of our assessment are summarized in the table below.

SCREENING OF SELECT PHYSICAL RISKS

ASSET	SIZE	SEA-LEVEL RISE RISK		HURRICANE RISK	WATER AVAILABILITY RISK	WILDFIRE RISK	
PETROLEUM REFINERIES	CRUDE CAPACITY (MBPD)	COASTAL	INUNDATED AT 4 FT SEA-LEVEL RISE[a]	GULF COAST	HIGH WATER STRESS REGION[b]	CALIFORNIA	FIRE HAZARD SEVERITY ZONE[c]
Galveston Bay, Texas	631	✓	—	✓	—	—	—
Garyville, Louisiana	606	✓	—	✓	—	—	—
Los Angeles, California	365	✓	—	—	✓	✓	—
El Paso, Texas	133	—	—	—	✓	—	—
Anacortes, Washington	119	✓	—	—	—	—	—
Kenai, Alaska	68	✓	—	—	—	—	—
Salt Lake City, Utah	68	—	—	—	✓	—	—
Remaining Refineries	973	—	—	—	—	—	—
MIDSTREAM	COUNT						
Terminals	>100	17	5	7	—	8	—
Natural Gas and NGL Services Facilities	>100	—	—	—	16	—	—

(a) Based on interpretations of the National Oceanic and Atmospheric Administration (NOAA) Sea Level Rise Viewer, which is a screening-level tool to illustrate the scale of potential flooding. Available at: https://coast.noaa.gov/slr/. Accessed Jun. 2024. Note: Assets in Alaska are not included in the screening as the NOAA Sea Level Rise Viewer is only available for the contiguous U.S.

(b) World Resource Institute, Aqueduct Assessment Tool, available at https://www.wri.org/aqueduct/tools. Accessed Jan. 2025. Note: Not screened for terminals due to comprising an insignificant portion of total water usage.

(c) California Office of the State Fire Marshal Fire Hazard Severity Zone (FHSZ) maps assign a hazard score based on factors influencing both the likelihood and behavior of wildfires. Each site is located in an area that the State Fire Marshal has identified as a *No Fire Hazard Severity Zone*. Available at: https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones. Accessed Mar. 2025.

Our policies and programs enable us to effectively monitor, assess, and respond to physical climate risks.

Pictured: Mt. Airy Terminal

MITIGATION EFFORTS

Our facilities are subject to acute physical risks, such as floods, hurricane-force winds, tornadoes, wildfires, extreme temperatures and winter storms, and chronic physical risks, such as sea-level rise and drought. In response, we have developed comprehensive programs and procedures to help ensure the safe continuation of our operations during severe weather events, facilitating a timely recovery. Furthermore, we have incurred, and expect to continue incurring, additional costs to protect our assets and operations from these physical risks that may occur, investing in the employment of mitigation technologies and processes. If severe weather events or other climate conditions become more frequent and/or severe, we may need to modify our operations and incur increased costs, potentially impacting our business.

CHRONIC RISKS

Sea-level Risks

MPC operates coastal sites, including five refineries, one joint venture renewable fuels facility, and 17 terminals. Under a high emissions scenario (RCP8.5), the IPCC estimates a likely sea-level rise ranging from 0.61 to 1.1 meters (2.0-3.7 feet) with a median of 0.84 meters (2.76 feet) by 2100.[21] Adopting a conservative approach, we evaluated our assets at 4 feet, exceeding the IPCC upper range. Below is a summary of our assessments and enhancements implemented for the affected sites:

- **Renewable fuels facility (Martinez, California)**
  At 4 feet, a low level of flooding was identified for the Avon marine terminal at the northern end of the property. In 2017, the terminal was upgraded to the latest Marine Oil Terminal Engineering & Maintenance Standard, considering potential sea-level rise. Furthermore, to meet permitting requirements, technical estimations of future water levels were estimated. In 2030, water levels were estimated to increase by 0.22 feet due to extreme tide or 100-year flood conditions. With water-level rise estimated to occur at approximately 0.1 inch per year, the pipelines at the site would likely not be inundated until 2070. This provides sufficient time to monitor and mitigate any potential impacts.
- **17 terminals (Alaska, California, Florida, Louisiana, and Washington)**
  These terminals indicate minor impacts at 4 feet of sea-level rise; due to the chronic nature of sea-level rise, we are able to monitor and mitigate any potential impacts.

Water Availability and Drought

Please see more information on Pages 34-35 regarding our assessment and actions to mitigate water risks through our Focus on Water program.

ACUTE RISKS

Wind and Wildfire

- **Wind:** Refinery structures are generally designed for a wind load of up to 120 mph and are not likely to be adversely affected by excessive wind speed or extended periods of elevated winds due to physical rigidity and inherent strength of refinery infrastructure components.
- **Wildfire (California Assets)**: Our assets are located in areas that the State Fire Marshal has identified as *No Fire Hazard Severity Zones (FHSZ),* as opposed to *Very High, High*, or *Moderate FHSZ*. This classification is based on burn probabilities and potential fire behavior in the area. One example of an asset in a *No FHSZ* is our Los Angeles refinery, which is located in a highly industrialized and urban area, with additional separation from high-hazard zones due to surrounding infrastructure.

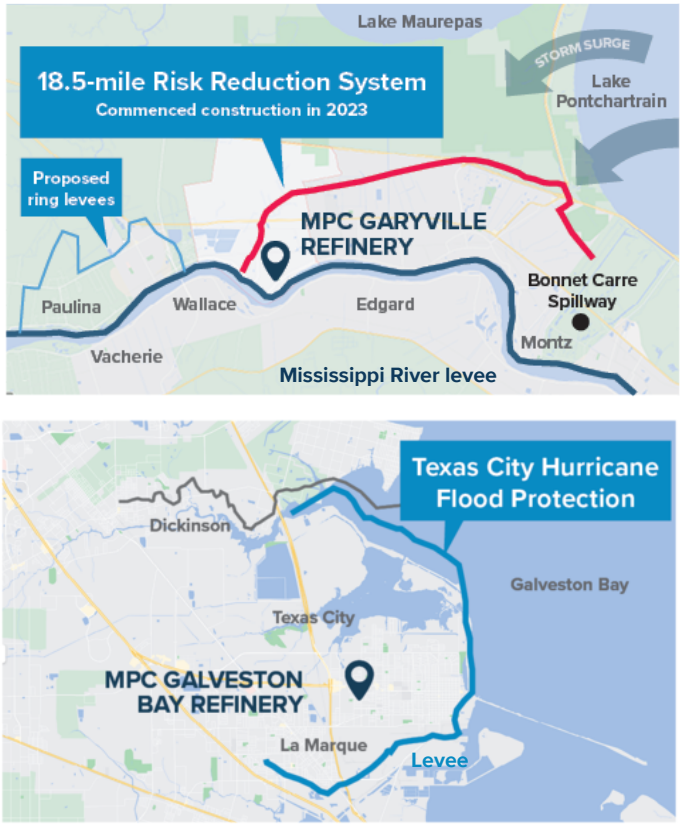
Winter Storms and Heavy Rainfall

- **Extreme Temperature/Winterization:** Refineries in regions that experience freezing and extreme winter weather have implemented winterization plans that identify both short- and long-term actions to ensure that the refinery is prepared for winter every year. The plans include steps to prepare for inclement weather along with long-term projects to winter-proof equipment. This includes actions such as the winterization of the on-site cogeneration facility at our Galveston Bay refinery due to disruptions resulting from hard freezes in 2021 and 2022. The project upgrades allowed the facility to run efficiently and reliably during the statewide cold snap in January 2024.
- **Pipeline Integrity Management:** Our midstream segment owns, leases or has an ownership interest in approximately 21,000 miles of pipeline throughout the U.S. We continuously monitor and manage the integrity of our pipeline systems based on changing conditions, including efforts such as identifying and proactively relocating pipeline segments deeper below waterway beds to reduce the risk of scouring.

Hurricanes and Tropical Storms

- **External Flood and Storm Surge Controls:** Our Garyville refinery is located on a local high point and is currently protected by an external levee system that runs along the Mississippi River with several spillways both upstream and downstream of the facility (Figure 19). This system provided flood protection during hurricanes such as Katrina in 2005, Gustav in 2008 and Ida in 2021. In addition, an 18.5-mile risk reduction system is currently under construction to protect areas around the refinery from storm surge, projected to be complete in 2029. Furthermore, additional safeguards, such as locating pumps and compressors on foundations above grade and adopting hurricane preparedness measures, have been implemented. Our Galveston Bay refinery is protected with an external levee and pump station system that protects 36 square miles of land in the Texas City area (Figure 19). This levee has provided adequate protection through several storms, including Hurricane Ike in 2008 and Hurricane Harvey in 2017. Neither of these storms caused material flooding to our operations.
- **Facility Hardening:** New centralized control rooms at our Garyville and Galveston Bay refineries were built to withstand wind and storm surges characteristic for each of their respective locations. These hardening measures are designed to protect the main control systems so they may remain in good operational standing during extreme weather events. In addition, we designed process vessels, storage tanks, and other logistical assets to withstand significant wind.
- **Electrical Infrastructure and Power Supply:** We continue to proactively implement a multiyear program to replace and upgrade electrical infrastructure at our refineries to ensure power supply continuity; e.g., cable installations, combining substations, on-site generators, installing new safety features and elevating infrastructure to avoid flooding, and other measures. Gulf Coast refining facilities have redundant power supplies and historically have experienced few problems maintaining power during severe weather events, including hurricanes. Our other facilities, such as fuel terminals and pipeline stations, historically exposed to hurricanes or other severe weather, elevate power infrastructure above historic flood levels and maintain a combination of on-site generators and contracts for rapid procurement of generators in the event of power loss. Notably, in 2017, all our operations in the greater Houston area maintained power throughout Hurricane Harvey and its aftermath.

Figure 19. Gulf Coast Refinery Flood Protection



EMERGENCY PREPAREDNESS AND RESPONSE

Meticulous planning and preparedness are critical to effectively respond to emergencies such as releases, major floods, fires, and hurricanes. Through continuous improvement in our response capabilities, we seek to minimize and mitigate the impacts on people and the environment when incidents occur.

Maintaining Emergency Preparedness and Readiness

MPC and MPLX maintain a response program designed to test and continuously enhance our response capabilities:

- **Incident Command System**
  We utilize this globally recognized emergency response management system to promote effective and organized integration of all responders, resources, and response management efforts.
- **Regular Training, Drills, and Exercises**
  Our exercises prepare us for emergency situations and are used to review, critique and improve our emergency response plans. These exercises follow the federal government's National Preparedness for Response Exercise Program (PREP), which satisfies the requirements of the Oil Pollution Act of 1990. We also review other applicable federal, state and local requirements and include additional exercises and steps designed to meet any such requirements.
- **Unified Response**
  We take a collaborative approach to emergency preparedness. In addition to training our employees and contractors, we work to engage with federal, state, local, and tribal agencies, local fire departments and other first responders, and community leaders who have an interest in the design and development of our plans and exercises.

The 2024 Prince William Sound exercise was one of MPC's largest emergency preparedness exercises, with over 250 participants, including several federal and state agencies.

Pictured: Prince William Sound, Alaska

Emergency Preparedness Group (EPG)

MPC's EPG oversees our emergency response program, which includes companywide guidelines and procedures for preparing for and responding to emergencies. Its focus is on strengthening our ability to respond swiftly and effectively to an emergency incident at any of our facilities. The EPG coordinates with business components to share best practices and resources across the company.

Corporate Emergency Response Team (CERT)

EPG maintains CERT, a program that assures comprehensive corporate staffing, resources, support and response management are available to local management for communicating, responding to and managing major emergencies.

We have nearly 500 MPC and MPLX employees participating across six subsections of CERT. Additional employees are active in emergency response teams within the various operating organizations.

- **Emergency Strike Team**
  A stand-alone response management team capable of supplementing, relieving or taking command of a major emergency.
- **Emergency Support Group**
  Provides key support functions, such as information technology, communications and geographic information system mapping during an incident.
- **Business Recovery Team**
  Works to meet MPC's, MPLX's and customers' needs during supply disruptions.
- **Crisis Management Team**
  A group of executive-level advisors prepared to respond to MPC's and MPLX's needs during significant incidents.
- **Threat Assessment Group**
  Tasked with determining the potential impact of a threat to MPC or MPLX, informing impacted stakeholders and recommending steps to protect people and assets.
- **International Team**
  Determines the potential impact, recommends response strategies and responds to incidents related to our international operations.

Emergency Communications System

We maintain an emergency mass-notification system to assist in providing humanitarian aid to our personnel during natural disasters and expedite communications among response teams.

Climate-Related Metrics and Targets

The suite of metrics and targets below helps measure progress on our climate strategy and risk management processes. We assess progress against these targets annually and may revise them or adopt new metrics as we achieve our goals or as new sources of information become available. Our performance to date has resulted in meaningful, sustainable emissions reductions and significant investment in lowering the carbon intensity of our operations.

We have taken the following actions related to our metrics:

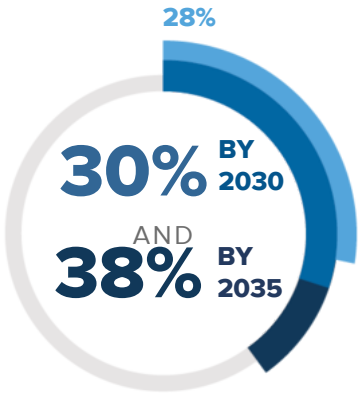
- Extended and increased our Scope 1 and 2 GHG emissions intensity target to a 38% reduction by 2035 from 2014 levels.
- Recalibrated our refining value chain Scope 3 - Category 11 metric to transparently monitor and report these emissions data in lieu of a 15% reduction target. As highlighted on Pages 11-13, this change reflects the competitive position of our assets and aligns with energy demand. Please see Pages 30-31 for more information on our Scope 3 emissions reporting.
- Began evaluating potential adjustments to our methane targets as we complete initiatives to incorporate a more measurement-informed inventory. Please see Pages 32-33 for more information.

Since 2019, absolute Scope 1, 2 and 3 - Category 11 GHG emissions have decreased by more than 25 million tonnes per year.

OPERATIONAL TARGETS[(a)]: *Designed to reduce the impact of our operations on the environment*

Scope 1 and 2 GHG Emissions Intensity

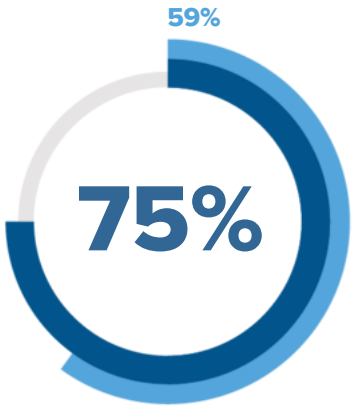
● 2035 Goal ● 2030 Goal ● Progress



30% REDUCTION of Scope 1 and 2 GHG emissions intensity by 2030 and **38% REDUCTION** by 2035 from 2014 levels

Methane Emissions Intensity

● 2030 Goal ● Progress



75% REDUCTION of MPLX methane emissions intensity by 2030 from 2016 levels

Freshwater Withdrawal Intensity

● 2030 Goal ● Progress

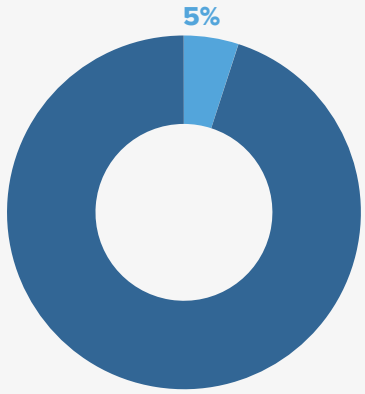
20% REDUCTION of freshwater withdrawal intensity by 2030 from 2016 levels

Value Chain Reporting

Helps our business strategy consider long-term climate-related market risk

Absolute Scope 3 - Category 11 GHG Emissions

● Status



5% DECREASE of Scope 3 - Category 11 GHG emissions in 2024 relative to 2019 levels

(a) Data before 2019 is inclusive of facilities that MPC did not yet own so that performance can be compared across the same asset base over time.

We utilize several reporting protocols and guidance documents to develop and compute our GHG emissions and targets, including: U.S. EPA's Mandatory Greenhouse Gas Reporting Rule reporting protocols (40 CFR Part 98), the Science Based Targets initiative (SBTi), Greenhouse Gas Protocol, and Ipieca's petroleum industry guidelines for reporting greenhouse gas emissions. Beginning in 2020, an independent third party, LRQA, has validated our GHG data and emissions calculation methodologies related to the above metrics. This comprehensive review and assurance promotes accurate disclosures that align with accepted reporting practices. The latest assurance statement can be found at https://www.marathonpetroleum.com/Sustainability/Reports-and-Policies/.

Scope 1 and 2 GHG Emissions Intensity Target

We are committed to reducing the carbon footprint of our operations and the products we manufacture, improving the energy efficiency of our operations, and collaborating with others to improve energy efficiency across the manufacturing, consumer and transportation sectors.

In 2020, we adopted a companywide manufacturing Scope 1 and 2 GHG emissions intensity reduction target of 30% below 2014 levels by 2030. In 2024, we extended this metric to reduce our intensity by 38% below 2014 levels by 2035. This metric is calculated by aggregating the Scope 1 and 2 GHG emissions across all our organizations and dividing by total manufacturing inputs. Because our manufacturing sites process a wide range of inputs, including, but not limited to, crude oil, natural gas, natural gas liquids and renewable feedstocks, we normalized these manufacturing inputs on a common energy unit: barrels of oil equivalent (boe).

We are focused on cutting our GHG emissions through multiple initiatives, including:

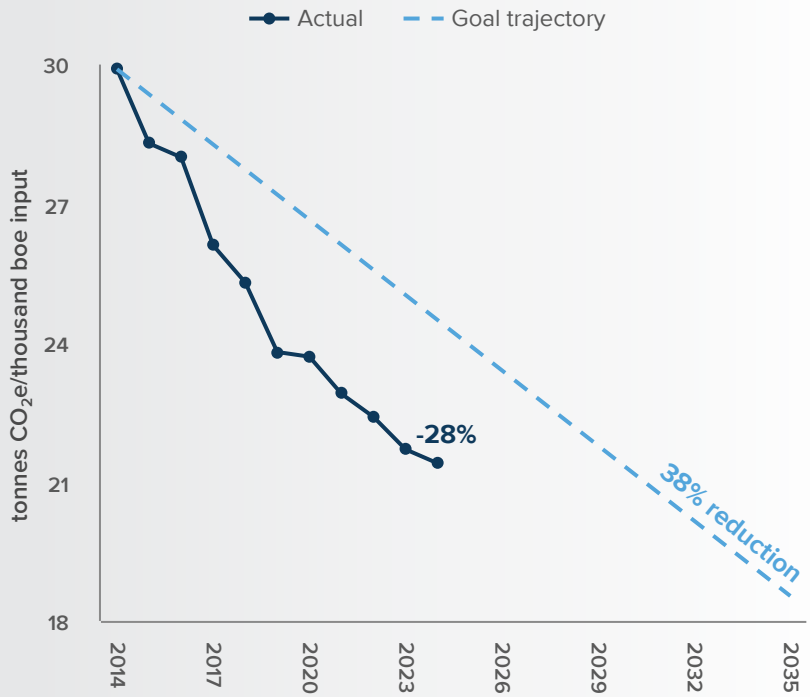
- Driving efficiency through our Focus on Energy program
- The acquisition and expansion of our MPLX Natural Gas and NGL Services business

Highlights of Our Scope 1 and 2 Reductions

- Since 2019, our companywide Scope 1 and 2 GHG emissions have decreased by over 10% on an absolute basis. We have achieved a reduction in our intensity for the 10th consecutive year, demonstrating the resiliency and effectiveness of our Focus on Energy program.
- Energy savings have avoided the equivalent of over 1.3 billion Btu/hour of energy use, resulting in savings of over $28 million in 2024. This is roughly equivalent to the energy used annually by over 80,000 homes or 140,000 gasoline-powered passenger vehicles.[16]
- In 2024, for a fifth consecutive year, MPC earned the ENERGY STAR® Partner of the Year – Sustained Excellence award from the U.S. Environmental Protection Agency.
- Five MPC refineries (Anacortes, Washington; Canton, Ohio; Garyville, Louisiana; Robinson, Illinois; St. Paul Park, Minnesota) earned 2024 ENERGY STAR certifications for ranking in the top 25% of similar facilities nationwide in energy efficiency. MPC has earned more certifications than all other refining companies combined. Please see Pages 27-29 for more information on our 2024 Focus on Energy initiatives and achievements.
- In our Midstream operations, MPLX's Bluestone natural gas plant in Pennsylvania became the first facility in the U.S. natural gas processing sector to achieve the 2024 EPA ENERGY STAR Challenge for Industry.

Overall, we view our Scope 1 and 2 emissions intensity as a direct measure of our climate performance, helping us assess our progress in our energy evolution initiatives.

Figure 20. Companywide Scope 1 and 2 GHG Emissions Intensity Reduction Progress



ACHIEVING 10 CONSECUTIVE YEARS OF PROGRESS

As highlighted in Figure 20, we have achieved a 28% reduction in Scope 1 and 2 GHG emissions intensity compared to our 2014 baseline, representing 10 consecutive years of progress.

Given that we remain on track to meet our previous target of a 30% reduction by 2030, we extended and strengthened our commitment last year by setting a new target: a 38% reduction in GHG emissions intensity by 2035.

Focus on Energy: Improving Energy Efficiency

Energy efficiency is one of our key metrics with both environmental and financial benefits. By identifying opportunities to conserve energy cost effectively, we reduce our operating costs and reduce our environmental footprint. MPC has achieved significant energy savings, GHG emissions reductions and cost savings through our Focus on Energy (FOE) program. This program represents our holistic approach to improving energy efficiency across the organization, driving continuous improvement and reducing GHG emissions. Over the past decade, the FOE program has helped us avoid the equivalent of several billion Btu/hour of energy use.

Through the success of our FOE program, MPC was recognized by the U.S. EPA for our contributions to building an energy efficiency mindset with the 2024 ENERGY STAR® Partner of the Year – Sustained Excellence Award. ENERGY STAR is a voluntary EPA program that helps industry improve energy efficiency and reduce environmental impact. This honor, MPC's fifth consecutive, places us among a distinguished group of industry leaders.

As active participants in the program, our facilities continually focus on identifying ways to reduce energy consumption and showcase our strategies and share insights with peers across the industry to support others in reaching their energy efficiency goals.

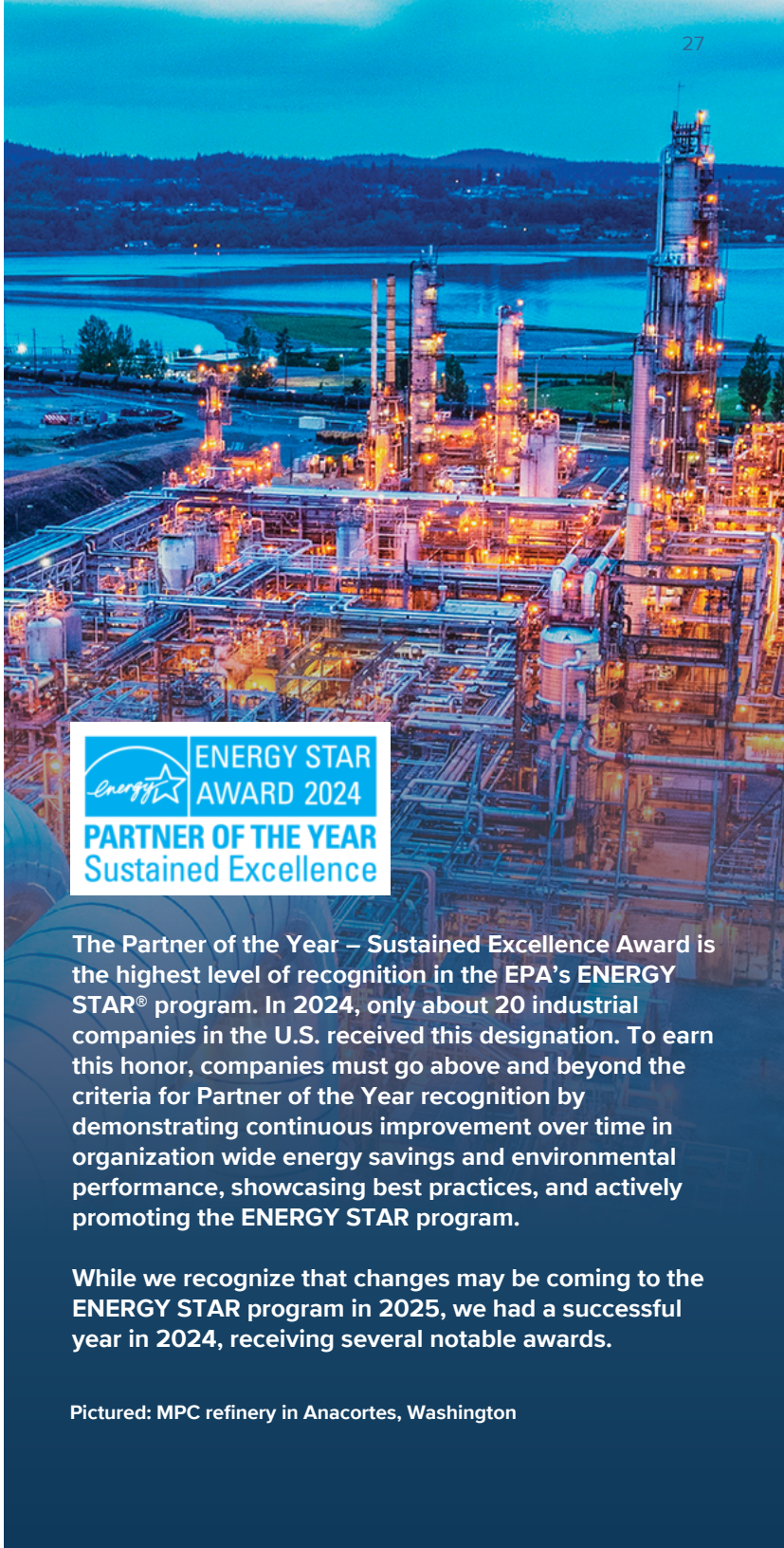
REFINING ENERGY EFFICIENCY

With FOE programs in place at all 13 of our refineries, we have expanded these efforts to include our renewable fuels facilities. In 2024, key performance indicators (KPIs) were developed for the Dickinson Renewable Fuels facility and initial implementation began at the Martinez Renewables facility.

We conduct deep-dive studies to benchmark our refineries against industry peers, maintain KPIs through our FOE program, and use an energy road map with long-term performance goals to guide our energy efficiency efforts. Additionally, we are embracing digital technologies and continually evaluating more efficient solutions. In our industry, energy efficiency is constantly advancing, so we remain committed to innovation and continuous improvement.

Figure 21. Cumulative Count of U.S. EPA ENERGY STAR® Certifications Awarded to Refineries[(a)]

(a) Through 2024 certification year.



The Partner of the Year – Sustained Excellence Award is the highest level of recognition in the EPA's ENERGY STAR® program. In 2024, only about 20 industrial companies in the U.S. received this designation. To earn this honor, companies must go above and beyond the criteria for Partner of the Year recognition by demonstrating continuous improvement over time in organization wide energy savings and environmental performance, showcasing best practices, and actively promoting the ENERGY STAR program.

While we recognize that changes may be coming to the ENERGY STAR program in 2025, we had a successful year in 2024, receiving several notable awards.

Pictured: MPC refinery in Anacortes, Washington

Strategies to Improve Energy Efficiency

- **Energy performance standards:** Establish standards for equipment to encourage the adoption of more efficient technologies.
- **Energy management systems:** Monitor energy consumption, identify inefficiencies, and implement measures to help improve performance.
- **Data collection and analysis:** Collect and analyze data on energy consumption patterns to identify potential improvements and track effectiveness of energy initiatives.
- **Operator awareness and training:** Train operators to identify and address energy inefficiencies to help improve energy consumption practices.
- **Maintenance:** Implement programs designed to help equipment operate efficiently.
- **Digitization:** Migrate to and enhance data management systems to improve data quality and enable operational optimization.

Pictured: MPC refinery in Garyville, Louisiana

SPOTLIGHT ON

Garyville Refinery

The refinery steam challenge was recognized as one of EPA's 2024 Top Projects in the U.S. industrial sector at the annual ENERGY STAR® Industrial Partner Meeting.

In 2024, the Garyville refinery challenged itself to reduce fired steam generation by 100,000 pounds per hour. The Garyville team exceeded the expectations of this project by recovering 129,000 pounds per hour of steam. This amounts to more than $5 million in annual cost savings and over 45,000 tonnes of carbon dioxide-equivalent emissions reductions per year. Examples of this success include:

- **Optimization:** Improved process unit operating temperatures and rightsized equipment.
- **Maintenance:** Increased waste-heat steam generation by cleaning a unit heater convection system and repaired steam leaks.
- **Source recovery:** Adjusted process unit valves to recover excess purge steam.

The success of this initiative was driven by its strategic focus on education and active engagement to create a collaborative and supportive environment where all contributions are valued. By effectively conveying the principles of Refining's FOE program and its key performance indicators, program participants across the refinery understood how savings from energy efficiency are both beneficial for the environment and good for business. With this knowledge, our operators understood the challenge and rose to meet it successfully.

By promoting best practices and encouraging new ideas, the Garyville refinery continues building upon efforts that have helped the site remain one of the most energy efficient refineries in the United States, having been ENERGY STAR certified for 19 consecutive years.

MIDSTREAM ENERGY EFFICIENCY

To build upon the success of our refinery-specific FOE program, MPC has expanded FOE initiatives to include programs currently underway at various MPLX facilities.

Significant Midstream Energy Wins

As part of the ENERGY STAR program, the EPA launched the ENERGY STAR Challenge for Industry in 2010 to encourage manufacturing plants to reduce GHG emissions, generate momentum for energy savings, establish sound energy management practices, increase the visibility of energy management efforts, and motivate employees to support energy initiatives.

Recognizing the potential benefits for the company, its customers, and the public, MPLX marked an industry first by entering the ENERGY STAR Challenge for Industry in late 2022.

Bluestone Gas Processing Facility

Our Bluestone natural gas plant in Pennsylvania is the first and only facility in the U.S. natural gas processing sector to achieve the EPA's ENERGY STAR Challenge for Industry. A 10% decrease in energy intensity is required within five years as part of this challenge. Bluestone exceeded this requirement, successfully achieving the milestone well ahead of schedule.

As a result of this accomplishment, Bluestone hosted an ENERGY STAR Industrial Showcase in October 2024 to share the benefits of implementing an energy program, highlight its progress and milestones achieved, and provide insights to stakeholders, legislators, and representatives of other industries. Furthermore, we presented details of our energy program at the 2024 Gas Processors Association Midstream Conference, which generated discussions with multiple industry peer companies and led to further idea sharing for energy efficiency improvements.

Expanding the Impact

Key lessons learned at Bluestone are now being applied at two additional MPLX gas processing facilities that have entered the ENERGY STAR Challenge:

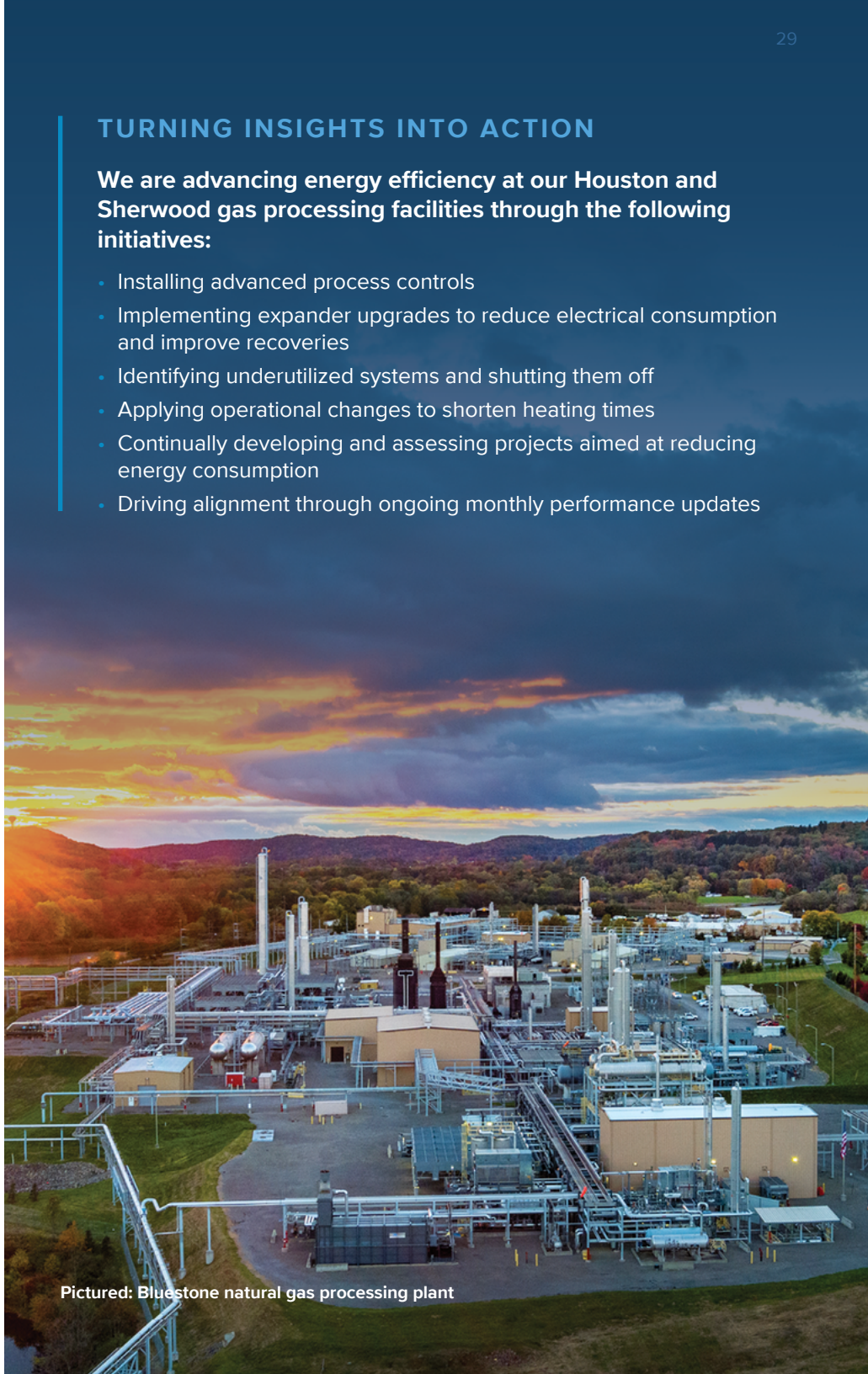
- Houston, Pennsylvania: The largest gas processing facility in Pennsylvania
- Sherwood, West Virginia: The largest gas processing facility in the U.S.

As our FOE program becomes more established within our midstream operations, we continue to evaluate opportunities to expand it to additional facilities, further reducing companywide energy use.

TURNING INSIGHTS INTO ACTION

We are advancing energy efficiency at our Houston and Sherwood gas processing facilities through the following initiatives:

- Installing advanced process controls
- Implementing expander upgrades to reduce electrical consumption and improve recoveries
- Identifying underutilized systems and shutting them off
- Applying operational changes to shorten heating times
- Continually developing and assessing projects aimed at reducing energy consumption
- Driving alignment through ongoing monthly performance updates



Pictured: Bluestone natural gas processing plant

Refining Scope 3 GHG Emissions

In February of 2022, we established a 15% absolute reduction target of Scope 3 - Category 11 emissions by 2030, associated with the products produced at our refining assets. Since 2020, we have reduced 206,000 barrels per day of crude oil refining capacity by indefinitely idling one petroleum refinery and repurposing two other refineries to produce renewable diesel, which helps reduce greenhouse gas emissions in hard-to-abate transportation sectors. These measures are the primary reason our refining value chain Scope 3 - Category 11 emissions have been reduced by 5% from the 2019 baseline (Figure 22). To achieve a 15% reduction would require a combination of measures, including further rationalization, divestiture, emission offsets, or transition to lower carbon intensity products, such as renewable diesel or petrochemicals. At the time we established our target, these measures aligned with an ambitious energy transition supported by state, federal and international energy policies, as well as several reputable sources, including the IEA.

In our recent reports, we have highlighted several factors impacting the pace and magnitude of Scope 3 - Category 11 emissions, including:

- Russia's invasion of Ukraine sparked a global energy crisis that altered the global energy landscape, causing many governments to prioritize energy security and affordability. In response, U.S. refined product exports have reached record highs.
- Based upon several considerations, including shareholder engagement, we decided not to include the avoided GHG emissions associated with our production and blending of liquid renewable fuels towards the target. Several of our shareholders expressed that these avoided GHG emissions represent Scope 4 emission reductions, which refer to emissions avoided outside a company's value chain due to the use of its products, and should not be applied toward the Scope 3 target. Our annual production and blending of approximately 2.8 billion gallons of liquid renewable fuels result in an estimated 16 million tonnes of avoided emissions, equivalent to approximately 4% of the 2019 baseline Scope 3 - Category 11 emissions.
- The global refining sector continues to transform, driven by geopolitical shifts, evolving energy policy, and changing demand patterns. Refined products are global commodities, so high-cost and less-competitive refineries are typically the first to be rationalized in conjunction with the energy transition. We have publicly stated our goal of becoming the most profitable refining operator in each region in which we operate. We are progressing on this goal through multiple strategic commitments, including safe and reliable operations, shifting our business model toward value chain optimization, and implementing cost-optimization measures. As discussed on Pages 11-13, our refining assets are competitive and forecast to remain resilient even in a lower-carbon economy. Reflecting, in part, the competitive positions of the U.S. refining sector and our refining assets, a number of refining companies have recently announced plans to either shutter operations or reduce production capacity, collectively representing nearly 1 million barrels per day of crude oil refining capacity, including several of the regions where we operate.*

* Announced capacity reductions: Houston, Texas (268,000 bpd); Wesseling, Germany (147,000 bpd); Benicia, California (145,000 bpd); Grangemouth, Scotland (140,000 bpd); Los Angeles, California (139,000 bpd); and Gelsenkirchen, Germany (88,000 bpd). Aggregated capacity is estimated using site capacities as published in respective companies' Form 10-K filings.

Figure 22. Refining Scope 3 - Category 11 Emissions

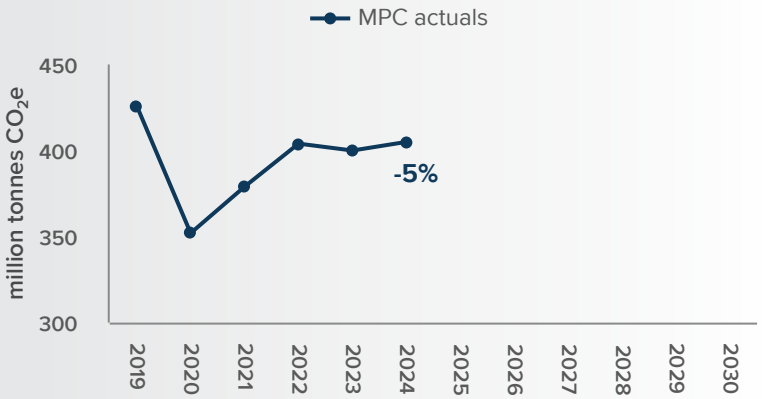
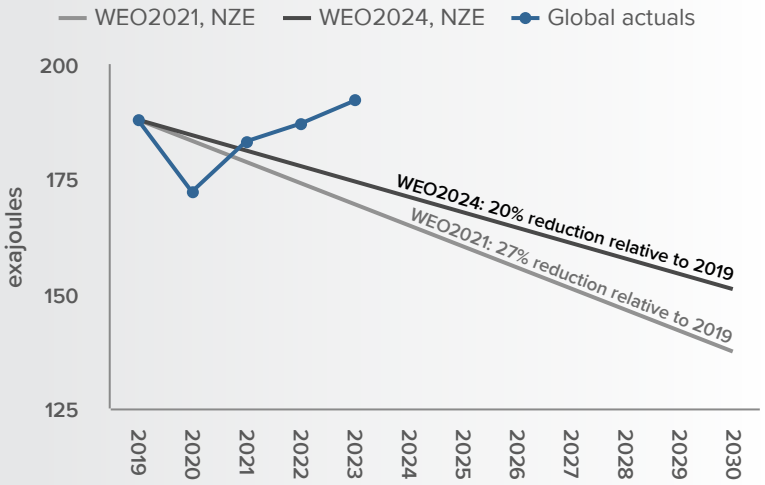


Figure 23. 2030 Global Oil Supply Revisions



Data sources: IEA, *World Energy Outlook 2024*[2]; IEA, *World Energy Outlook 2021*[6]

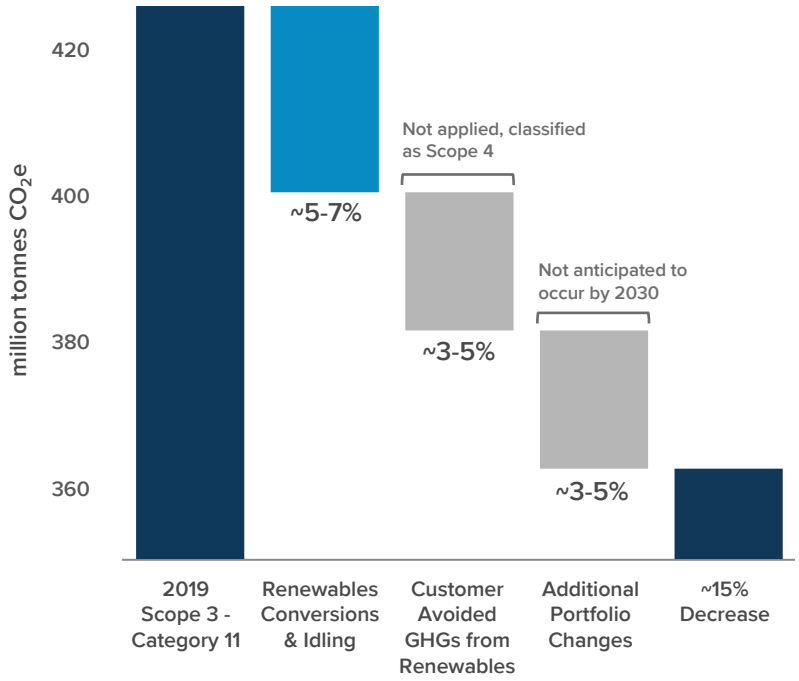
Since 2019, global oil supply has continued to rise. For the fourth consecutive year, the IEA has revised oil supply reductions by 2030 in their NZE Scenario. These repeated revisions highlight a slower-than-expected pace in the global energy transition.

- Over the last several years, we evaluated multiple petrochemical projects that would have shifted gasoline blend components to petrochemical feedstocks. This shift would result in lower Scope 3 - Category 11 emissions, as petrochemical products are not generally combusted in their end use. However, we decided not to pursue these projects in the near term due to the forecast prolonged down cycle in the petrochemical sector, largely driven by significant overbuild of capacity, particularly in Asia. Further extension into the petrochemical value chain remains a strategic option, but we do not anticipate any material projects that would impact Scope 3 - Category 11 emissions of our refining products before 2030.
- The overall pace of energy evolution has slowed compared to projections made at the time we established our target. As shown in Figures 9 and 23, this is evidenced by adjustments made by of the IEA and other agencies, which have consistently revised their 2030 oil demand forecasts upward in each of the past three years.

For these reasons, we do not believe that a 15% reduction in absolute Scope 3 - Category 11 emissions is achievable by the end of 2030. We evaluated multiple options to the target, including extending beyond 2030 or adjusting the target to align with the factors outlined above. However, due to ongoing uncertainties surrounding demand for global refined products, we are transitioning to a monitor-and-disclose framework. Under this approach, we will continue to report absolute Scope 3 - Category 11 GHG emissions over time within this report.

While we continue to provide transparency around our refining value chain Scope 3 - Category 11 emissions, we remain firmly committed to reducing our operational GHG emissions, a metric fully within our control, through our Focus on Energy program. This initiative supports our goal of achieving a 38% reduction in Scope 1 and 2 GHG emissions intensity by 2035. This underscores our dedication to environmental stewardship and operational discipline, as we pursue meaningful GHG emissions reductions from our operations while continuing to meet growing energy demands and support energy security.

Figure 24. Scope 3 Pathway - Historic Reduction Scenarios



GREENHOUSE GAS EMISSIONS

In 2024, absolute Scope 1, 2, and 3 - Category 11 GHG emissions decreased by more than 25 million tonnes relative to 2019.

- Our efforts to improve operational efficiency and sustainability have led to a 28% reduction in our companywide manufacturing Scope 1 and 2 GHG emissions intensity compared to our 2014 baseline, marking 10 consecutive years of measurable progress.
- Refining Scope 3 - Category 11 emissions have decreased by approximately 5% compared to 2019 levels.

Pictured: MPC refinery in Anacortes, Washington

Methane Intensity

FOCUS ON METHANE PROGRAM

The processing and transporting of methane, the main component of natural gas, are vital for meeting global energy needs. However, when methane is emitted to the atmosphere, it has a global warming potential greater than that of carbon dioxide, albeit with a shorter lifespan. Given the environmental impact of these emissions, as well as the throughput gains achieved by minimizing leakages, companies across the industry are increasingly prioritizing efforts to reduce them. These complementary measures curb methane emissions and enhance system efficiency, helping to contribute to a lower-carbon intensive natural gas value chain.

MPLX FOCUS AREAS FOR METHANE MANAGEMENT	Reductions achieved since 2016 (tonnes per year)
Maintenance Venting and Other Controls We are optimizing maintenance venting to reduce emissions going to the atmosphere, including using vapor recovery units (VRUs) and portable flares. Additionally, newly constructed systems are designed with lower potential for methane emissions.	~5,000
Pneumatic Devices We are phasing out high-bleed pneumatic controllers at our compressor stations.	~3,000
Leak Detection and Repair (LDAR) We adopted an enhanced LDAR program at our gas processing and fractionation plants to reduce fugitive methane emissions intensity.	~3,000
Pipeline Launchers and Receivers We designed pipeline launcher and receiver stations to reduce methane and volatile organic compound emissions by as much as 85% each time they are opened as part of required operation. More information can be found at: https://www.mplx.com/Pipeline-LauncherReceiver-Emissions-Reduction-Systems/.	~1,000
Reciprocating Compressors[(a)] We are installing low-emissions (low-e) packing material and measurement ports on our reciprocating compressors. Rod packing replacements will occur proactively when warranted.	~1,000
Flaring Improvements[(a)] We are implementing process improvements to reduce flaring and achieve enhanced control efficiency.	-
Advancing Measurement and Quantification Technology[(a)] We are analyzing data from Fourier transform infrared spectroscopy (FTIR) testing and employing advanced monitoring technologies, such as satellite imagery, flyovers and drones, to identify leaks and inform calculations.	-
TOTAL	~13,000

(a) Ongoing and/or future development opportunities. Currently available estimates are based on EPA's upcoming revised GHG reporting rule.

MPLX Natural Gas and NGL Services is focused on reducing methane emissions by optimizing assets and leveraging regulatory, commercial, and maintenance synergies through multiple methane mitigation projects.

As part of this commitment, advanced technologies were deployed in 2024 to enhance measurement-informed emission inventories, improving both accuracy and transparency. Investments in these initiatives, coupled with expanded advocacy and industry engagement, have strengthened data-driven decision-making and reinforced our dedication to lowering our methane intensity.

INDUSTRY ENGAGEMENT

Frequent and effective communication with our peers and academic institutions is a key element to achieving our methane intensity reduction aspirations. Sharing best practices with our peers and research partners allows MPLX to identify and execute on the highest priority opportunities for emission detection and reduction technologies. A few of these industry groups include:

- **Appalachian Methane Initiative (AMI):** Supported by the Energy Emissions Modeling and Data Lab, AMI is a proactive, first-of-its-kind basinwide initiative designed to further enhance methane emissions monitoring and facilitate methane emissions reductions in the Appalachian Basin. AMI aims to establish basinwide and operator metrics that will drive long-term reductions.
- **The Environmental Partnership (TEP):** TEP is comprised of a number of American oil and gas companies that share reliability, emissions, and operations metrics to progress efficiency and improve environmental outcomes.
- **Colorado State University Methane Emissions Technology Evaluation Center (CSU METEC):** Operated by the Energy Institute at CSU, METEC provides a leading research facility for developing, testing, and demonstrating emissions leak detection and quantification technologies.

PRIORITIZING OUR GREATEST REDUCTION OPPORTUNITY: METHANE SLIP

Methane slip refers to methane released into the atmosphere due to incomplete combustion in flares, heaters, and, most commonly, reciprocating compressor engines and turbine exhaust. The EPA issued updates to its GHG reporting rules, which are effective for 2025 emissions (to be reported in 2026) and include significantly higher emission factors for select equipment, such as compressor engines, due to methane slip. Extensive testing conducted by MPLX indicates that our actual engine performance generally resulted in lower emissions than these revised EPA factors, but at rates higher than the factors used in the current rule. As a result, we are actively considering the following methane slip reduction solutions:

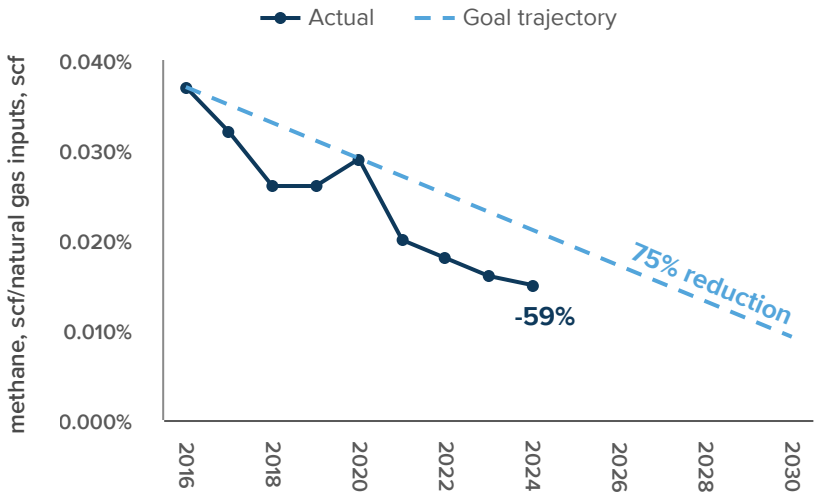
- **Engine Upgrade Kits:** An engine supplier has introduced cost-effective, low-emission upgrade kits that can be installed during overhauls, significantly reducing methane slip while also lowering other co-pollutants.
- **Fuel Optimization:** Through our Equipment, Compression Health & Optimization (ECHO) program, we are enhancing efficiency and reducing emissions by optimizing fuel use.
- **Data-Driven Maintenance:** We are prioritizing engine maintenance and overhauls based on insights from aerial detection data, ensuring targeted emissions reduction efforts.

METHANE EMISSIONS INTENSITY TARGET

The data from our compressor engine study, as well as the updated EPA emission factors, indicate an impact to our intensity baseline and current annual reported methane emissions. Accordingly, we plan to adjust our affected targets when the new reporting requirements and revised emissions factors are implemented.

Since 2016, we have implemented measures that have achieved over 10,000 tonnes per year of methane emissions reductions.

Figure 25. MPLX Natural Gas and NGL Services Methane Intensity



DELIVERING REAL-TIME EQUIPMENT AND COMPRESSION VISIBILITY

ECHO gets real-time data from compressor skids and pump skids to Operations, Maintenance and Reliability to guide decisions that support:

- Efficiently utilizing horsepower, including shutting down unnecessary units to reduce greenhouse gas emissions and save fuel.
- Identifying inefficient units and deploying additional analysis.
- Laying the foundation for preventive maintenance practices by recording panel data in a way that could generate analytical insight and modeling.

Current program implementations to date are estimated to reduce energy use by approximately 250,000 mmbtu per year. Our goal is to deploy this technology throughout the MPLX Natural Gas and NGL Services operational footprint by the end of 2026.

Pictured: MPLX's Preakness natural gas processing plant in the Permian Basin

Freshwater Withdrawal Intensity

Fresh water is essential to sustaining life. Society relies on it for food production, health, economic livelihoods, and recreation. It is also vital to our operations. Water is used to add heat to our manufacturing process as steam, remove process heat as cooling water, remove impurities from crude oil, protect equipment from corrosion, control emissions, and clean equipment during maintenance activities. Depending on the location, our water sources may include rivers, lakes, wells, municipal water plants, and recycled water purchases.

WATER AVAILABILITY AND DROUGHT

Water availability and other related risks, such as water quality, are a major concern throughout much of the world, including parts of the U.S. Population growth, together with a changing climate, could further exacerbate these risks, including intensifying the frequency and severity of both short- and long-term drought, particularly across the southwestern U.S. In some regions, prolonged drought and periods of elevated temperatures could also contribute to dry conditions that increase the risk of wildfires.

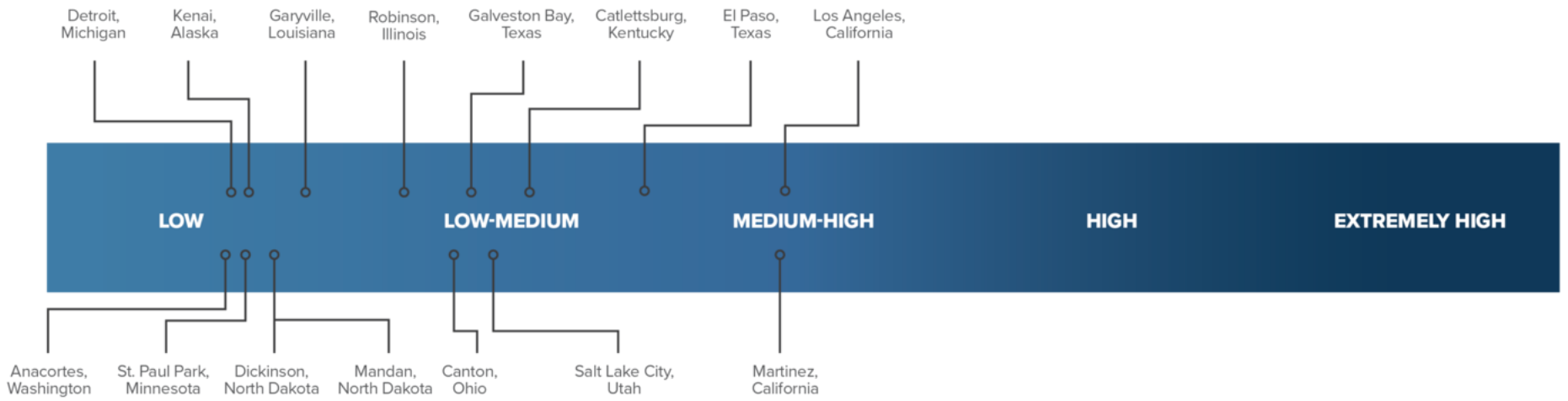
These risks could create operational constraints for water utilities. During drought conditions, water utilities may experience reduced water availability or the loss of supply sources, while simultaneously facing increased demand from customers. This imbalance often requires reductions in water use and availability, potentially limiting or eliminating water sources typically available to a facility. In severe drought cases, authorities may implement water rationing measures for specific industries based on priority or contractual agreements.

FOCUS ON WATER PROGRAM

As illustrated in Figure 26, our Los Angeles refinery and Martinez Renewables joint venture facility are located in areas designated as medium to high risk for water availability, as defined by the Global Reporting Initiative and World Resources Institute assessment tools. To proactively manage the risks associated with freshwater use at these sites and others, we adopted a formal Focus on Water program in 2020. This program is designed to asses, site-specific freshwater use, understand and mitigate water-related risks, and identify opportunities to reduce freshwater consumption. The program has been implemented at all of our refineries, with special attention on facilities located in regions where water stress is higher, such as California and Texas.

Through our Focus on Water program, we actively track water utilization across our operations, continuously identifying opportunities to reduce our dependency on this shared resource through process optimization and efficient water management practices.

Figure 26. Water Risk Analysis - WRI Aqueduct Assessment Tool[(a)]



(a) World Resource Institute, Aqueduct Assessment Tool, available at https://www.wri.org/aqueduct/tools. Note: Results of water risk assessment are presented in this report; however, analyses were completed for both water risk and water stress.

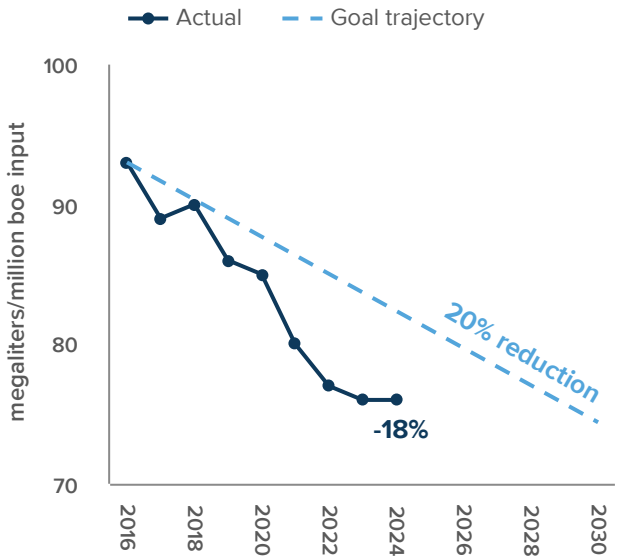
FRESHWATER WITHDRAWAL INTENSITY REDUCTION TARGET

To ensure the success of the Focus on Water program, we established a companywide target to reduce freshwater withdrawal intensity 20% below 2016 levels by 2030.

To date, we have achieved an 18% reduction in intensity below 2016 levels, which equates to almost 2 billion gallons of fresh water saved per year.

As highlighted to the right, projects identified in 2024 by the Focus on Water program are estimated to have the potential to save an additional 500 million gallons of fresh water per year.

Figure 27. Freshwater Withdrawal Intensity



Highlights from the Focus on Water program in 2024 include:

DETROIT REFINERY
Annual savings: ~140 million gallons

- Implemented a project to utilize a reverse osmosis system to process about one-third of its wastewater treatment plant effluent for reuse as boiler feed water. Plans are underway to implement a second system to achieve a twofold increase in water savings.

GALVESTON BAY REFINERY
Annual savings: ~133 million gallons

- Shifted operations to improve makeup water use in the wet gas scrubber unit.

CATLETTSBURG REFINERY
Annual savings: ~100 million gallons

- Multiple steam leaks from the refinery's main steam header drip leg lines across the site were repaired and redesigned to allow for easier line isolation in the future.

MARTINEZ RENEWABLES
Annual savings: ~70 million gallons

- The water at the pretreatment facility to remove metals, solids and other contaminants from untreated feedstock was reduced by 30%.

EL PASO REFINERY
Annual savings: ~20 million gallons

- Steam management was enhanced to recover additional condensate streams. The project's success has prompted plans for a parallel optimization initiative at other areas of the refinery.

LOS ANGELES REFINERY
Annual savings: ~20 million gallons

- A condensing steam turbine was replaced with a more energy-efficient electric motor, lowering the site's water use.

ANACORTES REFINERY
Annual savings: ~15 million gallons

- A large stream of wastewater was recovered from a waste-heat boiler/flash drum system and rerouted to another process unit, reducing the use of fresh water.

ROBINSON REFINERY
Annual savings: ~2 million gallons

- A new method of separating solids from wastewater for the fluid catalytic cracking unit scrubber was enhanced to more effectively capture wastewater for recycling.

Note: Freshwater volumes are projected annualized savings.

Greenhouse Gas Metrics[a][b][c]	Unit of measure	Result 2014	Result 2016	Result 2019	Result 2022	Result 2023	Result 2024
ACTIVITY							
1. MPC Refining manufacturing inputs	million boe processed inputs	1,026	1,075	1,142	1,068	1,054	**1,066**
2. MPLX Natural Gas and NGL Services gas plant manufacturing inputs	million boe processed inputs	332	513	675	673	714	**780**
3. Total MPC and MPLX manufacturing inputs	million boe processed inputs	1,358	1,588	1,817	1,741	1,769	**1,846**
4. MPLX Natural Gas and NGL Services gas gathering throughput	billion scf natural gas	–	1,541	2,178	2,075	2,247	**2,391**
5. MPLX Natural Gas and NGL Services gas processing throughput	billion scf natural gas	–	2,366	3,062	3,022	3,216	**3,493**
SCOPE 1 GHG EMISSIONS[d][e]							
6. MPC Refining Scope 1 GHG emissions	million tonnes CO_2e	31.4	32.4	31.0	28.3	27.6	**28.3**
7. MPLX Natural Gas and NGL Services Scope 1 GHG emissions	million tonnes CO_2e	3.3	4.8	5.4	5.1	5.1	**6.0**
8. MPLX Crude Oil and Products Logistics Scope 1 GHG emissions	million tonnes CO_2e	0.3	0.4	0.3	0.3	0.3	**0.3**
9. MPC Other Scope 1 GHG emissions	million tonnes CO_2e	0.04	0.03	0.06	0.01	0.01	**0.01**
10. Total MPC and MPLX Scope 1 GHG emissions	million tonnes CO_2e	35.0	37.7	36.8	33.7	33.0	**34.6**
11. Total Scope 1 biogenic CO_2 emissions	million tonnes biogenic CO_2	–	–	0.0	0.08	0.08	**0.09**
SCOPE 2 GHG EMISSIONS (LOCATION-BASED)[e][f]							
12. MPC Refining Scope 2 GHG emissions	million tonnes CO_2e	4.3	4.4	4.0	3.4	3.4	**3.1**
13. MPLX Natural Gas and NGL Services Scope 2 GHG emissions	million tonnes CO_2e	1.9	2.9	3.2	2.8	2.8	**2.7**
14. MPLX Crude Oil and Products Logistics Scope 2 GHG emissions	million tonnes CO_2e	0.6	0.7	0.6	0.5	0.5	**0.5**
15. MPC Other Scope 2 GHG emissions	million tonnes CO_2e	0.4	0.5	0.4	0.0	0.0	**0.0**
16. Total MPC and MPLX Scope 2 GHG emissions	million tonnes CO_2e	7.1	8.5	8.2	6.7	6.8	**6.3**
SCOPE 3 GHG EMISSIONS[e][g]							
17. MPC Scope 3 - Category 11 GHG emissions (refinery yield method)	million tonnes CO_2e	–	–	426	404	400	**405**
18. Biogenic MPC Scope 3 - category 11 GHG emissions (refinery yield method)	million tonnes biogenic CO_2	–	–	1	2	2	**4**
GHG INTENSITIES[h][i]							
19. MPC Refining Scope 1 and 2 GHG intensity	tonnes CO_2e / thousand boe input	33.7	33.1	29.5	28.4	28.1	**28.2**
20. MPLX Natural Gas and NGL Services Scope 1 and 2 GHG intensity	tonnes CO_2e / thousand boe input	15.6	15.0	12.7	11.6	11.1	**11.1**
21. MPC and MPLX total Scope 1 and 2 GHG intensity	tonnes CO_2e / thousand boe input	29.9	28.0	23.8	22.4	21.7	**21.4**
22. MPC and MPLX total Scope 1 and 2 GHG intensity	reduction from 2014 baseline	–	6%	20%	25%	27%	**28%**

Greenhouse Gas Metrics[a][b][c] (continued)	Unit of Measure	Result 2014	Result 2016	Result 2019	Result 2022	Result 2023	Result 2024
METHANE[j]							
23. MPLX Natural Gas and NGL Services gas gathering methane emissions	thousand tonnes CH_4	–	24.1	18.4	14.3	11.6	**11.2**
24. MPLX Natural Gas and NGL Services gas processing methane emissions	thousand tonnes CH_4	–	3.8	7.9	3.4	5.3	**5.8**
25. MPLX Natural Gas and NGL Services total methane emissions	thousand tonnes CH_4	–	28.0	26.3	17.7	16.9	**17.1**
26. MPLX Natural Gas and NGL Services gas gathering methane emissions	billion scf CH_4	–	1.26	0.96	0.75	0.60	**0.59**
27. MPLX Natural Gas and NGL Services gas processing methane emissions	billion scf CH_4	–	0.20	0.41	0.18	0.28	**0.31**
28. MPLX Natural Gas and NGL Services total methane emissions	billion scf CH_4	–	1.46	1.37	0.92	0.88	**0.89**
29. MPLX Natural Gas and NGL Services gas gathering methane emissions intensity	methane (scf) / inputs (scf)	–	0.082%	0.044%	0.036%	0.027%	**0.025%**
30. MPLX Natural Gas and NGL Services gas processing methane emissions intensity	methane (scf) / inputs (scf)	–	0.008%	0.013%	0.006%	0.009%	**0.009%**
31. MPLX Natural Gas and NGL Services combined methane emissions intensity	methane (scf) / inputs (scf)	–	0.037%	0.026%	0.018%	0.016%	**0.015%**
32. MPLX Natural Gas and NGL Services combined methane emissions intensity	reduction from 2016 baseline	–	–	30%	51%	57%	**59%**
Water Metrics (MPC and MPLX Combined)[a][b][c]							
33. Total freshwater withdrawal	thousand megaliters	–	148	156	134	134	**141**
34. Total water discharge	thousand megaliters	–	83	89	79	80	**80**
35. Total freshwater withdrawal in stressed areas	thousand megaliters	–	36	39	28	33	**36**
36. Total water discharge in stressed areas	thousand megaliters	–	21	21	18	23	**20**
37. Freshwater withdrawal intensity	megaliters / million boe input	–	93	86	77	76	**76**
38. Freshwater withdrawal intensity	reduction from 2016 baseline	–	–	8%	17%	18%	**18%**

(a) Please see previous reports for non-baseline year data prior to 2022.

(b) Totals may not equal sum of components due to independent rounding.

(c) Operational GHG emissions data and water data reported for facilities where MPC and MPLX have operational control. Data before 2019 is inclusive of facilities that MPC did not yet own so performance can be compared across the same asset base over time.

(d) Scope 1 direct GHG emissions include those from Refining, Midstream and Retail/other and are typically calculated per the EPA's Mandatory Greenhouse Gas Reporting Program or the 2021 API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry. Global Warming Potentials used are from Table A-1 to Subpart A of 40 CFR Part 98 as of the year they were reported. It includes emissions from fuel combustion, company vehicles and fugitive emissions.

(e) Inclusive of carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O) and sulfur hexafluoride (SF_6). Nitrogen trifluoride (NF_3), hydrofluorocarbons (HFC), and perfluorocarbons (PFC) emissions are considered to not be significant to our operations and are therefore excluded.

(f) Scope 2 emissions include indirect GHG emissions from consumption of purchased electricity, heat or steam.

(g) MPC estimates emissions from third-party use of sold products in alignment with methods in Category 11 of Ipieca's Estimating Petroleum Industry Value Chain (Scope 3) Greenhouse Gas Emissions (2016). Emissions estimates are based on refinery yields as stated in MPC's Annual Report on Form 10-K, emission factors from EPA's GHG Emission Factors Hub at the EPA Center for Corporate Climate Leadership, and storage factors derived from Table 3-24 and Annex 2 of EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks.

(h) Excludes GHGs associated with exported power from cogeneration units.

(i) Excludes Retail and GHGs associated with exported power from cogeneration units.

(j) Methane emissions were calculated pursuant to the EPA's Mandatory Greenhouse Gas Reporting Rule (MRR) at 40 CFR Part 98. As highlighted on Page 33, EPA has updated the MRR to include revised methane emission factors from large gas-fired compressors. We expect that our reported methane emissions will show an increase of ~20,000 metric tonnes per year in our baseline and annual reported methane emissions when the rule takes effect.

TCFD Recommendation Index

The table below shows how the disclosures in this report align with the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD), as the TCFD has described the categories, and where the relevant information can be found in this report.

TCFD RECOMMENDATION		Section	Page
Governance			
Disclose the organization's governance around climate-related risks and opportunities.	Describe the board's oversight of climate-related risks and opportunities.	Governance	6
	Describe management's role in assessing and managing climate-related risks and opportunities.	Governance	6
		Risk Management	7
Strategy			
Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's business, strategy and financial planning where such information is material.	Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.	Strategy and Scenario Planning	9
	Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.	Strategy and Scenario Planning	8
	Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	Strategy and Scenario Planning	11-12
Risk Management			
Disclose how the organization identifies, assesses and manages climate-related risks.	Describe the organization's processes for identifying and assessing climate-related risks.	Governance	6
		Risk Management	7
		Strategy and Scenario Planning	8
	Describe the organization's processes for managing climate-related risks.	Risk Management	7
		Managing Physical Risks to Our Facilities	21-24
	Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.	Risk Management	7
Metrics and Targets			
Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	Climate-Related Metrics and Targets	25
	Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	Climate-Related Metrics and Targets	36-37
	Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	Climate-Related Metrics and Targets	25-36

Citations

(1) International Energy Agency (2024, October), World Energy Outlook 2024 Extended Dataset, Paris, https://www.iea.org/data-and-statistics/data-product/world-energy-outlook-2024-extended-dataset, License: Terms of Use for Non-CC Material. All rights reserved, applicable figures as modified by Marathon Petroleum Corporation.

(2) International Energy Agency (2024, October), World Energy Outlook 2024, Paris, https://www.iea.org/reports/world-energy-outlook-2024, License: CC BY 4.0 (report); CC BY NC SA 4.0 (Annex A). All rights reserved; applicable figures as modified by Marathon Petroleum Corporation.

(3) International Energy Agency (2022, October), World Energy Outlook 2022, https://www.iea.org/reports/world-energy-outlook-2022; International Institute for Applied Systems Analysis (2022), AR6 Scenario Explorer and Database hosted by IIASA, data.ece.iiasa.ac.at/ar6/.

(4) Oil & Gas Journal Online Research Center (2025, January), Worldwide Refinery Survey and Complexity Analysis, https://ogjresearch.com/.

(5) International Energy Agency (2025, March), Global Energy Review 2025 dataset, https://www.iea.org/reports/global-energy-review-2025.

(6) U.S. Energy Information Administration (2025, March), March 2025 Monthly Energy Review, https://www.eia.gov/totalenergy/data/monthly/.

(7) International Energy Agency (2021, October), World Energy Outlook 2021, Paris, https://www.iea.org/reports/world-energy-outlook-2021.

(8) International Energy Agency (2022, October), World Energy Outlook 2022, Paris, https://www.iea.org/reports/world-energy-outlook-2022.

(9) International Energy Agency (2023, October), World Energy Outlook 2023, Paris, https://www.iea.org/reports/world-energy-outlook-2023.

(10) International Energy Agency (2024, August), Greenhouse Gas Emissions from Energy, 2024 - Highlights, Paris, https://www.iea.org/data-and-statistics/data-product/greenhouse-gas-emissions-from-energy-highlights.

(11) U.S. Energy Information Administration (2025, May), Annual U.S. Natural Gas Consumption by End Use, https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_nus_a.htm.

(12) U.S. Energy Information Administration (2025, May), Short-Term Energy Outlook (STEO), https://www.eia.gov/outlooks/steo/index.php.

(13) U.S. Energy Information Administration (2025, April), Annual Energy Outlook 2025, https://www.eia.gov/outlooks/aeo/.

(14) U.S. Energy Information Administration (2023, March), Annual Energy Outlook 2023, https://www.eia.gov/outlooks/archive/aeo23/.

(15) U.S. Energy Information Administration (2025, March) March 2025 Monthly Energy Review, https://www.eia.gov/totalenergy/data/monthly/.

(16) U.S. EPA (2025, November), Greenhouse Gas Equivalencies Calculator, https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator.

(17) California Air Resources Board (2025, May), Low Carbon Fuel Standard Pathway Certified Carbon Intensities, Certified Fuel Pathway Table, https://ww2.arb.ca.gov/resources/documents/lcfs-pathway-certified-carbon-intensities.

(18) U.S. EPA (2021, January), An Overview of Renewable Natural Gas from Biogas, (EPA 456-R-21-001), https://www.epa.gov/sites/default/files/2021-02/documents/lmop_rng_document.pdf.

(19) MPC estimated avoided emissions using fuel carbon intensity values generated per the California Air Resources Board Low Carbon Fuel Standard life-cycle analysis models and documentation (i.e., CA-GREET3.0).

(20) Intergovernmental Panel on Climate Change (2022), Climate Change 2022: Mitigation of Climate Change, Working Group III contribution to the Sixth Assessment Report of the IPCC, Cambridge University Press, Cambridge, UK and New York, NY, USA, https://www.ipcc.ch/report/ar6/wg3/.

(21) Intergovernmental Panel on Climate Change (2019), IPCC Special Report on the Ocean and Cryosphere in a Changing Climate, https://www.ipcc.ch/srocc/.

Forward-looking Statements

This publication contains forward-looking statements regarding Marathon Petroleum Corporation (MPC) and MPLX LP (MPLX). These forward-looking statements may relate to, among other things, our expectations, estimates and projections concerning its business and operations, financial priorities, strategic plans and initiatives, capital return plans, capital expenditure plans, operating cost reduction objectives, and climate-related plans and goals. Forward-looking and other statements regarding our climate-related plans and goals are not an indication that these statements are material to investors or are required to be disclosed in our filings with the Securities and Exchange Commission (SEC). In the context of this disclosure, the term "material" is distinct from, and should not be confused with, such term as defined for SEC reporting purposes. You can identify forward-looking statements by words such as "anticipate," "believe," "commitment," "could," "design," "endeavor," "estimate," "expect," "forecast," "goal," "guidance," "intend," "may," "objective," "opportunity," "outlook," "plan," "policy," "position," "potential," "predict," "priority," "progress," "project," "prospective," "pursue," "seek," "should," "strategy," "strive," "target," "trends," "will," "would" or other similar expressions that convey the uncertainty of future events or outcomes.

Forward-looking statements in this document include, among other things, statements regarding our climate-related plans and goals, including those related to our Scope 1 and Scope 2 greenhouse gas (GHG) emissions intensity targets; methane emissions intensity targets; freshwater withdrawal intensity targets; success or timing of completion of ongoing or anticipated capital or maintenance projects; future market, industry, regulatory and legislative conditions; future safety performance; future financial and operating performance and results; management of future risks; future levels of capital, environmental or maintenance expenditures, general and administrative and other expenses; business strategies, growth opportunities and expected investments, including plans to improve commercial performance, lower costs and optimize our asset portfolio; consumer demand for refined products, natural gas, renewables and natural gas liquids, such as ethane, propane, butanes and natural gasoline, which we refer to as "NGLs"; the anticipated effects of actions of third parties such as competitors, activist investors, federal, foreign, state or local regulatory authorities, or plaintiffs in litigation.

We caution that these statements are based on management's current knowledge and expectations and are subject to certain risks and uncertainties, many of which are beyond our control, that could cause actual results and events to differ materially from the statements made herein. Factors that could cause actual results to differ materially from those implied in the forward-looking statements include but are not limited to: general economic, political or regulatory developments, including changes in governmental policies relating to refined petroleum products, crude oil, natural gas, NGLs, GHG emissions, renewables, or taxation; the regional, national and worldwide demand for refined products, natural gas and renewables and related margins; the regional, national or worldwide availability and pricing of crude oil, natural gas, NGLs and other feedstocks and related pricing differentials; the success or timing of completion of ongoing or anticipated projects; the timing and ability to obtain necessary regulatory approvals and permits and to satisfy other conditions necessary to complete planned projects within the expected time frames, if at all; the availability of desirable strategic alternatives to optimize portfolio assets and the ability to obtain regulatory and other approvals with respect thereto; the inability or failure of our joint venture partners to fund their share of operations and development activities; the financing and distribution decisions of joint ventures we do not control; our ability to successfully implement our sustainable energy strategy and principles and achieve our climate-related plans and goals within the expected time frames, if at all; the occurrence of industrial incidents; changes in government incentives for emission-reduction products and technologies; evolving standards for tracking and reporting on GHG emissions; the outcome of research and development efforts to create future technologies necessary to achieve our climate-related plans and goals; the availability of feedstocks for lower-emission fuels; the availability of cost-effective carbon credits; the availability of suppliers that can meet our sustainability-related standards; our ability to scale projects and technologies on a commercially competitive basis; actions of competitors; changes in regional and global economic growth rates and consumer preferences, including consumer support for emission-reduction products and technology; the availability of cost-effective carbon credits; our ability to identify and recruit qualified employee candidates; and the factors set forth under the headings "Risk Factors" and "Disclosures Regarding Forward-Looking Statements" in MPC's and MPLX's Annual Reports on Form 10-K for the year ended Dec. 31, 2024, and in other filings with the SEC.

Copies of MPC's SEC filings are available on the SEC website, MPC's website at http://ir.marathonpetroleum.com or by contacting MPC's Investor Relations office. Copies of MPLX's SEC filings are available on the SEC website, MPLX's website at http://ir.mplx.com or by contacting MPLX's Investor Relations office.

Any forward-looking statement speaks only as of the date of the applicable communication, and we undertake no obligation to update any forward-looking statement except to the extent required by applicable law.

Neither future distribution of this material nor the continued availability of this material in archive form on our website should be deemed to constitute an update or reaffirmation of these figures or statements as of any future date. This publication is a shareholder-requested publication and is purposefully focused on unknown future events. This publication is not intended to communicate any material investment information. The statements and analysis in these documents represent a good faith effort to address these requests despite significant unknown variables.

Historical, current and forward-looking sustainability-related information and statements may be based on standards for measuring progress that are still developing, internal controls and processes that continue to evolve, and assumptions that are subject to change in the future. We caution that this information is approximate, these statements and information reflect our current plans and aspirations and are not guarantees of future performance, nor promises that our goals will be met, and are subject to numerous and evolving risks and uncertainties that we may not be able to predict or assess. In some cases, we may determine to adjust or abandon our commitments, targets or goals or establish new ones to reflect changes in our business, operations or plans.

Any reference to our support of a third-party organization within this publication does not constitute or imply an endorsement by us of any or all of the positions or activities of such organization. Any website references are included for convenience only, and we assume no liability for third-party content contained on the referenced websites.

ENERGY STAR® Accomplishments

2024 U.S. EPA's ENERGY STAR Partner of the Year Sustained Excellence Award

- 7th consecutive Partner of the Year Award
- 5th consecutive Partner of the Year Sustained Excellence Award

5 Refineries ENERGY STAR Certified

- Anacortes, Washington (5 years)
- Canton, Ohio (19 years)
- Garyville, Louisiana (19 years)
- Robinson, Illinois (10 years)
- St. Paul Park, Minnesota (7 years)

14 Facilities Achieving the ENERGY STAR Challenge for Industry

- Evans City, Pennsylvania, Bluestone Gas Processing Facility
- Anchorage, Alaska, Terminal
- Champaign, Illinois, Terminal
- Charleston, West Virginia, Terminal
- Cincinnati, Ohio, Terminal
- Cincinnati Renewable Fuels, LLC (2 times)
- Jackson, Michigan, Terminal
- Lansing, Michigan, Terminal
- Mt. Vernon, Indiana, Terminal
- Muncie, Indiana, Terminal
- Nashville, Tennessee, 51st Terminal
- Nashville, Tennessee, Bordeaux Terminal
- Nashville, Tennessee, Downtown Terminal
- Youngstown, Ohio, Terminal