



Commitment to a Sustainable Future

2026 Sustainability Report



- 2 Our Commitment to Sustainability
- 4 Environmental Stewardship
- 12 Health & Safety
- 26 Thriving People & Communities
- 44 Driving Progress
- 58 Holding Ourselves Accountable
- 64 References
- 66 Information Resources



A Message from the President and CEO of AFPM

AFPM members remain firmly committed to delivering the fuels and petrochemicals that power modern life — and to doing so safely and efficiently, while being good stewards of the environment. Our work is essential to the well-being of individuals, households, communities, industries, and economies across the country and around the world.

This report highlights how AFPM members are leading on sustainability by reducing environmental impacts, strengthening safety, investing in people and communities and driving progress through innovation.

AFPM members are working on multiple fronts to protect natural resources and increase the environmental performance of their operations and products. They are investing in advanced technologies to improve air quality around their facilities. Through cutting-edge recycling, conservation and treatment systems, they are reducing water withdrawals and ensuring water resources are managed efficiently and responsibly. Facilities are minimizing landfill impact by scaling up recycling to transform waste streams into new products. And our commitment to biodiversity and conservation is reflected in active land restoration projects, wildlife habitat protection and collaborations to preserve and enhance natural ecosystems surrounding our facilities.

Our commitment to the safety of our workforce and the communities where we operate is unwavering. AFPM members are advancing cutting-edge technologies, implementing innovative processes, and strengthening operational discipline to ensure the protection of our people, our neighbors and our environment. This is the most important work we do.

We recognize that the creativity, dedication and spirit of our workforce are the foundation of our continued success. That's why we remain deeply committed to supporting their professional development, well-being and long-term career growth. Our members provide high-quality jobs, generate essential tax revenues and contribute time, resources and expertise to local priorities. Whether responding in times of crisis, supporting first responders or investing in education, our members consistently work to build stronger, safer and more resilient communities for future generations.

Our industries are actively investing in and developing technologies that will shape a lower-carbon future — from carbon capture and storage to renewable power and hydrogen — all aimed at further reducing operational emissions. AFPM members also are ramping up production of low-carbon fuels such as renewable diesel, sustainable aviation fuel and renewable natural gas. In the petrochemical sector, companies are expanding advanced recycling capabilities, forging strategic partnerships to improve plastic collection and sorting and scaling innovative solutions that support a more circular economy. Together, these efforts are not only reducing waste in the environment but also driving meaningful progress toward a more sustainable future.

Our industries are strong. We have exceptional assets, a highly skilled and dedicated workforce and a track record of solving big challenges. That gives us confidence — both for the opportunities ahead and for the progress we can achieve right now. We are proud to support these industries and the people who make them run.



A stylized, handwritten signature in black ink, appearing to read 'Chet M. Thompson'.

Chet M. Thompson
President and CEO

American
Fuel & Petrochemical
Manufacturers

Our Commitment to Sustainability

Our Sustainability Pillars



Environmental Stewardship

We are committed and responsible stewards of the environment. We are doing more with less — reducing emissions, conserving energy, using water efficiently, preserving land and reducing waste to protect the climate, air, water and land around us today and for generations to come.



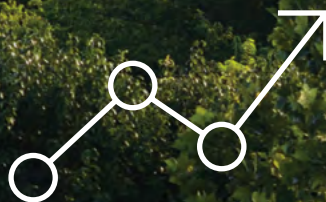
Health and Safety

We foster a strong culture of safety throughout our industries and our communities, building on the progress that has led our industries to be amongst the safest of hundreds of industries within the manufacturing sector.



Thriving People and Communities

We help people and communities thrive by providing well-paying jobs for people of all backgrounds, building more inclusive and diversified workforces and communities, preparing the future workforce for jobs in our industries, and giving back to our communities through philanthropy and volunteerism.



Driving Progress

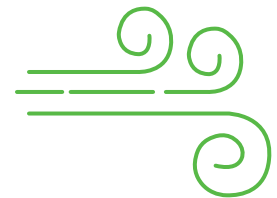
We are addressing society's biggest challenges — including building a lower-carbon future and advancing a more circular economy for plastics — and pushing past the status quo by driving innovation that will make life better, safer and more productive.

Across the country, AFPM members are working hard every day to bring valuable and affordable products to support society's energy demands, while also taking action to protect the environment and support healthy, thriving communities. Leveraging innovation, best in class operational standards and responsible resource management, we are focused on lowering emissions intensity, conserving water, minimizing waste and ensuring our operations contribute to a more sustainable future.

Environmental Stewardship

Air Quality

Our members use advanced monitoring and cutting-edge technology to reduce emissions in the communities where they operate.



- Since 2020, **Phillips 66** has reduced air emissions by roughly 16% across its refining assets, and reduced air emissions by approximately 9% from 2023 to 2024.¹
- **Marathon Petroleum's** Los Angeles refinery made progress in 2024 toward completing a multi-year initiative that is expected to lower emissions of nitrogen oxides by 20%. The transformation, which is expected to be finished by the end of 2025, includes replacing six existing boilers with two new, high-pressure boilers that have selective catalytic reduction technology. The technology uses a catalyst to create a chemical reaction to reduce the amount of nitrogen oxide in the boiler exhaust.²
- **Chevron** trialed automated modeling and dashboard software for fence-line monitoring at its Pascagoula Refinery following successful deployment at its Pasadena Refinery. In addition to required monitoring, these refineries use networks of real-time analyzers for faster detection of volatile organic compound (VOC) concentrations. This software enables better visualization and analysis of the analyzer data.³
- Total reportable emissions of VOCs, sulfur oxide and nitrogen oxide decreased by roughly 25% at **ExxonMobil's** operated assets from 2016 to 2024.⁴
- Since 2000, **Flint Hills Resources'** refineries have reduced flaring hours by approximately 98% while also reducing Criteria Air Emissions by roughly 72% through pollution control equipment, burner and heater replacements, and other measures.⁵
- **PBF's** facilities use state-of-the-art pollution control equipment like carbon monoxide boilers, wet gas scrubbers and tail gas treating units on sulfur recovery units to reduce emissions.⁶
- **Valero** is undertaking a pilot program at certain refineries to test out the Leak Detection Sensor Network, which uses a system of real-time air quality monitors to create continuous leak monitoring, enabling faster detection of leaks to enhance emissions reduction efforts.⁷
- From July 2024 to date, **INVISTA** made capital investments and successfully implemented two new nitrous oxide abatement projects. The projects are now complete and running and delivering better efficiency than originally expected. From 2024 to 2025, INVISTA has improved N₂O emission reductions by approximately 30%.⁸



Water

Our members are committed to doing more with less — and that includes freshwater use. The fuel and petrochemical industries are developing cutting-edge water treatment and recycling technologies to reduce their reliance on freshwater.



- **Chevron's** Richmond Refinery is among the largest industrial users of recycled water in the San Francisco Bay area, with the capacity to use more than 7 million gallons of recycled water a day.⁹
- In 2020, **Marathon Petroleum** set a company-wide target to reduce freshwater withdrawal intensity 20% by 2030 from 2016 levels. Through 2024, Marathon has achieved an 18% reduction in its freshwater withdrawal intensity from 2016 levels, which is the equivalent of almost 2 billion gallons of water saved each year.¹⁰
- **Ecolab** helped its customers conserve more than 226 billion gallons of water in 2024, while also helping them conserve over 65 trillion BTU of energy.¹¹
- In 2024, 93% of **Phillips 66's** treated water was recycled for reuse at its facilities, with over 2 billion gallons of water being collected and treated through its remediation systems for reuse. Phillips 66 also conserved over 650,000 gallons of water through its tank cleanout methods.¹²
- **TPC Group's** recent investment to reduce unnecessary boiler blowdowns has the potential to save 19,136,000 gallons of water each year.¹³
- In 2024, **Westlake** engaged a third-party to perform a global Water Risk Assessment study, which will inform their water management strategy and program. This initiative supports Westlake's goal to introduce a water management program at their water-stressed and other relevant sites by 2030.¹⁴

Every Drop Counts

Water isn't just a resource — it's a lifeline that powers people, communities and industries alike. In refining and petrochemical operations, water is woven into every step: from cooling and cleaning to turning raw materials into the fuels and products relied on worldwide. The stakes for water stewardship run high, making environmental responsibility inseparable from business success. Recognizing this, AFPM member companies invest tirelessly in advanced technologies and best practices to clean, recycle and conserve water, reflecting a long-standing commitment to sustainability and progress.

Let's start with what happens inside these facilities. Many AFPM member sites house state-of-the-art water treatment systems that process and purify water before it ever leaves plant boundaries. At Monroe Energy, for example, teams monitor water quality rigorously, collecting thousands of samples each month and ensuring that every gallon discharged to surrounding waterways is cleaner than when it was first withdrawn.¹⁵ This dedication doesn't just meet regulatory standards — it raises the bar for environmental care.

But protecting water isn't just about what leaves the facility — it's also about how much is used and how efficiently. Since 2010, Flint Hills Resources' refineries have conserved 4.3 billion gallons of water through stormwater recovery or wastewater recycling. During the same period, their water use per barrel of crude dropped by approximately 27%.¹⁶

Innovation also opens new doors for conservation. Valero's McKee refinery commissioned a novel Closed Circuit Reverse Osmosis Treatment technology — a system that allows brine, instead of freshwater, to be recycled for cooling processes. This switch is projected to keep 25 million gallons per year in the Ogallala Aquifer.¹⁷

Water sourcing is evolving right alongside technology. ExxonMobil has made significant progress in reducing freshwater dependence in the Permian Basin, increasing the use of recycled produced water in hydraulic fracturing operations from 64% in 2022 to 87% in 2024. Reclaimed and brackish sources made up an additional 11%. All told, recycled produced, brackish, and reclaimed sources comprised 98% of water ExxonMobil used in their hydraulic fracturing operations in the Permian Basin.¹⁸

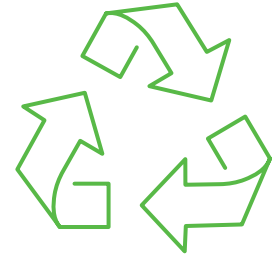
AFPM refining and petrochemical companies are committed water stewards, innovating at every stage of operations to protect water sources, use them responsibly and return the water to its source as clean, safe and abundant as possible. These investments not only support the production of today's essential fuels and products but also safeguard a legacy of responsibility for tomorrow.



Water isn't just a resource —
it's a lifeline that powers people,
communities and industries alike.

Waste

Through process improvements and partnerships, our members reduce waste and find new ways to recycle and reuse materials.



- In 2024, more than 39 million pounds of **Valero's** catalysts were recycled to recover valuable metals. As a result of recycling efforts like these, 95% of all of Valero's refinery hazardous and exempted waste was recycled in 2024.¹⁹
- **Chevron Phillips Chemical** diverted more than 35% of its non-hazardous waste, the company's largest waste category, from disposal. CPChem continues to optimize its waste inventory through an expanded analysis of all waste streams, seeking to better identify and prioritize areas for improvement.²⁰
- **Ergon's** Resinall Corp works with a metal recycler to collect and repurpose 500-pound galvanized tin containers used to store raw materials and returns used wood pallets to the pallet manufacturer for refurbishment or for turning them into wood products.²¹
- **ExxonMobil** diverted from landfills more than 95% of waste produced in its global network of lubricants blending and packaging plants in 2023 and 2024, effectively achieving UL Silver validation.²²
- The amount of **LyondellBasell's** waste diverted from disposal increased by 120% in 2024 as a result of LyondellBasell's commitment to effective waste management and recycling for non-hazardous waste streams. Since 2021, its overall generated waste has decreased by roughly 30%.²³
- In 2024, **Marathon** invested more than \$23 million in methods and technologies to reduce, reuse and recycle waste throughout the refining process in 2024.²⁴
- **PBF** recycles catalysts used in the refining process, with reclaimers recovering the precious or rare earth metals such as nickel, cobalt, platinum and molybdenum, reducing the need for these metals to be mined and eliminating these materials from landfills.²⁵
- **INEOS** Olefins & Polymers' Battleground site in Houston made progress in reclassifying its hexane waste stream so the waste can be valorized and sold as fuel. After its completion in 2025, the project is expected to reduce hazardous waste by roughly 500 metric tons a year at the site.²⁶
- **ONEOK** utilizes a resource-management software system to streamline reporting and quantify the amounts of waste and recycled materials that are being sent to an offsite facility. The data is analyzed to identify opportunities to reduce waste, recycle materials where possible and improve waste management processes.²⁷
- Since 2012, **TPC Group** has reduced its hazardous waste by up to 80%.²⁸
- **W.R. Grace** has signed agreements to develop two initiatives to reclaim spent catalyst metals for reuse in new catalysts.²⁹





Pellet Loss Prevention

AFPM members are working toward keeping plastic pellets contained through innovative technology, training and strict handling procedures.

- **Dow** has long championed Operation Clean Sweep (OCS), which is designed to prevent plastic loss in the environment. In 2024, Dow achieved external OCS Blue Verification at its sites in Seadrift and Victoria, Texas, and also began engaging with maritime suppliers on a joint project to prevent pellet loss at sea.³⁰
- **ExxonMobil's** joint venture, Gulf Coast Growth Ventures, uses comprehensive controls designed to prevent plastic pellets from escaping into the environment. The site employs pellet interceptors at the site outfalls, pellet handling enclosures and interior unit collection systems to maintain its record of zero reportable pellet discharge under OCS Blue reporting standards since the beginning of operations.³¹
- **LyondellBasell** is a member of OCS and in 2025 is in the process of undertaking the third-party audits for seven U.S. sites to join OCS Blue. This is in addition to the employee training, annual risk assessments, and enhancement projects that LyondellBasell engages in as a part of its internal handling of plastic pellets.³²
- In 2024, there was zero plastic pellet loss from **Chevron Phillips Chemical** facilities, showing the effectiveness of CPChem's following of the enhanced OCS Blue guidelines, which include sharing best practices, enhanced reporting, third-party audits and cross-industry collaboration.³³
- In 2024, **Westlake** did not have a reportable loss of plastic over the threshold amount, as set forth in the OCS Blue Program.³⁴



Land

Our members are taking steps to protect and enhance the natural environments where they operate. By partnering with nonprofits and community groups, they support projects that preserve habitats, encourage native species and strengthen biodiversity both within our fencelines and in surrounding areas.

- In Centreville, Mississippi, **ExxonMobil**'s cross-functional team is implementing an ambitious beneficial use remediation project on a 240-acre site, which includes the introduction of natural grasses and reforestation. With support from the Mississippi Forestry Commission and Mississippi State University. The project also includes the use of leading eDNA technologies to perform ecological surveys.³⁵
- **Flint Hills Resources'** Pine Bend Bluffs property consists of hundreds of relatively undisturbed acres situated along the Mississippi River. The Mississippi River flyway, of which this is a part, serves as a key migration corridor for 40% of North America's waterfowl and shorebirds as well as millions of songbirds. Flint Hills has helped restore hundreds of acres of oak savanna and natural prairie since 1999, using controlled burns and the removal of invasive plants to return the area to pre-settlement conditions. Employee volunteers, meanwhile, have helped with pollinator planting and monarch butterfly monitoring.³⁶



- **Valero** is continuing its \$1 million partnership with the Pontchartrain Conservancy in support of the Conservancy's five-year reforestation project, with volunteers from Valero's Meraux and St. Charles Refineries planting 1,150 trees in the Pontchartrain Estuary during the 2024-2025 planting season. Thus far, more than 52.5 acres had been restored in and around the St. Charles and St. Bernard parishes.³⁷
- Marathon Pipe Line LLC (MPL), a wholly owned subsidiary of **Marathon Petroleum's** MPLX, has set a target of applying sustainable landscapes to roughly 10,000 acres of compatible rights of way by the end of 2025; as of 2024, 8,825 acres of sustainable landscapes have been applied to pipeline rights of way. MPL is working with The Ohio State University School of Environment and Natural Resources, Pheasants Forever/Quail Forever, Mule Deer Foundation, Nutrien Solutions and Corteva Agriscience to move this project forward.³⁸ Marathon Petroleum's Mandan refinery donated \$45,000 to Ducks Unlimited to support the habitat restoration of the 117-acre Clairmont Family Conservation Park.³⁹
- **Ecolab** supports the Nature Conservancy's Loch Leven Project within the Mississippi River Delta, working to restore and enhance 10,000 acres that provide refuge to migrating birds and other wildlife. Ecolab's contribution to this project supports 164 million gallons of water replenishment in the Upper Mississippi River Basin.⁴⁰
- In 2024, **Dow** worked with Ducks Unlimited to restore key acreage in one of Michigan's largest managed wetland complexes in the Shiawassee National Wildlife Refuge to improve water quality, increase biodiversity and enhance flood storage capacity.⁴¹
- In Texas, **Phillips 66** was a supporting sponsor to the Texas Parks & Wildlife Foundation's unveiling of the Pollinators and Prairies program, which aims to conserve pollinators and grasslands through research, outreach and on-the-ground prairie restoration — including a research project that uses trained dogs to find difficult-to-locate American bumblebee and cuckoo nests to better understand habitat requirements and inform conservation planning.⁴²
- During a routine Right-Of-Way patrol of Crum Creek in Nether Providence Township, MIPC (**Monroe Energy's** pipeline subsidiary) discovered an eroded streambank caused by an upstream dam in disrepair. Working with the Pennsylvania Department of Environmental Protection, MIPC rebuilt the streambank from the dam past the washout, filling the area with new soil and plants to help the creek bank thrive.⁴³
- **Energy Transfer's** partnership with Ducks Unlimited led to its support of conservation projects in Ohio and Louisiana that helped to sequester more than 368 metric tons of CO₂ equivalent in 2023.⁴⁴
- In 2024, **ONEOK** undertook to restore nearly 2,100 acres of habitat related to pipeline projects completed during that year, with efforts including determining the appropriate seed mixes suitable for the ecosystem, properly segregating topsoil before the beginning of construction to restore the right-of-way upon completion and restoring land elevations and contours to preconstruction conditions.⁴⁵
- **Plains All American Pipeline's** conservation program seeks to enhance wildlife habitats while supporting compatibility with essential infrastructure operations. By identifying and implementing opportunities for ecological stewardship at sites like Cushing, Oklahoma, the program integrates habitat creation into routine facility management. These efforts contribute to sustainability outcomes by balancing operational needs with the preservation of native species and their environments.⁴⁶
- At **INVISTA's** Victoria and Camden sites, employees are advancing habitat conservation and environmental stewardship through active partnerships with the Wildlife Habitat Council. At the Victoria site, a 53-acre wetlands area serves as both a thriving ecosystem and an outdoor classroom, where more than 82,000 students over the past three decades have gained hands-on experience in environmental science and conservation.⁴⁷
- **CITGO** invested \$8MM over the last decade in environmental, conservation and community-based projects through its signature Caring for Our Coast program. Grants support projects located throughout the Gulf Coast region and in Lemont, Illinois where CITGO has operations to help sustain long-term environmental stewardship, conservation efforts and ecosystem restoration initiatives by planting almost 1 million trees and grasses, volunteering more than 200,000 hours, collecting more than 520,000 pounds of trash and debris, and restoring 12,000 acres of land.⁴⁸

The health and safety of our employees, communities and the environment continue to guide everything our industries do. Our commitment extends beyond compliance with regulations and industry standards, embedding a strong culture of care, awareness and responsibility into every aspect of our work. From the first day on the job, employees are immersed in safety principles that shape our operations and drive ongoing improvements in health and safety performance.

Health & Safety

Safety Record

The fuel and petrochemical industries remain steadfast in the goal of achieving zero injuries and incidents across all operations. A focus on continuous improvement, strict safety procedures and proactive hazard prevention has helped maintain consistently low rates of workplace illness and injury, ranking our sectors among the best in manufacturing. Through advanced safety systems, ongoing employee training and shared best practices, our industry continues to earn top marks in federal safety evaluations.



Leading the Way in Safety Among U.S. Manufacturers

Nothing is more important to the refining and petrochemical industries than safety. AFPM's member companies have strong safety records and consistently work to improve performance to take care of our people, communities and environment.



According to data from the Occupational Safety and Health Administration (OSHA) and the U.S. Bureau of Labor Statistics (BLS), which monitor workplace injuries and illnesses across nearly 500 manufacturing sectors, refining and petrochemical companies consistently rank in the top tier for safety performance.

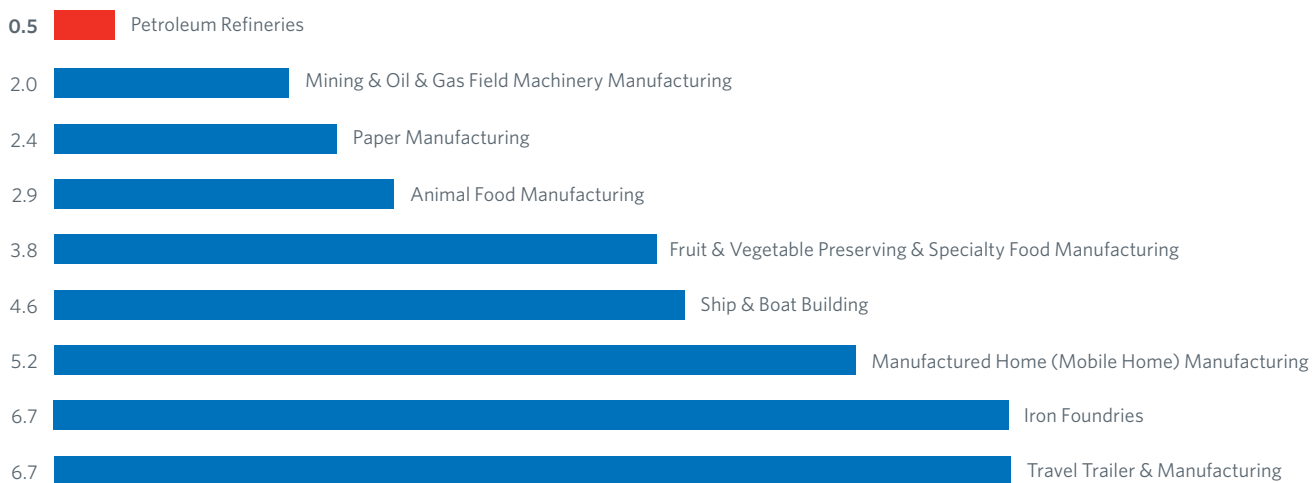
Process safety is defined by OSHA as the proactive identification, evaluation, and mitigation or prevention of chemical releases that could occur due to failures in processes, procedures, or equipment.

The injury and illness rates in the refining and petrochemical manufacturing industries are lower than most others including mining, food, ship building and paper, just to name a few. When sectors beyond manufacturing are included, the refining industry injury and illness rate is below those in business services, agriculture and air transportation, among many others.

A Tier 1 Process Safety Event (PSE) is defined as the most severe event, involving significant consequences such as injuries, fatalities, major property damage, or community impact.

Incidence Rates of Non-Fatal Injuries or Illnesses Among Manufacturing Sectors

In 2023, petroleum refineries ranked 3rd of 500 manufacturing industries with a TRIR of 0.5



Source: U.S. Bureau of Labor Statistics, (2023 data)

Outstanding Safety Performance

Year after year, AFPM members lead the way in safety results, outperforming many of their peers in other industries. This record reflects disciplined adherence to safety protocols; effective training programs and a workforce deeply committed to protecting people and the environment.

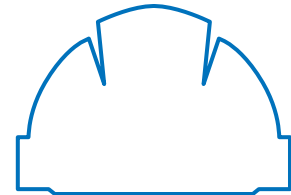
- **Motiva, PBF's** Paulsboro Refinery, **Placid Refining Company**, eight of **LyondellBasell's** sites, nine of **Valero's** refineries, 10 of **Phillips 66's** facilities and all of **Chevron Phillips Chemical's** eligible facilities have received the U.S. Occupational Safety and Health Administration Voluntary Protection Programs (VPP) certification, which recognizes efforts of employers and employees to achieve stellar occupational safety and health.⁴⁹
- In 2024, **Marathon's** Garyville refinery reached a milestone: 30 years of maintaining its OSHA VPP status, making it the longest-running VPP Star refinery in the U.S.⁵⁰
- **ExxonMobil** maintained an industry-leading 0.02 lost-time incident rate (LTIR) per 200,000 work hours in both 2023 and 2024.⁵¹
- **Phillips 66's** 2024 combined total recordable rate (TRR) of 0.12 matched its record safety rate. Phillips 66 also achieved a 38% reduction in injuries from serious incidents in 2024 as compared to 2023.⁵²
- Over the last 14 years, **Flint Hills Resources' Corpus Christi** refineries have averaged an annual Total Recordable Injury Rate (TRIR) of 0.32 — the equivalent of less than one recordable injury per 100 full-time employees.⁵³
- In 2024, a record 10 **Valero** refineries ended the year having recorded zero process safety events (PSE) Tier 1s, with two refineries achieving five straight years with no PSE Tier 1s.⁵⁴
- Since 2009, **INEOS' efforts** to prioritize safety have resulted in a more than fourfold decrease in TRIR among employees and contractors.⁵⁵
- In 2024, **LyondellBasell's** TRIR was 0.127, the second lowest in company history. Its Texas manufacturing sites have achieved astounding safety records: Channelview has gone over six million hours without a recordable injury, while La Porte has gone over five million hours and the Houston Refinery has gone over four million hours.⁵⁶
- **ONEOK's** TRIR was 0.31 in 2024, nearly 23% below its 2024 target goal of 0.40.⁵⁷
- In 2024, **Chevron Phillips Chemical's** Borger Proprietary Fleet was recognized by the National Tank Truck Carriers for outstanding safety performance. The fleet was awarded two Grand Awards in the NTTC's North American Safety Contest by transporting odorant products more than 930,000 miles and maintaining a spotless record with the Department of Transportation, with zero reportable accidents and no OSHA recordable injuries.⁵⁸
- **Cheniere** exceeded its corporate safety target and achieved an industry top-quintile safety record with a 0.15 TRIR.⁵⁹
- **Energy Transfer's** 2023 TRIR was 0.77, a 24% decrease from 2022 and a company record.⁶⁰
- 2024 marked **Cenovus's** best-ever process safety performance, placing them in the top quartile amongst industry peers, a trend the company has continued since 2022. There were 14 Tier 1 and 2 events, below the target of 24 for the year.⁶¹





Industry Programs

U.S. refiners and petrochemical manufacturers work collaboratively to learn from each other and share good practices to advance safety across industries. AFPM facilitates this collaboration through a series of safety programs focusing on process safety, occupational safety and training and development.



ADVANCING PROCESS SAFETY



Advancing Process Safety

Advancing Process Safety (APS) is AFPM's flagship safety program. AFPM, in collaboration with American Petroleum Institute (API), promotes collaboration across industries and continuously improves safety through data collection and opportunities to share experiences and knowledge.

Created more than a decade ago to improve process safety at facilities, the APS programs contribute to improved performance by developing tools and resources for our industries to prevent process safety events. This voluntary program has grown to include a suite of resources that facilitate the sharing of learnings and information, and includes:

APS Programs

Walk the Line

AFPM's human and organizational performance program provides operators with practical tools and resources to prevent common incidents, aid workplace performance and strengthen safety overall.

Process Safety Regional Networks

Seven regional information-sharing networks that enable process safety professionals to collaborate at the site and association level to improve overall process safety performance.

Process Safety Site Assessment Program

AFPM collaboration with API to facilitate rigorous, independent third-party assessments of written programs and operations that help facilities prevent process safety events.

Hazard Identification/Practice Sharing Subgroup

AFPM member group that develops hazard identification and practice share documents addressing common industry hazards and good industry practices.

Mechanical Integrity Subgroup

AFPM/API member group that develops resources to help members keep their equipment and systems working safely and reliably.

Human & Organizational Performance Subgroup

AFPM/API member group that develops information and tools to improve human performance in operations and aids in reducing the likelihood and consequences of human errors.

Industry Learning & Outreach Subgroup

AFPM member group that collects and analyzes data to identify opportunities for improvement for APS and conducts monthly industry webinars.



Walk the Job

The concept of joint job walks, or joint job site visits, is not new to the industry. Walk the Job helps improve process and personal safety through a six-step approach focused on clear communication, proper equipment preparation, defined scope and hold points, correct tools, verified energy isolation, and confirmed completion with permit closure – all reinforcing one rule: No walk, no work.



Occupational Safety Programs

AFPM Occupational Safety programs and trainings are geared toward preventing injuries in refining and petrochemical facilities. We use incident data provided by our members to identify and address opportunities for industrywide improvement and then build and share tools that address those issues.

Our Occupational Safety Regional Networks facilitate information sharing, including lessons learned to improve the overall safety of the industries. Recently, we focused on good energy isolation practices to minimize unplanned or uncontrolled releases of electrical, mechanical, hydraulic, pneumatic, chemical, thermal and other energy sources, and ultimately reduce injuries and loss of primary containment events.

Sharing Safety Practices Across the Manufacturing Sector

Other industries and government partners are taking note of the success of AFPM's safety programs and are seeking to apply good practices more broadly across the manufacturing sector. During the last year, AFPM has worked with organizations and government partners such as the API, the Chemical Safety Board (CSB) and the OSHA to share learnings derived from these programs.

Strengthening FCC Safety

AFPM's FCC Committee hosts regional workshops that give operators practical tools and strategies to improve safety, enhance communication and reduce risk across FCC operations. Participants engage in discussions about communication, monitoring tools, startup and shutdown procedures, emergency protocols and risk identification. They return to their facilities with actionable ideas that drive implementation and continuous improvement. AFPM has been recognized by the CSB for its regional workshops on FCC process safety.



Immersive Learning Program

AFPM and its Immersive Learning and Training Committee bring people together to create new training tools using virtual reality (VR) and augmented reality. These technologies help improve safety, boost performance and optimize training time across all safety disciplines.

This group created AFPM's first VR training simulation, a powerful tool that replicates the complex process of lighting a fired heater from a cold start. Because this operation can have serious risks if done incorrectly, hands-on field training is often limited. The simulation offers a safe, controlled environment where trainees can practice critical procedures to build skills and confidence. It also helps users prepare for rare but high-stakes scenarios without real-world consequences, leading to better training outcomes and stronger knowledge retention. This innovative tool is an asset for employees at refinery and petrochemical facilities.

Building on that success, AFPM created the Winterization VR simulation, a supplemental training tool that gamifies hazard recognition and preparation for winter, cold or freezing conditions. Trainees experience consequence-based outcomes in a digital environment where they can fail safely, reinforcing key actions in the real world during each phase of winterization. The Winterization simulation complements a suite of tools designed to improve performance during freezing conditions, including a three-episode podcast series, a winterization training video and a set of trivia game questions.

Smarter Operations for Safer Outcomes

Innovation continues to drive safety progress in the U.S. fuel and petrochemical industries, where our members regularly adopt next-generation technologies to strengthen process safety, occupational protection and employee training. Advanced sensors, real-time monitoring and digital tools help shape a safer, more resilient workplace every day.



- **Phillips 66**'s Ponca Refinery Training Center features the HoloCAVE, a virtual reality space with immersive 3D training simulations. Future plans include integrating drone-generated virtual walk-throughs of the refinery, discipline-specific simulations and the integration of mixed-reality headsets.⁶²
- **Chevron** has been striving to reduce risk and eliminate human exposure to hazardous environments, including confined spaces and great heights, through technology. Chevron has been deploying tank inspection technology at facilities throughout the U.S. using a robot with HD live cameras, advanced sensors and other special technology for precise inspections.⁶³
- **Par Pacific** has a team of six Federal Aviation Administration-certified drone pilots that assist with search and rescue operations, get real-time readings above a tank and can get an accurate overhead view of a spill incident.⁶⁴
- **Dow** uses acoustic camera technology, which allows sounds to be visualized, to help pinpoint noise sources so that viable solutions to reduce noise exposure can be efficiently explored.⁶⁵
- **ONEOK** partners with Orbital Sidekick, which uses a constellation of satellites equipped with hyperspectral sensors, combined with onboard AI, to monitor ONEOK's assets. In 2024, ONEOK monitored more than 25,000 miles of its operations using satellites and it expanded to monitor more than 22,000 miles in the first quarter of 2025 alone.⁶⁶



Innovation continues to drive safety progress in the U.S. fuel and petrochemical industries.



Employee and Contractor Safety

The well-being of employees and contractors is vital to the success of our industry. With strong safety protocols, ongoing education and innovative technology, AFPM members provide a safe working environment that supports both people and performance.

- **Valero** employees and contractors are required to wear personal gas monitors while in and around process units. These monitors sound an alarm and record when elevated levels of gases are detected. And Valero is rolling out upgraded personal four-gas monitors, which continuously measure oxygen, carbon monoxide, hydrogen sulfide and lower explosive limit.⁶⁷
- **ExxonMobil** stood up a cross-functional team from 2021 through 2023 to create an end-to-end safety standard for its operations. The team researched both inside and outside the company to discover, evaluate and benchmark the latest in safety best practices, and rollout is expected to be complete by the end of 2026.⁶⁸
- **Marathon Petroleum** integrates Behavior-Based Safety (BBS) programs throughout its operations, which empowers both employees and contractors to enhance workplace safety practices through peer observations. In 2024, Marathon completed more than 57,000 BBS observations, which led to safety engagements with 131,000 employees and contractors. The observations were conducted by trained observers who used checklists to identify safety risks and discuss safe practices.⁶⁹
- **LyondellBasell** provides a Health and Safety Council Essentials training for contractors at all of its U.S. sites, and in 2024 it added a Spanish option to better reach populations in their native languages.⁷⁰
- In 2024, over 60 leaders from 30 contract companies gathered at **Phillips 66's** Annual Contractor Safety Forum to share best practices and collaborate on effective strategies for strengthening safety leadership.⁷¹
- **Chevron Phillips Chemical's** Human Performance (HP) program emphasizes how work is performed, paving the way for more effective safeguards to mitigate consequences and uphold operational discipline. This process looks to identify and reduce potential high-consequence risks through skill-sharing discussions and guidance from the most experienced teammates. In 2024, CPChem fully implemented Human Performance across the organization, building the common language and principles into first-level leader and mid-level leader training, helping work groups use HP tools, conducting workshops and learning teams, and ensuring 100% completion of the three-part video series and discussions.⁷²



AI Advances Take Safety to New Heights

People are increasingly turning to tools like ChatGPT and Copilot to get quick answers, draft content or spark new ideas. But artificial intelligence (AI) is doing much more than offering guidance — it is reshaping some of the world’s most complex and safety critical industries.

In the refining and petrochemical industries, companies are leveraging AI’s capacity to analyze massive streams of data, identify subtle patterns and predict operational risks before they escalate. These advances are not just about improving efficiency — they are about safeguarding people, protecting the environment and securing essential infrastructure.

Much as AI tools like ChatGPT aid people in decision-making, AI-assisted solutions are supporting refining professionals in continuing to improve safety within the industrial automation space. In October 2024, Chevron and Honeywell announced a collaboration to create a new generation of AI-Assisted alarm management solutions to help operators make decisions to increase the efficiency, safety and reliability of process operations and industrial assets. The new solutions are expected to include an Alarm Guidance application that provides operators with guided and specific actions to effectively respond to alarms and operational events, helping to reduce lost profit opportunities and process safety incidents.⁷³

AI’s ability to analyze vast datasets, predict patterns and spot emerging trends is revolutionizing facility maintenance. Instead of relying solely on routine schedules or manual inspections, leading companies now utilize AI systems that continuously monitor sensor inputs and historical performance data. These systems precisely predict where and when maintenance is required, allowing operators to shift from reactive repairs to predictive interventions, thereby addressing potential problems before incidents occur. This form of predictive maintenance saves time, money and avoids incidents that might cause emissions or put our people at risk. Industry leaders such as ExxonMobil⁷⁴, Chevron⁷⁵, Phillips 66⁷⁶, Flint Hills Resources⁷⁷, LyondellBasell⁷⁸, and BASF⁷⁹ have all implemented AI-enabled predictive maintenance programs at their facilities.

Beyond maintenance, AI enhances safety with advanced video and camera monitoring. Its capability to process countless surveillance feeds far exceeds human limitations, and companies are putting that ability to work spotting potential safety hazards. For example, ExxonMobil uses machine learning and computer vision to analyze real-time footage in its refineries, alerting staff to potential hazards or behaviors and helping prevent incidents before they escalate.⁸⁰ And Marathon Petroleum uses Flyscan, an AI-driven threat- and leak-detection technology to monitor its pipeline rights of way. From a patrol plane, technology scans the landscape for hydrocarbon leaks and mechanical equipment threats, performing surveillance with greater sensitivity and accuracy than is possible with human observers.⁸¹



“AI is helping us move from reactive to proactive safety — identifying risks before they escalate and guiding proven responses. But these technologies don’t operate in isolation. It’s the combination of intelligent systems and skilled people — those who bring insight, empathy and accountability — that creates a truly resilient safety culture. Together, they’re enabling a step-change in how we protect workers, communities and critical infrastructure.”

Lara Swett, Vice President of Technical and Safety Programs at AFPM

Emergency Preparedness and Response



We invest in extensive emergency planning, frequent training and simulation drills so that employees and contractors are ready to respond to any situation, from equipment failures to extreme weather events like hurricanes or wildfires. Our programs feature detailed response strategies and coordination with government and community agencies so we can protect our workforce and limit impacts on our operations and neighbors.

- During the Palisades Fire, the Chevron Fire Department crew helped the El Segundo Fire Department by deploying to the **Chevron Van Nuys** terminal with engines and foam tenders to protect it from the fire. The Chevron Fire Department also provided mutual aid in response to the Vistra Energy fire in Moss Landing.⁸²
- In 2025, nine firefighters from **Phillips 66** Los Angeles Refinery joined more than 15,000 first responders in contributing to fighting the Los Angeles wildfires. For several days the group helped provide a supply of resources to the frontlines and monitored for flare-ups to prevent further wildfires.⁸³
- When its Florida terminals were threatened by two major hurricanes in the fall of 2024, **Marathon Petroleum** deployed 170 employees from its emergency response team to the surrounding area and engaged over 140 employees remotely to execute hurricane plans and prepare the terminals for the storms' paths. As a result of their collaboration and swift action, both responses were completed with zero injuries, no environmental or product quality impact and terminal operations resumed quickly.⁸⁴
- **Valero's** Port Arthur Refinery recently conducted a comprehensive two-day Worst-Case Discharge Drill with representatives from federal, state and local agencies. The drill covered containment procedures, environmental monitoring and communication between agencies to ensure a coordinated response to emergency situations. A Worst-Case Discharge Drill is a high-intensity simulation designed to leave teams prepared to deal with the most severe potential discharge scenario, and it provided Valero and partner agencies with the opportunity to practice workforce coordination, prompt regulatory notifications and seamless collaboration to protect public safety and the environment.⁸⁵
- **CITGO** hosted its first Corporate Foam and Tank Fire School in Corpus Christi to prepare roughly 50 students with specialized training in emergency preparedness and fire safety. The event included guests from the Naval Air Station Corpus Christi; South Portland, Maine Fire Department; Braintree, Mass. Fire Department; and other local municipalities and emergency response services. Guests from **Phillips 66**, **Valero**, **Flint Hills Resources** and Buckeye Pipeline also joined to learn and promote collaboration among experts in the petroleum industry.⁸⁶
- The Delaware Bay & River Cooperative's Industrial Firefighting Group is made up of highly trained emergency response and firefighting personnel from **Monroe Energy's** Trainer Refinery, **PBF Energy's** Delaware City and Paulsboro Refineries, **Energy Transfer's** Marcus Hook Terminal and Kinder Morgan's Philadelphia Terminal. The group ensures that there are extensively trained and well-equipped personnel available to handle any potential industrial incidents.⁸⁷
- In August 2024, **ExxonMobil's** Regional Response Team held the largest exercise in the Baytown facility's 105-year history, simulating a worst-case discharge. The exercise included more than 240 people from within and outside the company, including representatives from the Environmental Protection Agency, the Texas General Land Office, and both the Baytown and Harris County Offices of Emergency Management.⁸⁸
- **Flint Hills Resources'** Corpus Christi refineries have more than 120 emergency responders and 14 dedicated fire captains, as well as 14 industrial emergency response specialists — of which there are fewer than 600 worldwide.⁸⁹
- **Motiva** maintains dedicated emergency response teams, including an onsite medical and fire and rescue team, which are trained to respond to incidents. Motiva also supports neighboring facilities and the community at large through the Sabine-Neches Chiefs Association's mutual aid organization.⁹⁰
- **Placid Refining** lends its expertise to both the North and West Baton Rouge Parish Emergency Response Task Forces, with its Safety Manager serving as the treasurer on the West Baton Rouge Emergency Response Task Force. Placid is also a member of a nine-parish Mutual Aid System — BRAMAS, and West Baton Rouge Local Emergency Planning Committee.⁹¹
- **Westlake** works with a range of stakeholders to coordinate and communicate appropriate responses to potential incidents, including certified safety personnel to act as an incident command team, local emergency services, and state and national security departments. Westlake not only regularly reviews its response plans but also routinely undertakes exercises and drills to test response arrangements.⁹²
- During the 2024 International Rescue & Emergency Care Association and Texas A&M Engineering Extension Service conference, emergency responders from **Chevron Phillips Chemical's** Cedar Bayou Plant earned top marks for their performance in rescue challenges. The conference included a week of rescue and medical challenges along with opportunities to compete against top rescue teams and share best practices.⁹³



We protect our
workforce and
limit impacts on
our operations
and neighbors.

Community Safety

AFPM’s commitment to safety extends to their neighboring communities. They work closely with local organizations to enhance community safety through initiatives like providing grants, safety equipment and community education.

- **CITGO’s** Lemont Refinery awarded first responder grants for the third year in a row as a part of the CITGO Community Awareness Emergency Response (CAER) program. Eight grants totaling more than \$80,000 were awarded to the Romeoville, Lemont and Lockport Police Departments; Will County Emergency Management Agency; the Lemont and Lockport Fire Districts; and the Will County Sheriff’s Office. The grants will be used for disaster relief and educational purposes, with a goal of increasing community preparedness.⁹⁴
- **Flint Hills Resources’** Helping Heroes grant program has awarded more than \$1 million in grants to emergency responders and fire departments across the state of Texas since its inception in 2012. These grants go to help volunteer and small fire and first responder organizations to get the education, equipment, training and emergency notification units they need.⁹⁵
- **Marathon Petroleum** recently supported Galveston County, Texas emergency responders by investing in a cellular tower for cellular and internet connectivity that prioritizes first responders, as well as a trailer to transport the equipment to areas throughout the county that require assistance. This support is a part of Marathon’s broader contributions to first responder organizations, which totaled more than \$1.2 million in 2024 alone.⁹⁶
- **CountryMark** provides education about pipeline safety to the affected public, farmers, landowners, excavators and school districts through 28,500 mailers delivered annually.⁹⁷
- Since the **Motiva** First Responder Grant Program was introduced in 2021, Motiva has provided grant awards totaling more than \$500,000 to assist emergency response organizations in communities that host Motiva facilities. The grants of up to \$10,000 are used for professional training, safety equipment or safety education programs.⁹⁸
- **Cenovus** supports the Superior Fire Department, with funding helping to provide emergency response training, winter protective gear and the purchase of a new ladder-truck that is designed for industrial response and rescue.⁹⁹
- In 2024, **Cheniere** partnered with local authorities and emergency responders in Johnson Bayou and Holly Beach, Louisiana to create and distribute magnets with contact information for community response entities.¹⁰⁰





AFPM's commitment to safety extends to their neighboring communities.

The U.S. fuel and petrochemical industries are proud to play an active role in strengthening the communities where we operate. Our members create high-quality jobs, partner with local businesses and invest in workforce development through tailored education and training. By supporting local initiatives, promoting STEM learning and expanding skills training, we help build resilient communities and open new opportunities for people of all ages. Our industries also donate their time, resources and expertise to make their neighborhoods better places to live.

Thriving People & Communities



Our Workforce Today

AFPM members actively seek out talented individuals from a wide range of backgrounds. By fostering an inclusive environment where all employees are supported and valued, they help ensure every team member can contribute and succeed.

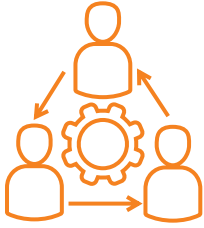


Internal

AFPM members are committed to building inclusive workplaces by launching initiatives that advance diversity and foster belonging within their organizations.

- **ONEOK**'s Inclusion & Diversity (I&D) Work Group is a dedicated team of employees led by its director of Engagement, Inclusion and Diversity. The working group supports ONEOK's I&D Council and the company's Business Resource Groups while also ensuring the integration of I&D principles throughout all aspects of the company's talent policies and practices.¹⁰¹
- In 2024, **LyondellBasell** focused on educating employees about its refreshed competencies and further integrating them into processes and systems. One of these competencies is to "Promote Inclusion," which refers to taking action to ensure that the capabilities and insights of all individuals are included and valued in ways that lead to equitable outcomes, organizational success and a sense of belonging.¹⁰²
- **Phillips 66** has an Executive Inclusion, Diversity and Culture Council to support its goal of fostering an inclusive culture where diverse talents create value, innovate and deliver exceptional results. This approach attracts and retains top talent, unlocks innovation and performance, and strengthens Phillips 66's ability to compete in the global market.¹⁰³
- As a part of its 2024 Employee Voices global survey, **BASF** again used an inclusion index as a reference point for the inclusion of its employees, which provided leaders with suggestions for follow-up measures.¹⁰⁴





Employee Resource Groups

Employee Resource Groups (ERGs) give team members a place to connect around shared interests, experiences and goals. Within AFPM member companies, these groups strengthen diversity and inclusion while offering valuable opportunities for career development and personal growth.

- **Marathon Petroleum** has seven employee networks, focusing on Asian, Black, Disability, Hispanic, LGBTQ+, Veterans and Women. Any employee may elect to join any of the groups, which are led by employees with involvement and support from executive sponsors. Over 5,100 employees belong to these employee networks.¹⁰⁵
- **Chevron** has 11 voluntary employee networks, and more than 50% of the Chevron workforce is involved with at least one of these networks.¹⁰⁶ The Chairman's Inclusion Council provides employee network presidents with a direct line of communication to the Chairman and CEO, the Chief Human Resources Officer, the Chief Diversity and Inclusion Officer, and the enterprise leadership team. The council allows executives and network presidents to collaborate and discuss how the employee networks can reinforce Chevron's values of diversity and inclusion.¹⁰⁷
- In 2024, **Phillips 66's** 10 ERGs expanded across its 70+ chapters, with 40% of employees participating in an ERG, up from 35% in 2023. This growth of almost 700 employees reflects the need for community and belonging in the workplace and demonstrates Phillips 66's progress in meeting those needs.¹⁰⁸
- **Dow's** Vet Net ERG partnered with Team Rubicon, an international disaster response nonprofit, to volunteer after Texas hurricanes and Canadian wildfires.¹⁰⁹
- **Ecolab's** 11 employee-driven ERGs include more than 9,300 members and 103 chapters globally, helping to connect emerging leaders with professional and personal development opportunities.¹¹⁰
- **INEOS** established the INEOS Women's Network in 2022 to shrink the gender gap in manufacturing. The group has grown to over 300 members and hosts regular events in the Texas area where it was founded, as well as online masterclasses on issues such as thought leadership, career development and executive presence.¹¹¹
- **LyondellBasell** recently launched two new employee networks while also increasing the participation in employee network from 18% in 2023 to 22% in 2024.¹¹²
- **W.R. Grace** celebrates the wealth of experiences and perspectives of its employees through its ERGs, including the Asian American & Pacific Islanders (AAPI) Group, Black Employee Resource Group (BERG), LGBTQ+ Employee Resource Group, Military Veterans Employee Resource Group (G-VETS) and Women Employees & Allies Championing Together (WE ACT).¹¹³
- **Westlake** has four primary ERGs — the Hispanic Organization for Leadership and Action (HOLA), Westlake Asian Organization (WAO), the African Diaspora of Westlake (ADW) and the Women of Westlake (WoW) — that foster professional development while offering open forums for support and discussion.¹¹⁴
- **Chevron Phillips Chemical** has seven employee-led ERGs — BELIEVE, HOLA, SPIRIT, INSPIRASIAN, PRIDE, STRIVE and VETNET — each of which is paired with an executive sponsor to enhance communication and connections between employees and company leadership. SPIRIT, the newest ERG that was launched in 2024, aims to create a work environment where Native American members and allies can bring their whole selves to work and obtain the support required to reach their fullest potential.¹¹⁵
- **Plains All American Pipeline's** employee-led Cultivating Connections network fosters inclusion at Plains and across the industry through mentoring, networking, sharing experiences and furthering leadership development. Cultivating Connections launched a young professionals group with the goal of providing career development opportunities to early-career and other interested employees through educational workshops, networking and events.¹¹⁶
- **Cheniere** supports six professional development groups and ERGs, which provide a sense of community, mentorship volunteer opportunities, networking and learning experiences. In 2024, Cheniere launched BeLoNG, for members and allies of the LGBTQ+ community.¹¹⁷

Awards

Companies in the fuel and petrochemical industries are regularly honored by leading organizations for their dedication to diversity, inclusion and responsible workplace practices. Ongoing recognition highlights the success of industry efforts to create environments where every employee can thrive.



Marathon Petroleum, Dow, Ecolab and **CF Industries** were all named to JUST Capital's JUST 100 2025 rankings.¹¹⁸



LyondellBasell, MPLX, ONEOK, Albemarle, Honeywell, Ecolab, Air Products and Chemicals, Baker Hughes and **CF Industries** all made Newsweek's list of "America's Most Responsible Companies 2025."¹¹⁹



Chevron, Ecolab and **Air Products and Chemicals** were included on *Forbes'* "2024 America's Best Employers for Diversity."¹²⁰



Phillips 66 was named to *Military Times'* "Best for Vets 2024 Employers" list.¹²¹



Marathon Petroleum, Air Products and Chemicals and **Koch Companies** were named one of the "2024 Top Companies for Women to Work in Transportation" by the Women in Trucking Association.¹²²



Dow was honored by Great Place To Work® and *Fortune* as one of the "25 World's Best Workplaces" for the second consecutive year.¹²³



Dow and **Ecolab** were ranked among *Fortune's* "World's Most Admired Companies."¹²⁴



Honeywell was named to Newsweek's "America's Greatest Workplaces for People with Disabilities 2024/25" list.¹²⁵



Chevron, ExxonMobil and **Marathon Petroleum** made the "Top 50 Workplaces for Indigenous STEM Professionals in 2025" by the American Indian Science and Engineering Society.¹²⁶



Supply Chain

AFPM members are working alongside their suppliers to expand sustainability efforts beyond company boundaries and drive positive impact across the supply chain.

- **ExxonMobil** spends approximately \$6.8 billion with diverse suppliers in the United States each year.¹²⁷
- **Phillips 66** spent \$171 million with Tier 1 small and diverse suppliers in 2024 (made up of direct suppliers to Phillips 66), a 28% increase from the year before. Its Tier 2 small and diverse spend (made up of suppliers or contractors to Tier 1 suppliers) increased 27%, to \$107 million.¹²⁸
- As a part of its effort to encourage a diverse and inclusive supplier base, **Dow**'s goal is to exceed \$500 million in global certified diverse supplier spending by the end of 2025.¹²⁹
- **ONEOK** spent more than \$420 million with third-party verified diverse and small business suppliers in 2024, which included over 1,075 small businesses, more than 50 veteran-owned businesses, 125 women-owned businesses and more than 80 minority-owned businesses.¹³⁰
- **Chevron Phillips Chemical** participated in the 2024 National Minority Supplier Development Council Conference & Exchange, which emphasized strategic networking, expanding opportunities for small and minority-owned businesses and breaking down barriers.¹³¹
- **Cheniere** partners with the Coastal Bend Business Innovation Center and the Office of Institutional Advancement of Texas A&M University-Corpus Christi to sponsor Doing Business with Giants, a workshop series for small local businesses that enhances the ability of small businesses to obtain the necessary qualifications to become a part of a corporate supply chain. Participants who complete the six workshops are eligible for grants of up to \$20,000.¹³²



Talent Development

Our members invest in the growth of their employees through a wide range of programs that build skills and cultivate leadership potential. From advanced e-learning to one-on-one coaching, these resources equip teams with the knowledge and experience needed to thrive.



Career Development

Through innovative learning programs and career development initiatives, AFPM members prepare their workforce to succeed today and in the future.

- In 2024, **LyondellBasell** expanded LYB University with new programs focusing on leaders for the future. The program for aspiring leaders became very popular globally, fostering hands-on learning and networking, and helping to equip participants to grow and succeed. LyondellBasell also piloted another leadership program in 2024 that centered on giving participants time and support to reflect on their personal purpose and aspirations, expand their network across the company and increase their connection with senior leaders.¹³³
- **Phillips 66** enhanced its leadership development initiatives in 2024, using programs like Field Safety and Leadership Essentials, Crucial Conversations and Leading with Trust to lay a foundation for leadership excellence across all levels. Phillips 66's robust participation rate extended to executives, with 90% of its executives participating in the flagship G.O.L.D. (Grow. Optimize. Lead. Deliver.) Executive Leadership Program, which aims to equip senior leaders with the tools and insights needed to navigate complex challenges and lead with confidence. Overall, 91% of all Phillips 66 leaders engaged in leadership development opportunities.¹³⁴
- **Ecolab's** 2024 Development Season offered Ecolab associates with the opportunity to participate in development tracks — a curated combination of independent and group learning opportunities translated into multiple languages — as well as a catalog of over 20,000 courses. LinkedIn Learning was provided to associates, which resulted in over 28,000 course completions in 2024.¹³⁵
- **Ergon** created the Management Trainee Program to fast-track the technical and leadership skills of future Ergon leaders. The program aims to put trainees on an accelerated path towards leadership by placing them at one of Ergon Asphalt & Emulsions larger facilities, where they are exposed to most of the processes they might see in their future management careers with Ergon, including polymer modified asphalt cement production, railcar and barge operations, and emulsion production.¹³⁶
- In 2024, **Ketjen** launched two new leadership programs, called LEAD and ASCEND, with four strategic goals in mind: bridging executive leadership to front-line leadership to support the execution of Ketjen's transformation; empowering and engaging a broader level of leadership to influence better business outcomes; increasing the understanding of company performance and key business drivers; and aligning and advancing individual and team goals with a clear line of sight to objectives and key results (OKRs).¹³⁷
- **W.R. Grace** offers a three-year Commercial Leadership Program for high-potential recent college graduates to accelerate leadership development, enhance understanding of W.R. Grace's commercial business areas and prepare participants for future roles in leadership. Participants rotate through three year-long assignments in areas such as Business Management, Marketing, Sales, Procurement and Supply Chain while receiving support, coaching and training to strengthen leadership skills.¹³⁸

Driving Engagement

AFPM members prioritize engagement by fostering dialogue and responding to employee perspectives. Tailored surveys and other feedback tools help capture experiences and ideas that strengthen both workplace culture and performance.



- **LyondellBasell** has more than 100 Culture Ambassadors globally to help build awareness and act as advocates for its culture change. One of the first initiatives undertaken was to host small group sessions with peers. The insights, gathered from more than 100 listening sessions with 900 participants, have informed competency development, helping employees gain the knowledge and skills needed to drive business success.¹³⁹
- **Marathon Petroleum** uses “pulse” surveys and focus groups to collect and delve into employee insights. In early 2024, Marathon conducted a pulse survey that asked questions about drivers of employee experience, engagement and well-being and that included an open-text question to better capture employees’ perspectives in their own voices. These surveys are also used to measure progress in identified priority areas, which include supporting employees with more meaningful career conversations, collaborating with excellence and communicating Marathon’s strategy to employees.¹⁴⁰
- **Ecolab’s** annual, organization-wide employee engagement survey was completed in April 2024, with a record high participation rate of 91%. For the second year in a row, its overall engagement score and inclusion index remained at all-time high scores of 81% and 85%, respectively.¹⁴¹
- **Ketjen’s** Employee Empowerment Survey participation increased by 12% in 2024 and improved their performance score by 6% in the key focus areas of communication and growth.¹⁴²





Well-Being

A healthy, supported workforce is vital to AFPM members' success. Through initiatives that address the physical, mental, emotional and financial needs of employees, our companies create environments where people feel valued and ready to perform at their best.

- To build greater awareness of available mental health resources, **Valero** has added initiatives such as awareness campaigns, virtual and in-person access to wellness experts, stress and anxiety workshops, meditation resources, a virtual program focused on cognitive behavioral therapy, nutritional clinics and annual wellness assessments.¹⁴³
- In 2024, **Marathon Petroleum** rolled out the Critical Incident Stress Management program, which is designed to support employees who have been exposed to a critical incident or traumatic event arising within a personal or work context. The program offers specialized crisis support that seeks to lessen the impact to those affected by normalizing emotional reactions, facilitating access to continued care and encouraging coping skills. This team of trained health services employees are placed across the organization, with plans to expand their number in the future.¹⁴⁴
- **Dow's** Personify Health global app provides access to high-quality mental, physical, financial and social well-being resources for employees. As of 2024, more than 84% of employees have enrolled and 77% use the app frequently. Of those who utilize the app, 71% say it helps them better manage work-related stress and 68% report it helps improve energy at the end of the workday.¹⁴⁵
- **LyondellBasell's** Employee Assistance Program offers resources and tools on topics including emotional wellness, resiliency, workplace success, work-life balance, personal and family goals, and good health. In 2024, after gathering employee feedback and reviewing benefits offerings, LyondellBasell enhanced its financial wellness offerings. By partnering with a global financial services firm, LyondellBasell now provides resources for financial planning, retirement savings, debt management and personalized education to help employees overcome financial challenges and build long-term security.¹⁴⁶
- **Ecolab** offers its employees on-site biometric screenings, wellness challenges and select seasonal vaccination appointments. Confide, Ecolab's employee assistance program, provides a variety of resources and tools to assist with workplace stress management, offering face-to-face counseling, digital resources, seminars and webcasts.¹⁴⁷
- **Par Pacific** supports the mental health of its workforce in a number of ways, including by providing access to mobile-enabled mental health resources featuring counseling and support groups, as well as 24/7 access to an employee assistance platform that provides support to employees to help them in managing stress at work or home, parenting and childcare, money management or health issues.¹⁴⁸
- **Chevron Phillips Chemical** supports healthy lifestyles by encouraging employees to engage with "Your Journey to Wellness," a program that focuses on improving physical and financial well-being. Employees earn cash rewards and reimbursements for participating in preventative care activities. In 2024, CPChem expanded the program to offer rewards for engaging in financial wellness activities and completing health screenings.¹⁴⁹
- The **INEOS** Energy Station, INEOS's flagship health and well-being program, is free for employees and has over 10,000 participants from across all INEOS regions. Via an online portal, employees can access fitness tips, well-being advice, challenges, a bookable class timetable and discounts with well-known fitness brands.¹⁵⁰

Our Future Workforce

Across the country, AFPM members support Science, Technology, Engineering and Math (STEM) learning and technical skills programs that inspire future generations of workers and innovators. By investing in school resources, internships and training courses, they help ensure that talent from every community is ready to pursue opportunities in these dynamic, high-tech industries.

STEM Education

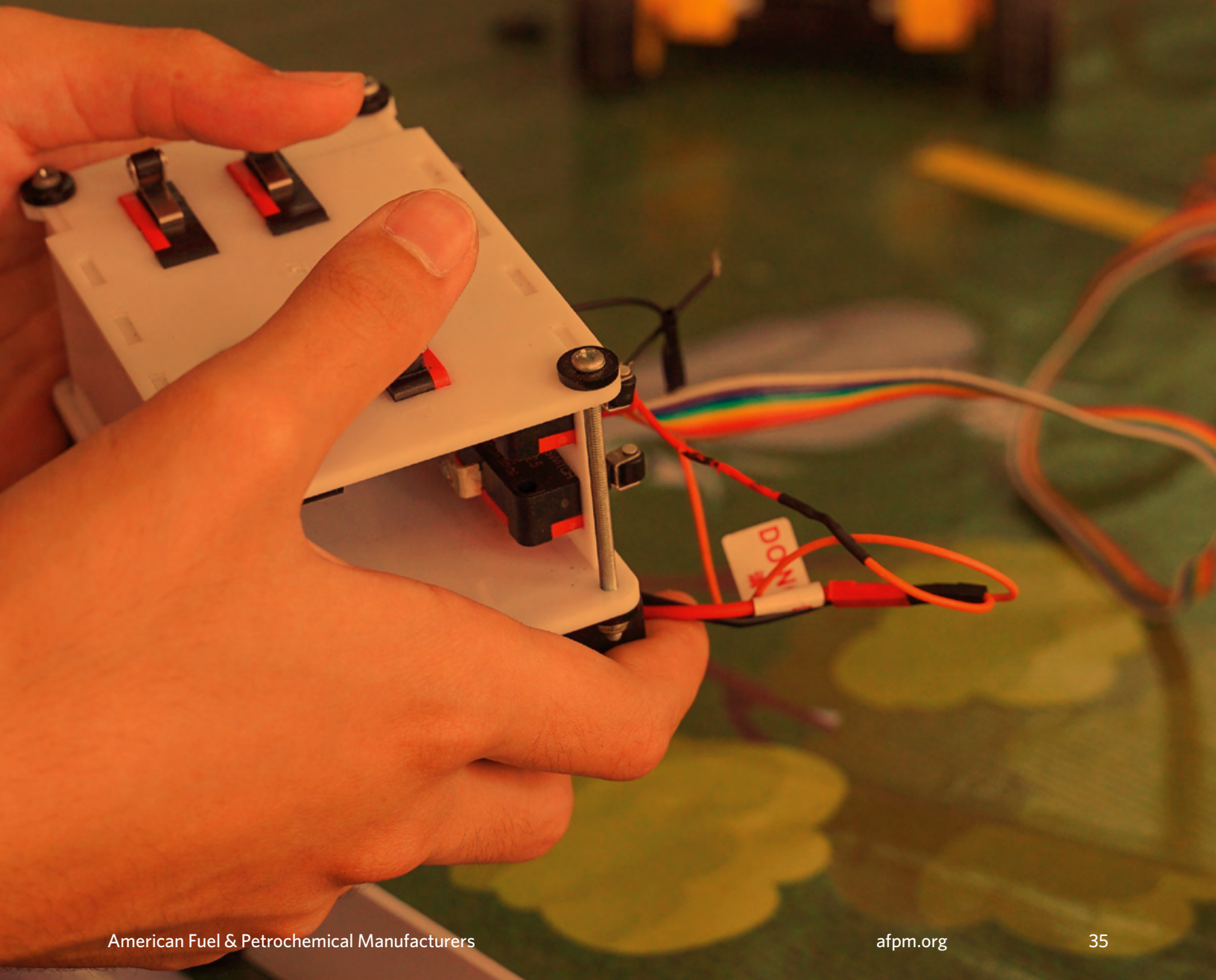


Our members recognize that investing in STEM is vital to building the next generation of industry professionals. Through dedicated funding and hands-on educational initiatives, we are working to spark students' interest in STEM fields and support learning opportunities that prepare them for rewarding careers.

- The **Flint Hills Resources** Discovery Scholarship program has awarded over \$2.7 million to high school seniors who demonstrate academic and leadership excellence and plan to pursue a career in the STEM and construction fields.¹⁵¹
- **Motiva** awarded \$250,000 in scholarship funds to 42 Southeast Texas high school students as a part of the 2025 Motiva Excellence in Education Scholarship, which aids students in pursuit of their STEM or business-related undergraduate, associate or vocational degree. Recipients are selected based on academic achievements, community service, extracurricular activities and teacher recommendations.¹⁵²
- To help students build the skills needed for careers in the energy industry, in 2025 **Cenovus** announced its first major multi-year U.S. education investment: \$1 million to the University of Toledo to establish the Cenovus Energy Hub in the newly renovated North Engineering building.¹⁵³
- **BASF** partnered with the Children's Museum Houston to develop the all-new BASF Power Science Lab, an interactive learning space designed to inspire the next generation of engineers, scientists and problem solvers by providing them with a laboratory equipped with real-world tools and equipment to support engaging demonstrations and experiments. The Lab allows kids to explore chemistry, biology, anatomy, physiology and more as they mix chemicals, test reactions and discover the power of scientific inquiry in a fun and safe environment.¹⁵⁴
- In Indianapolis and Mt. Vernon, **CountryMark** hosted six robotics camps free of charge for children interested in STEM.¹⁵⁵
- **Dow** has been working with FIRST® a global nonprofit, since 2014 to prepare young people for the future through robotics programs for ages 4-18. In 2024, Dow supported 182 FIRST teams globally with team grants, affecting more than 3,000 students.¹⁵⁶
- In 2025, **Phillips 66** expanded its support for STEM programs, committing to a \$1 million gift to help with the expansion of the Project Lead the Way Gateway program, which uses collaborative academic activities to introduce middle school students to STEM careers. This follows a \$1.1 million grant to implement a game-based learning program called ST Math for students in the Permian Basin.¹⁵⁷
- In 2024, **Chevron Phillips Chemical** was a \$15,000 Title Sponsor of the Education for Tomorrow Alliance, supporting its mission to expand STEM education throughout Montgomery County, Texas. CPChem employees supported that mission by volunteering at the Chevron Phillips Chemical Senior High School Science Fair, assisting high school students with resumes and practice interviews, hosting four high school interns and sharing career journeys with junior high students.¹⁵⁸
- **CITGO** invests millions in its STEM education program and its CITGO Innovation Academies by supporting programs that increase student interest, retention and graduation rates, particularly at the high school and post-secondary levels and prepare students for STEM technical and university-level programs.¹⁵⁹



Our members recognize that investing in STEM is vital to building the next generation of industry professionals.





Skills Training

Our companies are expanding access to practical, interactive training that builds strong career foundations. Through training initiatives and external learning programs, AFPM members help develop the skilled workforce needed for the future.

- **Phillips 66** donated \$1.1 million to the SOWELA Technical Community College in Louisiana to aid in the expansion of the region’s only Process Technology Center, which supports the development of skilled process technicians.¹⁶⁰
- In 2025, 17 Chattanooga-area high school students graduated from **BASF’s** TECH Academy, a week-long program that introduces students to technical and craft careers through skill classes, industry tours and workshops. The program, which is delivered in partnership with Chattanooga State Community College, began each day with a hands-on classroom session and students then participated in afternoon field trips to local manufacturing facilities where they gained insight into different industry practices and procedures while learning about career opportunities. Students also learned technical skills such as 3D printing, welding and hydropower generation.¹⁶¹
- **Valero** provided \$187,000 in support of a new glass distillation unit that offers hands-on training to more than 600 process technology students at the College of the Mainland.¹⁶²
- **Marathon Petroleum** supported the development and opening of the Heart River Career and Technical Education Center in Mandan, North Dakota, which provides college dual-credit opportunities for high school students as well as experience in construction, agriculture, manufacturing, healthcare, welding and other high-demand occupational fields.¹⁶³



Advancing Opportunity

AFPM members are committed to opening doors for students from a wide range of backgrounds to pursue higher education and explore career possibilities in the fuel and petrochemical industries.

- **Marathon Petroleum** partners with the Osage Nation Career and Technical Education Program, which introduces Native American students within Osage County, Oklahoma to Career and Technical Education programming aimed at providing a better understanding of trade school programs and degree options. Marathon employees also offer mentorships for petroleum industry programs.¹⁶⁴
- **Ecolab** promotes careers and opportunities to diverse communities through partnerships with Historically Black Colleges & Universities, The Society of Hispanic Professional Engineers, The National Society of Black Engineers, The Society of Women Engineers, Competitive Advantage, Out4U and The Consortium.¹⁶⁵
- **Phillips 66’s** Black Employee Network supports the Houston Area Urban League’s Young Professionals University, volunteering at this dynamic college and life-readiness program for high school students.¹⁶⁶





Our Community

For fuel and petrochemical manufacturers, supporting the communities where we operate is central to who we are. Our members take this responsibility seriously, working to strengthen neighborhoods by providing funding for local programs, encouraging employee volunteerism and supporting their neighbors after emergencies. These investments help create lasting positive changes and build stronger connections between our industry and the people we serve.

Our Mission: *Robert Schrieber*

Our Vision: *John Schrieber*

Values:

- Accountability**
Choosing to live above the law, exceeding our obligations, and being a good neighbor.
- Transparency**
Doing the right thing, and being open about it.





Giving Back

AFPM members contribute extensively to the communities where they live and work. Their support for local initiatives and nonprofits reflects a long-standing commitment to being engaged and valued partners in neighborhood life.

- **Valero** generated \$77.2 million for charities through employee and company donations, corporate philanthropy, fundraising and volunteerism. That includes \$21.4 million to the United Way, bringing Valero's total contribution to that organization to more than \$280 million since 1980.¹⁶⁷
- **ExxonMobil** donated \$10 million to support efforts to improve public health and reduce cancer risk in Beaumont, Texas through the Be Well Beaumont program, which is run by the University of Texas MD Anderson Cancer Center. Be Well Beaumont's goal is to promote wellness and lower cancer risk among the community by providing cancer prevention education and tools. The program builds upon Be Well Baytown, which has been supported by ExxonMobil since 2016.¹⁶⁸
- Approximately \$34 million was invested in communities by **Marathon Petroleum**, MPLX, employees and fundraising partners in 2024.¹⁶⁹
- In 2024, **CountryMark's** Fueling Freedom program raised over \$55,000 for organizations like the USO and local National Guard Family Readiness Groups. Both organizations use the donations to host meals for soldiers and their families, send packages to deployed soldiers and fund after-school programs in their local areas.¹⁷⁰ Since the inception of the program, CountryMark has donated over \$550,000 to local organizations supporting military families.¹⁷¹
- In June 2025, **CITGO's** Lemont Refinery hosted its 29th annual Driving for a Cure Golf Outing and its inaugural Driving for a Cure Gala in partnership with the Muscular Dystrophy Association (MDA). Together, these events raised \$1,091,642 to advance MDA's mission of empowering individuals living with neuromuscular diseases. Since its inception, Driving for a Cure has contributed more than \$10.2 million to support innovative research, clinical trials, advanced care and new treatments for muscular dystrophy, ALS and more than 300 related neuromuscular conditions.¹⁷²
- The **Chevron** Richmond team contributes more than \$2 million to local nonprofits annually and has invested over \$52 million in community partners since 2012.¹⁷³
- **Phillips 66** invested \$30 million in community initiatives, focusing on the environment, education equity, safety and well-being, and social advancement,¹⁷⁴ with \$6.5 million of that supporting United Way campaigns in 10 locations.¹⁷⁵
- Since 2022, **HF Sinclair** has raised \$2.1 million for Folds of Honor through designated fill-ups and donations at Sinclair-branded stations. The 2024 campaign ran for 50 days in November and December, when Sinclair dealers and distributors as well as HF Sinclair employees raised funds for scholarship programs in support of American families of fallen and disabled veterans and first responders.¹⁷⁶
- **Hunt Refining** employees participate in the Adopt-A-School program, partnering with Oakdale Elementary School to engage in school-led initiatives such as toy drives.¹⁷⁷
- **Dow's** ALL IN ERG Fund harnesses the perspective and passion of Dow's 10 ERGs to partner with nonprofits to address community needs. Since its launch in 2019, the fund has committed \$1.8 million to support 78 projects in 30 countries.¹⁷⁸
- In 2024, the **Ecolab** Foundation gave \$5 million in grant funding to organizations that provide basic needs to the most vulnerable citizens, including access to food, housing and job training. Housing-focused grants alone totaled over \$267,000 across nine states, which included many grants for Habitat for Humanity, a partner of Ecolab's for over 20 years.¹⁷⁹
- In addition to the **Ergon** Foundation's giving to support education, health and cultural causes, it allocates \$500,000 to distribute among nonprofit organizations nominated by Ergon employees. In 2024, that list included the AIDS Service Coalition, Berean Children's Home, Family Promise of Greater Phoenix, Jackson Free Clinic, Matt's House Shelter, Neuro Assistance Foundation and Petal Children's Task Force.¹⁸⁰



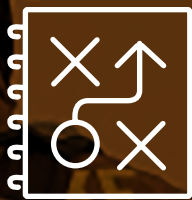
- **Marathon Petroleum** supported Hospice El Paso with a \$174,000 donation, including a fully equipped ambulance to aid patient transport.¹⁸¹ Separately, its HONOR Veterans chapter in St. Paul Park, Minnesota raised \$25,000 for local veterans organizations and completed a ceremonial fire ring for retiring American flags, with additional support from the refinery.¹⁸²
- **Westlake's** North American employees consistently engage in local campaigns that advance United Way's mission of building stronger communities. In 2024, our Houston headquarters employees contributed approximately \$356,000.¹⁸³
- Approaching 40 years of partnership, **CITGO** raised a record breaking \$4.36 million for the Muscular Dystrophy Association (MDA) to fuel research, expand care, and bring hope to families living with muscular dystrophy, ALS, and related neuromuscular diseases. Since 1986, CITGO has raised more than \$280 million through annual fundraising campaigns throughout its operational footprint.¹⁸⁴
- **Chevron Phillips Chemical** donated \$100,000 to the Sweeny Community Hospital Development Foundation, helping to make the new Sweeney Community Hospital a reality. The facility includes 16 medical/surgical beds with private bathrooms, an airborne isolation room, expanded Level IV Trauma Designated Emergency Services Center, cardiopulmonary services, surgical and procedure suite, inpatient pharmacy, state-of-the-art imaging suite, certified clinical laboratory, EMS facility, wound care center with hyperbaric chambers and an IFR-capable helipad.¹⁸⁵
- **Motiva**, in partnership with the Julie Rogers Gift of Life Program, has provided more than 700 preventative health care screenings to medically underserved women and men throughout Southeast Texas, helping to empower the local community to take control of their health and well-being.¹⁸⁶
- **Par Pacific's** Annual Fueling Dreams campaign supports Special Olympics Hawaii athletes by collecting donations at participating Hele stores across Hawaii Island, Oahu and Maui. All donations provide opportunities for athletes with intellectual disabilities to train and compete for free. Par Pacific has been a strong supporter of Special Olympics Hawaii for more than three decades, giving more than \$1.6 million to the Special Olympics Hawaii athletes and programs.¹⁸⁷
- **PBF's** Torrance Refining Company donated \$25,000 to the Switzer Learning Center, which aims to help children of all abilities thrive both academically and socially.¹⁸⁸
- **Placid Refining Company** and its employees participate in a number of charity programs serving organizations such as the United Way and St. Jude's Children's Hospital, donating over \$129,000 to these charities annually.¹⁸⁹
- The **TPC Group** Annual Charity Golf Tournament has raised more than \$2 million since 2006 for nearly 50 nonprofit organizations.¹⁹⁰
- **ONEOK** donated \$8.7 million in charitable contributions, including more than \$3.8 million as a part of the 2024 ONEOK United Way Campaign, which used pledges, fundraising activities, events and company matches to raise the funds.¹⁹¹
- **Cheniere** invested \$5.8 million in direct giving to its communities in 2024, with money going to a diverse array of educational, environmental, civil and social projects.¹⁹²
- **Energy Transfer** donated \$6.53 million to support over 360 nonprofit organizations across the U.S., including the American Red Cross, the Salvation Army, Carry The Load, Houston Methodist Hospital, Mercy Street Dallas and the Tulsa Community Foundation.¹⁹³



Volunteerism

AFPM members contribute countless hours of their time and talent to local nonprofits and community groups.

- **Valero** employees recorded 133,850 volunteer hours in 2024.¹⁹⁴
- **Marathon Petroleum** employees volunteered over 57,600 hours in 2024, giving back to their communities and supporting nonprofit organizations.¹⁹⁵
- **Chevron Phillips Chemical** employees volunteered 9,785 hours in 2024 in the communities where they live and work.¹⁹⁶
- Approximately 77% of **Dow** employees volunteered at least once in the past year in their local communities.¹⁹⁷
- In April 2024 **Phillips 66** completed its third annual Good Energy Month, with U.S. employees logging 16,000 volunteer hours, a 20% increase over 2023. Employees completed roughly 75 service projects, which included cleaning up household hazardous waste, community food distribution, community home and yard improvements, tree planting and a home build for a local family. As a result of their efforts, Phillips 66 employees raised \$400,000 in volunteer grant dollars.¹⁹⁸
- Through **TPC's One Day** community day for employees and family members, more than 1,020 volunteer hours and \$120,000 have been invested since 2018.¹⁹⁹
- Approximately 80 pounds of trash were collected by volunteers from **Westlake's** five plants in Lake Charles as a part of the annual City of Lake Charles Beach Sweep. More than 140 Westlake Houston-area volunteers united to advance the Houston Food Bank's mission to combat hunger. They dedicated the day to sorting donated goods, ensuring they were ready for distribution to residents across 18 Southeast Texas counties served by the organization.²⁰⁰
- **Ecolab** employees volunteered a total of 49,600 hours globally in 2024, with over 5,800 individuals averaging nine hours each.²⁰¹
- **Ketjen** employees from Bayport, Pasadena and Clear Lake joined Houston-area volunteers to participate in the annual Changing Young Children's Lives Through Education (CYCLE) bike build program, which rewards students with new bicycles for improving their academic performance. In 2024, Ketjen employees contributed roughly 90 volunteer hours to build bicycles.²⁰²
- Energy, **ONEOK's** volunteer program, had 1,375 volunteers who gave a total of 20,000 volunteer hours in the communities where ONEOK operates.²⁰³
- **Plains All American Pipeline** employees volunteer thousands of hours a year to help their communities, engaging in activities like partnering with the Bureau of Land Management to revitalize the Black River Recreation Area in Carlsbad, New Mexico; packing mobile pantry boxes for the Food Bank of Wyoming; and assembling kits of hygiene items and donated clothing for the Houston Area Women's Center.²⁰⁴
- **Cheniere** employees and affiliates volunteered for about 11,000 hours with community organizations such as Habitat for Humanity, Kids' Meals, Project C.U.R.E. and DC Greens.²⁰⁵
- More than 1,800 **Energy Transfer** employees volunteered more than 3,900 hours of their time to a wide range of social causes, such as volunteering at food banks, working with the Special Olympics and supporting Rebuilding Together.²⁰⁶



Emergency Response

When emergencies strike, the fuel and petrochemical industries rise to the occasion. AFPM members respond swiftly, providing critical financial aid and volunteering their time to help affected communities recover.

- **Phillips 66** donated \$560,000 for disaster relief to the Red Cross for recovery efforts supporting New Mexico floods, Oklahoma wildfires and tornadoes, and Texas wildfires, as well as funding a blood donor emergency vehicle in the Red Cross' Kansas/Oklahoma division.²⁰⁷
- After the 2024 tornadoes affected Ardmore, Dickson, Marietta and Sulphur, Oklahoma, **Valero** provided \$150,000 for hygiene kits, cleaning supplies and fuel cards as well as \$100,000 for the United Way of South Central Oklahoma's long-term recovery fund. Volunteers from Valero's Ardmore Refinery also assisted hundreds of families with cleanup efforts and supply distribution.²⁰⁸
- The **ONEOK** Foundation donated \$100,000 to the North Dakota Stockmen's Association (NDSA) and the North Dakota Stockmen's Foundation Out of the Ashes Wildfire Disaster Relief Program after North Dakota wildfires burned approximately 126,000 acres in October 2024.²⁰⁹
- After the Smokehouse Creek Fire, which burned a total of 1,075,000 acres and was declared the largest in Texas history, **Chevron Phillips Chemical** made a donation of \$25,000 to Hutchinson County United Way to help support partner organizations and affected local families.²¹⁰
- **Ergon's** Magnolia Marine Transport Company helped with the design and construction of Hinds Community College's firefighting station at its new 16,000-square-foot Maritime Training Center, as well as donating equipment and supplies.²¹¹

Building Trust with Our Neighbors

Election cycles can bring changes on the local, state, or federal level, but our responsibility to the communities where AFPM members operate remains. Being a good neighbor isn't just a slogan — it's a commitment. So, what does that look like in practice? We asked leaders from Flint Hills Resources and Phillips 66 to share how they turn that commitment into action.

What Does Being a Good Neighbor Mean?

To the leaders at Phillips 66 and Flint Hills Resources, being a good neighbor is more than a corporate responsibility — it's a personal philosophy. Melissa Erker, director of public affairs for the west region at Phillips 66 likens it to living in a residential neighborhood: "You don't just go over to your neighbor's house on the first day and expect trust. You build it over time." Geoff Glasrud, vice president and manufacturing manager at Flint Hills Resources, echoes this sentiment, emphasizing the importance of treating others — and the environment — with the same respect and care one would expect for themselves if they lived across the street from a refinery. "It's about integrity, transparency and mutual benefit," he says.

Safety Beyond Compliance

Both companies stress that safety and environmental stewardship are foundational, not optional. "Compliance is the floor, not the ceiling," says Jake Reint, vice president for public affairs at Flint Hills Resources. "Safety is always the number one priority. We live with hazards all around us, and our goal is to keep people safe — every single day." Their approach is principle-based, driven by stewardship and continuous improvement. Heath Wanamaker, vice president of Phillips 66 emphasizes a commitment that goes beyond simply following the rules. "Our responsibility isn't just to meet regulatory requirements — it's to do what's right for our employees and the communities where we operate, every single day. Safety and environmental stewardship are our guiding principles."

At the Wood River Refinery, internal audits, corporate reviews and proactive technology adoption — like AI-powered confined space monitoring and flare cameras — ensure operations exceed regulatory standards. Flint Hills takes a similar approach, with 650 low-level air quality sensors deployed across the plant and fenceline — none of which are required by law. These tools provide transparency and early detection, reinforcing their commitment to community reassurance.

Both teams emphasize that safety is a core value — maintained consistently over time and independent of political shifts. "Our values and expectations remain the same," says Erker. "We're committed to safe, reliable, environmentally conscious operations." Glasrud adds, "Our culture is our culture. It's principle-based and doesn't waver."

Transparency and Trust

Open communication is central to building trust. Phillips 66 maintains a robust Community Advisory Panel (CAP) with monthly meetings, composed of fenceline neighbors, educators, emergency responders and small business owners. "They set the agenda," Erker explains. "We want two-way dialogue." The refinery also operates a 24/7 community concern line with a live responder and proactively communicates via email and phone calls with schools and local officials before any potentially abnormal or disruptive activity occurs.

Flint Hills Resources has revitalized its long-standing Community Advisory Council, ensuring it remains a vibrant forum for engagement. "We meet monthly, after hours, and answer every question," says Reint. "It's all fair game." Their transparency extends to social media updates during incidents and regular public tours, including milestone open houses that draw thousands.

Investing in Community Wellbeing

Both companies demonstrate a deep and enduring commitment to the communities where they operate. At Phillips 66, this commitment is structured around education, equity, safety and environmental stewardship. "Social impact is an important part of what we do in every community where we operate," says Erker. "We focus on education, equity, safety and the environment — and we back that up with both financial support and volunteer time." Through its "Good Energy" volunteer program, employees contribute hands-on support to local projects, from planting trees to renovating community spaces. In 2024 alone, Wood River employees generated more than \$250,000 in community investments through volunteerism.

“Compliance is the floor, not the ceiling,”

Jake Reint, Vice President for Public Affairs at Flint Hills Resources

Flint Hills Resources applies the same disciplined approach to community partnerships that it does to business decisions. “We apply the same rigor to community partnerships that we do to business decisions — making sure resources deliver real impact,” explains Reint. This philosophy drives initiatives like Project Green Fleet, a collaboration to install pollution-control equipment in thousands of diesel vehicles and Project CAR, a project that helps reduce emissions and improve access to reliable transportation, both of which deliver measurable environmental benefits. Beyond environmental programs, Flint Hills invests in local fire and law enforcement training facilities, STEM education, and long-standing partnerships with organizations such as Ducks Unlimited and the Minnesota Zoo. “Our partnerships aren’t just about writing checks,” Reint adds. “We invest time and talent to advance shared goals like clean air, STEM education and safety.”

Both companies also step up in times of crisis. Phillips 66 responded to severe flooding in their community by deploying pumps, providing funding and partnering with the Red Cross to assist affected families. Flint Hills Resources demonstrated similar care during a propane release that required evacuations. “We made sure families were cared for with dignity and respect — finding hotels, meeting personal needs and minimizing disruption,” says Reint. “We treat people the way we’d want our own families treated.”

Our Ongoing Commitment

“We’ve been here for over 100 years, and our commitment hasn’t changed,” says Erker. Glasrud adds, “Our culture is relentless in improving operations. We don’t change who we are.”

Both companies reaffirm that their accountability lies with their employees and communities regardless of election outcomes. Their message to neighbors is one of consistency, transparency, and unwavering commitment.

The fuel and petrochemical industries are creating a more sustainable future with bold innovation and high-tech investments that push beyond today's limits. By developing lower-carbon fuels and feedstocks, expanding advanced recycling and pursuing breakthrough technologies, we are dedicated to reducing our impact while shaping solutions that create a cleaner, more resilient world for generations to come.

Driving Progress



Climate Change

AFPM members are working to address GHG emissions with a multifaceted approach that blends technology, investment and operational best practices.



Investments

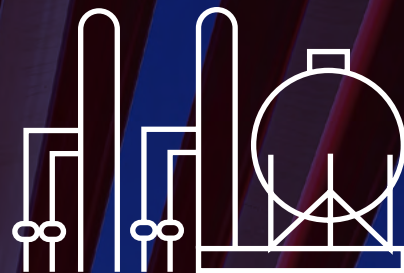
Through strategic investments totaling billions of dollars, companies are stepping up to cut emissions, accelerate deployment of new technologies and secure a lower-carbon future.

- In 2024, **Chevron** spent more than \$600 million to advance and complete carbon abatement projects. From 2021 to 2024, Chevron completed abatement projects designed to abate 1.2 million metric tons of carbon dioxide-equivalent (CO₂e) emissions.²¹²
- **ExxonMobil** is pursuing approximately \$20 billion of lower-emission investments between 2025 and 2030, with approximately 60% focused on reducing emissions for third-party customers.²¹³
- Of **Marathon Petroleum's** expected 2025 growth capital, roughly 12% is allocated to lower-carbon projects such as those to lower GHG emissions at its refineries or to invest in renewables and emerging technologies.²¹⁴



Operations

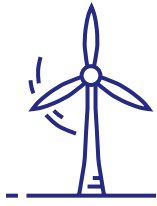
Fuel and petrochemical companies are working to function more sustainably by reducing greenhouse gas emissions; integrating renewable power; expanding the use of carbon capture, utilization and storage (CCUS) technologies and advancing hydrogen solutions.



GHG Emissions Reductions

AFPM members have achieved major reductions in GHG emissions by adopting advanced technologies and optimizing operational processes.

- **LyondellBasell's** Value Enhancement Program (VEP) empowers employees to pursue opportunities to save energy and costs through large- and small-scale projects. In 2024, VEP projects yielded an estimated annual GHG emissions reduction of nearly 310 kt of CO₂e and an estimated annual energy savings of over 5 million gigajoules.²¹⁵
- **Marathon Petroleum's** Garyville refinery challenged itself to reduce fired steam generation by 100,000 pounds-per-hour in 2024. They exceeded their goal and recovered 129,000 pounds-per-hour of steam, which amounts to over 45,000 metric tons of CO₂e emissions each year.²¹⁶
- At its site in Plaquemine, Louisiana, **Dow** replaced end-of-life energy assets with new technologies that provide reliable steam and power supply to the facility while decreasing CO₂ emissions by more than 350 kt annually and reducing river water usage by 30%.²¹⁷
- **Ergon Refining** will be undertaking projects in 2026 in keeping with its goal to reduce carbon emissions by 25%. There are also several ongoing projects that will further reduce the life cycle impacts of the naphthenic base oils produced at Ergon's Vicksburg refinery, with projects started in 2024 expected to reduce volatile organic compound emissions by 15%. And with the installation and startup of new units in 2025, there will be a significant reduction in ammonia emissions.²¹⁸
- **Ketjen** has worked to improve the energy efficiency of the process to produce Fluid Catalytic Cracker (FCC) catalyst. The spray dryer, which is used to form the FCC particles from a slurry of mixed ingredients and water, is the largest consumer of energy, with the evaporation of the water mainly determining the energy requirement. At Ketjen's Bayport site, the spray dryer auto-dilution implementation has enhanced the energy efficiency of its spray dryer by increasing the density of material feeding the unit by an average of 2.5%, leading to a 0.7% reduction in natural gas use and its associated CO₂ emissions.²¹⁹
- **Energy Transfer** used dual drive technology, a one-of-a-kind compression technology that allowed it to operate its units using electric power approximately 80% of the time, thereby reducing emissions by 789,908 tons of CO₂ each year.²²⁰



Renewable Power

U.S. fuel and petrochemical manufacturers are harnessing renewable energy — like solar and wind — to cut greenhouse gas emissions and power their operations more sustainably.

- **Flint Hills Resources** has begun operating on its Corpus Christi solar installation in August 2025. The 100-acre installation, made up of approximately 56,700 panels, will provide the facility with up to 28% of its electrical power during optimal conditions. The project is believed to be the second largest utility-scale solar complex in the Corpus Christi area and the first solar installation in Texas to provide on-site, self-generated electricity directly to a refinery.²²¹
- In 2024, **BASF**'s share of electricity from renewable sources rose to 26%, up from 20% in 2023. BASF aims to source more than 60% of its electricity from renewable sources by 2030.²²²
- **Chevron** installed a 10-acre solar array expected to provide electricity for approximately 40% of its Mason City, Iowa biorefinery's annual power consumption needs.²²³
- In 2024, approximately 26% of **Valero**'s total refinery energy consumption came from renewable sources. More than 99% of the electricity used at Valero's Quebec City refinery comes from renewables, with the majority coming from hydropower and smaller portions from wind, biomass, solar and thermal.²²⁴
- **Dow** sources more than 50% of the Company's purchased electricity from renewable sources, including more than 1,000 megawatts of installed capacity.²²⁵
- **INEOS Olefins & Polymers USA** and NextEra Energy Resources LLC are constructing the INEOS Hickerson Solar site, a 310-MW solar project in Bosque County, Texas that is planned to be completed by the end of 2025. The project is expected to supply enough power to cover the net purchased electricity of all 14 INEOS O&P US sites, reducing annual Scope 2 emissions by about 290,000 metric tons of CO₂e.²²⁶
- **Phillips 66** partnered with a subsidiary of NextEra Energy Resources LLC to power its Rodeo Complex with a 30.2-megawatt solar facility. The facility, which became fully operational in 2025, will reduce the complex's grid power demand by 50% and is expected to avoid approximately 33,000 metric tons of CO₂ emissions annually.²²⁷
- **Ecolab** partners with renewable energy producer Clearway Energy Group through a virtual power purchasing agreement to cover 100% of Ecolab's electricity use in the United States.²²⁸
- In 2024, **LyondellBasell** secured power purchase agreements with an aggregate capacity that will enable it to meet its goal of securing at least 50% of its electricity from renewable sources by 2030. These agreements are expected to generate approximately 5 million megawatt hours of renewable energy annually, reducing LyondellBasell's Scope 2 emissions by more than 1.8 million metric tons of carbon emissions.²²⁹
- **Par Pacific** uses hydropower at its Tacoma facility to generate renewable energy to power its operations.²³⁰
- **ONEOK** has installed solar-powered equipment at certain facilities and purchased electricity from providers who generate power from renewable sources in select regions, leading to approximately 34% of ONEOK's current electrical supply being sourced from renewables — a 10% increase from 2019.²³¹
- To reduce its carbon footprint, **Westlake Corporation** has secured renewable power purchase agreements for locations such as its Geismar, Louisiana plant.²³²



CCUS

With its tremendous potential to cut carbon emissions, CCUS has become a central pillar in today's decarbonization strategies. AFPM members are critical to this progress — both by adopting CCUS solutions at scale and by advancing the deployment of key technologies and partnerships that help the industry move toward a net-zero future.

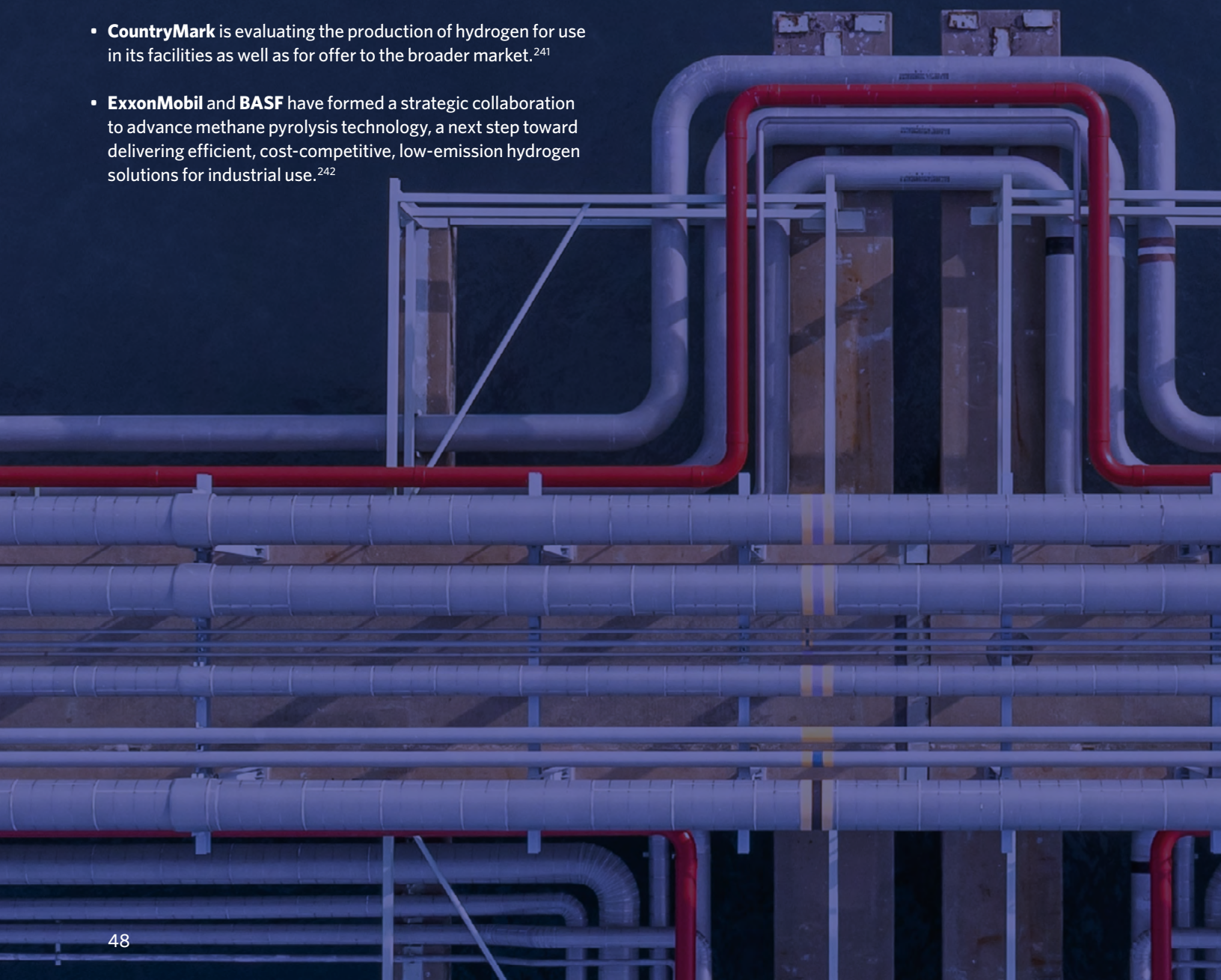
- **ExxonMobil** has the largest CO₂ pipeline network in the United States, and it has agreements with major industrial customers to transport and store approximately 9 million metric tons of direct CO₂ emissions per year. ExxonMobil is also advancing integrated CCS-enabled low-carbon data center projects.²³³
- **Chevron** drilled onshore and offshore stratigraphic wells through the joint venture Bayou Bend CCS LLC (Bayou Bend), an approximately 140,000-acre CO₂ storage project. These wells supplied key data about the subsurface area — data that's helpful in determining whether the conditions are right for storing CO₂. In 2024, Bayou Bend submitted a permit application for CO₂ injection. The approval process usually takes the regulatory agency about two years.²³⁴
- **Valero** has a long history of utilizing CCUS, going back to the 2013 installation of carbon capture technology at its refinery in Port Arthur, Texas — where approximately 1 million metric tons of CO₂ per year is captured. Currently, Valero is developing stand-alone carbon sequestration projects at several of its Eastern ethanol plants, which will potentially capture up to 1 million metric tons of CO₂ each year.²³⁵
- **Marathon Petroleum** is teaming up with Blue Planet Systems Corporation to advance the commercialization of Blue Planet's patented Geomimetic® technology, which uses mineralization to sequester and permanently store CO₂ in synthetic limestone aggregate that can be used for concrete and other building materials.²³⁶
- **ONEOK** manages a CCS project in partnership with BKV Corp, where natural gas from BKV's operations is sent to ONEOK's processing plant in Bridgeport, Texas. At the facility, CO₂ is captured from the waste stream and sent to a BKV site where it is compressed and stored underground. The project aims to achieve an average sequestration rate of up to roughly 185,000 metric tons of CO₂ per year.²³⁷
- In 2023, **Energy Transfer** sequestered approximately 69,360 metric tons of CO₂ through carbon capture and sequestration technology installed at treating and processing facilities located in West Texas, South Texas and New Mexico.²³⁸

Hydrogen

AFPM members are harnessing hydrogen's potential to help address GHG emissions, both by advancing its production and by using it as a low-carbon alternative to traditional fuels.



- **Chevron** became the operator of and furthered construction on the Advanced Clean Energy Storage project (ACES I). This joint venture aims to produce hydrogen for long-duration energy storage in salt caverns.²³⁹
- **LyondellBasell** is evaluating using hydrogen from its Channelview, Texas site as a replacement for fossil fuels, and is considering reforming excess methane into hydrogen and capturing and storing the GHG emissions from the reforming process at its La Porte, Texas facility.²⁴⁰
- **CountryMark** is evaluating the production of hydrogen for use in its facilities as well as for offer to the broader market.²⁴¹
- **ExxonMobil** and **BASF** have formed a strategic collaboration to advance methane pyrolysis technology, a next step toward delivering efficient, cost-competitive, low-emission hydrogen solutions for industrial use.²⁴²





Pipeline Companies Reduce Methane Emissions

Pipeline operators are deploying advanced monitoring and detection technologies — such as continuous emissions sensors, satellite imaging, and AI-driven analytics—to rapidly identify and reduce methane emissions in real time.

- **Phillips 66** developed an innovative application that tracks abnormal methane emissions all the way from detection through resolution. The Methane Event Management System streamlines and standardizes pipeline leak data management from multiple sources, including manual inputs, aerial surveys and satellite information.²⁴³
- Communication with peers and academic institutions is a key part of **Marathon Petroleum** subsidiary MPLX's efforts to reduce methane intensity. MPLX shares best practices and collaborates with groups like the Appalachian Methane Initiative, which is led by the Energy Emissions Modeling and Data Lab, a partnership of the University of Texas, Colorado State University and the Colorado School of Mines; Colorado State University Methane Emissions Technology Evaluation Center; and The Environmental Partnership.²⁴⁴
- Since 2019, **ONEOK** has reduced absolute methane emissions from its Scope 1 operations by about 57% by leveraging advanced methane emissions detection technologies such as optical gas imaging cameras, drones, satellites, photoionization detectors, flame ionization detectors and ultrasonic technology; implementing methane best management practices; and eliminating methane emission sources in its operations.²⁴⁵
- **Boardwalk Pipeline** has reduced methane emissions by 68% from 2021 as a result of modifying fuel systems on key reciprocating equipment, performing annual leak surveys along its pipelines with the aid of fixed-wing planes and helicopters, and using optical gas imaging cameras to scan all natural gas piping and components at its compressor stations to visualize leaks.²⁴⁶

Products

AFPM members are advancing the production of lower-emission fuels by integrating renewable and low-carbon energy sources into their operations. Through continuous improvements in energy efficiency and a strong focus on sustainable practices, they are actively shrinking their carbon footprint and driving meaningful progress toward a cleaner energy future.



Renewable Fuels

Renewable fuels are produced from resources like agricultural crops, organic waste or recycled materials that can be naturally replenished over time.

- As of December 31, 2024, **Valero** has invested \$5.8 billion in its low-carbon fuels businesses, positioning it as one of the largest low-carbon fuels producers in the world.²⁴⁷
- **Chevron** invested in the agricultural innovation company Terviva Inc., which seeks to drive greater availability of pongamia oil as a feedstock for renewable fuel production by scaling farming operations.²⁴⁸
- In 2024, **Marathon Petroleum** delivered approximately 2.8 billion gallons of renewable fuels, making Marathon one of the largest marketers of renewable fuels in the U.S. Marathon also produced about 600 million gallons of renewable fuels, which is a company record.²⁴⁹
- In July 2025, **Par Pacific**, Mitsubishi Corporation, and ENEOS Corporation announced the creation of Hawaii Renewables, LLC, a joint venture to produce renewable fuels at Par Pacific's refinery in Kapolei, Hawaii. Construction is underway, with the facility expected to be completed by the end of 2025. Once fully operational, Hawaii Renewables is expected to produce approximately 61 million gallons per year of renewable diesel, SAF, renewable naphtha and low carbon liquified petroleum gases, making it the state's largest renewable fuels manufacturing facility.²⁵⁰
- In 2024, New York City announced that the city's entire fleet of more than 12,500 heavy-duty and off-road vehicles had completed a transition to renewable diesel, making New York City the first major East Coast city to implement this technology at such a large scale. An estimated 162 million pounds of global carbon dioxide emissions would be prevented from entering the air every year. **Diamond Green Diesel** is supplying the renewable diesel to support this effort through a multi-year contract with Approved Oil, who was awarded the contract with New York City DCAS in 2023.²⁵¹



Renewable Diesel

Renewable diesel is a low carbon biofuel made from vegetable oils, animal fats and other forms of biomass, produced through a hydrogenation process that creates a fuel chemically identical to petroleum diesel. This drop-in compatibility allows it to be used in existing diesel engines while helping to reduce greenhouse gas emissions.

- **Chevron** completed construction of an expansion at its Geismar, Louisiana renewable diesel plant, which is expected to increase site nameplate capacity to 340 million gallons a year.²⁵²
- In late 2024 Martinez Renewables, a joint venture between **Marathon Petroleum** and Neste Corporation, reached its full capacity of 730 million gallons per year, making it among the largest renewable diesel facilities in the world.²⁵³
- In July 2025, **CountryMark** announced the completion of a \$100 million-plus refinery upgrade in Mount Vernon, Indiana. These upgrades are to improve its diesel fuel quality and increase its diesel fuel production capabilities through ISO Technology.²⁵⁴



Sustainable Aviation Fuel

Sustainable aviation fuel (SAF) is a renewable biofuel designed to power aircraft while producing a much lower carbon footprint than conventional jet fuel.

- **Flint Hills Resources** and Delta Air Lines are developing a facility to blend up to 30 million gallons of neat SAF in early 2026 at Flint Hills Resources' Pine Bend refinery in Rosemont, Minnesota. It will be the first facility between the coasts to blend neat SAF with conventional jet fuel, with the blended fuel being transported through Flint Hills' pipeline to Minneapolis-St. Paul International Airport.²⁵⁵
- World Fuel and DHL signed a supply agreement with **Valero** for the delivery of approximately 60 million gallons of blended SAF to Miami International airport over a two-year period.²⁵⁶
- A "Demand Consortium" that includes **Ecolab**, Bank of America, Deloitte and Delta will purchase several million gallons of SAF annually starting in late 2025. The aim is to reduce costs, scale production and ensure multiyear demand to promote SAF market growth.²⁵⁷
- In 2024, **Phillips 66** completed the conversion of its San Francisco Refinery into the Rodeo Renewable Energy Complex (Rodeo Complex). The Rodeo Complex has since achieved its full processing capacity of 50,000 barrels per day of renewable feedstocks and began producing SAF. As the second-largest producer of SAF in the U.S., the Rodeo Complex supplies SAF to several airlines.²⁵⁸



Renewable Natural Gas

Renewable Natural Gas (RNG) is created by upgrading biogas from sources like landfills, wastewater treatment plants and farm waste until it becomes virtually identical to conventional natural gas.

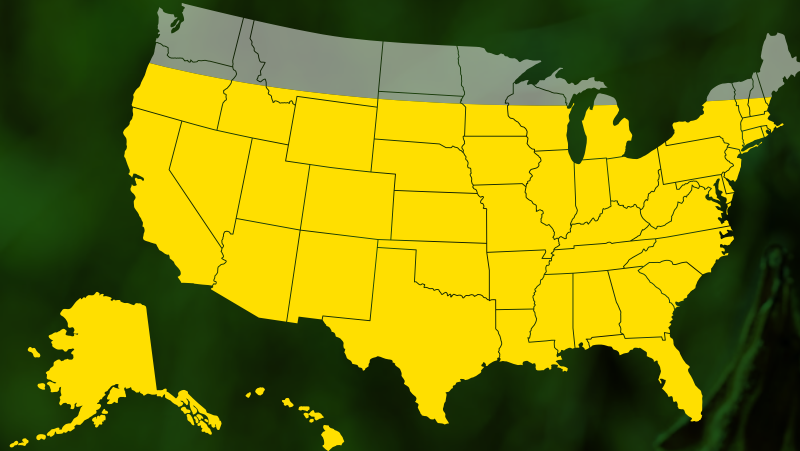
- Brightmark RNG Holdings LLC, a joint venture between **Chevron U.S.A. Inc.** and Brightmark Fund Holdings LLC, announced in January 2025 that it had delivered first gas at 10 renewable natural gas projects across the Midwest. With this milestone, the Brightmark RNG Holdings LLC joint venture now owns and operates 15 RNG projects in the Midwest.²⁵⁹
- In 2024, **Valero** processed approximately 2.6 trillion BTUs of renewable natural gas to make lower carbon transportation fuels, which is nearly three times the amount it processed in 2022.²⁶⁰
- Since **Marathon Petroleum** acquired a 49.9% stake in LF Bioenergy — a renewable energy developer that builds, owns and operates facilities that turn organic dairy farm waste into RNG — the company has initiated commercial operations at five facilities across the U.S. and has two additional sites under construction.²⁶¹
- **Energy Transfer** transported over 7 billion cubic feet of RNG in 2023, a 40% increase from 2022.²⁶²

Advancing Renewable Fuel Production

AFPM members are driving the expansion of renewable diesel (RD) and sustainable aviation fuel (SAF)—investing in new capacity, upgrading facilities and scaling advanced technologies to meet growing demand.

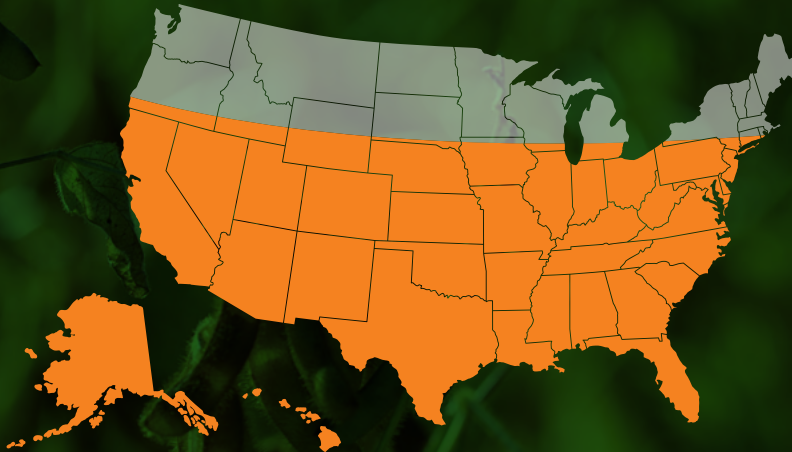
92%

92% of U.S. RD and SAF operational production capacity is owned by petroleum refiners



86%

86% of total U.S. RD and SAF operational production capacity belongs to AFPM members



46%

The United States accounts for 46% of global operational RD and SAF capacity



Plastic Waste

Addressing the challenge of plastic waste requires a circular approach, and AFPM members are at the forefront by expanding advanced recycling technologies and investing in modern collection and sorting systems. This multi-pronged strategy is closing the loop on plastic waste and setting a new standard for sustainability in plastics production and use.



Scaling Recycling



Our members are expanding advanced recycling capacity through major investments in the infrastructure needed to progress these next generation technologies. By breaking down plastic waste into its original “building blocks,” advanced recycling makes it possible to create new, virgin quality materials from plastics that were once difficult to recycle.

- **ExxonMobil**'s second advanced recycling unit in Baytown is now operational, doubling its capacity to convert plastic waste into feedstocks. Combined with ExxonMobil's first unit, the facility has processed over 100 million pounds of plastic waste as of May 2025. Looking ahead, ExxonMobil plans to invest more than \$200 million to expand advanced recycling at its Baytown and Beaumont sites, adding 350 million pounds of annual capacity. ExxonMobil expects to eventually expand its annual advanced recycling capacity to 1 billion pounds.²⁶³
- **Ketjen**'s catalysts are essential to the advanced recycling of waste plastics, and Ketjen conducts active research into waste plastics oil hydroprocessing and catalytic upgrading and aromatization opportunities. Ketjen also partners with technology developers and licensors to create customized, innovative and reliable catalyst solutions for advanced recycling.²⁶⁴
- **BASF** has entered into a sizeable long-term agreement with Braven Environmental to provide an advanced recycling feedstock derived from mixed plastic waste, which will serve as a partial replacement for fossil fuels at BASF's TotalEnergies Petrochemical facility in Port Arthur, Texas.²⁶⁵
- **LyondellBasell** has also started the engineering for MoReTec-22, which is expected to have twice the capacity of MoReTec-1 and will be located at LyondellBasell's Houston refinery site.²⁶⁶
- **Dow** entered into a supply agreement with Freepoint Eco-Systems for 65,000 metric tons of pyrolysis oil per year. The pyrolysis oil will be produced at a new advanced recycling facility owned and operated by a Freepoint Eco-Systems affiliate located in Arizona.²⁶⁷
- **Westlake** participates in VIABILITY™, a post-consumer PVC recycling grant program in the U.S. Westlake and other major PVC producers have committed collectively to provide \$1 million each year to support the grant program during 2023-2025 time period. The goal of the program is to help foster new opportunities for the recycling of vinyl products, with individual grants available to industry collaborations such as trade associations, construction and demolition waste facilities, recovery facilities, recyclers, colleges and universities.²⁶⁸



Partnering For a More Circular Economy


Across the petrochemical industry, companies are recognizing that building a circular economy for plastics isn't a solo endeavor — it's a collective mission. Through strategic partnerships, manufacturers are taking a comprehensive approach to increasing recycling — boosting overall recycling rates and tackling hard-to-recycle materials across sectors.

Companies are tackling specialized plastic products with unique challenges to collecting, sorting and recycling. We see challenges like this in healthcare plastics, which can be at risk of contamination, or have products made up of multiple materials that can make them difficult to sort and break down. Westlake Corporation, in partnership with Houston Methodist Hospital, launched the "Choose Pink" campaign — Houston's first healthcare-focused PVC recycling program. By collecting items like masks, saline bags, and oxygen tubing, and transforming them into new products such as exercise mats and cord protectors, Westlake is proving that even specialized plastics can be reintegrated into the circular economy.²⁶⁹

More companies are teaming up to find new ways to make products that are designed to be reused or recycled back into themselves — rather than thrown away. One example: Dow's MobilityScience™ team has partnered with Jaguar Land Rover and Adient to recycle polyurethane car seat foam. Together, they've created a system that takes polyurethane foam from old car seats, recycles it and turns it into brand new foam for new seats — instead of sending it to the landfill. It's the first time this kind of closed-loop recycling content is expected to be used in automotive production.²⁷⁰

Together, these initiatives reflect a broader trend — petrochemical companies are joining forces across sectors to build the infrastructure, technologies and systems needed for a circular economy for plastics. Whether through community engagement, cross-industry innovation or investment in advanced facilities, these partnerships are reshaping how materials flow through society.





“Building a more circular economy for plastics requires more than innovation — it demands partnership. Across our industry, companies are coming together to rethink how materials are collected, sorted, recycled and reused. We’re not just reducing waste — we’re creating systems that keep valuable materials in use and deliver real environmental benefits.”

Rob Benedict, Vice President Midstream and Petrochemicals, AFPM



Research and Development

Our members are pioneering innovation through R&D. Collaboration across the value chain and thoughtful product design are key strategies in meeting environmental challenges and building a more sustainable future.

- **ExxonMobil** participated on a report for the Department of Energy examining the costs and benefits of scaling up low-carbon hydrogen for use in hard-to-abate industries.²⁷¹
- **Ketjen** participates in several consortia aimed at furthering the development and adoption of biofuels. These include SUSTEPS, which aims to advance the sustainable production of biofuels from microalgae; FUEL-UP, which focuses on transforming forest waste into advanced biofuels in the aviation and marine transport sectors; and CUWP, a North American partnership between industrial partners and academic institutes targeting the chemical recycling of waste plastics.²⁷²
- **Dow** is partnering with Google to improve the circularity of hard-to-recycle plastics such as films and flexibles by using AI sensing technology in the recycling stream. By combining Dow's materials science expertise with Google's AI technologies, the partnership aims to revolutionize the way recycling centers process plastic by making the process more efficient and effective. The companies have already demonstrated the ability to use machine vision tools to identify the components of flexibles and films and to predict the material composition percentages in each piece of packaging.²⁷³
- **BASF** has developed the world's first biomass-balanced polyethersulfone (PESU), enabling customers in industries as diverse as household and catering, automotive, electrics and electronics and healthcare to adopt renewable plastics.²⁷⁴





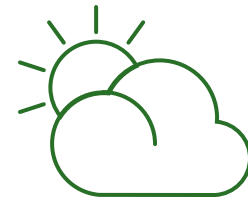
Our members
are committed to
pioneering innovation.

Many refiners and petrochemical manufacturers are reinforcing their sustainability commitments by setting clear, measurable targets and integrating them into strong governance frameworks. Enhanced data collection and reporting help track progress and validate performance against those commitments.

Holding Ourselves Accountable

Delivering on Commitments

AFPM members are improving efficiency, expanding renewable energy use and enabling carbon-reducing technologies across their operations.



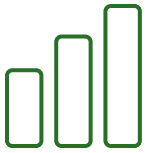
- In 2022, three years ahead of schedule, **Valero** achieved its 2025 GHG emissions target to reduce and displace the equivalent to 63% of the tonnage from its global refinery Scope 1 and 2 GHG emissions. In 2023 and again in 2024, Valero continued to exceed this target.²⁷⁵
- **Marathon Petroleum** has reduced its companywide Scope 1 and Scope 2 GHG emissions intensity by 28% since 2014, well on its way to its 2030 goal of a 30% reduction of Scope 1 and 2 GHG emissions compared to a 2014 baseline.²⁷⁶
- In 2024, as a result of its Value Enhancement Program and other projects, **LyondellBasell** reduced Scope 1 (which comes from the direct operation of owned assets) and Scope 2 (resulting from the generation of purchased energy) carbon emissions by 200,000 metric tons, the equivalent of taking approximately 43,400 gasoline-powered cars off the road.²⁷⁷
- **Flint Hills Resources'** combined Scope 1 and 2 GHG emissions have remained flat since 2010, despite a significant increase in production, while its refineries' combined Scope 1 and 2 GHG emissions intensity — the direct and indirect emissions per barrel of crude oil processed — has improved by 27%.²⁷⁸
- **Phillips 66** reduced its Scope 1 and Scope 2 GHG emissions intensity by 15% compared to a 2019 baseline.²⁷⁹
- **ONEOK** has targeted a 2.2 million metric ton reduction of its combined Scope 1 and Scope 2 GHG emissions by 2030, a 30% reduction in emissions as of December 31, 2019. At the end of 2024, ONEOK had achieved reductions totaling roughly 1.7 million metric tons, which is 77% of the way to its target.²⁸⁰
- By end of 2024, **Westlake** achieved their 2030 climate goal of reducing Scope 1 and Scope 2 CO₂e emissions per ton of production by 20% from a 2016 baseline — well ahead of schedule.²⁸¹



Good Governance

Good governance is fundamental to the sustainability journeys of the fuel and petrochemical industries, with AFPM companies aligning executive priorities, data quality and internal governance to industry-leading standards.

- **Flint Hills Resources** designates senior leadership to be accountable for identifying and pursuing upcoming stewardship opportunities. This leader manages a Stewardship Core Team and Stewardship Business Team to help progress the company's stewardship initiatives. The team helps to identify "bottom-up" opportunities and ideas for the company to pursue, which are then discussed with the Stewardship Business Team during regular review sessions.²⁸²
- **LyondellBasell's** Health, Safety, Environmental, and Sustainability (HSE&S) Committee oversees its environmental, health, safety, sustainability and climate policies, initiatives, risks, ambitions, performance results and reporting. The HSE&S Committee also receives reports on key HSE&S and climate initiatives and topics at each regularly scheduled meeting and frequently reviews updates to LyondellBasell's ESG dashboard, which tracks key metrics and activities.²⁸³
- **Phillips 66** has layers of leadership devoted to its sustainability programs, policies and processes. The Board of Directors provides oversight of Phillips 66's sustainability strategy, goals and progress towards targets and public reporting, with the Public Policy and Sustainability Committee including all members of the Board of Directors. The executive leadership team develops corporate strategies, implements sustainability efforts, manages sustainability issues and reports on company performance. The Sustainability Executive Steering Committee reviews program development and emerging sustainability trends and risks, while approving execution of sustainability initiatives for the company. Sustainability Working Groups, meanwhile, lead the execution of specific sustainability initiatives such as Phillips 66's decarbonization strategy, methane management and lobbying disclosures.²⁸⁴
- **ExxonMobil's** Standards of Business Conduct contain what it calls "foundation policies" that define the basis of its conduct worldwide. The Board of Directors adopted and oversees the administration of the Standards, which no one at ExxonMobil can make exceptions to or grant waivers for. ExxonMobil's foundation policies cover aspects of the environment, health, safety, product safety, customer relations, equal employment opportunity harassment in the workplace and more. They also define ethical conduct for the company, which includes its values on important matters like human rights, labor, the environment and anti-corruption.²⁸⁵
- **Dow** continued its enhancement of its Board of Director qualification assessments and disclosures while also refreshing its governance practices regarding Board meeting dynamics and culture to encourage candid communication, rigorous decision-making and continuous improvement.²⁸⁶
- **Ecolab's** Safety, Health and Environment (SHE) Committee of the Board of Directors plays an important role in oversight, with responsibility for reviewing and overseeing Ecolab's sustainability policies, programs and practices that affect, or could affect, associates, customers, stockholders and neighboring communities. The SHE Committee's work is shaped by Ecolab's Sustainability Executive Advisory Team, led by the Senior Vice President and Chief Sustainability Officer. The SHE Committee reports regularly to the Board of Directors on the company's implementation of, and progress against, sustainability goals that include water and biodiversity efforts.²⁸⁷
- **ONEOK's** Sustainability Leadership Committee was created to continuously improve ESG performance and provide relevant disclosures. The Committee — which reports to the Environment, Safety and Health (ESH) Leadership Committee — is comprised of key leaders from departments across the company and meets monthly to discuss ESG topics. Members attend monthly ESH Leadership Committee meetings upon request to provide recommendations and updates.²⁸⁸



Data Quality

As technologies and methodologies improve, refiners and petrochemical manufacturers are enhancing their ability to identify lifecycle assessments and GHG emissions tracking.

- **LyondellBasell** aims to generate full life cycle assessments (LCAs) and associated product carbon footprint (PCF) calculations for the majority of its product portfolio by the end of 2026. These LCAs undergo critical review with independent expert reviewers or a panel of experts, using well-regarded tools and databases that align with Together for Sustainability (TfS). LyondellBasell is also working to support the harmonization of product life cycle metrics and their applications and to share best practices with the chemical industry. In pursuit of this goal, LyondellBasell participates in TfS and the World Business Council for Sustainable Development Partnership for Carbon Transparency pathfinder framework project, in which members design and publish standards and tools for data exchange on PCF information.²⁸⁹
- **Ketjen** is using LCA methodology to assess the climate change impacts of its products via the development of PCFs. Ketjen is working on streamlining its workflows and continuing to work on partial, gate-to-gate PCFs. Through the use of the advanced digital tools, Ketjen is gaining access to enhanced data analytics, which will help it measure energy use and emissions from a range of production sources.²⁹⁰
- **Cheniere** updated its LCA model in 2024 to include a novel gas-pathing algorithm, improving overall modeling of GHG emissions across Cheniere's supply chain with the use of actual operational data.²⁹¹

Advancing Policies for a More Sustainable Future

AFPM's Carbon Policy Working Group and Plastic Policy Working Group actively evaluate and pursue policies based on member-driven principles to address the challenges of climate change and the mismanagement of plastic waste. Working with these groups, AFPM has advocated for the EPA to recognize the potential of renewable diesel and not limit its use under the RFS, supported the deployment of incentives for emerging technologies like carbon capture, utilization and sequestration and hydrogen production, championed federal legislation to spur innovation and collaboration to keep plastic waste out of the environment, among others. And, as an accredited stakeholder with the United Nations (UN) Environmental Program, we are continuing to advocate for policies that enable industry innovation and global investment in plastics circularity through the development of the UN agreement on global plastic pollution.

AFPM Climate Policy Principles

AFPM is committed to the development of sound policies that enable our members to supply the fuel and petrochemicals that growing global populations and economies need to thrive, and to do so in an environmentally sustainable way.

Policies addressing climate change must be:

- Balanced and measured to improve quality of life, ensuring the long-term economic, energy and environmental needs of humanity are met;
- Protective of U.S. competitiveness and prevent the shifting of production, jobs and emissions from the United States to other countries;
- Harmonized, preemptive and economy-wide;
- Simple and transparent;
- Achievable and flexible to adjust as necessary.

AFPM and our members are further committed to:

- Delivering affordable, reliable fuel and petrochemical products that lift the standards of living for people all over the world;
- Improving the efficiency and sustainability of our operations;
- Offering fuels and petrochemicals that make engines and other products more efficient; and
- Continuing research, innovation and application of new technologies and products.

AFPM Plastic Waste Policy Principles

AFPM approaches the challenges of global plastic waste by addressing the many aspects of this complex issue. Ultimately, our solutions always acknowledge the tremendous long-term value of plastic products, while considering data-driven innovations that promote advanced recycling solutions and remove regulatory barriers to widescale adoption of such technologies. Specifically, we advocate for:

- Developing a national framework to eliminate plastic waste in the environment and grow the circular economy for plastics.
- Working collaboratively across the plastics value chain and with governments to encourage the responsible disposal of plastic products and the recycling, reuse and recovery of plastic waste on a global scale. This includes increased funding of state and local waste collection programs to better source and collect plastic waste.
- Supporting the innovation and development of plastic waste repurposing technologies that have the potential to recover plastic waste and transform it into usable materials. This includes removing regulatory barriers for new facilities that will allow for the continued expansion of advanced recycling capabilities.
- Ensuring the regulatory classification for plastic waste is as a manufacturing feedstock, which simplifies the process and reduces regulatory hurdles for companies processing plastic; and proper accounting and tracking of recycled content, allowing companies to set clear goals and to consistently track their recycling efforts.



AFPM Supports Balanced Global Agreement on Plastic Pollution

The United Nations (UN) embarked on the effort to develop a global agreement to end plastic pollution in March of 2022. AFPM was formally recognized by the UN as an accredited stakeholder and has been part of those negotiations every step of the way. AFPM has been committed to being a constructive partner in the global effort to end plastic pollution at the seven negotiating sessions held to date. And while negotiations are on-going, we continue to support a global agreement that eliminates plastic pollution, provides nations with the flexibility to address their unique plastic pollution challenges, recognizes the tremendous societal benefits of plastics, and unlocks innovation across the plastics value chain to enable a more circular economy. Specifically, we are advocating for the following:

Individualized national action plans:

Recognizing that different countries have different challenges in confronting plastic pollution, an agreement must allow nations the flexibility to address unique plastic pollution challenges through national action plans as opposed to a one size fits all approach supplemented by global metrics.

End pollution, not production:

An agreement should not be centered around arbitrary production bans. We can manage plastic pollution by designing products that are more easily reused and or recycled, encouraging the use of recycled content and optimizing resources and improving waste management systems globally.

Keep chemicals out of the agreement:

The scope of this agreement is and should remain on addressing plastic pollution. Other global forums address the management of chemicals and those are the appropriate venues for discussion on chemical regulation. This agreement shouldn't include a broad list of banned chemicals that provide value to the global economy. For those countries that lack the regulatory infrastructure to properly manage these chemicals, they should refer to the UN's Global Framework on Chemicals (GFC), which provides the guidance for countries to develop their national regulations.

As a leading exporter of petrochemicals, we encourage the United States to remain engaged in future negotiating sessions to help reach an agreement that advances the practical, science-based solutions to help end plastic pollution worldwide.



References

- 1 Phillips 66
- 2 Marathon Petroleum
- 3 Chevron
- 4 ExxonMobil
- 5 Flint Hills Resources
- 6 PBF
- 7 Valero
- 8 INVISTA
- 9 Chevron
- 10 Marathon Petroleum
- 11 Ecolab
- 12 Phillips 66
- 13 TPC Group
- 14 Westlake
- 15 Monroe Energy
- 16 Flint Hills Resources
- 17 Valero
- 18 ExxonMobil
- 19 Valero
- 20 Chevron Phillips Chemical
- 21 Ergon
- 22 ExxonMobil
- 23 LyondellBasell
- 24 Marathon Petroleum
- 25 PBF
- 26 INEOS
- 27 ONEOK
- 28 TPC Group
- 29 W.R. Grace
- 30 Dow
- 31 ExxonMobil
- 32 LyondellBasell
- 33 Chevron Phillips Chemical
- 34 Westlake
- 35 ExxonMobil
- 36 Flint Hills Resources
- 37 Valero
- 38 Marathon Petroleum
- 39 Marathon Petroleum
- 40 Ecolab
- 41 Dow
- 42 Phillips 66
- 43 Monroe Energy
- 44 Energy Transfer
- 45 ONEOK
- 46 Plains All American Pipeline
- 47 INVISTA
- 48 CITGO
- 49 Motiva; PBF; Placid Refining Company; LyondellBasell; Valero; Phillips 66; Chevron Phillips Chemical
- 50 Marathon Petroleum
- 51 ExxonMobil
- 52 Phillips 66
- 53 Flint Hills Resources
- 54 Valero
- 55 INEOS
- 56 LyondellBasell
- 57 ONEOK
- 58 Chevron Phillips Chemical
- 59 Cheniere
- 60 Energy Transfer
- 61 Cenovus
- 62 Phillips 66
- 63 Chevron
- 64 Par Pacific
- 65 Dow
- 66 ONEOK
- 67 Valero
- 68 ExxonMobil
- 69 Marathon Petroleum
- 70 LyondellBasell
- 71 Phillips 66
- 72 Chevron Phillips Chemical
- 73 Honeywell
- 74 ExxonMobil
- 75 Chevron
- 76 AI Insider
- 77 Computer Weekly
- 78 Pitch Grade
- 79 BASF
- 80 Pitch Grade
- 81 Marathon Petroleum
- 82 Richmond Standard
- 83 Phillips 66
- 84 Marathon Petroleum
- 85 Valero
- 86 CITGO
- 87 Monroe Energy
- 88 ExxonMobil
- 89 Flint Hills Resources
- 90 Motiva
- 91 Placid Refining
- 92 Westlake
- 93 Chevron Phillips Chemical
- 94 CITGO
- 95 Flint Hills Resources
- 96 Marathon Petroleum
- 97 CountryMark
- 98 Motiva
- 99 Cenovus
- 100 Cheniere
- 101 ONEOK
- 102 LyondellBasell
- 103 Phillips 66
- 104 BASF
- 105 Marathon Petroleum
- 106 Chevron
- 107 Chevron
- 108 Phillips 66
- 109 Dow
- 110 Ecolab
- 111 INEOS
- 112 LyondellBasell
- 113 W.R. Grace
- 114 Westlake
- 115 Chevron Phillips Chemical
- 116 Plains All American Pipeline
- 117 Cheniere
- 118 JUST Capital
- 119 Newsweek
- 120 Forbes
- 121 Military Times
- 122 Women in Trucking Association
- 123 Dow
- 124 Dow; Ecolab
- 125 Newsweek
- 126 Winds of Change
- 127 ExxonMobil
- 128 Phillips 66
- 129 Dow
- 130 ONEOK
- 131 Chevron Phillips Chemical
- 132 Cheniere
- 133 LyondellBasell
- 134 Phillips 66
- 135 Ecolab
- 136 Ergon
- 137 Ketjen
- 138 W.R. Grace
- 139 LyondellBasell
- 140 Marathon Petroleum
- 141 Ecolab
- 142 Ketjen
- 143 Valero
- 144 Marathon Petroleum
- 145 Dow

146 LyondellBasell	195 Marathon Petroleum	244 Marathon Petroleum
147 Ecolab	196 Chevron Phillips Chemical	245 ONEOK
148 Par Pacific	197 Dow	246 Boardwalk Pipeline
149 Chevron Phillips Chemical	198 Phillips 66	247 Valero
150 INEOS	199 TPC Group	248 Chevron
151 Flint Hills Resources	200 Westlake	249 Marathon Petroleum
152 Motiva	201 Ecolab	250 Par Pacific
153 Cenovus	202 Ketjen	251 Valero
154 BASF	203 ONEOK	252 Chevron
155 CountryMark	204 Plains American Pipeline	253 Marathon Petroleum
156 Dow	205 Cheniere	254 CountryMark
157 Phillips 66	206 Energy Transfer	255 Flint Hills Resources
158 Chevron Phillips Chemical	207 Phillips 66	256 Valero
159 CITGO	208 Valero	257 Ecolab
160 Phillips 66	209 OK Energy Today	258 Phillips 66
161 BASF	210 Chevron Phillips Chemical	259 Chevron
162 Valero	211 Ergon	260 Valero
163 Marathon Petroleum	212 Chevron	261 Marathon Petroleum
164 Marathon Petroleum	213 ExxonMobil	262 Energy Transfer
165 Ecolab	214 Marathon Petroleum	263 ExxonMobil
166 Phillips 66	215 LyondellBasell	264 Ketjen
167 Valero	216 Marathon Petroleum	265 BASF
168 ExxonMobil	217 Dow	266 LyondellBasell
169 Marathon Petroleum	218 Ergon	267 Dow
170 CountryMark	219 Ketjen	268 Vinyl Institute
171 CountryMark	220 Energy Transfer	269 Westlake
172 CITGO	221 Flint Hills Resources	270 Dow
173 Chevron	222 BASF	271 ExxonMobil
174 Phillips 66	223 Chevron	272 Ketjen
175 Phillips 66	224 Valero	273 ESG Today
176 HF Sinclair	225 Dow	274 BASF
177 Hunt Refining	226 INEOS	275 Valero
178 Dow	227 Phillips 66	276 Marathon Petroleum
179 Ecolab	228 Ecolab	277 LyondellBasell
180 Ergon	229 LyondellBasell	278 Flint Hills Resources
181 KTSM	230 Par Pacific	279 Phillips 66
182 CStoreDecisions	231 ONEOK	280 ONEOK
183 Westlake	232 Westlake	281 Westlake
184 CITGO	233 ExxonMobil	282 Flint Hills Resources
185 Chevron Phillips Chemical	234 Chevron	283 LyondellBasell
186 Motiva	235 Valero	284 Phillips 66
187 Par Pacific	236 Marathon Petroleum	285 ExxonMobil
188 Switzer Learning Center	237 ONEOK	286 Dow
189 Placid Refining Company	238 Energy Transfer	287 Ecolab
190 TPC Group	239 Chevron	288 ONEOK
191 ONEOK	240 LyondellBasell	289 LyondellBasell
192 Cheniere	241 CountryMark	290 Ketjen
193 Energy Transfer	242 ExxonMobil	291 Cheniere
194 Valero	243 Phillips 66	

Information Resources

Communications

Through a combination of traditional and social media outlets, AFPM reaches the press, policymakers and the public to educate them on the facts about our industries' work and value, and to inform member company employees about important issues impacting the industries.



**WE
MAKE
PROGRESS**



Publications

AFPM publications inform our members about industry statistics, technical innovations, environment and safety developments, security, and many other relevant issues.

AFPM's online store allows you to search technical papers and reports by keyword, author and/or meeting and directly download to your computer. Learn more at afpm.org/publications.

Newsletters and General Publications

- Annual Report
- Daily Alert
- Energy in Motion — The AFPM Transportation & Infrastructure Newsletter
- Fuel Line
- Green Room Report
- Security Watch
- Sustainability Report
- Tech Update

Statistics

- Annual Survey of Occupational Injuries & Illnesses
- Process Safety Event Report
- AFPM U.S. Refining & Storage Capacity Report

Petrochemical Statistics Program Subscriptions

- AFPM Petrochemical Surveys, Production & Inventory Statistics — quarterly
- AFPM Selected Petrochemical Statistics U.S. Trade Data — monthly

Technical Papers

- Annual Meeting Papers
- Cybersecurity Conference Papers
- Environmental Conference Papers
- International Base Oils & Waxes Conferences Papers
- National Occupational & Process Safety Conference Exhibition Papers
- Operational Planning Control and Automation Technologies Conference Papers (2019 and previous)
- Reliability & Maintenance Conference Papers (2019 and previous)

Transcripts

Operations & Process Technology Summit, formerly Q&A (2019 and previous)

Publications are distributed to members only.



All images ©Shutterstock except: ©Plains All American Pipeline cover, page 17, 26, 27, 45; ©Phillips 66 page 2, 3, 43, 47; ©Monroe Energy page 6, 7; ©INEOS page 9; ©INVISTA page 10, 11; ©Flint Hills Resources page 12; ©Toledo Refining Company page 15; ©Marathon Petroleum page 18, 24, 25, 39; ©CITGO page 36; ©Westlake page 37, 41, 54



1800 M Street, NW
Suite 900 North
Washington, DC
20036

202.457.0480
afpm.org

© 2026 American
Fuel & Petrochemical
Manufacturers